

FreeWRL/FreeX3D

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Contents

1	cson JSON API	1
2	Hierarchical Index	3
2.1	Class Hierarchy	3
3	Data Structure Index	27
3.1	Data Structures	27
4	Data Structure Documentation	51
4.1	_BrowserNative Struct Reference	51
4.1.1	Detailed Description	51
4.2	_cd_list_t Struct Reference	51
4.2.1	Detailed Description	51
4.3	_CRnodeStruct Struct Reference	52
4.3.1	Detailed Description	52
4.4	_FW_PluginInstance Struct Reference	52
4.4.1	Detailed Description	52
4.5	_GLwDrawingAreaClassPart Struct Reference	53
4.5.1	Detailed Description	53
4.6	_GLwDrawingAreaClassRec Struct Reference	53
4.6.1	Detailed Description	53
4.7	_GLwDrawingAreaRec Struct Reference	53
4.7.1	Detailed Description	53
4.8	_intX3D_MFBool Struct Reference	54
4.8.1	Detailed Description	54

4.9	_intX3D_MFColor Struct Reference	54
4.9.1	Detailed Description	54
4.10	_intX3D_MFColorRGBA Struct Reference	54
4.10.1	Detailed Description	54
4.11	_intX3D_MFFloat Struct Reference	55
4.11.1	Detailed Description	55
4.12	_intX3D_MFImage Struct Reference	55
4.12.1	Detailed Description	55
4.13	_intX3D_MFInt32 Struct Reference	55
4.13.1	Detailed Description	55
4.14	_intX3D_MFNode Struct Reference	56
4.14.1	Detailed Description	56
4.15	_intX3D_MFRotation Struct Reference	56
4.15.1	Detailed Description	56
4.16	_intX3D_MFString Struct Reference	56
4.16.1	Detailed Description	56
4.17	_intX3D_MFTime Struct Reference	57
4.17.1	Detailed Description	57
4.18	_intX3D_MFVec2d Struct Reference	57
4.18.1	Detailed Description	57
4.19	_intX3D_MFVec2f Struct Reference	57
4.19.1	Detailed Description	57
4.20	_intX3D_MFVec3d Struct Reference	58
4.20.1	Detailed Description	58
4.21	_intX3D_MFVec3f Struct Reference	58
4.21.1	Detailed Description	58
4.22	_intX3D_SFBool Struct Reference	58
4.22.1	Detailed Description	58
4.23	_intX3D_SFColor Struct Reference	59
4.23.1	Detailed Description	59

4.24	_intX3D_SFColorRGBA Struct Reference	59
4.24.1	Detailed Description	59
4.25	_intX3D_SFFloat Struct Reference	59
4.25.1	Detailed Description	59
4.26	_intX3D_SFImage Struct Reference	60
4.26.1	Detailed Description	60
4.27	_intX3D_SFInt32 Struct Reference	60
4.27.1	Detailed Description	60
4.28	_intX3D_SFNode Struct Reference	60
4.28.1	Detailed Description	60
4.29	_intX3D_SFRotation Struct Reference	61
4.29.1	Detailed Description	61
4.30	_intX3D_SFString Struct Reference	61
4.30.1	Detailed Description	61
4.31	_intX3D_SFTime Struct Reference	61
4.31.1	Detailed Description	61
4.32	_intX3D_SFVec2d Struct Reference	62
4.32.1	Detailed Description	62
4.33	_intX3D_SFVec2f Struct Reference	62
4.33.1	Detailed Description	62
4.34	_intX3D_SFVec3d Struct Reference	62
4.34.1	Detailed Description	62
4.35	_intX3D_SFVec3f Struct Reference	63
4.35.1	Detailed Description	63
4.36	_intX3DEventIn Struct Reference	63
4.36.1	Detailed Description	63
4.37	_NPByteRange Struct Reference	63
4.37.1	Detailed Description	64
4.38	_NPEmbedPrint Struct Reference	64
4.38.1	Detailed Description	64

4.39	_NPFullPrint Struct Reference	64
4.39.1	Detailed Description	64
4.40	_NPImageExpose Struct Reference	65
4.40.1	Detailed Description	65
4.41	_NPNetscapeFuncs Struct Reference	65
4.41.1	Detailed Description	66
4.42	_NPP Struct Reference	66
4.42.1	Detailed Description	66
4.43	_NPPluginFuncs Struct Reference	67
4.43.1	Detailed Description	67
4.44	_NPPrint Struct Reference	67
4.44.1	Detailed Description	67
4.45	_NPRect Struct Reference	68
4.45.1	Detailed Description	68
4.46	_NPSavedData Struct Reference	68
4.46.1	Detailed Description	68
4.47	_NPSize Struct Reference	68
4.47.1	Detailed Description	68
4.48	_NPStream Struct Reference	69
4.48.1	Detailed Description	69
4.49	_NPString Struct Reference	69
4.49.1	Detailed Description	69
4.50	_NPVariant Struct Reference	69
4.50.1	Detailed Description	70
4.51	_NPWindow Struct Reference	70
4.51.1	Detailed Description	70
4.52	_s_list_t Struct Reference	70
4.52.1	Detailed Description	70
4.53	freeWRLSAI_cpp::_SAIParameter Class Reference	71
4.53.1	Detailed Description	71

4.54	_SFColorNative Struct Reference	71
4.54.1	Detailed Description	71
4.55	_SFColorRGBANative Struct Reference	71
4.55.1	Detailed Description	71
4.56	_SFImageNative Struct Reference	72
4.56.1	Detailed Description	72
4.57	_SFNodeNative Struct Reference	72
4.57.1	Detailed Description	72
4.58	_SFRotationNative Struct Reference	72
4.58.1	Detailed Description	72
4.59	_SFVec2fNative Struct Reference	73
4.59.1	Detailed Description	73
4.60	_SFVec3dNative Struct Reference	73
4.60.1	Detailed Description	73
4.61	_SFVec3fNative Struct Reference	73
4.61.1	Detailed Description	73
4.62	_SFVec4dNative Struct Reference	74
4.62.1	Detailed Description	74
4.63	_SFVec4fNative Struct Reference	74
4.63.1	Detailed Description	74
4.64	_urlRequest Struct Reference	74
4.64.1	Detailed Description	74
4.65	_X3DNode Union Reference	75
4.65.1	Detailed Description	75
4.66	ActiveRegion Struct Reference	75
4.66.1	Detailed Description	76
4.67	anyVrml Union Reference	76
4.67.1	Detailed Description	76
4.68	Arc Class Reference	76
4.68.1	Detailed Description	77

4.69 ArcSdirSorter Class Reference	77
4.69.1 Detailed Description	78
4.70 ArcSorter Class Reference	78
4.70.1 Detailed Description	78
4.71 ArcTdirSorter Class Reference	79
4.71.1 Detailed Description	79
4.72 ArcTessellator Class Reference	79
4.72.1 Detailed Description	79
4.73 ArgListType Struct Reference	80
4.73.1 Detailed Description	80
4.74 Atlas Struct Reference	80
4.74.1 Detailed Description	80
4.75 AtlasEntry Struct Reference	80
4.75.1 Detailed Description	81
4.76 AtlasEntrySet Struct Reference	81
4.76.1 Detailed Description	81
4.77 AtlasFont Struct Reference	81
4.77.1 Detailed Description	82
4.78 Backend Class Reference	82
4.78.1 Detailed Description	83
4.79 vrml.BaseNode Class Reference	83
4.79.1 Detailed Description	83
4.80 BasePlugin Class Reference	83
4.80.1 Detailed Description	84
4.81 BasicCurveEvaluator Class Reference	84
4.81.1 Detailed Description	85
4.82 BasicSurfaceEvaluator Class Reference	85
4.82.1 Detailed Description	86
4.83 BezierArc Struct Reference	86
4.83.1 Detailed Description	86

4.84 bezierPatch Struct Reference	86
4.84.1 Detailed Description	87
4.85 bezierPatchMesh Struct Reference	87
4.85.1 Detailed Description	87
4.86 Bin Class Reference	87
4.86.1 Detailed Description	88
4.87 bindablestack Struct Reference	88
4.87.1 Detailed Description	88
4.88 block Struct Reference	88
4.88.1 Detailed Description	89
4.89 Breakpt Struct Reference	89
4.89.1 Detailed Description	89
4.90 brotoDefpair Struct Reference	89
4.90.1 Detailed Description	89
4.91 brotoIS Struct Reference	90
4.91.1 Detailed Description	90
4.92 brotoRoute Struct Reference	90
4.92.1 Detailed Description	90
4.93 brouteEnd Struct Reference	90
4.93.1 Detailed Description	91
4.94 org.web3d.x3d.sai.Browser Interface Reference	91
4.94.1 Detailed Description	92
4.95 vrml.Browser Class Reference	92
4.95.1 Detailed Description	92
4.96 vrml.external.Browser Class Reference	92
4.96.1 Detailed Description	94
4.97 org.web3d.x3d.sai.BrowserEvent Class Reference	94
4.97.1 Detailed Description	95
4.98 sai.BrowserFactory Class Reference	95
4.98.1 Detailed Description	95

4.99	org.web3d.x3d.sai.BrowserFactoryImpl Interface Reference	95
4.99.1	Detailed Description	96
4.100	vrml.external.BrowserGlobals Class Reference	96
4.100.1	Detailed Description	96
4.101	sai.BrowserGlobals Class Reference	96
4.101.1	Detailed Description	96
4.102	org.web3d.x3d.sai.BrowserInterface Interface Reference	97
4.102.1	Detailed Description	97
4.103	vrml.external.BrowserInterface Interface Reference	97
4.103.1	Detailed Description	97
4.104	org.web3d.x3d.sai.BrowserListener Interface Reference	98
4.104.1	Detailed Description	98
4.105	freeWRLSAI_cpp::browserNotSharedException Class Reference	98
4.105.1	Detailed Description	98
4.106	org.web3d.x3d.sai.BrowserNotSharedException Class Reference	99
4.106.1	Detailed Description	99
4.107	Buffer Class Reference	99
4.107.1	Detailed Description	99
4.108	BUTitem Struct Reference	99
4.108.1	Detailed Description	100
4.109	CachedVertex Struct Reference	100
4.109.1	Detailed Description	100
4.110	CachingEvaluator Class Reference	100
4.110.1	Detailed Description	101
4.111	cbDataExactName Struct Reference	101
4.111.1	Detailed Description	101
4.112	cbDataRootNameAndRouteDir Struct Reference	101
4.112.1	Detailed Description	101
4.113	CdIIFreeWRL Class Reference	102
4.113.1	Detailed Description	103

4.114chardata Struct Reference	103
4.114.1 Detailed Description	103
4.115chaser_ptrs Struct Reference	103
4.115.1 Detailed Description	103
4.116cline Struct Reference	104
4.116.1 Detailed Description	104
4.117coded_block_pattern_entry Struct Reference	104
4.117.1 Detailed Description	104
4.118colorScheme Struct Reference	104
4.118.1 Detailed Description	104
4.119command Struct Reference	105
4.119.1 Detailed Description	105
4.120org.web3d.x3d.sai.ComponentInfo Interface Reference	105
4.120.1 Detailed Description	105
4.121connection_info_struct Struct Reference	106
4.121.1 Detailed Description	106
4.122org.web3d.x3d.sai.ConnectionException Class Reference	106
4.122.1 Detailed Description	106
4.123freeWRLSAI_cpp::connectionException Class Reference	107
4.123.1 Detailed Description	107
4.124consoleLine Struct Reference	107
4.124.1 Detailed Description	107
4.125vrml.ConstField Class Reference	108
4.125.1 Detailed Description	108
4.126vrml.field.ConstMFColor Class Reference	108
4.126.1 Detailed Description	109
4.127vrml.field.ConstMFFloat Class Reference	109
4.127.1 Detailed Description	110
4.128vrml.ConstMField Class Reference	110
4.128.1 Detailed Description	111

4.129vrml.field.ConstMFIInt32 Class Reference	111
4.129.1 Detailed Description	112
4.130vrml.field.ConstMFNode Class Reference	112
4.130.1 Detailed Description	112
4.131vrml.field.ConstMFRotation Class Reference	113
4.131.1 Detailed Description	113
4.132vrml.field.ConstMFString Class Reference	114
4.132.1 Detailed Description	114
4.133vrml.field.ConstMFTime Class Reference	114
4.133.1 Detailed Description	115
4.134vrml.field.ConstMFVec2f Class Reference	115
4.134.1 Detailed Description	116
4.135vrml.field.ConstMFVec3f Class Reference	116
4.135.1 Detailed Description	116
4.136vrml.field.ConstSFBool Class Reference	117
4.136.1 Detailed Description	117
4.137vrml.field.ConstSFColor Class Reference	117
4.137.1 Detailed Description	118
4.138vrml.field.ConstSFFloat Class Reference	118
4.138.1 Detailed Description	119
4.139vrml.field.ConstSFImage Class Reference	119
4.139.1 Detailed Description	119
4.140vrml.field.ConstSFInt32 Class Reference	120
4.140.1 Detailed Description	120
4.141vrml.field.ConstSFNode Class Reference	120
4.141.1 Detailed Description	121
4.142vrml.field.ConstSFRotation Class Reference	121
4.142.1 Detailed Description	121
4.143vrml.field.ConstSFString Class Reference	122
4.143.1 Detailed Description	122

4.144vrml.field.ConstSFTIME Class Reference	122
4.144.1 Detailed Description	123
4.145vrml.field.ConstSFVec2f Class Reference	123
4.145.1 Detailed Description	123
4.146vrml.field.ConstSFVec3f Class Reference	124
4.146.1 Detailed Description	124
4.147contenttype Struct Reference	124
4.147.1 Detailed Description	124
4.148contenttype_captiontext Struct Reference	125
4.148.1 Detailed Description	125
4.149contenttype_e3dmouse Struct Reference	125
4.149.1 Detailed Description	125
4.150contenttype_layer Struct Reference	126
4.150.1 Detailed Description	126
4.151contenttype_multitouch Struct Reference	126
4.151.1 Detailed Description	126
4.152contenttype_orientation Struct Reference	126
4.152.1 Detailed Description	127
4.153contenttype_quadrant Struct Reference	127
4.153.1 Detailed Description	127
4.154contenttype_scene Struct Reference	127
4.154.1 Detailed Description	127
4.155contenttype_splitter Struct Reference	127
4.155.1 Detailed Description	128
4.156contenttype_statusbar Struct Reference	128
4.156.1 Detailed Description	128
4.157contenttype_stereo_anaglyph Struct Reference	128
4.157.1 Detailed Description	128
4.158contenttype_stereo_shutter Struct Reference	128
4.158.1 Detailed Description	129

4.159	contenttype_stereo_sidebyside Struct Reference	129
4.159.1	Detailed Description	129
4.160	contenttype_stereo_updown Struct Reference	129
4.160.1	Detailed Description	129
4.161	contenttype_switch Struct Reference	129
4.161.1	Detailed Description	130
4.162	contenttype_textpanel Struct Reference	130
4.162.1	Detailed Description	130
4.163	contenttype_texturegrid Struct Reference	131
4.163.1	Detailed Description	131
4.164	CoveAndTiler Class Reference	131
4.164.1	Detailed Description	132
4.165	CPlugin Class Reference	132
4.165.1	Detailed Description	132
4.165.2	Constructor & Destructor Documentation	132
4.165.2.1	CPlugin()	133
4.166	CR_RegStruct Struct Reference	133
4.166.1	Detailed Description	133
4.167	CRjsnameStruct Struct Reference	133
4.167.1	Detailed Description	134
4.168	CRscriptStruct Struct Reference	134
4.168.1	Detailed Description	134
4.169	CRStruct Struct Reference	134
4.169.1	Detailed Description	135
4.170	cson_array Struct Reference	135
4.170.1	Detailed Description	135
4.171	cson_buffer Struct Reference	136
4.171.1	Detailed Description	136
4.171.2	Field Documentation	136
4.171.2.1	capacity	137

4.171.2.2 mem	137
4.171.2.3 timesExpanded	137
4.171.2.4 used	137
4.172cson_data_source_StringSource_ Struct Reference	138
4.172.1 Detailed Description	138
4.172.2 Field Documentation	138
4.172.2.1 end	138
4.172.2.2 pos	138
4.172.2.3 str	139
4.173cson_kv Struct Reference	139
4.173.1 Detailed Description	139
4.174cson_kv_list Struct Reference	139
4.174.1 Detailed Description	140
4.175cson_object Struct Reference	140
4.175.1 Detailed Description	140
4.176cson_object_iterator Struct Reference	141
4.176.1 Detailed Description	141
4.177cson_output_opt Struct Reference	141
4.177.1 Detailed Description	142
4.177.2 Field Documentation	142
4.177.2.1 escapeForwardSlashes	142
4.177.2.2 indentation	142
4.177.2.3 maxDepth	143
4.178cson_parse_info Struct Reference	143
4.178.1 Detailed Description	143
4.179cson_parse_opt Struct Reference	144
4.179.1 Detailed Description	144
4.179.2 Field Documentation	144
4.179.2.1 allowComments	144
4.180cson_parser Struct Reference	144

4.180.1 Detailed Description	145
4.181cson_string Struct Reference	145
4.181.1 Detailed Description	145
4.182cson_value Struct Reference	146
4.182.1 Detailed Description	146
4.182.2 Field Documentation	147
4.182.2.1 api	147
4.182.2.2 refcount	148
4.182.2.3 value	148
4.183cson_value_api Struct Reference	148
4.183.1 Detailed Description	149
4.183.2 Field Documentation	149
4.183.2.1 cleanup	149
4.184cson_value_list Struct Reference	149
4.184.1 Detailed Description	149
4.185curfile64_info Struct Reference	150
4.185.1 Detailed Description	150
4.186currayhit Struct Reference	150
4.186.1 Detailed Description	150
4.187Curve Class Reference	151
4.187.1 Detailed Description	151
4.188curveEvalMachine Struct Reference	151
4.188.1 Detailed Description	151
4.189Curvelist Class Reference	152
4.189.1 Detailed Description	152
4.190damper_ptr Struct Reference	152
4.190.1 Detailed Description	152
4.191datChnk Struct Reference	153
4.191.1 Detailed Description	153
4.192dct_dc_size_entry Struct Reference	153

4.192.1 Detailed Description	153
4.193DDS_header Union Reference	153
4.193.1 Detailed Description	154
4.194DdsLoadInfo Struct Reference	154
4.194.1 Detailed Description	155
4.195Dict Struct Reference	155
4.195.1 Detailed Description	155
4.196DictNode Struct Reference	155
4.196.1 Detailed Description	155
4.197directedLine Class Reference	156
4.197.1 Detailed Description	157
4.198DisplayList Class Reference	157
4.198.1 Detailed Description	157
4.199freeWRLSAI_cpp::disposedException Class Reference	157
4.199.1 Detailed Description	158
4.200DlNode Struct Reference	158
4.200.1 Detailed Description	158
4.201draw_call_params Struct Reference	159
4.201.1 Detailed Description	159
4.202duk__bigint Struct Reference	159
4.202.1 Detailed Description	159
4.203duk__compile_raw_args Struct Reference	159
4.203.1 Detailed Description	160
4.204duk__compiler_stkstate Struct Reference	160
4.204.1 Detailed Description	160
4.205duk__decode_context Struct Reference	160
4.205.1 Detailed Description	160
4.206duk__encode_context Struct Reference	161
4.206.1 Detailed Description	161
4.207duk__exp_limits Struct Reference	161

4.207.1 Detailed Description	161
4.208duk__id_lookup_result Struct Reference	161
4.208.1 Detailed Description	161
4.209duk__numconv_stringify_ctx Struct Reference	162
4.209.1 Detailed Description	162
4.210duk__objlit_state Struct Reference	162
4.210.1 Detailed Description	162
4.211duk__pcall_prop_args Struct Reference	163
4.211.1 Detailed Description	163
4.212duk__re_disjunction_info Struct Reference	163
4.212.1 Detailed Description	163
4.213duk__transform_context Struct Reference	163
4.213.1 Detailed Description	163
4.214duk__activation Struct Reference	164
4.214.1 Detailed Description	164
4.215duk__bitdecoder_ctx Struct Reference	164
4.215.1 Detailed Description	164
4.216duk__bitencoder_ctx Struct Reference	164
4.216.1 Detailed Description	165
4.217duk__breakpoint Struct Reference	165
4.217.1 Detailed Description	165
4.218duk__bufwriter_ctx Struct Reference	165
4.218.1 Detailed Description	165
4.219duk__catcher Struct Reference	166
4.219.1 Detailed Description	166
4.220duk__compiler_ctx Struct Reference	166
4.220.1 Detailed Description	166
4.221duk__compiler_func Struct Reference	167
4.221.1 Detailed Description	168
4.222duk__compiler_instr Struct Reference	168

4.222.1 Detailed Description	168
4.223duk_double_union Union Reference	168
4.223.1 Detailed Description	168
4.224duk_function_list_entry Struct Reference	169
4.224.1 Detailed Description	169
4.225duk_harray Struct Reference	169
4.225.1 Detailed Description	169
4.226duk_hbuffer Struct Reference	169
4.226.1 Detailed Description	169
4.227duk_hbuffer_dynamic Struct Reference	170
4.227.1 Detailed Description	170
4.228duk_hbuffer_external Struct Reference	170
4.228.1 Detailed Description	170
4.229duk_hbuffer_fixed Struct Reference	170
4.229.1 Detailed Description	171
4.230duk_hbufobj Struct Reference	171
4.230.1 Detailed Description	171
4.231duk_hcompfunc Struct Reference	171
4.231.1 Detailed Description	171
4.232duk_heap Struct Reference	172
4.232.1 Detailed Description	172
4.233duk_heaphdr Struct Reference	172
4.233.1 Detailed Description	173
4.234duk_heaphdr_string Struct Reference	173
4.234.1 Detailed Description	173
4.235duk_hnatfunc Struct Reference	173
4.235.1 Detailed Description	173
4.236duk_hobject Struct Reference	174
4.236.1 Detailed Description	174
4.237duk_hstring Struct Reference	174

4.237.1 Detailed Description	174
4.238duk_hstring_external Struct Reference	174
4.238.1 Detailed Description	175
4.239duk_hthread Struct Reference	175
4.239.1 Detailed Description	175
4.240duk_internal_thread_state Struct Reference	176
4.240.1 Detailed Description	176
4.241duk_ispec Struct Reference	176
4.241.1 Detailed Description	176
4.242duk_ivalue Struct Reference	176
4.242.1 Detailed Description	177
4.243duk_jmpbuf Struct Reference	177
4.243.1 Detailed Description	177
4.244duk_json_dec_ctx Struct Reference	177
4.244.1 Detailed Description	177
4.245duk_json_enc_ctx Struct Reference	178
4.245.1 Detailed Description	178
4.246duk_labelinfo Struct Reference	178
4.246.1 Detailed Description	178
4.247duk_lexer_codepoint Struct Reference	179
4.247.1 Detailed Description	179
4.248duk_lexer_ctx Struct Reference	179
4.248.1 Detailed Description	179
4.249duk_lexer_point Struct Reference	179
4.249.1 Detailed Description	180
4.250duk_ljstate Struct Reference	180
4.250.1 Detailed Description	180
4.251duk_memory_functions Struct Reference	180
4.251.1 Detailed Description	180
4.252duk_number_list_entry Struct Reference	181

4.252.1 Detailed Description	181
4.253duk_propaccessor Struct Reference	181
4.253.1 Detailed Description	181
4.254duk_propdesc Struct Reference	181
4.254.1 Detailed Description	182
4.255duk_propvalue Union Reference	182
4.255.1 Detailed Description	182
4.256duk_re_compiler_ctx Struct Reference	182
4.256.1 Detailed Description	182
4.257duk_re_matcher_ctx Struct Reference	183
4.257.1 Detailed Description	183
4.258duk_re_token Struct Reference	183
4.258.1 Detailed Description	183
4.259duk_strcache Struct Reference	184
4.259.1 Detailed Description	184
4.260duk_strtab_entry Struct Reference	184
4.260.1 Detailed Description	184
4.261duk_thread_state Struct Reference	184
4.261.1 Detailed Description	185
4.262duk_time_components Struct Reference	185
4.262.1 Detailed Description	185
4.263duk_token Struct Reference	185
4.263.1 Detailed Description	186
4.264duk_tval_unused Struct Reference	186
4.264.1 Detailed Description	186
4.265EAI_ListenerStruct Struct Reference	186
4.265.1 Detailed Description	186
4.266vrml.external.FreeWRLEAI.EAIAsyncMessage Class Reference	187
4.266.1 Detailed Description	187
4.267sai.eai.EAIAsyncMessage Class Reference	187

4.267.1 Detailed Description	187
4.268vrml.external.FreeWRLEAI.EAIAsyncQueue Class Reference	187
4.268.1 Detailed Description	188
4.269sai.eai.EAIAsyncQueue Class Reference	188
4.269.1 Detailed Description	188
4.270sai.eai.EAIAsyncThread Class Reference	188
4.270.1 Detailed Description	188
4.271vrml.external.FreeWRLEAI.EAIAsyncThread Class Reference	189
4.271.1 Detailed Description	189
4.272sai.eai.EAIinThread Class Reference	189
4.272.1 Detailed Description	189
4.273vrml.external.FreeWRLEAI.EAIinThread Class Reference	190
4.273.1 Detailed Description	190
4.274sai.eai.EAIMessage Class Reference	190
4.274.1 Detailed Description	190
4.275vrml.external.FreeWRLEAI.EAIMessage Class Reference	191
4.275.1 Detailed Description	191
4.276EAINodeIndexStruct Struct Reference	191
4.276.1 Detailed Description	191
4.277EAINodeParams Struct Reference	191
4.277.1 Detailed Description	192
4.278sai.eai.EAIoutQueue Class Reference	192
4.278.1 Detailed Description	192
4.279vrml.external.FreeWRLEAI.EAIoutQueue Class Reference	192
4.279.1 Detailed Description	192
4.280sai.eai.EAIoutThread Class Reference	193
4.280.1 Detailed Description	193
4.281vrml.external.FreeWRLEAI.EAIoutThread Class Reference	193
4.281.1 Detailed Description	193
4.282ECMAValueStruct Struct Reference	194

4.282.1 Detailed Description	194
4.283EdgePair Struct Reference	194
4.283.1 Detailed Description	194
4.284vrml.Event Class Reference	194
4.284.1 Detailed Description	195
4.285vrml.external.field.EventIn Class Reference	195
4.285.1 Detailed Description	196
4.286vrml.external.field.EventInMFColor Class Reference	196
4.286.1 Detailed Description	196
4.287vrml.external.field.EventInMFFloat Class Reference	197
4.287.1 Detailed Description	197
4.288vrml.external.field.EventInMFInt32 Class Reference	197
4.288.1 Detailed Description	197
4.289vrml.external.field.EventInMFNode Class Reference	198
4.289.1 Detailed Description	198
4.290vrml.external.field.EventInMFRotation Class Reference	198
4.290.1 Detailed Description	198
4.291vrml.external.field.EventInMFString Class Reference	199
4.291.1 Detailed Description	199
4.292vrml.external.field.EventInMFVec2f Class Reference	199
4.292.1 Detailed Description	199
4.293vrml.external.field.EventInMFVec3f Class Reference	200
4.293.1 Detailed Description	200
4.294vrml.external.field.EventInSFBool Class Reference	200
4.294.1 Detailed Description	200
4.295vrml.external.field.EventInSFColor Class Reference	201
4.295.1 Detailed Description	201
4.296vrml.external.field.EventInSFFloat Class Reference	201
4.296.1 Detailed Description	201
4.297vrml.external.field.EventInSFImage Class Reference	202

4.297.1 Detailed Description	202
4.298vrml.external.field.EventInSFInt32 Class Reference	202
4.298.1 Detailed Description	202
4.299vrml.external.field.EventInSFNode Class Reference	203
4.299.1 Detailed Description	203
4.300vrml.external.field.EventInSFRotation Class Reference	203
4.300.1 Detailed Description	203
4.301vrml.external.field.EventInSFString Class Reference	204
4.301.1 Detailed Description	204
4.302vrml.external.field.EventInSFTime Class Reference	204
4.302.1 Detailed Description	204
4.303vrml.external.field.EventInSFVec2f Class Reference	205
4.303.1 Detailed Description	205
4.304vrml.external.field.EventInSFVec3f Class Reference	205
4.304.1 Detailed Description	205
4.305vrml.external.field.EventOut Class Reference	206
4.305.1 Detailed Description	207
4.306vrml.external.field.EventOutMFColor Class Reference	207
4.306.1 Detailed Description	207
4.307vrml.external.field.EventOutMFFloat Class Reference	207
4.307.1 Detailed Description	208
4.308vrml.external.field.EventOutMField Class Reference	208
4.308.1 Detailed Description	209
4.309vrml.external.field.EventOutMFInt32 Class Reference	209
4.309.1 Detailed Description	209
4.310vrml.external.field.EventOutMFNode Class Reference	209
4.310.1 Detailed Description	210
4.311vrml.external.field.EventOutMFRotation Class Reference	210
4.311.1 Detailed Description	210
4.312vrml.external.field.EventOutMFString Class Reference	211

4.312.1 Detailed Description	211
4.313vrml.external.field.EventOutMFVec2f Class Reference	211
4.313.1 Detailed Description	212
4.314vrml.external.field.EventOutMFVec3f Class Reference	212
4.314.1 Detailed Description	212
4.315vrml.external.field.EventOutObserver Interface Reference	212
4.315.1 Detailed Description	213
4.316vrml.external.field.EventOutSFBool Class Reference	213
4.316.1 Detailed Description	213
4.317vrml.external.field.EventOutSFColor Class Reference	213
4.317.1 Detailed Description	214
4.318vrml.external.field.EventOutSFFloat Class Reference	214
4.318.1 Detailed Description	214
4.319vrml.external.field.EventOutSFImage Class Reference	214
4.319.1 Detailed Description	215
4.320vrml.external.field.EventOutSFInt32 Class Reference	215
4.320.1 Detailed Description	215
4.321vrml.external.field.EventOutSFNode Class Reference	216
4.321.1 Detailed Description	216
4.322vrml.external.field.EventOutSFRotation Class Reference	216
4.322.1 Detailed Description	216
4.323vrml.external.field.EventOutSFString Class Reference	217
4.323.1 Detailed Description	217
4.324vrml.external.field.EventOutSFTime Class Reference	217
4.324.1 Detailed Description	217
4.325vrml.external.field.EventOutSFVec2f Class Reference	218
4.325.1 Detailed Description	218
4.326vrml.external.field.EventOutSFVec3f Class Reference	218
4.326.1 Detailed Description	218
4.327org.web3d.x3d.sai.ExternalBrowser Interface Reference	219

4.327.1 Detailed Description	219
4.328extrusion Struct Reference	219
4.328.1 Detailed Description	219
4.329FaceCount Struct Reference	220
4.329.1 Detailed Description	220
4.330vrml.Field Class Reference	220
4.330.1 Detailed Description	221
4.331FieldDecl Struct Reference	221
4.331.1 Detailed Description	221
4.332vrml.external.field.FieldTypes Class Reference	222
4.332.1 Detailed Description	222
4.333file_in_zip64_read_info_s Struct Reference	222
4.333.1 Detailed Description	223
4.334FirstStruct Struct Reference	223
4.334.1 Detailed Description	223
4.335Flist Class Reference	223
4.335.1 Detailed Description	224
4.336FlistSorter Class Reference	224
4.336.1 Detailed Description	224
4.337flychord Struct Reference	224
4.337.1 Detailed Description	225
4.338fmtChnk Struct Reference	225
4.338.1 Detailed Description	225
4.339freewrl_params Struct Reference	225
4.339.1 Detailed Description	226
4.340sai.FreeWRLBrowser Class Reference	226
4.340.1 Detailed Description	228
4.341sai.FreeWRLBrowserInfo Class Reference	228
4.341.1 Detailed Description	228
4.342sai.FreeWRLComponent Class Reference	228

4.342.1 Detailed Description	228
4.343sai.FreeWRLField Class Reference	229
4.343.1 Detailed Description	230
4.344sai.FreeWRLFieldDefinition Class Reference	230
4.344.1 Detailed Description	231
4.345sai.FreeWRLFieldTypes Class Reference	231
4.345.1 Detailed Description	231
4.346sai.FreeWRLMField Class Reference	232
4.346.1 Detailed Description	232
4.347sai.FreeWRLNode Class Reference	233
4.347.1 Detailed Description	233
4.348sai.FreeWRLNodeTypes Class Reference	233
4.348.1 Detailed Description	234
4.349sai.FreeWRLRendererInfo Class Reference	234
4.349.1 Detailed Description	234
4.350sai.FreeWRLScene Class Reference	235
4.350.1 Detailed Description	236
4.351ftype Struct Reference	236
4.351.1 Detailed Description	236
4.352fw_MaterialParameters Struct Reference	237
4.352.1 Detailed Description	237
4.353FWBITMAPFILEHEADER Struct Reference	237
4.353.1 Detailed Description	237
4.354FWBITMAPINFO Struct Reference	237
4.354.1 Detailed Description	238
4.355FWBITMAPINFOHEADER Struct Reference	238
4.355.1 Detailed Description	238
4.356sai.FWComponentInfo Class Reference	238
4.356.1 Detailed Description	239
4.357vrml.FWCreateField Class Reference	239

4.357.1 Detailed Description	239
4.358sai.FWExternProtoDeclaration Class Reference	239
4.358.1 Detailed Description	240
4.359FWFunctionSpec Struct Reference	240
4.359.1 Detailed Description	240
4.360vrml.FWHelper Class Reference	240
4.360.1 Detailed Description	240
4.361vrml.FWJavaScript Class Reference	241
4.361.1 Detailed Description	241
4.362vrml.FWJavaScriptBinding Class Reference	241
4.362.1 Detailed Description	241
4.363vrml.FWJavaScriptClassLoader Class Reference	242
4.363.1 Detailed Description	242
4.363.2 Constructor & Destructor Documentation	242
4.363.2.1 FWJavaScriptClassLoader()	242
4.364sai.FWMFColor Class Reference	243
4.364.1 Detailed Description	243
4.365sai.FWMFColorRGBA Class Reference	243
4.365.1 Detailed Description	244
4.366sai.FWMFDouble Class Reference	244
4.366.1 Detailed Description	245
4.367sai.FWMFFloat Class Reference	245
4.367.1 Detailed Description	245
4.368sai.FWMFInt32 Class Reference	246
4.368.1 Detailed Description	246
4.369sai.FWMFNode Class Reference	246
4.369.1 Detailed Description	247
4.370sai.FWMFRotation Class Reference	247
4.370.1 Detailed Description	248
4.371sai.FWMFString Class Reference	248

4.371.1 Detailed Description	248
4.372sai.FWMFVec2d Class Reference	249
4.372.1 Detailed Description	249
4.373sai.FWMFVec2f Class Reference	249
4.373.1 Detailed Description	250
4.374sai.FWMFVec3d Class Reference	250
4.374.1 Detailed Description	251
4.375sai.FWMFVec3f Class Reference	251
4.375.1 Detailed Description	251
4.376sai.FWProfileInfo Class Reference	252
4.376.1 Detailed Description	252
4.377sai.FWProfInfo Class Reference	252
4.377.1 Detailed Description	252
4.378FWPropertySpec Struct Reference	253
4.378.1 Detailed Description	253
4.379sai.FWProtoDeclaration Class Reference	253
4.379.1 Detailed Description	254
4.380sai.FWProtoInstance Class Reference	254
4.380.1 Detailed Description	254
4.381FWRGBQUAD Struct Reference	254
4.381.1 Detailed Description	255
4.382sai.FWRoute Class Reference	255
4.382.1 Detailed Description	255
4.383sai.FWSFBool Class Reference	255
4.383.1 Detailed Description	256
4.384sai.FWSFColor Class Reference	256
4.384.1 Detailed Description	256
4.385sai.FWSFColorRGBA Class Reference	257
4.385.1 Detailed Description	257
4.386sai.FWSFDouble Class Reference	257

4.386.1 Detailed Description	258
4.387sai.FWSFFloat Class Reference	258
4.387.1 Detailed Description	258
4.388sai.FWSFImage Class Reference	258
4.388.1 Detailed Description	259
4.389sai.FWSFInt32 Class Reference	259
4.389.1 Detailed Description	259
4.390sai.FWSFNode Class Reference	260
4.390.1 Detailed Description	260
4.391sai.FWSFRotation Class Reference	260
4.391.1 Detailed Description	261
4.392sai.FWSFString Class Reference	261
4.392.1 Detailed Description	261
4.393sai.FWSFTime Class Reference	261
4.393.1 Detailed Description	262
4.394sai.FWSFVec2d Class Reference	262
4.394.1 Detailed Description	262
4.395sai.FWSFVec2f Class Reference	263
4.395.1 Detailed Description	263
4.396sai.FWSFVec3d Class Reference	263
4.396.1 Detailed Description	264
4.397sai.FWSFVec3f Class Reference	264
4.397.1 Detailed Description	264
4.398FWSNDMSG Struct Reference	264
4.398.1 Detailed Description	265
4.399FWTYPE Struct Reference	265
4.399.1 Detailed Description	265
4.400FWVAL Struct Reference	265
4.400.1 Detailed Description	266
4.401FXY Struct Reference	266

4.401.1 Detailed Description	266
4.402GLUface Struct Reference	266
4.402.1 Detailed Description	266
4.403GLUhalfEdge Struct Reference	267
4.403.1 Detailed Description	267
4.404GLUmesh Struct Reference	267
4.404.1 Detailed Description	267
4.405GLUnurbs Class Reference	267
4.405.1 Detailed Description	268
4.406GLUtesselator Struct Reference	268
4.406.1 Detailed Description	269
4.407GLUvertex Struct Reference	269
4.407.1 Detailed Description	270
4.408GLwDrawingAreaCallbackStruct Struct Reference	270
4.408.1 Detailed Description	270
4.409GLwDrawingAreaPart Struct Reference	270
4.409.1 Detailed Description	271
4.410GoP Struct Reference	271
4.410.1 Detailed Description	271
4.411gridBoundaryChain Class Reference	271
4.411.1 Detailed Description	272
4.412Gridline Struct Reference	272
4.412.1 Detailed Description	272
4.413GridTrimVertex Class Reference	272
4.413.1 Detailed Description	273
4.414GridVertex Struct Reference	273
4.414.1 Detailed Description	273
4.415gridWrap Class Reference	273
4.415.1 Detailed Description	274
4.416GUIElement Struct Reference	274

4.416.1 Detailed Description	274
4.417GUINamedType Struct Reference	274
4.417.1 Detailed Description	274
4.418GUIScreen Struct Reference	274
4.418.1 Detailed Description	275
4.419Hull Class Reference	275
4.419.1 Detailed Description	275
4.420vrml.external.IBrowser Interface Reference	275
4.420.1 Detailed Description	276
4.421iiglobal Struct Reference	277
4.421.1 Detailed Description	279
4.422IMEXPORT Struct Reference	279
4.422.1 Detailed Description	279
4.423org.web3d.x3d.sai.ImportedException Class Reference	280
4.423.1 Detailed Description	280
4.424initialRouteStruct Struct Reference	280
4.424.1 Detailed Description	280
4.425freeWRLSAI_cpp::insufficientCapabilitiesException Class Reference	281
4.425.1 Detailed Description	281
4.426org.web3d.x3d.sai.InsufficientCapabilitiesException Class Reference	281
4.426.1 Detailed Description	282
4.427intersection_info Struct Reference	282
4.427.1 Detailed Description	282
4.428intTableIndex Struct Reference	282
4.428.1 Detailed Description	282
4.429freeWRLSAI_cpp::invalidAccessTypeException Class Reference	283
4.429.1 Detailed Description	283
4.430freeWRLSAI_cpp::invalidBrowserException Class Reference	283
4.430.1 Detailed Description	284
4.431org.web3d.x3d.sai.InvalidBrowserException Class Reference	284

4.431.1 Detailed Description	284
4.432freeWRLSAI_cpp::invalidDocumentException Class Reference	284
4.432.1 Detailed Description	285
4.433org.web3d.x3d.sai.InvalidDocumentException Class Reference	285
4.433.1 Detailed Description	285
4.434vrml.InvalidEventInException Class Reference	285
4.434.1 Detailed Description	286
4.435vrml.external.exception.InvalidEventInException Class Reference	286
4.435.1 Detailed Description	286
4.435.2 Constructor & Destructor Documentation	286
4.435.2.1 InvalidEventInException()	286
4.436vrml.InvalidEventOutException Class Reference	287
4.436.1 Detailed Description	287
4.437vrml.external.exception.InvalidEventOutException Class Reference	287
4.437.1 Detailed Description	288
4.438freeWRLSAI_cpp::invalidExecutionContextException Class Reference	288
4.438.1 Detailed Description	288
4.439org.web3d.x3d.sai.InvalidExecutionContextException Class Reference	288
4.439.1 Detailed Description	289
4.440vrml.InvalidExposedFieldException Class Reference	289
4.440.1 Detailed Description	289
4.441vrml.InvalidFieldChangeException Class Reference	289
4.441.1 Detailed Description	290
4.442org.web3d.x3d.sai.InvalidFieldException Class Reference	290
4.442.1 Detailed Description	290
4.443freeWRLSAI_cpp::invalidFieldException Class Reference	290
4.443.1 Detailed Description	291
4.444vrml.InvalidFieldException Class Reference	291
4.444.1 Detailed Description	291
4.445org.web3d.x3d.sai.InvalidFieldValueException Class Reference	291

4.445.1 Detailed Description	292
4.446freeWRLSAI_cpp::invalidImportException Class Reference	292
4.446.1 Detailed Description	292
4.447org.web3d.x3d.sai.InvalidNameException Class Reference	292
4.447.1 Detailed Description	293
4.448org.web3d.x3d.sai.InvalidNodeException Class Reference	293
4.448.1 Detailed Description	293
4.449freeWRLSAI_cpp::invalidNodeException Class Reference	293
4.449.1 Detailed Description	294
4.450vrml.external.exception.InvalidNodeException Class Reference	294
4.450.1 Detailed Description	294
4.450.2 Constructor & Destructor Documentation	294
4.450.2.1 InvalidNodeException()	294
4.451freeWRLSAI_cpp::invalidOperationTimingException Class Reference	295
4.451.1 Detailed Description	295
4.452org.web3d.x3d.sai.InvalidOperationTimingException Class Reference	295
4.452.1 Detailed Description	296
4.453org.web3d.x3d.sai.InvalidProtoException Class Reference	296
4.453.1 Detailed Description	296
4.454freeWRLSAI_cpp::InvalidReadableFieldException Class Reference	296
4.454.1 Detailed Description	297
4.455vrml.InvalidRouteException Class Reference	297
4.455.1 Detailed Description	297
4.456org.web3d.x3d.sai.InvalidRouteException Class Reference	297
4.456.1 Detailed Description	298
4.457freeWRLSAI_cpp::invalidUrlException Class Reference	298
4.457.1 Detailed Description	298
4.458org.web3d.x3d.sai.InvalidURLException Class Reference	298
4.458.1 Detailed Description	299
4.459vrml.external.exception.InvalidVrmlException Class Reference	299

4.459.1 Detailed Description	299
4.459.2 Constructor & Destructor Documentation	299
4.459.2.1 InvalidVrmlException()	299
4.460vrml.InvalidVRMLSyntaxException Class Reference	300
4.460.1 Detailed Description	300
4.461freeWRLSAI_cpp::InvalidWritableFieldException Class Reference	300
4.461.1 Detailed Description	301
4.462freeWRLSAI_cpp::invalidX3DException Class Reference	301
4.462.1 Detailed Description	301
4.463org.web3d.x3d.sai.InvalidX3DException Class Reference	302
4.463.1 Detailed Description	302
4.464vrml.InvalidX3DSyntaxException Class Reference	302
4.464.1 Detailed Description	302
4.465ivec2 Struct Reference	303
4.465.1 Detailed Description	303
4.466ivec4 Struct Reference	303
4.466.1 Detailed Description	303
4.467Jarcloc Class Reference	303
4.467.1 Detailed Description	304
4.468JMATRIX Struct Reference	304
4.468.1 Detailed Description	304
4.469JSLoadPropElement Struct Reference	304
4.469.1 Detailed Description	304
4.470JSON_config Struct Reference	304
4.470.1 Detailed Description	305
4.470.2 Field Documentation	305
4.470.2.1 callback	305
4.470.2.2 callback_ctx	305
4.470.2.3 depth	306
4.470.2.4 free	306

4.470.2.5 malloc	306
4.471JSON_parser_struct Struct Reference	307
4.471.1 Detailed Description	307
4.472JSON_value_struct Struct Reference	307
4.472.1 Detailed Description	308
4.473key Struct Reference	308
4.473.1 Detailed Description	308
4.474keyHit Struct Reference	308
4.474.1 Detailed Description	308
4.475keyval Struct Reference	308
4.475.1 Detailed Description	309
4.476Knotspec Struct Reference	309
4.476.1 Detailed Description	310
4.477Knotvector Struct Reference	310
4.477.1 Detailed Description	310
4.478layout_scale_item Struct Reference	310
4.478.1 Detailed Description	310
4.479layoutmode Struct Reference	311
4.479.1 Detailed Description	311
4.480linkedlist_data_s Struct Reference	311
4.480.1 Detailed Description	311
4.481linkedlist_datablock_internal_s Struct Reference	311
4.481.1 Detailed Description	311
4.482macroblock Struct Reference	312
4.482.1 Detailed Description	312
4.483Mapdesc Class Reference	312
4.483.1 Detailed Description	314
4.484Maplist Class Reference	314
4.484.1 Detailed Description	314
4.485matpropstruct Struct Reference	314

4.485.1 Detailed Description	315
4.486org.web3d.x3d.sai.Matrix Interface Reference	315
4.486.1 Detailed Description	315
4.487org.web3d.x3d.sai.Matrix3 Class Reference	315
4.487.1 Detailed Description	316
4.488org.web3d.x3d.sai.Matrix4 Class Reference	316
4.488.1 Detailed Description	317
4.489mb_addr_inc_entry Struct Reference	317
4.489.1 Detailed Description	317
4.490mb_type_entry Struct Reference	317
4.490.1 Detailed Description	317
4.491Mesher Class Reference	318
4.491.1 Detailed Description	318
4.492org.web3d.x3d.sai.MFBool Interface Reference	318
4.492.1 Detailed Description	319
4.493vrml.field.MFColor Class Reference	319
4.493.1 Detailed Description	320
4.494org.web3d.x3d.sai.MFColor Interface Reference	320
4.494.1 Detailed Description	320
4.495org.web3d.x3d.sai.MFColorRGBA Interface Reference	321
4.495.1 Detailed Description	321
4.496org.web3d.x3d.sai.MFDouble Interface Reference	321
4.496.1 Detailed Description	322
4.497org.web3d.x3d.sai.MFFloat Interface Reference	322
4.497.1 Detailed Description	322
4.498vrml.field.MFFloat Class Reference	323
4.498.1 Detailed Description	323
4.499org.web3d.x3d.sai.MField Interface Reference	324
4.499.1 Detailed Description	324
4.500vrml.MField Class Reference	325

4.500.1 Detailed Description	326
4.501org.web3d.x3d.sai.MFImage Interface Reference	326
4.501.1 Detailed Description	326
4.502org.web3d.x3d.sai.MFInt32 Interface Reference	327
4.502.1 Detailed Description	327
4.503vrml.field.MFInt32 Class Reference	327
4.503.1 Detailed Description	328
4.504org.web3d.x3d.sai.MFNode Interface Reference	328
4.504.1 Detailed Description	329
4.505vrml.field.MFNode Class Reference	329
4.505.1 Detailed Description	330
4.506org.web3d.x3d.sai.MFRotation Interface Reference	330
4.506.1 Detailed Description	330
4.507vrml.field.MFRotation Class Reference	331
4.507.1 Detailed Description	331
4.508org.web3d.x3d.sai.MFString Interface Reference	332
4.508.1 Detailed Description	332
4.509vrml.field.MFString Class Reference	332
4.509.1 Detailed Description	333
4.510vrml.field.MFTime Class Reference	333
4.510.1 Detailed Description	334
4.511org.web3d.x3d.sai.MFTime Interface Reference	334
4.511.1 Detailed Description	335
4.512org.web3d.x3d.sai.MFVec2d Interface Reference	335
4.512.1 Detailed Description	336
4.513vrml.field.MFVec2f Class Reference	336
4.513.1 Detailed Description	337
4.514org.web3d.x3d.sai.MFVec2f Interface Reference	337
4.514.1 Detailed Description	337
4.515org.web3d.x3d.sai.MFVec3d Interface Reference	338

4.515.1 Detailed Description	338
4.516vrml.field.MFVec3f Class Reference	338
4.516.1 Detailed Description	339
4.517org.web3d.x3d.sai.MFVec3f Interface Reference	339
4.517.1 Detailed Description	340
4.518mode_name Struct Reference	340
4.518.1 Detailed Description	340
4.519monoChain Class Reference	341
4.519.1 Detailed Description	341
4.520Monotonizer Class Reference	341
4.520.1 Detailed Description	342
4.521motion_vectors_entry Struct Reference	342
4.521.1 Detailed Description	342
4.522Multi_Any Struct Reference	342
4.522.1 Detailed Description	342
4.523Multi_Bool Struct Reference	342
4.523.1 Detailed Description	343
4.524Multi_Color Struct Reference	343
4.524.1 Detailed Description	343
4.525Multi_ColorRGBA Struct Reference	343
4.525.1 Detailed Description	343
4.526Multi_Double Struct Reference	344
4.526.1 Detailed Description	344
4.527Multi_Float Struct Reference	344
4.527.1 Detailed Description	344
4.528Multi_Int32 Struct Reference	344
4.528.1 Detailed Description	345
4.529Multi_Matrix3d Struct Reference	345
4.529.1 Detailed Description	345
4.530Multi_Matrix3f Struct Reference	345

4.530.1 Detailed Description	345
4.531Multi_Matrix4d Struct Reference	346
4.531.1 Detailed Description	346
4.532Multi_Matrix4f Struct Reference	346
4.532.1 Detailed Description	346
4.533Multi_Node Struct Reference	346
4.533.1 Detailed Description	347
4.534Multi_Rotation Struct Reference	347
4.534.1 Detailed Description	347
4.535Multi_String Struct Reference	347
4.535.1 Detailed Description	347
4.536Multi_Time Struct Reference	348
4.536.1 Detailed Description	348
4.537Multi_Vec2d Struct Reference	348
4.537.1 Detailed Description	348
4.538Multi_Vec2f Struct Reference	348
4.538.1 Detailed Description	349
4.539Multi_Vec3d Struct Reference	349
4.539.1 Detailed Description	349
4.540Multi_Vec3f Struct Reference	349
4.540.1 Detailed Description	349
4.541Multi_Vec4d Struct Reference	350
4.541.1 Detailed Description	350
4.542Multi_Vec4f Struct Reference	350
4.542.1 Detailed Description	350
4.543multiTexParams Struct Reference	350
4.543.1 Detailed Description	351
4.544myArgs Struct Reference	351
4.544.1 Detailed Description	351
4.545MyVertex Struct Reference	351

4.545.1 Detailed Description	351
4.546name_num Struct Reference	352
4.546.1 Detailed Description	352
4.547nameValuePairs Struct Reference	352
4.547.1 Detailed Description	352
4.548navmode Struct Reference	352
4.548.1 Detailed Description	353
4.549vrml.external.Node Class Reference	353
4.549.1 Detailed Description	353
4.550vrml.node.Node Class Reference	353
4.550.1 Detailed Description	354
4.551nodedistance Struct Reference	354
4.551.1 Detailed Description	354
4.552freeWRLSAI_cpp::nodeInUseException Class Reference	354
4.552.1 Detailed Description	355
4.553org.web3d.x3d.sai.NodeInUseException Class Reference	355
4.553.1 Detailed Description	355
4.554freeWRLSAI_cpp::nodeUnavailableException Class Reference	355
4.554.1 Detailed Description	356
4.555org.web3d.x3d.sai.NodeUnavailableException Class Reference	356
4.555.1 Detailed Description	356
4.556freeWRLSAI_cpp::noSuchBrowserException Class Reference	356
4.556.1 Detailed Description	357
4.557org.web3d.x3d.sai.NoSuchBrowserException Class Reference	357
4.557.1 Detailed Description	357
4.558org.web3d.x3d.sai.NotSupportedException Class Reference	357
4.558.1 Detailed Description	358
4.559freeWRLSAI_cpp::notSupportedException Class Reference	358
4.559.1 Detailed Description	358
4.560NPCClass Struct Reference	359

4.560.1 Detailed Description	359
4.561NPObj Struct Reference	359
4.561.1 Detailed Description	359
4.562nsByteRange Struct Reference	360
4.562.1 Detailed Description	360
4.563nsIAuthenticationInfo Interface Reference	360
4.563.1 Detailed Description	360
4.564nsICookieStorage Interface Reference	361
4.564.1 Detailed Description	361
4.564.2 Member Function Documentation	361
4.564.2.1 getCookie()	361
4.564.2.2 setCookie()	361
4.565nsIFileUtilities Interface Reference	362
4.565.1 Detailed Description	362
4.565.2 Member Function Documentation	363
4.565.2.1 getProgramPath()	363
4.565.2.2 getTempDirPath()	364
4.565.2.3 newTempFileName()	364
4.566nsIHTTPHeaderListener Interface Reference	365
4.566.1 Detailed Description	365
4.566.2 Member Function Documentation	365
4.566.2.1 newResponseHeader()	365
4.566.2.2 statusLine()	366
4.567nsIJVMAuthTools Interface Reference	366
4.567.1 Detailed Description	366
4.567.2 Member Function Documentation	366
4.567.2.1 GetAuthenticationInfo()	366
4.567.2.2 SetAuthenticationInfo()	367
4.568nsIPlugin Interface Reference	367
4.568.1 Detailed Description	368

4.568.2 Member Function Documentation	368
4.568.2.1 createPluginInstance()	368
4.568.2.2 getMIMEDescription()	368
4.568.2.3 getValue()	369
4.568.2.4 initialize()	369
4.568.2.5 shutdown()	370
4.569nsIPluginDocument Interface Reference	370
4.569.1 Detailed Description	370
4.569.2 Field Documentation	370
4.569.2.1 willHandleInstantiation	371
4.570nsIPluginHost Interface Reference	371
4.570.1 Detailed Description	372
4.570.2 Member Function Documentation	372
4.570.2.1 findProxyForURL()	372
4.570.2.2 getPluginName()	373
4.570.2.3 getPluginTagForInstance()	373
4.570.2.4 GetURL()	373
4.570.2.5 instantiateDummyJavaPlugin()	374
4.570.2.6 instantiatePluginForChannel()	374
4.570.2.7 parsePostBufferToFixHeaders()	375
4.570.2.8 PostURL()	375
4.570.2.9 reloadPlugins()	376
4.571nsIPluginHostOld Interface Reference	376
4.571.1 Detailed Description	377
4.571.2 Member Function Documentation	377
4.571.2.1 instantiatePluginForChannel()	377
4.572nsIPluginInputStream Interface Reference	378
4.572.1 Detailed Description	378
4.573nsIPluginInstance Interface Reference	378
4.573.1 Detailed Description	379

4.573.2 Member Function Documentation	380
4.573.2.1 getMimeType()	380
4.573.2.2 getValue()	380
4.573.2.3 handleEvent()	380
4.573.2.4 initialize()	381
4.573.2.5 newStreamFromPlugin()	381
4.573.2.6 newStreamToPlugin()	382
4.573.2.7 print()	382
4.573.2.8 setWindow()	383
4.573.2.9 showStatus()	383
4.573.2.10 start()	383
4.573.2.11 stop()	384
4.573.3 Field Documentation	384
4.573.3.1 JSContext	384
4.574 nsIPluginInstanceInternal Class Reference	384
4.574.1 Detailed Description	385
4.575 nsIPluginInstanceOld Interface Reference	385
4.575.1 Detailed Description	386
4.575.2 Member Function Documentation	386
4.575.2.1 destroy()	387
4.575.2.2 getValue()	387
4.575.2.3 handleEvent()	387
4.575.2.4 initialize()	388
4.575.2.5 newStream()	388
4.575.2.6 print()	389
4.575.2.7 setWindow()	389
4.575.2.8 start()	389
4.575.2.9 stop()	390
4.575.3 Field Documentation	390
4.575.3.1 peer	390

4.576nsIPluginInstanceOwner Interface Reference	390
4.576.1 Detailed Description	391
4.576.2 Member Function Documentation	391
4.576.2.1 createWidget()	391
4.576.2.2 GetURL()	392
4.576.2.3 getWindow()	392
4.577nsIPluginInstancePeer Interface Reference	392
4.577.1 Detailed Description	393
4.577.2 Member Function Documentation	393
4.577.2.1 getValue()	393
4.577.2.2 newStream()	394
4.577.2.3 setWindowSize()	394
4.577.2.4 showStatus()	395
4.577.3 Field Documentation	395
4.577.3.1 MIMETYPE	395
4.577.3.2 mode	395
4.578nsIPluginInstancePeer2 Interface Reference	396
4.578.1 Detailed Description	396
4.578.2 Field Documentation	397
4.578.2.1 JSContext	397
4.578.2.2 JSThread	397
4.578.2.3 JSWindow	397
4.579nsIPluginInstancePeer2_1_9_1_BRANCH Interface Reference	398
4.579.1 Detailed Description	398
4.580nsIPluginManager Interface Reference	399
4.580.1 Detailed Description	399
4.580.2 Member Function Documentation	399
4.580.2.1 GetURL()	400
4.580.2.2 GetURLWithHeaders()	400
4.580.2.3 GetValue()	401

4.580.2.4 PostURL()	401
4.580.2.5 RegisterPlugin()	402
4.580.2.6 reloadPlugins()	403
4.580.2.7 UnregisterPlugin()	403
4.580.2.8 UserAgent()	403
4.581nsIPluginManager2 Interface Reference	404
4.581.1 Detailed Description	405
4.581.2 Member Function Documentation	405
4.581.2.1 allocateMenuID()	405
4.581.2.2 beginWaitCursor()	405
4.581.2.3 deallocateMenuID()	405
4.581.2.4 endWaitCursor()	406
4.581.2.5 findProxyForURL()	406
4.581.2.6 hasAllocatedMenuID()	406
4.581.2.7 notifyStatusChange()	407
4.581.2.8 registerWindow()	407
4.581.2.9 supportsURLProtocol()	408
4.581.2.10unregisterWindow()	408
4.582nsIPluginOld Interface Reference	409
4.582.1 Detailed Description	409
4.582.2 Member Function Documentation	409
4.582.2.1 createPluginInstance()	410
4.582.2.2 getMIMEDescription()	410
4.582.2.3 getValue()	410
4.582.2.4 initialize()	411
4.582.2.5 shutdown()	411
4.583nsIPluginStreamInfo Interface Reference	411
4.583.1 Detailed Description	412
4.584nsIPluginStreamListener Interface Reference	412
4.584.1 Detailed Description	413

4.584.2 Member Function Documentation	413
4.584.2.1 onDataAvailable()	413
4.584.2.2 onFileAvailable()	414
4.584.2.3 onStartBinding()	414
4.584.2.4 onStopBinding()	414
4.584.3 Field Documentation	415
4.584.3.1 streamType	415
4.585nsIPluginTag Interface Reference	415
4.585.1 Detailed Description	416
4.586nsIPluginTagInfo Interface Reference	416
4.586.1 Detailed Description	417
4.586.2 Member Function Documentation	417
4.586.2.1 getAttribute()	417
4.586.2.2 getAttributes()	418
4.586.2.3 getParameter()	418
4.586.2.4 getParameters()	418
4.586.3 Field Documentation	418
4.586.3.1 DOMElement	418
4.586.3.2 tagType	419
4.587nsIPluginTagInfo2 Interface Reference	419
4.587.1 Detailed Description	420
4.587.2 Member Function Documentation	420
4.587.2.1 getParameter()	421
4.587.2.2 getParameters()	422
4.587.3 Field Documentation	422
4.587.3.1 DOMElement	422
4.587.3.2 tagType	422
4.588nsIPluginTagInfoOld Interface Reference	423
4.588.1 Detailed Description	423
4.588.2 Member Function Documentation	423

4.588.2.1 <code>getAttribute()</code>	423
4.588.2.2 <code>getAttributes()</code>	424
4.589nsIScriptablePlugin Interface Reference	424
4.589.1 Detailed Description	425
4.589.2 Field Documentation	425
4.589.2.1 <code>scriptableInterface</code>	425
4.589.2.2 <code>scriptablePeer</code>	425
4.590nsIWindowlessPluginInstancePeer Interface Reference	425
4.590.1 Detailed Description	426
4.591nsPIPluginInstancePeer Interface Reference	426
4.591.1 Detailed Description	426
4.592nsPluginEmbedPrint Struct Reference	426
4.592.1 Detailed Description	427
4.593nsPluginEvent Struct Reference	427
4.593.1 Detailed Description	427
4.594nsPluginFullPrint Struct Reference	427
4.594.1 Detailed Description	427
4.595nsPluginLogging Class Reference	428
4.595.1 Detailed Description	428
4.596nsPluginNativeWindow Class Reference	428
4.596.1 Detailed Description	429
4.596.2 Member Function Documentation	429
4.596.2.1 <code>GetPluginInstance()</code> [1/2]	429
4.596.2.2 <code>GetPluginInstance()</code> [2/2]	429
4.597nsPluginPrint Struct Reference	430
4.597.1 Detailed Description	430
4.598nsPluginRect Struct Reference	430
4.598.1 Detailed Description	430
4.599nsPluginWindow Struct Reference	431
4.599.1 Detailed Description	431

4.600NurbsTessellator Class Reference	431
4.600.1 Detailed Description	432
4.601O_curve Struct Reference	433
4.601.1 Detailed Description	433
4.602O_nurbscurve Struct Reference	433
4.602.1 Detailed Description	434
4.603O_nurbssurface Struct Reference	434
4.603.1 Detailed Description	434
4.604O_pwlcurve Class Reference	435
4.604.1 Detailed Description	435
4.605O_surface Struct Reference	435
4.605.1 Detailed Description	436
4.606O_trim Struct Reference	436
4.606.1 Detailed Description	436
4.607OpenGLCurveEvaluator Class Reference	436
4.607.1 Detailed Description	438
4.608OpenGLSurfaceEvaluator Class Reference	438
4.608.1 Detailed Description	439
4.609openned_file Struct Reference	439
4.609.1 Detailed Description	439
4.610orient_XYZA Struct Reference	440
4.610.1 Detailed Description	440
4.611particle Struct Reference	440
4.611.1 Detailed Description	440
4.612Patch Class Reference	440
4.612.1 Detailed Description	441
4.613Patchlist Class Reference	441
4.613.1 Detailed Description	441
4.614Patchspec Struct Reference	442
4.614.1 Detailed Description	442

4.615pBindable Struct Reference	442
4.615.1 Detailed Description	442
4.616pcollision Struct Reference	443
4.616.1 Detailed Description	443
4.617pcommon Struct Reference	443
4.617.1 Detailed Description	444
4.618pComponent_CubeMapTexturing Struct Reference	444
4.618.1 Detailed Description	444
4.619pComponent_EnviroSensor Struct Reference	444
4.619.1 Detailed Description	444
4.620pComponent_Followers Struct Reference	445
4.620.1 Detailed Description	445
4.621pComponent_Geometry3D Struct Reference	445
4.621.1 Detailed Description	445
4.622pComponent_Geospatial Struct Reference	445
4.622.1 Detailed Description	445
4.623pComponent_HAnim Struct Reference	446
4.623.1 Detailed Description	446
4.624pComponent_KeyDevice Struct Reference	446
4.624.1 Detailed Description	446
4.625pComponent_Layering Struct Reference	446
4.625.1 Detailed Description	446
4.626pComponent_Layout Struct Reference	447
4.626.1 Detailed Description	447
4.627pComponent_NURBS Struct Reference	447
4.627.1 Detailed Description	447
4.628pComponent_ParticleSystems Struct Reference	447
4.628.1 Detailed Description	447
4.629pComponent_Picking Struct Reference	448
4.629.1 Detailed Description	448

4.630pComponent_ProgrammableShaders Struct Reference	448
4.630.1 Detailed Description	448
4.631pComponent_Rendering Struct Reference	448
4.631.1 Detailed Description	448
4.632pComponent_RigidBodyPhysics Struct Reference	449
4.632.1 Detailed Description	449
4.633pComponent_Shape Struct Reference	449
4.633.1 Detailed Description	449
4.634pComponent_Sound Struct Reference	449
4.634.1 Detailed Description	450
4.635pComponent_Text Struct Reference	450
4.635.1 Detailed Description	451
4.636pComponent_VolumeRendering Struct Reference	451
4.636.1 Detailed Description	451
4.637pConsoleMessage Struct Reference	451
4.637.1 Detailed Description	452
4.638pCParse Struct Reference	452
4.638.1 Detailed Description	452
4.639pCParseParser Struct Reference	452
4.639.1 Detailed Description	452
4.640pCRoutes Struct Reference	453
4.640.1 Detailed Description	453
4.641pCScripts Struct Reference	453
4.641.1 Detailed Description	453
4.642pCursorDraw Struct Reference	454
4.642.1 Detailed Description	454
4.643pdisplay Struct Reference	454
4.643.1 Detailed Description	454
4.644pEAI_C_CommonFunctions Struct Reference	454
4.644.1 Detailed Description	454

4.645pEAICore Struct Reference	455
4.645.1 Detailed Description	455
4.646pEAIEventsIn Struct Reference	455
4.646.1 Detailed Description	455
4.647pEAHelpers Struct Reference	455
4.647.1 Detailed Description	455
4.648pedal_state Struct Reference	456
4.648.1 Detailed Description	456
4.649pFrustum Struct Reference	456
4.649.1 Detailed Description	456
4.650pict Struct Reference	456
4.650.1 Detailed Description	457
4.651pict_image Struct Reference	457
4.651.1 Detailed Description	457
4.652pJScript Struct Reference	457
4.652.1 Detailed Description	457
4.653pjsUtils Struct Reference	458
4.653.1 Detailed Description	458
4.654pjsVRMLBrowser Struct Reference	458
4.654.1 Detailed Description	458
4.655pjsVRMLClasses Struct Reference	458
4.655.1 Detailed Description	458
4.656pLoadTextures Struct Reference	459
4.656.1 Detailed Description	459
4.657pMainloop Struct Reference	459
4.657.1 Detailed Description	460
4.658Point Struct Reference	460
4.658.1 Detailed Description	460
4.659point_XYZ Struct Reference	461
4.659.1 Detailed Description	461

4.660point_XYZ3 Struct Reference	461
4.660.1 Detailed Description	461
4.661pointer2pointer Struct Reference	461
4.661.1 Detailed Description	461
4.662polygon Struct Reference	462
4.662.1 Detailed Description	462
4.663polyrep_combiner_data Struct Reference	462
4.663.1 Detailed Description	462
4.664Pool Class Reference	462
4.664.1 Detailed Description	463
4.665PooledObj Class Reference	463
4.665.1 Detailed Description	464
4.666pOpenGL_Utils Struct Reference	464
4.666.1 Detailed Description	464
4.667pPluginSocket Struct Reference	465
4.667.1 Detailed Description	465
4.668ppuginUtils Struct Reference	465
4.668.1 Detailed Description	465
4.669pProdCon Struct Reference	465
4.669.1 Detailed Description	466
4.670PQhandleElem Struct Reference	466
4.670.1 Detailed Description	466
4.671PQnode Struct Reference	466
4.671.1 Detailed Description	466
4.672pRasterFont Struct Reference	466
4.672.1 Detailed Description	467
4.673pRenderFuncs Struct Reference	467
4.673.1 Detailed Description	468
4.674pRenderTextures Struct Reference	468
4.674.1 Detailed Description	468

4.675presources Struct Reference	468
4.675.1 Detailed Description	468
4.676primStream Class Reference	469
4.676.1 Detailed Description	469
4.677PriorityQ Struct Reference	469
4.677.1 Detailed Description	470
4.678profile_entry Struct Reference	470
4.678.1 Detailed Description	470
4.679org.web3d.x3d.sai.ProfileInfo Interface Reference	470
4.679.1 Detailed Description	471
4.680proftablestruct Struct Reference	471
4.680.1 Detailed Description	471
4.681Property Struct Reference	471
4.681.1 Detailed Description	472
4.682ProtoDefinition Struct Reference	472
4.682.1 Detailed Description	472
4.683ProtoFieldDecl Struct Reference	472
4.683.1 Detailed Description	472
4.684pSensInterps Struct Reference	473
4.684.1 Detailed Description	473
4.685pSnapshot Struct Reference	473
4.685.1 Detailed Description	473
4.686Pspec Struct Reference	473
4.686.1 Detailed Description	474
4.687PSStruct Struct Reference	474
4.687.1 Detailed Description	474
4.688pstatusbar Struct Reference	474
4.688.1 Detailed Description	475
4.689pStreamPoly Struct Reference	475
4.689.1 Detailed Description	475

4.690pTess Struct Reference	475
4.690.1 Detailed Description	475
4.691pTextures Struct Reference	475
4.691.1 Detailed Description	476
4.692pViewer Struct Reference	476
4.692.1 Detailed Description	476
4.693PwlArc Class Reference	476
4.693.1 Detailed Description	477
4.694pX3DParser Struct Reference	477
4.694.1 Detailed Description	477
4.695quaternion Struct Reference	478
4.695.1 Detailed Description	478
4.696Quilt Class Reference	478
4.696.1 Detailed Description	479
4.697QuiltSpec Struct Reference	479
4.697.1 Detailed Description	479
4.698rb1 Struct Reference	479
4.698.1 Detailed Description	480
4.699rectBlock Class Reference	480
4.699.1 Detailed Description	480
4.700rectBlockArray Class Reference	480
4.700.1 Detailed Description	480
4.701reflexChain Class Reference	481
4.701.1 Detailed Description	481
4.702RenderHints Class Reference	481
4.702.1 Detailed Description	481
4.703resource_item Struct Reference	482
4.703.1 Detailed Description	482
4.704row32 Struct Reference	482
4.704.1 Detailed Description	483

4.705s_renderer_capabilities_t Struct Reference	483
4.705.1 Detailed Description	483
4.706s_shader_capabilities Struct Reference	484
4.706.1 Detailed Description	485
4.707freeWRLSAI_cpp::saiBrowser Class Reference	485
4.707.1 Detailed Description	486
4.708freeWRLSAI_cpp::saiComponent Class Reference	486
4.708.1 Detailed Description	486
4.709freeWRLSAI_cpp::saiCustomException Class Reference	486
4.709.1 Detailed Description	487
4.710freeWRLSAI_cpp::saiException Class Reference	487
4.710.1 Detailed Description	488
4.711freeWRLSAI_cpp::saiExecutionContext Class Reference	488
4.711.1 Detailed Description	488
4.712freeWRLSAI_cpp::saiField Class Reference	488
4.712.1 Detailed Description	489
4.713freeWRLSAI_cpp::saiNode Class Reference	489
4.713.1 Detailed Description	489
4.714freeWRLSAI_cpp::saiProfileDeclaration Class Reference	489
4.714.1 Detailed Description	490
4.715freeWRLSAI_cpp::saiProto Class Reference	490
4.715.1 Detailed Description	490
4.716freeWRLSAI_cpp::saiRoute Class Reference	490
4.716.1 Detailed Description	490
4.717freeWRLSAI_cpp::saiScene Class Reference	491
4.717.1 Detailed Description	491
4.718sampledLine Class Reference	491
4.718.1 Detailed Description	491
4.719sCollisionGeometry Struct Reference	492
4.719.1 Detailed Description	492

4.720sCollisionInfo Struct Reference	492
4.720.1 Detailed Description	492
4.721screentextdata Struct Reference	492
4.721.1 Detailed Description	493
4.722vrml.node.Script Class Reference	493
4.722.1 Detailed Description	493
4.723ScriptablePluginObjectBase Class Reference	494
4.723.1 Detailed Description	495
4.724ScriptFieldDecl Struct Reference	495
4.724.1 Detailed Description	495
4.725ScriptFieldInstanceInfo Struct Reference	495
4.725.1 Detailed Description	495
4.726ScriptParamList Struct Reference	496
4.726.1 Detailed Description	496
4.727SensStruct Struct Reference	496
4.727.1 Detailed Description	496
4.728sFallInfo Struct Reference	497
4.728.1 Detailed Description	497
4.729vrml.field.SFBool Class Reference	497
4.729.1 Detailed Description	498
4.730org.web3d.x3d.sai.SFBool Interface Reference	498
4.730.1 Detailed Description	498
4.731SFColor Struct Reference	499
4.731.1 Detailed Description	499
4.732org.web3d.x3d.sai.SFColor Interface Reference	499
4.732.1 Detailed Description	499
4.733vrml.field.SFColor Class Reference	500
4.733.1 Detailed Description	500
4.734SFColorRGBA Struct Reference	500
4.734.1 Detailed Description	501

4.735org.web3d.x3d.sai.SFColorRGBA Interface Reference	501
4.735.1 Detailed Description	501
4.736org.web3d.x3d.sai.SFDouble Interface Reference	501
4.736.1 Detailed Description	502
4.737vrml.field.SFFloat Class Reference	502
4.737.1 Detailed Description	502
4.738org.web3d.x3d.sai.SFFloat Interface Reference	503
4.738.1 Detailed Description	503
4.739vrml.field.SFImage Class Reference	503
4.739.1 Detailed Description	504
4.740org.web3d.x3d.sai.SFImage Interface Reference	504
4.740.1 Detailed Description	504
4.741vrml.field.SFInt32 Class Reference	505
4.741.1 Detailed Description	505
4.742org.web3d.x3d.sai.SFInt32 Interface Reference	505
4.742.1 Detailed Description	506
4.743SFMatrix3d Struct Reference	506
4.743.1 Detailed Description	506
4.744SFMatrix3f Struct Reference	506
4.744.1 Detailed Description	506
4.745SFMatrix4d Struct Reference	507
4.745.1 Detailed Description	507
4.746SFMatrix4f Struct Reference	507
4.746.1 Detailed Description	507
4.747vrml.field.SFNode Class Reference	507
4.747.1 Detailed Description	508
4.748org.web3d.x3d.sai.SFNode Interface Reference	508
4.748.1 Detailed Description	508
4.749vrml.field.SFRotation Class Reference	509
4.749.1 Detailed Description	509

4.750org.web3d.x3d.sai.SFRotation Interface Reference	509
4.750.1 Detailed Description	510
4.751SFRotation Struct Reference	510
4.751.1 Detailed Description	510
4.752vrml.field.SFString Class Reference	510
4.752.1 Detailed Description	511
4.753org.web3d.x3d.sai.SFString Interface Reference	511
4.753.1 Detailed Description	511
4.754vrml.field.SFTime Class Reference	512
4.754.1 Detailed Description	512
4.755org.web3d.x3d.sai.SFTime Interface Reference	512
4.755.1 Detailed Description	513
4.756SFVec2d Struct Reference	513
4.756.1 Detailed Description	513
4.757org.web3d.x3d.sai.SFVec2d Interface Reference	513
4.757.1 Detailed Description	514
4.758SFVec2f Struct Reference	514
4.758.1 Detailed Description	514
4.759vrml.field.SFVec2f Class Reference	514
4.759.1 Detailed Description	515
4.760org.web3d.x3d.sai.SFVec2f Interface Reference	515
4.760.1 Detailed Description	515
4.761SFVec3d Struct Reference	515
4.761.1 Detailed Description	516
4.762org.web3d.x3d.sai.SFVec3d Interface Reference	516
4.762.1 Detailed Description	516
4.763vrml.field.SFVec3f Class Reference	516
4.763.1 Detailed Description	517
4.764org.web3d.x3d.sai.SFVec3f Interface Reference	517
4.764.1 Detailed Description	517

4.765SFVec3f Struct Reference	518
4.765.1 Detailed Description	518
4.766SFVec4d Struct Reference	518
4.766.1 Detailed Description	518
4.767SFVec4f Struct Reference	518
4.767.1 Detailed Description	518
4.768Shader_Script Struct Reference	519
4.768.1 Detailed Description	519
4.769shaderflagsstruct Struct Reference	519
4.769.1 Detailed Description	519
4.770shaderTableEntry Struct Reference	519
4.770.1 Detailed Description	520
4.771slice Struct Reference	520
4.771.1 Detailed Description	520
4.772Slicer Class Reference	520
4.772.1 Detailed Description	521
4.773sNavInfo Struct Reference	521
4.773.1 Detailed Description	521
4.774SNDFILE Struct Reference	521
4.774.1 Detailed Description	522
4.775Sorter Class Reference	522
4.775.1 Detailed Description	522
4.776Splinespec Struct Reference	523
4.776.1 Detailed Description	523
4.777ssr Struct Reference	523
4.777.1 Detailed Description	523
4.778SSR_request Struct Reference	524
4.778.1 Detailed Description	524
4.779stage Struct Reference	524
4.779.1 Detailed Description	524

4.780StoredVertex Class Reference	525
4.780.1 Detailed Description	525
4.781Subdivider Class Reference	525
4.781.1 Detailed Description	525
4.782surfEvalMachine Struct Reference	526
4.782.1 Detailed Description	526
4.783sweepRange Struct Reference	526
4.783.1 Detailed Description	526
4.784targetwindow Struct Reference	527
4.784.1 Detailed Description	527
4.785iiglobal::tBindable Struct Reference	527
4.785.1 Detailed Description	527
4.786iiglobal::tcollision Struct Reference	527
4.786.1 Detailed Description	528
4.787iiglobal::tcommon Struct Reference	528
4.787.1 Detailed Description	528
4.788iiglobal::tComponent_CubeMapTexturing Struct Reference	528
4.788.1 Detailed Description	528
4.789iiglobal::tComponent_EnvironSensor Struct Reference	528
4.789.1 Detailed Description	529
4.790iiglobal::tComponent_Followers Struct Reference	529
4.790.1 Detailed Description	529
4.791iiglobal::tComponent_Geometry3D Struct Reference	529
4.791.1 Detailed Description	529
4.792iiglobal::tComponent_Geospatial Struct Reference	529
4.792.1 Detailed Description	530
4.793iiglobal::tComponent_HAnim Struct Reference	530
4.793.1 Detailed Description	530
4.794iiglobal::tComponent_KeyDevice Struct Reference	530
4.794.1 Detailed Description	530

4.795iiglobal::tComponent_Layering Struct Reference	530
4.795.1 Detailed Description	531
4.796iiglobal::tComponent_Layout Struct Reference	531
4.796.1 Detailed Description	531
4.797iiglobal::tComponent_NURBS Struct Reference	531
4.797.1 Detailed Description	531
4.798iiglobal::tComponent_ParticleSystems Struct Reference	531
4.798.1 Detailed Description	532
4.799iiglobal::tComponent_Picking Struct Reference	532
4.799.1 Detailed Description	532
4.800iiglobal::tComponent_ProgrammableShaders Struct Reference	532
4.800.1 Detailed Description	532
4.801iiglobal::tComponent_Rendering Struct Reference	532
4.801.1 Detailed Description	533
4.802iiglobal::tComponent_RigidBodyPhysics Struct Reference	533
4.802.1 Detailed Description	533
4.803iiglobal::tComponent_Shape Struct Reference	533
4.803.1 Detailed Description	533
4.804iiglobal::tComponent_Sound Struct Reference	533
4.804.1 Detailed Description	534
4.805iiglobal::tComponent_Text Struct Reference	534
4.805.1 Detailed Description	534
4.806iiglobal::tComponent_VolumeRendering Struct Reference	534
4.806.1 Detailed Description	534
4.807iiglobal::tComponent_VRML1 Struct Reference	534
4.807.1 Detailed Description	535
4.808iiglobal::tConsoleMessage Struct Reference	535
4.808.1 Detailed Description	535
4.809tcontenttype Struct Reference	535
4.809.1 Detailed Description	535

4.810iiglobal::tCParse Struct Reference	536
4.810.1 Detailed Description	536
4.811iiglobal::tCParseParser Struct Reference	536
4.811.1 Detailed Description	536
4.812iiglobal::tCRoutes Struct Reference	536
4.812.1 Detailed Description	537
4.813iiglobal::tCScripts Struct Reference	537
4.813.1 Detailed Description	537
4.814iiglobal::tCursorDraw Struct Reference	537
4.814.1 Detailed Description	537
4.815iiglobal::tdisplay Struct Reference	537
4.815.1 Detailed Description	538
4.816iiglobal::tEAI_C_CommonFunctions Struct Reference	538
4.816.1 Detailed Description	538
4.817iiglobal::tEAICore Struct Reference	538
4.817.1 Detailed Description	538
4.818iiglobal::tEAIEventsIn Struct Reference	539
4.818.1 Detailed Description	539
4.819iiglobal::tEAHelpers Struct Reference	539
4.819.1 Detailed Description	539
4.820text_combiner_data Struct Reference	539
4.820.1 Detailed Description	539
4.821textureTableIndexStruct Struct Reference	540
4.821.1 Detailed Description	540
4.822textureVertexInfo Struct Reference	540
4.822.1 Detailed Description	540
4.823iiglobal::tFrustum Struct Reference	541
4.823.1 Detailed Description	541
4.824iiglobal::tinternalc Struct Reference	541
4.824.1 Detailed Description	541

4.825iiglobal::tJScript Struct Reference	541
4.825.1 Detailed Description	542
4.826iiglobal::tjsUtils Struct Reference	542
4.826.1 Detailed Description	542
4.827iiglobal::tjsVRMLBrowser Struct Reference	542
4.827.1 Detailed Description	542
4.828iiglobal::tjsVRMLClasses Struct Reference	542
4.828.1 Detailed Description	543
4.829iiglobal::tLoadTextures Struct Reference	543
4.829.1 Detailed Description	543
4.830tm_unz_s Struct Reference	543
4.830.1 Detailed Description	543
4.831tm_zip_s Struct Reference	544
4.831.1 Detailed Description	544
4.832iiglobal::tMainloop Struct Reference	544
4.832.1 Detailed Description	545
4.833iiglobal::tOpenGL_Utils Struct Reference	545
4.833.1 Detailed Description	545
4.834Touch Struct Reference	545
4.834.1 Detailed Description	546
4.835iiglobal::tPluginSocket Struct Reference	546
4.835.1 Detailed Description	546
4.836iiglobal::tpluginUtils Struct Reference	546
4.836.1 Detailed Description	546
4.837iiglobal::tProdCon Struct Reference	546
4.837.1 Detailed Description	547
4.838treeNode Struct Reference	547
4.838.1 Detailed Description	547
4.839iiglobal::tRenderFuncs Struct Reference	547
4.839.1 Detailed Description	548

4.840trenderstate Struct Reference	548
4.840.1 Detailed Description	548
4.841iiglobal::tRenderTextures Struct Reference	548
4.841.1 Detailed Description	548
4.842iiglobal::tresources Struct Reference	549
4.842.1 Detailed Description	549
4.843Trimline Class Reference	549
4.843.1 Detailed Description	549
4.844TrimRegion Class Reference	550
4.844.1 Detailed Description	550
4.845TrimVertex Class Reference	550
4.845.1 Detailed Description	551
4.846TrimVertexPool Class Reference	551
4.846.1 Detailed Description	551
4.847iiglobal::tSensInterps Struct Reference	551
4.847.1 Detailed Description	551
4.848iiglobal::tSnapshot Struct Reference	551
4.848.1 Detailed Description	552
4.849iiglobal::tstatusbar Struct Reference	552
4.849.1 Detailed Description	552
4.850iiglobal::tStreamPoly Struct Reference	552
4.850.1 Detailed Description	552
4.851iiglobal::tTess Struct Reference	552
4.851.1 Detailed Description	553
4.852iiglobal::tTextures Struct Reference	553
4.852.1 Detailed Description	553
4.853iiglobal::tthreads Struct Reference	553
4.853.1 Detailed Description	554
4.854iiglobal::tViewer Struct Reference	554
4.854.1 Detailed Description	554

4.855iiglobal::tX3DParser Struct Reference	554
4.855.1 Detailed Description	554
4.856Uarray Class Reference	554
4.856.1 Detailed Description	555
4.857un1 Union Reference	555
4.857.1 Detailed Description	555
4.858Uni_String Struct Reference	555
4.858.1 Detailed Description	555
4.859vrml.external.FreeWRLEAI.UnsupportedFieldTypeException Class Reference	556
4.859.1 Detailed Description	556
4.860sai.eai.UnsupportedFieldTypeException Class Reference	556
4.860.1 Detailed Description	556
4.861unz64_file_pos_s Struct Reference	557
4.861.1 Detailed Description	557
4.862unz64_s Struct Reference	557
4.862.1 Detailed Description	557
4.863unz_file_info64_internal_s Struct Reference	558
4.863.1 Detailed Description	558
4.864unz_file_info64_s Struct Reference	558
4.864.1 Detailed Description	558
4.865unz_file_info_s Struct Reference	559
4.865.1 Detailed Description	559
4.866unz_file_pos_s Struct Reference	559
4.866.1 Detailed Description	559
4.867unz_global_info64_s Struct Reference	559
4.867.1 Detailed Description	560
4.868unz_global_info_s Struct Reference	560
4.868.1 Detailed Description	560
4.869org.web3d.x3d.sai.URLUnavailableException Class Reference	560
4.869.1 Detailed Description	560

4.870freeWRLSAI_cpp::urlUnavailableException Class Reference	561
4.870.1 Detailed Description	561
4.871usehit Struct Reference	561
4.871.1 Detailed Description	561
4.872Varray Class Reference	562
4.872.1 Detailed Description	562
4.873vec2 Struct Reference	562
4.873.1 Detailed Description	562
4.874vec4 Struct Reference	562
4.874.1 Detailed Description	563
4.875Vector Struct Reference	563
4.875.1 Detailed Description	563
4.876vertexArray Class Reference	563
4.876.1 Detailed Description	564
4.877vrml.external.FreeWRLEAI.VField Class Reference	564
4.877.1 Detailed Description	565
4.878sai.eai.VField Class Reference	565
4.878.1 Detailed Description	567
4.879vid_stream Struct Reference	567
4.879.1 Detailed Description	568
4.880viewer Struct Reference	568
4.880.1 Detailed Description	569
4.881viewer_examine Struct Reference	570
4.881.1 Detailed Description	570
4.882viewer_fly Struct Reference	570
4.882.1 Detailed Description	570
4.883viewer_inplane Struct Reference	570
4.883.1 Detailed Description	571
4.884viewer_walk Struct Reference	571
4.884.1 Detailed Description	571

4.885viewer_ypz Struct Reference	571
4.885.1 Detailed Description	571
4.886vrml.external.FreeWRLEAI.VIP Class Reference	572
4.886.1 Detailed Description	572
4.887sai.eai.VIP Class Reference	572
4.887.1 Detailed Description	573
4.888vrml.external.FreeWRLEAI.VMFCOLOR Class Reference	573
4.888.1 Detailed Description	574
4.889sai.eai.VMFCOLOR Class Reference	574
4.889.1 Detailed Description	574
4.890sai.eai.VMFFloat Class Reference	575
4.890.1 Detailed Description	575
4.891vrml.external.FreeWRLEAI.VMFFloat Class Reference	575
4.891.1 Detailed Description	576
4.892sai.eai.VMFInt32 Class Reference	576
4.892.1 Detailed Description	576
4.893vrml.external.FreeWRLEAI.VMFInt32 Class Reference	576
4.893.1 Detailed Description	577
4.894sai.eai.VMFRotation Class Reference	577
4.894.1 Detailed Description	577
4.895vrml.external.FreeWRLEAI.VMFRotation Class Reference	578
4.895.1 Detailed Description	578
4.896sai.eai.VMFString Class Reference	578
4.896.1 Detailed Description	579
4.897vrml.external.FreeWRLEAI.VMFString Class Reference	579
4.897.1 Detailed Description	579
4.898sai.eai.VMFVec2f Class Reference	579
4.898.1 Detailed Description	580
4.899vrml.external.FreeWRLEAI.VMFVec2f Class Reference	580
4.899.1 Detailed Description	580

4.900vrml.external.FreeWRLEAI.VMFVec3f Class Reference	581
4.900.1 Detailed Description	581
4.901sai.eai.VMFVec3f Class Reference	581
4.901.1 Detailed Description	582
4.902void3 Struct Reference	582
4.902.1 Detailed Description	582
4.903VRMLLexer Struct Reference	582
4.903.1 Detailed Description	583
4.904sai.eai.VRMLObject Class Reference	583
4.904.1 Detailed Description	583
4.905vrml.external.FreeWRLEAI.VRMLObject Class Reference	584
4.905.1 Detailed Description	584
4.906vrml.external.FreeWRLEAI.VRMLObjectObserver Interface Reference	584
4.906.1 Detailed Description	585
4.907sai.eai.VRMLObjectObserver Interface Reference	585
4.907.1 Detailed Description	585
4.908VRMLParser Struct Reference	585
4.908.1 Detailed Description	585
4.909vrml.external.FreeWRLEAI.VSFBool Class Reference	586
4.909.1 Detailed Description	586
4.910sai.eai.VSFBool Class Reference	586
4.910.1 Detailed Description	587
4.911sai.eai.VSFColor Class Reference	587
4.911.1 Detailed Description	587
4.912vrml.external.FreeWRLEAI.VSFColor Class Reference	587
4.912.1 Detailed Description	588
4.913vrml.external.FreeWRLEAI.VSFFloat Class Reference	588
4.913.1 Detailed Description	588
4.914sai.eai.VSFFloat Class Reference	589
4.914.1 Detailed Description	589

4.915vrml.external.FreeWRLEAI.VSFImage Class Reference	589
4.915.1 Detailed Description	590
4.916sai.eai.VSFImage Class Reference	590
4.916.1 Detailed Description	590
4.917vrml.external.FreeWRLEAI.VSFInt32 Class Reference	590
4.917.1 Detailed Description	591
4.918sai.eai.VSFInt32 Class Reference	591
4.918.1 Detailed Description	591
4.919sai.eai.VSFRotation Class Reference	592
4.919.1 Detailed Description	592
4.920vrml.external.FreeWRLEAI.VSFRotation Class Reference	592
4.920.1 Detailed Description	593
4.921sai.eai.VSFString Class Reference	593
4.921.1 Detailed Description	593
4.922vrml.external.FreeWRLEAI.VSFString Class Reference	593
4.922.1 Detailed Description	594
4.923sai.eai.VSFTime Class Reference	594
4.923.1 Detailed Description	594
4.924vrml.external.FreeWRLEAI.VSFTime Class Reference	595
4.924.1 Detailed Description	595
4.925vrml.external.FreeWRLEAI.VSFVec2f Class Reference	595
4.925.1 Detailed Description	596
4.926sai.eai.VSFVec2f Class Reference	596
4.926.1 Detailed Description	596
4.927vrml.external.FreeWRLEAI.VSFVec3f Class Reference	596
4.927.1 Detailed Description	597
4.928sai.eai.VSFVec3f Class Reference	597
4.928.1 Detailed Description	598
4.929walk_cbdata Struct Reference	598
4.929.1 Detailed Description	598

4.930WEB3DNATIVE Struct Reference	598
4.930.1 Detailed Description	599
4.931X3D_Ancor Struct Reference	599
4.931.1 Detailed Description	599
4.932X3D_Appearance Struct Reference	600
4.932.1 Detailed Description	600
4.933X3D_Arc2D Struct Reference	600
4.933.1 Detailed Description	601
4.934X3D_ArcClose2D Struct Reference	601
4.934.1 Detailed Description	601
4.935X3D_AudioClip Struct Reference	602
4.935.1 Detailed Description	602
4.936X3D_BackdropBackground Struct Reference	603
4.936.1 Detailed Description	603
4.937X3D_Background Struct Reference	603
4.937.1 Detailed Description	604
4.938X3D_BallJoint Struct Reference	604
4.938.1 Detailed Description	605
4.939X3D_Billboard Struct Reference	605
4.939.1 Detailed Description	606
4.940X3D_BlendedVolumeStyle Struct Reference	606
4.940.1 Detailed Description	606
4.941X3D_BooleanFilter Struct Reference	607
4.941.1 Detailed Description	607
4.942X3D_BooleanSequencer Struct Reference	607
4.942.1 Detailed Description	608
4.943X3D_BooleanToggle Struct Reference	608
4.943.1 Detailed Description	608
4.944X3D_BooleanTrigger Struct Reference	608
4.944.1 Detailed Description	609

4.945X3D_BoundaryEnhancementVolumeStyle Struct Reference	609
4.945.1 Detailed Description	609
4.946X3D_BoundedPhysicsModel Struct Reference	610
4.946.1 Detailed Description	610
4.947X3D_Box Struct Reference	610
4.947.1 Detailed Description	611
4.948X3D_CADAssembly Struct Reference	611
4.948.1 Detailed Description	611
4.949X3D_CADFace Struct Reference	612
4.949.1 Detailed Description	612
4.950X3D_CADLayer Struct Reference	612
4.950.1 Detailed Description	613
4.951X3D_CADPart Struct Reference	613
4.951.1 Detailed Description	613
4.952X3D_CalibratedCameraSensor Struct Reference	614
4.952.1 Detailed Description	614
4.953X3D_CartoonVolumeStyle Struct Reference	614
4.953.1 Detailed Description	615
4.954X3D_Circle2D Struct Reference	615
4.954.1 Detailed Description	615
4.955X3D_ClipPlane Struct Reference	615
4.955.1 Detailed Description	616
4.956X3D_CollidableOffset Struct Reference	616
4.956.1 Detailed Description	616
4.957X3D_CollidableShape Struct Reference	617
4.957.1 Detailed Description	617
4.958X3D_Collision Struct Reference	617
4.958.1 Detailed Description	618
4.959X3D_CollisionCollection Struct Reference	618
4.959.1 Detailed Description	619

4.960X3D_CollisionSensor Struct Reference	619
4.960.1 Detailed Description	619
4.961X3D_CollisionSpace Struct Reference	620
4.961.1 Detailed Description	620
4.962X3D_Color Struct Reference	620
4.962.1 Detailed Description	621
4.963X3D_ColorChaser Struct Reference	621
4.963.1 Detailed Description	621
4.964X3D_ColorDamper Struct Reference	622
4.964.1 Detailed Description	622
4.965X3D_ColorInterpolator Struct Reference	623
4.965.1 Detailed Description	623
4.966X3D_ColorRGBA Struct Reference	623
4.966.1 Detailed Description	624
4.967X3D_ComposedCubeMapTexture Struct Reference	624
4.967.1 Detailed Description	624
4.968X3D_ComposedShader Struct Reference	625
4.968.1 Detailed Description	625
4.969X3D_ComposedTexture3D Struct Reference	625
4.969.1 Detailed Description	626
4.970X3D_ComposedVolumeStyle Struct Reference	626
4.970.1 Detailed Description	626
4.971X3D_CompositeVolumeStyle Struct Reference	627
4.971.1 Detailed Description	627
4.972X3D_Cone Struct Reference	627
4.972.1 Detailed Description	628
4.973X3D_ConeEmitter Struct Reference	628
4.973.1 Detailed Description	628
4.974X3D_Contact Struct Reference	629
4.974.1 Detailed Description	629

4.975X3D_Contour2D Struct Reference	630
4.975.1 Detailed Description	630
4.976X3D_ContourPolyline2D Struct Reference	630
4.976.1 Detailed Description	631
4.977X3D_Coordinate Struct Reference	631
4.977.1 Detailed Description	631
4.978X3D_CoordinateChaser Struct Reference	631
4.978.1 Detailed Description	632
4.979X3D_CoordinateDamper Struct Reference	632
4.979.1 Detailed Description	633
4.980X3D_CoordinateDouble Struct Reference	633
4.980.1 Detailed Description	633
4.981X3D_CoordinateInterpolator Struct Reference	634
4.981.1 Detailed Description	634
4.982X3D_CoordinateInterpolator2D Struct Reference	634
4.982.1 Detailed Description	635
4.983X3D_Cylinder Struct Reference	635
4.983.1 Detailed Description	635
4.984X3D_CylinderSensor Struct Reference	636
4.984.1 Detailed Description	636
4.985X3D_DirectionalLight Struct Reference	637
4.985.1 Detailed Description	637
4.986X3D_DISEntityManager Struct Reference	637
4.986.1 Detailed Description	638
4.987X3D_DISEntityTypeMapping Struct Reference	638
4.987.1 Detailed Description	639
4.988X3D_Disk2D Struct Reference	639
4.988.1 Detailed Description	639
4.989X3D_DoubleAxisHingeJoint Struct Reference	640
4.989.1 Detailed Description	641

4.990X3D_EaseInEaseOut Struct Reference	641
4.990.1 Detailed Description	641
4.991X3D_EdgeEnhancementVolumeStyle Struct Reference	642
4.991.1 Detailed Description	642
4.992X3D_Effect Struct Reference	642
4.992.1 Detailed Description	643
4.993X3D_EffectPart Struct Reference	643
4.993.1 Detailed Description	643
4.994X3D_ElevationGrid Struct Reference	644
4.994.1 Detailed Description	644
4.995X3D_EspduTransform Struct Reference	645
4.995.1 Detailed Description	647
4.996X3D_ExplosionEmitter Struct Reference	647
4.996.1 Detailed Description	647
4.997X3D_Extrusion Struct Reference	648
4.997.1 Detailed Description	648
4.998X3D_FillProperties Struct Reference	649
4.998.1 Detailed Description	649
4.999X3D_FloatVertexAttribute Struct Reference	649
4.999.1 Detailed Description	650
4.100X3D_Fog Struct Reference	650
4.1000. Detailed Description	650
4.100X3D_FogCoordinate Struct Reference	651
4.1001. Detailed Description	651
4.100X3D_FontStyle Struct Reference	651
4.1002. Detailed Description	652
4.100X3D_ForcePhysicsModel Struct Reference	652
4.1003. Detailed Description	652
4.100X3D_GeneratedCubeMapTexture Struct Reference	653
4.1004. Detailed Description	653

4.100X3D_GeoCoordinate Struct Reference	653
4.1005. Detailed Description	654
4.100X3D_GeoElevationGrid Struct Reference	654
4.1006. Detailed Description	655
4.100X3D_GeoLocation Struct Reference	655
4.1007. Detailed Description	655
4.100X3D_GeoLOD Struct Reference	656
4.1008. Detailed Description	656
4.100X3D_GeoMetadata Struct Reference	657
4.1009. Detailed Description	657
4.101X3D_GeoOrigin Struct Reference	657
4.1010. Detailed Description	658
4.101X3D_GeoPositionInterpolator Struct Reference	658
4.1011. Detailed Description	658
4.101X3D_GeoProximitySensor Struct Reference	659
4.1012. Detailed Description	659
4.101X3D_GeoTouchSensor Struct Reference	660
4.1013. Detailed Description	660
4.101X3D_GeoTransform Struct Reference	661
4.1014. Detailed Description	661
4.101X3D_GeoViewpoint Struct Reference	662
4.1015. Detailed Description	662
4.101X3D_Group Struct Reference	663
4.1016. Detailed Description	663
4.101X3D_HAnimDisplacer Struct Reference	663
4.1017. Detailed Description	664
4.101X3D_HAnimHumanoid Struct Reference	664
4.1018. Detailed Description	665
4.101X3D_HAnimJoint Struct Reference	665
4.1019. Detailed Description	666

4.102 X 3D_HAnimSegment Struct Reference	666
4.1020. Detailed Description	666
4.102 X 3D_HAnimSite Struct Reference	667
4.1021. Detailed Description	667
4.102 X 3D_ImageBackdropBackground Struct Reference	668
4.1022. Detailed Description	668
4.102 X 3D_ImageCubeMapTexture Struct Reference	668
4.1023. Detailed Description	669
4.102 X 3D_ImageTexture Struct Reference	669
4.1024. Detailed Description	669
4.102 X 3D_ImageTexture3D Struct Reference	670
4.1025. Detailed Description	670
4.102 X 3D_IndexedFaceSet Struct Reference	670
4.1026. Detailed Description	671
4.102 X 3D_IndexedLineSet Struct Reference	671
4.1027. Detailed Description	672
4.102 X 3D_IndexedQuadSet Struct Reference	672
4.1028. Detailed Description	673
4.102 X 3D_IndexedTriangleFanSet Struct Reference	673
4.1029. Detailed Description	673
4.103 X 3D_IndexedTriangleSet Struct Reference	674
4.1030. Detailed Description	674
4.103 X 3D_IndexedTriangleStripSet Struct Reference	674
4.1031. Detailed Description	675
4.103 X 3D_Inline Struct Reference	675
4.1032. Detailed Description	676
4.103 X 3D_IntegerSequencer Struct Reference	676
4.1033. Detailed Description	677
4.103 X 3D_IntegerTrigger Struct Reference	677
4.1034. Detailed Description	677

4.103 X 3D_IsoSurfaceVolumeData Struct Reference	678
4.1035. Detailed Description	678
4.103 X 3D_KeySensor Struct Reference	678
4.1036. Detailed Description	679
4.103 X 3D_Layer Struct Reference	679
4.1037. Detailed Description	680
4.103 X 3D_LayerSet Struct Reference	680
4.1038. Detailed Description	680
4.103 X 3D_Layout Struct Reference	681
4.1039. Detailed Description	681
4.104 X 3D_LayoutGroup Struct Reference	681
4.1040. Detailed Description	682
4.104 X 3D_LayoutLayer Struct Reference	682
4.1041. Detailed Description	683
4.104 X 3D_LinePickSensor Struct Reference	683
4.1042. Detailed Description	683
4.104 X 3D_LineProperties Struct Reference	684
4.1043. Detailed Description	684
4.104 X 3D_LineSensor Struct Reference	684
4.1044. Detailed Description	685
4.104 X 3D_LineSet Struct Reference	685
4.1045. Detailed Description	686
4.104 X 3D_LoadSensor Struct Reference	686
4.1046. Detailed Description	686
4.104 X 3D_LocalFog Struct Reference	687
4.1047. Detailed Description	687
4.104 X 3D_LOD Struct Reference	687
4.1048. Detailed Description	688
4.104 X 3D_Material Struct Reference	688
4.1049. Detailed Description	689

4.105 X 3D_Matrix3VertexAttribute Struct Reference	689
4.1050. Detailed Description	689
4.105 X 3D_Matrix4VertexAttribute Struct Reference	689
4.1051. Detailed Description	690
4.105 X 3D_MetadataBoolean Struct Reference	690
4.1052. Detailed Description	690
4.105 X 3D_MetadataDouble Struct Reference	691
4.1053. Detailed Description	691
4.105 X 3D_MetadataFloat Struct Reference	691
4.1054. Detailed Description	692
4.105 X 3D_MetadataInteger Struct Reference	692
4.1055. Detailed Description	692
4.105 X 3D_MetadataMFBool Struct Reference	693
4.1056. Detailed Description	693
4.105 X 3D_MetadataMFColor Struct Reference	693
4.1057. Detailed Description	694
4.105 X 3D_MetadataMFColorRGBA Struct Reference	694
4.1058. Detailed Description	694
4.105 X 3D_MetadataMFDouble Struct Reference	695
4.1059. Detailed Description	695
4.106 X 3D_MetadataMFFloat Struct Reference	695
4.1060. Detailed Description	696
4.106 X 3D_MetadataMFInt32 Struct Reference	696
4.1061. Detailed Description	696
4.106 X 3D_MetadataMFMatrix3d Struct Reference	697
4.1062. Detailed Description	697
4.106 X 3D_MetadataMFMatrix3f Struct Reference	697
4.1063. Detailed Description	698
4.106 X 3D_MetadataMFMatrix4d Struct Reference	698
4.1064. Detailed Description	698

4.106 X 3D_MetadataMFMatrix4f Struct Reference	699
4.1065. Detailed Description	699
4.106 X 3D_MetadataMFNode Struct Reference	699
4.1066. Detailed Description	700
4.106 X 3D_MetadataMFRotation Struct Reference	700
4.1067. Detailed Description	700
4.106 X 3D_MetadataMFString Struct Reference	701
4.1068. Detailed Description	701
4.106 X 3D_MetadataMFTime Struct Reference	701
4.1069. Detailed Description	702
4.107 X 3D_MetadataMFVec2d Struct Reference	702
4.1070. Detailed Description	702
4.107 X 3D_MetadataMFVec2f Struct Reference	703
4.1071. Detailed Description	703
4.107 X 3D_MetadataMFVec3d Struct Reference	703
4.1072. Detailed Description	704
4.107 X 3D_MetadataMFVec3f Struct Reference	704
4.1073. Detailed Description	704
4.107 X 3D_MetadataMFVec4d Struct Reference	705
4.1074. Detailed Description	705
4.107 X 3D_MetadataMFVec4f Struct Reference	705
4.1075. Detailed Description	706
4.107 X 3D_MetadataSet Struct Reference	706
4.1076. Detailed Description	706
4.107 X 3D_MetadataSFBool Struct Reference	707
4.1077. Detailed Description	707
4.107 X 3D_MetadataSFColor Struct Reference	707
4.1078. Detailed Description	708
4.107 X 3D_MetadataSFColorRGBA Struct Reference	708
4.1079. Detailed Description	708

4.108X3D_MetadataSFDouble Struct Reference	709
4.1080. Detailed Description	709
4.108X3D_MetadataSFFloat Struct Reference	709
4.1081. Detailed Description	710
4.108X3D_MetadataSFImage Struct Reference	710
4.1082. Detailed Description	710
4.108X3D_MetadataSFInt32 Struct Reference	711
4.1083. Detailed Description	711
4.108X3D_MetadataSFMatrix3d Struct Reference	711
4.1084. Detailed Description	712
4.108X3D_MetadataSFMatrix3f Struct Reference	712
4.1085. Detailed Description	712
4.108X3D_MetadataSFMatrix4d Struct Reference	713
4.1086. Detailed Description	713
4.108X3D_MetadataSFMatrix4f Struct Reference	713
4.1087. Detailed Description	714
4.108X3D_MetadataSFNode Struct Reference	714
4.1088. Detailed Description	714
4.108X3D_MetadataSFRotation Struct Reference	715
4.1089. Detailed Description	715
4.109X3D_MetadataSFString Struct Reference	715
4.1090. Detailed Description	716
4.109X3D_MetadataSFTime Struct Reference	716
4.1091. Detailed Description	716
4.109X3D_MetadataSFVec2d Struct Reference	717
4.1092. Detailed Description	717
4.109X3D_MetadataSFVec2f Struct Reference	717
4.1093. Detailed Description	718
4.109X3D_MetadataSFVec3d Struct Reference	718
4.1094. Detailed Description	718

4.109X3D_MetadataSFVec3f Struct Reference	719
4.1095. Detailed Description	719
4.109X3D_MetadataSFVec4d Struct Reference	719
4.1096. Detailed Description	720
4.109X3D_MetadataSFVec4f Struct Reference	720
4.1097. Detailed Description	720
4.109X3D_MetadataString Struct Reference	721
4.1098. Detailed Description	721
4.109X3D_MotorJoint Struct Reference	721
4.1099. Detailed Description	722
4.110X3D_MovieTexture Struct Reference	723
4.1100. Detailed Description	723
4.110X3D_MultiTexture Struct Reference	724
4.1101. Detailed Description	724
4.110X3D_MultiTextureCoordinate Struct Reference	724
4.1102. Detailed Description	725
4.110X3D_MultiTextureTransform Struct Reference	725
4.1103. Detailed Description	725
4.110X3D_NavigationInfo Struct Reference	725
4.1104. Detailed Description	726
4.110X3D_Node Struct Reference	726
4.1105. Detailed Description	726
4.110X3D_Normal Struct Reference	727
4.1106. Detailed Description	727
4.110X3D_NormalInterpolator Struct Reference	727
4.1107. Detailed Description	728
4.110X3D_NurbsCurve Struct Reference	728
4.1108. Detailed Description	728
4.110X3D_NurbsCurve2D Struct Reference	729
4.1109. Detailed Description	729

4.111X3D_NurbsOrientationInterpolator Struct Reference	729
4.1110. Detailed Description	730
4.111X3D_NurbsPatchSurface Struct Reference	730
4.1111. Detailed Description	731
4.111X3D_NurbsPositionInterpolator Struct Reference	731
4.1112. Detailed Description	731
4.111X3D_NurbsSet Struct Reference	732
4.1113. Detailed Description	732
4.111X3D_NurbsSurfaceInterpolator Struct Reference	732
4.1114. Detailed Description	733
4.111X3D_NurbsSweptSurface Struct Reference	733
4.1115. Detailed Description	734
4.111X3D_NurbsSwungSurface Struct Reference	734
4.1116. Detailed Description	734
4.111X3D_NurbsTextureCoordinate Struct Reference	735
4.1117. Detailed Description	735
4.111X3D_NurbsTrimmedSurface Struct Reference	735
4.1118. Detailed Description	736
4.111X3D_OpacityMapVolumeStyle Struct Reference	736
4.1119. Detailed Description	737
4.112X3D_OrientationChaser Struct Reference	737
4.1120. Detailed Description	737
4.112X3D_OrientationDamper Struct Reference	738
4.1121. Detailed Description	738
4.112X3D_OrientationInterpolator Struct Reference	739
4.1122. Detailed Description	739
4.112X3D_OrthoViewpoint Struct Reference	739
4.1123. Detailed Description	740
4.112X3D_OSC_Sensor Struct Reference	740
4.1124. Detailed Description	741

4.112 X 3D_PackagedShader Struct Reference	741
4.1125. Detailed Description	742
4.112 X 3D_ParticleSystem Struct Reference	742
4.1126. Detailed Description	743
4.112X3D_PickableGroup Struct Reference	743
4.1127. Detailed Description	743
4.112 X 3D_PixelTexture Struct Reference	744
4.1128. Detailed Description	744
4.112 X 3D_PixelTexture3D Struct Reference	744
4.1129. Detailed Description	745
4.113 X 3D_PlaneSensor Struct Reference	745
4.1130. Detailed Description	746
4.113X3D_PointEmitter Struct Reference	746
4.1131. Detailed Description	746
4.113 X 3D_PointLight Struct Reference	747
4.1132. Detailed Description	747
4.113 X 3D_PointPickSensor Struct Reference	747
4.1133. Detailed Description	748
4.113 X 3D_PointSet Struct Reference	748
4.1134. Detailed Description	749
4.113 X 3D_Polyline2D Struct Reference	749
4.1135. Detailed Description	749
4.113 X 3D_PolylineEmitter Struct Reference	750
4.1136. Detailed Description	750
4.113X3D_Polypoint2D Struct Reference	750
4.1137. Detailed Description	751
4.113 X 3D_PolyRep Struct Reference	751
4.1138. Detailed Description	751
4.113 X 3D_PositionChaser Struct Reference	752
4.1139. Detailed Description	752

4.114 X 3D_PositionChaser2D Struct Reference	753
4.1140. Detailed Description	753
4.114 X 3D_PositionDamper Struct Reference	754
4.1141. Detailed Description	754
4.114 X 3D_PositionDamper2D Struct Reference	755
4.1142. Detailed Description	755
4.114 X 3D_PositionInterpolator Struct Reference	756
4.1143. Detailed Description	756
4.114 X 3D_PositionInterpolator2D Struct Reference	756
4.1144. Detailed Description	757
4.114 X 3D_PrimitivePickSensor Struct Reference	757
4.1145. Detailed Description	757
4.114 X 3D_ProgramShader Struct Reference	758
4.1146. Detailed Description	758
4.114 X 3D_ProjectionVolumeStyle Struct Reference	758
4.1147. Detailed Description	759
4.114 X 3D_Proto Struct Reference	759
4.1148. Detailed Description	760
4.114 X 3D_ProximitySensor Struct Reference	760
4.1149. Detailed Description	760
4.115 X 3D_QuadSet Struct Reference	761
4.1150. Detailed Description	761
4.115 X 3D_ReceiverPdu Struct Reference	761
4.1151. Detailed Description	762
4.115 X 3D_Rectangle2D Struct Reference	763
4.1152. Detailed Description	763
4.115 X 3D_RigidBody Struct Reference	763
4.1153. Detailed Description	764
4.115 X 3D_RigidBodyCollection Struct Reference	764
4.1154. Detailed Description	765

4.115X3D_ScalarChaser Struct Reference	765
4.1155. Detailed Description	766
4.115X3D_ScalarDamper Struct Reference	766
4.1156. Detailed Description	767
4.115X3D_ScalarInterpolator Struct Reference	767
4.1157. Detailed Description	767
4.115X3D_ScreenFontStyle Struct Reference	768
4.1158. Detailed Description	768
4.115X3D_ScreenGroup Struct Reference	768
4.1159. Detailed Description	769
4.116X3D_Script Struct Reference	769
4.1160. Detailed Description	769
4.116X3D_SegmentedVolumeData Struct Reference	770
4.1161. Detailed Description	770
4.116X3D_ShadedVolumeStyle Struct Reference	770
4.1162. Detailed Description	771
4.116X3D_ShaderPart Struct Reference	771
4.1163. Detailed Description	771
4.116X3D_ShaderProgram Struct Reference	772
4.1164. Detailed Description	772
4.116X3D_Shape Struct Reference	772
4.1165. Detailed Description	773
4.116X3D_SignalPdu Struct Reference	773
4.1166. Detailed Description	774
4.116X3D_SilhouetteEnhancementVolumeStyle Struct Reference	774
4.1167. Detailed Description	775
4.116X3D_SingleAxisHingeJoint Struct Reference	775
4.1168. Detailed Description	775
4.116X3D_SliderJoint Struct Reference	776
4.1169. Detailed Description	776

4.117X3D_Sound Struct Reference	777
4.1170. Detailed Description	777
4.117X3D_Sphere Struct Reference	777
4.1171. Detailed Description	778
4.117X3D_SphereSensor Struct Reference	778
4.1172. Detailed Description	779
4.117X3D_SplinePositionInterpolator Struct Reference	779
4.1173. Detailed Description	779
4.117X3D_SplinePositionInterpolator2D Struct Reference	780
4.1174. Detailed Description	780
4.117X3D_SplineScalarInterpolator Struct Reference	780
4.1175. Detailed Description	781
4.117X3D_SpotLight Struct Reference	781
4.1176. Detailed Description	782
4.117X3D_SquadOrientationInterpolator Struct Reference	782
4.1177. Detailed Description	782
4.117X3D_StaticGroup Struct Reference	783
4.1178. Detailed Description	783
4.117X3D_StringSensor Struct Reference	783
4.1179. Detailed Description	784
4.118X3D_SurfaceEmitter Struct Reference	784
4.1180. Detailed Description	785
4.118X3D_Switch Struct Reference	785
4.1181. Detailed Description	785
4.118X3D_Teapot Struct Reference	786
4.1182. Detailed Description	786
4.118X3D_TexCoordChaser2D Struct Reference	786
4.1183. Detailed Description	787
4.118X3D_TexCoordDamper2D Struct Reference	787
4.1184. Detailed Description	788

4.118 X 3D_Text Struct Reference	788
4.1185. Detailed Description	788
4.118 X 3D_TextureBackground Struct Reference	789
4.1186. Detailed Description	789
4.118 X 3D_TextureCoordinate Struct Reference	790
4.1187. Detailed Description	790
4.118 X 3D_TextureCoordinate3D Struct Reference	790
4.1188. Detailed Description	791
4.118 X 3D_TextureCoordinate4D Struct Reference	791
4.1189. Detailed Description	791
4.119 X 3D_TextureCoordinateGenerator Struct Reference	791
4.1190. Detailed Description	792
4.119 X 3D_TextureProperties Struct Reference	792
4.1191. Detailed Description	792
4.119 X 3D_TextureTransform Struct Reference	793
4.1192. Detailed Description	793
4.119 X 3D_TextureTransform3D Struct Reference	793
4.1193. Detailed Description	794
4.119 X 3D_TextureTransformMatrix3D Struct Reference	794
4.1194. Detailed Description	794
4.119 X 3D_TimeSensor Struct Reference	794
4.1195. Detailed Description	795
4.119 X 3D_TimeTrigger Struct Reference	795
4.1196. Detailed Description	796
4.119 X 3D_ToneMappedVolumeStyle Struct Reference	796
4.1197. Detailed Description	796
4.119 X 3D_TouchSensor Struct Reference	797
4.1198. Detailed Description	797
4.119 X 3D_TrackingSensor Struct Reference	797
4.1199. Detailed Description	798

4.120 X 3D_Transform Struct Reference	798
4.1200. Detailed Description	799
4.120 X 3D_TransformSensor Struct Reference	799
4.1201. Detailed Description	800
4.120 X 3D_TransmitterPdu Struct Reference	800
4.1202. Detailed Description	801
4.120 X 3D_TriangleFanSet Struct Reference	801
4.1203. Detailed Description	802
4.120 X 3D_TriangleSet Struct Reference	802
4.1204. Detailed Description	802
4.120 X 3D_TriangleSet2D Struct Reference	803
4.1205. Detailed Description	803
4.120 X 3D_TriangleStripSet Struct Reference	803
4.1206. Detailed Description	804
4.120 X 3D_TwoSidedMaterial Struct Reference	804
4.1207. Detailed Description	805
4.120 X 3D_UniversalJoint Struct Reference	805
4.1208. Detailed Description	806
4.120 X 3D_Viewpoint Struct Reference	806
4.1209. Detailed Description	806
4.121 X 3D_ViewpointGroup Struct Reference	807
4.1210. Detailed Description	807
4.121 X 3D_Viewport Struct Reference	807
4.1211. Detailed Description	808
4.121 X 3D_Virt Struct Reference	808
4.1212. Detailed Description	808
4.121 X 3D_VisibilitySensor Struct Reference	809
4.1213. Detailed Description	809
4.121 X 3D_VolumeData Struct Reference	809
4.1214. Detailed Description	810

4.121	X3D_VolumeEmitter Struct Reference	810
4.1215	Detailed Description	811
4.121	X3D_VolumePickSensor Struct Reference	811
4.1216	Detailed Description	811
4.121	X3D_WindPhysicsModel Struct Reference	812
4.1217	Detailed Description	812
4.121	X3D_WorldInfo Struct Reference	812
4.1218	Detailed Description	813
4.121	org.web3d.x3d.sai.X3DAppearanceChildNode Interface Reference	813
4.1219	Detailed Description	813
4.122	org.web3d.x3d.sai.X3DAppearanceNode Interface Reference	813
4.1220	Detailed Description	813
4.122	org.web3d.x3d.sai.X3DAudioClipNode Interface Reference	814
4.1221	Detailed Description	814
4.122	org.web3d.x3d.sai.X3DBackgroundNode Interface Reference	814
4.1222	Detailed Description	815
4.122	org.web3d.x3d.sai.X3DBindableNode Interface Reference	815
4.1223	Detailed Description	815
4.122	org.web3d.x3d.sai.X3DBoundedObject Interface Reference	816
4.1224	Detailed Description	816
4.122	org.web3d.x3d.sai.X3DChildNode Interface Reference	816
4.1225	Detailed Description	817
4.122	org.web3d.x3d.sai.X3DColorNode Interface Reference	817
4.1226	Detailed Description	817
4.122	org.web3d.x3d.sai.X3DComponent Interface Reference	817
4.1227	Detailed Description	818
4.122	org.web3d.x3d.sai.X3DComposedGeometryNode Interface Reference	818
4.1228	Detailed Description	819
4.122	org.web3d.x3d.sai.X3DCoordinateNode Interface Reference	819
4.1229	Detailed Description	819

4.1230	org.web3d.x3d.sai.X3DDragSensorNode Interface Reference	819
4.1230.1	Detailed Description	820
4.1231	org.web3d.x3d.sai.X3DEnvironmentalSensorNode Interface Reference	820
4.1231.1	Detailed Description	820
4.1232	org.web3d.x3d.sai.X3DException Class Reference	821
4.1232.1	Detailed Description	821
4.1233	org.web3d.x3d.sai.X3DExecutionContext Interface Reference	822
4.1233.1	Detailed Description	823
4.1234	org.web3d.x3d.sai.X3DExternProtoDeclaration Interface Reference	823
4.1234.1	Detailed Description	823
4.1235	org.web3d.x3d.sai.X3DField Interface Reference	823
4.1235.1	Detailed Description	824
4.1236	org.web3d.x3d.sai.X3DFieldDefinition Interface Reference	825
4.1236.1	Detailed Description	825
4.1237	org.web3d.x3d.sai.X3DFieldEvent Class Reference	825
4.1237.1	Detailed Description	825
4.1238	org.web3d.x3d.sai.X3DFieldEventListener Interface Reference	826
4.1238.1	Detailed Description	826
4.1239	org.web3d.x3d.sai.X3DFieldTypes Interface Reference	826
4.1239.1	Detailed Description	827
4.1240	org.web3d.x3d.sai.X3DFontStyleNode Interface Reference	827
4.1240.1	Detailed Description	828
4.1241	org.web3d.x3d.sai.X3DGeometricPropertyNode Interface Reference	828
4.1241.1	Detailed Description	828
4.1242	org.web3d.x3d.sai.X3DGeometryNode Interface Reference	828
4.1242.1	Detailed Description	829
4.1243	org.web3d.x3d.sai.X3DGroupingNode Interface Reference	829
4.1243.1	Detailed Description	829
4.1244	org.web3d.x3d.sai.X3DInfoNode Interface Reference	829
4.1244.1	Detailed Description	830

4.1245	rg.web3d.x3d.sai.X3DInterpolatorNode Interface Reference	830
4.1245	Detailed Description	830
4.1246	rg.web3d.x3d.sai.X3DKeyDeviceSensorNode Interface Reference	830
4.1246	Detailed Description	831
4.1247	rg.web3d.x3d.sai.X3DLightNode Interface Reference	831
4.1247	Detailed Description	831
4.1248	rg.web3d.x3d.sai.X3DMaterialNode Interface Reference	832
4.1248	Detailed Description	832
4.1249	rg.web3d.x3d.sai.X3DMetadataObject Interface Reference	832
4.1249	Detailed Description	832
4.1250	rg.web3d.x3d.sai.X3DNetworkSensorNode Interface Reference	833
4.1250	Detailed Description	833
4.1251	rg.web3d.x3d.sai.X3DNode Interface Reference	833
4.1251	Detailed Description	834
4.1252	rg.web3d.x3d.sai.X3DNodeTypes Interface Reference	834
4.1252	Detailed Description	835
4.1253	rg.web3d.x3d.sai.X3DNormalNode Interface Reference	835
4.1253	Detailed Description	836
4.1254	rg.web3d.x3d.sai.X3DParametricGeometryNode Interface Reference	836
4.1254	Detailed Description	836
4.1255	rg.web3d.x3d.sai.X3DPerFrameObserverScript Interface Reference	836
4.1255	Detailed Description	837
4.1256	rg.web3d.x3d.sai.X3DPointingDeviceSensorNode Interface Reference	837
4.1256	Detailed Description	837
4.1257	rg.web3d.x3d.sai.X3DProtoDeclaration Interface Reference	837
4.1257	Detailed Description	838
4.1258	rg.web3d.x3d.sai.X3DProtoInstance Interface Reference	838
4.1258	Detailed Description	838
4.1259	rg.web3d.x3d.sai.X3DRoute Interface Reference	838
4.1259	Detailed Description	839

4.1260	org.web3d.x3d.sai.X3DScene Interface Reference	839
4.1260.1	Detailed Description	839
4.1261	org.web3d.x3d.sai.X3DScriptImplementation Interface Reference	840
4.1261.1	Detailed Description	840
4.1262	org.web3d.x3d.sai.X3DScriptNode Interface Reference	840
4.1262.1	Detailed Description	840
4.1263	org.web3d.x3d.sai.X3DSensorNode Interface Reference	841
4.1263.1	Detailed Description	841
4.1264	org.web3d.x3d.sai.X3DSequencerNode Interface Reference	841
4.1264.1	Detailed Description	842
4.1265	org.web3d.x3d.sai.X3DShapeNode Interface Reference	842
4.1265.1	Detailed Description	842
4.1266	org.web3d.x3d.sai.X3DSoundNode Interface Reference	842
4.1266.1	Detailed Description	843
4.1267	org.web3d.x3d.sai.X3DSoundSourceNode Interface Reference	843
4.1267.1	Detailed Description	843
4.1268	org.web3d.x3d.sai.X3DTextNode Interface Reference	843
4.1268.1	Detailed Description	844
4.1269	org.web3d.x3d.sai.X3DTexture2DNode Interface Reference	844
4.1269.1	Detailed Description	844
4.1270	org.web3d.x3d.sai.X3DTextureCoordinateNode Interface Reference	844
4.1270.1	Detailed Description	845
4.1271	org.web3d.x3d.sai.X3DTextureNode Interface Reference	845
4.1271.1	Detailed Description	845
4.1272	org.web3d.x3d.sai.X3DTextureTransform2DNode Interface Reference	845
4.1272.1	Detailed Description	846
4.1273	org.web3d.x3d.sai.X3DTextureTransformNode Interface Reference	846
4.1273.1	Detailed Description	846
4.1274	org.web3d.x3d.sai.X3DTimeDependentNode Interface Reference	847
4.1274.1	Detailed Description	847

4.1275	rg.web3d.x3d.sai.X3DTouchSensorNode Interface Reference	848
4.1275.	Detailed Description	848
4.1276	rg.web3d.x3d.sai.X3DTriggerNode Interface Reference	848
4.1276.	Detailed Description	849
4.1277	rg.web3d.x3d.sai.X3DUrlObject Interface Reference	849
4.1277.	Detailed Description	849
4.1278	ml_user_data Struct Reference	849
4.1278.	Detailed Description	850
4.1279	XY Struct Reference	850
4.1279.	Detailed Description	850
4.1280	ip64_internal Struct Reference	850
4.1280.	Detailed Description	850
4.1281	ip_fileinfo Struct Reference	851
4.1281.	Detailed Description	851
4.1282	lib_filefunc64_32_def_s Struct Reference	851
4.1282.	Detailed Description	851
4.1283	lib_filefunc64_def_s Struct Reference	851
4.1283.	Detailed Description	852
4.1284	lib_filefunc_def_s Struct Reference	852
4.1284.	Detailed Description	852
4.1285	one Struct Reference	852
4.1285.	Detailed Description	852

Chapter 1

cson JSON API

cson (pronounced "season") is an object-oriented C API for generating and consuming JSON (<http://www.json.org>) data.

Its main claim to fame is that it can parse JSON from, and output it to, damned near anywhere. The i/o routines use a callback function to fetch/emit JSON data, allowing clients to easily plug in their own implementations. Implementations are provided for string- and FILE-based i/o.

Project home page: <http://fossil.wanderinghorse.net/repos/cson>

Author: Stephan Beal (<http://www.wanderinghorse.net/home/stephan/>)

License: Dual Public Domain/MIT

The full license text is at the bottom of the main header file (cson.h).

Examples of how to use the library are scattered throughout the API documentation, in the test.c file in the source repo, and in the wiki on the project's home page.

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

_BrowserNative	51
_cd_list_t	51
_CRnodeStruct	52
_FW_PluginInstance	52
_GLwDrawingAreaClassPart	53
_GLwDrawingAreaClassRec	53
_GLwDrawingAreaRec	53
_intX3D_MFBool	54
_intX3D_MFColor	54
_intX3D_MFColorRGBA	54
_intX3D_MFFloat	55
_intX3D_MFImage	55
_intX3D_MFInt32	55
_intX3D_MFNode	56
_intX3D_MFRotation	56
_intX3D_MFString	56
_intX3D_MFTime	57
_intX3D_MFVec2d	57
_intX3D_MFVec2f	57
_intX3D_MFVec3d	58
_intX3D_MFVec3f	58
_intX3D_SFBool	58
_intX3D_SFColor	59
_intX3D_SFColorRGBA	59
_intX3D_SFFloat	59
_intX3D_SFImage	60
_intX3D_SFInt32	60
_intX3D_SFNode	60
_intX3D_SFRotation	61
_intX3D_SFString	61
_intX3D_SFTime	61
_intX3D_SFVec2d	62
_intX3D_SFVec2f	62
_intX3D_SFVec3d	62
_intX3D_SFVec3f	63

_intX3DEventIn	63
_NPByteRange	63
_NPEmbedPrint	64
_NPFullPrint	64
_NPImageExpose	65
_NPNetscapeFuncs	65
_NPP	66
_NPPluginFuncs	67
_NPPrint	67
_NPRect	68
_NPSavedData	68
_NPSize	68
_NPStream	69
_NPString	69
_NPVariant	69
_NPWindow	70
_s_list_t	70
freeWRLSAI_cpp::_SAIParameter	71
_SFColorNative	71
_SFColorRGBANative	71
_SFImageNative	72
_SFNodeNative	72
_SFRotationNative	72
_SFVec2fNative	73
_SFVec3dNative	73
_SFVec3fNative	73
_SFVec4dNative	74
_SFVec4fNative	74
_urlRequest	74
_X3DNode	75
ActiveRegion	75
anyVrml	76
ArcTessellator	79
ArgListType	80
Atlas	80
AtlasEntry	80
AtlasEntrySet	81
AtlasFont	81
Backend	82
vrml.BaseNode	83
vrml.node.Node	353
vrml.node.Script	493
bezierPatch	86
bezierPatchMesh	87
Bin	87
bindablestack	88
block	88
Breakpt	89
brotoDefpair	89
brotoIS	90
brotoRoute	90
brouteEnd	90
org.web3d.x3d.sai.Browser	91
org.web3d.x3d.sai.ExternalBrowser	219
sai.FreeWRLBrowser	226
vrml.Browser	92
sai.BrowserFactory	95
org.web3d.x3d.sai.BrowserFactoryImpl	95

vrml.external.BrowserGlobals	96
sai.BrowserGlobals	96
org.web3d.x3d.sai.BrowserInterface	97
sai.FreeWRLBrowser	226
vrml.external.BrowserInterface	97
vrml.external.Browser	92
Buffer	99
BUTitem	99
CachedVertex	100
CachingEvaluator	100
BasicCurveEvaluator	84
OpenGLCurveEvaluator	436
BasicSurfaceEvaluator	85
OpenGLSurfaceEvaluator	438
cbDataExactName	101
cbDataRootNameAndRouteDir	101
CdIIFreeWRL	102
chardata	103
chaser_ptrs	103
cline	104
Cloneable	
vrml.Event	194
vrml.Field	220
vrml.ConstField	108
vrml.ConstMField	110
vrml.field.ConstMFColor	108
vrml.field.ConstMFFloat	109
vrml.field.ConstMFInt32	111
vrml.field.ConstMFNode	112
vrml.field.ConstMFRotation	113
vrml.field.ConstMFString	114
vrml.field.ConstMFTime	114
vrml.field.ConstMFVec2f	115
vrml.field.ConstMFVec3f	116
vrml.field.ConstSFBool	117
vrml.field.ConstSFColor	117
vrml.field.ConstSFFloat	118
vrml.field.ConstSFImage	119
vrml.field.ConstSFInt32	120
vrml.field.ConstSFNode	120
vrml.field.ConstSFRotation	121
vrml.field.ConstSFString	122
vrml.field.ConstSFTime	122
vrml.field.ConstSFVec2f	123
vrml.field.ConstSFVec3f	124
vrml.field.SFBool	497
vrml.field.SFColor	500
vrml.field.SFFloat	502
vrml.field.SFImage	503
vrml.field.SFInt32	505
vrml.field.SFNode	507
vrml.field.SFRotation	509
vrml.field.SFString	510
vrml.field.SFTime	512
vrml.field.SFVec2f	514
vrml.field.SFVec3f	516
vrml.MField	325

vrml.field.MFColor	319
vrml.field.MFFloat	323
vrml.field.MFInt32	327
vrml.field.MFNode	329
vrml.field.MFRotation	331
vrml.field.MFString	332
vrml.field.MFTime	333
vrml.field.MFVec2f	336
vrml.field.MFVec3f	338
coded_block_pattern_entry	104
colorScheme	104
command	105
org.web3d.x3d.sai.ComponentInfo	105
sai.FWComponentInfo	238
connection_info_struct	106
consoleLine	107
contenttype	124
contenttype_captiontext	125
contenttype_e3dmouse	125
contenttype_layer	126
contenttype_multitouch	126
contenttype_orientation	126
contenttype_quadrant	127
contenttype_scene	127
contenttype_splitter	127
contenttype_statusbar	128
contenttype_stereo_anaglyph	128
contenttype_stereo_shutter	128
contenttype_stereo_sidebyside	129
contenttype_stereo_updown	129
contenttype_switch	129
contenttype_textpanel	130
contenttype_texturegrid	131
CPlugin	132
CR_RegStruct	133
CRjsnameStruct	133
CRscriptStruct	134
CRStruct	134
cson_array	135
cson_buffer	136
cson_data_source_StringSource_	138
cson_kvp	139
cson_kvp_list	139
cson_object	140
cson_object_iterator	141
cson_output_opt	141
cson_parse_info	143
cson_parse_opt	144
cson_parser	144
cson_string	145
cson_value	146
cson_value_api	148
cson_value_list	149
curfile64_info	150
currayhit	150
Curve	151
curveEvalMachine	151
Curvelist	152

damper_ptr	152
datChnk	153
dct_dc_size_entry	153
DDS_header	153
DdsLoadInfo	154
Dict	155
DictNode	155
directedLine	156
DisplayList	157
draw_call_params	159
duk_bigint	159
duk_compile_raw_args	159
duk_compiler_stkstate	160
duk_decode_context	160
duk_encode_context	161
duk_exp_limits	161
duk_id_lookup_result	161
duk_numconv_stringify_ctx	162
duk_objlit_state	162
duk_pcall_prop_args	163
duk_re_disjunction_info	163
duk_transform_context	163
duk_activation	164
duk_bitdecoder_ctx	164
duk_bitencoder_ctx	164
duk_breakpoint	165
duk_bufwriter_ctx	165
duk_catcher	166
duk_compiler_ctx	166
duk_compiler_func	167
duk_compiler_instr	168
duk_double_union	168
duk_function_list_entry	169
duk_harray	169
duk_hbuffer	169
duk_hbuffer_dynamic	170
duk_hbuffer_external	170
duk_hbuffer_fixed	170
duk_hbufobj	171
duk_hcompfunc	171
duk_heap	172
duk_heaphdr	172
duk_heaphdr_string	173
duk_hnatfunc	173
duk_hobject	174
duk_hstring	174
duk_hstring_external	174
duk_hthread	175
duk_internal_thread_state	176
duk_ispec	176
duk_ivalue	176
duk_jmpbuf	177
duk_json_dec_ctx	177
duk_json_enc_ctx	178
duk_labelinfo	178
duk_lexer_codepoint	179
duk_lexer_ctx	179
duk_lexer_point	179

duk_ljstate	180
duk_memory_functions	180
duk_number_list_entry	181
duk_propaccessor	181
duk_propdesc	181
duk_propvalue	182
duk_re_compiler_ctx	182
duk_re_matcher_ctx	183
duk_re_token	183
duk_strcache	184
duk_strtab_entry	184
duk_thread_state	184
duk_time_components	185
duk_token	185
duk_tval_unused	186
EAI_ListenerStruct	186
vrml.external.FreeWRLEAI.EAIAsyncMessage	187
sai.eai.EAIAsyncMessage	187
vrml.external.FreeWRLEAI.EAIAsyncQueue	187
sai.eai.EAIAsyncQueue	188
sai.eai.EAIMessage	190
vrml.external.FreeWRLEAI.EAIMessage	191
EAINodeIndexStruct	191
EAINodeParams	191
sai.eai.EAIoutQueue	192
vrml.external.FreeWRLEAI.EAIoutQueue	192
ECMAValueStruct	194
EdgePair	194
vrml.external.field.EventIn	195
vrml.external.field.EventInMFColor	196
vrml.external.field.EventInMFFloat	197
vrml.external.field.EventInMFInt32	197
vrml.external.field.EventInMFNode	198
vrml.external.field.EventInMFRotation	198
vrml.external.field.EventInMFString	199
vrml.external.field.EventInMFVec2f	199
vrml.external.field.EventInMFVec3f	200
vrml.external.field.EventInSFBool	200
vrml.external.field.EventInSFColor	201
vrml.external.field.EventInSFFloat	201
vrml.external.field.EventInSFImage	202
vrml.external.field.EventInSFInt32	202
vrml.external.field.EventInSFNode	203
vrml.external.field.EventInSFRotation	203
vrml.external.field.EventInSFString	204
vrml.external.field.EventInSFTime	204
vrml.external.field.EventInSFVec2f	205
vrml.external.field.EventInSFVec3f	205
EventListener	
org.web3d.x3d.sai.BrowserListener	98
EventListener	
org.web3d.x3d.sai.X3DFieldEventListener	826
EventObject	
org.web3d.x3d.sai.BrowserEvent	94
org.web3d.x3d.sai.X3DFieldEvent	825
vrml.external.field.EventOut	206
vrml.external.field.EventOutMField	208
vrml.external.field.EventOutMFColor	207

vrml.external.field.EventOutMFFloat	207
vrml.external.field.EventOutMFInt32	209
vrml.external.field.EventOutMFNode	209
vrml.external.field.EventOutMFRotation	210
vrml.external.field.EventOutMFString	211
vrml.external.field.EventOutMFVec2f	211
vrml.external.field.EventOutMFVec3f	212
vrml.external.field.EventOutSFBool	213
vrml.external.field.EventOutSFColor	213
vrml.external.field.EventOutSFFloat	214
vrml.external.field.EventOutSFImage	214
vrml.external.field.EventOutSFInt32	215
vrml.external.field.EventOutSFNode	216
vrml.external.field.EventOutSFRotation	216
vrml.external.field.EventOutSFString	217
vrml.external.field.EventOutSFTime	217
vrml.external.field.EventOutSFVec2f	218
vrml.external.field.EventOutSFVec3f	218
vrml.external.field.EventOutObserver	212
Exception	
vrml.InvalidVRMLSyntaxException	300
vrml.InvalidX3DSyntaxException	302
exception	
freeWRLSAI_cpp::saiException	487
freeWRLSAI_cpp::browserNotSharedException	98
freeWRLSAI_cpp::connectionException	107
freeWRLSAI_cpp::disposedException	157
freeWRLSAI_cpp::invalidBrowserException	283
freeWRLSAI_cpp::invalidExecutionContextException	288
freeWRLSAI_cpp::invalidFieldException	290
freeWRLSAI_cpp::InvalidReadableFieldException	296
freeWRLSAI_cpp::InvalidWritableFieldException	300
freeWRLSAI_cpp::invalidNodeException	293
freeWRLSAI_cpp::insufficientCapabilitiesException	281
freeWRLSAI_cpp::invalidAccessTypeException	283
freeWRLSAI_cpp::InvalidReadableFieldException	296
freeWRLSAI_cpp::InvalidWritableFieldException	300
freeWRLSAI_cpp::invalidDocumentException	284
freeWRLSAI_cpp::invalidImportException	292
freeWRLSAI_cpp::invalidOperationTimingException	295
freeWRLSAI_cpp::invalidUrlException	298
freeWRLSAI_cpp::invalidX3DException	301
freeWRLSAI_cpp::nodeInUseException	354
freeWRLSAI_cpp::nodeUnavailableException	355
freeWRLSAI_cpp::noSuchBrowserException	356
freeWRLSAI_cpp::notSupportedException	358
freeWRLSAI_cpp::saiCustomException	486
freeWRLSAI_cpp::urlUnavailableException	561
extrusion	219
FaceCount	220
FieldDecl	221
vrml.external.field.FieldTypes	222
file_in_zip64_read_info_s	222
FirstStruct	223
Flist	223
flychord	224
fmtChnk	225
freewrl_params	225

sai.FreeWRLBrowserInfo	228
sai.FreeWRLRendererInfo	234
ftype	236
fw_MaterialParameters	237
FWBITMAPFILEHEADER	237
FWBITMAPINFO	237
FWBITMAPINFOHEADER	238
vrml.FWCreateField	239
FWFunctionSpec	240
vrml.FWHelper	240
vrml.FWJavaScript	241
vrml.FWJavaScriptBinding	241
sai.FWProfInfo	252
FWPropertySpec	253
FWRGBQUAD	254
FWSNDMSG	264
FWTYPE	265
FWVAL	265
FX	266
GLUface	266
GLUhalfEdge	267
GLUmesh	267
GLUtesselator	268
GLUvertex	269
GLwDrawingAreaCallbackStruct	270
GLwDrawingAreaPart	270
GoP	271
gridBoundaryChain	271
Gridline	272
GridVertex	273
gridWrap	273
GUIElement	274
GUINamedType	274
GUIScreen	274
vrml.external.IBrowser	275
vrml.external.Browser	92
iiiglobal	277
IllegalArgumentException	
vrml.InvalidEventInException	285
vrml.InvalidEventOutException	287
vrml.InvalidExposedFieldException	289
vrml.InvalidFieldChangeException	289
vrml.InvalidFieldException	291
vrml.InvalidRouteException	297
IMEXPORT	279
initialRouteStruct	280
intersection_info	282
intTableIndex	282
ivec2	303
ivec4	303
Jarcloc	303
JMATRIX	304
JSLoadPropElement	304
JSON_config	304
JSON_parser_struct	307
JSON_value_struct	307
key	308
keyHit	308

keyval	308
Knotspec	309
Knotvector	310
layout_scale_item	310
layoutmode	311
linkedList_data_s	311
linkedList_datablock_internal_s	311
macroblock	312
Maplist	314
matpropstruct	314
org.web3d.x3d.sai.Matrix	315
org.web3d.x3d.sai.Matrix3	315
org.web3d.x3d.sai.Matrix4	316
mb_addr_inc_entry	317
mb_type_entry	317
mode_name	340
monoChain	341
Monotonizer	341
motion_vectors_entry	342
Multi_Any	342
Multi_Bool	342
Multi_Color	343
Multi_ColorRGBA	343
Multi_Double	344
Multi_Float	344
Multi_Int32	344
Multi_Matrix3d	345
Multi_Matrix3f	345
Multi_Matrix4d	346
Multi_Matrix4f	346
Multi_Node	346
Multi_Rotation	347
Multi_String	347
Multi_Time	348
Multi_Vec2d	348
Multi_Vec2f	348
Multi_Vec3d	349
Multi_Vec3f	349
Multi_Vec4d	350
Multi_Vec4f	350
multiTexParams	350
myArgs	351
MyVertex	351
name_num	352
nameValuePairs	352
navmode	352
vrml.external.Node	353
nodedistance	354
NPCClass	359
NPObject	359
ScriptablePluginObjectBase	494
BasePlugin	83
nsByteRange	360
nsIFactory	
nsIPluginHostOld	376
nsIPluginOld	409
nsIInputStream	
nsIPluginInputStream	378

nsISupports	
nsIAuthenticationInfo	360
nsICookieStorage	361
nsIFileUtilities	362
nsIHTTPHeaderListener	365
nsIJVMAuthTools	366
nsIPlugin	367
nsIPluginDocument	370
nsIPluginHost	371
nsIPluginInstance	378
nsIPluginInstanceInternal	384
nsIPluginInstanceOld	385
nsIPluginInstanceOwner	390
nsIPluginInstancePeer	392
nsIPluginInstancePeer2	396
nsIPluginInstancePeer2_1_9_1_BRANCH	398
nsIPluginManager	399
nsIPluginManager2	404
nsIPluginStreamInfo	411
nsIPluginStreamListener	412
nsIPluginTag	415
nsIPluginTagInfo	416
nsIPluginTagInfoOld	423
nsIPluginTagInfo2	419
nsIScriptablePlugin	424
nsIWindowlessPluginInstancePeer	425
nsPIPluginInstancePeer	426
nsPluginEmbedPrint	426
nsPluginEvent	427
nsPluginFullPrint	427
nsPluginLogging	428
nsPluginPrint	430
nsPluginRect	430
nsPluginWindow	431
nsPluginNativeWindow	428
nsPluginNativeWindow	428
NurbsTessellator	431
GLUnurbs	267
opened_file	439
orient_XYZA	440
particle	440
Patch	440
Patchlist	441
pBindable	442
pcollision	443
pcommon	443
pComponent_CubeMapTexturing	444
pComponent_EnviroSensor	444
pComponent_Followers	445
pComponent_Geometry3D	445
pComponent_Geospatial	445
pComponent_HAnim	446
pComponent_KeyDevice	446
pComponent_Layering	446
pComponent_Layout	447
pComponent_NURBS	447
pComponent_ParticleSystems	447

pComponent_Picking	448
pComponent_ProgrammableShaders	448
pComponent_Rendering	448
pComponent_RigidBodyPhysics	449
pComponent_Shape	449
pComponent_Sound	449
pComponent_Text	450
pComponent_VolumeRendering	451
pConsoleMessage	451
pCParse	452
pCParseParser	452
pCRoutes	453
pCScripts	453
pCursorDraw	454
pdisplay	454
pEAI_C_CommonFunctions	454
pEAICore	455
pEAIEventsIn	455
pEAHelpers	455
pedal_state	456
pFrustum	456
pict	456
pict_image	457
pJScript	457
pjsUtils	458
pjsVRMLBrowser	458
pjsVRMLClasses	458
pLoadTextures	459
pMainloop	459
Point	460
point_XYZ	461
point_XYZ3	461
pointer2pointer	461
polygon	462
polyrep_combiner_data	462
Pool	462
PooledObj	463
Arc	76
BezierArc	86
Dlnode	158
GridTrimVertex	272
Mapdesc	312
O_curve	433
O_nurbscurve	433
O_nurbssurface	434
O_pwlcurve	435
O_surface	435
O_trim	436
Property	471
PwlArc	476
Quilt	478
pOpenGL_Utils	464
pPluginSocket	465
ppluginUtils	465
pProdCon	465
PQhandleElem	466
PQnode	466
pRasterFont	466

pRenderFuncs	467
pRenderTextures	468
presources	468
primStream	469
PriorityQ	469
profile_entry	470
org.web3d.x3d.sai.ProfileInfo	470
sai.FWProfileInfo	252
proftablestruct	471
ProtoDefinition	472
ProtoFieldDecl	472
pSensInterps	473
pSnapshot	473
Pspec	473
Patchspec	442
PSStruct	474
pstatusbar	474
pStreamPoly	475
pTess	475
pTextures	475
pViewer	476
pX3DParser	477
quaternion	478
Quiltspec	479
rb1	479
rectBlock	480
rectBlockArray	480
reflexChain	481
Renderhints	481
resource_item	482
row32	482
Runnable	
sai.eai.EAInThread	189
vrml.external.FreeWRLEAI.EAInThread	190
RuntimeException	
org.web3d.x3d.sai.X3DException	821
org.web3d.x3d.sai.BrowserNotSharedException	99
org.web3d.x3d.sai.ConnectionException	106
org.web3d.x3d.sai.ImportedNodeException	280
org.web3d.x3d.sai.InsufficientCapabilitiesException	281
org.web3d.x3d.sai.InvalidBrowserException	284
org.web3d.x3d.sai.InvalidDocumentException	285
org.web3d.x3d.sai.InvalidExecutionContextException	288
org.web3d.x3d.sai.InvalidFieldException	290
org.web3d.x3d.sai.InvalidFieldValueException	291
org.web3d.x3d.sai.InvalidNameException	292
org.web3d.x3d.sai.InvalidNodeException	293
org.web3d.x3d.sai.InvalidOperationTimingException	295
org.web3d.x3d.sai.InvalidProtoException	296
org.web3d.x3d.sai.InvalidRouteException	297
org.web3d.x3d.sai.InvalidURLException	298
org.web3d.x3d.sai.InvalidX3DException	302
org.web3d.x3d.sai.NodeInUseException	355
org.web3d.x3d.sai.NodeUnavailableException	356
org.web3d.x3d.sai.NoSuchBrowserException	357
org.web3d.x3d.sai.NotSupportedException	357
org.web3d.x3d.sai.URLUnavailableException	560
sai.eai.UnsupportedFieldTypeException	556

vrml.external.exception.InvalidEventInException	286
vrml.external.exception.InvalidEventOutException	287
vrml.external.exception.InvalidNodeException	294
vrml.external.exception.InvalidVrmlException	299
vrml.external.FreeWRLAI.UnsupportedFieldTypeException	556
s_renderer_capabilities_t	483
s_shader_capabilities	484
freeWRLSAI_cpp::saiBrowser	485
freeWRLSAI_cpp::saiComponent	486
freeWRLSAI_cpp::saiExecutionContext	488
freeWRLSAI_cpp::saiField	488
freeWRLSAI_cpp::saiNode	489
freeWRLSAI_cpp::saiProfileDeclaration	489
freeWRLSAI_cpp::saiProto	490
freeWRLSAI_cpp::saiRoute	490
freeWRLSAI_cpp::saiScene	491
sampledLine	491
sCollisionGeometry	492
sCollisionInfo	492
screenextdata	492
ScriptFieldDecl	495
ScriptFieldInstanceInfo	495
ScriptParamList	496
SecureClassLoader	
vrml.FWJavaScriptClassLoader	242
SensStruct	496
sFallInfo	497
SFColor	499
SFColorRGBA	500
SFMatrix3d	506
SFMatrix3f	506
SFMatrix4d	507
SFMatrix4f	507
SFRotation	510
SFVec2d	513
SFVec2f	514
SFVec3d	515
SFVec3f	518
SFVec4d	518
SFVec4f	518
Shader_Script	519
shaderflagsstruct	519
shaderTableEntry	519
slice	520
sNavInfo	521
SNDFILE	521
Sorter	522
ArcSorter	78
ArcSdirSorter	77
ArcTdirSorter	79
FlistSorter	224
Splinespec	523
ssr	523
SSR_request	524
stage	524
StoredVertex	525
Subdivider	525
surfEvalMachine	526

sweepRange	526
targetwindow	527
iiglobal::tBindable	527
iiglobal::tcollision	527
iiglobal::tcommon	528
iiglobal::tComponent_CubeMapTexturing	528
iiglobal::tComponent_EnvironSensor	528
iiglobal::tComponent_Followers	529
iiglobal::tComponent_Geometry3D	529
iiglobal::tComponent_Geospatial	529
iiglobal::tComponent_HAnim	530
iiglobal::tComponent_KeyDevice	530
iiglobal::tComponent_Layering	530
iiglobal::tComponent_Layout	531
iiglobal::tComponent_NURBS	531
iiglobal::tComponent_ParticleSystems	531
iiglobal::tComponent_Picking	532
iiglobal::tComponent_ProgrammableShaders	532
iiglobal::tComponent_Rendering	532
iiglobal::tComponent_RigidBodyPhysics	533
iiglobal::tComponent_Shape	533
iiglobal::tComponent_Sound	533
iiglobal::tComponent_Text	534
iiglobal::tComponent_VolumeRendering	534
iiglobal::tComponent_VRML1	534
iiglobal::tConsoleMessage	535
tcontenttype	535
iiglobal::tCParse	536
iiglobal::tCParseParser	536
iiglobal::tCRoutes	536
iiglobal::tCScripts	537
iiglobal::tCursorDraw	537
iiglobal::tdisplay	537
iiglobal::tEAI_C_CommonFunctions	538
iiglobal::tEAICore	538
iiglobal::tEAIEventsIn	539
iiglobal::tEAHelpers	539
text_combiner_data	539
textureTableIndexStruct	540
textureVertexInfo	540
iiglobal::tFrustum	541
Thread	
sai.eai.EAIAsyncThread	188
sai.eai.EAIoutThread	193
vrml.external.FreeWRLEAI.EAIAsyncThread	189
vrml.external.FreeWRLEAI.EAIoutThread	193
iiglobal::tinternalc	541
iiglobal::tJScript	541
iiglobal::tjsUtils	542
iiglobal::tjsVRMLBrowser	542
iiglobal::tjsVRMLClasses	542
iiglobal::tLoadTextures	543
tm_unz_s	543
tm_zip_s	544
iiglobal::tMainloop	544
iiglobal::tOpenGL_Utils	545
Touch	545
iiglobal::tPluginSocket	546

iiglobal::tpluginUtils	546
iiglobal::tProdCon	546
treeNode	547
iiglobal::tRenderFuncs	547
trenderstate	548
iiglobal::tRenderTextures	548
iiglobal::tresources	549
Trimline	549
TrimRegion	550
CoveAndTiler	131
Slicer	520
Hull	275
Mesher	318
Slicer	520
Mesher	318
TrimVertex	550
TrimVertexPool	551
iiglobal::tSensInterps	551
iiglobal::tSnapshot	551
iiglobal::tstatusbar	552
iiglobal::tStreamPoly	552
iiglobal::tTess	552
iiglobal::tTextures	553
iiglobal::tthreads	553
iiglobal::tViewer	554
iiglobal::tX3DParser	554
Uarray	554
un1	555
Uni_String	555
unz64_file_pos_s	557
unz64_s	557
unz_file_info64_internal_s	558
unz_file_info64_s	558
unz_file_info_s	559
unz_file_pos_s	559
unz_global_info64_s	559
unz_global_info_s	560
usehit	561
Varray	562
vec2	562
vec4	562
Vector	563
vertexArray	563
vrml.external.FreeWRLEAI.VField	564
vrml.external.FreeWRLEAI.VMFCOLOR	573
vrml.external.FreeWRLEAI.VMFFloat	575
vrml.external.FreeWRLEAI.VMFInt32	576
vrml.external.FreeWRLEAI.VMFRotation	578
vrml.external.FreeWRLEAI.VMFString	579
vrml.external.FreeWRLEAI.VMFVec2f	580
vrml.external.FreeWRLEAI.VMFVec3f	581
vrml.external.FreeWRLEAI.VSFBool	586
vrml.external.FreeWRLEAI.VSFColor	587
vrml.external.FreeWRLEAI.VSFFloat	588
vrml.external.FreeWRLEAI.VSFImage	589
vrml.external.FreeWRLEAI.VSFInt32	590
vrml.external.FreeWRLEAI.VSFRotation	592
vrml.external.FreeWRLEAI.VSFString	593

vrml.external.FreeWRLEAI.VSFTIME	595
vrml.external.FreeWRLEAI.VSFVec2f	595
vrml.external.FreeWRLEAI.VSFVec3f	596
sai.eai.VField	565
sai.eai.VMFCOLOR	574
sai.eai.VMFFloat	575
sai.eai.VMFInt32	576
sai.eai.VMFRotation	577
sai.eai.VMFString	578
sai.eai.VMFVec2f	579
sai.eai.VMFVec3f	581
sai.eai.VSFBool	586
sai.eai.VSFColor	587
sai.eai.VSFFloat	589
sai.eai.VSFImage	590
sai.eai.VSFInt32	591
sai.eai.VSFRotation	592
sai.eai.VSFString	593
sai.eai.VSFTIME	594
sai.eai.VSFVec2f	596
sai.eai.VSFVec3f	597
vid_stream	567
viewer	568
viewer_examine	570
viewer_fly	570
viewer_inplane	570
viewer_walk	571
viewer_ypz	571
vrml.external.FreeWRLEAI.VIP	572
sai.eai.VIP	572
void3	582
VRMLLexer	582
sai.eai.VRMLObject	583
vrml.external.FreeWRLEAI.VRMLObject	584
vrml.external.FreeWRLEAI.VRMLObjectObserver	584
sai.eai.VRMLObjectObserver	585
VRMLParser	585
walk_cbdata	598
WEB3DNATIVE	598
X3D_Anchor	599
X3D_Appearance	600
X3D_Arc2D	600
X3D_ArcClose2D	601
X3D_AudioClip	602
X3D_BackdropBackground	603
X3D_Background	603
X3D_BallJoint	604
X3D_Billboard	605
X3D_BlendedVolumeStyle	606
X3D_BooleanFilter	607
X3D_BooleanSequencer	607
X3D_BooleanToggle	608
X3D_BooleanTrigger	608
X3D_BoundaryEnhancementVolumeStyle	609
X3D_BoundedPhysicsModel	610
X3D_Box	610
X3D_CADAssembly	611
X3D_CADFace	612

X3D_CADLayer	612
X3D_CADPart	613
X3D_CalibratedCameraSensor	614
X3D_CartoonVolumeStyle	614
X3D_Circle2D	615
X3D_ClipPlane	615
X3D_CollidableOffset	616
X3D_CollidableShape	617
X3D_Collision	617
X3D_CollisionCollection	618
X3D_CollisionSensor	619
X3D_CollisionSpace	620
X3D_Color	620
X3D_ColorChaser	621
X3D_ColorDamper	622
X3D_ColorInterpolator	623
X3D_ColorRGBA	623
X3D_ComposedCubeMapTexture	624
X3D_ComposedShader	625
X3D_ComposedTexture3D	625
X3D_ComposedVolumeStyle	626
X3D_CompositeVolumeStyle	627
X3D_Cone	627
X3D_ConeEmitter	628
X3D_Contact	629
X3D_Contour2D	630
X3D_ContourPolyline2D	630
X3D_Coordinate	631
X3D_CoordinateChaser	631
X3D_CoordinateDamper	632
X3D_CoordinateDouble	633
X3D_CoordinateInterpolator	634
X3D_CoordinateInterpolator2D	634
X3D_Cylinder	635
X3D_CylinderSensor	636
X3D_DirectionalLight	637
X3D_DISEntityManager	637
X3D_DISEntityTypeMapping	638
X3D_Disk2D	639
X3D_DoubleAxisHingeJoint	640
X3D_EaseInEaseOut	641
X3D_EdgeEnhancementVolumeStyle	642
X3D_Effect	642
X3D_EffectPart	643
X3D_ElevationGrid	644
X3D_EspduTransform	645
X3D_ExplosionEmitter	647
X3D_Extrusion	648
X3D_FillProperties	649
X3D_FloatVertexAttribute	649
X3D_Fog	650
X3D_FogCoordinate	651
X3D_FontStyle	651
X3D_ForcePhysicsModel	652
X3D_GeneratedCubeMapTexture	653
X3D_GeoCoordinate	653
X3D_GeoElevationGrid	654
X3D_GeoLocation	655

X3D_GeoLOD	656
X3D_GeoMetadata	657
X3D_GeoOrigin	657
X3D_GeoPositionInterpolator	658
X3D_GeoProximitySensor	659
X3D_GeoTouchSensor	660
X3D_GeoTransform	661
X3D_GeoViewpoint	662
X3D_Group	663
X3D_HAnimDisplacer	663
X3D_HAnimHumanoid	664
X3D_HAnimJoint	665
X3D_HAnimSegment	666
X3D_HAnimSite	667
X3D_ImageBackdropBackground	668
X3D_ImageCubeMapTexture	668
X3D_ImageTexture	669
X3D_ImageTexture3D	670
X3D_IndexedFaceSet	670
X3D_IndexedLineSet	671
X3D_IndexedQuadSet	672
X3D_IndexedTriangleFanSet	673
X3D_IndexedTriangleSet	674
X3D_IndexedTriangleStripSet	674
X3D_Inline	675
X3D_IntegerSequencer	676
X3D_IntegerTrigger	677
X3D_IsoSurfaceVolumeData	678
X3D_KeySensor	678
X3D_Layer	679
X3D_LayerSet	680
X3D_Layout	681
X3D_LayoutGroup	681
X3D_LayoutLayer	682
X3D_LinePickSensor	683
X3D_LineProperties	684
X3D_LineSensor	684
X3D_LineSet	685
X3D_LoadSensor	686
X3D_LocalFog	687
X3D_LOD	687
X3D_Material	688
X3D_Matrix3VertexAttribute	689
X3D_Matrix4VertexAttribute	689
X3D_MetadataBoolean	690
X3D_MetadataDouble	691
X3D_MetadataFloat	691
X3D_MetadataInteger	692
X3D_MetadataMFBool	693
X3D_MetadataMFColor	693
X3D_MetadataMFColorRGBA	694
X3D_MetadataMFDouble	695
X3D_MetadataMFFloat	695
X3D_MetadataMFInt32	696
X3D_MetadataMFMatrix3d	697
X3D_MetadataMFMatrix3f	697
X3D_MetadataMFMatrix4d	698
X3D_MetadataMFMatrix4f	699

X3D_MetadataMFNode	699
X3D_MetadataMFRotation	700
X3D_MetadataMFString	701
X3D_MetadataMFTime	701
X3D_MetadataMFVec2d	702
X3D_MetadataMFVec2f	703
X3D_MetadataMFVec3d	703
X3D_MetadataMFVec3f	704
X3D_MetadataMFVec4d	705
X3D_MetadataMFVec4f	705
X3D_MetadataSet	706
X3D_MetadataSFBool	707
X3D_MetadataSFColor	707
X3D_MetadataSFColorRGBA	708
X3D_MetadataSFDouble	709
X3D_MetadataSFFloat	709
X3D_MetadataSFImage	710
X3D_MetadataSFInt32	711
X3D_MetadataSFMatrix3d	711
X3D_MetadataSFMatrix3f	712
X3D_MetadataSFMatrix4d	713
X3D_MetadataSFMatrix4f	713
X3D_MetadataSFNode	714
X3D_MetadataSFRotation	715
X3D_MetadataSFString	715
X3D_MetadataSFTime	716
X3D_MetadataSFVec2d	717
X3D_MetadataSFVec2f	717
X3D_MetadataSFVec3d	718
X3D_MetadataSFVec3f	719
X3D_MetadataSFVec4d	719
X3D_MetadataSFVec4f	720
X3D_MetadataString	721
X3D_MotorJoint	721
X3D_MovieTexture	723
X3D_MultiTexture	724
X3D_MultiTextureCoordinate	724
X3D_MultiTextureTransform	725
X3D_NavigationInfo	725
X3D_Node	726
X3D_Normal	727
X3D_NormalInterpolator	727
X3D_NurbsCurve	728
X3D_NurbsCurve2D	729
X3D_NurbsOrientationInterpolator	729
X3D_NurbsPatchSurface	730
X3D_NurbsPositionInterpolator	731
X3D_NurbsSet	732
X3D_NurbsSurfaceInterpolator	732
X3D_NurbsSweptSurface	733
X3D_NurbsSwungSurface	734
X3D_NurbsTextureCoordinate	735
X3D_NurbsTrimmedSurface	735
X3D_OpacityMapVolumeStyle	736
X3D_OrientationChaser	737
X3D_OrientationDamper	738
X3D_OrientationInterpolator	739
X3D_OrthoViewpoint	739

X3D_OSC_Sensor	740
X3D_PackagedShader	741
X3D_ParticleSystem	742
X3D_PickableGroup	743
X3D_PixelTexture	744
X3D_PixelTexture3D	744
X3D_PlaneSensor	745
X3D_PointEmitter	746
X3D_PointLight	747
X3D_PointPickSensor	747
X3D_PointSet	748
X3D_Polyline2D	749
X3D_PolylineEmitter	750
X3D_Polypoint2D	750
X3D_PolyRep	751
X3D_PositionChaser	752
X3D_PositionChaser2D	753
X3D_PositionDamper	754
X3D_PositionDamper2D	755
X3D_PositionInterpolator	756
X3D_PositionInterpolator2D	756
X3D_PrimitivePickSensor	757
X3D_ProgramShader	758
X3D_ProjectionVolumeStyle	758
X3D_Proto	759
X3D_ProximitySensor	760
X3D_QuadSet	761
X3D_ReceiverPdu	761
X3D_Rectangle2D	763
X3D_RigidBody	763
X3D_RigidBodyCollection	764
X3D_ScalarChaser	765
X3D_ScalarDamper	766
X3D_ScalarInterpolator	767
X3D_ScreenFontStyle	768
X3D_ScreenGroup	768
X3D_Script	769
X3D_SegmentedVolumeData	770
X3D_ShadedVolumeStyle	770
X3D_ShaderPart	771
X3D_ShaderProgram	772
X3D_Shape	772
X3D_SignalPdu	773
X3D_SilhouetteEnhancementVolumeStyle	774
X3D_SingleAxisHingeJoint	775
X3D_SliderJoint	776
X3D_Sound	777
X3D_Sphere	777
X3D_SphereSensor	778
X3D_SplinePositionInterpolator	779
X3D_SplinePositionInterpolator2D	780
X3D_SplineScalarInterpolator	780
X3D_SpotLight	781
X3D_SquadOrientationInterpolator	782
X3D_StaticGroup	783
X3D_StringSensor	783
X3D_SurfaceEmitter	784
X3D_Switch	785

X3D_Teapot	786
X3D_TexCoordChaser2D	786
X3D_TexCoordDamper2D	787
X3D_Text	788
X3D_TextureBackground	789
X3D_TextureCoordinate	790
X3D_TextureCoordinate3D	790
X3D_TextureCoordinate4D	791
X3D_TextureCoordinateGenerator	791
X3D_TextureProperties	792
X3D_TextureTransform	793
X3D_TextureTransform3D	793
X3D_TextureTransformMatrix3D	794
X3D_TimeSensor	794
X3D_TimeTrigger	795
X3D_ToneMappedVolumeStyle	796
X3D_TouchSensor	797
X3D_TrackingSensor	797
X3D_Transform	798
X3D_TransformSensor	799
X3D_TransmitterPdu	800
X3D_TriangleFanSet	801
X3D_TriangleSet	802
X3D_TriangleSet2D	803
X3D_TriangleStripSet	803
X3D_TwoSidedMaterial	804
X3D_UniversalJoint	805
X3D_Viewpoint	806
X3D_ViewpointGroup	807
X3D_Viewport	807
X3D_Virt	808
X3D_VisibilitySensor	809
X3D_VolumeData	809
X3D_VolumeEmitter	810
X3D_VolumePickSensor	811
X3D_WindPhysicsModel	812
X3D_WorldInfo	812
org.web3d.x3d.sai.X3DBoundedObject	816
org.web3d.x3d.sai.X3DGroupingNode	829
org.web3d.x3d.sai.X3DComponent	817
sai.FreeWRLComponent	228
org.web3d.x3d.sai.X3DExecutionContext	822
org.web3d.x3d.sai.X3DScene	839
sai.FreeWRLScene	235
org.web3d.x3d.sai.X3DField	823
org.web3d.x3d.sai.MField	324
org.web3d.x3d.sai.MFBool	318
org.web3d.x3d.sai.MFColor	320
sai.FWMFColor	243
org.web3d.x3d.sai.MFColorRGBA	321
sai.FWMFColorRGBA	243
org.web3d.x3d.sai.MFDouble	321
sai.FWMFDouble	244
org.web3d.x3d.sai.MFFloat	322
sai.FWMFFloat	245
org.web3d.x3d.sai.MFImage	326
org.web3d.x3d.sai.MFInt32	327

sai.FWMFInt32	246
org.web3d.x3d.sai.MFNode	328
sai.FWMFNode	246
org.web3d.x3d.sai.MFRotation	330
sai.FWMFRotation	247
org.web3d.x3d.sai.MFString	332
sai.FWMFString	248
org.web3d.x3d.sai.MFTime	334
org.web3d.x3d.sai.MFVec2d	335
sai.FWMFVec2d	249
org.web3d.x3d.sai.MFVec2f	337
sai.FWMFVec2f	249
org.web3d.x3d.sai.MFVec3d	338
sai.FWMFVec3d	250
org.web3d.x3d.sai.MFVec3f	339
sai.FWMFVec3f	251
sai.FreeWRLMField	232
sai.FWMFColor	243
sai.FWMFColorRGBA	243
sai.FWMFDouble	244
sai.FWMFFloat	245
sai.FWMFInt32	246
sai.FWMFNode	246
sai.FWMFRotation	247
sai.FWMFString	248
sai.FWMFVec2d	249
sai.FWMFVec2f	249
sai.FWMFVec3d	250
sai.FWMFVec3f	251
org.web3d.x3d.sai.SFBool	498
sai.FWSFBool	255
org.web3d.x3d.sai.SFColor	499
sai.FWSFColor	256
org.web3d.x3d.sai.SFColorRGBA	501
sai.FWSFColorRGBA	257
org.web3d.x3d.sai.SFDouble	501
sai.FWSFDouble	257
org.web3d.x3d.sai.SFFloat	503
sai.FWSFFloat	258
org.web3d.x3d.sai.SFImage	504
sai.FWSFImage	258
org.web3d.x3d.sai.SFInt32	505
sai.FWSFInt32	259
org.web3d.x3d.sai.SFNode	508
sai.FWSFNode	260
org.web3d.x3d.sai.SFRotation	509
sai.FWSFRotation	260
org.web3d.x3d.sai.SFString	511
sai.FWSFString	261
org.web3d.x3d.sai.SFTime	512
sai.FWSFTime	261
org.web3d.x3d.sai.SFVec2d	513
sai.FWSFVec2d	262
org.web3d.x3d.sai.SFVec2f	515
sai.FWSFVec2f	263
org.web3d.x3d.sai.SFVec3d	516

sai.FWSFVec3d	263
org.web3d.x3d.sai.SFVec3f	517
sai.FWSFVec3f	264
sai.FreeWRLField	229
sai.FreeWRLMField	232
sai.FWSFBool	255
sai.FWSFColor	256
sai.FWSFColorRGBA	257
sai.FWSFDouble	257
sai.FWSFFloat	258
sai.FWSFImage	258
sai.FWSFInt32	259
sai.FWSFNode	260
sai.FWSFRotation	260
sai.FWSFString	261
sai.FWSFTime	261
sai.FWSFVec2d	262
sai.FWSFVec2f	263
sai.FWSFVec3d	263
sai.FWSFVec3f	264
org.web3d.x3d.sai.X3DFieldDefinition	825
sai.FreeWRLFieldDefinition	230
org.web3d.x3d.sai.X3DFieldTypes	826
sai.FreeWRLFieldTypes	231
org.web3d.x3d.sai.X3DMetadataObject	832
org.web3d.x3d.sai.X3DNode	833
org.web3d.x3d.sai.X3DAppearanceChildNode	813
org.web3d.x3d.sai.X3DMaterialNode	832
org.web3d.x3d.sai.X3DTextureNode	845
org.web3d.x3d.sai.X3DTexture2DNode	844
org.web3d.x3d.sai.X3DTextureTransformNode	846
org.web3d.x3d.sai.X3DTextureTransform2DNode	845
org.web3d.x3d.sai.X3DAppearanceNode	813
org.web3d.x3d.sai.X3DChildNode	816
org.web3d.x3d.sai.X3DBindableNode	815
org.web3d.x3d.sai.X3DBackgroundNode	814
org.web3d.x3d.sai.X3DGroupingNode	829
org.web3d.x3d.sai.X3DInfoNode	829
org.web3d.x3d.sai.X3DInterpolatorNode	830
org.web3d.x3d.sai.X3DLightNode	831
org.web3d.x3d.sai.X3DScriptNode	840
org.web3d.x3d.sai.X3DSensorNode	841
org.web3d.x3d.sai.X3DEnvironmentalSensorNode	820
org.web3d.x3d.sai.X3DKeyDeviceSensorNode	830
org.web3d.x3d.sai.X3DNetworkSensorNode	833
org.web3d.x3d.sai.X3DPointingDeviceSensorNode	837
org.web3d.x3d.sai.X3DDragSensorNode	819
org.web3d.x3d.sai.X3DTouchSensorNode	848
org.web3d.x3d.sai.X3DSequencerNode	841
org.web3d.x3d.sai.X3DShapeNode	842
org.web3d.x3d.sai.X3DSoundNode	842
org.web3d.x3d.sai.X3DTimeDependentNode	847
org.web3d.x3d.sai.X3DAudioClipNode	814
org.web3d.x3d.sai.X3DTriggerNode	848
org.web3d.x3d.sai.X3DFontStyleNode	827
org.web3d.x3d.sai.X3DGeometricPropertyNode	828

org.web3d.x3d.sai.X3DColorNode	817
org.web3d.x3d.sai.X3DCoordinateNode	819
org.web3d.x3d.sai.X3DNormalNode	835
org.web3d.x3d.sai.X3DTextureCoordinateNode	844
org.web3d.x3d.sai.X3DGeometryNode	828
org.web3d.x3d.sai.X3DComposedGeometryNode	818
org.web3d.x3d.sai.X3DParametricGeometryNode	836
org.web3d.x3d.sai.X3DTextNode	843
org.web3d.x3d.sai.X3DProtoInstance	838
sai.FWProtoInstance	254
sai.FreeWRLNode	233
sai.FWProtoInstance	254
org.web3d.x3d.sai.X3DNodeTypes	834
sai.FreeWRLNodeTypes	233
org.web3d.x3d.sai.X3DProtoDeclaration	837
org.web3d.x3d.sai.X3DExternProtoDeclaration	823
sai.FWExternProtoDeclaration	239
sai.FWProtoDeclaration	253
sai.FWProtoDeclaration	253
org.web3d.x3d.sai.X3DRoute	838
sai.FWRoute	255
org.web3d.x3d.sai.X3DScriptImplementation	840
org.web3d.x3d.sai.X3DPerFrameObserverScript	836
org.web3d.x3d.sai.X3DSoundSourceNode	843
org.web3d.x3d.sai.X3DUrlObject	849
org.web3d.x3d.sai.X3DAudioClipNode	814
org.web3d.x3d.sai.X3DScriptNode	840
xml_user_data	849
XY	850
zip64_internal	850
zip_fileinfo	851
zlib_filefunc64_32_def_s	851
zlib_filefunc64_def_s	851
zlib_filefunc_def_s	852
zone	852

Chapter 3

Data Structure Index

3.1 Data Structures

Here are the data structures with brief descriptions:

_BrowserNative	51
_cd_list_t	51
_CRnodeStruct	52
_FW_PluginInstance	52
_GLwDrawingAreaClassPart	53
_GLwDrawingAreaClassRec	53
_GLwDrawingAreaRec	53
_intX3D_MFBool	54
_intX3D_MFColor	54
_intX3D_MFColorRGBA	54
_intX3D_MFFloat	55
_intX3D_MFImage	55
_intX3D_MFInt32	55
_intX3D_MFNode	56
_intX3D_MFRotation	56
_intX3D_MFString	56
_intX3D_MFTime	57
_intX3D_MFVec2d	57
_intX3D_MFVec2f	57
_intX3D_MFVec3d	58
_intX3D_MFVec3f	58
_intX3D_SFBool	58
_intX3D_SFColor	59
_intX3D_SFColorRGBA	59
_intX3D_SFFloat	59
_intX3D_SFImage	60
_intX3D_SFInt32	60
_intX3D_SFNode	60
_intX3D_SFRotation	61
_intX3D_SFString	61
_intX3D_SFTime	61
_intX3D_SFVec2d	62
_intX3D_SFVec2f	62
_intX3D_SFVec3d	62
_intX3D_SFVec3f	63

<code>_intX3DEventIn</code>	63
<code>_NPByteRange</code>	63
<code>_NPEmbedPrint</code>	64
<code>_NPFullPrint</code>	64
<code>_NPImageExpose</code>	65
<code>_NPNetscapeFuncs</code>	65
<code>_NPP</code>	66
<code>_NPPluginFuncs</code>	67
<code>_NPPrint</code>	67
<code>_NPRect</code>	68
<code>_NPSavedData</code>	68
<code>_NPSize</code>	68
<code>_NPStream</code>	69
<code>_NPString</code>	69
<code>_NPVariant</code>	69
<code>_NPWindow</code>	70
<code>_s_list_t</code>	70
<code>freeWRLSAI_cpp::SAIParameter</code>	71
<code>_SFColorNative</code>	71
<code>_SFColorRGBANative</code>	71
<code>_SFImageNative</code>	72
<code>_SFNodeNative</code>	72
<code>_SFRotationNative</code>	72
<code>_SFVec2fNative</code>	73
<code>_SFVec3dNative</code>	73
<code>_SFVec3fNative</code>	73
<code>_SFVec4dNative</code>	74
<code>_SFVec4fNative</code>	74
<code>_urlRequest</code>	74
<code>_X3DNode</code>	75
<code>ActiveRegion</code>	75
<code>anyVrml</code>	76
<code>Arc</code>	76
<code>ArcSdirSorter</code>	77
<code>ArcSorter</code>	78
<code>ArcTdirSorter</code>	79
<code>ArcTessellator</code>	79
<code>ArgListType</code>	80
<code>Atlas</code>	80
<code>AtlasEntry</code>	80
<code>AtlasEntrySet</code>	81
<code>AtlasFont</code>	81
<code>Backend</code>	82
<code>vrml.BaseNode</code>	83
<code>BasePlugin</code>	83
<code>BasicCurveEvaluator</code>	84
<code>BasicSurfaceEvaluator</code>	85
<code>BezierArc</code>	86
<code>bezierPatch</code>	86
<code>bezierPatchMesh</code>	87
<code>Bin</code>	87
<code>bindablestack</code>	88
<code>block</code>	88
<code>Breakpt</code>	89
<code>brotoDefpair</code>	89
<code>brotoIS</code>	90
<code>brotoRoute</code>	90
<code>brouteEnd</code>	90

org.web3d.x3d.sai.Browser	91
vrml.Browser	92
vrml.external.Browser	92
org.web3d.x3d.sai.BrowserEvent	94
sai.BrowserFactory	95
org.web3d.x3d.sai.BrowserFactoryImpl	95
vrml.external.BrowserGlobals	96
sai.BrowserGlobals	96
org.web3d.x3d.sai.BrowserInterface	97
vrml.external.BrowserInterface	97
org.web3d.x3d.sai.BrowserListener	98
freeWRLSAI_cpp::browserNotSharedException	98
org.web3d.x3d.sai.BrowserNotSharedException	99
Buffer	99
BUTitem	99
CachedVertex	100
CachingEvaluator	100
cbDataExactName	101
cbDataRootNameAndRouteDir	101
CdIIFreeWRL	102
chardata	103
chaser_ptr	103
cline	104
coded_block_pattern_entry	104
colorScheme	104
command	105
org.web3d.x3d.sai.ComponentInfo	105
connection_info_struct	106
org.web3d.x3d.sai.ConnectionException	106
freeWRLSAI_cpp::connectionException	107
consoleLine	107
vrml.ConstField	108
vrml.field.ConstMFColor	108
vrml.field.ConstMFFloat	109
vrml.ConstMField	110
vrml.field.ConstMFInt32	111
vrml.field.ConstMFNode	112
vrml.field.ConstMFRotation	113
vrml.field.ConstMFString	114
vrml.field.ConstMFTime	114
vrml.field.ConstMFVec2f	115
vrml.field.ConstMFVec3f	116
vrml.field.ConstSFBool	117
vrml.field.ConstSFColor	117
vrml.field.ConstSFFloat	118
vrml.field.ConstSFImage	119
vrml.field.ConstSFInt32	120
vrml.field.ConstSFNode	120
vrml.field.ConstSFRotation	121
vrml.field.ConstSFString	122
vrml.field.ConstSFTime	122
vrml.field.ConstSFVec2f	123
vrml.field.ConstSFVec3f	124
contenttype	124
contenttype_captiontext	125
contenttype_e3dmouse	125
contenttype_layer	126
contenttype_multitouch	126

contenttype_orientation	126
contenttype_quadrant	127
contenttype_scene	127
contenttype_splitter	127
contenttype_statusbar	128
contenttype_stereo_anaglyph	128
contenttype_stereo_shutter	128
contenttype_stereo_sidebyside	129
contenttype_stereo_updown	129
contenttype_switch	129
contenttype_textpanel	130
contenttype_texturegrid	131
CoveAndTiler	131
CPlugin	132
CR_RegStruct	133
CRjsnameStruct	133
CRscriptStruct	134
CRStruct	134
cson_array	
Cson_array is an opaque handle to an Array value	135
cson_buffer	
A generic buffer class	136
cson_data_source_StringSource_	
Internal type to hold state for a JSON input string	138
cson_kvp	
A key/value pair collection	139
cson_kvp_list	139
cson_object	
Cson_object is an opaque handle to an Object value	140
cson_object_iterator	
An iterator type for traversing object properties	141
cson_output_opt	
Client-configurable options for the cson_output() family of functions	141
cson_parse_info	
A class for holding JSON parser information	143
cson_parse_opt	
Client-configurable options for the cson_parse() family of functions	144
cson_parser	144
cson_string	
Strings are allocated as an instances of this class with N+1 trailing bytes, where N is the length of the string being allocated	145
cson_value	
The core value type of this API	146
cson_value_api	
This type holds the "vtbl" for type-specific operations when working with cson_value (p. 146) objects	148
cson_value_list	149
curfile64_info	150
currayhit	150
Curve	151
curveEvalMachine	151
Curvelist	152
damper_ptr	152
datChnk	153
dct_dc_size_entry	153
DDS_header	153
DdsLoadInfo	154
Dict	155

DictNode	155
directedLine	156
DisplayList	157
freeWRLSAI_cpp::disposedException	157
Dlnode	158
draw_call_params	159
duk_bigint	159
duk_compile_raw_args	159
duk_compiler_stkstate	160
duk_decode_context	160
duk_encode_context	161
duk_exp_limits	161
duk_id_lookup_result	161
duk_numconv_stringify_ctx	162
duk_objlit_state	162
duk_pcall_prop_args	163
duk_re_disjunction_info	163
duk_transform_context	163
duk_activation	164
duk_bitdecoder_ctx	164
duk_bitencoder_ctx	164
duk_breakpoint	165
duk_bufwriter_ctx	165
duk_catcher	166
duk_compiler_ctx	166
duk_compiler_func	167
duk_compiler_instr	168
duk_double_union	168
duk_function_list_entry	169
duk_harray	169
duk_hbuffer	169
duk_hbuffer_dynamic	170
duk_hbuffer_external	170
duk_hbuffer_fixed	170
duk_hbufobj	171
duk_hcompfunc	171
duk_heap	172
duk_heaphdr	172
duk_heaphdr_string	173
duk_hnatfunc	173
duk_hobject	174
duk_hstring	174
duk_hstring_external	174
duk_hthread	175
duk_internal_thread_state	176
duk_ispec	176
duk_ivalue	176
duk_jmpbuf	177
duk_json_dec_ctx	177
duk_json_enc_ctx	178
duk_labelinfo	178
duk_lexer_codepoint	179
duk_lexer_ctx	179
duk_lexer_point	179
duk_ljstate	180
duk_memory_functions	180
duk_number_list_entry	181
duk_propaccessor	181

duk_propdesc	181
duk_propvalue	182
duk_re_compiler_ctx	182
duk_re_matcher_ctx	183
duk_re_token	183
duk_strcache	184
duk_strtab_entry	184
duk_thread_state	184
duk_time_components	185
duk_token	185
duk_tval_unused	186
EAI_ListenerStruct	186
vrml.external.FreeWRLEAI.EAIAsyncMessage	187
sai.eai.EAIAsyncMessage	187
vrml.external.FreeWRLEAI.EAIAsyncQueue	187
sai.eai.EAIAsyncQueue	188
sai.eai.EAIAsyncThread	188
vrml.external.FreeWRLEAI.EAIAsyncThread	189
sai.eai.EAlinThread	189
vrml.external.FreeWRLEAI.EAlinThread	190
sai.eai.EAIMessage	190
vrml.external.FreeWRLEAI.EAIMessage	191
EAINodeIndexStruct	191
EAINodeParams	191
sai.eai.EAloutQueue	192
vrml.external.FreeWRLEAI.EAloutQueue	192
sai.eai.EAloutThread	193
vrml.external.FreeWRLEAI.EAloutThread	193
ECMAValueStruct	194
EdgePair	194
vrml.Event	194
vrml.external.field.EventIn	195
vrml.external.field.EventInMFColor	196
vrml.external.field.EventInMFFloat	197
vrml.external.field.EventInMFInt32	197
vrml.external.field.EventInMFNode	198
vrml.external.field.EventInMFRotation	198
vrml.external.field.EventInMFString	199
vrml.external.field.EventInMFVec2f	199
vrml.external.field.EventInMFVec3f	200
vrml.external.field.EventInSFBool	200
vrml.external.field.EventInSFColor	201
vrml.external.field.EventInSFFloat	201
vrml.external.field.EventInSFImage	202
vrml.external.field.EventInSFInt32	202
vrml.external.field.EventInSFNode	203
vrml.external.field.EventInSFRotation	203
vrml.external.field.EventInSFString	204
vrml.external.field.EventInSFTime	204
vrml.external.field.EventInSFVec2f	205
vrml.external.field.EventInSFVec3f	205
vrml.external.field.EventOut	206
vrml.external.field.EventOutMFColor	207
vrml.external.field.EventOutMFFloat	207
vrml.external.field.EventOutMField	208
vrml.external.field.EventOutMFInt32	209
vrml.external.field.EventOutMFNode	209
vrml.external.field.EventOutMFRotation	210

vrml.external.field.EventOutMFString	211
vrml.external.field.EventOutMFVec2f	211
vrml.external.field.EventOutMFVec3f	212
vrml.external.field.EventOutObserver	212
vrml.external.field.EventOutSFBool	213
vrml.external.field.EventOutSFColor	213
vrml.external.field.EventOutSFFloat	214
vrml.external.field.EventOutSFImage	214
vrml.external.field.EventOutSFInt32	215
vrml.external.field.EventOutSFNode	216
vrml.external.field.EventOutSFRotation	216
vrml.external.field.EventOutSFString	217
vrml.external.field.EventOutSFTime	217
vrml.external.field.EventOutSFVec2f	218
vrml.external.field.EventOutSFVec3f	218
org.web3d.x3d.sai.ExternalBrowser	219
extrusion	219
FaceCount	220
vrml.Field	220
FieldDecl	221
vrml.external.field.FieldTypes	222
file_in_zip64_read_info_s	222
FirstStruct	223
Flist	223
FlistSorter	224
flychord	224
fmtChnk	225
freewrl_params	
Initialization	225
sai.FreeWRLBrowser	226
sai.FreeWRLBrowserInfo	228
sai.FreeWRLComponent	228
sai.FreeWRLField	229
sai.FreeWRLFieldDefinition	230
sai.FreeWRLFieldTypes	231
sai.FreeWRLMField	232
sai.FreeWRLNode	233
sai.FreeWRLNodeTypes	233
sai.FreeWRLRendererInfo	234
sai.FreeWRLScene	235
ftype	236
fw_MaterialParameters	237
FWBITMAPFILEHEADER	237
FWBITMAPINFO	237
FWBITMAPINFOHEADER	238
sai.FWComponentInfo	238
vrml.FWCreateField	239
sai.FWExternProtoDeclaration	239
FWFunctionSpec	240
vrml.FWHelper	240
vrml.FWJavaScript	241
vrml.FWJavaScriptBinding	241
vrml.FWJavaScriptClassLoader	242
sai.FWMFColor	243
sai.FWMFColorRGBA	243
sai.FWMFDouble	244
sai.FWMFFloat	245
sai.FWMFInt32	246

sai.FWMFNode	246
sai.FWMFRotation	247
sai.FWMFString	248
sai.FWMFVec2d	249
sai.FWMFVec2f	249
sai.FWMFVec3d	250
sai.FWMFVec3f	251
sai.FWProfileInfo	252
sai.FWProfInfo	252
FWPropertySpec	253
sai.FWProtoDeclaration	253
sai.FWProtoInstance	254
FWRGBQUAD	254
sai.FWRoute	255
sai.FWSFBool	255
sai.FWSFColor	256
sai.FWSFColorRGBA	257
sai.FWSFDouble	257
sai.FWSFFloat	258
sai.FWSFImage	258
sai.FWSFInt32	259
sai.FWSFNode	260
sai.FWSFRotation	260
sai.FWSFString	261
sai.FWSFTime	261
sai.FWSFVec2d	262
sai.FWSFVec2f	263
sai.FWSFVec3d	263
sai.FWSFVec3f	264
FWSNDMSG	264
FWTYPE	265
FWVAL	265
FXV	266
GLUface	266
GLUhalfEdge	267
GLUmesh	267
GLUnurbs	267
GLUtesselator	268
GLUvertex	269
GLwDrawingAreaCallbackStruct	270
GLwDrawingAreaPart	270
GoP	271
gridBoundaryChain	271
Gridline	272
GridTrimVertex	272
GridVertex	273
gridWrap	273
GUIElement	274
GUINamedType	274
GUIScreen	274
Hull	275
vrml.external.IBrowser	275
iiglobal	277
IMEXPORT	279
org.web3d.x3d.sai.ImportedException	280
initialRouteStruct	280
freeWRLSAI_cpp::insufficientCapabilitiesException	281
org.web3d.x3d.sai.InsufficientCapabilitiesException	281

intersection_info	282
intTableIndex	282
freeWRLSAI_cpp::invalidAccessTypeException	283
freeWRLSAI_cpp::invalidBrowserException	283
org.web3d.x3d.sai.InvalidBrowserException	284
freeWRLSAI_cpp::invalidDocumentException	284
org.web3d.x3d.sai.InvalidDocumentException	285
vrml.InvalidEventInException	285
vrml.external.exception.InvalidEventInException	286
vrml.InvalidEventOutException	287
vrml.external.exception.InvalidEventOutException	287
freeWRLSAI_cpp::invalidExecutionContextException	288
org.web3d.x3d.sai.InvalidExecutionContextException	288
vrml.InvalidExposedFieldException	289
vrml.InvalidFieldChangeException	289
org.web3d.x3d.sai.InvalidFieldException	290
freeWRLSAI_cpp::invalidFieldException	290
vrml.InvalidFieldException	291
org.web3d.x3d.sai.InvalidFieldValueException	291
freeWRLSAI_cpp::invalidImportException	292
org.web3d.x3d.sai.InvalidNameException	292
org.web3d.x3d.sai.InvalidNodeException	293
freeWRLSAI_cpp::invalidNodeException	293
vrml.external.exception.InvalidNodeException	294
freeWRLSAI_cpp::invalidOperationTimingException	295
org.web3d.x3d.sai.InvalidOperationTimingException	295
org.web3d.x3d.sai.InvalidProtoException	296
freeWRLSAI_cpp::InvalidReadableFieldException	296
vrml.InvalidRouteException	297
org.web3d.x3d.sai.InvalidRouteException	297
freeWRLSAI_cpp::invalidUrIException	298
org.web3d.x3d.sai.InvalidURLException	298
vrml.external.exception.InvalidVrmlException	299
vrml.InvalidVRMLSyntaxException	300
freeWRLSAI_cpp::InvalidWritableFieldException	300
freeWRLSAI_cpp::invalidX3DException	301
org.web3d.x3d.sai.InvalidX3DException	302
vrml.InvalidX3DSyntaxException	302
ivec2	303
ivec4	303
Jarcloc	303
JMATRIX	304
JSLoadPropElement	304
JSON_config	
The structure used to configure a JSON parser object	304
JSON_parser_struct	307
JSON_value_struct	307
key	308
keyHit	308
keyval	308
Knotspec	309
Knotvector	310
layout_scale_item	310
layoutmode	311
linkedlist_data_s	311
linkedlist_datablock_internal_s	311
macroblock	312
Mapdesc	312

Maplist	314
matpropstruct	314
org.web3d.x3d.sai.Matrix	315
org.web3d.x3d.sai.Matrix3	315
org.web3d.x3d.sai.Matrix4	316
mb_addr_inc_entry	317
mb_type_entry	317
Meshes	318
org.web3d.x3d.sai.MFBool	318
vrml.field.MFColor	319
org.web3d.x3d.sai.MFColor	320
org.web3d.x3d.sai.MFColorRGBA	321
org.web3d.x3d.sai.MFDouble	321
org.web3d.x3d.sai.MFFloat	322
vrml.field.MFFloat	323
org.web3d.x3d.sai.MField	324
vrml.MField	325
org.web3d.x3d.sai.MFImage	326
org.web3d.x3d.sai.MFInt32	327
vrml.field.MFInt32	327
org.web3d.x3d.sai.MFNode	328
vrml.field.MFNode	329
org.web3d.x3d.sai.MFRotation	330
vrml.field.MFRotation	331
org.web3d.x3d.sai.MFString	332
vrml.field.MFString	332
vrml.field.MFTime	333
org.web3d.x3d.sai.MFTime	334
org.web3d.x3d.sai.MFVec2d	335
vrml.field.MFVec2f	336
org.web3d.x3d.sai.MFVec2f	337
org.web3d.x3d.sai.MFVec3d	338
vrml.field.MFVec3f	338
org.web3d.x3d.sai.MFVec3f	339
mode_name	340
monoChain	341
Monotonizer	341
motion_vectors_entry	342
Multi_Any	342
Multi_Bool	342
Multi_Color	343
Multi_ColorRGBA	343
Multi_Double	344
Multi_Float	344
Multi_Int32	344
Multi_Matrix3d	345
Multi_Matrix3f	345
Multi_Matrix4d	346
Multi_Matrix4f	346
Multi_Node	346
Multi_Rotation	347
Multi_String	347
Multi_Time	348
Multi_Vec2d	348
Multi_Vec2f	348
Multi_Vec3d	349
Multi_Vec3f	349
Multi_Vec4d	350

Multi_Vec4f	350
multiTexParams	350
myArgs	351
MyVertex	351
name_num	352
nameValuePairs	352
navmode	352
vrml.external.Node	353
vrml.node.Node	353
nodedistance	354
freeWRLSAI_cpp::nodeInUseException	354
org.web3d.x3d.sai.NodeInUseException	355
freeWRLSAI_cpp::nodeUnavailableException	355
org.web3d.x3d.sai.NodeUnavailableException	356
freeWRLSAI_cpp::noSuchBrowserException	356
org.web3d.x3d.sai.NoSuchBrowserException	357
org.web3d.x3d.sai.NotSupportedException	357
freeWRLSAI_cpp::notSupportedException	358
NPClass	359
NPObject	359
nsByteRange	360
nsIAuthenticationInfo	360
nsICookieStorage	361
nsIFileUtilities	
The nsIFileUtilities (p. 362) interface provides access to random file operations	362
nsIHTTPHeaderListener	
The nsIHTTPHeaderListener (p. 365) interface allows plugin authors to access HTTP Response headers after issuing an nsIPluginHost (p. 371)::{GetURL,PostURL}() call	365
nsIJVMAuthTools	366
nsIPlugin	367
nsIPluginDocument	370
nsIPluginHost	371
nsIPluginHostOld	376
nsIPluginInputStream	
The nsIPluginInputStream (p. 378) interface ..	378
nsIPluginInstance	378
nsIPluginInstanceInternal	384
nsIPluginInstanceOld	
The nsIPluginInstance (p. 378) interface is the minimum interface plugin developers need to support in order to implement a plugin instance	385
nsIPluginInstanceOwner	390
nsIPluginInstancePeer	
The nsIPluginInstancePeer (p. 392) interface is the set of operations implemented by the browser to support a plugin instance	392
nsIPluginInstancePeer2	
The nsIPluginInstancePeer2 (p. 396) interface extends the nsIPluginInstancePeer (p. 392) interface, providing access to functionality provided by newer browsers	396
nsIPluginInstancePeer2_1_9_1_BRANCH	398
nsIPluginManager	399
nsIPluginManager2	
Plugin Manager 2 Interface These extensions to nsIPluginManager (p. 399) are only available in Communicator 5.0	404
nsIPluginOld	
The nsIPlugin (p. 367) interface is the minimum interface plugin developers need to support in order to implement a plugin	409
nsIPluginStreamInfo	
NsIPluginStreamInfo	411

nsIPluginStreamListener	
NsIPluginStreamListener	412
nsIPluginTag	415
nsIPluginTagInfo	
Plugin Tag Info Interface This interface provides information about the HTML tag on the page	416
nsIPluginTagInfo2	
NsIPluginTagInfo2	419
nsIPluginTagInfoOld	
Plugin Tag Info Interface This interface provides information about the HTML tag on the page	423
nsIScriptablePlugin	
Interface for exposing scriptable plugin methods to JavaScript via XPCConnect	424
nsIWindowlessPluginInstancePeer	425
nsPIPluginInstancePeer	426
nsPluginEmbedPrint	426
nsPluginEvent	427
nsPluginFullPrint	427
nsPluginLogging	428
nsPluginNativeWindow	
Base class for native plugin window implementations	428
nsPluginPrint	430
nsPluginRect	430
nsPluginWindow	431
NurbsTessellator	431
O_curve	433
O_nurbscurve	433
O_nurbssurface	434
O_pwlcurve	435
O_surface	435
O_trim	436
OpenGLCurveEvaluator	436
OpenGLSurfaceEvaluator	438
opened_file	439
orient_XYZA	440
particle	440
Patch	440
Patchlist	441
Patchspec	442
pBindable	442
pcollision	443
pcommon	443
pComponent_CubeMapTexturing	444
pComponent_EnvironSensor	444
pComponent_Followers	445
pComponent_Geometry3D	445
pComponent_Geospatial	445
pComponent_HAnim	446
pComponent_KeyDevice	446
pComponent_Layering	446
pComponent_Layout	447
pComponent_NURBS	447
pComponent_ParticleSystems	447
pComponent_Picking	448
pComponent_ProgrammableShaders	448
pComponent_Rendering	448
pComponent_RigidBodyPhysics	449
pComponent_Shape	449
pComponent_Sound	449
pComponent_Text	450

pComponent_VolumeRendering	451
pConsoleMessage	451
pCParse	452
pCParseParser	452
pCRoutes	453
pCScripts	453
pCursorDraw	454
pdisplay	454
pEAI_C_CommonFunctions	454
pEAICore	455
pEAIEventsIn	455
pEAHelpers	455
pedal_state	456
pFrustum	456
pict	456
pict_image	457
pJScript	457
pjsUtils	458
pjsVRMLBrowser	458
pjsVRMLClasses	458
pLoadTextures	459
pMainloop	459
Point	460
point_XYZ	461
point_XYZ3	461
pointer2pointer	461
polygon	462
polyrep_combiner_data	462
Pool	462
PooledObj	463
pOpenGL_Utils	464
pPluginSocket	465
ppluginUtils	465
pProdCon	465
PQhandleElem	466
PQnode	466
pRasterFont	466
pRenderFuncs	467
pRenderTextures	468
presources	468
primStream	469
PriorityQ	469
profile_entry	470
org.web3d.x3d.sai.ProfileInfo	470
proftablestruct	471
Property	471
ProtoDefinition	472
ProtoFieldDecl	472
pSensInterps	473
pSnapshot	473
Pspec	473
PSStruct	474
pstatusbar	474
pStreamPoly	475
pTess	475
pTextures	475
pViewer	476
PwlArc	476

pX3DParser	477
quaternion	478
Quilt	478
QuiltSpec	479
rb1	479
rectBlock	480
rectBlockArray	480
reflexChain	481
RenderHints	481
resource_item	482
row32	482
s_renderer_capabilities_t	483
s_shader_capabilities	484
freeWRLSAI_cpp::saiBrowser	485
freeWRLSAI_cpp::saiComponent	486
freeWRLSAI_cpp::saiCustomException	486
freeWRLSAI_cpp::saiException	487
freeWRLSAI_cpp::saiExecutionContext	488
freeWRLSAI_cpp::saiField	488
freeWRLSAI_cpp::saiNode	489
freeWRLSAI_cpp::saiProfileDeclaration	489
freeWRLSAI_cpp::saiProto	490
freeWRLSAI_cpp::saiRoute	490
freeWRLSAI_cpp::saiScene	491
sampledLine	491
sCollisionGeometry	492
sCollisionInfo	492
screenTextData	492
vrml.node.Script	493
ScriptablePluginObjectBase	494
ScriptFieldDecl	495
ScriptFieldInstanceInfo	495
ScriptParamList	496
SensStruct	496
sFallInfo	497
vrml.field.SFBool	497
org.web3d.x3d.sai.SFBool	498
SFColor	499
org.web3d.x3d.sai.SFColor	499
vrml.field.SFColor	500
SFColorRGBA	500
org.web3d.x3d.sai.SFColorRGBA	501
org.web3d.x3d.sai.SFDouble	501
vrml.field.SFFloat	502
org.web3d.x3d.sai.SFFloat	503
vrml.field.SFImage	503
org.web3d.x3d.sai.SFImage	504
vrml.field.SFInt32	505
org.web3d.x3d.sai.SFInt32	505
SFMatrix3d	506
SFMatrix3f	506
SFMatrix4d	507
SFMatrix4f	507
vrml.field.SFNode	507
org.web3d.x3d.sai.SFNode	508
vrml.field.SFRotation	509
org.web3d.x3d.sai.SFRotation	509
SFRotation	510

vrml.field.SFString	510
org.web3d.x3d.sai.SFString	511
vrml.field.SFTime	512
org.web3d.x3d.sai.SFTime	512
SFVec2d	513
org.web3d.x3d.sai.SFVec2d	513
SFVec2f	514
vrml.field.SFVec2f	514
org.web3d.x3d.sai.SFVec2f	515
SFVec3d	515
org.web3d.x3d.sai.SFVec3d	516
vrml.field.SFVec3f	516
org.web3d.x3d.sai.SFVec3f	517
SFVec3f	518
SFVec4d	518
SFVec4f	518
Shader_Script	519
shaderflagsstruct	519
shaderTableEntry	519
slice	520
Slicer	520
sNavInfo	521
SNDFILE	521
Sorter	522
Splinespec	523
ssr	523
SSR_request	524
stage	524
StoredVertex	525
Subdivider	525
surfEvalMachine	526
sweepRange	526
targetwindow	527
iiglobal::tBindable	527
iiglobal::tcollision	527
iiglobal::tcommon	528
iiglobal::tComponent_CubeMapTexturing	528
iiglobal::tComponent_EnvironSensor	528
iiglobal::tComponent_Followers	529
iiglobal::tComponent_Geometry3D	529
iiglobal::tComponent_Geospatial	529
iiglobal::tComponent_HAnim	530
iiglobal::tComponent_KeyDevice	530
iiglobal::tComponent_Layering	530
iiglobal::tComponent_Layout	531
iiglobal::tComponent_NURBS	531
iiglobal::tComponent_ParticleSystems	531
iiglobal::tComponent_Picking	532
iiglobal::tComponent_ProgrammableShaders	532
iiglobal::tComponent_Rendering	532
iiglobal::tComponent_RigidBodyPhysics	533
iiglobal::tComponent_Shape	533
iiglobal::tComponent_Sound	533
iiglobal::tComponent_Text	534
iiglobal::tComponent_VolumeRendering	534
iiglobal::tComponent_VRML1	534
iiglobal::tConsoleMessage	535
tcontenttype	535

iiglobal::tCParse	536
iiglobal::tCParseParser	536
iiglobal::tCRoutes	536
iiglobal::tCScripts	537
iiglobal::tCursorDraw	537
iiglobal::tdisplay	537
iiglobal::tEAI_C_CommonFunctions	538
iiglobal::tEAICore	538
iiglobal::tEAIEventsIn	539
iiglobal::tEAHelpers	539
text_combiner_data	539
textureTableIndexStruct	540
textureVertexInfo	540
iiglobal::tFrustum	541
iiglobal::tinternalc	541
iiglobal::tJScript	541
iiglobal::tjsUtils	542
iiglobal::tjsVRMLBrowser	542
iiglobal::tjsVRMLClasses	542
iiglobal::tLoadTextures	543
tm_unz_s	543
tm_zip_s	544
iiglobal::tMainloop	544
iiglobal::tOpenGL_Utils	545
Touch	545
iiglobal::tPluginSocket	546
iiglobal::tpluginUtils	546
iiglobal::tProdCon	546
treeNode	547
iiglobal::tRenderFuncs	547
trenderstate	548
iiglobal::tRenderTextures	548
iiglobal::tresources	549
Trimline	549
TrimRegion	550
TrimVertex	550
TrimVertexPool	551
iiglobal::tSensInterps	551
iiglobal::tSnapshot	551
iiglobal::tstatusbar	552
iiglobal::tStreamPoly	552
iiglobal::tTess	552
iiglobal::tTextures	553
iiglobal::tthreads	553
iiglobal::tViewer	554
iiglobal::tX3DParser	554
Uarray	554
un1	555
Uni_String	555
vrml.external.FreeWRLEAI.UnsupportedFieldTypeException	556
sai.eai.UnsupportedFieldTypeException	556
unz64_file_pos_s	557
unz64_s	557
unz_file_info64_internal_s	558
unz_file_info64_s	558
unz_file_info_s	559
unz_file_pos_s	559
unz_global_info64_s	559

unz_global_info_s	560
org.web3d.x3d.sai.URLUnavailableException	560
freeWRLSAI_cpp::urlUnavailableException	561
usehit	561
Varray	562
vec2	562
vec4	562
Vector	563
vertexArray	563
vrml.external.FreeWRLEAI.VField	564
sai.eai.VField	565
vid_stream	567
viewer	568
viewer_examine	570
viewer_fly	570
viewer_inplane	570
viewer_walk	571
viewer_ypz	571
vrml.external.FreeWRLEAI.VIP	572
sai.eai.VIP	572
vrml.external.FreeWRLEAI.VMFCColor	573
sai.eai.VMFCColor	574
sai.eai.VMFFloat	575
vrml.external.FreeWRLEAI.VMFFloat	575
sai.eai.VMFInt32	576
vrml.external.FreeWRLEAI.VMFInt32	576
sai.eai.VMFRotation	577
vrml.external.FreeWRLEAI.VMFRotation	578
sai.eai.VMFString	578
vrml.external.FreeWRLEAI.VMFString	579
sai.eai.VMFVec2f	579
vrml.external.FreeWRLEAI.VMFVec2f	580
vrml.external.FreeWRLEAI.VMFVec3f	581
sai.eai.VMFVec3f	581
void3	582
VRMLLexer	582
sai.eai.VRMLObject	583
vrml.external.FreeWRLEAI.VRMLObject	584
vrml.external.FreeWRLEAI.VRMLObjectObserver	584
sai.eai.VRMLObjectObserver	585
VRMLParser	585
vrml.external.FreeWRLEAI.VSFBool	586
sai.eai.VSFBool	586
sai.eai.VSFCColor	587
vrml.external.FreeWRLEAI.VSFCColor	587
vrml.external.FreeWRLEAI.VSFFloat	588
sai.eai.VSFFloat	589
vrml.external.FreeWRLEAI.VSFImage	589
sai.eai.VSFImage	590
vrml.external.FreeWRLEAI.VSFInt32	590
sai.eai.VSFInt32	591
sai.eai.VSFRotation	592
vrml.external.FreeWRLEAI.VSFRotation	592
sai.eai.VSFString	593
vrml.external.FreeWRLEAI.VSFString	593
sai.eai.VSFTTime	594
vrml.external.FreeWRLEAI.VSFTTime	595
vrml.external.FreeWRLEAI.VSFVec2f	595

sai.eai.VSFVec2f	596
vrml.external.FreeWRLEAI.VSFVec3f	596
sai.eai.VSFVec3f	597
walk_cbdata	598
WEB3DNATIVE	598
X3D_Anchor	599
X3D_Appearance	600
X3D_Arc2D	600
X3D_ArcClose2D	601
X3D_AudioClip	602
X3D_BackdropBackground	603
X3D_Background	603
X3D_BallJoint	604
X3D_Billboard	605
X3D_BlendedVolumeStyle	606
X3D_BooleanFilter	607
X3D_BooleanSequencer	607
X3D_BooleanToggle	608
X3D_BooleanTrigger	608
X3D_BoundaryEnhancementVolumeStyle	609
X3D_BoundedPhysicsModel	610
X3D_Box	610
X3D_CADAssembly	611
X3D_CADFace	612
X3D_CADLayer	612
X3D_CADPart	613
X3D_CalibratedCameraSensor	614
X3D_CartoonVolumeStyle	614
X3D_Circle2D	615
X3D_ClipPlane	615
X3D_CollidableOffset	616
X3D_CollidableShape	617
X3D_Collision	617
X3D_CollisionCollection	618
X3D_CollisionSensor	619
X3D_CollisionSpace	620
X3D_Color	620
X3D_ColorChaser	621
X3D_ColorDamper	622
X3D_ColorInterpolator	623
X3D_ColorRGBA	623
X3D_ComposedCubeMapTexture	624
X3D_ComposedShader	625
X3D_ComposedTexture3D	625
X3D_ComposedVolumeStyle	626
X3D_CompositeVolumeStyle	627
X3D_Cone	627
X3D_ConeEmitter	628
X3D_Contact	629
X3D_Contour2D	630
X3D_ContourPolyline2D	630
X3D_Coordinate	631
X3D_CoordinateChaser	631
X3D_CoordinateDamper	632
X3D_CoordinateDouble	633
X3D_CoordinateInterpolator	634
X3D_CoordinateInterpolator2D	634
X3D_Cylinder	635

X3D_CylinderSensor	636
X3D_DirectionalLight	637
X3D_DISEntityManager	637
X3D_DISEntityTypeMapping	638
X3D_Disk2D	639
X3D_DoubleAxisHingeJoint	640
X3D_EaseInEaseOut	641
X3D_EdgeEnhancementVolumeStyle	642
X3D_Effect	642
X3D_EffectPart	643
X3D_ElevationGrid	644
X3D_EspduTransform	645
X3D_ExplosionEmitter	647
X3D_Extrusion	648
X3D_FillProperties	649
X3D_FloatVertexAttribute	649
X3D_Fog	650
X3D_FogCoordinate	651
X3D_FontStyle	651
X3D_ForcePhysicsModel	652
X3D_GeneratedCubeMapTexture	653
X3D_GeoCoordinate	653
X3D_GeoElevationGrid	654
X3D_GeoLocation	655
X3D_GeoLOD	656
X3D_GeoMetadata	657
X3D_GeoOrigin	657
X3D_GeoPositionInterpolator	658
X3D_GeoProximitySensor	659
X3D_GeoTouchSensor	660
X3D_GeoTransform	661
X3D_GeoViewpoint	662
X3D_Group	663
X3D_HAnimDisplacer	663
X3D_HAnimHumanoid	664
X3D_HAnimJoint	665
X3D_HAnimSegment	666
X3D_HAnimSite	667
X3D_ImageBackdropBackground	668
X3D_ImageCubeMapTexture	668
X3D_ImageTexture	669
X3D_ImageTexture3D	670
X3D_IndexedFaceSet	670
X3D_IndexedLineSet	671
X3D_IndexedQuadSet	672
X3D_IndexedTriangleFanSet	673
X3D_IndexedTriangleSet	674
X3D_IndexedTriangleStripSet	674
X3D_Inline	675
X3D_IntegerSequencer	676
X3D_IntegerTrigger	677
X3D_IsoSurfaceVolumeData	678
X3D_KeySensor	678
X3D_Layer	679
X3D_LayerSet	680
X3D_Layout	681
X3D_LayoutGroup	681
X3D_LayoutLayer	682

X3D_LinePickSensor	683
X3D_LineProperties	684
X3D_LineSensor	684
X3D_LineSet	685
X3D_LoadSensor	686
X3D_LocalFog	687
X3D_LOD	687
X3D_Material	688
X3D_Matrix3VertexAttribute	689
X3D_Matrix4VertexAttribute	689
X3D_MetadataBoolean	690
X3D_MetadataDouble	691
X3D_MetadataFloat	691
X3D_MetadataInteger	692
X3D_MetadataMFBool	693
X3D_MetadataMFColor	693
X3D_MetadataMFColorRGBA	694
X3D_MetadataMFDouble	695
X3D_MetadataMFFloat	695
X3D_MetadataMFInt32	696
X3D_MetadataMFMatrix3d	697
X3D_MetadataMFMatrix3f	697
X3D_MetadataMFMatrix4d	698
X3D_MetadataMFMatrix4f	699
X3D_MetadataMFNode	699
X3D_MetadataMFRotation	700
X3D_MetadataMFString	701
X3D_MetadataMFTime	701
X3D_MetadataMFVec2d	702
X3D_MetadataMFVec2f	703
X3D_MetadataMFVec3d	703
X3D_MetadataMFVec3f	704
X3D_MetadataMFVec4d	705
X3D_MetadataMFVec4f	705
X3D_MetadataSet	706
X3D_MetadataSFBool	707
X3D_MetadataSFColor	707
X3D_MetadataSFColorRGBA	708
X3D_MetadataSFDouble	709
X3D_MetadataSFFloat	709
X3D_MetadataSFImage	710
X3D_MetadataSFInt32	711
X3D_MetadataSFMatrix3d	711
X3D_MetadataSFMatrix3f	712
X3D_MetadataSFMatrix4d	713
X3D_MetadataSFMatrix4f	713
X3D_MetadataSFNode	714
X3D_MetadataSFRotation	715
X3D_MetadataSFString	715
X3D_MetadataSFTime	716
X3D_MetadataSFVec2d	717
X3D_MetadataSFVec2f	717
X3D_MetadataSFVec3d	718
X3D_MetadataSFVec3f	719
X3D_MetadataSFVec4d	719
X3D_MetadataSFVec4f	720
X3D_MetadataString	721
X3D_MotorJoint	721

X3D_MovieTexture	723
X3D_MultiTexture	724
X3D_MultiTextureCoordinate	724
X3D_MultiTextureTransform	725
X3D_NavigationInfo	725
X3D_Node	726
X3D_Normal	727
X3D_NormalInterpolator	727
X3D_NurbsCurve	728
X3D_NurbsCurve2D	729
X3D_NurbsOrientationInterpolator	729
X3D_NurbsPatchSurface	730
X3D_NurbsPositionInterpolator	731
X3D_NurbsSet	732
X3D_NurbsSurfaceInterpolator	732
X3D_NurbsSweptSurface	733
X3D_NurbsSwungSurface	734
X3D_NurbsTextureCoordinate	735
X3D_NurbsTrimmedSurface	735
X3D_OpacityMapVolumeStyle	736
X3D_OrientationChaser	737
X3D_OrientationDamper	738
X3D_OrientationInterpolator	739
X3D_OrthoViewpoint	739
X3D_OSC_Sensor	740
X3D_PackagedShader	741
X3D_ParticleSystem	742
X3D_PickableGroup	743
X3D_PixelTexture	744
X3D_PixelTexture3D	744
X3D_PlaneSensor	745
X3D_PointEmitter	746
X3D_PointLight	747
X3D_PointPickSensor	747
X3D_PointSet	748
X3D_Polyline2D	749
X3D_PolylineEmitter	750
X3D_Polypoint2D	750
X3D_PolyRep	751
X3D_PositionChaser	752
X3D_PositionChaser2D	753
X3D_PositionDamper	754
X3D_PositionDamper2D	755
X3D_PositionInterpolator	756
X3D_PositionInterpolator2D	756
X3D_PrimitivePickSensor	757
X3D_ProgramShader	758
X3D_ProjectionVolumeStyle	758
X3D_Proto	759
X3D_ProximitySensor	760
X3D_QuadSet	761
X3D_ReceiverPdu	761
X3D_Rectangle2D	763
X3D_RigidBody	763
X3D_RigidBodyCollection	764
X3D_ScalarChaser	765
X3D_ScalarDamper	766
X3D_ScalarInterpolator	767

X3D_ScreenFontStyle	768
X3D_ScreenGroup	768
X3D_Script	769
X3D_SegmentedVolumeData	770
X3D_ShadedVolumeStyle	770
X3D_ShaderPart	771
X3D_ShaderProgram	772
X3D_Shape	772
X3D_SignalPdu	773
X3D_SilhouetteEnhancementVolumeStyle	774
X3D_SingleAxisHingeJoint	775
X3D_SliderJoint	776
X3D_Sound	777
X3D_Sphere	777
X3D_SphereSensor	778
X3D_SplinePositionInterpolator	779
X3D_SplinePositionInterpolator2D	780
X3D_SplineScalarInterpolator	780
X3D_SpotLight	781
X3D_SquadOrientationInterpolator	782
X3D_StaticGroup	783
X3D_StringSensor	783
X3D_SurfaceEmitter	784
X3D_Switch	785
X3D_Teapot	786
X3D_TexCoordChaser2D	786
X3D_TexCoordDamper2D	787
X3D_Text	788
X3D_TextureBackground	789
X3D_TextureCoordinate	790
X3D_TextureCoordinate3D	790
X3D_TextureCoordinate4D	791
X3D_TextureCoordinateGenerator	791
X3D_TextureProperties	792
X3D_TextureTransform	793
X3D_TextureTransform3D	793
X3D_TextureTransformMatrix3D	794
X3D_TimeSensor	794
X3D_TimeTrigger	795
X3D_ToneMappedVolumeStyle	796
X3D_TouchSensor	797
X3D_TrackingSensor	797
X3D_Transform	798
X3D_TransformSensor	799
X3D_TransmitterPdu	800
X3D_TriangleFanSet	801
X3D_TriangleSet	802
X3D_TriangleSet2D	803
X3D_TriangleStripSet	803
X3D_TwoSidedMaterial	804
X3D_UniversalJoint	805
X3D_Viewpoint	806
X3D_ViewpointGroup	807
X3D_Viewport	807
X3D_Virt	808
X3D_VisibilitySensor	809
X3D_VolumeData	809
X3D_VolumeEmitter	810

X3D_VolumePickSensor	811
X3D_WindPhysicsModel	812
X3D_WorldInfo	812
org.web3d.x3d.sai.X3DAppearanceChildNode	813
org.web3d.x3d.sai.X3DAppearanceNode	813
org.web3d.x3d.sai.X3DAudioClipNode	814
org.web3d.x3d.sai.X3DBackgroundNode	814
org.web3d.x3d.sai.X3DBindableNode	815
org.web3d.x3d.sai.X3DBoundedObject	816
org.web3d.x3d.sai.X3DChildNode	816
org.web3d.x3d.sai.X3DColorNode	817
org.web3d.x3d.sai.X3DComponent	817
org.web3d.x3d.sai.X3DComposedGeometryNode	818
org.web3d.x3d.sai.X3DCoordinateNode	819
org.web3d.x3d.sai.X3DDragSensorNode	819
org.web3d.x3d.sai.X3DEnvironmentalSensorNode	820
org.web3d.x3d.sai.X3DException	821
org.web3d.x3d.sai.X3DExecutionContext	822
org.web3d.x3d.sai.X3DExternProtoDeclaration	823
org.web3d.x3d.sai.X3DField	823
org.web3d.x3d.sai.X3DFieldDefinition	825
org.web3d.x3d.sai.X3DFieldEvent	825
org.web3d.x3d.sai.X3DFieldEventListener	826
org.web3d.x3d.sai.X3DFieldTypes	826
org.web3d.x3d.sai.X3DFontStyleNode	827
org.web3d.x3d.sai.X3DGeometricPropertyNode	828
org.web3d.x3d.sai.X3DGeometryNode	828
org.web3d.x3d.sai.X3DGroupingNode	829
org.web3d.x3d.sai.X3DInfoNode	829
org.web3d.x3d.sai.X3DInterpolatorNode	830
org.web3d.x3d.sai.X3DKeyDeviceSensorNode	830
org.web3d.x3d.sai.X3DLightNode	831
org.web3d.x3d.sai.X3DMaterialNode	832
org.web3d.x3d.sai.X3DMetadataObject	832
org.web3d.x3d.sai.X3DNetworkSensorNode	833
org.web3d.x3d.sai.X3DNode	833
org.web3d.x3d.sai.X3DNodeTypes	834
org.web3d.x3d.sai.X3DNormalNode	835
org.web3d.x3d.sai.X3DParametricGeometryNode	836
org.web3d.x3d.sai.X3DPerFrameObserverScript	836
org.web3d.x3d.sai.X3DPointingDeviceSensorNode	837
org.web3d.x3d.sai.X3DProtoDeclaration	837
org.web3d.x3d.sai.X3DProtoInstance	838
org.web3d.x3d.sai.X3DRoute	838
org.web3d.x3d.sai.X3DScene	839
org.web3d.x3d.sai.X3DScriptImplementation	840
org.web3d.x3d.sai.X3DScriptNode	840
org.web3d.x3d.sai.X3DSensorNode	841
org.web3d.x3d.sai.X3DSequencerNode	841
org.web3d.x3d.sai.X3DShapeNode	842
org.web3d.x3d.sai.X3DSoundNode	842
org.web3d.x3d.sai.X3DSoundSourceNode	843
org.web3d.x3d.sai.X3DTextNode	843
org.web3d.x3d.sai.X3DTexture2DNode	844
org.web3d.x3d.sai.X3DTextureCoordinateNode	844
org.web3d.x3d.sai.X3DTextureNode	845
org.web3d.x3d.sai.X3DTextureTransform2DNode	845
org.web3d.x3d.sai.X3DTextureTransformNode	846

<code>org.web3d.x3d.sai.X3DTimeDependentNode</code>	847
<code>org.web3d.x3d.sai.X3DTouchSensorNode</code>	848
<code>org.web3d.x3d.sai.X3DTriggerNode</code>	848
<code>org.web3d.x3d.sai.X3DUrlObject</code>	849
<code>xml_user_data</code>	849
<code>XY</code>	850
<code>zip64_internal</code>	850
<code>zip_fileinfo</code>	851
<code>zlib_filefunc64_32_def_s</code>	851
<code>zlib_filefunc64_def_s</code>	851
<code>zlib_filefunc_def_s</code>	852
<code>zone</code>	852

Chapter 4

Data Structure Documentation

4.1 `_BrowserNative` Struct Reference

Data Fields

- int **dummyEntry**

4.1.1 Detailed Description

Definition at line 39 of file jsNative.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsNative.h

4.2 `_cd_list_t` Struct Reference

Data Fields

- void * **elem**
- struct `_cd_list_t` * **next**
- struct `_cd_list_t` * **prev**

4.2.1 Detailed Description

Definition at line 85 of file list.h.

The documentation for this struct was generated from the following file:

- src/lib/list.h

4.3 `_CRnodeStruct` Struct Reference

Data Fields

- struct `X3D_Node` * `routeToNode`
- int `foffset`

4.3.1 Detailed Description

Definition at line 38 of file `CRoutes.h`.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/CRoutes.h`

4.4 `_FW_PluginInstance` Struct Reference

Data Fields

- int `interfaceFile` [2]
- Display * `display`
- int32 `x`
- int32 `y`
- uint32 `width`
- uint32 `height`
- Window `mozwindow`
- Window `fwwindow`
- pid_t `childPID`
- char * `fName`
- int `freewrl_running`
- int `interfacePipe` [2]
- char * `cacheFileName`
- int `cacheFileNameLen`
- FILE * `logFile`
- char * `logFileName`

4.4.1 Detailed Description

Definition at line 96 of file `plugin_main.c`.

The documentation for this struct was generated from the following file:

- `src/plugin/plugin_main.c`

4.5 _GLWDrawingAreaClassPart Struct Reference

Data Fields

- `caddr_t` **extension**

4.5.1 Detailed Description

Definition at line 49 of file GLWDrawAP.h.

The documentation for this struct was generated from the following file:

- `src/lib/ui/GLWDrawAP.h`

4.6 _GLWDrawingAreaClassRec Struct Reference

Data Fields

- `CoreClassPart` **core_class**
- **GLWDrawingAreaClassPart** `glwDrawingArea_class`

4.6.1 Detailed Description

Definition at line 68 of file GLWDrawAP.h.

The documentation for this struct was generated from the following file:

- `src/lib/ui/GLWDrawAP.h`

4.7 _GLWDrawingAreaRec Struct Reference

Data Fields

- `CorePart` **core**
- **GLWDrawingAreaPart** `glwDrawingArea`

4.7.1 Detailed Description

Definition at line 123 of file GLWDrawAP.h.

The documentation for this struct was generated from the following file:

- `src/lib/ui/GLWDrawAP.h`

4.8 `_intX3D_MFBool` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFBool * p`

4.8.1 Detailed Description

Definition at line 81 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.9 `_intX3D_MFColor` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFColor * p`

4.9.1 Detailed Description

Definition at line 72 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.10 `_intX3D_MFColorRGBA` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFColorRGBA * p`

4.10.1 Detailed Description

Definition at line 73 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.11 _intX3D_MFFloat Struct Reference

Data Fields

- int **type**
- int **n**
- **_intX3D_SFFloat * p**

4.11.1 Detailed Description

Definition at line 74 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.12 _intX3D_MFImage Struct Reference

Data Fields

- int **type**
- int **n**
- **_intX3D_SFImage * p**

4.12.1 Detailed Description

Definition at line 85 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.13 _intX3D_MFInt32 Struct Reference

Data Fields

- int **type**
- int **n**
- **_intX3D_SFInt32 * p**

4.13.1 Detailed Description

Definition at line 82 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.14 `_intX3D_MFNode` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFNode * p`

4.14.1 Detailed Description

Definition at line 83 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.15 `_intX3D_MFRotation` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFRotation * p`

4.15.1 Detailed Description

Definition at line 76 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.16 `_intX3D_MFString` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFString * p`

4.16.1 Detailed Description

Definition at line 84 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.17 `_intX3D_MFTime` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFTime * p`

4.17.1 Detailed Description

Definition at line 75 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.18 `_intX3D_MFVec2d` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFVec2d * p`

4.18.1 Detailed Description

Definition at line 78 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.19 `_intX3D_MFVec2f` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFVec2f * p`

4.19.1 Detailed Description

Definition at line 80 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.20 `_intX3D_MFVec3d` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFVec3d * p`

4.20.1 Detailed Description

Definition at line 77 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.21 `_intX3D_MFVec3f` Struct Reference

Data Fields

- `int type`
- `int n`
- `_intX3D_SFVec3f * p`

4.21.1 Detailed Description

Definition at line 79 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.22 `_intX3D_SFBool` Struct Reference

Data Fields

- `int type`
- `int value`

4.22.1 Detailed Description

Definition at line 57 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.23 _intX3D_SFColor Struct Reference

Data Fields

- int **type**
- float **c** [3]

4.23.1 Detailed Description

Definition at line 65 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.24 _intX3D_SFColorRGBA Struct Reference

Data Fields

- int **type**
- float **r** [4]

4.24.1 Detailed Description

Definition at line 68 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.25 _intX3D_SFFloat Struct Reference

Data Fields

- int **type**
- float **value**

4.25.1 Detailed Description

Definition at line 58 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.26 `_intX3D_SFImage` Struct Reference

Data Fields

- `int type`
- `int len`
- `char * strptr`

4.26.1 Detailed Description

Definition at line 70 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.27 `_intX3D_SFInt32` Struct Reference

Data Fields

- `int type`
- `int value`

4.27.1 Detailed Description

Definition at line 60 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.28 `_intX3D_SFNode` Struct Reference

Data Fields

- `int type`
- `int adr`

4.28.1 Detailed Description

Definition at line 61 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.29 _intX3D_SFRotation Struct Reference

Data Fields

- int **type**
- float **r** [4]

4.29.1 Detailed Description

Definition at line 62 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.30 _intX3D_SFString Struct Reference

Data Fields

- int **type**
- int **len**
- char * **strptr**

4.30.1 Detailed Description

Definition at line 69 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.31 _intX3D_SFTime Struct Reference

Data Fields

- int **type**
- double **value**

4.31.1 Detailed Description

Definition at line 59 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.32 `_intX3D_SFVec2d` Struct Reference

Data Fields

- int **type**
- double **c** [2]

4.32.1 Detailed Description

Definition at line 64 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.33 `_intX3D_SFVec2f` Struct Reference

Data Fields

- int **type**
- float **c** [2]

4.33.1 Detailed Description

Definition at line 63 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.34 `_intX3D_SFVec3d` Struct Reference

Data Fields

- int **type**
- double **c** [3]

4.34.1 Detailed Description

Definition at line 67 of file X3DNode.h.

The documentation for this struct was generated from the following file:

- src/libeai/X3DNode.h

4.35 `_intX3D_SFVec3f` Struct Reference

Data Fields

- `int type`
- `float c [3]`

4.35.1 Detailed Description

Definition at line 66 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.36 `_intX3DEventIn` Struct Reference

Data Fields

- `int nodeptr`
- `int offset`
- `int datatype`
- `int datasize`
- `int scripttype`
- `char * field`

4.36.1 Detailed Description

Definition at line 133 of file `X3DNode.h`.

The documentation for this struct was generated from the following file:

- `src/libeai/X3DNode.h`

4.37 `_NPByteRange` Struct Reference

Data Fields

- `int32_t offset`
- `uint32_t length`
- `struct _NPByteRange * next`

4.37.1 Detailed Description

Definition at line 176 of file npapi.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npapi.h

4.38 _NPEmbedPrint Struct Reference

Data Fields

- **NPWindow window**
- void * **platformPrint**

4.38.1 Detailed Description

Definition at line 441 of file npapi.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npapi.h

4.39 _NPFullPrint Struct Reference

Data Fields

- NPBool **pluginPrinted**
- NPBool **printOne**
- void * **platformPrint**

4.39.1 Detailed Description

Definition at line 433 of file npapi.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npapi.h

4.40 **_NPImageExpose Struct Reference**

Data Fields

- char * **data**
- int32_t **stride**
- int32_t **depth**
- int32_t **x**
- int32_t **y**
- uint32_t **width**
- uint32_t **height**
- **NPSize dataSize**
- float **translateX**
- float **translateY**
- float **scaleX**
- float **scaleY**

4.40.1 Detailed Description

Definition at line 417 of file npapi.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npapi.h

4.41 **_NPNetscapeFuncs Struct Reference**

Data Fields

- uint16_t **size**
- uint16_t **version**
- NPN_GetURLProcPtr **geturl**
- NPN_PostURLProcPtr **posturl**
- NPN_RequestReadProcPtr **requestread**
- NPN_NewStreamProcPtr **newstream**
- NPN_WriteProcPtr **write**
- NPN_DestroyStreamProcPtr **destroystream**
- NPN_StatusProcPtr **status**
- NPN_UserAgentProcPtr **uagent**
- NPN_MemAllocProcPtr **memalloc**
- NPN_MemFreeProcPtr **memfree**
- NPN_MemFlushProcPtr **memflush**
- NPN_ReloadPluginsProcPtr **reloadplugins**
- NPN_GetJavaEnvProcPtr **getJavaEnv**
- NPN_GetJavaPeerProcPtr **getJavaPeer**
- NPN_GetURLNotifyProcPtr **geturlnotify**
- NPN_PostURLNotifyProcPtr **posturlnotify**
- NPN_GetValueProcPtr **getvalue**
- NPN_SetValueProcPtr **setvalue**
- NPN_InvalidateRectProcPtr **invalidaterect**

- NPN_InvalidateRegionProcPtr **invalidateregion**
- NPN_ForceRedrawProcPtr **forcedredraw**
- NPN_GetStringIdentifierProcPtr **getstringidentifier**
- NPN_GetStringIdentifiersProcPtr **getstringidentifiers**
- NPN_GetIntlIdentifierProcPtr **getintidentifier**
- NPN_IdentifierIsStringProcPtr **identifierisstring**
- NPN_UTF8FromIdentifierProcPtr **utf8fromidentifier**
- NPN_IntFromIdentifierProcPtr **intfromidentifier**
- NPN_CreateObjectProcPtr **createobject**
- NPN_RetainObjectProcPtr **retainobject**
- NPN_ReleaseObjectProcPtr **releaseobject**
- NPN_InvokeProcPtr **invoke**
- NPN_InvokeDefaultProcPtr **invokeDefault**
- NPN_EvaluateProcPtr **evaluate**
- NPN_GetPropertyProcPtr **getproperty**
- NPN_SetPropertyProcPtr **setproperty**
- NPN_RemovePropertyProcPtr **removeproperty**
- NPN_HasPropertyProcPtr **hasproperty**
- NPN_HasMethodProcPtr **hasmethod**
- NPN_ReleaseVariantValueProcPtr **releasevariantvalue**
- NPN_SetExceptionProcPtr **setexception**
- NPN_PushPopupsEnabledStateProcPtr **pushpopupsenabledstate**
- NPN_PopPopupsEnabledStateProcPtr **poppopupsenabledstate**
- NPN_EnumerateProcPtr **enumerate**
- NPN_PluginThreadAsyncCallProcPtr **pluginthreadasynccall**
- NPN_ConstructProcPtr **construct**
- NPN_GetValueForURLPtr **getvalueforurl**
- NPN_SetValueForURLPtr **setvalueforurl**
- NPN_GetAuthenticationInfoPtr **getauthenticationinfo**

4.41.1 Detailed Description

Definition at line 139 of file npfunctions.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npfunctions.h

4.42 _NPP Struct Reference

Data Fields

- void * **pdata**
- void * **ndata**

4.42.1 Detailed Description

Definition at line 148 of file npapi.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npapi.h

4.43 _NPPluginFuncs Struct Reference

Data Fields

- uint16_t **size**
- uint16_t **version**
- NPP_NewProcPtr **newp**
- NPP_DestroyProcPtr **destroy**
- NPP_SetWindowProcPtr **setwindow**
- NPP_NewStreamProcPtr **newstream**
- NPP_DestroyStreamProcPtr **destroystream**
- NPP_StreamAsFileProcPtr **asfile**
- NPP_WriteReadyProcPtr **writeready**
- NPP_WriteProcPtr **write**
- NPP_PrintProcPtr **print**
- NPP_HandleEventProcPtr **event**
- NPP_URLNotifyProcPtr **urlnotify**
- void * **javaClass**
- NPP_GetValueProcPtr **getvalue**
- NPP_SetValueProcPtr **setvalue**

4.43.1 Detailed Description

Definition at line 120 of file npfunctions.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npfunctions.h

4.44 _NPPrint Struct Reference

Data Fields

- uint16_t **mode**
- - union {
 - NPFullPrint** fullPrint
 - NPEmbedPrint** embedPrint
- **print**

4.44.1 Detailed Description

Definition at line 447 of file npapi.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npapi.h

4.45 `_NPRect` Struct Reference

Data Fields

- `uint16_t top`
- `uint16_t left`
- `uint16_t bottom`
- `uint16_t right`

4.45.1 Detailed Description

Definition at line 189 of file `npapi.h`.

The documentation for this struct was generated from the following file:

- `src/plugin_win32/include/npapi.h`

4.46 `_NPSavedData` Struct Reference

Data Fields

- `int32_t len`
- `void * buf`

4.46.1 Detailed Description

Definition at line 183 of file `npapi.h`.

The documentation for this struct was generated from the following file:

- `src/plugin_win32/include/npapi.h`

4.47 `_NPSize` Struct Reference

Data Fields

- `int32_t width`
- `int32_t height`

4.47.1 Detailed Description

Definition at line 197 of file `npapi.h`.

The documentation for this struct was generated from the following file:

- `src/plugin_win32/include/npapi.h`

4.48 `_NPStream` Struct Reference

Data Fields

- void * **pdata**
- void * **ndata**
- const char * **url**
- uint32_t **end**
- uint32_t **lastmodified**
- void * **notifyData**
- const char * **headers**

4.48.1 Detailed Description

Definition at line 156 of file `npapi.h`.

The documentation for this struct was generated from the following file:

- `src/plugin_win32/include/npapi.h`

4.49 `_NPString` Struct Reference

Data Fields

- const NPUTF8 * **UTF8Characters**
- uint32_t **UTF8Length**

4.49.1 Detailed Description

Definition at line 117 of file `npruntime.h`.

The documentation for this struct was generated from the following file:

- `src/plugin_win32/include/npruntime.h`

4.50 `_NPVariant` Struct Reference

Data Fields

- NPVariantType **type**
- union {
 bool **boolValue**
 int32_t **intValue**
 double **doubleValue**
 NPString **stringValue**
 NPObject * **objectValue**
} **value**

4.50.1 Detailed Description

Definition at line 132 of file npruntime.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npruntime.h

4.51 `_NPWindow` Struct Reference

Data Fields

- void * **window**
- int32_t **x**
- int32_t **y**
- uint32_t **width**
- uint32_t **height**
- **NPREct clipRect**
- NPWindowType **type**

4.51.1 Detailed Description

Definition at line 400 of file npapi.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npapi.h

4.52 `_s_list_t` Struct Reference

Data Fields

- void * **elem**
- struct `_s_list_t` * **next**

4.52.1 Detailed Description

Definition at line 37 of file list.h.

The documentation for this struct was generated from the following file:

- src/lib/list.h

4.53 freeWRLSAI_cpp::_SAIParameter Class Reference

Data Fields

- void * **interactor**

4.53.1 Detailed Description

Definition at line 31 of file SAIGlobals.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIGlobals.h

4.54 _SFColorNative Struct Reference

Data Fields

- int **valueChanged**
- struct **SFColor v**

4.54.1 Detailed Description

Definition at line 76 of file jsNative.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsNative.h

4.55 _SFColorRGBANative Struct Reference

Data Fields

- int **valueChanged**
- struct **SFColorRGBA v**

4.55.1 Detailed Description

Definition at line 81 of file jsNative.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsNative.h

4.56 `_SfImageNative` Struct Reference

Data Fields

- int **valueChanged**

4.56.1 Detailed Description

Definition at line 72 of file `jsNative.h`.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/jsNative.h`

4.57 `_SFNodeNative` Struct Reference

Data Fields

- int **valueChanged**
- struct **X3D_Node** * **handle**
- char * **X3DString**
- int **fieldsExpanded**

4.57.1 Detailed Description

Definition at line 45 of file `jsNative.h`.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/jsNative.h`

4.58 `_SFRotationNative` Struct Reference

Data Fields

- int **valueChanged**
- struct **SFRotation** v

4.58.1 Detailed Description

Definition at line 52 of file `jsNative.h`.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/jsNative.h`

4.59 **_SFVec2fNative Struct Reference**

Data Fields

- int **valueChanged**
- struct **SFVec2f v**

4.59.1 Detailed Description

Definition at line 57 of file jsNative.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsNative.h

4.60 **_SFVec3dNative Struct Reference**

Data Fields

- int **valueChanged**
- struct **SFVec3d v**

4.60.1 Detailed Description

Definition at line 67 of file jsNative.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsNative.h

4.61 **_SFVec3fNative Struct Reference**

Data Fields

- int **valueChanged**
- struct **SFColor v**

4.61.1 Detailed Description

Definition at line 62 of file jsNative.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsNative.h

4.62 `_SFVec4dNative` Struct Reference

Data Fields

- int **valueChanged**
- struct **SFVec4d** **v**

4.62.1 Detailed Description

Definition at line 91 of file `jsNative.h`.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/jsNative.h`

4.63 `_SFVec4fNative` Struct Reference

Data Fields

- int **valueChanged**
- struct **SFVec4f** **v**

4.63.1 Detailed Description

Definition at line 86 of file `jsNative.h`.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/jsNative.h`

4.64 `_urlRequest` Struct Reference

Data Fields

- char **url** [FILENAME_MAX]
- void * **instance**
- unsigned int **notifyCode**

4.64.1 Detailed Description

Definition at line 57 of file `pluginUtils.h`.

The documentation for this struct was generated from the following files:

- `src/lib/plugin/pluginUtils.h`
- `src/plugin/plugin_utils.h`

4.65 _X3DNode Union Reference

Data Fields

- **int type**
- **_intX3D_MFBool X3D_MFBool**
- **_intX3D_SFBool X3D_SFBool**
- **_intX3D_SFFloat X3D_SFFloat**
- **_intX3D_SFTime X3D_SFTime**
- **_intX3D_SFInt32 X3D_SFInt32**
- **_intX3D_MFColor X3D_MFColor**
- **_intX3D_MFColorRGBA X3D_MFColorRGBA**
- **_intX3D_SFString X3D_SFString**
- **_intX3D_SFNode X3D_SFNode**
- **_intX3D_SFRotation X3D_SFRotation**
- **_intX3D_SFVec2f X3D_SFVec2f**
- **_intX3D_SFVec2d X3D_SFVec2d**
- **_intX3D_SFColor X3D_SFColor**
- **_intX3D_SFColor X3D_SFVec3f**
- **_intX3D_SFVec3d X3D_SFVec3d**
- **_intX3D_SFColorRGBA X3D_SFColorRGBA**
- **_intX3D_MFFloat X3D_MFFloat**
- **_intX3D_MFTime X3D_MFTime**
- **_intX3D_MFInt32 X3D_MFInt32**
- **_intX3D_MFString X3D_MFString**
- **_intX3D_MFNode X3D_MFNode**
- **_intX3D_MFRotation X3D_MFRotation**
- **_intX3D_MFVec2f X3D_MFVec2f**
- **_intX3D_MFVec3f X3D_MFVec3f**
- **_intX3D_MFImage X3D_MFImage**
- **_intX3D_MFVec3d X3D_MFVec3d**

4.65.1 Detailed Description

Definition at line 87 of file X3DNode.h.

The documentation for this union was generated from the following file:

- `src/libeai/X3DNode.h`

4.66 ActiveRegion Struct Reference

Data Fields

- **GLUhalfEdge * eUp**
- **DictNode * nodeUp**
- **int windingNumber**
- **GLboolean inside**
- **GLboolean sentinel**
- **GLboolean dirty**
- **GLboolean fixUpperEdge**

4.66.1 Detailed Description

Definition at line 59 of file sweep.h.

The documentation for this struct was generated from the following file:

- src/libtess/sweep.h

4.67 anyVrml Union Reference

4.67.1 Detailed Description

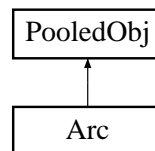
Definition at line 55 of file CParseGeneral.h.

The documentation for this union was generated from the following file:

- src/lib/vrml_parser/CParseGeneral.h

4.68 Arc Class Reference

Inheritance diagram for Arc:



Public Member Functions

- **Arc** (**Arc** *, **PwlArc** *)
- **Arc** (arc_side, long)
- Arc_ptr **append** (Arc_ptr)
- int **check** (void)
- int **isMonotone** (void)
- int **isDisconnected** (void)
- int **numpts** (void)
- void **markverts** (void)
- void **getextrema** (Arc_ptr[4])
- void **print** (void)
- void **show** (void)
- void **makeSide** (**PwlArc** *, arc_side)
- int **isTessellated** ()
- long **isbezier** ()
- void **setbezier** ()
- void **clearbezier** ()
- long **npts** ()

- **TrimVertex** * **pts** ()
- **REAL** * **tail** ()
- **REAL** * **head** ()
- **REAL** * **rhead** ()
- **long** **ismarked** ()
- **void** **setmark** ()
- **void** **clearmark** ()
- **void** **clearside** ()
- **void** **setside** (arc_side s)
- **arc_side** **getside** ()
- **int** **getitail** ()
- **void** **setitail** ()
- **void** **clearitail** ()

Data Fields

- **Arc_ptr** **prev**
- **Arc_ptr** **next**
- **Arc_ptr** **link**
- **BezierArc** * **bezierArc**
- **PwlArc** * **pwlArc**
- **long** **type**
- **long** **nuid**

Static Public Attributes

- **static const int** **bezier_tag** = (1<<13)
- **static const int** **arc_tag** = (1<<3)
- **static const int** **tail_tag** = (1<<6)

4.68.1 Detailed Description

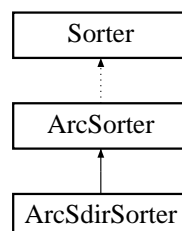
Definition at line 55 of file arc.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/arc.h
- src/libnurbs/internals/arc.cc

4.69 ArcSdirSorter Class Reference

Inheritance diagram for ArcSdirSorter:



Public Member Functions

- **ArcSdirSorter** (**Subdivider** &)

Additional Inherited Members

4.69.1 Detailed Description

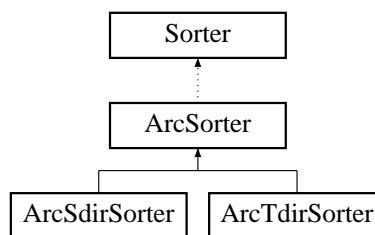
Definition at line 58 of file arcsorter.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/arcsorter.h
- src/libnurbs/internals/arcsorter.cc

4.70 ArcSorter Class Reference

Inheritance diagram for ArcSorter:



Public Member Functions

- **ArcSorter** (**Subdivider** &)
- void **qsort** (**Arc** **a, int n)

Protected Member Functions

- virtual int **qscmp** (char *, char *)

Protected Attributes

- **Subdivider** & **subdivider**

4.70.1 Detailed Description

Definition at line 45 of file arcsorter.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/arcsorter.h
- src/libnurbs/internals/arcsorter.cc

4.71 ArcTdirSorter Class Reference

Inheritance diagram for ArcTdirSorter:



Public Member Functions

- **ArcTdirSorter** (**Subdivider** &)

Additional Inherited Members

4.71.1 Detailed Description

Definition at line 66 of file arcsorter.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/arcsorter.h
- src/libnurbs/internals/arcsorter.cc

4.72 ArcTessellator Class Reference

Public Member Functions

- **ArcTessellator** (**TrimVertexPool** &, **Pool** &)
- void **bezier** (Arc_ptr, REAL, REAL, REAL, REAL)
- void **pwl** (Arc_ptr, REAL, REAL, REAL, REAL, REAL)
- void **pwl_left** (Arc_ptr, REAL, REAL, REAL, REAL)
- void **pwl_right** (Arc_ptr, REAL, REAL, REAL, REAL)
- void **pwl_top** (Arc_ptr, REAL, REAL, REAL, REAL)
- void **pwl_bottom** (Arc_ptr, REAL, REAL, REAL, REAL)
- void **tessellateLinear** (Arc_ptr, REAL, REAL, int)
- void **tessellateNonlinear** (Arc_ptr, REAL, REAL, int)

4.72.1 Detailed Description

Definition at line 47 of file arctess.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/arctess.h
- src/libnurbs/internals/arctess.cc

4.73 ArgListType Struct Reference

Data Fields

- char **nfixedArg**
- char **iVarArgStartsAt**
- char **fillMissingFixedWithZero**
- char * **argtypes**

4.73.1 Detailed Description

Definition at line 40 of file FWTYPE.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/FWTYPE.h

4.74 Atlas Struct Reference

Data Fields

- char * **name**
- int **type**
- char * **texture**
- int **bytesperpixel**
- **ivec2** **size**
- int **rowheight**
- **ivec2** **pen**

4.74.1 Detailed Description

Definition at line 2217 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.75 AtlasEntry Struct Reference

Data Fields

- char * **name**
- int **type**
- **ivec2** **apos**
- **ivec2** **size**
- int **ichar**
- **ivec2** **pos**
- **ivec2** **advance**

4.75.1 Detailed Description

Definition at line 2185 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.76 AtlasEntrySet Struct Reference

Data Fields

- char * **name**
- int **type**
- int **EMpixels**
- int **maxadvancepx**
- int **rowheight**
- int **lastascii**
- char * **atlasName**
- **Atlas** * **atlas**
- **AtlasFont** * **font**
- **AtlasEntry** * **ascii** [128]
- struct **Vector** * **entries**

4.76.1 Detailed Description

Definition at line 2358 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.77 AtlasFont Struct Reference

Data Fields

- char * **name**
- int **type**
- char * **path**
- FT_Face **fontFace**
- int **EMsize**
- **AtlasEntrySet** * **set**

4.77.1 Detailed Description

Definition at line 2454 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.78 Backend Class Reference

Public Member Functions

- **Backend** (**BasicCurveEvaluator** &c, **BasicSurfaceEvaluator** &e)
- void **bgnsurf** (int, int, long)
- void **patch** (REAL, REAL, REAL, REAL)
- void **surfpts** (long, REAL *, long, long, int, int, REAL, REAL, REAL, REAL)
- void **surfbbox** (long, REAL *, REAL *)
- void **surfgrid** (REAL, REAL, long, REAL, REAL, long)
- void **surfmesh** (long, long, long, long)
- void **bgntmesh** (const char *)
- void **endtmesh** (void)
- void **swaptmesh** (void)
- void **tmeshvert** (**GridTrimVertex** *)
- void **tmeshvert** (**TrimVertex** *)
- void **tmeshvert** (**GridVertex** *)
- void **tmeshvert** (REAL u, REAL v)
- void **linevert** (**TrimVertex** *)
- void **linevert** (**GridVertex** *)
- void **bgnoutline** (void)
- void **endoutline** (void)
- void **endsurf** (void)
- void **triangle** (**TrimVertex** *, **TrimVertex** *, **TrimVertex** *)
- void **bgntfan** ()
- void **endtfan** ()
- void **bgnqstrip** ()
- void **endqstrip** ()
- void **evalUStrip** (int n_upper, REAL v_upper, REAL *upper_val, int n_lower, REAL v_lower, REAL *lower_val)
- void **evalVStrip** (int n_left, REAL u_left, REAL *left_val, int n_right, REAL v_right, REAL *right_val)
- void **tmeshvertNOGE** (**TrimVertex** *t)
- void **tmeshvertNOGE_BU** (**TrimVertex** *t)
- void **tmeshvertNOGE_BV** (**TrimVertex** *t)
- void **preEvaluateBU** (REAL u)
- void **preEvaluateBV** (REAL v)
- void **bgncurv** (void)
- void **segment** (REAL, REAL)
- void **curvpts** (long, REAL *, long, int, REAL, REAL)
- void **curvgrid** (REAL, REAL, long)
- void **curvmesh** (long, long)
- void **curvpt** (REAL)
- void **bgntline** (void)
- void **endline** (void)
- void **endcurv** (void)

4.78.1 Detailed Description

Definition at line 46 of file backend.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/backend.h
- src/libnurbs/internals/backend.cc

4.79 vrml.BaseNode Class Reference

Inheritance diagram for vrml.BaseNode:



Public Member Functions

- **BaseNode** (String id)
- void **_set_nodeid** (String id)
- String **_get_nodeid** ()
- String **getType** ()
- **Browser** **getBrowser** ()

4.79.1 Detailed Description

Definition at line 5 of file BaseNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/BaseNode.java

4.80 BasePlugin Class Reference

Inheritance diagram for BasePlugin:



Public Member Functions

- **BasePlugin** (**NPP** npp)
- virtual bool **HasMethod** (NPIdentifier name)
- virtual bool **HasProperty** (NPIdentifier name)
Returns true if the NPIdentifier passed is managed as a scriptable property.
- virtual bool **GetProperty** (NPIdentifier name, **NPVariant** *result)
Returns true if the scriptable property is managed and fills the NPVariant pointer with the value.
- virtual bool **Invoke** (NPIdentifier name, const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)
returns true if the invoked method is managed and executes the appropriate code filling the NPVariant pointer with data if needed
- virtual bool **InvokeDefault** (const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)
Manages the invocation of the default '()' method.

Additional Inherited Members

4.80.1 Detailed Description

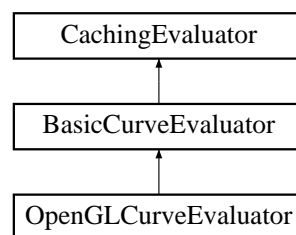
Definition at line 62 of file BasePlugin.h.

The documentation for this class was generated from the following files:

- src/plugin_win32/BasePlugin.h
- src/plugin_win32/BasePlugin.cpp

4.81 BasicCurveEvaluator Class Reference

Inheritance diagram for BasicCurveEvaluator:



Public Member Functions

- virtual void **domain1f** (REAL, REAL)
- virtual void **range1f** (long, REAL *, REAL *)
- virtual void **enable** (long)
- virtual void **disable** (long)
- virtual void **bgnmap1f** (long)
- virtual void **map1f** (long, REAL, REAL, long, long, REAL *)
- virtual void **mapgrid1f** (long, REAL, REAL)
- virtual void **mapmesh1f** (long, long, long)
- virtual void **evalcoord1f** (long, REAL)
- virtual void **endmap1f** (void)
- virtual void **bgnline** (void)
- virtual void **endline** (void)

Additional Inherited Members

4.81.1 Detailed Description

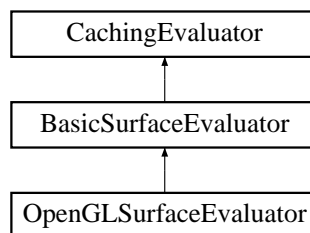
Definition at line 43 of file basiccrveval.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/basiccrveval.h
- src/libnurbs/internals/basiccrveval.cc

4.82 BasicSurfaceEvaluator Class Reference

Inheritance diagram for BasicSurfaceEvaluator:



Public Member Functions

- virtual void **range2f** (long, REAL *, REAL *)
- virtual void **domain2f** (REAL, REAL, REAL, REAL)
- virtual void **enable** (long)
- virtual void **disable** (long)
- virtual void **bgnmap2f** (long)
- virtual void **map2f** (long, REAL, REAL, long, long, REAL, REAL, long, long, REAL *)
- virtual void **mapgrid2f** (long, REAL, REAL, long, REAL, REAL)
- virtual void **mapmesh2f** (long, long, long, long, long)
- virtual void **evalcoord2f** (long, REAL, REAL)
- virtual void **evalpoint2i** (long, long)
- virtual void **endmap2f** (void)
- virtual void **polymode** (long)
- virtual void **bgnline** (void)
- virtual void **endline** (void)
- virtual void **bgnclosedline** (void)
- virtual void **endclosedline** (void)
- virtual void **bgntmesh** (void)
- virtual void **swaptmesh** (void)
- virtual void **endtmesh** (void)
- virtual void **bgnqstrip** (void)
- virtual void **endqstrip** (void)
- virtual void **bgntfan** (void)
- virtual void **endtfan** (void)
- virtual void **evalUStrip** (int n_upper, REAL v_upper, REAL *upper_val, int n_lower, REAL v_lower, REAL *lower_val)=0
- virtual void **evalVStrip** (int n_left, REAL u_left, REAL *left_val, int n_right, REAL u_right, REAL *right_val)=0
- virtual void **inDoEvalCoord2NOGE** (REAL u, REAL v, REAL *ret_point, REAL *ret_normal)=0
- virtual void **inDoEvalCoord2NOGE_BU** (REAL u, REAL v, REAL *ret_point, REAL *ret_normal)=0
- virtual void **inDoEvalCoord2NOGE_BV** (REAL u, REAL v, REAL *ret_point, REAL *ret_normal)=0
- virtual void **inPreEvaluateBV_intfac** (REAL v)=0
- virtual void **inPreEvaluateBU_intfac** (REAL u)=0

Additional Inherited Members

4.82.1 Detailed Description

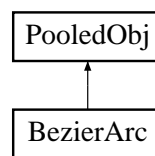
Definition at line 43 of file basicsurfeval.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/basicsurfeval.h
- src/libnurbs/internals/basicsurfeval.cc

4.83 BezierArc Struct Reference

Inheritance diagram for BezierArc:



Data Fields

- REAL * **cpts**
- int **order**
- int **stride**
- long **type**
- **Mapdesc** * **mapdesc**

Additional Inherited Members

4.83.1 Detailed Description

Definition at line 43 of file bezierarc.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/bezierarc.h

4.84 bezierPatch Struct Reference

Data Fields

- float **umin**
- float **vmin**
- float **umax**
- float **vmax**
- int **uorder**
- int **vorder**
- int **dimension**
- float * **ctlpoints**
- struct **bezierPatch** * **next**

4.84.1 Detailed Description

Definition at line 36 of file bezierPatch.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/interface/bezierPatch.h

4.85 bezierPatchMesh Struct Reference

Data Fields

- **bezierPatch** * **bpatch**
- **bezierPatch** * **bpatch_normal**
- **bezierPatch** * **bpatch_texcoord**
- **bezierPatch** * **bpatch_color**
- float * **UVarray**
- int * **length_array**
- GLenum * **type_array**
- int **size_UVarray**
- int **index_UVarray**
- int **size_length_array**
- int **index_length_array**
- int **counter**
- GLenum **type**
- float * **vertex_array**
- float * **normal_array**
- float * **color_array**
- float * **texcoord_array**
- struct **bezierPatchMesh** * **next**

4.85.1 Detailed Description

Definition at line 38 of file bezierPatchMesh.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/interface/bezierPatchMesh.h

4.86 Bin Class Reference

Public Member Functions

- Arc_ptr **firstarc** (void)
- Arc_ptr **nextarc** (void)
- Arc_ptr **removearc** (void)
- int **isnonempty** (void)
- void **addarc** (Arc_ptr)
- void **remove_this_arc** (Arc_ptr)
- int **numarcs** (void)
- void **adopt** (void)
- void **markall** (void)
- void **show** (char *)
- void **listBezier** (void)

4.86.1 Detailed Description

Definition at line 43 of file bin.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/bin.h
- src/libnurbs/internals/bin.cc

4.87 bindablestack Struct Reference

Data Fields

- void * **background**
- void * **viewpoint**
- void * **fog**
- void * **navigation**
- int **layerId**
- double **screenorientationmatrix** [16]
- double **viewtransformmatrix** [16]
- double **posormatrix** [16]
- double **stereooffsetmatrix** [2][16]
- int **isStereo**
- int **iside**
- int **nodetype**
- void * **viewer**
- double **pickraymatrix** [2][16]

4.87.1 Detailed Description

Definition at line 57 of file Bindable.h.

The documentation for this struct was generated from the following file:

- src/lib/x3d_parser/Bindable.h

4.88 block Struct Reference

Data Fields

- short int **dct_recon** [8][8]
- short int **dct_dc_y_past**
- short int **dct_dc_cr_past**
- short int **dct_dc_cb_past**

4.88.1 Detailed Description

Definition at line 182 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.89 Breakpt Struct Reference

Data Fields

- Knot **value**
- int **multi**
- int **def**

4.89.1 Detailed Description

Definition at line 48 of file tobezier.cc.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/tobezier.cc

4.90 brotoDefpair Struct Reference

Data Fields

- struct **X3D_Node** * **node**
- char * **name**

4.90.1 Detailed Description

Definition at line 235 of file CParseParser.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.h

4.91 brotoIS Struct Reference

Data Fields

- struct **X3D_Proto** * **proto**
- char * **protofieldname**
- int **pmode**
- int **iprotofield**
- int **type**
- struct **X3D_Node** * **node**
- char * **nodefieldname**
- int **mode**
- int **ifield**
- int **source**

4.91.1 Detailed Description

Definition at line 4103 of file CParseParser.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.c

4.92 brotoRoute Struct Reference

Data Fields

- struct **brouteEnd** **from**
- struct **brouteEnd** **to**
- int **lastCommand**
- int **ft**

4.92.1 Detailed Description

Definition at line 73 of file CRoutes.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CRoutes.h

4.93 brouteEnd Struct Reference

Data Fields

- int **weak**
- char * **cnode**
- char * **cfield**
- struct **X3D_Node** * **node**
- int **ifield**
- int **ftype**

4.93.1 Detailed Description

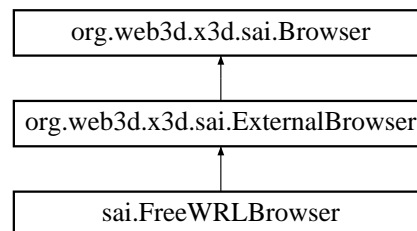
Definition at line 62 of file CRoutes.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CRoutes.h

4.94 org.web3d.x3d.sai.Browser Interface Reference

Inheritance diagram for org.web3d.x3d.sai.Browser:



Public Member Functions

- **X3DScene importDocument** (Node element) throws InvalidBrowserException, InvalidDocumentException, NotSupportedException, ConnectionException
- String **getName** () throws InvalidBrowserException, ConnectionException
- String **getVersion** () throws InvalidBrowserException, ConnectionException
- **ProfileInfo getProfile** (String name) throws InvalidBrowserException, NotSupportedException, ConnectionException
- **ProfileInfo [] getSupportedProfiles** () throws InvalidBrowserException, ConnectionException
- **ComponentInfo [] getSupportedComponents** () throws InvalidBrowserException, ConnectionException
- **ComponentInfo getComponent** (String name, int level) throws InvalidBrowserException, NotSupportedException, ConnectionException
- **X3DExecutionContext getExecutionContext** () throws InvalidBrowserException, ConnectionException
- **X3DScene createScene** (**ProfileInfo** profile, **ComponentInfo[]** components) throws InvalidBrowserException, ConnectionException
- float **getCurrentSpeed** () throws InvalidBrowserException, ConnectionException
- float **getCurrentFrameRate** () throws InvalidBrowserException, ConnectionException
- void **replaceWorld** (**X3DScene** scene) throws InvalidBrowserException, ConnectionException
- void **loadURL** (String[] url, Map parameters) throws InvalidBrowserException, InvalidURLException, ConnectionException
- String **getDescription** () throws InvalidBrowserException, ConnectionException
- void **setDescription** (String desc) throws InvalidBrowserException, ConnectionException
- **X3DScene createX3DFromString** (String scene) throws InvalidBrowserException, InvalidX3DException, NotSupportedException, ConnectionException
- **X3DScene createX3DFromStream** (java.io.InputStream is) throws InvalidBrowserException, InvalidX3DException, NotSupportedException, java.io.IOException, ConnectionException
- **X3DScene createX3DFromURL** (String[] url) throws InvalidBrowserException, InvalidX3DException, ConnectionException, java.io.IOException
- java.util.Map **getRenderingProperties** () throws InvalidBrowserException, ConnectionException
- java.util.Map **getBrowserProperties** () throws InvalidBrowserException, ConnectionException
- void **nextViewpoint** () throws InvalidBrowserException, ConnectionException
- void **previousViewpoint** () throws InvalidBrowserException, ConnectionException
- void **firstViewpoint** () throws InvalidBrowserException, ConnectionException
- void **lastViewpoint** () throws InvalidBrowserException, ConnectionException
- void **print** (Object obj) throws InvalidBrowserException, ConnectionException
- void **println** (Object obj) throws InvalidBrowserException, ConnectionException
- void **dispose** ()

4.94.1 Detailed Description

Definition at line 5 of file Browser.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/Browser.java

4.95 vrml.Browser Class Reference

Public Member Functions

- String **toString** ()
- String **getName** ()
- String **getVersion** ()
- float **getCurrentSpeed** ()
- float **getCurrentFrameRate** ()
- **BaseNode** [] **createX3DFromString** (String x3dSyntax) throws InvalidX3DSyntaxException
- **BaseNode** [] **createVrmlFromString** (String vrmlSyntax) throws InvalidVRMLSyntaxException

4.95.1 Detailed Description

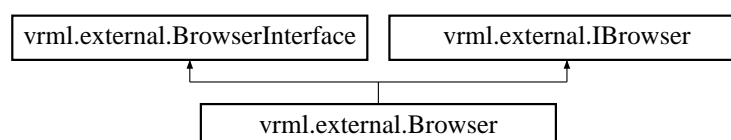
Definition at line 4 of file Browser.java.

The documentation for this class was generated from the following file:

- src/java/vrml/Browser.java

4.96 vrml.external.Browser Class Reference

Inheritance diagram for vrml.external.Browser:



Public Member Functions

- int **get_Browser_EVtype** (int event)
- **EventOutObserver** **get_Browser_EVObserver** (int eventno)
- void **Browser_RL_Async_send** (String EVentreply, int eventno)
- **Browser** (Applet pApplet, int portnum)
- **Browser** (Applet pApplet)
- **Browser** (Applet pApplet, String frameName, int index)
- String **getName** ()
- String **getVersion** ()
- int **getEncoding** ()
- float **getCurrentSpeed** ()
- float **getCurrentFrameRate** ()
- String **getWorldURL** ()
- String **getRenderingProperties** ()
- void **replaceWorld** (**Node**[] nodes) throws IllegalArgumentException
- void **loadURL** (String[] url, String[] parameter)
- void **firstViewpoint** ()
- void **lastViewpoint** ()
- void **nextViewpoint** ()
- void **previousViewpoint** ()
- void **setDescription** (String description)
- String **getDescription** ()
- **Node** [] **createX3DFromString** (String vrmlSyntax) throws InvalidVrmlException
- **Node** [] **createVrmlFromString** (String vrmlSyntax) throws InvalidVrmlException
- String **createNode** (String name)
- String **createProto** (String name)
- String **updateNamedNode** (String name, **Node** node)
- String **removeNamedNode** (String name)
- String **getProtoDeclaration** (String name)
- String **updateProtoDeclaration** (String name, String newProtoDecl)
- String **removeProtoDeclaration** (String name)
- String **getNodeFieldDefs** (**Node** myn)
- String **getNodeDEFName** (**Node** myn)
- String **getRoutes** ()
- String **getNodeType** (**Node** myn)
- void **createVrmlFromURL** (String[] url, **Node** node, String event)
- void **addRoute** (**Node** fromNode, String fromEventOut, **Node** toNode, String toEventIn) throws Illegal←
ArgumentException
- void **deleteRoute** (**Node** fromNode, String fromEventOut, **Node** toNode, String toEventIn) throws Illegal←
ArgumentException
- void **beginUpdate** ()
- void **endUpdate** ()
- void **initialize** ()
- void **shutdown** ()
- **Node** **getNode** (String getName) throws InvalidNodeException
- void **close** ()

Static Public Member Functions

- static **Browser** **getBrowser** (Applet pApplet)
- static **Browser** **getBrowser** (Applet pApplet, int portnum)
- static **Browser** **getBrowser** (Applet pApplet, String frameName, int index)
- static void **SendChildEvent** (int parent, int offset, String FieldName, int Child)
- static void **newSendEvent** (**EventIn** node, String Value)
- static String **SendEventOut** (int nodeptr, int offset, int datasize, String datatype, String **command**)
- static void **RegisterListener** (**EventOutObserver** f, Object userData, int nodeptr, int offset, String datatype, int datasize, int EventType)
- static void **unRegisterListener** (**EventOutObserver** f, int nodeptr, int offset, String datatype, int datasize, int EventType)

Static Protected Member Functions

- static String **SendNodeEAType** (int nodeptr)
- static String **SendEventType** (int nodeptr, String FieldName, String direction)
- static synchronized String **getVRMLreply** (int queryno)

4.96.1 Detailed Description

Definition at line 27 of file Browser.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/Browser.java

4.97 org.web3d.x3d.sai.BrowserEvent Class Reference

Inheritance diagram for org.web3d.x3d.sai.BrowserEvent:



Public Member Functions

- **BrowserEvent** (Object b, int a)
- int **getID** ()

Static Public Attributes

- static final int **INITIALIZED** = 0
- static final int **SHUTDOWN** = 1
- static final int **URL_ERROR** = 2
- static final int **CONNECTION_ERROR** = 10
- static final int **LAST_IDENTIFIER** = 100

4.97.1 Detailed Description

Definition at line 5 of file BrowserEvent.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/BrowserEvent.java

4.98 sai.BrowserFactory Class Reference

Static Public Member Functions

- static void **setBrowserFactoryImpl** (**BrowserFactoryImpl** fac) throws IllegalArgumentException, X3DException, SecurityException
- static **X3DComponent createX3DComponent** (Map params) throws NotSupportedException
- static **ExternalBrowser getBrowser** (Applet applet) throws NotSupportedException, NoSuchBrowserException
- static **ExternalBrowser getBrowser** (Applet applet, String frameName, int index) throws NotSupportedException, NoSuchBrowserException
- static **ExternalBrowser getBrowser** (InetAddress address, int port) throws NotSupportedException, NoSuchBrowserException, UnknownHostException, ConnectionException

4.98.1 Detailed Description

Definition at line 8 of file BrowserFactory.java.

The documentation for this class was generated from the following file:

- src/java/sai/BrowserFactory.java

4.99 org.web3d.x3d.sai.BrowserFactoryImpl Interface Reference

Inherited by sai.FreeWRLFactory.

Public Member Functions

- **ExternalBrowser getBrowser** (Applet applet) throws NotSupportedException, NoSuchBrowserException, ConnectionException
- **ExternalBrowser getBrowser** (Applet applet, String frameName, int index) throws NotSupportedException, NoSuchBrowserException, ConnectionException
- **ExternalBrowser getBrowser** (InetAddress add, int port) throws NotSupportedException, NoSuchBrowserException, UnknownHostException, ConnectionException
- **X3DComponent createX3DComponent** (Map args) throws NotSupportedException

4.99.1 Detailed Description

Definition at line 8 of file BrowserFactoryImpl.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/BrowserFactoryImpl.java

4.100 vrml.external.BrowserGlobals Class Reference

Static Public Attributes

- static double **TickTime** = 0.0
- static int **EVno** = 0
- static int **EVarray** [] = new int[256]
- static int **EVtype** [] = new int[256]
- static Object **EVObject** [] = new Object[256]
- static **EventOutObserver** **EObserver** [] = new **EventOutObserver**[256]
- static **EAIAsyncThread** **RL_Async**
- static int **queryno** = 1

4.100.1 Detailed Description

Definition at line 4 of file BrowserGlobals.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/BrowserGlobals.java

4.101 sai.BrowserGlobals Class Reference

Static Public Attributes

- static double **TickTime** = 0.0
- static int **EVno** = 0
- static int **EVarray** [] = new int[256]
- static int **EVtype** [] = new int[256]
- static Object **EVObject** [] = new Object[256]
- static **X3DFieldEventListener** **EObserver** [] = new **X3DFieldEventListener**[256]
- static **EAIAsyncThread** **RL_Async**
- static int **queryno** = 1

4.101.1 Detailed Description

Definition at line 7 of file BrowserGlobals.java.

The documentation for this class was generated from the following file:

- src/java/sai/BrowserGlobals.java

4.102 org.web3d.x3d.sai.BrowserInterface Interface Reference

Inheritance diagram for org.web3d.x3d.sai.BrowserInterface:



Public Member Functions

- int **get_Browser_EVtype** (int event)
- **X3DFieldEventListener** **get_Browser_EVObserver** (int eventno)
- void **Browser_RL_Async_send** (String EVentreply, int eventno)

4.102.1 Detailed Description

Definition at line 6 of file BrowserInterface.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/BrowserInterface.java

4.103 vrml.external.BrowserInterface Interface Reference

Inheritance diagram for vrml.external.BrowserInterface:



Public Member Functions

- int **get_Browser_EVtype** (int event)
- **EventOutObserver** **get_Browser_EVObserver** (int eventno)
- void **Browser_RL_Async_send** (String EVentreply, int eventno)

4.103.1 Detailed Description

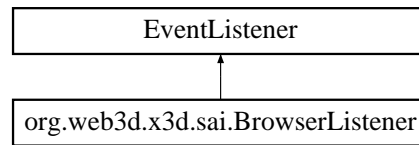
Definition at line 8 of file BrowserInterface.java.

The documentation for this interface was generated from the following file:

- src/java/vrml/external/BrowserInterface.java

4.104 org.web3d.x3d.sai.BrowserListener Interface Reference

Inheritance diagram for org.web3d.x3d.sai.BrowserListener:



Public Member Functions

- void **browserChanged** (**BrowserEvent** evt)

4.104.1 Detailed Description

Definition at line 6 of file BrowserListener.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/BrowserListener.java

4.105 freeWRLSAI_cpp::browserNotSharedException Class Reference

Inheritance diagram for freeWRLSAI_cpp::browserNotSharedException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.105.1 Detailed Description

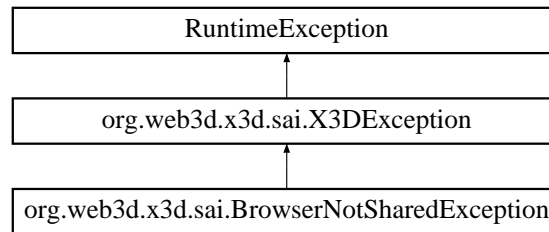
Definition at line 218 of file SAexception.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAexception.h

4.106 org.web3d.x3d.sai.BrowserNotSharedException Class Reference

Inheritance diagram for org.web3d.x3d.sai.BrowserNotSharedException:



Public Member Functions

- **BrowserNotSharedException** (String msg)

4.106.1 Detailed Description

Definition at line 3 of file BrowserNotSharedException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/BrowserNotSharedException.java

4.107 Buffer Class Reference

Friends

- class **Pool**

4.107.1 Detailed Description

Definition at line 45 of file bufpool.h.

The documentation for this class was generated from the following file:

- src/libnurbs/internals/bufpool.h

4.108 BUTitem Struct Reference

Data Fields

- unsigned char * **B**
- **BUTitem** * **prev**
- **BUTitem** * **next**

4.108.1 Detailed Description

Definition at line 807 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.109 CachedVertex Struct Reference

Data Fields

- GLdouble **coords** [3]
- void * **data**

4.109.1 Detailed Description

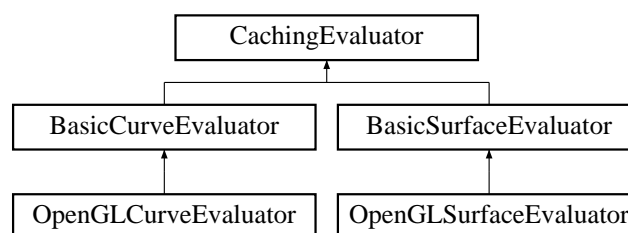
Definition at line 54 of file tess.h.

The documentation for this struct was generated from the following file:

- src/libtess/tess.h

4.110 CachingEvaluator Class Reference

Inheritance diagram for CachingEvaluator:



Public Types

- enum **ServiceMode** { **play**, **record**, **playAndRecord** }

Public Member Functions

- virtual int **canRecord** (void)
- virtual int **canPlayAndRecord** (void)
- virtual int **createHandle** (int handle)
- virtual void **beginOutput** (ServiceMode, int handle)
- virtual void **endOutput** (void)
- virtual void **discardRecording** (int handle)
- virtual void **playRecording** (int handle)

4.110.1 Detailed Description

Definition at line 39 of file cachingeval.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/cachingeval.h
- src/libnurbs/internals/cachingeval.cc

4.111 cbDataExactName Struct Reference

Data Fields

- char * **fname**
- union **anyVrml** * **fieldValue**
- int **mode**
- int **type**
- int **jfield**
- int **source**
- BOOL **publicfield**

4.111.1 Detailed Description

Definition at line 5124 of file CParseParser.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.c

4.112 cbDataRootNameAndRouteDir Struct Reference

Data Fields

- char * **fname**
- int **PKW_eventType**
- union **anyVrml** * **fieldValue**
- int **mode**
- int **type**
- int **jfield**
- int **source**
- BOOL **publicfield**

4.112.1 Detailed Description

Definition at line 5166 of file CParseParser.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.c

4.113 CdlIFreeWRL Class Reference

Public Types

- enum **KeyAction** { **KEYDOWN** =2, **KEYUP** =3, **KEYPRESS** =1 }
- enum **MouseButton** { **MOUSEMOVE** =6, **MOUSEDOWN** =4, **MOUSEUP** =5 }
- enum **MouseButton** { **LEFT** =1, **MIDDLE** =2, **RIGHT** =3, **NONE** =0 }
- enum **resource_status** {
ress_none, **ress_starts_good**, **ress_invalid**, **ress_downloaded**,
ress_failed, **ress_loaded**, **ress_not_loaded**, **ress_parsed**,
ress_not_parsed }
- enum **resource_media_type** {
resm_unknown, **resm_vrml**, **resm_x3d**, **resm_image**,
resm_movie, **resm_script**, **resm_pshader**, **resm_fshader**,
resm_audio, **resm_x3z**, **resm_external** }

Public Member Functions

- **CdlIFreeWRL** (int width, int height, void *windowhandle=0, bool bEai=false)
- **CdlIFreeWRL** (char *scene_url, int width, int height, void *windowhandle=0, bool bEai=false)
- void **setDensityFactor** (float density_factor)
- void **onInit** (int width, int height, void *windowhandle=0, bool bEai=false, bool frontend_handles_display_↔
thread=false)
- void **onLoad** (char *scene_url)
- void **onResize** (int width, int height)
- int **onMouse** (int mouseAction, int mouseButton, int x, int y)
- int **onTouch** (int touchAction, unsigned int ID, int x, int y)
- void **onGyro** (float rx, float ry, float rz)
- void **onAccelerometer** (float ax, float ay, float az)
- void **onMagnetic** (float azimuth, float pitch, float roll)
- void **onKey** (int keyAction, int keyValue)
- void **onDraw** ()
- void **onClose** ()
- void **print** (char *str)
- void **setTempFolder** (char *tmpFolder)
- void **setFontFolder** (char *fontFolder)
- int **getUpdatedCursorStyle** ()
- void * **frontenditem_dequeue** ()
- char * **resitem_getURL** (void *res)
- int **resitem_getStatus** (void *res)
- void **resitem_setStatus** (void *res, int status)
- int **resitem_getType** (void *res)
- int **resitem_getMediaType** (void *res)
- void **resitem_enqueueNextMulti** (void *res)
- void **resitem_setLocalPath** (void *res, char *path)
- void **resitem_enqueue** (void *res)
- void **resitem_load** (void *res)
- void **commandline** (char *cmdline)

4.113.1 Detailed Description

Definition at line 18 of file `dllFreeWRL.h`.

The documentation for this class was generated from the following files:

- `src/dllFreeWRL/dllFreeWRL.h`
- `src/dllFreeWRL/dllFreeWRL.cpp`

4.114 **chardata Struct Reference**

Data Fields

- unsigned int **iglyph**
- double **advance**
- double **x**
- double **y**
- double **sx**
- double **sy**

4.114.1 Detailed Description

Definition at line 202 of file `Component_Text.c`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/Component_Text.c`

4.115 **chaser_ptr Struct Reference**

Data Fields

- void * **value_changed**
- void * **initialDestination**
- void * **initialValue**
- void * **set_destination**
- void * **set_value**
- void * **_buffer**
- void * **_previousValue**
- void * **_destination**

4.115.1 Detailed Description

Definition at line 164 of file `Component_Followers.c`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/Component_Followers.c`

4.116 cline Struct Reference

Data Fields

- int **n**
- GLfloat **p** [6]

4.116.1 Detailed Description

Definition at line 234 of file CursorDraw.c.

The documentation for this struct was generated from the following file:

- src/lib/ui/CursorDraw.c

4.117 coded_block_pattern_entry Struct Reference

Data Fields

- unsigned int **cbp**
- int **num_bits**

4.117.1 Detailed Description

Definition at line 768 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.118 colorScheme Struct Reference

Data Fields

- char * **name**
- char * **panel**
- char * **menulcon**
- char * **statusText**
- char * **messageText**

4.118.1 Detailed Description

Definition at line 329 of file common.c.

The documentation for this struct was generated from the following file:

- src/lib/ui/common.c

4.119 command Struct Reference

Data Fields

- char * **key**
- int(* **cmdfunc**)()
- int(* **valfunc**)(char *val)
- char * **helpstring**

4.119.1 Detailed Description

Definition at line 687 of file common.c.

The documentation for this struct was generated from the following file:

- src/lib/ui/common.c

4.120 org.web3d.x3d.sai.ComponentInfo Interface Reference

Inheritance diagram for org.web3d.x3d.sai.ComponentInfo:



Public Member Functions

- String **getName** ()
- int **getLevel** ()
- String **getTitle** ()
- String **getProviderURL** ()
- String **toX3DString** ()

4.120.1 Detailed Description

Definition at line 3 of file ComponentInfo.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/ComponentInfo.java

4.121 connection_info_struct Struct Reference

Data Fields

- int **connectiontype**
- char * **answerstring**
- int **len**
- struct MHD_PostProcessor * **postprocessor**

4.121.1 Detailed Description

Definition at line 811 of file SSRServer.c.

The documentation for this struct was generated from the following file:

- src/SSR/SSRServer.c

4.122 org.web3d.x3d.sai.ConnectionException Class Reference

Inheritance diagram for org.web3d.x3d.sai.ConnectionException:



Public Member Functions

- **ConnectionException** (String msg)

4.122.1 Detailed Description

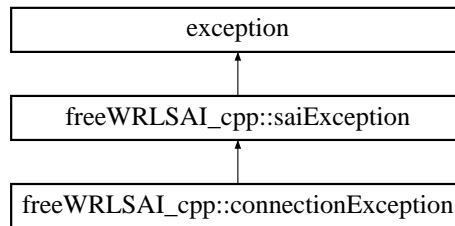
Definition at line 3 of file ConnectionException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/ConnectionException.java

4.123 freeWRLSAI_cpp::connectionException Class Reference

Inheritance diagram for freeWRLSAI_cpp::connectionException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.123.1 Detailed Description

Definition at line 85 of file SAexception.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAexception.h

4.124 consoleLine Struct Reference

Data Fields

- char * **line**
- int **len**
- int **endline**

4.124.1 Detailed Description

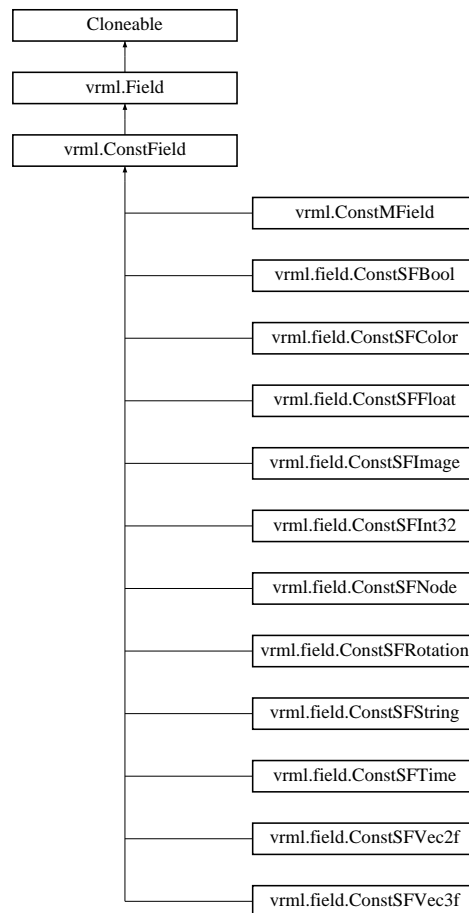
Definition at line 800 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.125 vrml.ConstField Class Reference

Inheritance diagram for vrml.ConstField:



Additional Inherited Members

4.125.1 Detailed Description

Definition at line 3 of file ConstField.java.

The documentation for this class was generated from the following file:

- src/java/vrml/ConstField.java

4.126 vrml.field.ConstMFColor Class Reference

Inheritance diagram for vrml.field.ConstMFColor:



Public Member Functions

- **ConstMFCOLOR** (float[] colors)
- **ConstMFCOLOR** (int size, float[] colors)
- **ConstMFCOLOR** (float[][] colors)
- void **getValue** (float[] colors)
- void **getValue** (float[][] colors)
- void **get1Value** (int index, float[] colors)
- void **get1Value** (int index, **SFCOLOR** sfColor)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.126.1 Detailed Description

Definition at line 10 of file `ConstMFCOLOR.java`.

The documentation for this class was generated from the following file:

- `src/java/vrml/field/ConstMFCOLOR.java`

4.127 vrml.field.ConstMFFloat Class Reference

Inheritance diagram for `vrml.field.ConstMFFloat`:



Public Member Functions

- **ConstMFFloat** (float[] f)
- **ConstMFFloat** (int size, float[] f)
- void **getValue** (float[] f)
- float **get1Value** (int index)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.127.1 Detailed Description

Definition at line 10 of file ConstMFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFFloat.java

4.128 vrml.ConstMField Class Reference

Inheritance diagram for vrml.ConstMField:



Public Member Functions

- int **getSize** ()

Data Fields

- **Vector** **__vect** = new **Vector**()

Protected Member Functions

- final void **__update1Read** (int index)

4.128.1 Detailed Description

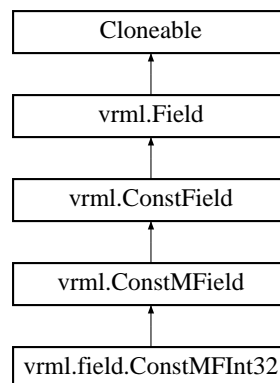
Definition at line 4 of file ConstMField.java.

The documentation for this class was generated from the following file:

- src/java/vrml/ConstMField.java

4.129 vrml.field.ConstMField32 Class Reference

Inheritance diagram for vrml.field.ConstMField32:



Public Member Functions

- **ConstMField32** (int[] value)
- **ConstMField32** (int size, int[] value)
- void **getValue** (int[] value)
- int **get1Value** (int index)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.129.1 Detailed Description

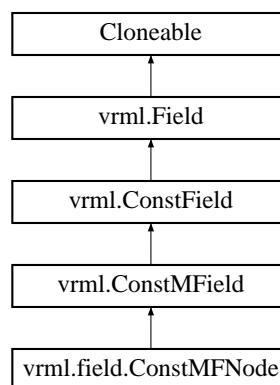
Definition at line 10 of file ConstMFInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFInt32.java

4.130 vrml.field.ConstMFNode Class Reference

Inheritance diagram for vrml.field.ConstMFNode:



Public Member Functions

- **ConstMFNode** (**BaseNode**[] node)
- **ConstMFNode** (int size, **BaseNode**[] node)
- void **getValue** (**BaseNode**[] node)
- **BaseNode** **get1Value** (int index)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.130.1 Detailed Description

Definition at line 10 of file ConstMFNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFNode.java

4.131 vrml.field.ConstMFRotation Class Reference

Inheritance diagram for vrml.field.ConstMFRotation:



Public Member Functions

- **ConstMFRotation** (float[] rotations)
- **ConstMFRotation** (int size, float[] rotations)
- **ConstMFRotation** (float[][] rotations)
- void **getValue** (float[] rotations)
- void **getValue** (float[][] rotations)
- void **get1Value** (int index, float[] rotations)
- void **get1Value** (int index, **SFRotation** sfRotation)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.131.1 Detailed Description

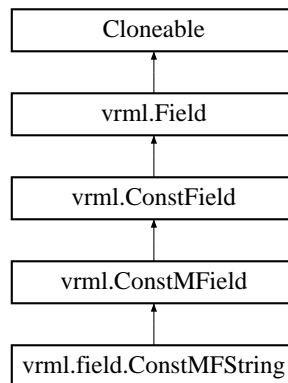
Definition at line 10 of file ConstMFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFRotation.java

4.132 vrml.field.ConstMFString Class Reference

Inheritance diagram for vrml.field.ConstMFString:



Public Member Functions

- **ConstMFString** (String[] s)
- **ConstMFString** (int size, String[] s)
- void **getValue** (String[] s)
- String **get1Value** (int index)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.132.1 Detailed Description

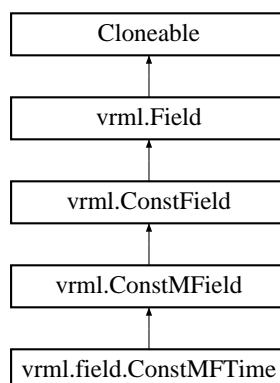
Definition at line 10 of file ConstMFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFString.java

4.133 vrml.field.ConstMFTIME Class Reference

Inheritance diagram for vrml.field.ConstMFTIME:



Public Member Functions

- **ConstMFTIME** (double[] value)
- **ConstMFTIME** (int size, double[] value)
- void **getValue** (double[] value)
- double **get1Value** (int index)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.133.1 Detailed Description

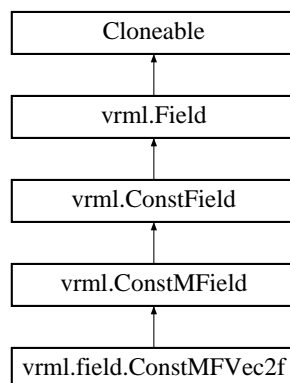
Definition at line 10 of file ConstMFTIME.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFTIME.java

4.134 vrml.field.ConstMFVec2f Class Reference

Inheritance diagram for vrml.field.ConstMFVec2f:



Public Member Functions

- **ConstMFVec2f** (float[] vec2fs)
- **ConstMFVec2f** (int size, float[] vec2fs)
- **ConstMFVec2f** (float[][] vec2fs)
- void **getValue** (float[] vec2fs)
- void **getValue** (float[][] vec2fs)
- void **get1Value** (int index, float[] vec2fs)
- void **get1Value** (int index, **SFVec2f** sfVec2f)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.134.1 Detailed Description

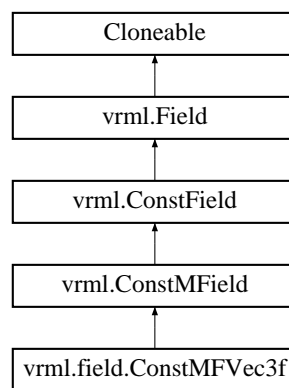
Definition at line 10 of file ConstMFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFVec2f.java

4.135 vrml.field.ConstMFVec3f Class Reference

Inheritance diagram for vrml.field.ConstMFVec3f:



Public Member Functions

- **ConstMFVec3f** (float[] vec3fs)
- **ConstMFVec3f** (int size, float[] vec3fs)
- **ConstMFVec3f** (float[][] vec3fs)
- void **getValue** (float[] vec3fs)
- void **getValue** (float[][] vec3fs)
- void **get1Value** (int index, float[] vec3fs)
- void **get1Value** (int index, **SFVec3f** sfVec3f)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.135.1 Detailed Description

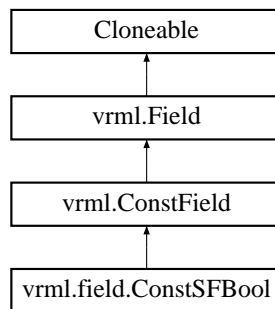
Definition at line 10 of file ConstMFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFVec3f.java

4.136 vrml.field.ConstSFBool Class Reference

Inheritance diagram for vrml.field.ConstSFBool:



Public Member Functions

- **ConstSFBool** (boolean value)
- boolean **getValue** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.136.1 Detailed Description

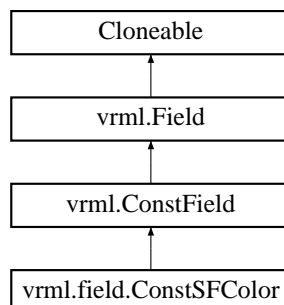
Definition at line 10 of file ConstSFBool.java.

The documentation for this class was generated from the following file:

- `src/java/vrml/field/ConstSFBool.java`

4.137 vrml.field.ConstSFColor Class Reference

Inheritance diagram for vrml.field.ConstSFColor:



Public Member Functions

- **ConstSFCOLOR** (float red, float green, float blue)
- void **getValue** (float[] values)
- float **getRed** ()
- float **getGreen** ()
- float **getBlue** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.137.1 Detailed Description

Definition at line 10 of file ConstSFCOLOR.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFCOLOR.java

4.138 vrml.field.ConstSFFloat Class Reference

Inheritance diagram for vrml.field.ConstSFFloat:



Public Member Functions

- **ConstSFFloat** (float f)
- float **getValue** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.138.1 Detailed Description

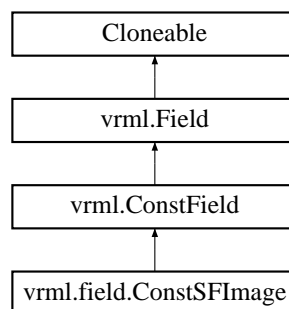
Definition at line 10 of file ConstSFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFFloat.java

4.139 vrml.field.ConstSfImage Class Reference

Inheritance diagram for vrml.field.ConstSfImage:



Public Member Functions

- **ConstSfImage** (int width, int height, int components, byte[] pixels)
- int **getWidth** ()
- int **getHeight** ()
- int **getComponents** ()
- byte [] **getPixels** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.139.1 Detailed Description

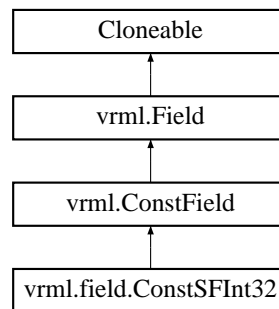
Definition at line 10 of file ConstSfImage.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSfImage.java

4.140 vrml.field.ConstSfInt32 Class Reference

Inheritance diagram for vrml.field.ConstSfInt32:



Public Member Functions

- **ConstSfInt32** (int value)
- int **getValue** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.140.1 Detailed Description

Definition at line 10 of file ConstSfInt32.java.

The documentation for this class was generated from the following file:

- `src/java/vrml/field/ConstSfInt32.java`

4.141 vrml.field.ConstSFNode Class Reference

Inheritance diagram for vrml.field.ConstSFNode:



Public Member Functions

- **ConstSFNode** (**BaseNode** node)
- **BaseNode** **getValue** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.141.1 Detailed Description

Definition at line 10 of file ConstSFNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFNode.java

4.142 vrml.field.ConstSFRotation Class Reference

Inheritance diagram for vrml.field.ConstSFRotation:



Public Member Functions

- **ConstSFRotation** (float axisX, float axisY, float axisZ, float angle)
- void **getValue** (float[] values)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.142.1 Detailed Description

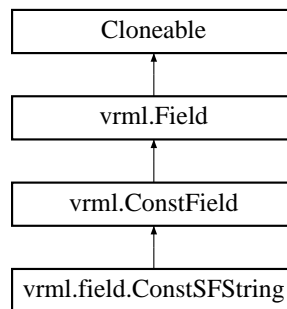
Definition at line 10 of file ConstSFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFRotation.java

4.143 vrml.field.ConstSFString Class Reference

Inheritance diagram for vrml.field.ConstSFString:



Public Member Functions

- **ConstSFString** (String s)
- String **getValue** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.143.1 Detailed Description

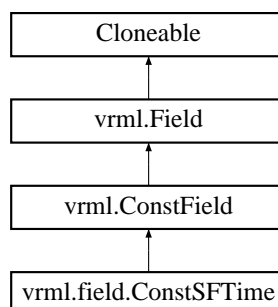
Definition at line 10 of file ConstSFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFString.java

4.144 vrml.field.ConstSFTIME Class Reference

Inheritance diagram for vrml.field.ConstSFTIME:



Public Member Functions

- **ConstSFTIME** (double value)
- double **getValue** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.144.1 Detailed Description

Definition at line 10 of file ConstSFTIME.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFTIME.java

4.145 vrml.field.ConstSFVec2f Class Reference

Inheritance diagram for vrml.field.ConstSFVec2f:



Public Member Functions

- **ConstSFVec2f** (float x, float y)
- void **getValue** (float[] values)
- float **getX** ()
- float **getY** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.145.1 Detailed Description

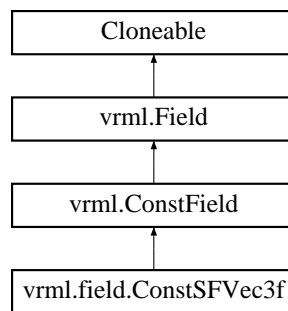
Definition at line 10 of file ConstSFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFVec2f.java

4.146 vrml.field.ConstSFVec3f Class Reference

Inheritance diagram for vrml.field.ConstSFVec3f:



Public Member Functions

- **ConstSFVec3f** (float x, float y, float z)
- void **getValue** (float[] values)
- float **getX** ()
- float **getY** ()
- float **getZ** ()
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.146.1 Detailed Description

Definition at line 10 of file ConstSFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstSFVec3f.java

4.147 contenttype Struct Reference

Data Fields

- **tcontenttype t1**

4.147.1 Detailed Description

Definition at line 452 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.148 contenttype_captiontext Struct Reference

Data Fields

- **tcontenttype t1**
- char * **caption**
- int **len**
- int * **utf32**
- int **len32**
- int **nalloc**
- **AtlasFont** * **font**
- char * **fontname**
- int **fontSize**
- **AtlasEntrySet** * **set**
- float **percentSize**
- int **EMpixels**
- int **maxadvancepx**
- float **angle**
- **vec4** **color**

4.148.1 Detailed Description

Definition at line 725 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.149 contenttype_e3dmouse Struct Reference

Data Fields

- **tcontenttype t1**
- int **sphericalmode**
- int **navigationMode**
- int **dragMode**
- int **waste**

4.149.1 Detailed Description

Definition at line 1400 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.150 contenttype_layer Struct Reference

Data Fields

- **tcontenttype t1**

4.150.1 Detailed Description

Definition at line 1265 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.151 contenttype_multitouch Struct Reference

Data Fields

- **tcontenttype t1**
- struct **Touch touchlist** [20]
- int **ntouch**
- int **IDD**
- int **lastbut**

4.151.1 Detailed Description

Definition at line 1325 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.152 contenttype_orientation Struct Reference

Data Fields

- **tcontenttype t1**
- int **nx**
- int **ny**
- int **nelements**
- int **nvert**
- GLushort * **index**
- GLfloat * **vert**
- GLfloat * **vert2**
- GLfloat * **tex**
- GLfloat * **norm**
- GLfloat **dx**
- GLfloat **tx**
- GLuint **textureID**

4.152.1 Detailed Description

Definition at line 2695 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.153 contenttype_quadrant Struct Reference

Data Fields

- **tcontenttype t1**
- float **offset_fraction** [2]

4.153.1 Detailed Description

Definition at line 1509 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.154 contenttype_scene Struct Reference

Data Fields

- **tcontenttype t1**

4.154.1 Detailed Description

Definition at line 498 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.155 contenttype_splitter Struct Reference

Data Fields

- **tcontenttype t1**
- float **offset_fraction**
- int **offset_pixels**
- int **orientation**

4.155.1 Detailed Description

Definition at line 2101 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.156 contenttype_statusbar Struct Reference

Data Fields

- **tcontenttype t1**
- int **clipplane**

4.156.1 Detailed Description

Definition at line 543 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.157 contenttype_stereo_anaglyph Struct Reference

Data Fields

- **tcontenttype t1**

4.157.1 Detailed Description

Definition at line 1790 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.158 contenttype_stereo_shutter Struct Reference

Data Fields

- **tcontenttype t1**

4.158.1 Detailed Description

Definition at line 1991 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.159 contenttype_stereo_sidebyside Struct Reference

Data Fields

- **contenttype t1**

4.159.1 Detailed Description

Definition at line 1639 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.160 contenttype_stereo_updown Struct Reference

Data Fields

- **contenttype t1**

4.160.1 Detailed Description

Definition at line 1883 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.161 contenttype_switch Struct Reference

Data Fields

- **contenttype t1**
- int **whichCase**
- int * **whichPtr**

4.161.1 Detailed Description

Definition at line 641 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.162 contenttype_textpanel Struct Reference

Data Fields

- **tcontenttype t1**
- **AtlasEntrySet * set**
- **AtlasFont * font**
- char * **fontname**
- int **fontSize**
- int **maxadvancepx**
- **vec4 color**
- int **maxlines**
- int **maxlen**
- int **wrap**
- unsigned char * **Ablob**
- int **blobsize**
- unsigned char * **S**
- unsigned char * **E**
- unsigned char * **Z**
- unsigned char * **z**
- **BUTitem * Blist**
- **BUTitem * bhead**
- int **added**
- int **rowsize**
- unsigned char * **row**
- int **initialized**

4.162.1 Detailed Description

Definition at line 812 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.163 contenttype_texturegrid Struct Reference

Data Fields

- **tcontenttype t1**
- int **nx**
- int **ny**
- int **nelements**
- int **nvert**
- GLushort * **index**
- GLfloat * **vert**
- GLfloat * **vert2**
- GLfloat * **tex**
- GLfloat * **norm**
- GLfloat **dx**
- GLfloat **tx**
- float **k1**
- float **xc**
- int **usingDistortions**
- GLuint **textureID**

4.163.1 Detailed Description

Definition at line 2322 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.164 CoveAndTiler Class Reference

Inheritance diagram for CoveAndTiler:



Public Member Functions

- **CoveAndTiler** (**Backend** &)
- void **coveAndTile** (void)

Additional Inherited Members

4.164.1 Detailed Description

Definition at line 46 of file coveandtiler.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/coveandtiler.h
- src/libnurbs/internals/coveandtiler.cc

4.165 CPlugin Class Reference

Public Member Functions

- **CPlugin** (**NPP** pNPInstance)
CPlugin (p. 132) *class.constructor.*
- NPBool **init** (**NPWindow** *pNPWindow)
- void **shut** ()
- NPBool **isInitialized** ()
- int16_t **handleEvent** (void *event)
- void **showVersion** ()
- void **clear** ()
- void **getVersion** (char **aVersion)
- void **setSceneUrl** (char *sceneUrl)
- void **setEAIFlag** ()
- **NPObject** * **GetScriptableObject** ()

Data Fields

- char **m_String** [128]
- UINT_PTR **m_pTimerID**

4.165.1 Detailed Description

Definition at line 46 of file plugin.h.

4.165.2 Constructor & Destructor Documentation

4.165.2.1 CPlugin()

```
CPlugin::CPlugin (
    NPP pNPInstance )
```

CPlugin (p. 132) class.constructor.

Base initialization goes here.

Definition at line 73 of file plugin.cpp.

The documentation for this class was generated from the following files:

- src/plugin_win32/plugin.h
- src/plugin_win32/plugin.cpp

4.166 CR_RegStruct Struct Reference

Data Fields

- int **adrem**
- struct **X3D_Node** * **from**
- int **fromoffset**
- struct **X3D_Node** * **to**
- int **toOfs**
- int **fieldType**
- void * **intptr**
- int **sccdir**
- int **extra**

4.166.1 Detailed Description

Definition at line 185 of file CRoutes.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CRoutes.c

4.167 CRjsnameStruct Struct Reference

Data Fields

- int **type**
- char **name** [MAXJSVARIABLELENGTH]
- void * **eventInFunction**

4.167.1 Detailed Description

Definition at line 186 of file CScripts.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/CScripts.h

4.168 CRscriptStruct Struct Reference

Data Fields

- int **thisScriptType**
- int **_initialized**
- void * **cx**
- void * **glob**
- void * **eventsProcessed**
- char * **scriptText**
- struct **ScriptParamList** * **paramList**
- int **scriptOK**
- struct **Shader_Script** * **script**
- int **scr_act**

4.168.1 Detailed Description

Definition at line 154 of file CScripts.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/CScripts.h

4.169 CRStruct Struct Reference

Data Fields

- struct **X3D_Node** * **routeFromNode**
- int **fnptr**
- int **tonode_count**
- **CRnodeStruct** * **tonodes**
- int **isActive**
- int **len**
- void(* **interpptr**)(void *)
- int **direction_flag**
- int **extra**
- int **intTimeStamp**

4.169.1 Detailed Description

Definition at line 44 of file CRoutes.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CRoutes.h

4.170 cson_array Struct Reference

cson_array (p. 135) is an opaque handle to an Array value.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- **cson_value_list** list

4.170.1 Detailed Description

cson_array (p. 135) is an opaque handle to an Array value.

They are used like:

```
cson_array * obj = cson_value_get_array(myValue);  
...
```

They can be created like:

```
cson_value * arV = cson_value_new_array();  
cson_array * ar = cson_value_get_array(arV);  
// ar is owned by arV and arV must eventually be freed  
// using cson_value_free() or added to a container  
// object/array (which transfers ownership to that container).
```

See also

```
cson_value_new_array()  
cson_value_get_array()  
cson_value_free()
```

Definition at line 2142 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.171 cson_buffer Struct Reference

A generic buffer class.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- `cson_size_t` **capacity**
The number of bytes allocated for this object.
- `cson_size_t` **used**
The number of bytes "used" by this object.
- `cson_size_t` **timesExpanded**
This is a debugging/metric-counting value intended to help certain malloc()-conscious clients tweak their memory reservation sizes.
- `unsigned char *` **mem**
The memory allocated for and owned by this buffer.

4.171.1 Detailed Description

A generic buffer class.

They can be used like this:

```
cson_buffer b = cson_buffer_empty;  
int rc = cson_buffer_reserve( &buf, 100 );  
if( 0 != rc ) { ... allocation error ... }  
... use buf.mem ...  
... then free it up ...  
cson_buffer_reserve( &buf, 0 );
```

To take over ownership of a buffer's memory:

```
void * mem = b.mem;  
// mem is b.capacity bytes long, but only b.used  
// bytes of it has been "used" by the API.  
b = cson_buffer_empty;
```

The memory now belongs to the caller and must eventually be free()d.

Definition at line 1826 of file cson_amalgamation_core.h.

4.171.2 Field Documentation

4.171.2.1 capacity

```
cson_size_t cson_buffer::capacity
```

The number of bytes allocated for this object.

Use `cson_buffer_reserve()` to change its value.

Definition at line 1832 of file `cson_amalgamation_core.h`.

4.171.2.2 mem

```
unsigned char* cson_buffer::mem
```

The memory allocated for and owned by this buffer.

Use `cson_buffer_reserve()` to change its size or free it. To take over ownership, do:

```
void * myptr = buf.mem;  
buf = cson_buffer_empty;
```

(You might also need to store `buf.used` and `buf.capacity`, depending on what you want to do with the memory.)

When doing so, the memory must eventually be passed to `free()` to deallocate it.

Definition at line 1868 of file `cson_amalgamation_core.h`.

4.171.2.3 timesExpanded

```
cson_size_t cson_buffer::timesExpanded
```

This is a debugging/metric-counting value intended to help certain `malloc()`-conscious clients tweak their memory reservation sizes.

Each time `cson_buffer_reserve()` expands the buffer, it increments this value by 1.

Definition at line 1850 of file `cson_amalgamation_core.h`.

4.171.2.4 used

```
cson_size_t cson_buffer::used
```

The number of bytes "used" by this object.

It is not needed for all use cases, and management of this value (if needed) is up to the client. The **cson_buffer** (p. 136) public API does not use this member. The intention is that this can be used to track the length of strings which are allocated via **cson_buffer** (p. 136), since they need an explicit length and/or null terminator.

Definition at line 1841 of file `cson_amalgamation_core.h`.

The documentation for this struct was generated from the following file:

- `src/SSR/cson/cson_amalgamation_core.h`

4.172 cson_data_source_StringSource_ Struct Reference

Internal type to hold state for a JSON input string.

Data Fields

- char const * **str**
Start of input string.
- char const * **pos**
Current iteration position.
- char const * **end**
Logical EOF, one-past-the-end of str.

4.172.1 Detailed Description

Internal type to hold state for a JSON input string.

Definition at line 4325 of file cson_amalgamation_core.c.

4.172.2 Field Documentation

4.172.2.1 end

```
char const* cson_data_source_StringSource_::end
```

Logical EOF, one-past-the-end of str.

Definition at line 4332 of file cson_amalgamation_core.c.

4.172.2.2 pos

```
char const* cson_data_source_StringSource_::pos
```

Current iteration position.

Must initially be == str.

Definition at line 4330 of file cson_amalgamation_core.c.

4.172.2.3 str

```
char const* cson_data_source_StringSource_::str
```

Start of input string.

Definition at line 4328 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.173 cson_kvp Struct Reference

A key/value pair collection.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- **cson_value * key**
- **cson_value * value**

4.173.1 Detailed Description

A key/value pair collection.

This class represents a key/value pair and is used for storing object properties.

Each of these objects owns its key/value pointers, and they are cleaned up by cson_kvp_clean().

It is opaque to client code, and the public API only uses this type for purposes of iterating over **cson_object** (p. 140) properties using the **cson_object_iterator** (p. 141) interfaces.

Definition at line 2022 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.174 cson_kvp_list Struct Reference

Data Fields

- **cson_kvp ** list**
- unsigned int **count**
- unsigned int **allocated**

4.174.1 Detailed Description

Definition at line 2114 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.175 cson_object Struct Reference

cson_object (p. 140) is an opaque handle to an Object value.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- **cson_kvp_list** kvp

4.175.1 Detailed Description

cson_object (p. 140) is an opaque handle to an Object value.

They are used like:

```
cson_object * obj = cson_value_get_object(myValue);  
...
```

They can be created like:

```
cson_value * objV = cson_value_new_object();  
cson_object * obj = cson_value_get_object(objV);  
// obj is owned by objV and objV must eventually be freed  
// using cson_value_free() or added to a container  
// object/array (which transfers ownership to that container).
```

See also

```
cson_value_new_object()  
cson_value_get_object()  
cson_value_free()
```

Definition at line 2124 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.176 cson_object_iterator Struct Reference

An iterator type for traversing object properties.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- **cson_object** const * **obj**
- unsigned int **pos**

4.176.1 Detailed Description

An iterator type for traversing object properties.

Its values must be considered private, not to be touched by client code.

See also

```
cson_object_iter_init()  
cson_object_iter_next()
```

Definition at line 1699 of file cson_amalgamation_core.h.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.h

4.177 cson_output_opt Struct Reference

Client-configurable options for the cson_output() family of functions.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- unsigned char **indentation**
Specifies how to indent (or not) output.
- unsigned short **maxDepth**
Maximum object/array depth to traverse.
- char **addNewline**
If true, a newline will be added to generated output, else not.
- char **addSpaceAfterColon**
If true, a space will be added after the colon operator in objects' key/value pairs.
- char **indentSingleMemberValues**
If set to 1 then objects/arrays containing only a single value will not indent an extra level for that value (but will indent on subsequent levels if that value contains multiple values).
- char **escapeForwardSlashes**
The JSON format allows, but does not require, JSON generators to backslash-escape forward slashes.

4.177.1 Detailed Description

Client-configurable options for the `cson_output()` family of functions.

Definition at line 517 of file `cson_amalgamation_core.h`.

4.177.2 Field Documentation

4.177.2.1 `escapeForwardSlashes`

```
char cson_output_opt::escapeForwardSlashes
```

The JSON format allows, but does not require, JSON generators to backslash-escape forward slashes.

This option enables/disables that feature. According to JSON's inventor, Douglas Crockford:

<quote> It is allowed, not required. It is allowed so that JSON can be safely embedded in HTML, which can freak out when seeing strings containing "</". JSON tolerates "<\\" for this reason. </quote>

(from an email on 2011-04-08)

The default value is 0 (because it's just damned ugly).

Definition at line 572 of file `cson_amalgamation_core.h`.

4.177.2.2 `indentation`

```
unsigned char cson_output_opt::indentation
```

Specifies how to indent (or not) output.

The values are:

(0) == no extra indentation.

(1) == 1 TAB character for each level.

(>1) == that number of SPACES for each level.

Definition at line 529 of file `cson_amalgamation_core.h`.

4.177.2.3 maxDepth

```
unsigned short cson_output_opt::maxDepth
```

Maximum object/array depth to traverse.

Traversing deeply can be indicative of cycles in the object/array tree, and this value is used to figure out when to abort the traversal.

Definition at line 536 of file cson_amalgamation_core.h.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.h

4.178 cson_parse_info Struct Reference

A class for holding JSON parser information.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- unsigned int **line**
1-based line number.
- unsigned int **col**
0-based column number.
- unsigned int **length**
Length, in bytes.
- int **errorCode**
Error code of the parse run (0 for no error).
- unsigned int **totalKeyCount**
The total number of object keys successfully processed by the parser.
- unsigned int **totalValueCount**
The total number of object/array values successfully processed by the parser, including the root node.

4.178.1 Detailed Description

A class for holding JSON parser information.

It is primarily intended for finding the position of a parse error.

Definition at line 458 of file cson_amalgamation_core.h.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.h

4.179 cson_parse_opt Struct Reference

Client-configurable options for the cson_parse() family of functions.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- unsigned short **maxDepth**
Maximum object/array depth to traverse.
- char **allowComments**
Whether or not to allow C-style comments.

4.179.1 Detailed Description

Client-configurable options for the cson_parse() family of functions.

Definition at line 433 of file cson_amalgamation_core.h.

4.179.2 Field Documentation

4.179.2.1 allowComments

```
char cson_parse_opt::allowComments
```

Whether or not to allow C-style comments.

Do not rely on this option being available. If the underlying parser is replaced, this option might no longer be supported.

Definition at line 444 of file cson_amalgamation_core.h.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.h

4.180 cson_parser Struct Reference

Data Fields

- **JSON_parser** p
- **cson_value** * root
- **cson_value** * node
- **cson_array** stack
- **cson_string** * ckey
- int **errNo**
- unsigned int **totalKeyCount**
- unsigned int **totalValueCount**

4.180.1 Detailed Description

Definition at line 2151 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.181 cson_string Struct Reference

Strings are allocated as an instances of this class with N+1 trailing bytes, where N is the length of the string being allocated.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- unsigned int **length**

4.181.1 Detailed Description

Strings are allocated as an instances of this class with N+1 trailing bytes, where N is the length of the string being allocated.

cson-internal string type, opaque to client code.

To convert a **cson_string** (p. 145) to c-string we simply increment the **cson_string** (p. 145) pointer. To do the opposite we use (cstr - sizeof(cson_string)). Zero-length strings are a special case handled by a couple of the **cson_string** (p. 145) functions.

Strings in cson are immutable and allocated only by library internals, never directly by client code.

The actual string bytes are to be allocated together in the same memory chunk as the **cson_string** (p. 145) object, which saves us 1 malloc() and 1 pointer member in this type (because we no longer have a direct pointer to the memory).

Potential TODOs:

See also

cson_string_cstr()

Definition at line 1578 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.182 cson_value Struct Reference

The core value type of this API.

```
#include <cson_amalgamation_core.h>
```

Data Fields

- **cson_value_api** const * **api**
The "vtbl" of type-specific operations.
- void * **value**
The raw value.
- cson_counter_t **refcount**
*We use this to allow us to store **cson_value** (p. 146) instances in multiple containers or multiple times within a single container (provided no cycles are introduced).*

4.182.1 Detailed Description

The core value type of this API.

It is opaque to clients, and only the cson public API should be used for setting or inspecting their values.

This class is opaque because stack-based usage can easily cause leaks if one does not intimately understand the underlying internal memory management (which sometimes changes).

It is (as of 20110323) legal to insert a given value instance into multiple containers (they will share ownership using reference counting) as long as those insertions do not cause cycles. However, be very aware that such value re-use uses a reference to the original copy, meaning that if its value is changed once, it is changed everywhere. Also beware that multi-threaded write operations on such references leads to undefined behaviour.

PLEASE read the ACHTUNGEN below...

ACHTUNG #1:

cson_values MUST NOT form cycles (e.g. via object or array entries).

Not abiding th Holy Law Of No Cycles will lead to double-frees and the like (i.e. undefined behaviour, likely crashes due to infinite recursion or stepping on invalid (freed) pointers).

ACHTUNG #2:

ALL cson_values returned as non-const **cson_value** (p. 146) pointers from any public functions in the cson API are to be treated as if they are heap-allocated, and MUST be freed by client by doing ONE of:

- Passing it to cson_value_free().
- Adding it to an Object or Array, in which case the object/array takes over ownership. As of 20110323, a value may be inserted into a single container multiple times, or into multiple containers, in which case they all share ownership (via reference counting) of the original value (meaning any changes to it are visible in all references to it).

Each call to `cson_value_new_xxx()` MUST eventually be followed up by one of those options.

Some `cson_value_new_XXX()` implementations do not actually allocate memory, but this is an internal implementation detail. Client code MUST NOT rely on this behaviour and MUST treat each object returned by such a function as if it was a freshly-allocated copy (even if their pointer addresses are the same).

ACHTUNG #3:

Note that ACHTUNG #2 tells us that we must always free (or transfer ownership of) all pointers returned by `cson_value_new_xxx()`, but that two calls to (e.g.) `cson_value_new_bool(1)` will (or might) return the same address. The client must not rely on the "non-allocation" policy of such special cases, and must pass each returned value to `cson_value_free()`, even if two of them have the same address. Some special values (e.g. null, true, false, integer 0, double 0.0, and empty strings) use shared copies and in other places reference counting is used internally to figure out when it is safe to destroy an object.

See also

- `cson_value_new_array()`
- `cson_value_new_object()`
- `cson_value_new_string()`
- `cson_value_new_integer()`
- `cson_value_new_double()`
- `cson_value_new_bool()`
- `cson_value_true()`
- `cson_value_false()`
- `cson_value_null()`
- `cson_value_free()`
- `cson_value_type_id()`

Definition at line 1486 of file `cson_amalgamation_core.c`.

4.182.2 Field Documentation

4.182.2.1 api

```
cson_value_api const* cson_value::api
```

The "vtbl" of type-specific operations.

All instances of a given logical value type share a single `api` instance.

Results are undefined if this value is NULL.

Definition at line 1493 of file `cson_amalgamation_core.c`.

4.182.2.2 refcount

```
cson_counter_t cson_value::refcount
```

We use this to allow us to store **cson_value** (p. 146) instances in multiple containers or multiple times within a single container (provided no cycles are introduced).

Notes about the rc implementation:

- The refcount is for the **cson_value** (p. 146) instance itself, not its value pointer.
- Instances start out with a refcount of 0 (not 1). Adding them to a container will increase the refcount. Cleaning up the container will decrement the count.
- `cson_value_free()` decrements the refcount (if it is not already 0) and cleans/frees the value only when the refcount is 0.
- Some places in the internals add an "extra" reference to objects to avoid a premature deletion. Don't try this at home.

Definition at line 1526 of file `cson_amalgamation_core.c`.

4.182.2.3 value

```
void* cson_value::value
```

The raw value.

Its interpretation depends on the value of the `api` member. Some value types require dynamically-allocated memory, so one must always call `cson_value_free()` to destroy a value when it is no longer needed. For stack-allocated values (which client could **SHOULD NOT USE** unless they are intimately familiar with the memory management rules and don't mind an occasional leak or crash), use `cson_value_clean()` instead of `cson_value_free()`.

Definition at line 1504 of file `cson_amalgamation_core.c`.

The documentation for this struct was generated from the following file:

- `src/SSR/cson/cson_amalgamation_core.c`

4.183 cson_value_api Struct Reference

This type holds the "vtbl" for type-specific operations when working with **cson_value** (p. 146) objects.

Data Fields

- `const cson_type_id typeId`
The logical JavaScript/JSON type associated with this object.
- `void(* cleanup)(cson_value *self)`
Must free any memory associated with self, but not free self.

4.183.1 Detailed Description

This type holds the "vtbl" for type-specific operations when working with `cson_value` (p. 146) objects.

All `cson_values` of a given logical type share a pointer to a single library-internal instance of this class.

Definition at line 1443 of file `cson_amalgamation_core.c`.

4.183.2 Field Documentation

4.183.2.1 `cleanup`

```
void(* cson_value_api::cleanup) ( cson_value *self)
```

Must free any memory associated with self, but not free self.

If self is NULL then this function must do nothing.

Definition at line 1455 of file `cson_amalgamation_core.c`.

The documentation for this struct was generated from the following file:

- `src/SSR/cson/cson_amalgamation_core.c`

4.184 `cson_value_list` Struct Reference

Data Fields

- `cson_value` ** **list**
- unsigned int **count**
- unsigned int **allocated**

4.184.1 Detailed Description

Definition at line 2132 of file `cson_amalgamation_core.c`.

The documentation for this struct was generated from the following file:

- `src/SSR/cson/cson_amalgamation_core.c`

4.185 curfile64_info Struct Reference

Data Fields

- z_stream **stream**
- int **stream_initialised**
- ulnt **pos_in_buffered_data**
- ZPOS64_T **pos_local_header**
- char * **central_header**
- uLong **size_centralExtra**
- uLong **size_centralheader**
- uLong **size_centralExtraFree**
- uLong **flag**
- int **method**
- int **raw**
- Byte **buffered_data** [Z_BUFSIZE]
- uLong **dosDate**
- uLong **crc32**
- int **encrypt**
- int **zip64**
- ZPOS64_T **pos_zip64extrainfo**
- ZPOS64_T **totalCompressedData**
- ZPOS64_T **totalUncompressedData**
- unsigned long **keys** [3]
- const unsigned long * **pcrc_32_tab**
- int **crypt_header_size**

4.185.1 Detailed Description

Definition at line 130 of file zip.c.

The documentation for this struct was generated from the following file:

- src/libminizip/zip.c

4.186 currayhit Struct Reference

Data Fields

- struct **X3D_Node** * **hitNode**
- GLDOUBLE **modelMatrix** [16]
- GLDOUBLE **projMatrix** [16]
- GLDOUBLE **justModel** [16]

4.186.1 Detailed Description

Definition at line 39 of file RenderFuncs.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/RenderFuncs.h

4.187 Curve Class Reference

Public Member Functions

- **Curve** (**Quilt** *, REAL, REAL, **Curve** *)
- **Curve** (**Curve** &, REAL, **Curve** *)

Data Fields

- **Curve** * **next**

Friends

- class **Curvelist**

4.187.1 Detailed Description

Definition at line 46 of file curve.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/curve.h
- src/libnurbs/internals/curve.cc

4.188 curveEvalMachine Struct Reference

Data Fields

- REAL **uprime**
- int **k**
- REAL **u1**
- REAL **u2**
- int **ustride**
- int **uorder**
- REAL **ctlpoints** [IN_MAX_BEZIER_ORDER *IN_MAX_DIMENSION]
- REAL **ucoeff** [IN_MAX_BEZIER_ORDER]

4.188.1 Detailed Description

Definition at line 56 of file glcurveval.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/interface/glcurveval.h

4.189 Curvelist Class Reference

Public Member Functions

- **Curvelist** (**Quilt** *, REAL, REAL)
- **Curvelist** (**Curvelist** &, REAL)
- int **cullCheck** (void)
- void **getstepsize** (void)
- int **needsSamplingSubdivision** ()

Friends

- class **Subdivider**

4.189.1 Detailed Description

Definition at line 46 of file curvelist.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/curvelist.h
- src/libnurbs/internals/curvelist.cc

4.190 damper_ptrs Struct Reference

Data Fields

- void * **value_changed**
- void * **initialDestination**
- void * **initialValue**
- void * **set_destination**
- void * **set_value**
- void * **_values**
- void * **_input**

4.190.1 Detailed Description

Definition at line 176 of file Component_Followers.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Followers.c

4.191 datChnk Struct Reference

Data Fields

- char **chunkID** [4]
- int32_t **chunkSize**

4.191.1 Detailed Description

Definition at line 65 of file soundheader.h.

The documentation for this struct was generated from the following file:

- src/sound/soundheader.h

4.192 dct_dc_size_entry Struct Reference

Data Fields

- unsigned int **value**
- int **num_bits**

4.192.1 Detailed Description

Definition at line 795 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.193 DDS_header Union Reference

Data Fields

-

```

struct {
    unsigned int dwMagic
    unsigned int dwSize
    unsigned int dwFlags
    unsigned int dwHeight
    unsigned int dwWidth
    unsigned int dwPitchOrLinearSize
    unsigned int dwDepth
    unsigned int dwMipMapCount
    unsigned int dwReserved1 [11]
    struct {
        unsigned int dwSize
        unsigned int dwFlags
        unsigned int dwFourCC
        unsigned int dwRGBBitCount
        unsigned int dwRBitMask
        unsigned int dwGBitMask
        unsigned int dwBBitMask
        unsigned int dwAlphaBitMask
    } sPixelFormat
    struct {
        unsigned int dwCaps1
        unsigned int dwCaps2
        unsigned int dwDD SX
        unsigned int dwReserved
    } sCaps
    unsigned int dwReserved2
};

```

- char **data** [128]

4.193.1 Detailed Description

Definition at line 474 of file Component_CubeMapTexturing.c.

The documentation for this union was generated from the following file:

- src/lib/scenegraph/Component_CubeMapTexturing.c

4.194 DdsLoadInfo Struct Reference

Data Fields

- bool **compressed**
- bool **swap**
- bool **palette**
- unsigned int **divSize**
- unsigned int **blockBytes**
- GLenum **internalFormat**
- GLenum **externalFormat**
- GLenum **type**

4.194.1 Detailed Description

Definition at line 513 of file Component_CubeMapTexturing.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_CubeMapTexturing.c

4.195 Dict Struct Reference

Data Fields

- **DictNode** head
- void * **frame**
- int(* **leq**)(void *frame, DictKey key1, DictKey key2)

4.195.1 Detailed Description

Definition at line 94 of file dict-list.h.

The documentation for this struct was generated from the following files:

- src/libtess/dict-list.h
- src/libtess/dict.h

4.196 DictNode Struct Reference

Data Fields

- DictKey **key**
- **DictNode** * **next**
- **DictNode** * **prev**

4.196.1 Detailed Description

Definition at line 88 of file dict-list.h.

The documentation for this struct was generated from the following files:

- src/libtess/dict-list.h
- src/libtess/dict.h

4.197 directedLine Class Reference

Public Member Functions

- **directedLine** (short dir, **sampledLine** *sl)
- void **init** (short dir, **sampledLine** *sl)
- Real * **head** ()
- Real * **tail** ()
- Real * **getVertex** (Int i)
- Int **get_npoints** ()
- **directedLine** * **getPrev** ()
- **directedLine** * **getNext** ()
- **directedLine** * **getNextPolygon** ()
- **sampledLine** * **getSampledLine** ()
- short **getDirection** ()
- void **putDirection** (short dir)
- void **putPrev** (**directedLine** *p)
- void **putNext** (**directedLine** *p)
- void **insert** (**directedLine** *nl)
- void **deletePolygonList** ()
- void **deleteSinglePolygon** ()
- void **deleteSinglePolygonWithSline** ()
- void **deletePolygonListWithSline** ()
- void **deleteSingleLine** (**directedLine** *dline)
- **directedLine** * **deleteDegenerateLines** ()
- **directedLine** * **deleteDegenerateLinesAllPolygons** ()
- **directedLine** * **cutIntersectionAllPoly** (int &cutOccur)
- short **isPolygon** ()
- Int **complnY** (**directedLine** *nl)
- Int **complnX** (**directedLine** *nl)
- **directedLine** ** **sortAllPolygons** ()
- Int **numEdges** ()
- Int **numEdgesAllPolygons** ()
- Int **numPolygons** ()
- short **isConnected** ()
- Real **polyArea** ()
- void **printSingle** ()
- void **printList** ()
- void **printAllPolygons** ()
- void **writeAllPolygons** (char *filename)
- **directedLine** * **insertPolygon** (**directedLine** *newpolygon)
- **directedLine** * **cutoffPolygon** (**directedLine** *p)
- Int **toArraySinglePolygon** (**directedLine** **array, Int index)
- **directedLine** ** **toArrayAllPolygons** (Int &total_num_edges)
- void **connectDiagonal** (**directedLine** *v1, **directedLine** *v2, **directedLine** **ret_p1, **directedLine** **ret_p2, **sampledLine** **generatedLine, **directedLine** *list)
- void **connectDiagonal_2slines** (**directedLine** *v1, **directedLine** *v2, **directedLine** **ret_p1, **directedLine** **ret_p2, **directedLine** *list)
- Int **samePolygon** (**directedLine** *v1, **directedLine** *v2)
- void **setRootBit** ()
- void **resetRootBit** ()
- **directedLine** * **findRoot** ()
- void **rootLinkSet** (**directedLine** *r)
- **directedLine** * **rootLinkFindRoot** ()
- **directedLine** * **deleteChain** (**directedLine** *begin, **directedLine** *end)

4.197.1 Detailed Description

Definition at line 41 of file directedLine.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/directedLine.h
- src/libnurbs/nurbtess/directedLine.cc

4.198 DisplayList Class Reference

Public Member Functions

- **DisplayList** (**NurbsTessellator** *)
- void **play** (void)
- void **append** (PFVS work, void *arg, PFVS cleanup)
- void **endList** (void)

4.198.1 Detailed Description

Definition at line 64 of file displaylist.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/displaylist.h
- src/libnurbs/internals/displaylist.cc

4.199 freeWRLSAI_cpp::disposedException Class Reference

Inheritance diagram for freeWRLSAI_cpp::disposedException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.199.1 Detailed Description

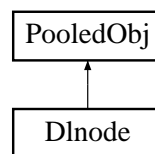
Definition at line 96 of file SAlexception.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAlexception.h

4.200 Dlnode Struct Reference

Inheritance diagram for Dlnode:



Public Member Functions

- **Dlnode** (PFVS, void *, PFVS)

Data Fields

- PFVS **work**
- void * **arg**
- PFVS **cleanup**
- **Dlnode** * **next**

4.200.1 Detailed Description

Definition at line 48 of file displaylist.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/displaylist.h

4.201 draw_call_params Struct Reference

Data Fields

- int **calltype**
- ```
union {
 struct arrays {
 int arrays_mode
 int arrays_count
 int arrays_first
 } arrays
 struct elements {
 int elements_mode
 int elements_count
 ushort * elements_indices
 } elements
};
```

#### 4.201.1 Detailed Description

Definition at line 71 of file RenderFuncs.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/RenderFuncs.c

## 4.202 duk\_\_bigint Struct Reference

### Data Fields

- duk\_small\_int\_t **n**
- duk\_uint32\_t **v** [DUK\_\_BI\_MAX\_PARTS]

#### 4.202.1 Detailed Description

Definition at line 79190 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.203 duk\_\_compile\_raw\_args Struct Reference

### Data Fields

- duk\_size\_t **src\_length**
- const duk\_uint8\_t \* **src\_buffer**
- duk\_uint\_t **flags**

#### 4.203.1 Detailed Description

Definition at line 14494 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

### 4.204 duk\_\_compiler\_stkstate Struct Reference

#### Data Fields

- duk\_small\_uint\_t **flags**
- duk\_compiler\_ctx comp\_ctx\_alloc
- duk\_lexer\_point lex\_pt\_alloc

#### 4.204.1 Detailed Description

Definition at line 60581 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

### 4.205 duk\_\_decode\_context Struct Reference

#### Data Fields

- duk\_codepoint\_t **codepoint**
- duk\_uint8\_t **upper**
- duk\_uint8\_t **lower**
- duk\_uint8\_t **needed**
- duk\_uint8\_t **bom\_handled**
- duk\_uint8\_t **fatal**
- duk\_uint8\_t **ignore\_bom**

#### 4.205.1 Detailed Description

Definition at line 29015 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.206 duk\_\_encode\_context Struct Reference

### Data Fields

- duk\_uint8\_t \* **out**
- duk\_codepoint\_t **lead**

#### 4.206.1 Detailed Description

Definition at line 29010 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.207 duk\_\_exp\_limits Struct Reference

### Data Fields

- duk\_int16\_t **upper**
- duk\_int16\_t **lower**

#### 4.207.1 Detailed Description

Definition at line 79149 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.208 duk\_\_id\_lookup\_result Struct Reference

### Data Fields

- duk\_hobject \* **holder**
- duk\_tval \* **value**
- duk\_int\_t **attrs**
- duk\_tval \* **this\_binding**
- duk\_hobject \* **env**

#### 4.208.1 Detailed Description

Definition at line 74954 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.209 duk\_\_numconv\_stringify\_ctx Struct Reference

### Data Fields

- **duk\_\_bigint f**
- **duk\_\_bigint r**
- **duk\_\_bigint s**
- **duk\_\_bigint mp**
- **duk\_\_bigint mm**
- **duk\_\_bigint t1**
- **duk\_\_bigint t2**
- **duk\_small\_int\_t is\_s2n**
- **duk\_small\_int\_t is\_fixed**
- **duk\_small\_int\_t req\_digits**
- **duk\_small\_int\_t abs\_pos**
- **duk\_small\_int\_t e**
- **duk\_small\_int\_t b**
- **duk\_small\_int\_t B**
- **duk\_small\_int\_t k**
- **duk\_small\_int\_t low\_ok**
- **duk\_small\_int\_t high\_ok**
- **duk\_small\_int\_t unequal\_gaps**
- **duk\_uint8\_t digits** [DUK\_\_MAX\_OUTPUT\_DIGITS]
- **duk\_small\_int\_t count**

### 4.209.1 Detailed Description

Definition at line 79745 of file duktape.c.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/duktape/duktape.c`

## 4.210 duk\_\_objlit\_state Struct Reference

### Data Fields

- **duk\_reg\_t reg\_obj**
- **duk\_reg\_t temp\_start**
- **duk\_small\_uint\_t num\_pairs**

### 4.210.1 Detailed Description

Definition at line 63417 of file duktape.c.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/duktape/duktape.c`



## 4.211 duk\_pcall\_prop\_args Struct Reference

### Data Fields

- duk\_idx\_t **obj\_idx**
- duk\_idx\_t **nargs**

#### 4.211.1 Detailed Description

Definition at line 13387 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.212 duk\_re\_disjunction\_info Struct Reference

### Data Fields

- duk\_int32\_t **charlen**

#### 4.212.1 Detailed Description

Definition at line 81422 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.213 duk\_transform\_context Struct Reference

### Data Fields

- duk\_hthread \* **thr**
- duk\_hstring \* **h\_str**
- duk\_bufwriter\_ctx **bw**
- const duk\_uint8\_t \* **p**
- const duk\_uint8\_t \* **p\_start**
- const duk\_uint8\_t \* **p\_end**

#### 4.213.1 Detailed Description

Definition at line 30433 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.214 duk\_activation Struct Reference

### Data Fields

- **duk\_tval** **tv\_func**
- **duk\_hobject** \* **func**
- **duk\_hobject** \* **var\_env**
- **duk\_hobject** \* **lex\_env**
- **duk\_instr\_t** \* **curr\_pc**
- **duk\_small\_uint\_t** **flags**
- **duk\_size\_t** **idx\_bottom**
- **duk\_size\_t** **idx\_retval**

### 4.214.1 Detailed Description

Definition at line 6854 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.215 duk\_bitdecoder\_ctx Struct Reference

### Data Fields

- const **duk\_uint8\_t** \* **data**
- **duk\_size\_t** **offset**
- **duk\_size\_t** **length**
- **duk\_uint32\_t** **currval**
- **duk\_small\_int\_t** **currbits**

### 4.215.1 Detailed Description

Definition at line 1856 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.216 duk\_bitencoder\_ctx Struct Reference

### Data Fields

- **duk\_uint8\_t** \* **data**
- **duk\_size\_t** **offset**
- **duk\_size\_t** **length**
- **duk\_uint32\_t** **currval**
- **duk\_small\_int\_t** **currbits**
- **duk\_small\_int\_t** **truncated**

#### 4.216.1 Detailed Description

Definition at line 1870 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

### 4.217 duk\_breakpoint Struct Reference

#### Data Fields

- **duk\_hstring \* filename**
- **duk\_uint32\_t line**

#### 4.217.1 Detailed Description

Definition at line 7685 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

### 4.218 duk\_bufwriter\_ctx Struct Reference

#### Data Fields

- **duk\_uint8\_t \* p**
- **duk\_uint8\_t \* p\_base**
- **duk\_uint8\_t \* p\_limit**
- **duk\_hbuffer\_dynamic \* buf**

#### 4.218.1 Detailed Description

Definition at line 1941 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.219 duk\_catcher Struct Reference

### Data Fields

- **duk\_hstring** \* **h\_varname**
- **duk\_instr\_t** \* **pc\_base**
- **duk\_size\_t** **callstack\_index**
- **duk\_size\_t** **idx\_base**
- **duk\_uint32\_t** **flags**

### 4.219.1 Detailed Description

Definition at line 6906 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.220 duk\_compiler\_ctx Struct Reference

### Data Fields

- **duk\_hthread** \* **thr**
- **duk\_hstring** \* **h\_filename**
- **duk\_lexer\_ctx** **lex**
- **duk\_token** **prev\_token**
- **duk\_token** **curr\_token**
- **duk\_idx\_t** **tok11\_idx**
- **duk\_idx\_t** **tok12\_idx**
- **duk\_idx\_t** **tok21\_idx**
- **duk\_idx\_t** **tok22\_idx**
- **duk\_int\_t** **recursion\_depth**
- **duk\_int\_t** **recursion\_limit**
- **duk\_int\_t** **emit\_jumpslot\_pc**
- **duk\_compiler\_func** **curr\_func**

### 4.220.1 Detailed Description

Definition at line 3635 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.221 duk\_compiler\_func Struct Reference

### Data Fields

- **duk\_bufwriter\_ctx** bw\_code
- **duk\_hstring** \* h\_name
- **duk\_hobject** \* h\_consts
- **duk\_hobject** \* h\_funcs
- **duk\_hobject** \* h\_decls
- **duk\_hobject** \* h\_labelnames
- **duk\_hbuffer\_dynamic** \* h\_labelinfos
- **duk\_hobject** \* h\_argnames
- **duk\_hobject** \* h\_varmap
- **duk\_idx\_t** consts\_idx
- **duk\_idx\_t** funcs\_idx
- **duk\_idx\_t** decls\_idx
- **duk\_idx\_t** labelnames\_idx
- **duk\_idx\_t** labelinfos\_idx
- **duk\_idx\_t** argnames\_idx
- **duk\_idx\_t** varmap\_idx
- **duk\_reg\_t** temp\_first
- **duk\_reg\_t** temp\_next
- **duk\_reg\_t** temp\_max
- **duk\_reg\_t** shuffle1
- **duk\_reg\_t** shuffle2
- **duk\_reg\_t** shuffle3
- **duk\_int\_t** nud\_count
- **duk\_int\_t** led\_count
- **duk\_int\_t** paren\_level
- **duk\_bool\_t** expr\_lhs
- **duk\_bool\_t** allow\_in
- **duk\_int\_t** stmt\_next
- **duk\_int\_t** label\_next
- **duk\_int\_t** catch\_depth
- **duk\_int\_t** with\_depth
- **duk\_int\_t** fnum\_next
- **duk\_int\_t** num\_formals
- **duk\_reg\_t** reg\_stmt\_value
- **duk\_uint8\_t** is\_function
- **duk\_uint8\_t** is\_eval
- **duk\_uint8\_t** is\_global
- **duk\_uint8\_t** is\_namebinding
- **duk\_uint8\_t** is\_constructable
- **duk\_uint8\_t** is\_setget
- **duk\_uint8\_t** is\_strict
- **duk\_uint8\_t** is\_notail
- **duk\_uint8\_t** in\_directive\_prologue
- **duk\_uint8\_t** in\_scanning
- **duk\_uint8\_t** may\_direct\_eval
- **duk\_uint8\_t** id\_access\_arguments
- **duk\_uint8\_t** id\_access\_slow
- **duk\_uint8\_t** id\_access\_slow\_own
- **duk\_uint8\_t** is\_arguments\_shadowed
- **duk\_uint8\_t** needs\_shuffle
- **duk\_uint8\_t** reject\_regexp\_in\_adv

#### 4.221.1 Detailed Description

Definition at line 3552 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

### 4.222 duk\_compiler\_instr Struct Reference

#### Data Fields

- duk\_instr\_t **ins**
- duk\_uint32\_t **line**

#### 4.222.1 Detailed Description

Definition at line 3516 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

### 4.223 duk\_double\_union Union Reference

#### Data Fields

- double **d**
- float **f** [2]
- duk\_uint32\_t **ui** [2]
- duk\_uint16\_t **us** [4]
- duk\_uint8\_t **uc** [8]
- void \* **vp** [2]

#### 4.223.1 Detailed Description

Definition at line 1294 of file duktape.h.

The documentation for this union was generated from the following file:

- src/lib/world\_script/duktape/duktape.h

## 4.224 duk\_function\_list\_entry Struct Reference

### Data Fields

- const char \* **key**
- duk\_c\_function **value**
- duk\_idx\_t **nargs**

### 4.224.1 Detailed Description

Definition at line 224 of file duktape.h.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.h

## 4.225 duk\_harray Struct Reference

### Data Fields

- duk\_hobject **obj**
- duk\_uint32\_t **length**
- duk\_bool\_t **length\_nonwritable**

### 4.225.1 Detailed Description

Definition at line 7065 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.226 duk\_hbuffer Struct Reference

### Data Fields

- duk\_heap\_hdr **hdr**
- duk\_size\_t **size**

### 4.226.1 Detailed Description

Definition at line 7263 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.227 duk\_hbuffer\_dynamic Struct Reference

### Data Fields

- **duk\_heaphdr** **hdr**
- **duk\_size\_t** **size**
- **void \*** **curr\_alloc**

### 4.227.1 Detailed Description

Definition at line 7363 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.228 duk\_hbuffer\_external Struct Reference

### Data Fields

- **duk\_heaphdr** **hdr**
- **duk\_size\_t** **size**
- **void \*** **curr\_alloc**

### 4.228.1 Detailed Description

Definition at line 7392 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/duktape/duktape.c

## 4.229 duk\_hbuffer\_fixed Struct Reference

### Data Fields

- ```
union {
    struct {
        duk_heaphdr hdr
        duk_size_t size
    } s
    duk_double_t dummy_for_align8
} u
```


4.229.1 Detailed Description

Definition at line 7309 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.230 duk_hbufobj Struct Reference

Data Fields

- **duk_hobject** obj
- **duk_hbuffer** * buf
- **duk_hobject** * buf_prop
- **duk_uint_t** offset
- **duk_uint_t** length
- **duk_uint8_t** shift
- **duk_uint8_t** elem_type
- **duk_uint8_t** is_typedarray

4.230.1 Detailed Description

Definition at line 6598 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.231 duk_hcompfunc Struct Reference

Data Fields

- **duk_hobject** obj
- **duk_hbuffer** * data
- **duk_hobject** ** funcs
- **duk_instr_t** * bytecode
- **duk_hobject** * lex_env
- **duk_hobject** * var_env
- **duk_uint16_t** nregs
- **duk_uint16_t** nargs

4.231.1 Detailed Description

Definition at line 6336 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.232 duk_heap Struct Reference

Data Fields

- duk_small_uint_t **flags**
- duk_alloc_function **alloc_func**
- duk_realloc_function **realloc_func**
- duk_free_function **free_func**
- void * **heap_udata**
- duk_fatal_function **fatal_func**
- duk_heaphdr * **heap_allocated**
- duk_heaphdr * **refzero_list**
- duk_heaphdr * **refzero_list_tail**
- duk_int_t **mark_and_sweep_trigger_counter**
- duk_int_t **mark_and_sweep_recursion_depth**
- duk_small_uint_t **mark_and_sweep_base_flags**
- duk_heaphdr * **finalize_list**
- duk_ljstate lj
- duk_bool_t **handling_error**
- duk_hthread * **heap_thread**
- duk_hthread * **curr_thread**
- duk_hobject * **heap_object**
- duk_int_t **call_recursion_depth**
- duk_int_t **call_recursion_limit**
- duk_uint32_t **hash_seed**
- duk_uint32_t **rnd_state**
- duk_uint32_t **sym_counter** [2]
- duk_hstring ** **strtable**
- duk_uint32_t **st_size**
- duk_uint32_t **st_used**
- duk_strcache **strcache** [DUK_HEAP_STRCACHE_SIZE]
- duk_hstring * **strs** [DUK_HEAP_NUM_STRINGS]

4.232.1 Detailed Description

Definition at line 7766 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.233 duk_heaphdr Struct Reference

Data Fields

- duk_uint32_t **h_flags**
- duk_size_t **h_refcount**
- duk_heaphdr * **h_next**
- duk_heaphdr * **h_prev**

4.233.1 Detailed Description

Definition at line 3787 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.234 duk_heaphdr_string Struct Reference

Data Fields

- duk_uint32_t **h_flags**
- duk_size_t **h_refcount**

4.234.1 Detailed Description

Definition at line 3826 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.235 duk_hnatfunc Struct Reference

Data Fields

- duk_hobject **obj**
- duk_c_function **func**
- duk_int16_t **nargs**
- duk_int16_t **magic**

4.235.1 Detailed Description

Definition at line 6476 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.236 duk_hobject Struct Reference

Data Fields

- **duk_heaphdr** **hdr**
- duk_uint8_t * **props**
- **duk_hobject** * **prototype**
- duk_uint32_t **e_size**
- duk_uint32_t **e_next**
- duk_uint32_t **a_size**
- duk_uint32_t **h_size**

4.236.1 Detailed Description

Definition at line 5971 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.237 duk_hstring Struct Reference

Data Fields

- **duk_heaphdr_string** **hdr**
- duk_uint32_t **hash**
- duk_uarridx_t **arridx**
- duk_uint32_t **blen**
- duk_uint32_t **clen**

4.237.1 Detailed Description

Definition at line 5165 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.238 duk_hstring_external Struct Reference

Data Fields

- **duk_hstring** **str**
- const duk_uint8_t * **extdata**

4.238.1 Detailed Description

Definition at line 5216 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.239 duk_hthread Struct Reference

Data Fields

- **duk_hobject** obj
- duk_instr_t ** ptr_curr_pc
- **duk_heap** * heap
- duk_uint8_t strict
- duk_uint8_t state
- duk_uint8_t unused1
- duk_uint8_t unused2
- duk_size_t valstack_max
- duk_size_t callstack_max
- duk_size_t catchstack_max
- **duk_tval** * valstack
- **duk_tval** * valstack_end
- **duk_tval** * valstack_bottom
- **duk_tval** * valstack_top
- duk_size_t valstack_size
- **duk_activation** * callstack
- duk_size_t callstack_size
- duk_size_t callstack_top
- duk_size_t callstack_preventcount
- **duk_catcher** * catchstack
- duk_size_t catchstack_size
- duk_size_t catchstack_top
- **duk_hthread** * resumer
- **duk_compiler_ctx** * compile_ctx
- **duk_hobject** * builtins [DUK_NUM_BUILTINS]
- **duk_hstring** ** strs

4.239.1 Detailed Description

Definition at line 6915 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.240 duk_internal_thread_state Struct Reference

Data Fields

- **duk_ljstate** lj
- duk_bool_t **handling_error**
- **duk_hthread** * curr_thread
- duk_int_t **call_recursion_depth**

4.240.1 Detailed Description

Definition at line 14949 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.241 duk_ispec Struct Reference

Data Fields

- duk_small_uint_t t
- duk_regconst_t **regconst**
- duk_idx_t **valstack_idx**

4.241.1 Detailed Description

Definition at line 3489 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.242 duk_ivalue Struct Reference

Data Fields

- duk_small_uint_t t
- duk_small_uint_t **op**
- **duk_ispec** x1
- **duk_ispec** x2

4.242.1 Detailed Description

Definition at line 3495 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.243 duk_jmpbuf Struct Reference

Data Fields

- **DUK_JMPBUF_TYPE** **jb**

4.243.1 Detailed Description

Definition at line 229 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.244 duk_json_dec_ctx Struct Reference

Data Fields

- **duk_hthread** * **thr**
- const duk_uint8_t * **p**
- const duk_uint8_t * **p_start**
- const duk_uint8_t * **p_end**
- duk_idx_t **idx_reviver**
- duk_small_uint_t **flags**
- duk_small_uint_t **flag_ext_custom**
- duk_small_uint_t **flag_ext_compatible**
- duk_small_uint_t **flag_ext_custom_or_compatible**
- duk_int_t **recursion_depth**
- duk_int_t **recursion_limit**

4.244.1 Detailed Description

Definition at line 9175 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.245 duk_json_enc_ctx Struct Reference

Data Fields

- **duk_hthread** * thr
- **duk_bufwriter_ctx** bw
- **duk_hobject** * h_replacer
- **duk_hstring** * h_gap
- **duk_idx_t** idx_proplist
- **duk_idx_t** idx_loop
- **duk_small_uint_t** flags
- **duk_small_uint_t** flag_ascii_only
- **duk_small_uint_t** flag_avoid_key_quotes
- **duk_small_uint_t** flag_ext_custom
- **duk_small_uint_t** flag_ext_compatible
- **duk_small_uint_t** flag_ext_custom_or_compatible
- **duk_int_t** recursion_depth
- **duk_int_t** recursion_limit
- **duk_uint_t** mask_for_undefined
- **duk_small_uint_t** stridx_custom_undefined
- **duk_small_uint_t** stridx_custom_nan
- **duk_small_uint_t** stridx_custom_neginf
- **duk_small_uint_t** stridx_custom_posinf
- **duk_small_uint_t** stridx_custom_function
- **duk_hobject** * visiting [DUK_JSON_ENC_LOOPARRAY]

4.245.1 Detailed Description

Definition at line 9147 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.246 duk_labelinfo Struct Reference

Data Fields

- **duk_small_uint_t** flags
- **duk_int_t** label_id
- **duk_hstring** * h_label
- **duk_int_t** catch_depth
- **duk_int_t** pc_label

4.246.1 Detailed Description

Definition at line 3534 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.247 duk_lexer_codepoint Struct Reference

Data Fields

- duk_codepoint_t **codepoint**
- duk_size_t **offset**
- duk_int_t **line**

4.247.1 Detailed Description

Definition at line 3390 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.248 duk_lexer_ctx Struct Reference

Data Fields

- duk_lexer_codepoint * **window**
- duk_lexer_codepoint **buffer** [DUK_LEXER_BUFFER_SIZE]
- duk_hthread * **thr**
- const duk_uint8_t * **input**
- duk_size_t **input_length**
- duk_size_t **input_offset**
- duk_int_t **input_line**
- duk_idx_t **slot1_idx**
- duk_idx_t **slot2_idx**
- duk_idx_t **buf_idx**
- duk_hbuffer_dynamic * **buf**
- duk_bufwriter_ctx **bw**
- duk_int_t **token_count**
- duk_int_t **token_limit**

4.248.1 Detailed Description

Definition at line 3397 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.249 duk_lexer_point Struct Reference

Data Fields

- duk_size_t **offset**
- duk_int_t **line**

4.249.1 Detailed Description

Definition at line 3384 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.250 duk_ljstate Struct Reference

Data Fields

- **duk_jmpbuf * jmpbuf_ptr**
- **duk_small_uint_t type**
- **duk_bool_t iserror**
- **duk_tval value1**
- **duk_tval value2**

4.250.1 Detailed Description

Definition at line 7731 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.251 duk_memory_functions Struct Reference

Data Fields

- **duk_alloc_function alloc_func**
- **duk_realloc_function realloc_func**
- **duk_free_function free_func**
- **void * udata**

4.251.1 Detailed Description

Definition at line 217 of file duktape.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.h

4.252 duk_number_list_entry Struct Reference

Data Fields

- const char * **key**
- duk_double_t **value**

4.252.1 Detailed Description

Definition at line 230 of file duktape.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.h

4.253 duk_propaccessor Struct Reference

Data Fields

- duk_hobject * **get**
- duk_hobject * **set**

4.253.1 Detailed Description

Definition at line 5945 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.254 duk_propdesc Struct Reference

Data Fields

- duk_small_int_t **flags**
- duk_hobject * **get**
- duk_hobject * **set**
- duk_int_t **e_idx**
- duk_int_t **h_idx**
- duk_int_t **a_idx**

4.254.1 Detailed Description

Definition at line 5959 of file duktape.c.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/duktape/duktape.c`

4.255 duk_propvalue Union Reference

Data Fields

- **duk_tval** *v*
- **duk_propaccessor** *a*

4.255.1 Detailed Description

Definition at line 5950 of file duktape.c.

The documentation for this union was generated from the following file:

- `src/lib/world_script/duktape/duktape.c`

4.256 duk_re_compiler_ctx Struct Reference

Data Fields

- **duk_hthread** * *thr*
- **duk_uint32_t** *re_flags*
- **duk_lexer_ctx** *lex*
- **duk_re_token** *curr_token*
- **duk_bufwriter_ctx** *bw*
- **duk_uint32_t** *captures*
- **duk_uint32_t** *highest_backref*
- **duk_uint32_t** *recursion_depth*
- **duk_uint32_t** *recursion_limit*
- **duk_uint32_t** *nranges*

4.256.1 Detailed Description

Definition at line 3733 of file duktape.c.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/duktape/duktape.c`

4.257 duk_re_matcher_ctx Struct Reference

Data Fields

- **duk_hthread** * **thr**
- duk_uint32_t **re_flags**
- const duk_uint8_t * **input**
- const duk_uint8_t * **input_end**
- const duk_uint8_t * **bytecode**
- const duk_uint8_t * **bytecode_end**
- const duk_uint8_t ** **saved**
- duk_uint32_t **nsaved**
- duk_uint32_t **recursion_depth**
- duk_uint32_t **recursion_limit**
- duk_uint32_t **steps_count**
- duk_uint32_t **steps_limit**

4.257.1 Detailed Description

Definition at line 3717 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.258 duk_re_token Struct Reference

Data Fields

- duk_small_int_t **t**
- duk_small_int_t **greedy**
- duk_uint_fast32_t **num**
- duk_uint_fast32_t **qmin**
- duk_uint_fast32_t **qmax**

4.258.1 Detailed Description

Definition at line 3375 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.259 duk_strcache Struct Reference

Data Fields

- **duk_hstring * h**
- **duk_uint32_t bidx**
- **duk_uint32_t cidx**

4.259.1 Detailed Description

Definition at line 7720 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.260 duk_strtab_entry Struct Reference

Data Fields

- **duk_size_t listlen**
- union {
 duk_hstring ** strlist
 duk_hstring * str
} **u**

4.260.1 Detailed Description

Definition at line 7743 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.261 duk_thread_state Struct Reference

Data Fields

- char **data** [128]

4.261.1 Detailed Description

Definition at line 209 of file duktape.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.h

4.262 duk_time_components Struct Reference

Data Fields

- duk_double_t **year**
- duk_double_t **month**
- duk_double_t **day**
- duk_double_t **hours**
- duk_double_t **minutes**
- duk_double_t **seconds**
- duk_double_t **milliseconds**
- duk_double_t **weekday**

4.262.1 Detailed Description

Definition at line 235 of file duktape.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.h

4.263 duk_token Struct Reference

Data Fields

- duk_small_int_t **t**
- duk_small_int_t **t_nores**
- duk_double_t **num**
- duk_hstring * **str1**
- duk_hstring * **str2**
- duk_size_t **start_offset**
- duk_int_t **start_line**
- duk_int_t **num_escapes**
- duk_bool_t **lineterm**
- duk_bool_t **allow_auto_semi**

4.263.1 Detailed Description

Definition at line 3359 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.264 duk_tval_unused Struct Reference

Data Fields

- duk_uint16_t **a**
- duk_uint16_t **b**
- duk_uint16_t **c**
- duk_uint16_t **d**

4.264.1 Detailed Description

Definition at line 415 of file duktape.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/duktape/duktape.c

4.265 EAI_ListenerStruct Struct Reference

Data Fields

- int **FreeWRL_RegisterNumber**
- int **type**
- int **datasize**
- void * **dataArea**
- void * **arg**
- void(* **functionHandler**)(**X3DNode** *, double, void *arg)

4.265.1 Detailed Description

Definition at line 11 of file EAI_C_Advise.c.

The documentation for this struct was generated from the following file:

- src/libeai/EAI_C_Advise.c

4.266 vrml.external.FreeWRLEAI.EAIAsyncMessage Class Reference

Data Fields

- String **value**
- int **EventNumber**
- **EAIAsyncMessage** prev
- **EAIAsyncMessage** next

4.266.1 Detailed Description

Definition at line 20 of file EAIAsyncMessage.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/EAIAsyncMessage.java

4.267 sai.eai.EAIAsyncMessage Class Reference

Data Fields

- String **value**
- int **EventNumber**
- **EAIAsyncMessage** prev
- **EAIAsyncMessage** next

4.267.1 Detailed Description

Definition at line 20 of file EAIAsyncMessage.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/EAIAsyncMessage.java

4.268 vrml.external.FreeWRLEAI.EAIAsyncQueue Class Reference

Public Member Functions

- synchronized void **enqueue** (**EAIAsyncMessage** msg)
- synchronized **EAIAsyncMessage** **dequeue** ()
- boolean **isEmpty** ()

4.268.1 Detailed Description

Definition at line 20 of file `EAIAsyncQueue.java`.

The documentation for this class was generated from the following file:

- `src/java/vrml/external/FreeWRLEAI/EAIAsyncQueue.java`

4.269 `sai.eai.EAIAsyncQueue` Class Reference

Public Member Functions

- synchronized void **enqueue** (`EAIAsyncMessage` msg)
- synchronized `EAIAsyncMessage` **dequeue** ()
- boolean **isEmpty** ()

4.269.1 Detailed Description

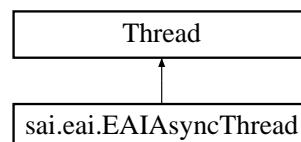
Definition at line 20 of file `EAIAsyncQueue.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/eai/EAIAsyncQueue.java`

4.270 `sai.eai.EAIAsyncThread` Class Reference

Inheritance diagram for `sai.eai.EAIAsyncThread`:



Public Member Functions

- void **run** ()
- synchronized void **send** (String eaistring, int indx)
- synchronized void **stopThread** ()

4.270.1 Detailed Description

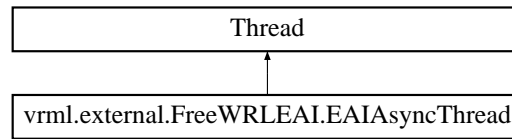
Definition at line 36 of file `EAIAsyncThread.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/eai/EAIAsyncThread.java`

4.271 vrml.external.FreeWRLEAI.EAIAsyncThread Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.EAIAsyncThread:



Public Member Functions

- void **run** ()
- synchronized void **send** (String eaistring, int indx)
- synchronized void **stopThread** ()

4.271.1 Detailed Description

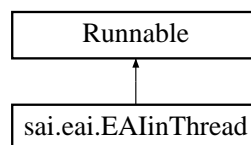
Definition at line 34 of file `EAIAsyncThread.java`.

The documentation for this class was generated from the following file:

- `src/java/vrml/external/FreeWRLEAI/EAIAsyncThread.java`

4.272 sai.eai.EAlinThread Class Reference

Inheritance diagram for sai.eai.EAlinThread:



Public Member Functions

- **EAlinThread** (Socket s, Applet d, PrintWriter pwtoBrowserjava, **BrowserInterface** me)
- void **run** ()

4.272.1 Detailed Description

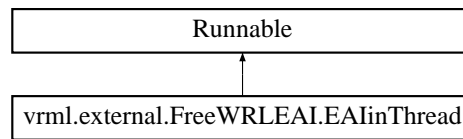
Definition at line 12 of file `EAlinThread.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/eai/EAlinThread.java`

4.273 vrml.external.FreeWRLEAI.EAInThread Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.EAInThread:



Public Member Functions

- **EAInThread** (Socket s, Applet d, PrintWriter pwtoBrowserjava, **Browser** me)
- void **run** ()

4.273.1 Detailed Description

Definition at line 13 of file EAInThread.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/EAInThread.java

4.274 sai.eai.EAImessage Class Reference

Public Member Functions

- **EAImessage** (String thismsg)

Data Fields

- String **mmm**
- **EAImessage** prev
- **EAImessage** next

4.274.1 Detailed Description

Definition at line 20 of file EAImessage.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/EAImessage.java

4.275 vrml.external.FreeWRLEAI.EAIMessage Class Reference

Public Member Functions

- **EAIMessage** (String thismsg)

Data Fields

- String **mmm**
- **EAIMessage** prev
- **EAIMessage** next

4.275.1 Detailed Description

Definition at line 20 of file EAIMessage.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/EAIMessage.java

4.276 EAINodeIndexStruct Struct Reference

Data Fields

- struct **X3D_Node** * **actualNodePtr**
- int **nodeType**
- struct **Vector** * **nodeParams**

4.276.1 Detailed Description

Definition at line 141 of file EAIHelpers.c.

The documentation for this struct was generated from the following file:

- src/lib/input/EAIHelpers.c

4.277 EAINodeParams Struct Reference

Data Fields

- struct **X3D_Node** * **thisFieldNodePointer**
- int **fieldOffset**
- int **datalen**
- int **typeString**
- int **scripttype**
- char * **invokedPROTOValue**

4.277.1 Detailed Description

Definition at line 132 of file EAIHelpers.c.

The documentation for this struct was generated from the following file:

- src/lib/input/EAIHelpers.c

4.278 sai.eai.EAloutQueue Class Reference

Public Member Functions

- synchronized void **enqueue** (**EAIMessage** msg)
- synchronized **EAIMessage dequeue** ()
- boolean **isEmpty** ()

4.278.1 Detailed Description

Definition at line 21 of file EAloutQueue.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/EAloutQueue.java

4.279 vrml.external.FreeWRLEAI.EAloutQueue Class Reference

Public Member Functions

- synchronized void **enqueue** (**EAIMessage** msg)
- synchronized **EAIMessage dequeue** ()
- boolean **isEmpty** ()

4.279.1 Detailed Description

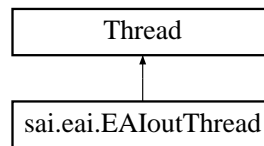
Definition at line 21 of file EAloutQueue.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/EAloutQueue.java

4.280 sai.eai.EAloutThread Class Reference

Inheritance diagram for sai.eai.EAloutThread:



Public Member Functions

- **EAloutThread** (PrintWriter output)
- void **run** ()
- synchronized void **send** (String eaistring)
- synchronized void **stopThread** ()

4.280.1 Detailed Description

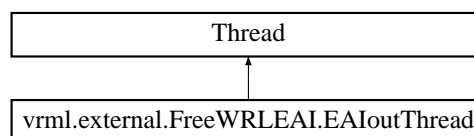
Definition at line 33 of file EAloutThread.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/EAloutThread.java

4.281 vrml.external.FreeWRLEAI.EAloutThread Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.EAloutThread:



Public Member Functions

- **EAloutThread** (PrintWriter output)
- void **run** ()
- synchronized void **send** (String eaistring)
- synchronized void **stopThread** ()

4.281.1 Detailed Description

Definition at line 33 of file EAloutThread.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/EAloutThread.java

4.282 ECMAValueStruct Struct Reference

Data Fields

- jsval **JS_address**
- JSContext * **context**
- int **valueChanged**
- char * **name**

4.282.1 Detailed Description

Definition at line 68 of file jsVRMLClasses.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsVRMLClasses.c

4.283 EdgePair Struct Reference

Data Fields

- GLUhalfEdge **e**
- GLUhalfEdge **eSym**

4.283.1 Detailed Description

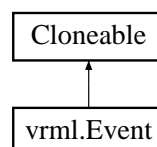
Definition at line 59 of file mesh.c.

The documentation for this struct was generated from the following files:

- src/libtess/mesh.c
- src/libtess/tess.c

4.284 vrml.Event Class Reference

Inheritance diagram for vrml.Event:



Public Member Functions

- **Event** (String name2, double timestamp2, **ConstField** value2)
- String **getName** ()
- double **getTimeStamp** ()
- **ConstField** **getValue** ()
- Object **clone** ()
- String **toString** ()

4.284.1 Detailed Description

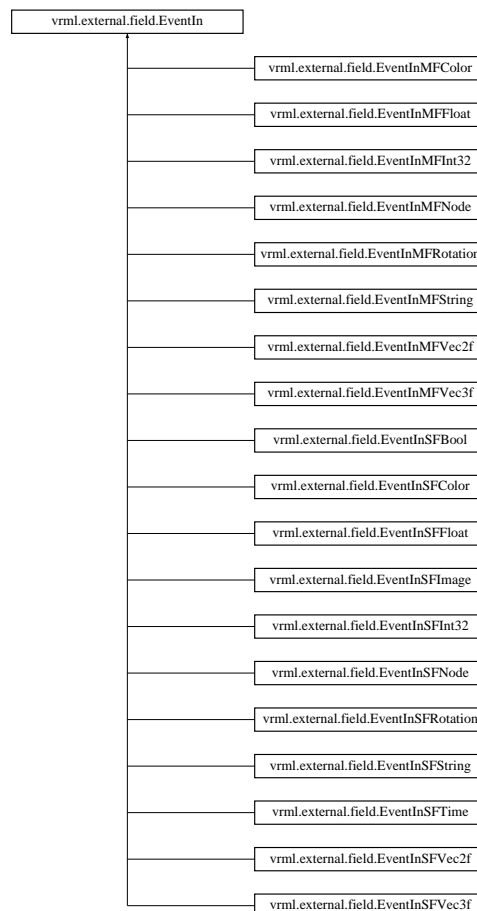
Definition at line 4 of file Event.java.

The documentation for this class was generated from the following file:

- src/java/vrml/Event.java

4.285 vrml.external.field.EventIn Class Reference

Inheritance diagram for vrml.external.field.EventIn:



Public Member Functions

- int **getIntType** ()
- int **getType** ()

Data Fields

- String **command**
- String **inNode**
- int **datasize** = 0
- int **nodeptr** = 0
- int **offset** = 0
- int **ScriptType** = 0
- String **datatype**

4.285.1 Detailed Description

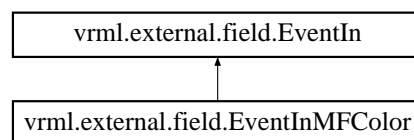
Definition at line 5 of file EventIn.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventIn.java

4.286 vrml.external.field.EventInMFColor Class Reference

Inheritance diagram for vrml.external.field.EventInMFColor:



Public Member Functions

- void **setValue** (float[][] value) throws IllegalArgumentException
- void **set1Value** (int index, float[] value) throws IllegalArgumentException

Additional Inherited Members

4.286.1 Detailed Description

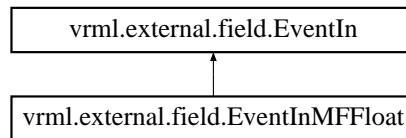
Definition at line 6 of file EventInMFColor.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInMFColor.java

4.287 vrml.external.field.EventInMFFloat Class Reference

Inheritance diagram for vrml.external.field.EventInMFFloat:



Public Member Functions

- void **setValue** (float[] value) throws IllegalArgumentException
- void **set1Value** (int index, float value) throws IllegalArgumentException

Additional Inherited Members

4.287.1 Detailed Description

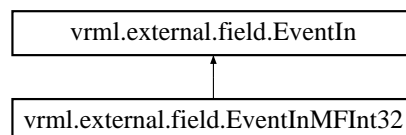
Definition at line 6 of file EventInMFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInMFFloat.java

4.288 vrml.external.field.EventInMFInt32 Class Reference

Inheritance diagram for vrml.external.field.EventInMFInt32:



Public Member Functions

- void **setValue** (int value[]) throws IllegalArgumentException
- void **set1Value** (int index, int value) throws IllegalArgumentException

Additional Inherited Members

4.288.1 Detailed Description

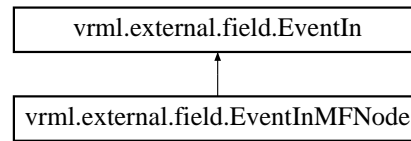
Definition at line 6 of file EventInMFInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInMFInt32.java

4.289 vrml.external.field.EventInMFNode Class Reference

Inheritance diagram for vrml.external.field.EventInMFNode:



Public Member Functions

- void **setValue** (**Node**[] node) throws `IllegalArgumentException`
- void **set1Value** (int index, **Node** node) throws `IllegalArgumentException`

Additional Inherited Members

4.289.1 Detailed Description

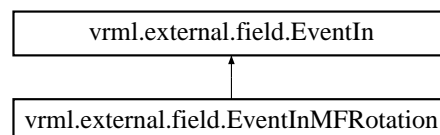
Definition at line 6 of file `EventInMFNode.java`.

The documentation for this class was generated from the following file:

- `src/java/vrml/external/field/EventInMFNode.java`

4.290 vrml.external.field.EventInMFRotation Class Reference

Inheritance diagram for vrml.external.field.EventInMFRotation:



Public Member Functions

- void **setValue** (float[] [] value) throws `IllegalArgumentException`
- void **set1Value** (int index, float[] value) throws `IllegalArgumentException`

Additional Inherited Members

4.290.1 Detailed Description

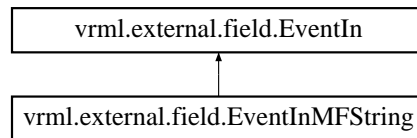
Definition at line 6 of file `EventInMFRotation.java`.

The documentation for this class was generated from the following file:

- `src/java/vrml/external/field/EventInMFRotation.java`

4.291 vrml.external.field.EventInMFString Class Reference

Inheritance diagram for vrml.external.field.EventInMFString:



Public Member Functions

- void **setValue** (String[] value) throws IllegalArgumentException
- void **set1Value** (int index, String value) throws IllegalArgumentException

Additional Inherited Members

4.291.1 Detailed Description

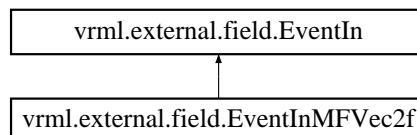
Definition at line 5 of file EventInMFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInMFString.java

4.292 vrml.external.field.EventInMFVec2f Class Reference

Inheritance diagram for vrml.external.field.EventInMFVec2f:



Public Member Functions

- void **setValue** (float[][] value) throws IllegalArgumentException
- void **set1Value** (int index, float value[]) throws IllegalArgumentException

Additional Inherited Members

4.292.1 Detailed Description

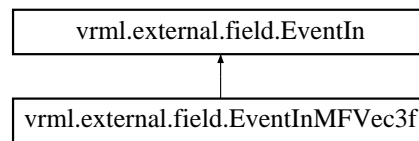
Definition at line 6 of file EventInMFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInMFVec2f.java

4.293 vrml.external.field.EventInMFVec3f Class Reference

Inheritance diagram for vrml.external.field.EventInMFVec3f:



Public Member Functions

- void **setValue** (float[][] value) throws IllegalArgumentException
- void **set1Value** (int index, float[] value) throws IllegalArgumentException

Additional Inherited Members

4.293.1 Detailed Description

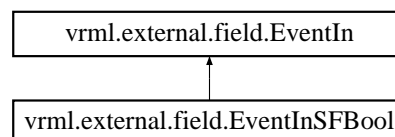
Definition at line 6 of file EventInMFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInMFVec3f.java

4.294 vrml.external.field.EventInSFBool Class Reference

Inheritance diagram for vrml.external.field.EventInSFBool:



Public Member Functions

- void **setValue** (boolean value)

Additional Inherited Members

4.294.1 Detailed Description

Definition at line 5 of file EventInSFBool.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFBool.java

4.295 vrml.external.field.EventInSFCOLOR Class Reference

Inheritance diagram for vrml.external.field.EventInSFCOLOR:



Public Member Functions

- void **setValue** (float[] value) throws IllegalArgumentException

Additional Inherited Members

4.295.1 Detailed Description

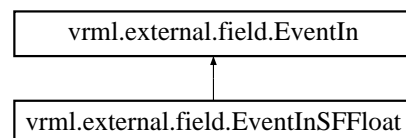
Definition at line 5 of file EventInSFCOLOR.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFCOLOR.java

4.296 vrml.external.field.EventInSFFloat Class Reference

Inheritance diagram for vrml.external.field.EventInSFFloat:



Public Member Functions

- void **setValue** (float value)

Additional Inherited Members

4.296.1 Detailed Description

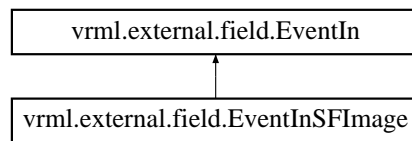
Definition at line 5 of file EventInSFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFFloat.java

4.297 vrml.external.field.EventInSFImage Class Reference

Inheritance diagram for vrml.external.field.EventInSFImage:



Public Member Functions

- void **setValue** (int width, int height, int components, byte[] pixels) throws IllegalArgumentException

Additional Inherited Members

4.297.1 Detailed Description

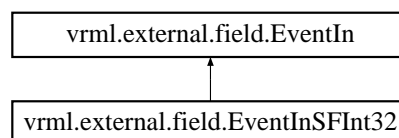
Definition at line 7 of file EventInSFImage.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFImage.java

4.298 vrml.external.field.EventInSFInt32 Class Reference

Inheritance diagram for vrml.external.field.EventInSFInt32:



Public Member Functions

- void **setValue** (Integer value)
- void **setValue** (int value)

Additional Inherited Members

4.298.1 Detailed Description

Definition at line 6 of file EventInSFInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFInt32.java

4.299 vrml.external.field.EventInSFNode Class Reference

Inheritance diagram for vrml.external.field.EventInSFNode:



Public Member Functions

- void **setValue** (**Node** node)

Additional Inherited Members

4.299.1 Detailed Description

Definition at line 6 of file EventInSFNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFNode.java

4.300 vrml.external.field.EventInSFRotation Class Reference

Inheritance diagram for vrml.external.field.EventInSFRotation:



Public Member Functions

- void **setValue** (float[] value) throws IllegalArgumentException

Additional Inherited Members

4.300.1 Detailed Description

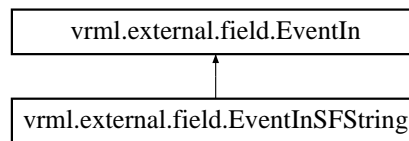
Definition at line 5 of file EventInSFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFRotation.java

4.301 vrml.external.field.EventInSFString Class Reference

Inheritance diagram for vrml.external.field.EventInSFString:



Public Member Functions

- void **setValue** (String value)

Additional Inherited Members

4.301.1 Detailed Description

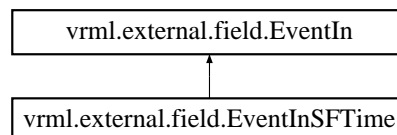
Definition at line 6 of file EventInSFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFString.java

4.302 vrml.external.field.EventInSFTIME Class Reference

Inheritance diagram for vrml.external.field.EventInSFTIME:



Public Member Functions

- void **setValue** (double value)

Additional Inherited Members

4.302.1 Detailed Description

Definition at line 6 of file EventInSFTIME.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFTIME.java

4.303 vrml.external.field.EventInSFVec2f Class Reference

Inheritance diagram for vrml.external.field.EventInSFVec2f:



Public Member Functions

- void **setValue** (float[] value) throws IllegalArgumentException

Additional Inherited Members

4.303.1 Detailed Description

Definition at line 5 of file EventInSFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFVec2f.java

4.304 vrml.external.field.EventInSFVec3f Class Reference

Inheritance diagram for vrml.external.field.EventInSFVec3f:



Public Member Functions

- void **setValue** (float[] value) throws IllegalArgumentException

Additional Inherited Members

4.304.1 Detailed Description

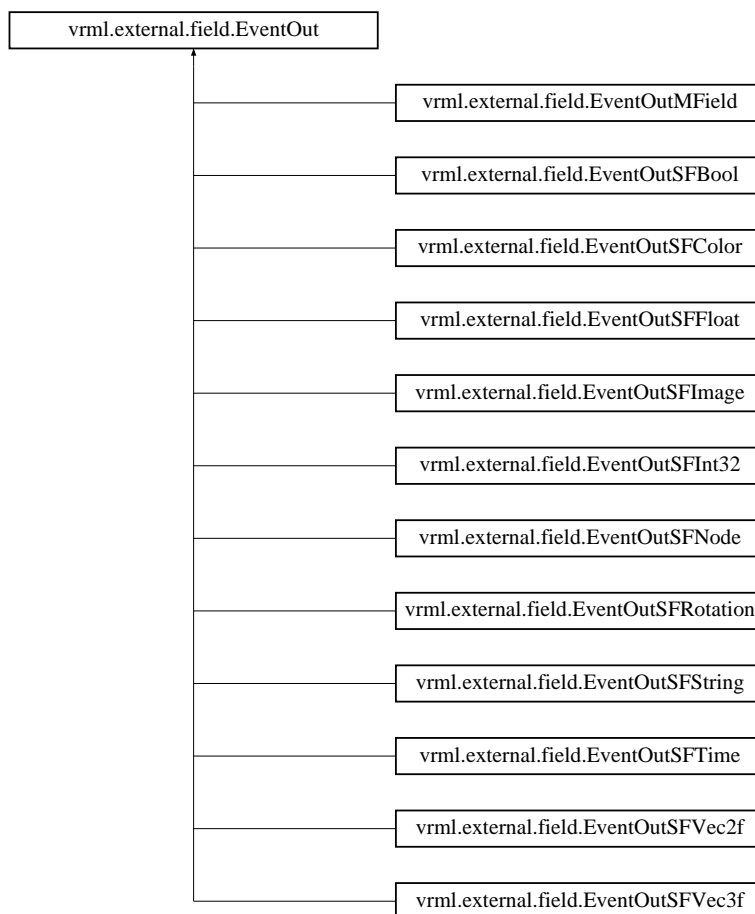
Definition at line 5 of file EventInSFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFVec3f.java

4.305 vrml.external.field.EventOut Class Reference

Inheritance diagram for vrml.external.field.EventOut:



Public Member Functions

- int **getType** ()
- int **getIntType** ()
- void **advise** (**EventOutObserver** f, Object userData)
- void **unadvise** (**EventOutObserver** f)

Data Fields

- int **EventType** = FieldTypes.UnknownType
- String **inNode**
- String **RLreturn**
- String **command**
- int **nodeptr** = 0
- int **offset** = 0
- int **datasize** = 0
- String **datatype**
- int **ScriptType** = 0

4.305.1 Detailed Description

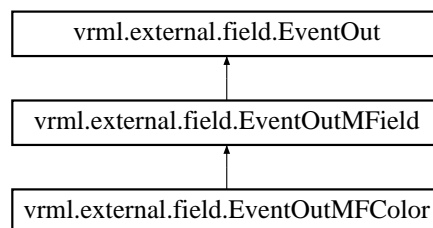
Definition at line 6 of file EventOut.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOut.java

4.306 vrml.external.field.EventOutMFCOLOR Class Reference

Inheritance diagram for vrml.external.field.EventOutMFCOLOR:



Public Member Functions

- float [][] **getValue** ()
- float [] **get1Value** (int index)

Additional Inherited Members

4.306.1 Detailed Description

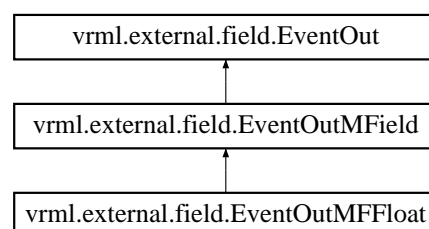
Definition at line 8 of file EventOutMFCOLOR.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFCOLOR.java

4.307 vrml.external.field.EventOutMFFLOAT Class Reference

Inheritance diagram for vrml.external.field.EventOutMFFLOAT:



Public Member Functions

- float [] **getValue** ()
- float **get1Value** (int index)

Additional Inherited Members

4.307.1 Detailed Description

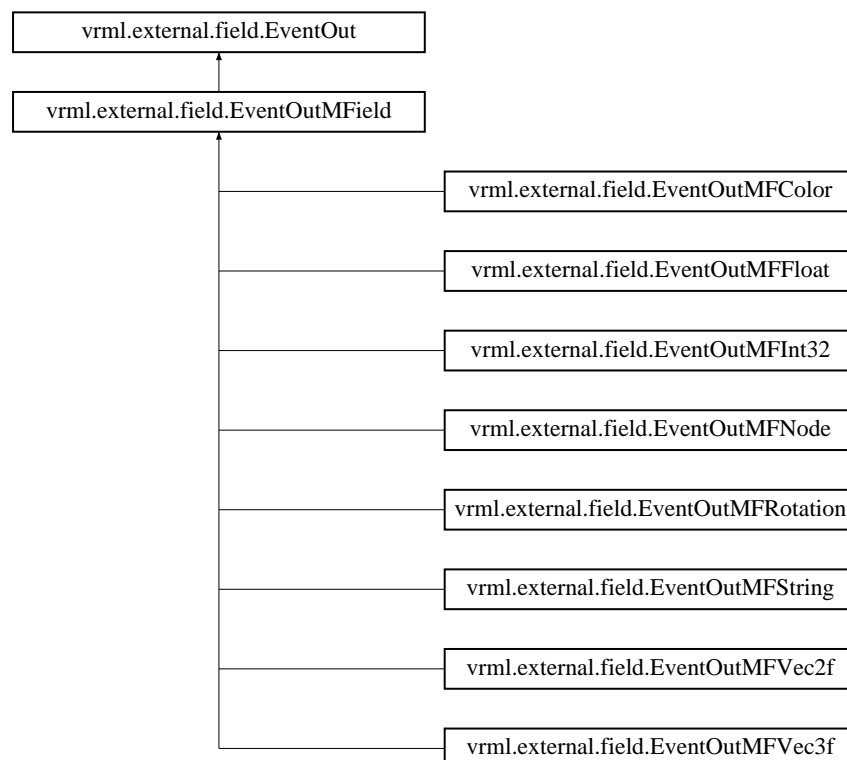
Definition at line 8 of file EventOutMFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFFloat.java

4.308 vrml.external.field.EventOutMField Class Reference

Inheritance diagram for vrml.external.field.EventOutMField:



Public Member Functions

- int **getSize** ()

Additional Inherited Members

4.308.1 Detailed Description

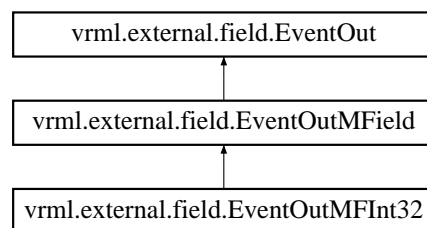
Definition at line 7 of file EventOutMField.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMField.java

4.309 vrml.external.field.EventOutMField Class Reference

Inheritance diagram for vrml.external.field.EventOutMField:



Public Member Functions

- int [] **getValue** ()
- int **get1Value** (int index)

Additional Inherited Members

4.309.1 Detailed Description

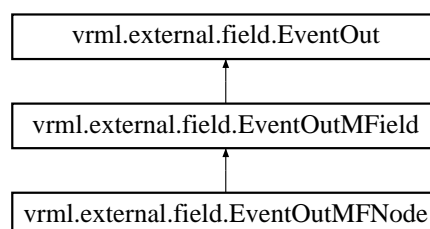
Definition at line 8 of file EventOutMFieldInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFieldInt32.java

4.310 vrml.external.field.EventOutMFNode Class Reference

Inheritance diagram for vrml.external.field.EventOutMFNode:



Public Member Functions

- **Node []** **getValue** ()
- **Node** **get1Value** (int index)

Additional Inherited Members

4.310.1 Detailed Description

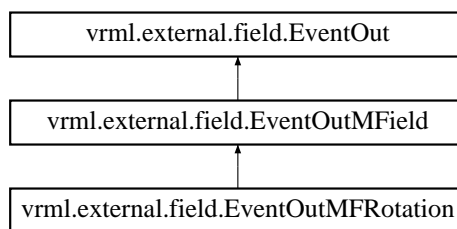
Definition at line 8 of file EventOutMFNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFNode.java

4.311 vrml.external.field.EventOutMFRotation Class Reference

Inheritance diagram for vrml.external.field.EventOutMFRotation:



Public Member Functions

- float [][] **getValue** ()
- float [] **get1Value** (int index)

Additional Inherited Members

4.311.1 Detailed Description

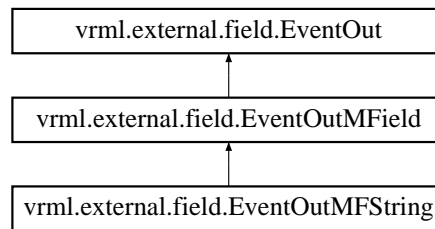
Definition at line 8 of file EventOutMFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFRotation.java

4.312 vrml.external.field.EventOutMFString Class Reference

Inheritance diagram for vrml.external.field.EventOutMFString:



Public Member Functions

- String [] **getValue** ()
- String **get1Value** (int index)

Additional Inherited Members

4.312.1 Detailed Description

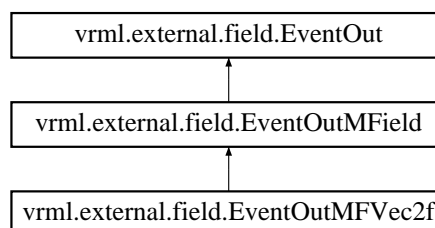
Definition at line 7 of file EventOutMFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFString.java

4.313 vrml.external.field.EventOutMFVec2f Class Reference

Inheritance diagram for vrml.external.field.EventOutMFVec2f:



Public Member Functions

- float [][] **getValue** ()
- float [] **get1Value** (int index)

Additional Inherited Members

4.313.1 Detailed Description

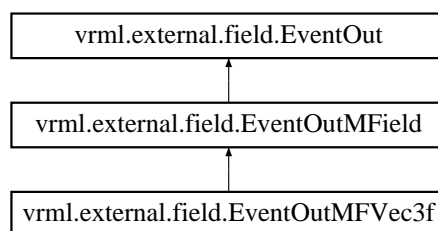
Definition at line 8 of file EventOutMFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFVec2f.java

4.314 vrml.external.field.EventOutMFVec3f Class Reference

Inheritance diagram for vrml.external.field.EventOutMFVec3f:



Public Member Functions

- float [][] **getValue** ()
- float [] **get1Value** (int index)

Additional Inherited Members

4.314.1 Detailed Description

Definition at line 8 of file EventOutMFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutMFVec3f.java

4.315 vrml.external.field.EventOutObserver Interface Reference

Public Member Functions

- void **callback** (**EventOut** value, double timeStamp, Object userData)

4.315.1 Detailed Description

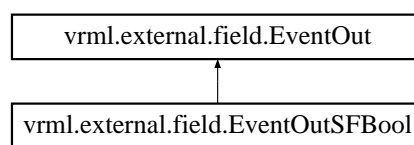
Definition at line 8 of file EventOutObserver.java.

The documentation for this interface was generated from the following file:

- src/java/vrml/external/field/EventOutObserver.java

4.316 vrml.external.field.EventOutSFBool Class Reference

Inheritance diagram for vrml.external.field.EventOutSFBool:



Public Member Functions

- boolean **getValue** ()

Additional Inherited Members

4.316.1 Detailed Description

Definition at line 7 of file EventOutSFBool.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFBool.java

4.317 vrml.external.field.EventOutSFColor Class Reference

Inheritance diagram for vrml.external.field.EventOutSFColor:



Public Member Functions

- float [] **getValue** ()

Additional Inherited Members

4.317.1 Detailed Description

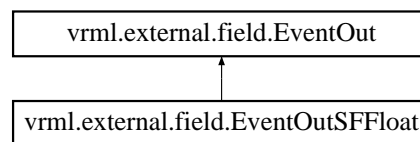
Definition at line 7 of file EventOutSFColor.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFColor.java

4.318 vrml.external.field.EventOutSFFloat Class Reference

Inheritance diagram for vrml.external.field.EventOutSFFloat:



Public Member Functions

- float **getValue** ()

Additional Inherited Members

4.318.1 Detailed Description

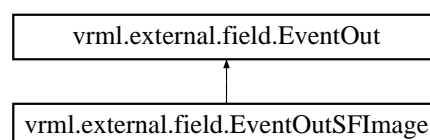
Definition at line 7 of file EventOutSFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFFloat.java

4.319 vrml.external.field.EventOutSFImage Class Reference

Inheritance diagram for vrml.external.field.EventOutSFImage:



Public Member Functions

- int **getWidth** ()
- int **getHeight** ()
- int **getNumComponents** ()
- byte [] **getPixels** ()

Additional Inherited Members

4.319.1 Detailed Description

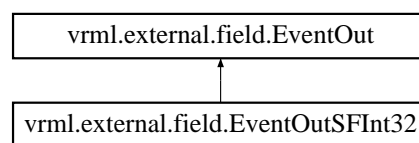
Definition at line 7 of file EventOutSFImage.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFImage.java

4.320 vrml.external.field.EventOutSFInt32 Class Reference

Inheritance diagram for vrml.external.field.EventOutSFInt32:



Public Member Functions

- int **getValue** ()

Additional Inherited Members

4.320.1 Detailed Description

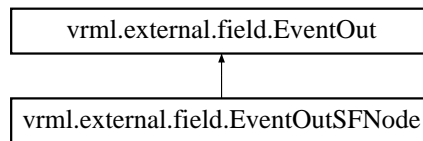
Definition at line 7 of file EventOutSFInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFInt32.java

4.321 vrml.external.field.EventOutSFNode Class Reference

Inheritance diagram for vrml.external.field.EventOutSFNode:



Public Member Functions

- **Node** `getValue ()`

Additional Inherited Members

4.321.1 Detailed Description

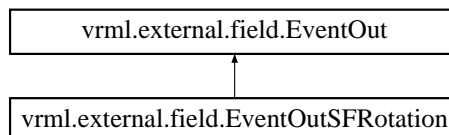
Definition at line 8 of file EventOutSFNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFNode.java

4.322 vrml.external.field.EventOutSFRotation Class Reference

Inheritance diagram for vrml.external.field.EventOutSFRotation:



Public Member Functions

- float [] **getValue ()**

Additional Inherited Members

4.322.1 Detailed Description

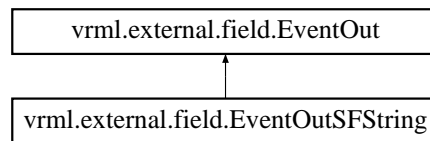
Definition at line 6 of file EventOutSFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFRotation.java

4.323 vrml.external.field.EventOutSFString Class Reference

Inheritance diagram for vrml.external.field.EventOutSFString:



Public Member Functions

- String **getValue** ()

Additional Inherited Members

4.323.1 Detailed Description

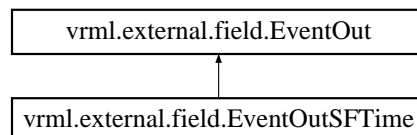
Definition at line 7 of file EventOutSFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFString.java

4.324 vrml.external.field.EventOutSFTIME Class Reference

Inheritance diagram for vrml.external.field.EventOutSFTIME:



Public Member Functions

- double **getValue** ()

Additional Inherited Members

4.324.1 Detailed Description

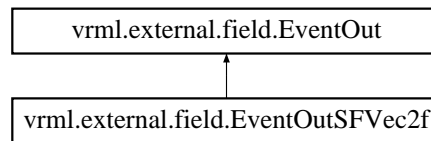
Definition at line 7 of file EventOutSFTIME.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFTIME.java

4.325 vrml.external.field.EventOutSFVec2f Class Reference

Inheritance diagram for vrml.external.field.EventOutSFVec2f:



Public Member Functions

- float [] **getValue** ()

Additional Inherited Members

4.325.1 Detailed Description

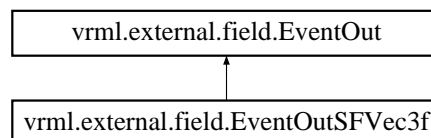
Definition at line 6 of file EventOutSFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFVec2f.java

4.326 vrml.external.field.EventOutSFVec3f Class Reference

Inheritance diagram for vrml.external.field.EventOutSFVec3f:



Public Member Functions

- float [] **getValue** ()

Additional Inherited Members

4.326.1 Detailed Description

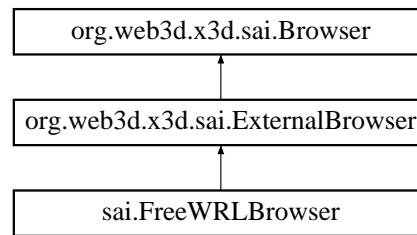
Definition at line 6 of file EventOutSFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventOutSFVec3f.java

4.327 org.web3d.x3d.sai.ExternalBrowser Interface Reference

Inheritance diagram for org.web3d.x3d.sai.ExternalBrowser:



Public Member Functions

- void **addBrowserListener** (**BrowserListener** listener) throws InvalidBrowserException
- void **removeBrowserListener** (**BrowserListener** l) throws InvalidBrowserException
- void **beginUpdate** () throws InvalidBrowserException
- void **endUpdate** () throws InvalidBrowserException
- void **dispose** () throws InvalidOperationTimingException

4.327.1 Detailed Description

Definition at line 4 of file ExternalBrowser.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/ExternalBrowser.java

4.328 extrusion Struct Reference

Data Fields

- **polygon poly**
- double **below**
- double **above**

4.328.1 Detailed Description

Definition at line 771 of file SSRServer.c.

The documentation for this struct was generated from the following file:

- src/SSR/SSRServer.c

4.329 FaceCount Struct Reference

Data Fields

- long **size**
- **GLUhalfEdge** * **eStart**
- void(* **render**)(**GLUtesselator** *, **GLUhalfEdge** *, long)

4.329.1 Detailed Description

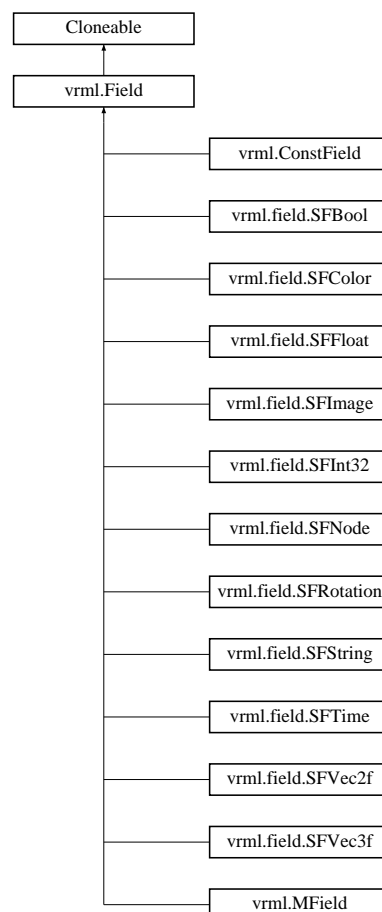
Definition at line 49 of file render.c.

The documentation for this struct was generated from the following file:

- src/libtess/render.c

4.330 vrml.Field Class Reference

Inheritance diagram for vrml.Field:



Public Member Functions

- Object **clone** ()
- void **bind_to** (FWJavaScriptBinding b)
- final void **__updateRead** ()
- abstract void **__fromPerl** (BufferedReader in) throws IOException
- abstract void **__toPerl** (PrintWriter out) throws IOException
- void **setOffset** (String offs)
- String **getOffset** ()

Protected Member Functions

- final void **__updateWrite** ()

4.330.1 Detailed Description

Definition at line 4 of file Field.java.

The documentation for this class was generated from the following file:

- src/java/vrml/Field.java

4.331 FieldDecl Struct Reference

Data Fields

- indexT **PKWmode**
- indexT **fieldType**
- indexT **lexerNameIndex**
- indexT **JSparamNameIndex**
- int **shaderVariableID**

4.331.1 Detailed Description

Definition at line 32 of file CFieldDecls.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CFieldDecls.h

4.332 vrml.external.field.FieldTypes Class Reference

Static Public Attributes

- static final int **UnknownType** = 0
- static final int **SFBOOL** = 1
- static final int **SFIMAGE** = 2
- static final int **SFTIME** = 3
- static final int **SFCOLOR** = 4
- static final int **MFCOLOR** = 5
- static final int **SFFLOAT** = 6
- static final int **MFFLOAT** = 7
- static final int **SFINT32** = 8
- static final int **MFINT32** = 9
- static final int **SFNODE** = 10
- static final int **MFNODE** = 11
- static final int **SFROTATION** = 12
- static final int **MFROTATION** = 13
- static final int **SFSTRING** = 14
- static final int **MFSTRING** = 15
- static final int **SFVEC2F** = 16
- static final int **MFVEC2F** = 17
- static final int **SFVEC3F** = 18
- static final int **MFVEC3F** = 19

4.332.1 Detailed Description

Definition at line 5 of file FieldTypes.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/field/FieldTypes.java

4.333 file_in_zip64_read_info_s Struct Reference

Data Fields

- char * **read_buffer**
- z_stream **stream**
- ZPOS64_T **pos_in_zipfile**
- uLong **stream_initialised**
- ZPOS64_T **offset_local_extrafield**
- uInt **size_local_extrafield**
- ZPOS64_T **pos_local_extrafield**
- ZPOS64_T **total_out_64**
- uLong **crc32**
- uLong **crc32_wait**
- ZPOS64_T **rest_read_compressed**
- ZPOS64_T **rest_read_uncompressed**
- **zlib_filefunc64_32_def** z_filefunc
- voidpf **filestream**
- uLong **compression_method**
- ZPOS64_T **byte_before_the_zipfile**
- int **raw**

4.333.1 Detailed Description

Definition at line 134 of file unzip.c.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.c

4.334 FirstStruct Struct Reference

Data Fields

- void * **tonode**
- void(* **interpptr**)(void *)

4.334.1 Detailed Description

- we count times through the scenegraph; helps to break routing loops `/** Routing table */` Structure table `/** EAI needs the extra parameter, so we put it globally when a RegisteredListener is clicked. */`

Definition at line 174 of file CRoutes.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CRoutes.c

4.335 Flist Class Reference

Public Member Functions

- void **add** (REAL x)
- void **filter** (void)
- void **grow** (int)
- void **taper** (REAL, REAL)

Data Fields

- REAL * **pts**
- int **npts**
- int **start**
- int **end**

Protected Attributes

- **FlistSorter** sorter

4.335.1 Detailed Description

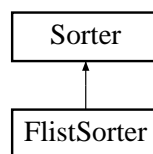
Definition at line 42 of file flist.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/flist.h
- src/libnurbs/internals/flist.cc

4.336 FlistSorter Class Reference

Inheritance diagram for FlistSorter:



Public Member Functions

- void **qsort** (REAL *a, int n)

Protected Member Functions

- virtual int **qscmp** (char *, char *)
- virtual void **qsexc** (char *i, char *j)
- virtual void **qstexc** (char *i, char *j, char *k)

4.336.1 Detailed Description

Definition at line 42 of file flistsorter.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/flistsorter.h
- src/libnurbs/internals/flistsorter.cc

4.337 flychord Struct Reference

Data Fields

- int **chord**
- **Key arrows** [4]

4.337.1 Detailed Description

Definition at line 1838 of file Viewer.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.c

4.338 fmtChnk Struct Reference

Data Fields

- char **chunkID** [4]
- int **chunkSize**
- short **wFormatTag**
- unsigned short **wChannels**
- unsigned int **dwSamplesPerSec**
- unsigned int **dwAvgBytesPerSec**
- unsigned short **wBlockAlign**
- unsigned short **wBitsPerSample**

4.338.1 Detailed Description

Definition at line 51 of file soundheader.h.

The documentation for this struct was generated from the following file:

- src/sound/soundheader.h

4.339 freewrl_params Struct Reference

Initialization.

```
#include <libFreeWRL.h>
```

Data Fields

- int **width**
- int **height**
- int **xpos**
- int **ypos**
- long int **winToEmbedInto**
- bool **fullscreen**
- bool **multithreading**
- bool **enableEAI**
- bool **verbose**
- bool **frontend_handles_display_thread**
- void * **display**
- void * **context**
- void * **surface**

4.339.1 Detailed Description

Initialization.

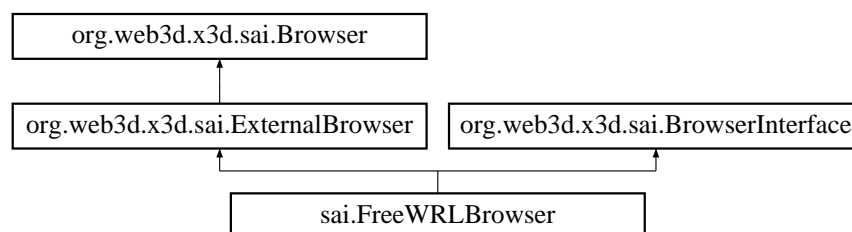
Definition at line 71 of file libFreeWRL.h.

The documentation for this struct was generated from the following file:

- src/lib/libFreeWRL.h

4.340 sai.FreeWRLBrowser Class Reference

Inheritance diagram for sai.FreeWRLBrowser:



Public Member Functions

- int **get_Browser_EVtype** (int event)
- **X3DFieldEventListener** **get_Browser_EVObserver** (int eventno)
- void **Browser_RL_Async_send** (String EVentreply, int eventno)
- **FreeWRLBrowser** (Applet pApplet, int portnum)
- **FreeWRLBrowser** (Applet pApplet)
- void **checkValid** ()
- String **getName** () throws InvalidBrowserException, ConnectionException
- String **getVersion** () throws InvalidBrowserException, ConnectionException
- float **getCurrentSpeed** () throws InvalidBrowserException, ConnectionException
- float **getCurrentFrameRate** () throws InvalidBrowserException, ConnectionException
- void **replaceWorld** (X3DScene passedscene) throws InvalidBrowserException, ConnectionException
- void **setDescription** (String des) throws InvalidBrowserException, ConnectionException
- **X3DScene** **createX3DFromString** (String str) throws InvalidBrowserException, InvalidX3DException, ConnectionException, NotSupportedException
- **X3DNode** **createNodeFromString** (String str)
- **X3DScene** **createX3DFromStream** (InputStream is) throws InvalidBrowserException, InvalidX3DException, ConnectionException, NotSupportedException, IOException
- **X3DScene** **createX3DFromURL** (String[] url) throws InvalidBrowserException, InvalidX3DException, ConnectionException, IOException
- Map **getRenderingProperties** () throws InvalidBrowserException, ConnectionException
- Map **getBrowserProperties** () throws InvalidBrowserException, ConnectionException
- void **nextViewpoint** () throws InvalidBrowserException, ConnectionException
- void **previousViewpoint** () throws InvalidBrowserException, ConnectionException
- void **firstViewpoint** () throws InvalidBrowserException, ConnectionException
- void **lastViewpoint** () throws InvalidBrowserException, ConnectionException
- void **print** (Object obj) throws InvalidBrowserException, ConnectionException

- void **println** (Object obj) throws InvalidBrowserException, ConnectionException
- String **addRoute** (**FreeWRLNode** fromNode, String fromEventOut, **FreeWRLNode** toNode, String toEventIn) throws IllegalArgumentException
- String **deleteRoute** (**FreeWRLNode** fromNode, String fromEventOut, **FreeWRLNode** toNode, String toEventIn) throws IllegalArgumentException
- void **beginUpdate** ()
- void **endUpdate** ()
- void **initialize** ()
- void **shutdown** ()
- **X3DNode** **getNode** (String nodeName) throws NodeUnavailableException
- void **close** ()
- void **dispose** ()
- void **addBrowserListener** (**BrowserListener** listener) throws InvalidBrowserException, ConnectionException
- void **removeBrowserListener** (**BrowserListener** listener) throws InvalidBrowserException, ConnectionException
- void **browserEvent** (int type)
- **X3DScene** **currentScene** ()
- **ProfileInfo** **getProfile** (String name) throws ConnectionException, InvalidBrowserException, NotSupportedException
- **ProfileInfo** [] **getSupportedProfiles** () throws InvalidBrowserException, ConnectionException
- **ComponentInfo** [] **getSupportedComponents** () throws InvalidBrowserException, ConnectionException
- **ComponentInfo** **getComponent** (String name, int level) throws InvalidBrowserException, NotSupportedException, ConnectionException
- **X3DExecutionContext** **getExecutionContext** () throws InvalidBrowserException, ConnectionException
- **X3DScene** **createScene** (**ProfileInfo** profile, **ComponentInfo** [] components) throws InvalidBrowserException, ConnectionException
- void **loadURL** (String[] url, Map parameters) throws InvalidBrowserException, InvalidURLException, ConnectionException
- String **getDescription** () throws InvalidBrowserException, ConnectionException
- void **stopRender** ()
- void **pauseRender** ()
- **X3DScene** **importDocument** (Node element) throws InvalidBrowserException, InvalidDocumentException, NotSupportedException, ConnectionException

Static Public Member Functions

- static void **SendChildEvent** (String parent, String offset, String fieldName, String child)
- static void **newSendEvent** (**FreeWRLField** field, String value)
- static String **sendGlobalCommand** (String command)
- static String **SendEventOut** (String nodeptr, String offset, String datasize, String datatype, String command)
- static void **RegisterListener** (**X3DFieldEventListener** f, Object userData, String nodeptr, String offset, String datatype, String datasize, int EventType)
- static void **unRegisterListener** (**X3DFieldEventListener** f, String nodeptr, String offset, String datatype, String datasize, int EventType)

Static Protected Member Functions

- static String **SendEventType** (String nodeName, String ptr, String fieldName, String direction)
- static synchronized String **getVRMLreply** (int queryno)

4.340.1 Detailed Description

Definition at line 18 of file FreeWRLBrowser.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLBrowser.java

4.341 sai.FreeWRLBrowserInfo Class Reference

Static Public Member Functions

- static void **setBrowserProperty** (int property, boolean value)
- static boolean **getBrowserProperty** (int property)
- static Map **getBrowserProperties** ()

4.341.1 Detailed Description

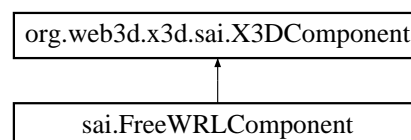
Definition at line 5 of file FreeWRLBrowserInfo.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLBrowserInfo.java

4.342 sai.FreeWRLComponent Class Reference

Inheritance diagram for sai.FreeWRLComponent:



Public Member Functions

- **ExternalBrowser** **getBrowser** ()
- Object **getImplementation** ()
- void **shutdown** ()

4.342.1 Detailed Description

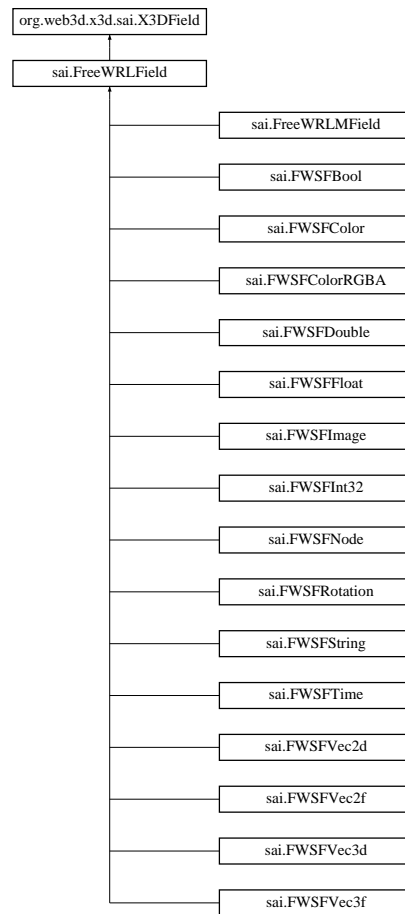
Definition at line 4 of file FreeWRLComponent.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLComponent.java

4.343 sai.FreeWRLField Class Reference

Inheritance diagram for sai.FreeWRLField:



Public Member Functions

- **FreeWRLField** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- **String toString** ()
- **X3DFieldDefinition getDefinition** () throws InvalidFieldException, ConnectionException
- **boolean isReadable** () throws InvalidFieldException, ConnectionException
- **boolean isWritable** () throws InvalidFieldException, ConnectionException
- **void addX3DEventListener** (**X3DFieldEventListener** l) throws ConnectionException, InvalidFieldException
- **void removeX3DEventListener** (**X3DFieldEventListener** l) throws ConnectionException, InvalidFieldException
- **void setUserData** (Object data) throws InvalidFieldException, ConnectionException
- **Object getUserData** () throws InvalidFieldException, ConnectionException
- **void dispose** ()
- **void checkValid** ()
- **void setCommand** (String com)
- **void setNode** (String nod)
- **void setDataType** (String dt)
- **void setNodePtr** (String np)
- **void setOffset** (String off)
- **void setDataSize** (String ds)

- void **setScriptType** (String st)
- String **getDataSize** ()
- String **getScriptType** ()
- String **getCommand** ()
- String **getNode** ()
- String **getDataType** ()
- String **getNodePtr** ()
- String **getOffset** ()

Protected Attributes

- **FreeWRLFieldDefinition** fieldDef
- Object **userData**
- **FreeWRLBrowser** browser

4.343.1 Detailed Description

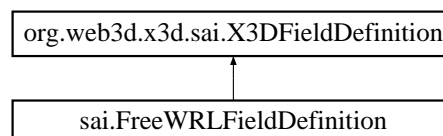
Definition at line 4 of file FreeWRLField.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLField.java

4.344 sai.FreeWRLFieldDefinition Class Reference

Inheritance diagram for sai.FreeWRLFieldDefinition:



Public Member Functions

- **FreeWRLFieldDefinition** (String nm, int access, int field)
- String **getName** ()
- int **getAccessType** ()
- int **getFieldType** ()
- String **getFieldTypeString** ()
- void **setDefaultValue** (String val)
- String **getDefault** ()

Protected Attributes

- String **name**
- int **accessType**
- int **fieldType**
- String **fieldTypeString**
- String **defaultVal**

4.344.1 Detailed Description

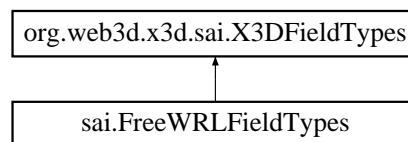
Definition at line 4 of file FreeWRLFieldDefinition.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLFieldDefinition.java

4.345 sai.FreeWRLFieldTypes Class Reference

Inheritance diagram for sai.FreeWRLFieldTypes:



Static Public Member Functions

- static int **getIntType** (String type)
- static String **getStringType** (int type)
- static String **getStringDesc** (int type)
- static int **getIntFromStringDesc** (String desc)
- static int **getAccessFromType** (String type)
- static int **getIntAccess** (String type)
- static String **getStringAccess** (int type)

Static Public Attributes

- static int **SFUNKOWN** = 0

Additional Inherited Members

4.345.1 Detailed Description

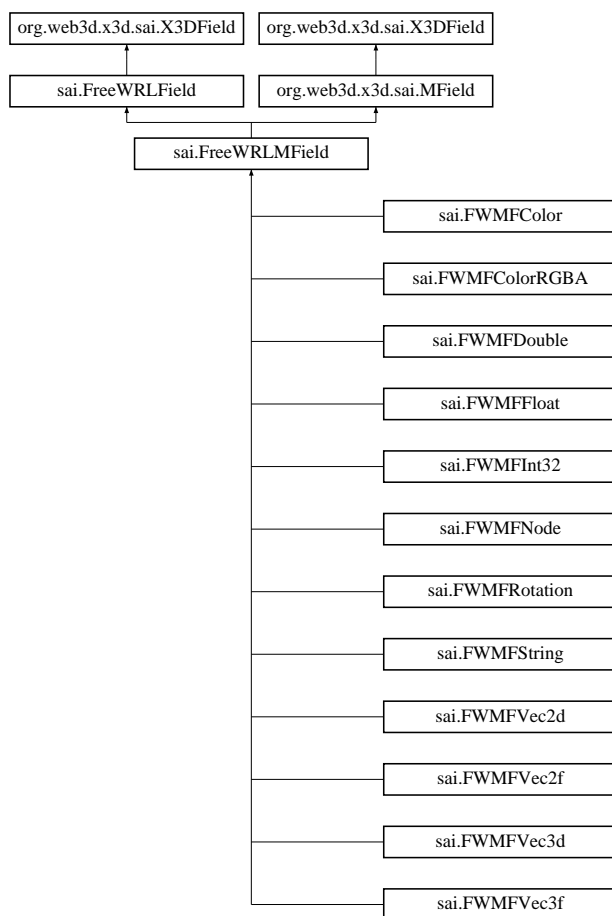
Definition at line 5 of file FreeWRLFieldTypes.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLFieldTypes.java

4.346 sai.FreeWRLMField Class Reference

Inheritance diagram for sai.FreeWRLMField:



Public Member Functions

- **FreeWRLMField** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- int **size** () throws InvalidFieldException, ConnectionException
- void **clear** () throws InvalidFieldException, ConnectionException
- void **remove** (int index) throws InvalidFieldException, ConnectionException, ArrayIndexOutOfBoundsException

Additional Inherited Members

4.346.1 Detailed Description

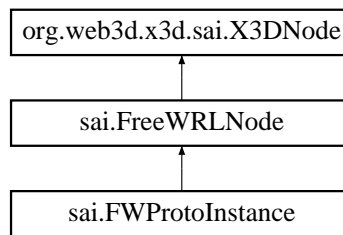
Definition at line 5 of file FreeWRLMField.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLMField.java

4.347 sai.FreeWRLNode Class Reference

Inheritance diagram for sai.FreeWRLNode:



Public Member Functions

- **FreeWRLNode** (**FreeWRLBrowser** b)
- **toString** ()
- **equals** (Object o)
- **getNodeName** () throws InvalidNodeException, ConnectionException
- **setPerIPtr** (String p)
- **getPerIPtr** ()
- **getName** ()
- **getNodeType** () throws InvalidNodeException, ConnectionException
- **X3DFieldDefinition** [] **getFieldDefinitions** () throws InvalidNodeException, ConnectionException
- **X3DField** **getField** (String fieldName) throws InvalidNameException, InvalidNodeException, ConnectionException
- **dispose** () throws InvalidNodeException
- **setNodeName** (String n)
- **setType** (int t)
- **setPointer** (String p)
- **getPointer** ()
- **setMetadata** (**X3DMetadataObject** data) throws InvalidNodeException, ConnectionException
- **X3DMetadataObject** **getMetadata** () throws InvalidNodeException, ConnectionException

4.347.1 Detailed Description

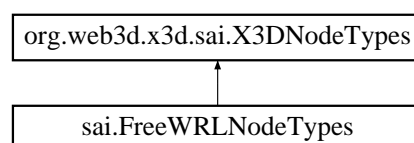
Definition at line 6 of file FreeWRLNode.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLNode.java

4.348 sai.FreeWRLNodeTypes Class Reference

Inheritance diagram for sai.FreeWRLNodeTypes:



Static Public Member Functions

- static String **getStringType** (int type)

Data Fields

- int **X3D_Component_Networking** = 1
- int **X3D_Component_Shape** = 2
- int **X3D_Component_Geometry2D** = 3
- int **X3D_Component_Sound** = 4
- int **X3D_Component_EnvironmentalEffects** = 5
- int **X3D_Component_Navigation** = 6
- int **X3D_Component_EventUtilities** = 7
- int **X3D_Component_Geometry3D** = 8
- int **X3D_Component_Rendering** = 9
- int **X3D_Component_Interpolation** = 10
- int **X3D_Component_Nurbs** = 11
- int **X3D_Component_PointingDevice** = 12
- int **X3D_Component_Lighting** = 13
- int **X3D_Component_Text** = 14
- int **X3D_Component_Geospatial** = 15
- int **X3D_Component_Grouping** = 16
- int **X3D_Component_HAnim** = 17
- int **X3D_Component_Texturing** = 18
- int **X3D_Component_EnvironmentalSensor** = 19
- int **X3D_Component_Scripting** = 20
- int **X3D_Component_Time** = 21

4.348.1 Detailed Description

Definition at line 5 of file FreeWRLNodeTypes.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLNodeTypes.java

4.349 sai.FreeWRLRendererInfo Class Reference

Static Public Member Functions

- static void **setRenderingProperty** (String **key**, Object value)
- static Object **getRenderingProperty** (String **key**)
- static Map **getRenderingProperties** ()

4.349.1 Detailed Description

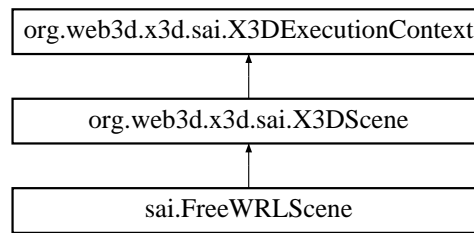
Definition at line 5 of file FreeWRLRendererInfo.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLRendererInfo.java

4.350 sai.FreeWRLScene Class Reference

Inheritance diagram for sai.FreeWRLScene:



Public Member Functions

- **FreeWRLScene** (**FreeWRLNode**[] n, **FreeWRLBrowser** b)
- **FreeWRLScene** (**FreeWRLBrowser** b)
- **FreeWRLScene** (**FWComponentInfo**[] c, **FWProfileInfo** p, **FreeWRLBrowser** b)
- void **setCurrent** (boolean val)
- String **getMetaData** (String **key**) throws `InvalidExecutionContextException`
- void **setMetaData** (String **key**, String value) throws `InvalidExecutionContextException`
- **X3DNode** **getExportedNode** (String nodeName) throws `InvalidExecutionContextException`, `NodeUnavailableException`, `InvalidNameException`
- void **updateExportedNode** (String nodeName, String newName) throws `InvalidExecutionContextException`, `InvalidNameException`
- void **removeExportedNode** (String nodeName) throws `InvalidExecutionContextException`, `InvalidNameException`
- void **addRootNode** (**X3DNode** rootNode) throws `InvalidExecutionContextException`, `NodeInUseException`, `InsufficientCapabilitiesException`
- void **removeRootNode** (**X3DNode** rootNode) throws `InvalidExecutionContextException`
- String **getSpecificationVersion** () throws `InvalidExecutionContextException`
- int **getEncoding** () throws `InvalidExecutionContextException`
- **ProfileInfo** **getProfile** () throws `InvalidExecutionContextException`
- **ComponentInfo** [] **getComponents** () throws `InvalidExecutionContextException`
- String **getWorldURL** () throws `InvalidExecutionContextException`
- **X3DNode** **getNamedNode** (String nodeName) throws `InvalidExecutionContextException`, `NodeUnavailableException`, `InvalidNameException`
- **X3DNode** **getImportedNode** (String nodeName) throws `InvalidExecutionContextException`, `NodeUnavailableException`, `InvalidNameException`
- **X3DNode** **createNode** (String nodeName) throws `InvalidExecutionContextException`, `InvalidNameException`
- **X3DProtoInstance** **createProto** (String protoName) throws `InvalidExecutionContextException`, `InvalidNameException`
- void **updateNamedNode** (String nodeName, **X3DNode** nodeRef) throws `InvalidExecutionContextException`, `InvalidNameException`, `ImportedNodeException`
- void **updateImportedNode** (String nodeName, String importedName, **X3DNode** nodeRef) throws `InvalidExecutionContextException`, `InvalidNameException`, `ImportedNodeException`
- void **removeNamedNode** (String nodeName) throws `InvalidExecutionContextException`, `InvalidNameException`
- void **removeImportedNode** (String nodeName) throws `InvalidExecutionContextException`, `InvalidNameException`
- **X3DProtoDeclaration** **getProtoDeclaration** (String protoName) throws `InvalidExecutionContextException`, `InvalidNameException`

- void **updateProtoDeclaration** (String protoName, **X3DProtoDeclaration** newDeclaration) throws InvalidExecutionContextException, InvalidNameException
- void **removeProtoDeclaration** (String protoName) throws InvalidExecutionContextException, InvalidNameException
- **X3DExternProtoDeclaration** **getExternProtoDeclaration** (String protoName) throws InvalidExecutionContextException, InvalidNameException, URLUnavailableException
- void **updateExternProtoDeclaration** (String protoName, **X3DExternProtoDeclaration** newDeclaration) throws InvalidExecutionContextException
- void **removeExternProtoDeclaration** (String protoName) throws InvalidExecutionContextException
- **X3DNode** [] **getRootNodes** () throws InvalidExecutionContextException
- **X3DRoute** [] **getRoutes** () throws InvalidExecutionContextException
- **X3DRoute** **addRoute** (**X3DNode** startNode, String startName, **X3DNode** endNode, String endEvent) throws InvalidExecutionContextException, InvalidNodeException, InvalidFieldException
- void **removeRoute** (**X3DRoute** route) throws InvalidExecutionContextException, InvalidNodeException, InvalidFieldException
- void **checkValid** ()
- void **dispose** ()

4.350.1 Detailed Description

Definition at line 6 of file FreeWRLScene.java.

The documentation for this class was generated from the following file:

- src/java/sai/FreeWRLScene.java

4.351 ftype Struct Reference

Data Fields

- int **type**
- void *(* **copy**)(void *T, void *A)
- void *(* **add**)(void *T, void *A, void *B)
- void *(* **dif**)(void *T, void *A, void *B)
- void *(* **scale**)(void *T, void *A, float S)
- void *(* **lerp**)(void *T, void *A, void *B, float alpha)
- float(* **dist**)(void *A)
- int(* **same**)(void *A, void *B)
- int(* **approx**)(void *A, void *B)
- void *(* **arr**)(void *A, int i)
- void ** **tmp**

4.351.1 Detailed Description

Definition at line 195 of file Component_Followers.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Followers.c

4.352 fw_MaterialParameters Struct Reference

Data Fields

- float **emission** [4]
- float **ambient** [4]
- float **diffuse** [4]
- float **specular** [4]
- float **shininess**

4.352.1 Detailed Description

Definition at line 143 of file Component_Shape.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Shape.h

4.353 FWBITMAPFILEHEADER Struct Reference

Data Fields

- FDWORD **bfSize**
- FWORD **bfReserved1**
- FWORD **bfReserved2**
- FDWORD **bfOffBits**

4.353.1 Detailed Description

Definition at line 309 of file Snapshot.c.

The documentation for this struct was generated from the following file:

- src/lib/main/Snapshot.c

4.354 FWBITMAPINFO Struct Reference

Data Fields

- FWBITMAPINFOHEADER **bmiHeader**
- FWRGBQUAD **bmiColors** [1]

4.354.1 Detailed Description

Definition at line 324 of file Snapshot.c.

The documentation for this struct was generated from the following file:

- src/lib/main/Snapshot.c

4.355 FWBITMAPINFOHEADER Struct Reference

Data Fields

- FDWORD **biSize**
- FLONG **biWidth**
- FLONG **biHeight**
- FWORD **biPlanes**
- FWORD **biBitCount**
- FDWORD **biCompression**
- FDWORD **biSizeImage**
- FLONG **biXPelsPerMeter**
- FLONG **biYPelsPerMeter**
- FDWORD **biClrUsed**
- FDWORD **biClrImportant**

4.355.1 Detailed Description

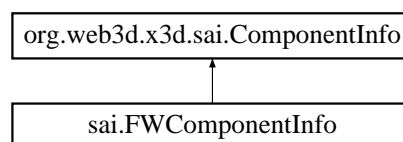
Definition at line 294 of file Snapshot.c.

The documentation for this struct was generated from the following file:

- src/lib/main/Snapshot.c

4.356 sai.FWComponentInfo Class Reference

Inheritance diagram for sai.FWComponentInfo:



Public Member Functions

- **FWComponentInfo** (String n, int l, String t, String u)
- String **getName** ()
- int **getLevel** ()
- String **getTitle** ()
- String **getProviderURL** ()
- String **toX3DString** ()

4.356.1 Detailed Description

Definition at line 4 of file FWComponentInfo.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWComponentInfo.java

4.357 vrml.FWCreateField Class Reference

Static Public Member Functions

- static **Field** **createField** (String type)
- static **ConstField** **createConstField** (String type)

4.357.1 Detailed Description

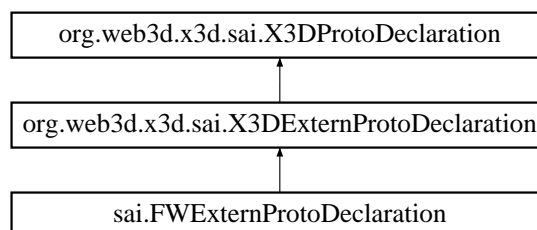
Definition at line 5 of file FWCreateField.java.

The documentation for this class was generated from the following file:

- src/java/vrml/FWCreateField.java

4.358 sai.FWExternProtoDeclaration Class Reference

Inheritance diagram for sai.FWExternProtoDeclaration:



Public Member Functions

- String **getProtoName** ()
- int **getLoadState** ()
- void **loadNow** ()
- **X3DProtoInstance** **createInstance** () throws InvalidOperationTimingException, InvalidProtoException
- **X3DFieldDefinition** [] **getFieldDefinitions** () throws InvalidOperationTimingException, InvalidProtoException
- void **setProtoName** (String name)
- void **setFields** (FreeWRLFieldDefinition[] f)
- void **setType** (int t)
- void **dispose** ()

4.358.1 Detailed Description

Definition at line 5 of file FWExternProtoDeclaration.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWExternProtoDeclaration.java

4.359 FWFunctionSpec Struct Reference

Data Fields

- const char * **name**
- FWFunction **call**
- char **retType**
- struct **ArgListType** **arglist**

4.359.1 Detailed Description

Definition at line 57 of file FWTYPE.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/FWTYPE.h

4.360 vrml.FWHelper Class Reference

Static Public Member Functions

- static String **base64encode** (String str)
- static String **base64decode** (String str)
- static String **quote** (String str)
This is the static method, that quotes a string.
- static String **nodeToString** (**BaseNode** node)

4.360.1 Detailed Description

Definition at line 4 of file FWHelper.java.

The documentation for this class was generated from the following file:

- src/java/vrml/FWHelper.java

4.361 vrml.FWJavaScript Class Reference

Static Public Member Functions

- static void **add_touched** (**Field** f)
- static void **send_touched** (String reqid) throws IOException
- static void **main** (String argv[]) throws ClassNotFoundException, NoSuchMethodException, InstantiationException, IllegalAccessException, InvocationTargetException, Exception, Throwable
- static String **getFieldType** (**BaseNode** node, String fieldname, String kind)
- static void **readField** (**BaseNode** node, String fieldName, **Field** fld)
- static String **getNodeTypes** (**BaseNode** node)
- static **Browser** **getBrowser** ()
- static **BaseNode** [] **createVrmlFromString** (String vrmlSyntax) throws InvalidVRMLSyntaxException
- static **BaseNode** [] **createX3DFromString** (String vrmlSyntax) throws InvalidX3DSyntaxException

4.361.1 Detailed Description

Definition at line 13 of file FWJavaScript.java.

The documentation for this class was generated from the following file:

- src/java/vrml/FWJavaScript.java

4.362 vrml.FWJavaScriptBinding Class Reference

Public Member Functions

- **FWJavaScriptBinding** (**BaseNode** n, String f)
- **FWJavaScriptBinding** (**BaseNode** n, String f, boolean u)
- **BaseNode** **node** ()
- String **field** ()
- void **updateRead** (**Field** field)
- void **updateWrite** (**Field** field)
- String **toString** ()

4.362.1 Detailed Description

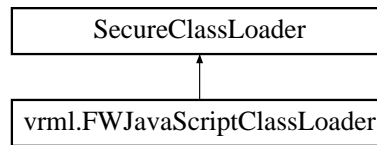
Definition at line 5 of file FWJavaScriptBinding.java.

The documentation for this class was generated from the following file:

- src/java/vrml/FWJavaScriptBinding.java

4.363 vrml.FWJavaScriptClassLoader Class Reference

Inheritance diagram for vrml.FWJavaScriptClassLoader:



Public Member Functions

- **FWJavaScriptClassLoader** (String url)

Protected Member Functions

- Class **findClass** (String name) throws ClassNotFoundException
- PermissionCollection **getPermissions** (CodeSource codesource)
- URL **findResource** (String name)
- Enumeration **findResources** (String name) throws IOException

4.363.1 Detailed Description

Definition at line 13 of file FWJavaScriptClassLoader.java.

4.363.2 Constructor & Destructor Documentation

4.363.2.1 FWJavaScriptClassLoader()

```
vrml.FWJavaScriptClassLoader.FWJavaScriptClassLoader (
    String url ) [inline]
```

Parameters

<i>url</i>	base url for loading classes.
------------	-------------------------------

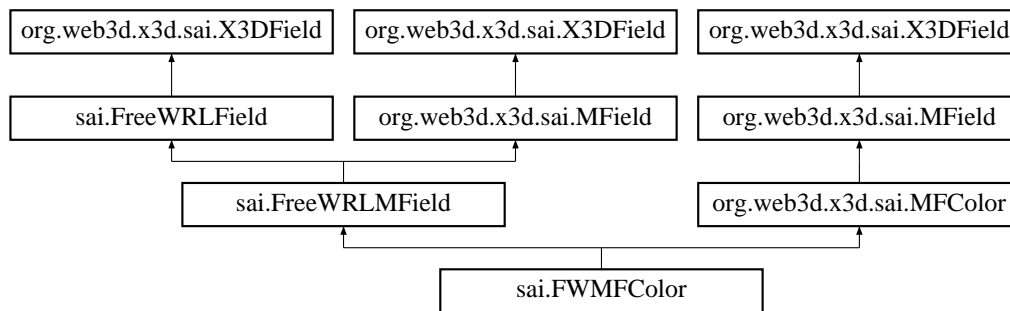
Definition at line 21 of file FWJavaScriptClassLoader.java.

The documentation for this class was generated from the following file:

- src/java/vrml/FWJavaScriptClassLoader.java

4.364 sai.FWMFColor Class Reference

Inheritance diagram for sai.FWMFColor:



Public Member Functions

- **FWMFColor** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[][] value) throws `ArrayIndexOutOfBoundsException`
- void **getValue** (float[] value)
- void **get1Value** (int index, float[] value)
- void **setValue** (int numVals, float[] value) throws `ArrayIndexOutOfBoundsException`, `IllegalArgumentException`
- void **setValue** (int numVals, float[][] value) throws `ArrayIndexOutOfBoundsException`, `IllegalArgumentException`
- void **set1Value** (int index, float[] value) throws `IllegalArgumentException`, `ArrayIndexOutOfBoundsException`
- void **append** (float[] value) throws `IllegalArgumentException`, `ArrayIndexOutOfBoundsException`
- void **insertValue** (int index, float[] value)

Additional Inherited Members

4.364.1 Detailed Description

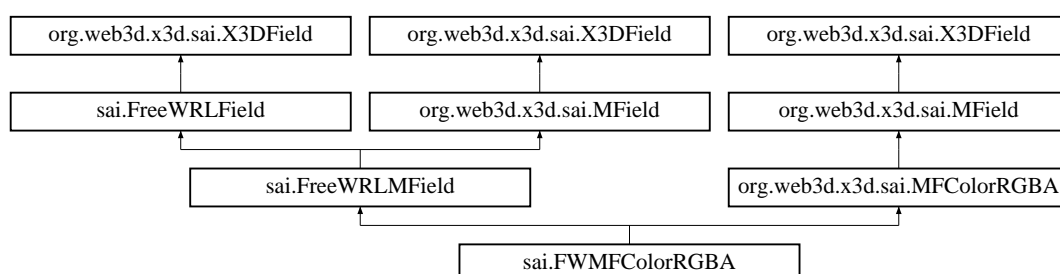
Definition at line 6 of file `FWMFColor.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/FWMFColor.java`

4.365 sai.FWMFColorRGBA Class Reference

Inheritance diagram for sai.FWMFColorRGBA:



Public Member Functions

- **FWMFColorRGBA** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[][] value) throws **ArrayIndexOutOfBoundsException**
- void **getValue** (float[] value) throws **ArrayIndexOutOfBoundsException**
- void **get1Value** (int index, float[] value)
- void **setValue** (int numColors, float[] value) throws **ArrayIndexOutOfBoundsException**
- void **setValue** (int numColors, float[][] value) throws **ArrayIndexOutOfBoundsException**
- void **set1Value** (int index, float[] value)
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

Additional Inherited Members

4.365.1 Detailed Description

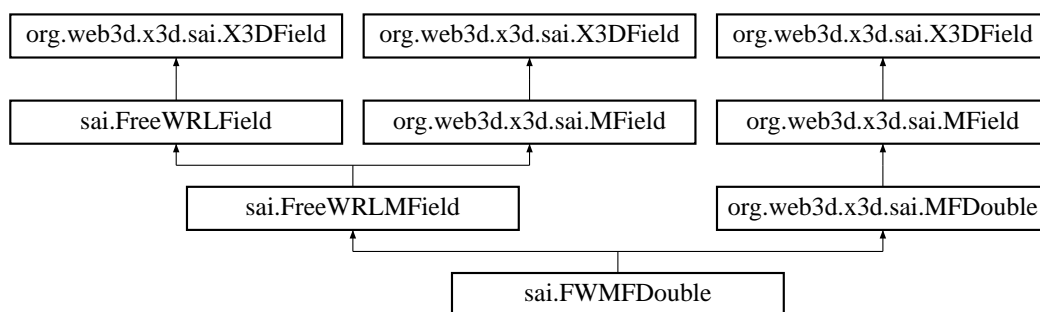
Definition at line 5 of file FWMFColorRGBA.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFColorRGBA.java

4.366 sai.FWMFDouble Class Reference

Inheritance diagram for sai.FWMFDouble:



Public Member Functions

- **FWMFDouble** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (double[] value) throws **ArrayIndexOutOfBoundsException**
- double **get1Value** (int index) throws **ArrayIndexOutOfBoundsException**
- void **setValue** (int size, double[] value)
- void **set1Value** (int index, double value) throws **ArrayIndexOutOfBoundsException**
- void **append** (double[] value)
- void **insertValue** (int index, double[] value) throws **ArrayIndexOutOfBoundsException**

Additional Inherited Members

4.366.1 Detailed Description

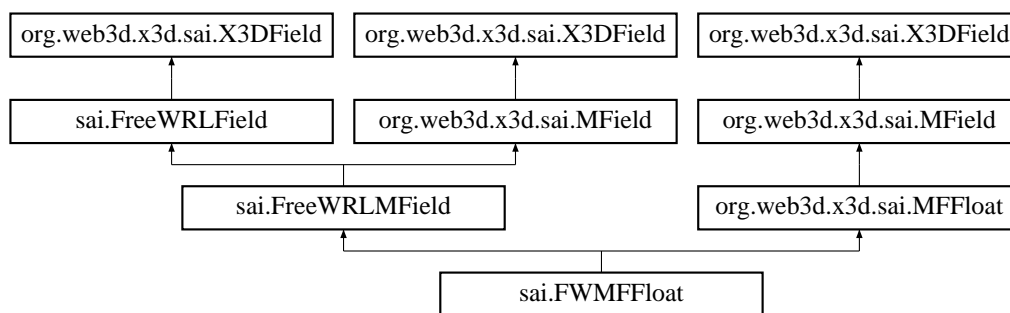
Definition at line 5 of file FWMFDouble.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFDouble.java

4.367 sai.FWMFFloat Class Reference

Inheritance diagram for sai.FWMFFloat:



Public Member Functions

- **FWMFFloat** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[] value) throws **ArrayIndexOutOfBoundsException**
- float **get1Value** (int index) throws **ArrayIndexOutOfBoundsException**
- void **setValue** (int size, float[] value)
- void **set1Value** (int index, float value) throws **ArrayIndexOutOfBoundsException**
- void **append** (float[] value)
- void **insertValue** (int index, float[] value) throws **ArrayIndexOutOfBoundsException**

Additional Inherited Members

4.367.1 Detailed Description

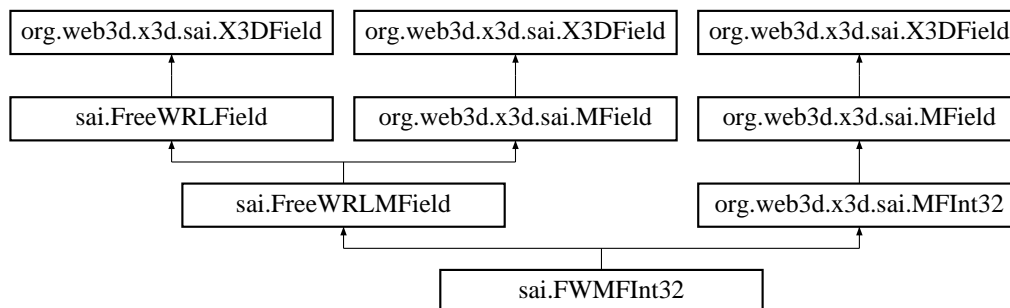
Definition at line 5 of file FWMFFloat.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFFloat.java

4.368 sai.FWMFInt32 Class Reference

Inheritance diagram for sai.FWMFInt32:



Public Member Functions

- **FWMFInt32** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (int[] values) throws `ArrayIndexOutOfBoundsException`
- int **get1Value** (int index) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, int[] value)
- void **set1Value** (int index, int value) throws `ArrayIndexOutOfBoundsException`
- void **append** (int[] value)
- void **insertValue** (int index, int[] value)

Additional Inherited Members

4.368.1 Detailed Description

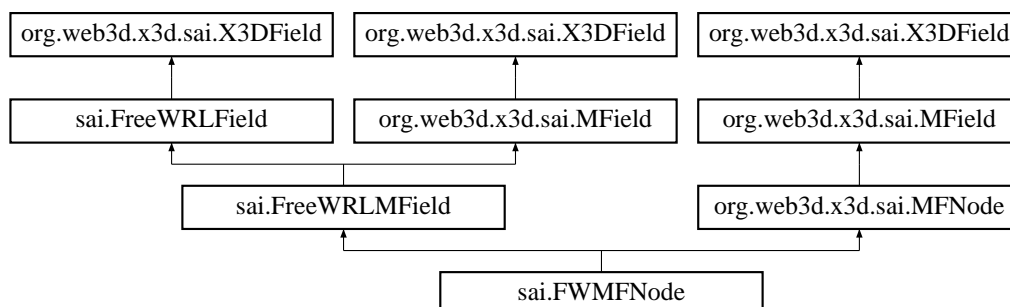
Definition at line 5 of file `FWMFInt32.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/FWMFInt32.java`

4.369 sai.FWMFNode Class Reference

Inheritance diagram for sai.FWMFNode:



Public Member Functions

- void **getValue** (**X3DNode**[] nodes) throws ArrayIndexOutOfBoundsException
- **X3DNode** **get1Value** (int index) throws ArrayIndexOutOfBoundsException
- void **setValue** (int size, **X3DNode**[] value)
- void **set1Value** (int index, **X3DNode** value)
- void **append** (**X3DNode** value)
- void **insertValue** (int index, **X3DNode** value)

Additional Inherited Members

4.369.1 Detailed Description

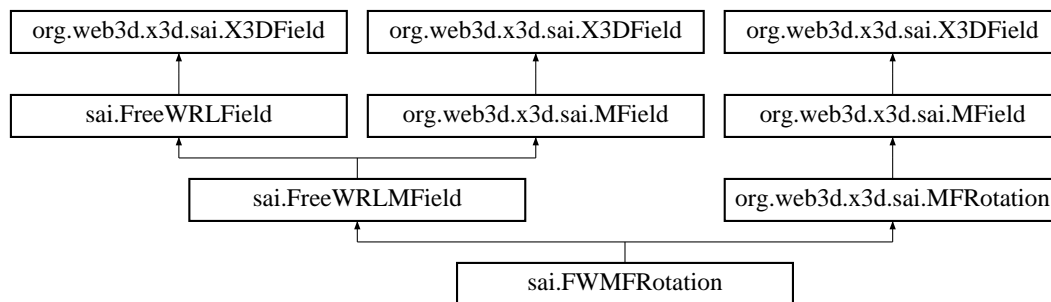
Definition at line 5 of file FWMFNode.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFNode.java

4.370 sai.FWMFRotation Class Reference

Inheritance diagram for sai.FWMFRotation:



Public Member Functions

- **FWMFRotation** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[] value) throws ArrayIndexOutOfBoundsException
- void **getValue** (float[] value) throws ArrayIndexOutOfBoundsException
- void **get1Value** (int index, float[] value)
- void **setValue** (int numRotations, float[] value) throws ArrayIndexOutOfBoundsException
- void **setValue** (int numRotations, float[] value) throws ArrayIndexOutOfBoundsException
- void **set1Value** (int index, float[] value)
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

Additional Inherited Members

4.370.1 Detailed Description

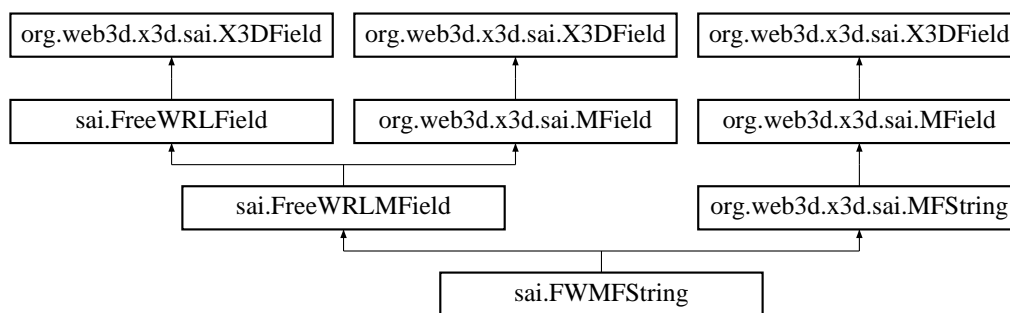
Definition at line 5 of file FWMFRotation.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFRotation.java

4.371 sai.FWMFString Class Reference

Inheritance diagram for sai.FWMFString:



Public Member Functions

- **FWMFString** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (String[] value) throws ArrayIndexOutOfBoundsException
- String **get1Value** (int index) throws ArrayIndexOutOfBoundsException
- void **setValue** (int numStrings, String[] value)
- void **set1Value** (int index, String value)
- void **append** (String[] value)
- void **insertValue** (int index, String[] value)

Additional Inherited Members

4.371.1 Detailed Description

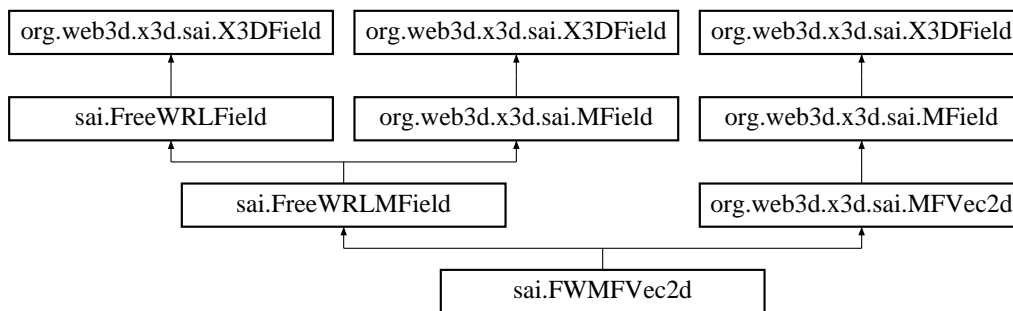
Definition at line 5 of file FWMFString.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFString.java

4.372 sai.FWMFVec2d Class Reference

Inheritance diagram for sai.FWMFVec2d:



Public Member Functions

- **FWMFVec2d** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (double[][] value) throws `ArrayIndexOutOfBoundsException`
- void **getValue** (double[] value) throws `ArrayIndexOutOfBoundsException`
- void **get1Value** (int index, double[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, double[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, double[][] value) throws `ArrayIndexOutOfBoundsException`
- void **set1Value** (int index, double[] value) throws `ArrayIndexOutOfBoundsException`
- void **append** (double[] value)
- void **insertValue** (int index, double[] value)

Additional Inherited Members

4.372.1 Detailed Description

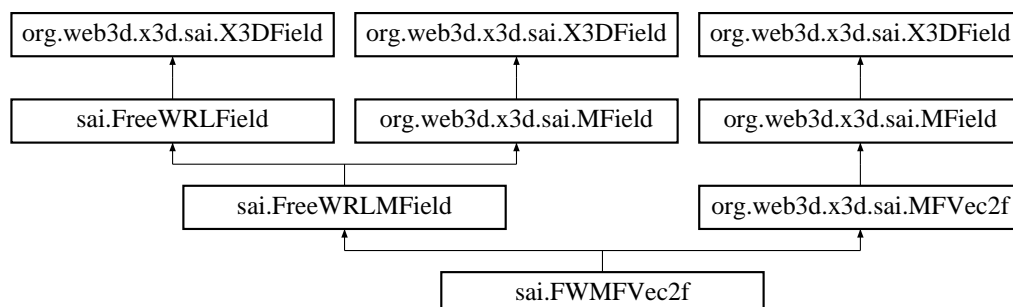
Definition at line 5 of file `FWMFVec2d.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/FWMFVec2d.java`

4.373 sai.FWMFVec2f Class Reference

Inheritance diagram for sai.FWMFVec2f:



Public Member Functions

- **FWMFVec2f** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[][] value) throws `ArrayIndexOutOfBoundsException`
- void **getValue** (float[] value) throws `ArrayIndexOutOfBoundsException`
- void **get1Value** (int index, float[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, float[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, float[][] value) throws `ArrayIndexOutOfBoundsException`
- void **set1Value** (int index, float[] value) throws `ArrayIndexOutOfBoundsException`
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

Additional Inherited Members

4.373.1 Detailed Description

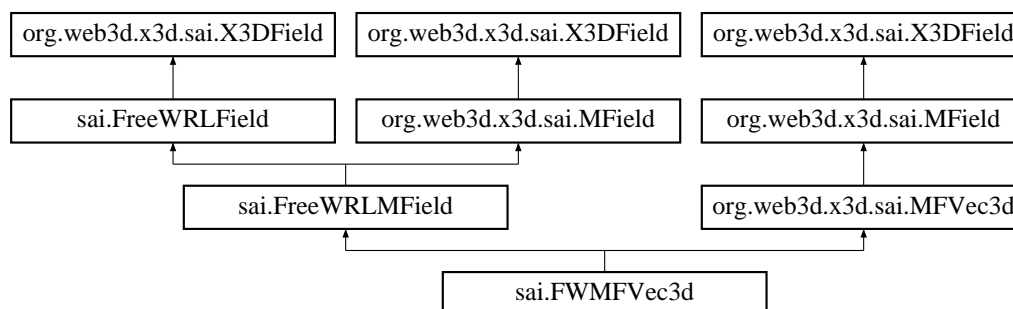
Definition at line 5 of file `FWMFVec2f.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/FWMFVec2f.java`

4.374 sai.FWMFVec3d Class Reference

Inheritance diagram for `sai.FWMFVec3d`:



Public Member Functions

- **FWMFVec3d** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (double[][] value) throws `ArrayIndexOutOfBoundsException`
- void **getValue** (double[] value) throws `ArrayIndexOutOfBoundsException`
- void **get1Value** (int index, double[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, double[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, double[][] value) throws `ArrayIndexOutOfBoundsException`
- void **set1Value** (int index, double[] value) throws `ArrayIndexOutOfBoundsException`
- void **append** (double[] value)
- void **insertValue** (int index, double[] value)

Additional Inherited Members

4.374.1 Detailed Description

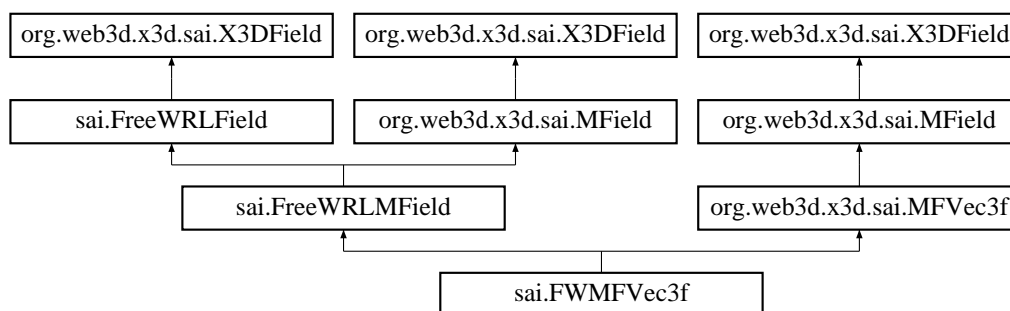
Definition at line 5 of file FWMFVec3d.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFVec3d.java

4.375 sai.FWMFVec3f Class Reference

Inheritance diagram for sai.FWMFVec3f:



Public Member Functions

- **FWMFVec3f** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[][] value) throws `ArrayIndexOutOfBoundsException`
- void **getValue** (float[] value) throws `ArrayIndexOutOfBoundsException`
- void **get1Value** (int index, float[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, float[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (int size, float[][] value) throws `ArrayIndexOutOfBoundsException`
- void **set1Value** (int index, float[] value) throws `ArrayIndexOutOfBoundsException`
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

Additional Inherited Members

4.375.1 Detailed Description

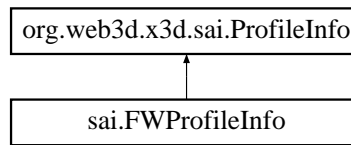
Definition at line 5 of file FWMFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWMFVec3f.java

4.376 sai.FWProfileInfo Class Reference

Inheritance diagram for sai.FWProfileInfo:



Public Member Functions

- **FWProfileInfo** (String n, String t, **ComponentInfo**[] c)
- String **getName** ()
- String **getTitle** ()
- **ComponentInfo** [] **getComponents** ()
- String **toX3DString** ()

4.376.1 Detailed Description

Definition at line 4 of file FWProfileInfo.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWProfileInfo.java

4.377 sai.FWProfInfo Class Reference

Static Public Member Functions

- static **FWProfileInfo** **getProfile** (String name) throws NotSupportedException
- static **FWProfileInfo** [] **getProfiles** ()
- static **ComponentInfo** [] **getComponents** ()
- static **FWComponentInfo** **getComponent** (String name, int level) throws NotSupportedException

4.377.1 Detailed Description

Definition at line 5 of file FWProfInfo.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWProfInfo.java

4.378 FWPropertySpec Struct Reference

Data Fields

- const char * **name**
- short **index**
- char **type**
- char **readOnly**

4.378.1 Detailed Description

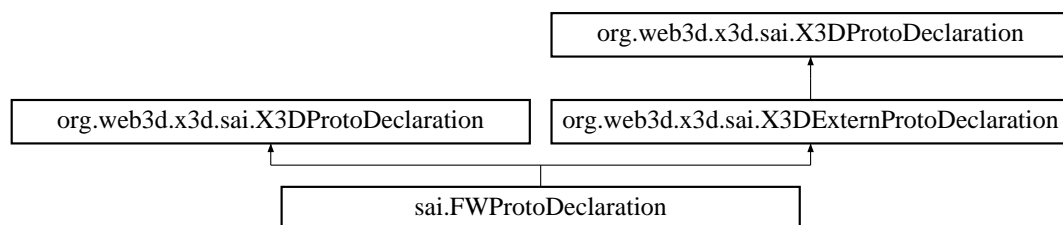
Definition at line 33 of file FWTYPE.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/FWTYPE.h

4.379 sai.FWProtoDeclaration Class Reference

Inheritance diagram for sai.FWProtoDeclaration:



Public Member Functions

- String **getProtoName** ()
- String **toString** ()
- **X3DProtoInstance** **createInstance** () throws InvalidOperationTimingException, InvalidProtoException
- **X3DFieldDefinition** [] **getFieldDefinitions** () throws InvalidOperationTimingException, InvalidProtoException
- int **getLoadState** ()
- void **loadNow** ()
- void **setProtoName** (String name)
- void **setFields** (FreeWRLFieldDefinition[] f)
- void **setType** (int t)
- int [] **getNodeTypes** () throws InvalidProtoException
- void **dispose** ()

4.379.1 Detailed Description

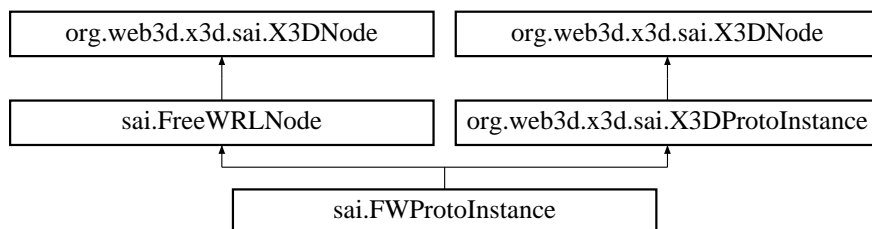
Definition at line 5 of file FWProtoDeclaration.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWProtoDeclaration.java

4.380 sai.FWProtoInstance Class Reference

Inheritance diagram for sai.FWProtoInstance:



Public Member Functions

- **FWProtoInstance** (**FreeWRLBrowser** b)
- **int [] getImplementationTypes** ()

4.380.1 Detailed Description

Definition at line 4 of file FWProtoInstance.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWProtoInstance.java

4.381 FWRGBQUAD Struct Reference

Data Fields

- **FBYTE rgbBlue**
- **FBYTE rgbGreen**
- **FBYTE rgbRed**
- **FBYTE rgbReserved**

4.381.1 Detailed Description

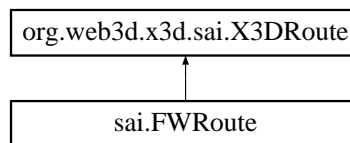
Definition at line 317 of file Snapshot.c.

The documentation for this struct was generated from the following file:

- src/lib/main/Snapshot.c

4.382 sai.FWRoute Class Reference

Inheritance diagram for sai.FWRoute:



Public Member Functions

- **FWRoute** (**FreeWRLNode** sn, String sf, **FreeWRLNode** dn, String df)
- String **toString** ()
- boolean **equals** (Object o)
- **X3DNode** **getSourceNode** () throws InvalidRouteException
- **X3DNode** **getDestinationNode** () throws InvalidRouteException
- String **getSourceField** () throws InvalidRouteException
- String **getDestinationField** () throws InvalidRouteException
- void **dispose** ()

4.382.1 Detailed Description

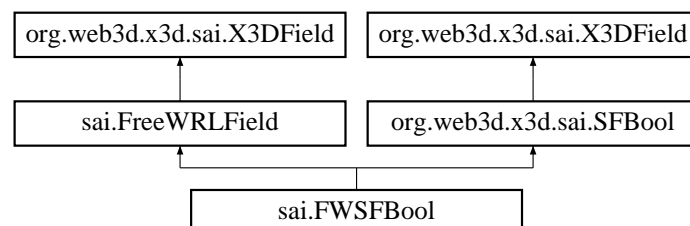
Definition at line 4 of file FWRoute.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWRoute.java

4.383 sai.FWSFBool Class Reference

Inheritance diagram for sai.FWSFBool:



Public Member Functions

- **FWSFBool** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- boolean **getValue** () throws InvalidFieldException
- void **setValue** (boolean value) throws InvalidFieldException

Additional Inherited Members

4.383.1 Detailed Description

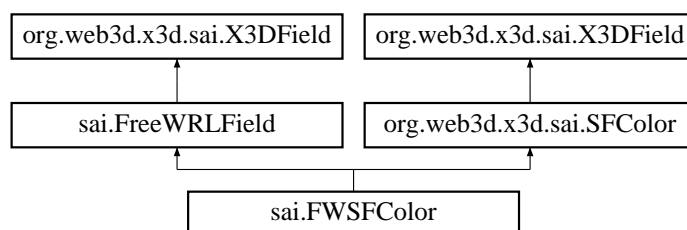
Definition at line 4 of file FWSFBool.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFBool.java

4.384 sai.FWSFColor Class Reference

Inheritance diagram for sai.FWSFColor:



Public Member Functions

- **FWSFColor** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[] value) throws ArrayIndexOutOfBoundsException
- void **setValue** (float[] value) throws IllegalArgumentException, ArrayIndexOutOfBoundsException

Additional Inherited Members

4.384.1 Detailed Description

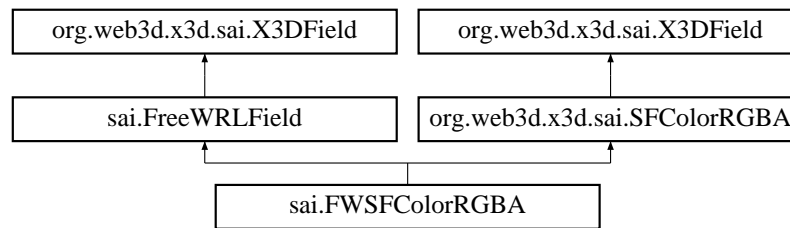
Definition at line 5 of file FWSFColor.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFColor.java

4.385 sai.FWSFColorRGBA Class Reference

Inheritance diagram for sai.FWSFColorRGBA:



Public Member Functions

- **FWSFColorRGBA** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[] value) throws **ArrayIndexOutOfBoundsException**
- void **setValue** (float[] value) throws **ArrayIndexOutOfBoundsException**

Additional Inherited Members

4.385.1 Detailed Description

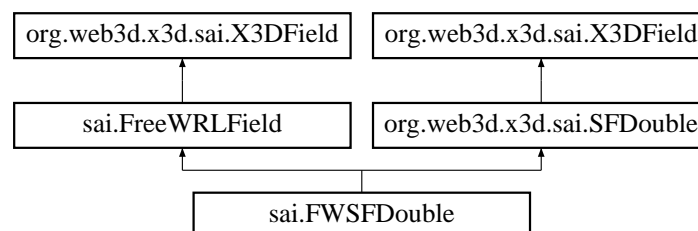
Definition at line 5 of file FWSFColorRGBA.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFColorRGBA.java

4.386 sai.FWSFDouble Class Reference

Inheritance diagram for sai.FWSFDouble:



Public Member Functions

- **FWSFDouble** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- double **getValue** ()
- void **setValue** (double value)

Additional Inherited Members

4.386.1 Detailed Description

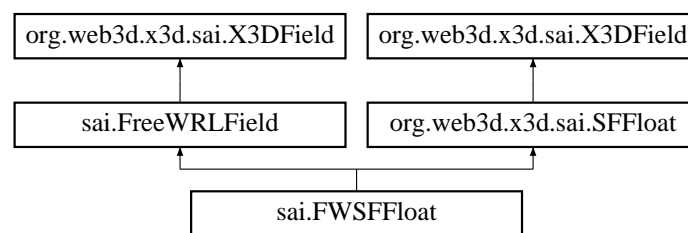
Definition at line 4 of file FWSFDouble.java.

The documentation for this class was generated from the following file:

- `src/java/sai/FWSFDouble.java`

4.387 sai.FWSFFloat Class Reference

Inheritance diagram for sai.FWSFFloat:



Public Member Functions

- **FWSFFloat** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- float **getValue** ()
- void **setValue** (float value)

Additional Inherited Members

4.387.1 Detailed Description

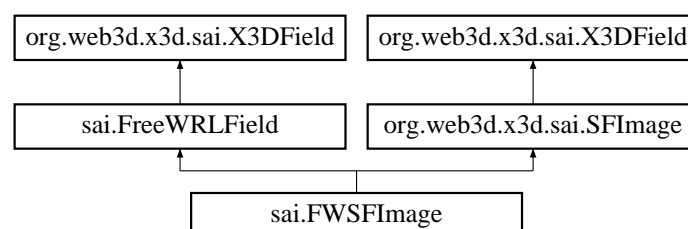
Definition at line 4 of file FWSFFloat.java.

The documentation for this class was generated from the following file:

- `src/java/sai/FWSFFloat.java`

4.388 sai.FWSFImage Class Reference

Inheritance diagram for sai.FWSFImage:



Public Member Functions

- **FWSFImage** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- int **getWidth** ()
- int **getHeight** ()
- int **getComponents** ()
- void **getPixels** (int[] pixels)
- WritableRenderedImage **getImage** ()
- void **setValue** (int width, int height, int components, int[] pixels)
- void **setImage** (RenderedImage image)
- void **setSubImage** (RenderedImage image, int srcWidth, int srcHeight, int srcXOffset, int srcYOffset, int destXOffset, int destYOffset)

Additional Inherited Members

4.388.1 Detailed Description

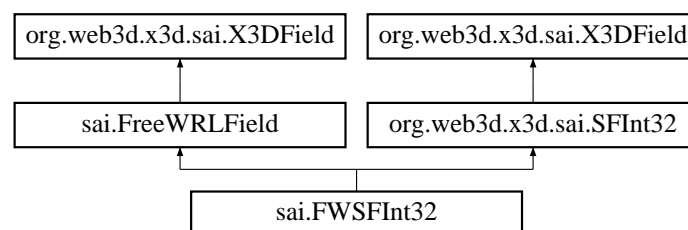
Definition at line 7 of file FWSFImage.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFImage.java

4.389 sai.FWSFInt32 Class Reference

Inheritance diagram for sai.FWSFInt32:



Public Member Functions

- **FWSFInt32** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- int **getValue** ()
- void **setValue** (int value)

Additional Inherited Members

4.389.1 Detailed Description

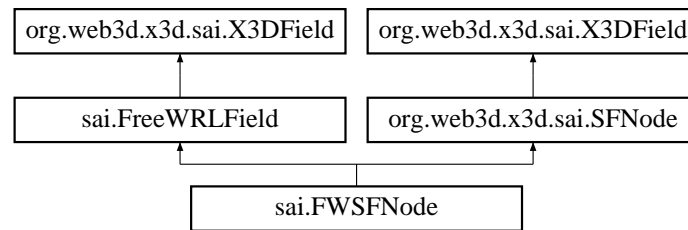
Definition at line 4 of file FWSFInt32.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFInt32.java

4.390 sai.FWSFNode Class Reference

Inheritance diagram for sai.FWSFNode:



Public Member Functions

- **FWSFNode** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- **X3DNode** **getValue** ()
- void **setValue** (**X3DNode** value) throws InvalidNodeException

Additional Inherited Members

4.390.1 Detailed Description

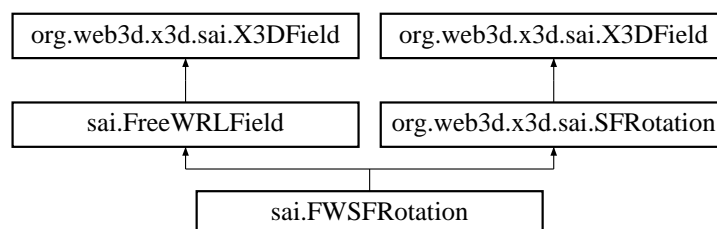
Definition at line 4 of file FWSFNode.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFNode.java

4.391 sai.FWSFRotation Class Reference

Inheritance diagram for sai.FWSFRotation:



Public Member Functions

- **FWSFRotation** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[] value) throws ArrayIndexOutOfBoundsException
- void **setValue** (float[] value) throws ArrayIndexOutOfBoundsException

Additional Inherited Members

4.391.1 Detailed Description

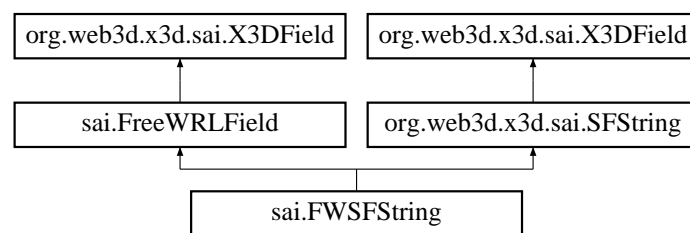
Definition at line 5 of file FWSFRotation.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFRotation.java

4.392 sai.FWSFString Class Reference

Inheritance diagram for sai.FWSFString:



Public Member Functions

- **FWSFString** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- String **getValue** ()
- void **setValue** (String value)

Additional Inherited Members

4.392.1 Detailed Description

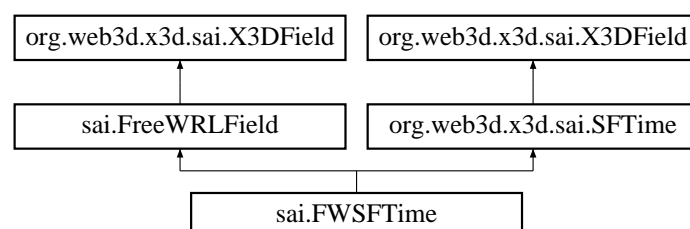
Definition at line 4 of file FWSFString.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFString.java

4.393 sai.FWSFTime Class Reference

Inheritance diagram for sai.FWSFTime:



Public Member Functions

- **FWSFTIME** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- double **getValue** ()
- long **getJavaValue** ()
- void **setValue** (double value)
- void **setValue** (long value)

Additional Inherited Members

4.393.1 Detailed Description

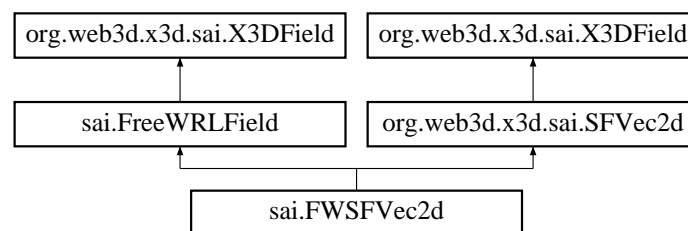
Definition at line 4 of file FWSFTIME.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFTIME.java

4.394 sai.FWSFVec2d Class Reference

Inheritance diagram for sai.FWSFVec2d:



Public Member Functions

- **FWSFVec2d** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (double[] value) throws **ArrayIndexOutOfBoundsException**
- void **setValue** (double[] value) throws **ArrayIndexOutOfBoundsException**

Additional Inherited Members

4.394.1 Detailed Description

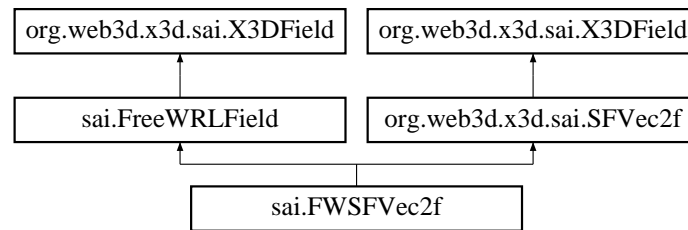
Definition at line 5 of file FWSFVec2d.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFVec2d.java

4.395 sai.FWSFVec2f Class Reference

Inheritance diagram for sai.FWSFVec2f:



Public Member Functions

- **FWSFVec2f** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[] value) throws ArrayIndexOutOfBoundsException
- void **setValue** (float[] value) throws ArrayIndexOutOfBoundsException

Additional Inherited Members

4.395.1 Detailed Description

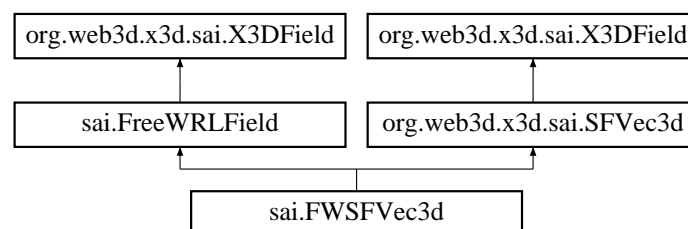
Definition at line 5 of file FWSFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFVec2f.java

4.396 sai.FWSFVec3d Class Reference

Inheritance diagram for sai.FWSFVec3d:



Public Member Functions

- **FWSFVec3d** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (double[] value) throws ArrayIndexOutOfBoundsException
- void **setValue** (double[] value) throws ArrayIndexOutOfBoundsException

Additional Inherited Members

4.396.1 Detailed Description

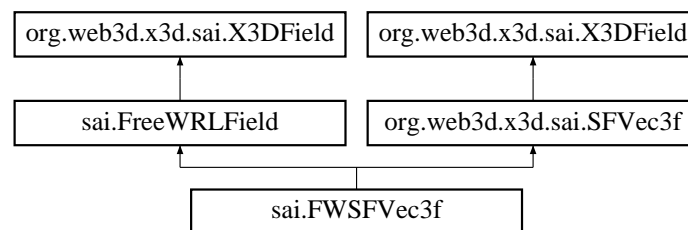
Definition at line 5 of file FWSFVec3d.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFVec3d.java

4.397 sai.FWSFVec3f Class Reference

Inheritance diagram for sai.FWSFVec3f:



Public Member Functions

- **FWSFVec3f** (**FreeWRLFieldDefinition** def, **FreeWRLBrowser** b)
- void **getValue** (float[] value) throws `ArrayIndexOutOfBoundsException`
- void **setValue** (float[] value) throws `ArrayIndexOutOfBoundsException`

Additional Inherited Members

4.397.1 Detailed Description

Definition at line 5 of file FWSFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/sai/FWSFVec3f.java

4.398 FWSNDMSG Struct Reference

Data Fields

- long **mtype**
- char **msg** [SNDMAXMSGSIZE]

4.398.1 Detailed Description

Definition at line 49 of file sounds.h.

The documentation for this struct was generated from the following files:

- src/lib/scenegraph/sounds.h
- src/sound/soundheader.h

4.399 FWTYPE Struct Reference

Data Fields

- int **itype**
- char **ctype**
- char * **name**
- int **size_of**
- FWConstructor **Constructor**
- struct **ArgListType** * **ConstructorArgs**
- **FWPropertySpec** * **Properties**
- FWIterator **iterator**
- FWGet **Getter**
- FWSet **Setter**
- char **takesIndexer**
- char **indexerReadOnly**
- **FWFunctionSpec** * **Functions**

4.399.1 Detailed Description

Definition at line 64 of file FWTYPE.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/FWTYPE.h

4.400 FWVAL Struct Reference

Data Fields

- char **itype**
 -
- ```

union {
 int _null
 double _numeric
 int _integer
 int _boolean
 const char * _string
 FWPointer _pointer
 FWPointer _web3dval
 void * _jobject
};

```

#### 4.400.1 Detailed Description

Definition at line 112 of file FWTYPE.h.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/FWTYPE.h

### 4.401 FXY Struct Reference

#### Data Fields

- GLfloat **x**
- GLfloat **y**

#### 4.401.1 Detailed Description

Definition at line 220 of file CursorDraw.c.

The documentation for this struct was generated from the following file:

- src/lib/ui/CursorDraw.c

### 4.402 GLUface Struct Reference

#### Data Fields

- **GLUface \* next**
- **GLUface \* prev**
- **GLUhalfEdge \* anEdge**
- void \* **data**
- **GLUface \* trail**
- GLboolean **marked**
- GLboolean **inside**

#### 4.402.1 Detailed Description

Definition at line 126 of file mesh.h.

The documentation for this struct was generated from the following file:

- src/libtess/mesh.h



## 4.403 GLUhalfEdge Struct Reference

### Data Fields

- **GLUhalfEdge \* next**
- **GLUhalfEdge \* Sym**
- **GLUhalfEdge \* Onext**
- **GLUhalfEdge \* Lnext**
- **GLUvertex \* Org**
- **GLUface \* Lface**
- **ActiveRegion \* activeRegion**
- **int winding**

### 4.403.1 Detailed Description

Definition at line 138 of file mesh.h.

The documentation for this struct was generated from the following file:

- src/libtess/mesh.h

## 4.404 GLUmesh Struct Reference

### Data Fields

- **GLUvertex vHead**
- **GLUface fHead**
- **GLUhalfEdge eHead**
- **GLUhalfEdge eHeadSym**

### 4.404.1 Detailed Description

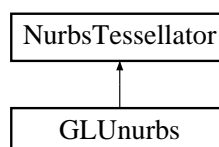
Definition at line 163 of file mesh.h.

The documentation for this struct was generated from the following file:

- src/libtess/mesh.h

## 4.405 GLUnurbs Class Reference

Inheritance diagram for GLUnurbs:



## Public Member Functions

- void **useGLMatrices** (const GLfloat modelMatrix[16], const GLfloat projMatrix[16], const GLint viewport[4])
- void **setSamplingMatrixIdentity** (void)
- void **errorHandler** (int)
- void **bgnrender** (void)
- void **endrender** (void)
- void **setautoloadmode** (INREAL value)
- GLboolean **getautoloadmode** (void)
- void **postError** (int which)
- void **putSurfCallBack** (GLenum which, \_GLUfuncptr fn)
- int **get\_vertices\_call\_back** ()
- void **put\_vertices\_call\_back** (int flag)
- int **get\_callback\_auto\_normal** ()
- void **put\_callback\_auto\_normal** (int flag)
- void **setNurbsCallbackData** (void \*userData)
- void **LOD\_eval\_list** (int level)
- int **is\_callback** ()
- void **put\_callbackFlag** (int flag)

## Data Fields

- errorCallbackType **errorCallback**

## Additional Inherited Members

### 4.405.1 Detailed Description

Definition at line 50 of file glrender.h.

The documentation for this class was generated from the following files:

- src/libnurbs/interface/glrender.h
- src/libnurbs/interface/glrender.cc

## 4.406 GLUtesselator Struct Reference

### Public Member Functions

- **void** (GLAPIENTRY \*callError)(GLenum errnum)
- **void** (GLAPIENTRY \*callCombine)(GLdouble coords[3])
- **void** (GLAPIENTRY \*callBegin)(GLenum type)
- **void** (GLAPIENTRY \*callEdgeFlag)(GLboolean boundaryEdge)
- **void** (GLAPIENTRY \*callVertex)(void \*data)
- **void** (GLAPIENTRY \*callEnd)(void)
- **void** (GLAPIENTRY \*callMesh)( **GLUmesh** \*mesh)
- **void** (GLAPIENTRY \*callBeginData)(GLenum type)
- **void** (GLAPIENTRY \*callEdgeFlagData)(GLboolean boundaryEdge)
- **void** (GLAPIENTRY \*callVertexData)(void \*data)
- **void** (GLAPIENTRY \*callEndData)(void \*polygonData)
- **void** (GLAPIENTRY \*callErrorData)(GLenum errnum)
- **void** (GLAPIENTRY \*callCombineData)(GLdouble coords[3])

## Data Fields

- enum TessState **state**
- **GLUhalfEdge** \* **lastEdge**
- **GLUmesh** \* **mesh**
- GLdouble **normal** [3]
- GLdouble **sUnit** [3]
- GLdouble **tUnit** [3]
- GLdouble **relTolerance**
- GLenum **windingRule**
- GLboolean **fatalError**
- **Dict** \* **dict**
- **PriorityQ** \* **pq**
- **GLUvertex** \* **event**
- void \* **data** [4]
- void GLfloat **weight** [4]
- void GLfloat void \*\* **outData**
- GLboolean **flagBoundary**
- GLboolean **boundaryOnly**
- **GLUface** \* **lonelyTriList**
- GLboolean **emptyCache**
- int **cacheCount**
- **CachedVertex** **cache** [TESS\_MAX\_CACHE]
- void \* **polygonData**
- void GLfloat void void \* **polygonData**
- jmp\_buf **env**

### 4.406.1 Detailed Description

Definition at line 59 of file tess.h.

The documentation for this struct was generated from the following file:

- src/libtess/tess.h

## 4.407 GLUvertex Struct Reference

### Data Fields

- **GLUvertex** \* **next**
- **GLUvertex** \* **prev**
- **GLUhalfEdge** \* **anEdge**
- void \* **data**
- GLdouble **coords** [3]
- GLdouble **s**
- GLdouble **t**
- long **pqHandle**

#### 4.407.1 Detailed Description

Definition at line 114 of file mesh.h.

The documentation for this struct was generated from the following file:

- src/libtess/mesh.h

### 4.408 GLwDrawingAreaCallbackStruct Struct Reference

#### Data Fields

- int **reason**
- XEvent \* **event**
- Dimension **width**
- Dimension **height**

#### 4.408.1 Detailed Description

Definition at line 196 of file GLwDrawA.h.

The documentation for this struct was generated from the following file:

- src/lib/ui/GLwDrawA.h

### 4.409 GLwDrawingAreaPart Struct Reference

#### Data Fields

- int \* **attribList**
- XVisualInfo \* **visualInfo**
- Boolean **myList**
- Boolean **myVisual**
- Boolean **installColormap**
- Boolean **allocateBackground**
- Boolean **allocateOtherColors**
- Boolean **installBackground**
- XtCallbackList **ginitCallback**
- XtCallbackList **resizeCallback**
- XtCallbackList **exposeCallback**
- XtCallbackList **inputCallback**
- int **bufferSize**
- int **level**
- Boolean **rgba**
- Boolean **doublebuffer**
- Boolean **stereo**
- int **auxBuffers**
- int **redSize**
- int **greenSize**
- int **blueSize**
- int **alphaSize**
- int **depthSize**
- int **stencilSize**
- int **accumRedSize**
- int **accumGreenSize**
- int **accumBlueSize**
- int **accumAlphaSize**

### 4.409.1 Detailed Description

Definition at line 80 of file GLwDrawAP.h.

The documentation for this struct was generated from the following file:

- src/lib/ui/GLwDrawAP.h

## 4.410 GoP Struct Reference

### Data Fields

- int **drop\_flag**
- unsigned int **tc\_hours**
- unsigned int **tc\_minutes**
- unsigned int **tc\_seconds**
- unsigned int **tc\_pictures**
- int **closed\_gop**
- int **broken\_link**
- char \* **ext\_data**
- char \* **user\_data**

### 4.410.1 Detailed Description

Definition at line 116 of file mpeg\_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg\_berkley.h

## 4.411 gridBoundaryChain Class Reference

### Public Member Functions

- **gridBoundaryChain** ( **gridWrap** \*gr, Int first\_vline\_index, Int n\_vlines, Int \*uline\_indices, Int \*inner\_indices)
- Int **getVlineIndex** (Int i)
- Int **getUlineIndex** (Int i)
- Real **get\_u\_value** (Int i)
- Real **get\_v\_value** (Int i)
- Int **get\_nVlines** ()
- Int **getInnerIndex** (Int i)
- Real **getInner\_u\_value** (Int i)
- Real \* **get\_vertex** (Int i)
- **gridWrap** \* **getGrid** ()
- void **leftEndFan** (Int i, **primStream** \*pStream)
- void **rightEndFan** (Int i, **primStream** \*pStream)
- Int **lookfor** (Real v, Int i1, Int i2)
- void **draw** ()
- void **drawInner** ()

### 4.411.1 Detailed Description

Definition at line 96 of file gridWrap.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/gridWrap.h
- src/libnurbs/nurbtess/gridWrap.cc

## 4.412 Gridline Struct Reference

### Data Fields

- long **v**
- REAL **vval**
- long **vindex**
- long **ustart**
- long **uend**

### 4.412.1 Detailed Description

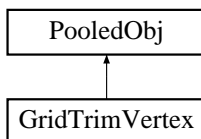
Definition at line 39 of file gridline.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/gridline.h

## 4.413 GridTrimVertex Class Reference

Inheritance diagram for GridTrimVertex:



### Public Member Functions

- void **set** (long, long)
- void **set** (REAL, REAL)
- void **set** ( **TrimVertex** \*)
- void **clear** (void)
- int **isGridVert** ()
- int **isTrimVert** ()
- void **output** ()

### Data Fields

- **TrimVertex** \* t
- **GridVertex** \* g

#### 4.413.1 Detailed Description

Definition at line 44 of file gridtrimvertex.h.

The documentation for this class was generated from the following file:

- src/libnurbs/internals/gridtrimvertex.h

## 4.414 GridVertex Struct Reference

### Public Member Functions

- **GridVertex** (long u, long v)
- void **set** (long u, long v)
- long **nextu** ()
- long **prevu** ()

### Data Fields

- long **gparam** [2]

#### 4.414.1 Detailed Description

Definition at line 39 of file gridvertex.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/gridvertex.h

## 4.415 gridWrap Class Reference

### Public Member Functions

- **gridWrap** (Int nUlines, Int nVlines, Real uMin, Real uMax, Real vMin, Real vMax)
- **gridWrap** (Int nUlines, Real \*uvals, Int nVlines, Real \*vvlas)
- void **print** ()
- Int **get\_n\_ulin**es ()
- Int **get\_n\_vlin**es ()
- Real **get\_u\_min** ()
- Real **get\_u\_max** ()
- Real **get\_v\_min** ()
- Real **get\_v\_max** ()
- Real **get\_u\_value** (Int i)
- Real **get\_v\_value** (Int j)
- Real \* **get\_u\_values** ()
- Real \* **get\_v\_values** ()
- void **outputFanWithPoint** (Int v, Int uleft, Int uright, Real vert[2], **primStream** \*pStream)
- void **draw** ()
- Int **isUniform** ()

#### 4.415.1 Detailed Description

Definition at line 42 of file gridWrap.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/gridWrap.h
- src/libnurbs/nurbtess/gridWrap.cc

### 4.416 GUIElement Struct Reference

#### Data Fields

- char \* **name**
- GUIElementType **type**
- void \* **userData**

#### 4.416.1 Detailed Description

Definition at line 2946 of file Component\_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component\_Text.c

### 4.417 GUINamedType Struct Reference

#### Data Fields

- char \* **name**
- int **type**

#### 4.417.1 Detailed Description

Definition at line 2297 of file Component\_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component\_Text.c

### 4.418 GUIScreen Struct Reference

#### Data Fields

- int **X**
- int **Y**



### 4.418.1 Detailed Description

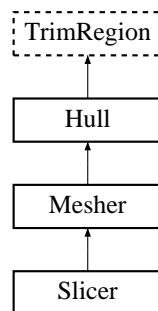
Definition at line 2975 of file Component\_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component\_Text.c

## 4.419 Hull Class Reference

Inheritance diagram for Hull:



### Public Member Functions

- void **init** (void)
- **GridTrimVertex** \* **nextlower** ( **GridTrimVertex** \*)
- **GridTrimVertex** \* **nextupper** ( **GridTrimVertex** \*)

### Additional Inherited Members

### 4.419.1 Detailed Description

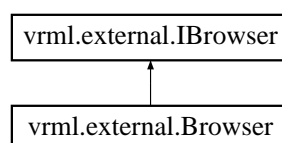
Definition at line 47 of file hull.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/hull.h
- src/libnurbs/internals/hull.cc

## 4.420 vrml.external.IBrowser Interface Reference

Inheritance diagram for vrml.external.IBrowser:



## Public Member Functions

- String **getName** ()
- String **getVersion** ()
- int **getEncoding** ()
- float **getCurrentSpeed** ()
- float **getCurrentFrameRate** ()
- String **getWorldURL** ()
- void **replaceWorld** ( **Node**[] nodes) throws IllegalArgumentException
- void **loadURL** (String[] url, String[] parameter)
- void **setDescription** (String description)
- String **getDescription** ()
- String **getRenderingProperties** ()
- **Node** [] **createVrmlFromString** (String vrmlSyntax) throws InvalidVrmlException
- void **createVrmlFromURL** (String[] url, **Node** node, String event)
- **Node** **getNode** (String name)
- void **addRoute** ( **Node** fromNode, String fromEventOut, **Node** toNode, String toEventIn) throws Illegal↔ArgumentException
- void **deleteRoute** ( **Node** fromNode, String fromEventOut, **Node** toNode, String toEventIn) throws Illegal↔ArgumentException
- void **beginUpdate** ()
- void **endUpdate** ()
- void **initialize** ()
- void **shutdown** ()
- void **firstViewpoint** ()
- void **lastViewpoint** ()
- void **nextViewpoint** ()
- void **previousViewpoint** ()
- String **createNode** (String name)
- String **createProto** (String name)
- String **updateNamedNode** (String name, **Node** node)
- String **removeNamedNode** (String name)
- String **getProtoDeclaration** (String name)
- String **removeProtoDeclaration** (String name)
- String **updateProtoDeclaration** (String name, String npdecl)
- String **getNodeFieldDefs** ( **Node** myn)
- String **getNodeDEFName** ( **Node** myn)

### 4.420.1 Detailed Description

Definition at line 6 of file IBrowser.java.

The documentation for this interface was generated from the following file:

- src/java/vrml/external/IBrowser.java

## 4.421 iiglobal Struct Reference

### Data Structures

- struct **tBindable**
- struct **tcollision**
- struct **tcommon**
- struct **tComponent\_CubeMapTexturing**
- struct **tComponent\_EnvironSensor**
- struct **tComponent\_Followers**
- struct **tComponent\_Geometry3D**
- struct **tComponent\_Geospatial**
- struct **tComponent\_HAnim**
- struct **tComponent\_KeyDevice**
- struct **tComponent\_Layering**
- struct **tComponent\_Layout**
- struct **tComponent\_NURBS**
- struct **tComponent\_ParticleSystems**
- struct **tComponent\_Picking**
- struct **tComponent\_ProgrammableShaders**
- struct **tComponent\_Rendering**
- struct **tComponent\_RigidBodyPhysics**
- struct **tComponent\_Shape**
- struct **tComponent\_Sound**
- struct **tComponent\_Text**
- struct **tComponent\_VolumeRendering**
- struct **tComponent\_VRML1**
- struct **tConsoleMessage**
- struct **tCParse**
- struct **tCParseParser**
- struct **tCRoutes**
- struct **tCScripts**
- struct **tCursorDraw**
- struct **tdisplay**
- struct **tEAI\_C\_CommonFunctions**
- struct **tEAICore**
- struct **tEAIEventsIn**
- struct **tEAHelpers**
- struct **tFrustum**
- struct **tinternalc**
- struct **tJScript**
- struct **tjsUtils**
- struct **tjsVRMLBrowser**
- struct **tjsVRMLClasses**
- struct **tLoadTextures**
- struct **tMainloop**
- struct **tOpenGL\_Utils**
- struct **tPluginSocket**
- struct **tpluginUtils**
- struct **tProdCon**
- struct **tRenderFuncs**
- struct **tRenderTextures**
- struct **tresources**
- struct **tSensInterps**

- struct **tSnapshot**
- struct **tstatusbar**
- struct **tStreamPoly**
- struct **tTess**
- struct **tTextures**
- struct **tthreads**
- struct **tViewer**
- struct **tX3DParser**

## Data Fields

- struct **iiglobal::tdisplay display**
- struct **iiglobal::tinternalc internalc**
- struct **iiglobal::tresources resources**
- struct **iiglobal::tthreads threads**
- struct **iiglobal::tSnapshot Snapshot**
- struct **iiglobal::tEAI\_C\_CommonFunctions EAI\_C\_CommonFunctions**
- struct **iiglobal::tEAIEventsIn EAIEventsIn**
- struct **iiglobal::tEAIHelpers EAIHelpers**
- struct **iiglobal::tEAICore EAICore**
- struct **iiglobal::tSensInterps SensInterps**
- struct **iiglobal::tConsoleMessage ConsoleMessage**
- struct **iiglobal::tMainloop Mainloop**
- struct **iiglobal::tProdCon ProdCon**
- struct **iiglobal::tFrustum Frustum**
- struct **iiglobal::tLoadTextures LoadTextures**
- struct **iiglobal::tOpenGL\_Utils OpenGL\_Utils**
- struct **iiglobal::tRenderTextures RenderTextures**
- struct **iiglobal::tTextures Textures**
- struct **iiglobal::tPluginSocket PluginSocket**
- struct **iiglobal::tpluginUtils pluginUtils**
- struct **iiglobal::tcollision collision**
- struct **iiglobal::tComponent\_CubeMapTexturing Component\_CubeMapTexturing**
- struct **iiglobal::tComponent\_EnvironSensor Component\_EnvironSensor**
- struct **iiglobal::tComponent\_Geometry3D Component\_Geometry3D**
- struct **iiglobal::tComponent\_Geospatial Component\_Geospatial**
- struct **iiglobal::tComponent\_HAnim Component\_HAnim**
- struct **iiglobal::tComponent\_Layering Component\_Layering**
- struct **iiglobal::tComponent\_Layout Component\_Layout**
- struct **iiglobal::tComponent\_NURBS Component\_NURBS**
- struct **iiglobal::tComponent\_ParticleSystems Component\_ParticleSystems**
- struct **iiglobal::tComponent\_ProgrammableShaders Component\_ProgrammableShaders**
- struct **iiglobal::tComponent\_RigidBodyPhysics Component\_RigidBodyPhysics**
- struct **iiglobal::tComponent\_Followers Component\_Followers**
- struct **iiglobal::tComponent\_KeyDevice Component\_KeyDevice**
- struct **iiglobal::tComponent\_Picking Component\_Picking**
- struct **iiglobal::tComponent\_Rendering Component\_Rendering**
- struct **iiglobal::tComponent\_Shape Component\_Shape**
- struct **iiglobal::tComponent\_Sound Component\_Sound**
- struct **iiglobal::tComponent\_Text Component\_Text**
- struct **iiglobal::tComponent\_VRML1 Component\_VRML1**
- struct **iiglobal::tComponent\_VolumeRendering Component\_VolumeRendering**
- struct **iiglobal::tRenderFuncs RenderFuncs**
- struct **iiglobal::tStreamPoly StreamPoly**

- struct **iiglobal::tTess Tess**
- struct **iiglobal::tViewer Viewer**
- struct **iiglobal::tstatusbar statusbar**
- struct **iiglobal::tCParse CParse**
- struct **iiglobal::tCParserParser CParserParser**
- struct **iiglobal::tCRoutes CRoutes**
- struct **iiglobal::tCScripts CScripts**
- struct **iiglobal::tJScript JScript**
- struct **iiglobal::tjsUtils jsUtils**
- struct **iiglobal::tjsVRMLBrowser jsVRMLBrowser**
- struct **iiglobal::tjsVRMLClasses jsVRMLClasses**
- struct **iiglobal::tBindable Bindable**
- struct **iiglobal::tX3DParser X3DParser**
- struct **iiglobal::tcommon common**
- struct **iiglobal::tCursorDraw CursorDraw**

#### 4.421.1 Detailed Description

Definition at line 41 of file `iglobal.h`.

The documentation for this struct was generated from the following file:

- `src/lib/iglobal.h`

## 4.422 IMEXPORT Struct Reference

### Data Fields

- struct **X3D\_Node \* nodeptr**
- char \* **inlinename**
- char \* **mxname**
- char \* **as**

#### 4.422.1 Detailed Description

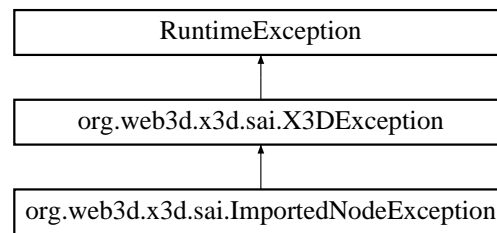
Definition at line 240 of file `CParserParser.h`.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/CParserParser.h`

## 4.423 org.web3d.x3d.sai.ImportedException Class Reference

Inheritance diagram for org.web3d.x3d.sai.ImportedException:



### Public Member Functions

- **ImportedException** (String msg)

#### 4.423.1 Detailed Description

Definition at line 3 of file ImportedException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/ImportedException.java

## 4.424 initialRouteStruct Struct Reference

### Data Fields

- struct **X3D\_Node** \* **from**
- size\_t **totalptr**

#### 4.424.1 Detailed Description

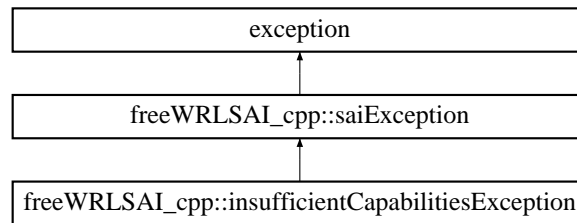
Definition at line 209 of file CRoutes.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/CRoutes.c

## 4.425 freeWRLSAI\_cpp::insufficientCapabilitiesException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::insufficientCapabilitiesException:



### Public Member Functions

- virtual const char \* **what** ()

### Additional Inherited Members

#### 4.425.1 Detailed Description

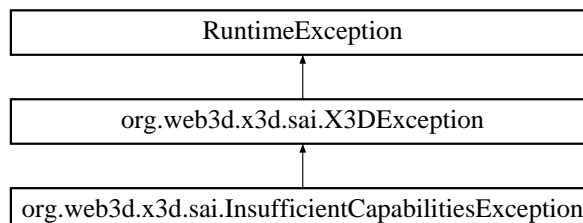
Definition at line 118 of file SAlexception.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAlexception.h

## 4.426 org.web3d.x3d.sai.InsufficientCapabilitiesException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InsufficientCapabilitiesException:



### Public Member Functions

- **InsufficientCapabilitiesException** (String msg)

#### 4.426.1 Detailed Description

Definition at line 3 of file `InsufficientCapabilitiesException.java`.

The documentation for this class was generated from the following file:

- `src/java/org/web3d/x3d/sai/InsufficientCapabilitiesException.java`

### 4.427 intersection\_info Struct Reference

#### Data Fields

- float **dist**
- float **p** [3]
- float **normal** [3]
- float **texcoord** [3]

#### 4.427.1 Detailed Description

Definition at line 121 of file `Polyrep.h`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/Polyrep.h`

### 4.428 intTableIndex Struct Reference

#### Data Fields

- int \* **table**
- int **index**

#### 4.428.1 Detailed Description

Definition at line 166 of file `jsVRMLBrowser.c`.

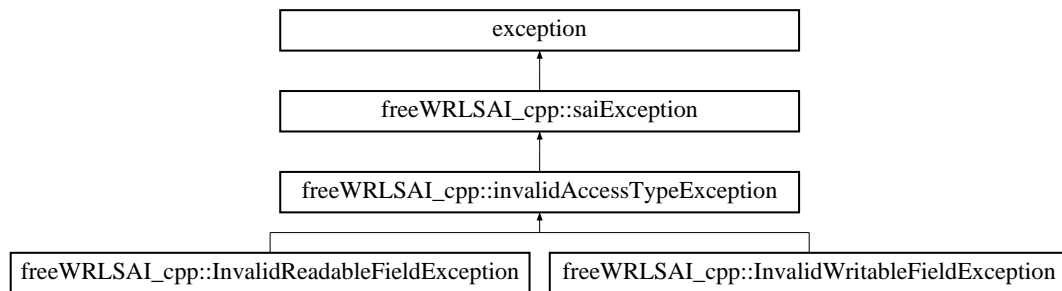
The documentation for this struct was generated from the following file:

- `src/lib/world_script/jsVRMLBrowser.c`



## 4.429 freeWRLSAI\_cpp::invalidAccessTypeException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidAccessTypeException:



### Public Member Functions

- virtual const char \* **what** ()

### Additional Inherited Members

#### 4.429.1 Detailed Description

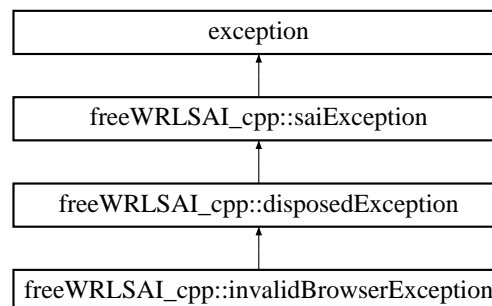
Definition at line 129 of file SAlexception.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAlexception.h

## 4.430 freeWRLSAI\_cpp::invalidBrowserException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidBrowserException:



### Public Member Functions

- virtual const char \* **what** ()

## Additional Inherited Members

### 4.430.1 Detailed Description

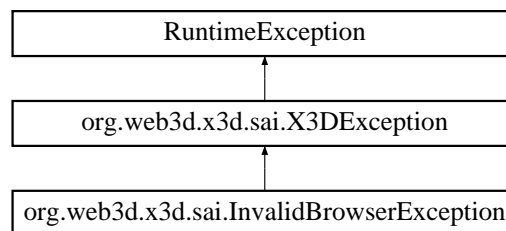
Definition at line 140 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAException.h

## 4.431 org.web3d.x3d.sai.InvalidBrowserException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidBrowserException:



## Public Member Functions

- **InvalidBrowserException** (String msg)

### 4.431.1 Detailed Description

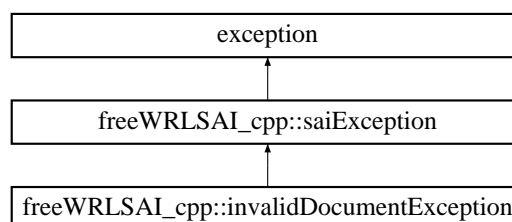
Definition at line 3 of file InvalidBrowserException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidBrowserException.java

## 4.432 freeWRLSAI\_cpp::invalidDocumentException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidDocumentException:



## Public Member Functions

- virtual const char \* **what** ()

## Additional Inherited Members

### 4.432.1 Detailed Description

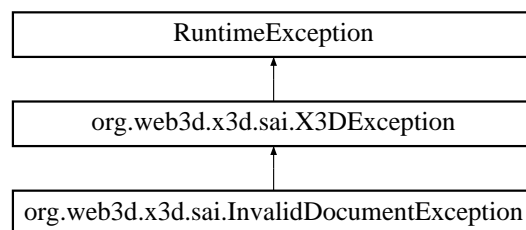
Definition at line 151 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAException.h

## 4.433 org.web3d.x3d.sai.InvalidDocumentException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidDocumentException:



## Public Member Functions

- **InvalidDocumentException** (String msg)

### 4.433.1 Detailed Description

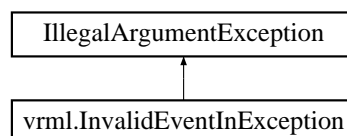
Definition at line 3 of file InvalidDocumentException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidDocumentException.java

## 4.434 vrml.InvalidEventInException Class Reference

Inheritance diagram for vrml.InvalidEventInException:



## Public Member Functions

- **InvalidEventInException** (String s)

### 4.434.1 Detailed Description

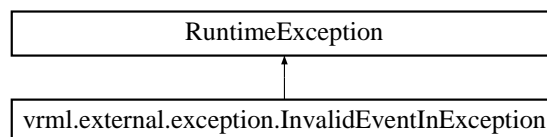
Definition at line 6 of file InvalidEventInException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidEventInException.java

## 4.435 vrml.external.exception.InvalidEventInException Class Reference

Inheritance diagram for vrml.external.exception.InvalidEventInException:



## Public Member Functions

- **InvalidEventInException** ()  
Constructs an **InvalidEventInException** (p. 286) with no detail message.
- **InvalidEventInException** (String s)  
Constructs an **InvalidEventInException** (p. 286) with the specified detail message.

### 4.435.1 Detailed Description

Definition at line 3 of file InvalidEventInException.java.

### 4.435.2 Constructor & Destructor Documentation

#### 4.435.2.1 InvalidEventInException()

```
vrml.external.exception.InvalidEventInException.InvalidEventInException (
 String s) [inline]
```

Constructs an **InvalidEventInException** (p. 286) with the specified detail message.

A detail message is a String that describes this particular exception.

## Parameters

|   |                    |
|---|--------------------|
| s | the detail message |
|---|--------------------|

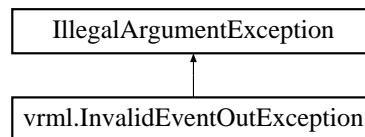
Definition at line 17 of file InvalidEventInException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/exception/InvalidEventInException.java

## 4.436 vrml.InvalidEventOutException Class Reference

Inheritance diagram for vrml.InvalidEventOutException:



## Public Member Functions

- **InvalidEventOutException** (String s)

### 4.436.1 Detailed Description

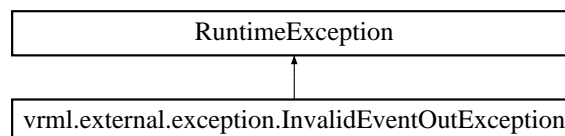
Definition at line 6 of file InvalidEventOutException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidEventOutException.java

## 4.437 vrml.external.exception.InvalidEventOutException Class Reference

Inheritance diagram for vrml.external.exception.InvalidEventOutException:



## Public Member Functions

- **InvalidEventOutException** (String s)

#### 4.437.1 Detailed Description

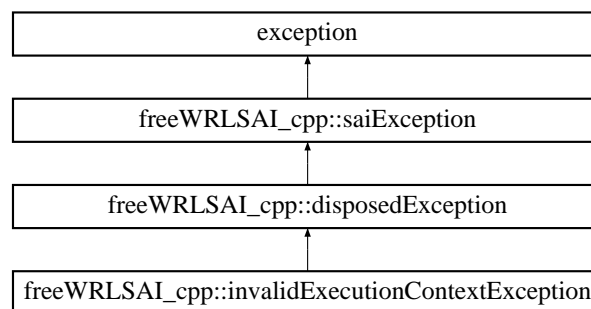
Definition at line 3 of file InvalidEventOutException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/exception/InvalidEventOutException.java

#### 4.438 freeWRLSAI\_cpp::invalidExecutionContextException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidExecutionContextException:



#### Public Member Functions

- virtual const char \* **what** ()

#### Additional Inherited Members

#### 4.438.1 Detailed Description

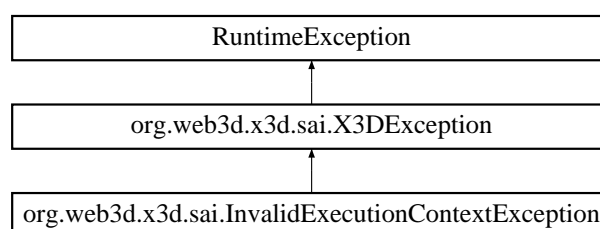
Definition at line 253 of file SAlexception.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAlexception.h

#### 4.439 org.web3d.x3d.sai.InvalidExecutionContextException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidExecutionContextException:



## Public Member Functions

- **InvalidExecutionContextException** (String msg)

### 4.439.1 Detailed Description

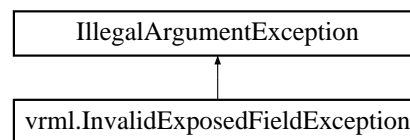
Definition at line 3 of file InvalidExecutionContextException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidExecutionContextException.java

## 4.440 vrml.InvalidExposedFieldException Class Reference

Inheritance diagram for vrml.InvalidExposedFieldException:



## Public Member Functions

- **InvalidExposedFieldException** (String s)

### 4.440.1 Detailed Description

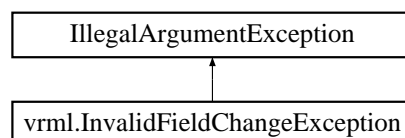
Definition at line 6 of file InvalidExposedFieldException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidExposedFieldException.java

## 4.441 vrml.InvalidFieldChangeException Class Reference

Inheritance diagram for vrml.InvalidFieldChangeException:



## Public Member Functions

- **InvalidFieldChangeException** (String s)

### 4.441.1 Detailed Description

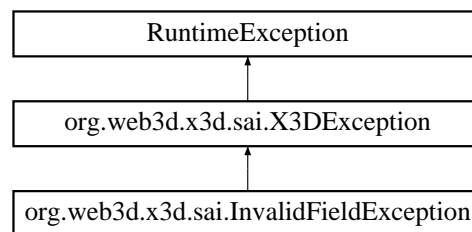
Definition at line 6 of file InvalidFieldChangeException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidFieldChangeException.java

## 4.442 org.web3d.x3d.sai.InvalidFieldException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidFieldException:



## Public Member Functions

- **InvalidFieldException** (String msg)

### 4.442.1 Detailed Description

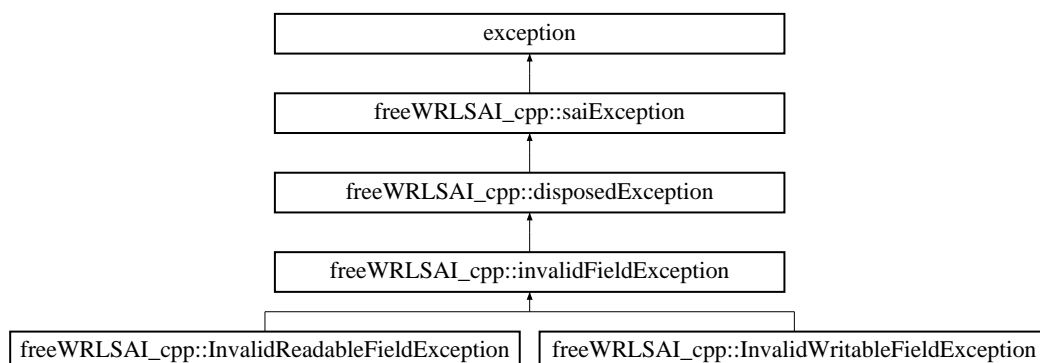
Definition at line 3 of file InvalidFieldException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidFieldException.java

## 4.443 freeWRLSAI\_cpp::invalidFieldException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidFieldException:





### Public Member Functions

- virtual const char \* **what** ()

### Additional Inherited Members

#### 4.443.1 Detailed Description

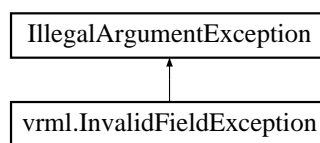
Definition at line 264 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAException.h

## 4.444 vrml.InvalidFieldException Class Reference

Inheritance diagram for vrml.InvalidFieldException:



### Public Member Functions

- **InvalidFieldException** (String s)

#### 4.444.1 Detailed Description

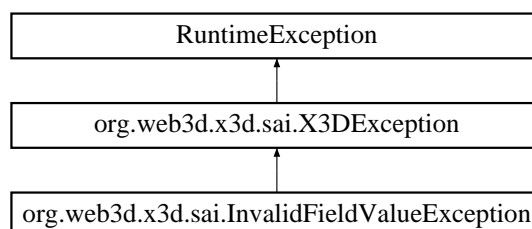
Definition at line 6 of file InvalidFieldException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidFieldException.java

## 4.445 org.web3d.x3d.sai.InvalidFieldValueException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidFieldValueException:



## Public Member Functions

- **InvalidFieldValueException** (String msg)

### 4.445.1 Detailed Description

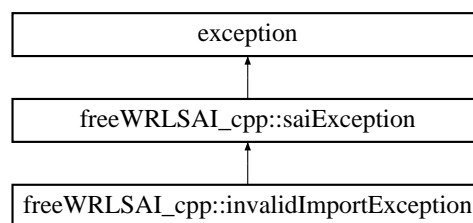
Definition at line 3 of file InvalidFieldValueException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidFieldValueException.java

## 4.446 freeWRLSAI\_cpp::invalidImportException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidImportException:



## Public Member Functions

- virtual const char \* **what** ()

## Additional Inherited Members

### 4.446.1 Detailed Description

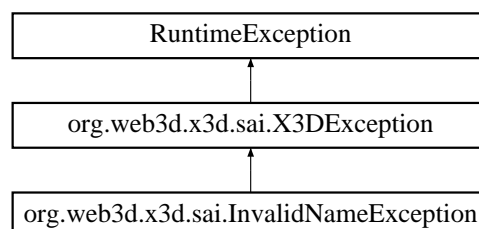
Definition at line 107 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAException.h

## 4.447 org.web3d.x3d.sai.InvalidNameException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidNameException:



### Public Member Functions

- **InvalidNameException** (String str)

#### 4.447.1 Detailed Description

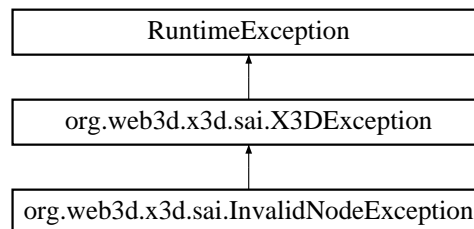
Definition at line 3 of file InvalidNameException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidNameException.java

## 4.448 org.web3d.x3d.sai.InvalidNodeException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidNodeException:



### Public Member Functions

- **InvalidNodeException** (String str)

#### 4.448.1 Detailed Description

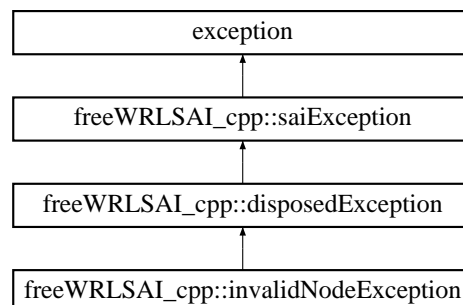
Definition at line 3 of file InvalidNodeException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidNodeException.java

## 4.449 freeWRLSAI\_cpp::invalidNodeException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidNodeException:



## Public Member Functions

- virtual const char \* **what** ()

## Additional Inherited Members

### 4.449.1 Detailed Description

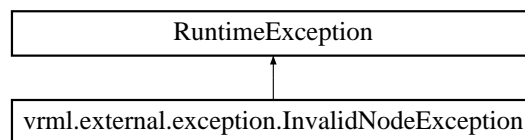
Definition at line 275 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAException.h

## 4.450 vrml.external.exception.InvalidNodeException Class Reference

Inheritance diagram for vrml.external.exception.InvalidNodeException:



## Public Member Functions

- **InvalidNodeException** ()  
Constructs an **InvalidNodeException** (p. 294) with no detail message.
- **InvalidNodeException** (String s)  
Constructs an **InvalidNodeException** (p. 294) with the specified detail message.

### 4.450.1 Detailed Description

Definition at line 3 of file InvalidNodeException.java.

### 4.450.2 Constructor & Destructor Documentation

#### 4.450.2.1 InvalidNodeException()

```
vrml.external.exception.InvalidNodeException.InvalidNodeException (
 String s) [inline]
```

Constructs an **InvalidNodeException** (p. 294) with the specified detail message.

A detail message is a String that describes this particular exception.

## Parameters

|   |                    |
|---|--------------------|
| s | the detail message |
|---|--------------------|

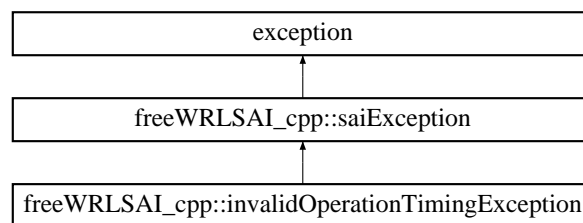
Definition at line 17 of file InvalidNodeException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/exception/InvalidNodeException.java

## 4.451 freeWRLSAI\_cpp::invalidOperationTimingException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidOperationTimingException:



### Public Member Functions

- virtual const char \* **what** ()

### Additional Inherited Members

#### 4.451.1 Detailed Description

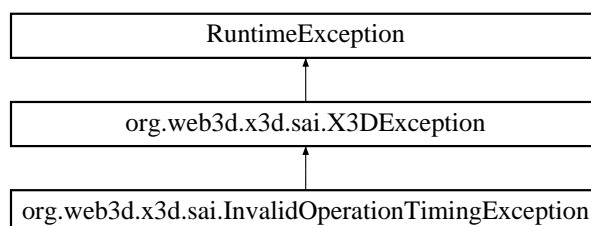
Definition at line 162 of file SAlexception.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAlexception.h

## 4.452 org.web3d.x3d.sai.InvalidOperationTimingException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidOperationTimingException:



## Public Member Functions

- **InvalidOperationTimingException** (String msg)

### 4.452.1 Detailed Description

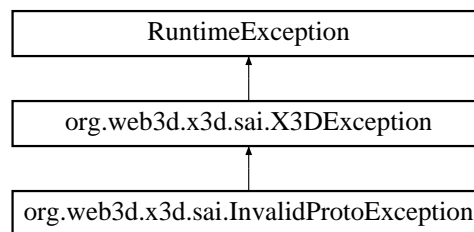
Definition at line 3 of file InvalidOperationTimingException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidOperationTimingException.java

## 4.453 org.web3d.x3d.sai.InvalidProtoException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidProtoException:



## Public Member Functions

- **InvalidProtoException** (String msg)

### 4.453.1 Detailed Description

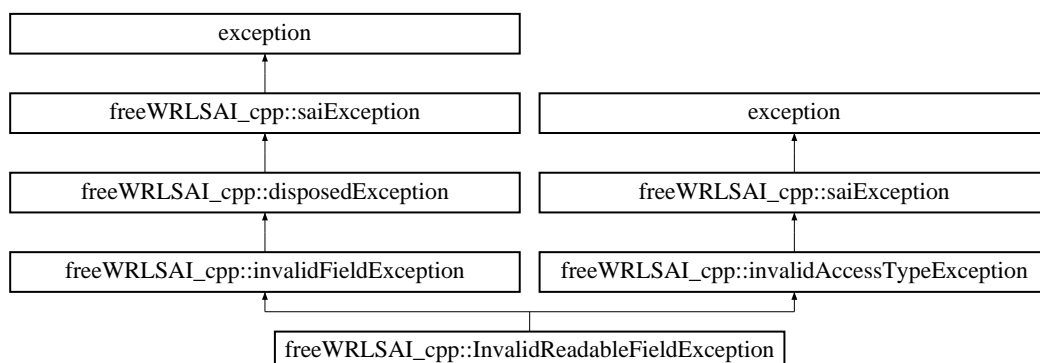
Definition at line 3 of file InvalidProtoException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidProtoException.java

## 4.454 freeWRLSAI\_cpp::InvalidReadableFieldException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::InvalidReadableFieldException:



### Public Member Functions

- virtual const char \* **what** ()

### Additional Inherited Members

#### 4.454.1 Detailed Description

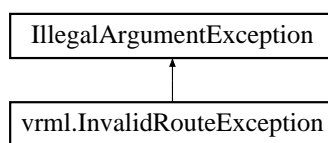
Definition at line 298 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAException.h

## 4.455 vrml.InvalidRouteException Class Reference

Inheritance diagram for vrml.InvalidRouteException:



### Public Member Functions

- **InvalidRouteException** (String s)

#### 4.455.1 Detailed Description

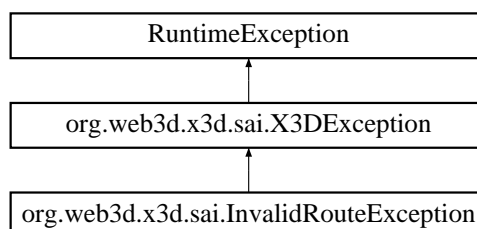
Definition at line 6 of file InvalidRouteException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidRouteException.java

## 4.456 org.web3d.x3d.sai.InvalidRouteException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidRouteException:



## Public Member Functions

- **InvalidRouteException** (String msg)

### 4.456.1 Detailed Description

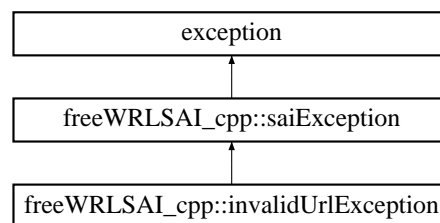
Definition at line 3 of file InvalidRouteException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidRouteException.java

## 4.457 freeWRLSAI\_cpp::invalidUrlException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidUrlException:



## Public Member Functions

- virtual const char \* **what** ()

## Additional Inherited Members

### 4.457.1 Detailed Description

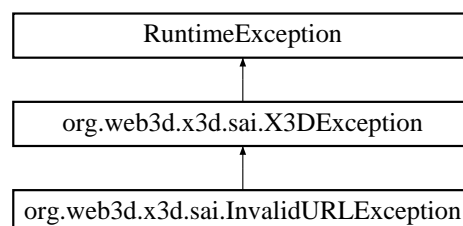
Definition at line 173 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAException.h

## 4.458 org.web3d.x3d.sai.InvalidURLException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidURLException:





## Public Member Functions

- **InvalidURLException** (String str)

### 4.458.1 Detailed Description

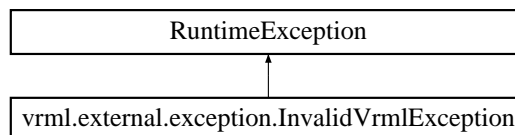
Definition at line 3 of file InvalidURLException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidURLException.java

## 4.459 vrml.external.exception.InvalidVrmlException Class Reference

Inheritance diagram for vrml.external.exception.InvalidVrmlException:



## Public Member Functions

- **InvalidVrmlException** ()  
Constructs an **InvalidVrmlException** (p. 299) with no detail message.
- **InvalidVrmlException** (String s)  
Constructs an **InvalidVrmlException** (p. 299) with the specified detail message.

### 4.459.1 Detailed Description

Definition at line 3 of file InvalidVrmlException.java.

### 4.459.2 Constructor & Destructor Documentation

#### 4.459.2.1 InvalidVrmlException()

```
vrml.external.exception.InvalidVrmlException.InvalidVrmlException (
 String s) [inline]
```

Constructs an **InvalidVrmlException** (p. 299) with the specified detail message.

A detail message is a String that describes this particular exception.

## Parameters

|   |                    |
|---|--------------------|
| s | the detail message |
|---|--------------------|

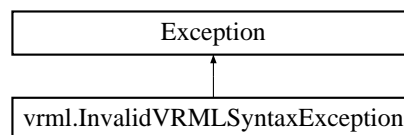
Definition at line 17 of file InvalidVrmlException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/exception/InvalidVrmlException.java

## 4.460 vrml.InvalidVRMLSyntaxException Class Reference

Inheritance diagram for vrml.InvalidVRMLSyntaxException:



### Public Member Functions

- **InvalidVRMLSyntaxException** (String s)

#### 4.460.1 Detailed Description

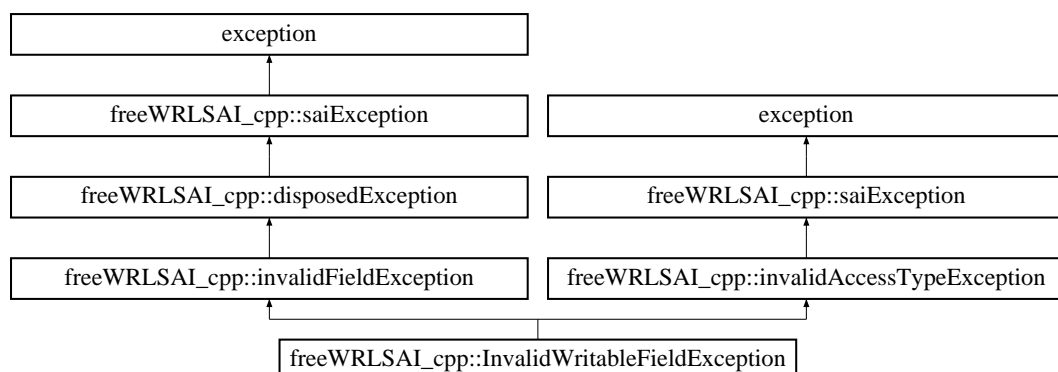
Definition at line 3 of file InvalidVRMLSyntaxException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidVRMLSyntaxException.java

## 4.461 freeWRLSAI\_cpp::InvalidWritableFieldException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::InvalidWritableFieldException:



## Public Member Functions

- virtual const char \* **what** ()

## Additional Inherited Members

### 4.461.1 Detailed Description

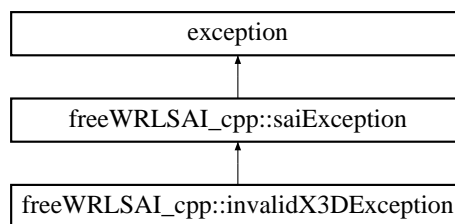
Definition at line 287 of file SAexception.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAexception.h

## 4.462 freeWRLSAI\_cpp::invalidX3DException Class Reference

Inheritance diagram for freeWRLSAI\_cpp::invalidX3DException:



## Public Member Functions

- virtual const char \* **what** ()

## Additional Inherited Members

### 4.462.1 Detailed Description

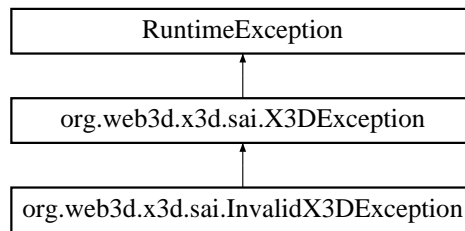
Definition at line 184 of file SAexception.h.

The documentation for this class was generated from the following file:

- src/SAI\_Cpp/SAexception.h

## 4.463 org.web3d.x3d.sai.InvalidX3DException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidX3DException:



### Public Member Functions

- **InvalidX3DException** (String str)

#### 4.463.1 Detailed Description

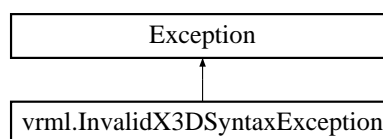
Definition at line 3 of file InvalidX3DException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/InvalidX3DException.java

## 4.464 vrml.InvalidX3DSyntaxException Class Reference

Inheritance diagram for vrml.InvalidX3DSyntaxException:



### Public Member Functions

- **InvalidX3DSyntaxException** (String s)

#### 4.464.1 Detailed Description

Definition at line 3 of file InvalidX3DSyntaxException.java.

The documentation for this class was generated from the following file:

- src/java/vrml/InvalidX3DSyntaxException.java

## 4.465 ivec2 Struct Reference

### Data Fields

- int **X**
- int **Y**

### 4.465.1 Detailed Description

Definition at line 66 of file display.c.

The documentation for this struct was generated from the following files:

- src/lib/display.c
- src/lib/scenegraph/Component\_Text.c
- src/lib/scenegraph/RenderFuncs.h

## 4.466 ivec4 Struct Reference

### Data Fields

- int **X**
- int **Y**
- int **W**
- int **H**

### 4.466.1 Detailed Description

Definition at line 65 of file display.c.

The documentation for this struct was generated from the following files:

- src/lib/display.c
- src/lib/scenegraph/Component\_Text.c
- src/lib/scenegraph/RenderFuncs.h

## 4.467 Jarcloc Class Reference

### Public Member Functions

- void **init** (Arc\_ptr a, long first, long last)
- TrimVertex \* **getnextpt** (void)
- TrimVertex \* **getprevpt** (void)
- void **reverse** ()

#### 4.467.1 Detailed Description

Definition at line 41 of file jarcloc.h.

The documentation for this class was generated from the following file:

- src/libnurbs/internals/jarcloc.h

### 4.468 JMATRIX Struct Reference

#### Data Fields

- double **mat** [16]
- float **normal** [9]

#### 4.468.1 Detailed Description

Definition at line 495 of file Component\_HAnim.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component\_HAnim.c

### 4.469 JSLoadPropElement Struct Reference

#### Data Fields

- JSClass \* **class**
- void \* **constr**
- void \* **Functions**
- void \* **Properties**
- char \* **id**

#### 4.469.1 Detailed Description

Definition at line 856 of file jsVRMLClasses.c.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/jsVRMLClasses.c

### 4.470 JSON\_config Struct Reference

The structure used to configure a JSON parser object.

## Data Fields

- JSON\_parser\_callback **callback**  
*Pointer to a callback, called when the parser has something to tell the user.*
- void \* **callback\_ctx**  
*Callback context - client-specified data to pass to the callback function.*
- int **depth**  
*Specifies the levels of nested JSON to allow.*
- int **allow\_comments**  
*To allow C style comments in JSON, set to non-zero.*
- int **handle\_floats\_manually**  
*To decode floating point numbers manually set this parameter to non-zero.*
- JSON\_malloc\_t **malloc**  
*The memory allocation routine, which must be semantically compatible with malloc(3).*
- JSON\_free\_t **free**  
*The memory deallocation routine, which must be semantically compatible with free(3).*

### 4.470.1 Detailed Description

The structure used to configure a JSON parser object.

Definition at line 121 of file cson\_amalgamation\_core.c.

### 4.470.2 Field Documentation

#### 4.470.2.1 callback

```
JSON_parser_callback JSON_config::callback
```

Pointer to a callback, called when the parser has something to tell the user.

This parameter may be NULL. In this case the input is merely checked for validity.

Definition at line 126 of file cson\_amalgamation\_core.c.

#### 4.470.2.2 callback\_ctx

```
void* JSON_config::callback_ctx
```

Callback context - client-specified data to pass to the callback function.

This parameter may be NULL.

Definition at line 131 of file cson\_amalgamation\_core.c.

#### 4.470.2.3 depth

```
int JSON_config::depth
```

Specifies the levels of nested JSON to allow.

Negative numbers yield unlimited nesting. If negative, the parser can parse arbitrary levels of JSON, otherwise the depth is the limit.

Definition at line 136 of file cson\_amalgamation\_core.c.

#### 4.470.2.4 free

```
JSON_free_t JSON_config::free
```

The memory deallocation routine, which must be semantically compatible with free(3).

If set to NULL, free(3) is used.

If this is set to a non-NULL value then the 'alloc' member MUST be set to the proper allocation counterpart for this function. Failure to do so results in undefined behaviour at deallocation time.

Definition at line 165 of file cson\_amalgamation\_core.c.

#### 4.470.2.5 malloc

```
JSON_malloc_t JSON_config::malloc
```

The memory allocation routine, which must be semantically compatible with malloc(3).

If set to NULL, malloc(3) is used.

If this is set to a non-NULL value then the 'free' member MUST be set to the proper deallocation counterpart for this function. Failure to do so results in undefined behaviour at deallocation time.

Definition at line 155 of file cson\_amalgamation\_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson\_amalgamation\_core.c



## 4.471 JSON\_parser\_struct Struct Reference

### Data Fields

- JSON\_parser\_callback **callback**
- void \* **ctx**
- signed char **state**
- signed char **before\_comment\_state**
- signed char **type**
- signed char **escaped**
- signed char **comment**
- signed char **allow\_comments**
- signed char **handle\_floats\_manually**
- signed char **error**
- char **decimal\_point**
- UTF16 **utf16\_high\_surrogate**
- int **current\_char**
- int **depth**
- int **top**
- int **stack\_capacity**
- signed char \* **stack**
- char \* **parse\_buffer**
- size\_t **parse\_buffer\_capacity**
- size\_t **parse\_buffer\_count**
- signed char **static\_stack** [JSON\_PARSER\_STACK\_SIZE]
- char **static\_parse\_buffer** [JSON\_PARSER\_PARSE\_BUFFER\_SIZE]
- JSON\_malloc\_t **malloc**
- JSON\_free\_t **free**

### 4.471.1 Detailed Description

Definition at line 347 of file cson\_amalgamation\_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson\_amalgamation\_core.c

## 4.472 JSON\_value\_struct Struct Reference

### Data Fields

- ```
union {
    JSON_int_t integer_value
    double float_value
    struct {
        const char * value
        size_t length
    } str
} vu
```

4.472.1 Detailed Description

Definition at line 81 of file cson_amalgamation_core.c.

The documentation for this struct was generated from the following file:

- src/SSR/cson/cson_amalgamation_core.c

4.473 key Struct Reference

Data Fields

- char **key**
- unsigned int **hit**

4.473.1 Detailed Description

Definition at line 174 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.474 keyHit Struct Reference

Data Fields

- int **direction**
- double **epoch**
- double **era**
- int **once**

4.474.1 Detailed Description

Definition at line 178 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.475 keyval Struct Reference

Data Fields

- char * **key**
- char * **val**
- cson_value * **cv**

4.475.1 Detailed Description

Definition at line 52 of file common.c.

The documentation for this struct was generated from the following files:

- src/lib/ui/common.c
- src/SSR/SSRServer.c

4.476 Knotspec Struct Reference

Public Member Functions

- void **factors** (void)
- void **insert** (REAL *)
- void **preselect** ()
- void **select** (void)
- void **copy** (INREAL *, REAL *)
- void **breakpoints** (void)
- void **knots** (void)
- void **transform** (REAL *)
- void **showpts** (REAL *)
- void **pt_io_copy** (REAL *, INREAL *)
- void **pt_oo_copy** (REAL *, REAL *)
- void **pt_oo_sum** (REAL *, REAL *, REAL *, Knot, Knot)

Data Fields

- long **order**
- Knot_ptr **inkbegin**
- Knot_ptr **inkend**
- Knot_ptr **outkbegin**
- Knot_ptr **outkend**
- Knot_ptr **kleft**
- Knot_ptr **kright**
- Knot_ptr **kfirst**
- Knot_ptr **klast**
- Knot_ptr **sbegin**
- Breakpt * **bbegin**
- Breakpt * **bend**
- int **ncoords**
- int **prestride**
- int **poststride**
- int **preoffset**
- int **postoffset**
- int **prewidth**
- int **postwidth**
- int **istransformed**
- Knotspec * **next**
- Knotspec * **kspectotrans**

4.476.1 Detailed Description

Definition at line 54 of file tobezier.cc.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/tobezier.cc

4.477 Knotvector Struct Reference

Public Member Functions

- void **init** (long, long, long, INREAL *)
- int **validate** (void)
- void **show** (const char *)

Data Fields

- long **order**
- long **knotcount**
- long **stride**
- Knot * **knotlist**

4.477.1 Detailed Description

Definition at line 41 of file knotvector.h.

The documentation for this struct was generated from the following files:

- src/libnurbs/internals/knotvector.h
- src/libnurbs/internals/knotvector.cc

4.478 layout_scale_item Struct Reference

Data Fields

- float **scale** [2]
- int **scalemode** [2]

4.478.1 Detailed Description

Definition at line 70 of file Component_Layout.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Layout.c

4.479 layoutmode Struct Reference

Data Fields

- char * **key**
- int **type**

4.479.1 Detailed Description

Definition at line 109 of file Component_Layout.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Layout.c

4.480 linkedlist_data_s Struct Reference

Data Fields

- **linkedlist_datablock_internal** * **first_block**
- **linkedlist_datablock_internal** * **last_block**

4.480.1 Detailed Description

Definition at line 123 of file zip.c.

The documentation for this struct was generated from the following file:

- src/libminizip/zip.c

4.481 linkedlist_datablock_internal_s Struct Reference

Data Fields

- struct **linkedlist_datablock_internal_s** * **next_datablock**
- uLong **avail_in_this_block**
- uLong **filled_in_this_block**
- uLong **unused**
- unsigned char **data** [SIZEDATA_INDATABLOCK]

4.481.1 Detailed Description

Definition at line 114 of file zip.c.

The documentation for this struct was generated from the following file:

- src/libminizip/zip.c

4.482 macroblock Struct Reference

Data Fields

- int **mb_address**
- int **past_mb_addr**
- int **motion_h_forw_code**
- unsigned int **motion_h_forw_r**
- int **motion_v_forw_code**
- unsigned int **motion_v_forw_r**
- int **motion_h_back_code**
- unsigned int **motion_h_back_r**
- int **motion_v_back_code**
- unsigned int **motion_v_back_r**
- unsigned int **cbp**
- int **mb_intra**
- int **bpict_past_forw**
- int **bpict_past_back**
- int **past_intra_addr**
- int **recon_right_for_prev**
- int **recon_down_for_prev**
- int **recon_right_back_prev**
- int **recon_down_back_prev**

4.482.1 Detailed Description

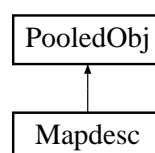
Definition at line 158 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.483 Mapdesc Class Reference

Inheritance diagram for Mapdesc:



Public Member Functions

- **Mapdesc** (long, int, int, **Backend** &)
- int **isProperty** (long)
- REAL **getProperty** (long)
- void **setProperty** (long, REAL)
- int **isConstantSampling** (void)
- int **isDomainSampling** (void)
- int **isRangeSampling** (void)
- int **isSampling** (void)
- int **isParametricDistanceSampling** (void)
- int **isObjectSpaceParaSampling** (void)
- int **isObjectSpacePathSampling** (void)
- int **isSurfaceAreaSampling** (void)
- int **isPathLengthSampling** (void)
- int **isCulling** (void)
- int **isBboxSubdividing** (void)
- long **getType** (void)
- void **subdivide** (REAL *, REAL *, REAL, int, int)
- int **cullCheck** (REAL *, int, int)
- void **xformBounding** (REAL *, int, int, REAL *, int)
- void **xformCulling** (REAL *, int, int, REAL *, int)
- void **xformSampling** (REAL *, int, int, REAL *, int)
- void **xformMat** (Maxmatrix, REAL *, int, int, REAL *, int)
- REAL **calcPartialVelocity** (REAL *, int, int, int, REAL)
- int **project** (REAL *, int, REAL *, int, int)
- REAL **calcVelocityRational** (REAL *, int, int)
- REAL **calcVelocityNonrational** (REAL *, int, int)
- void **subdivide** (REAL *, REAL *, REAL, int, int, int, int)
- int **cullCheck** (REAL *, int, int, int, int)
- void **xformBounding** (REAL *, int, int, int, int, REAL *, int, int)
- void **xformCulling** (REAL *, int, int, int, int, REAL *, int, int)
- void **xformSampling** (REAL *, int, int, int, int, REAL *, int, int)
- void **xformMat** (Maxmatrix, REAL *, int, int, int, int, REAL *, int, int)
- REAL **calcPartialVelocity** (REAL *, REAL *, int, int, int, int, int, int, REAL, REAL, int)
- int **project** (REAL *, int, int, REAL *, int, int, int, int)
- void **surfbbox** (REAL bb[2][MAXCOORDS])
- int **bboxTooBig** (REAL *, int, int, int, int, REAL [2][MAXCOORDS])
- int **xformAndCullCheck** (REAL *, int, int, int, int)
- void **identify** (REAL[MAXCOORDS][MAXCOORDS])
- void **setBboxsize** (INREAL *)
- void **setBmat** (INREAL *, long, long)
- void **setCmat** (INREAL *, long, long)
- void **setSmat** (INREAL *, long, long)
- int **isRational** (void)
- int **getNcoords** (void)

Data Fields

- REAL **pixel_tolerance**
- REAL **error_tolerance**
- REAL **object_space_error_tolerance**
- REAL **clampfactor**
- REAL **minsavings**
- REAL **maxrate**
- REAL **maxxrate**
- REAL **maxtrate**
- REAL **bboxsize** [MAXCOORDS]

Friends

- class **Maplist**

4.483.1 Detailed Description

Definition at line 49 of file mapdesc.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/mapdesc.h
- src/libnurbs/internals/mapdesc.cc
- src/libnurbs/internals/mapdescv.cc

4.484 Maplist Class Reference

Public Member Functions

- **Maplist** (**Backend** &)
- void **define** (long, int, int)
- void **undefine** (long)
- int **isMap** (long)
- void **initialize** (void)
- **Mapdesc** * **find** (long)
- **Mapdesc** * **locate** (long)

4.484.1 Detailed Description

Definition at line 46 of file maplist.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/maplist.h
- src/libnurbs/internals/maplist.cc

4.485 matpropstruct Struct Reference

Data Fields

- struct **fw_MaterialParameters** **fw_FrontMaterial**
- struct **fw_MaterialParameters** **fw_BackMaterial**
- **s_shader_capabilities_t** * **currentShaderProperties**
- float **transparency**
- GLfloat **emissionColour** [3]
- GLint **cubeFace**
- int **cullFace**
- int **algorithm**
- bool **hatchedBool**
- bool **filledBool**
- GLfloat **hatchPercent** [2]
- GLfloat **hatchScale** [2]
- GLfloat **hatchColour** [4]
- GLfloat **pointSize**
- int **texCoordGeneratorType**

4.485.1 Detailed Description

Definition at line 151 of file Component_Shape.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Shape.h

4.486 org.web3d.x3d.sai.Matrix Interface Reference

Public Member Functions

- void **setTransform** (**SFVec3f** translation, **SFVec3f** rotation, **SFVec2f** scale, **SFVec3f** scaleOrientation, **SFVec2f** center)
- void **getTransform** (**SFVec2f** translation, **SFVec3f** rotation, **SFVec2f** scale)
- void **inverse** (float[][] matrix)
- void **transpose** (float[][] matrix)
- void **multiplyLeft** (float[][] matrix, float[][] mult, int size)
- void **multiplyRight** (float[][] matrix, float[][] mult, int size)
- void **multiplyRowVector** (float[][] matrix, float[] vec, int size)
- void **multiplyColVector** (float[][] matrix, float[] vec, int size)

4.486.1 Detailed Description

Definition at line 3 of file Matrix.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/Matrix.java

4.487 org.web3d.x3d.sai.Matrix3 Class Reference

Public Member Functions

- **Matrix3** (float[] init)
- void **setIdentity** ()
- void **set** (int row, int column, float value)
- float **get** (int row, int column)
- void **setTransform** (**SFVec2f** translation, **SFVec3f** rotation, **SFVec2f** scale, **SFVec3f** scaleOrientation, **SFVec2f** centre)
- void **getTransform** (**SFVec2f** translation, **SFVec3f** rotation, **SFVec2f** scale)
- float[][] **multiply** (float[][] multp, float[][] mat)
- **Matrix3** **inverse** ()
- **Matrix3** **transpose** ()
- **Matrix3** **multiplyLeft** (**Matrix3** mat)
- **Matrix3** **multiplyRight** (**Matrix3** mat)
- float[] **multiplyRowVector** (float[] vec)
- float[] **multiplyColVector** (float[] vec)

Data Fields

- float [][] **matrix**

Static Public Attributes

- static int **SIZE** = 3

4.487.1 Detailed Description

Definition at line 3 of file Matrix3.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/Matrix3.java

4.488 org.web3d.x3d.sai.Matrix4 Class Reference

Public Member Functions

- **Matrix4** (float[][] init)
- **Matrix4** (float[] init)
- void **setIdentity** ()
- void **set** (int row, int column, float value)
- float **get** (int row, int column)
- void **setTransform** (**SFVec3f** translation, **SFRotation** rotation, **SFVec3f** scale, **SFRotation** scale↔ Orientation, **SFVec3f** centre)
- void **getTransform** (**SFVec3f** translation, **SFRotation** rotation, **SFVec3f** scale)
- **Matrix4** **inverse** ()
- **Matrix4** **transpose** ()
- **Matrix4** **multiplyLeft** (**Matrix4** mat)
- float [][] **multiply** (float[][] multp, float[][] mat)
- **Matrix4** **multiplyRight** (**Matrix4** mat)
- float [] **multiplyRowVector** (float[] vec)
- float [] **multiplyColVector** (float[] vec)

Data Fields

- float [][] **matrix**

Static Public Attributes

- static int **SIZE** = 4

4.488.1 Detailed Description

Definition at line 3 of file Matrix4.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/Matrix4.java

4.489 mb_addr_inc_entry Struct Reference

Data Fields

- int **value**
- int **num_bits**

4.489.1 Detailed Description

Definition at line 751 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.490 mb_type_entry Struct Reference

Data Fields

- unsigned int **mb_quant**
- unsigned int **mb_motion_forward**
- unsigned int **mb_motion_backward**
- unsigned int **mb_pattern**
- unsigned int **mb_intra**
- int **num_bits**

4.490.1 Detailed Description

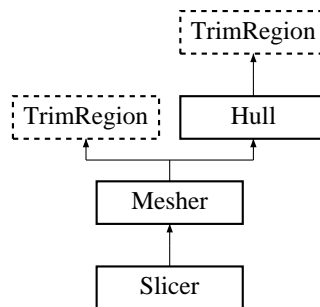
Definition at line 757 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.491 Mesher Class Reference

Inheritance diagram for Mesher:



Public Member Functions

- **Mesher** (**Backend** &)
- void **init** (unsigned int)
- void **mesh** (void)

Additional Inherited Members

4.491.1 Detailed Description

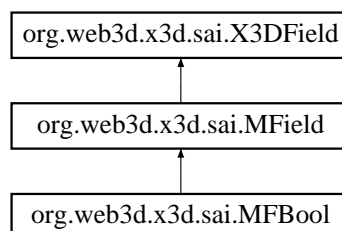
Definition at line 47 of file mesher.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/mesher.h
- src/libnurbs/internals/mesher.cc

4.492 org.web3d.x3d.sai.MFBool Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFBool:



Public Member Functions

- void **getValue** (boolean[] vals)
- boolean **get1Value** (int index)
- void **setValue** (int size, boolean[] value)
- void **set1Value** (int index, boolean value) throws `ArrayIndexOutOfBoundsException`
- void **append** (boolean value)
- void **insertValue** (int index, boolean value)

4.492.1 Detailed Description

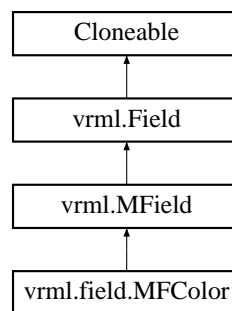
Definition at line 3 of file `MFBool.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/MFBool.java`

4.493 vrml.field.MFColor Class Reference

Inheritance diagram for `vrml.field.MFColor`:



Public Member Functions

- **MFColor** (float[] colors)
- **MFColor** (int size, float[] colors)
- **MFColor** (float[][] colors)
- void **getValue** (float[] colors)
- void **getValue** (float[][] colors)
- void **get1Value** (int index, float[] colors)
- void **get1Value** (int index, **SFColor** sfColor)
- void **setValue** (float[] colors)
- void **setValue** (int size, float[] colors)
- void **set1Value** (int index, float red, float green, float blue)
- void **set1Value** (int index, **SFColor** sfColor)
- void **set1Value** (int index, **ConstSFColor** sfColor)
- void **addValue** (float red, float green, float blue)
- void **addValue** (**SFColor** sfColor)
- void **addValue** (**ConstSFColor** sfColor)
- void **insertValue** (int index, float red, float green, float blue)
- void **insertValue** (int index, **SFColor** sfColor)
- void **insertValue** (int index, **ConstSFColor** sfColor)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws `IOException`
- void **__toPerl** (PrintWriter out) throws `IOException`

Additional Inherited Members

4.493.1 Detailed Description

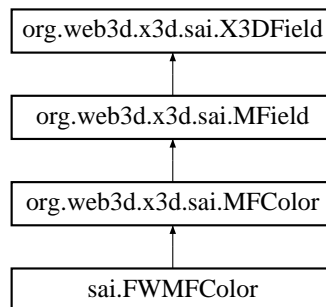
Definition at line 10 of file MFCOLOR.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFCOLOR.java

4.494 org.web3d.x3d.sai.MFCOLOR Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFCOLOR:



Public Member Functions

- void **getValue** (float[][] value)
- void **getValue** (float[] value)
- void **get1Value** (int index, float[] value)
- void **setValue** (int numVals, float[] value)
- void **setValue** (int numVals, float[][] value)
- void **set1Value** (int index, float[] value)
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

4.494.1 Detailed Description

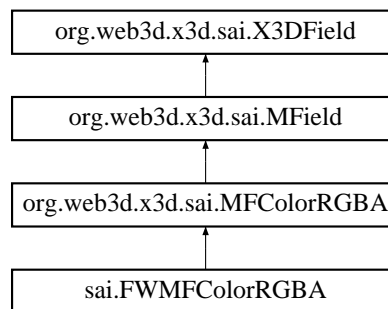
Definition at line 3 of file MFCOLOR.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFCOLOR.java

4.495 org.web3d.x3d.sai.MFColorRGBA Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFColorRGBA:



Public Member Functions

- void **getValue** (float[][] value)
- void **getValue** (float[] value)
- void **get1Value** (int index, float[] value)
- void **setValue** (int numVolors, float[] value)
- void **setValue** (int numColors, float[][] value)
- void **set1Value** (int index, float[] value)
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

4.495.1 Detailed Description

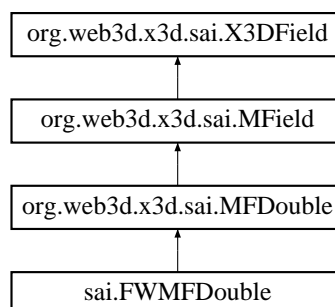
Definition at line 3 of file MFColorRGBA.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFColorRGBA.java

4.496 org.web3d.x3d.sai.MFDouble Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFDouble:



Public Member Functions

- void **getValue** (double[] values)
- double **get1Value** (int index) throws ArrayIndexOutOfBoundsException
- void **setValue** (int size, double[] value)
- void **set1Value** (int index, double value) throws ArrayIndexOutOfBoundsException
- void **append** (double[] value)
- void **insertValue** (int index, double[] value)

4.496.1 Detailed Description

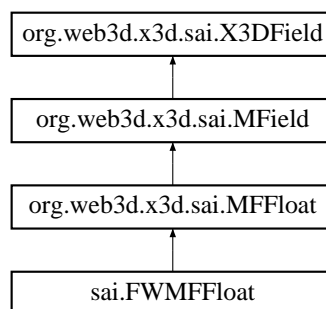
Definition at line 3 of file MFDouble.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFDouble.java

4.497 org.web3d.x3d.sai.MFFloat Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFFloat:



Public Member Functions

- void **getValue** (float[] values)
- float **get1Value** (int index) throws ArrayIndexOutOfBoundsException
- void **setValue** (int size, float[] value)
- void **set1Value** (int index, float value) throws ArrayIndexOutOfBoundsException
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

4.497.1 Detailed Description

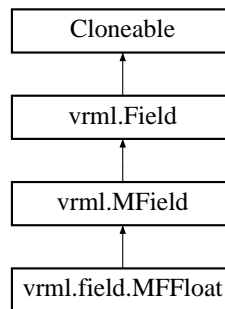
Definition at line 3 of file MFFloat.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFFloat.java

4.498 vrml.field.MFFloat Class Reference

Inheritance diagram for vrml.field.MFFloat:



Public Member Functions

- **MFFloat** (float[] f)
- **MFFloat** (int size, float[] f)
- void **getValue** (float[] f)
- float **get1Value** (int index)
- void **setValue** (float[] f)
- void **setValue** (int size, float[] f)
- void **set1Value** (int index, float f)
- void **set1Value** (int index, **SFFloat** sfFloat)
- void **set1Value** (int index, **ConstSFFloat** sfFloat)
- void **addValue** (float f)
- void **addValue** (**SFFloat** sfFloat)
- void **addValue** (**ConstSFFloat** sfFloat)
- void **insertValue** (int index, float f)
- void **insertValue** (int index, **SFFloat** sfFloat)
- void **insertValue** (int index, **ConstSFFloat** sfFloat)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.498.1 Detailed Description

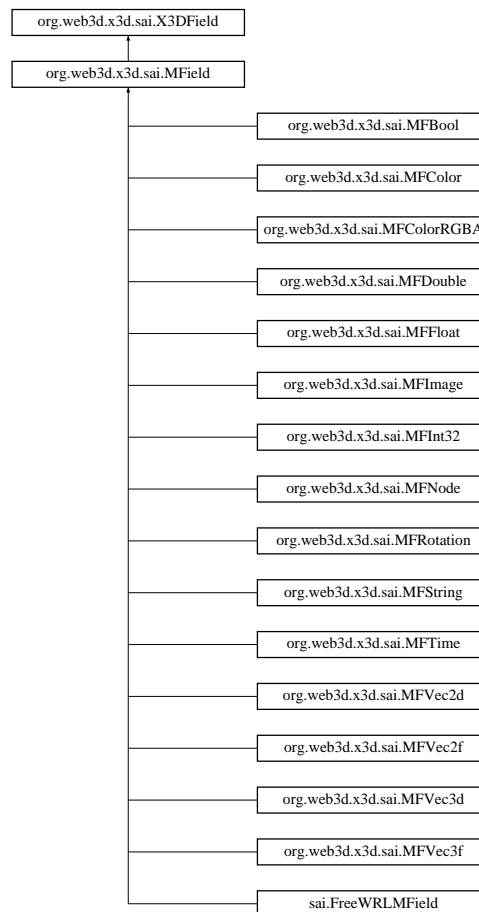
Definition at line 10 of file MFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFFloat.java

4.499 org.web3d.x3d.sai.MField Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MField:



Public Member Functions

- int **size** () throws InvalidFieldException, ConnectionException
- void **clear** () throws InvalidFieldException, ConnectionException
- void **remove** (int index) throws InvalidFieldException, ConnectionException, ArrayIndexOutOfBoundsException

4.499.1 Detailed Description

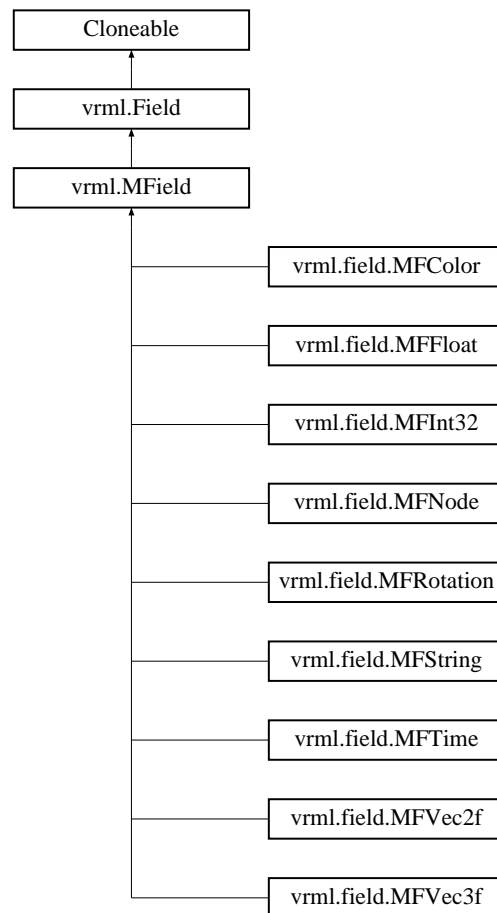
Definition at line 3 of file MField.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MField.java

4.500 vrml.MField Class Reference

Inheritance diagram for vrml.MField:



Public Member Functions

- `int` **getSize** ()
- `void` **clear** ()
- `void` **delete** (int index)

Data Fields

- `Vector` **__vect** = new `Vector`()

Protected Member Functions

- `final void` **__update1Read** (int index)
- `final void` **__set1Value** (int index, `ConstField` fld)
- `final void` **__insertValue** (int index, `ConstField` fld)
- `final void` **__addValue** (`ConstField` fld)

4.500.1 Detailed Description

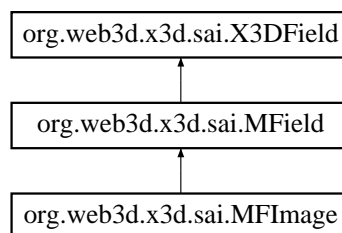
Definition at line 4 of file MField.java.

The documentation for this class was generated from the following file:

- src/java/vrml/MField.java

4.501 org.web3d.x3d.sai.MFImage Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFImage:



Public Member Functions

- int **getWidth** (int imgIndex)
- int **getHeight** (int imgIndex)
- int **getComponents** (int imgIndex)
- void **getPixels** (int imgIndex, int[] pixels)
- WritableRenderedImage **getImage** (int imgIndex)
- void **setImage** (int imgIndex, RenderedImage img)
- void **setSubImage** (int imgIndex, RenderedImage img, int srcWidth, int srcHeight, int srcXOffset, int srcYOffset, int destXOffset, int destYOffset)
- void **set1Value** (int index, int value)
- void **set1Value** (int imgIndex, int width, int height, int components, int[] pixels)
- void **setValue** (int[] value)
- void **setImage** (RenderedImage[] img)
- void **append** (RenderedImage value)
- void **insertValue** (int index, RenderedImage value)

4.501.1 Detailed Description

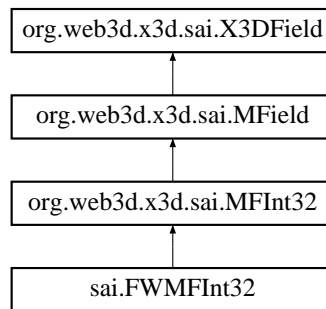
Definition at line 4 of file MFImage.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFImage.java

4.502 org.web3d.x3d.sai.MFInt32 Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFInt32:



Public Member Functions

- void **getValue** (int[] values)
- int **get1Value** (int index) throws ArrayIndexOutOfBoundsException
- void **setValue** (int size, int[] value)
- void **set1Value** (int index, int value) throws ArrayIndexOutOfBoundsException
- void **append** (int[] value)
- void **insertValue** (int index, int[] value)

4.502.1 Detailed Description

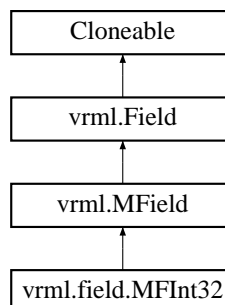
Definition at line 3 of file MFInt32.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFInt32.java

4.503 vrml.field.MFInt32 Class Reference

Inheritance diagram for vrml.field.MFInt32:



Public Member Functions

- **MInt32** (int[] value)
- **MInt32** (int size, int[] value)
- void **getValue** (int[] value)
- int **get1Value** (int index)
- void **setValue** (int[] value)
- void **setValue** (int size, int[] value)
- void **set1Value** (int index, int value)
- void **set1Value** (int index, **SInt32** sInt32)
- void **set1Value** (int index, **ConstSInt32** sInt32)
- void **addValue** (int value)
- void **addValue** (**SInt32** sInt32)
- void **addValue** (**ConstSInt32** sInt32)
- void **insertValue** (int index, int value)
- void **insertValue** (int index, **SInt32** sInt32)
- void **insertValue** (int index, **ConstSInt32** sInt32)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.503.1 Detailed Description

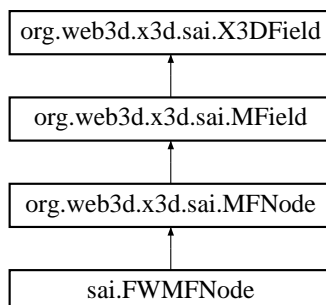
Definition at line 10 of file MInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MInt32.java

4.504 org.web3d.x3d.sai.MFNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFNode:



Public Member Functions

- void **getValue** (**X3DNode**[] nodes)
- **X3DNode** **get1Value** (int index)
- void **setValue** (int size, **X3DNode**[] value)
- void **set1Value** (int index, **X3DNode** value)
- void **append** (**X3DNode** value)
- void **insertValue** (int index, **X3DNode** value)

4.504.1 Detailed Description

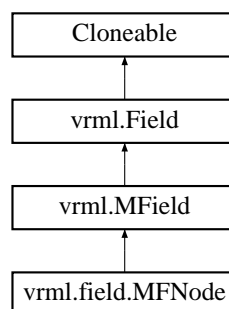
Definition at line 3 of file MFNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFNode.java

4.505 vrml.field.MFNode Class Reference

Inheritance diagram for vrml.field.MFNode:



Public Member Functions

- **MFNode** (**BaseNode**[] node)
- **MFNode** (int size, **BaseNode**[] node)
- void **getValue** (**BaseNode**[] node)
- **BaseNode** **get1Value** (int index)
- void **setValue** (**BaseNode**[] node)
- void **setValue** (int size, **BaseNode**[] node)
- void **set1Value** (int index, **BaseNode** node)
- void **set1Value** (int index, **SFNode** sfNode)
- void **set1Value** (int index, **ConstSFNode** sfNode)
- void **addValue** (**BaseNode** node)
- void **addValue** (**SFNode** sfNode)
- void **addValue** (**ConstSFNode** sfNode)
- void **insertValue** (int index, **BaseNode** node)
- void **insertValue** (int index, **SFNode** sfNode)
- void **insertValue** (int index, **ConstSFNode** sfNode)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.505.1 Detailed Description

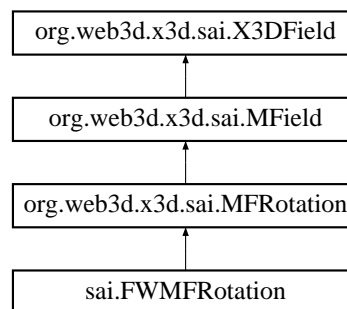
Definition at line 10 of file MFNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFNode.java

4.506 org.web3d.x3d.sai.MFRotation Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFRotation:



Public Member Functions

- void **getValue** (float[][] value)
- void **getValue** (float[] value)
- void **get1Value** (int index, float[] value)
- void **setValue** (int numRotations, float[] value)
- void **setValue** (int numRotations, float[][] value)
- void **set1Value** (int index, float[] value)
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

4.506.1 Detailed Description

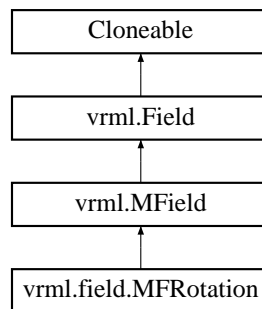
Definition at line 3 of file MFRotation.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFRotation.java

4.507 vrml.field.MFRotation Class Reference

Inheritance diagram for vrml.field.MFRotation:



Public Member Functions

- **MFRotation** (float[] rotations)
- **MFRotation** (int size, float[] rotations)
- **MFRotation** (float[][] rotations)
- void **getValue** (float[] rotations)
- void **getValue** (float[][] rotations)
- void **get1Value** (int index, float[] rotations)
- void **get1Value** (int index, **SFRotation** sfRotation)
- void **setValue** (float[] rotations)
- void **setValue** (int size, float[] rotations)
- void **set1Value** (int index, float axisX, float axisY, float axisZ, float angle)
- void **set1Value** (int index, **SFRotation** sfRotation)
- void **set1Value** (int index, **ConstSFRotation** sfRotation)
- void **addValue** (float axisX, float axisY, float axisZ, float angle)
- void **addValue** (**SFRotation** sfRotation)
- void **addValue** (**ConstSFRotation** sfRotation)
- void **insertValue** (int index, float axisX, float axisY, float axisZ, float angle)
- void **insertValue** (int index, **SFRotation** sfRotation)
- void **insertValue** (int index, **ConstSFRotation** sfRotation)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.507.1 Detailed Description

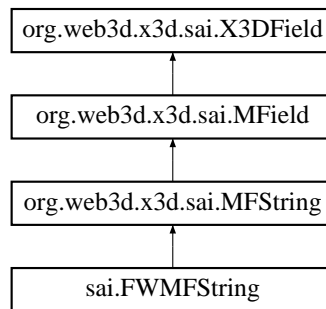
Definition at line 10 of file MFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFRotation.java

4.508 org.web3d.x3d.sai.MFString Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFString:



Public Member Functions

- void **getValue** (String[] value)
- String **get1Value** (int index)
- void **setValue** (int numStrings, String[] value)
- void **set1Value** (int index, String value)
- void **append** (String[] value)
- void **insertValue** (int index, String[] value)

4.508.1 Detailed Description

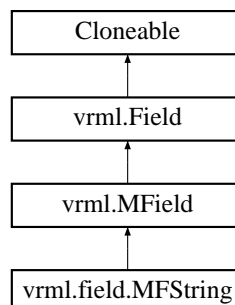
Definition at line 3 of file MFString.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFString.java

4.509 vrml.field.MFString Class Reference

Inheritance diagram for vrml.field.MFString:



Public Member Functions

- **MFString** (String[] s)
- **MFString** (int size, String[] s)
- void **getValue** (String[] s)
- String **get1Value** (int index)
- void **setValue** (String[] s)
- void **setValue** (int size, String[] s)
- void **set1Value** (int index, String s)
- void **set1Value** (int index, **SFString** sfString)
- void **set1Value** (int index, **ConstSFString** sfString)
- void **addValue** (String s)
- void **addValue** (**SFString** sfString)
- void **addValue** (**ConstSFString** sfString)
- void **insertValue** (int index, String s)
- void **insertValue** (int index, **SFString** sfString)
- void **insertValue** (int index, **ConstSFString** sfString)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.509.1 Detailed Description

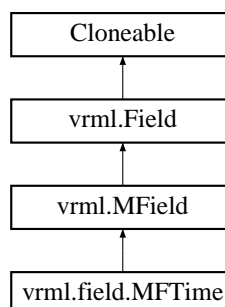
Definition at line 10 of file MFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFString.java

4.510 vrml.field.MFTime Class Reference

Inheritance diagram for vrml.field.MFTime:



Public Member Functions

- **MFTIME** (double[] value)
- **MFTIME** (int size, double[] value)
- void **getValue** (double[] value)
- double **get1Value** (int index)
- void **setValue** (double[] value)
- void **setValue** (int size, double[] value)
- void **set1Value** (int index, double value)
- void **set1Value** (int index, **SFTIME** sfTime)
- void **set1Value** (int index, **ConstSFTIME** sfTime)
- void **addValue** (double value)
- void **addValue** (**SFTIME** sfTime)
- void **addValue** (**ConstSFTIME** sfTime)
- void **insertValue** (int index, double value)
- void **insertValue** (int index, **SFTIME** sfTime)
- void **insertValue** (int index, **ConstSFTIME** sfTime)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.510.1 Detailed Description

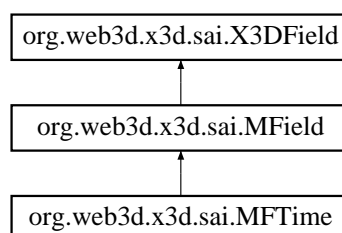
Definition at line 10 of file MFTIME.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFTIME.java

4.511 org.web3d.x3d.sai.MFTIME Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFTIME:



Public Member Functions

- void **getValue** (double[] value)
- double **get1Value** (int index)
- long **get1JavaValue** (int index)
- void **setValue** (int size, double[] value)
- void **setValue** (int size, long[] value)
- void **set1Value** (int index, double value)
- void **set1Value** (int index, long value)
- void **append** (double value)
- void **append** (long value)
- void **insertValue** (int index, long value)
- void **insertValue** (int index, double value)

4.511.1 Detailed Description

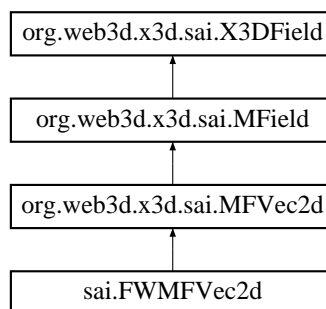
Definition at line 3 of file MFTIME.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFTIME.java

4.512 org.web3d.x3d.sai.MFVec2d Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFVec2d:



Public Member Functions

- void **getValue** (double[][] value)
- void **getValue** (double[] value)
- void **get1Value** (int index, double[] value)
- void **setValue** (int size, double[] value)
- void **setValue** (int size, double[][] value)
- void **set1Value** (int index, double[] value)
- void **append** (double[] value)
- void **insertValue** (int index, double[] value)

4.512.1 Detailed Description

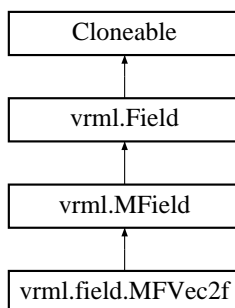
Definition at line 3 of file MFVec2d.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFVec2d.java

4.513 vrml.field.MFVec2f Class Reference

Inheritance diagram for vrml.field.MFVec2f:



Public Member Functions

- **MFVec2f** (float[] vec2fs)
- **MFVec2f** (int size, float[] vec2fs)
- **MFVec2f** (float[][] vec2fs)
- void **getValue** (float[] vec2fs)
- void **getValue** (float[][] vec2fs)
- void **get1Value** (int index, float[] vec2fs)
- void **get1Value** (int index, **SFVec2f** sfVec2f)
- void **setValue** (float[] vec2fs)
- void **setValue** (int size, float[] vec2fs)
- void **set1Value** (int index, float x, float y)
- void **set1Value** (int index, **SFVec2f** sfVec2f)
- void **set1Value** (int index, **ConstSFVec2f** sfVec2f)
- void **addValue** (float x, float y)
- void **addValue** (**SFVec2f** sfVec2f)
- void **addValue** (**ConstSFVec2f** sfVec2f)
- void **insertValue** (int index, float x, float y)
- void **insertValue** (int index, **SFVec2f** sfVec2f)
- void **insertValue** (int index, **ConstSFVec2f** sfVec2f)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.513.1 Detailed Description

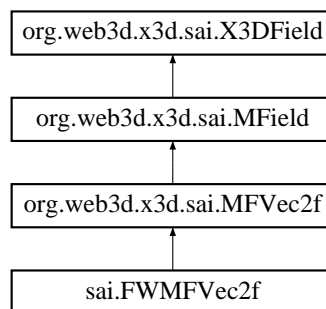
Definition at line 10 of file MFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFVec2f.java

4.514 org.web3d.x3d.sai.MFVec2f Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFVec2f:



Public Member Functions

- void **getValue** (float[][] value)
- void **getValue** (float[] value)
- void **get1Value** (int index, float[] value)
- void **setValue** (int size, float[] value)
- void **setValue** (int size, float[][] value)
- void **set1Value** (int index, float[] value)
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

4.514.1 Detailed Description

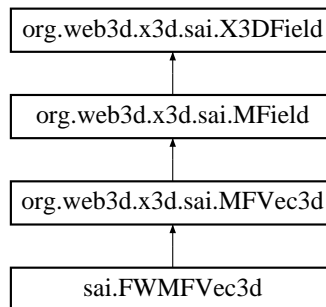
Definition at line 3 of file MFVec2f.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFVec2f.java

4.515 org.web3d.x3d.sai.MFVec3d Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFVec3d:



Public Member Functions

- void **getValue** (double[][] value)
- void **getValue** (double[] value)
- void **get1Value** (int index, double[] value)
- void **setValue** (int size, double[] value)
- void **setValue** (int size, double[][] value)
- void **set1Value** (int index, double[] value)
- void **append** (double[] value)
- void **insertValue** (int index, double[] value)

4.515.1 Detailed Description

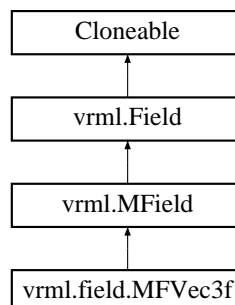
Definition at line 3 of file MFVec3d.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFVec3d.java

4.516 vrml.field.MFVec3f Class Reference

Inheritance diagram for vrml.field.MFVec3f:



Public Member Functions

- **MFVec3f** (float[] vec3fs)
- **MFVec3f** (int size, float[] vec3fs)
- **MFVec3f** (float[][] vec3fs)
- void **getValue** (float[] vec3fs)
- void **getValue** (float[][] vec3fs)
- void **get1Value** (int index, float[] vec3fs)
- void **get1Value** (int index, **SFVec3f** sfVec3f)
- void **setValue** (float[] vec3fs)
- void **setValue** (int size, float[] vec3fs)
- void **set1Value** (int index, float x, float y, float z)
- void **set1Value** (int index, **SFVec3f** sfVec3f)
- void **set1Value** (int index, **ConstSFVec3f** sfVec3f)
- void **addValue** (float x, float y, float z)
- void **addValue** (**SFVec3f** sfVec3f)
- void **addValue** (**ConstSFVec3f** sfVec3f)
- void **insertValue** (int index, float x, float y, float z)
- void **insertValue** (int index, **SFVec3f** sfVec3f)
- void **insertValue** (int index, **ConstSFVec3f** sfVec3f)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.516.1 Detailed Description

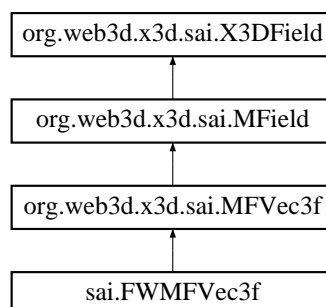
Definition at line 10 of file MFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/MFVec3f.java

4.517 org.web3d.x3d.sai.MFVec3f Interface Reference

Inheritance diagram for org.web3d.x3d.sai.MFVec3f:



Public Member Functions

- void **getValue** (float[][] value)
- void **getValue** (float[] value)
- void **get1Value** (int index, float[] value)
- void **setValue** (int size, float[] value)
- void **setValue** (int size, float[][] value)
- void **set1Value** (int index, float[] value)
- void **append** (float[] value)
- void **insertValue** (int index, float[] value)

4.517.1 Detailed Description

Definition at line 3 of file MFVec3f.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/MFVec3f.java

4.518 mode_name Struct Reference

Data Fields

- int **mode**
- const char * **name**

4.518.1 Detailed Description

Definition at line 167 of file X3DParser.c.

The documentation for this struct was generated from the following file:

- src/lib/x3d_parser/X3DParser.c

4.519 monoChain Class Reference

Public Member Functions

- **monoChain** (**directedLine** *cHead, **directedLine** *cTail)
- void **setNext** (**monoChain** *n)
- void **setPrev** (**monoChain** *p)
- void **setNextPolygon** (**monoChain** *np)
- **monoChain** * **getNext** ()
- **monoChain** * **getPrev** ()
- **directedLine** * **getHead** ()
- **directedLine** * **getTail** ()
- void **resetCurrent** ()
- void **deleteLoop** ()
- void **deleteLoopList** ()
- void **insert** (**monoChain** *nc)
- Int **numChainsSingleLoop** ()
- Int **numChainsAllLoops** ()
- **monoChain** ** **toArrayAllLoops** (Int &num_chains)
- Int **toArraySingleLoop** (**monoChain** **array, Int index)
- Real **chainIntersectHoriz** (Real y)
- **directedLine** * **find** (Real y)
- void **printOneChain** ()
- void **printChainLoop** ()
- void **printAllLoops** ()

Data Fields

- Int **isKey**
- Real **keyY**

4.519.1 Detailed Description

Definition at line 41 of file monoChain.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/monoChain.h
- src/libnurbs/nurbtess/monoChain.cc

4.520 Monotonizer Class Reference

Public Member Functions

- **Monotonizer** (**ArcTessellator** &at, **Pool** &ap, **Pool** &p, jmp_buf &j)
- int **decompose** (**Bin** &, REAL)

4.520.1 Detailed Description

Definition at line 49 of file `monotonizer.h`.

The documentation for this class was generated from the following file:

- `src/libnurbs/internals/monotonizer.h`

4.521 `motion_vectors_entry` Struct Reference

Data Fields

- `int code`
- `int num_bits`

4.521.1 Detailed Description

Definition at line 780 of file `mpeg_berkley.h`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/mpeg_berkley.h`

4.522 `Multi_Any` Struct Reference

Data Fields

- `int n`
- `char * p`

4.522.1 Detailed Description

Definition at line 130 of file `FWTYPE.h`.

The documentation for this struct was generated from the following file:

- `src/lib/world_script/FWTYPE.h`

4.523 `Multi_Bool` Struct Reference

Data Fields

- `int n`
- `int * p`
- `size_t n`

4.523.1 Detailed Description

Definition at line 2456 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.524 Multi_Color Struct Reference

Data Fields

- int **n**
- struct **SFColor** * **p**
- size_t **n**

4.524.1 Detailed Description

Definition at line 2462 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.525 Multi_ColorRGBA Struct Reference

Data Fields

- int **n**
- struct **SFColorRGBA** * **p**
- size_t **n**

4.525.1 Detailed Description

Definition at line 2464 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.526 Multi_Double Struct Reference

Data Fields

- int **n**
- double * **p**
- size_t **n**

4.526.1 Detailed Description

Definition at line 2476 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.527 Multi_Float Struct Reference

Data Fields

- int **n**
- float * **p**
- size_t **n**

4.527.1 Detailed Description

Definition at line 2450 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.528 Multi_Int32 Struct Reference

Data Fields

- int **n**
- int * **p**
- size_t **n**

4.528.1 Detailed Description

Definition at line 2458 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.529 Multi_Matrix3d Struct Reference

Data Fields

- int **n**
- struct **SFMatrix3d** * **p**
- size_t **n**

4.529.1 Detailed Description

Definition at line 2480 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.530 Multi_Matrix3f Struct Reference

Data Fields

- int **n**
- struct **SFMatrix3f** * **p**
- size_t **n**

4.530.1 Detailed Description

Definition at line 2478 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.531 Multi_Matrix4d Struct Reference

Data Fields

- int **n**
- struct **SFMatrix4d** * **p**
- size_t **n**

4.531.1 Detailed Description

Definition at line 2484 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.532 Multi_Matrix4f Struct Reference

Data Fields

- int **n**
- struct **SFMatrix4f** * **p**
- size_t **n**

4.532.1 Detailed Description

Definition at line 2482 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.533 Multi_Node Struct Reference

Data Fields

- int **n**
- struct **X3D_Node** ** **p**
- size_t **n**
- void ** **p**

4.533.1 Detailed Description

Definition at line 2460 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.534 Multi_Rotation Struct Reference

Data Fields

- int **n**
- struct **SFRotation** * **p**
- size_t **n**

4.534.1 Detailed Description

Definition at line 2452 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.535 Multi_String Struct Reference

Data Fields

- int **n**
- struct **Uni_String** ** **p**
- size_t **n**

4.535.1 Detailed Description

Definition at line 2468 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.536 Multi_Time Struct Reference

Data Fields

- int **n**
- double * **p**
- size_t **n**

4.536.1 Detailed Description

Definition at line 2466 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.537 Multi_Vec2d Struct Reference

Data Fields

- int **n**
- struct **SFVec2d** * **p**
- size_t **n**

4.537.1 Detailed Description

Definition at line 2486 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.538 Multi_Vec2f Struct Reference

Data Fields

- int **n**
- struct **SFVec2f** * **p**
- size_t **n**

4.538.1 Detailed Description

Definition at line 2470 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.539 Multi_Vec3d Struct Reference

Data Fields

- int **n**
- struct **SFVec3d** * **p**
- size_t **n**

4.539.1 Detailed Description

Definition at line 2474 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.540 Multi_Vec3f Struct Reference

Data Fields

- int **n**
- struct **SFVec3f** * **p**
- size_t **n**
- struct **SFColor** * **p**

4.540.1 Detailed Description

Definition at line 2454 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.541 Multi_Vec4d Struct Reference

Data Fields

- int **n**
- struct **SFVec4d** * **p**
- size_t **n**

4.541.1 Detailed Description

Definition at line 2490 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.542 Multi_Vec4f Struct Reference

Data Fields

- int **n**
- struct **SFVec4f** * **p**
- size_t **n**

4.542.1 Detailed Description

Definition at line 2488 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.543 multiTexParams Struct Reference

Data Fields

- int **multitex_mode** [2]
- int **multitex_source** [2]
- int **multitex_function**

4.543.1 Detailed Description

Definition at line 121 of file OpenGL_Utils.h.

The documentation for this struct was generated from the following file:

- src/lib/opengl/OpenGL_Utils.h

4.544 myArgs Struct Reference

Data Fields

- struct **X3D_Node** * **node**
- **ttglobal** **tg**

4.544.1 Detailed Description

Definition at line 162 of file Component_ProgrammableShaders.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_ProgrammableShaders.c

4.545 MyVertex Struct Reference

Data Fields

- struct **SFVec3f** **vert**
- struct **SFVec3f** **norm**
- struct **SFVec2f** **tc**
- struct **SFVec3f** **flat_norm**
- struct **SFColorRGBA** **col**

4.545.1 Detailed Description

Definition at line 53 of file Component_Geometry3D.c.

The documentation for this struct was generated from the following files:

- src/lib/scenegraph/Component_Geometry3D.c
- src/lib/x3d_parser/Bindable.c

4.546 name_num Struct Reference

Data Fields

- char * **facename**
- char * **family**
- char * **style**
- char * **style2**
- int **num**
- int **bold**
- int **italic**
- int **ifamily**

4.546.1 Detailed Description

Definition at line 613 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.547 nameValuePairs Struct Reference

Data Fields

- char * **fieldName**
- char * **fieldValue**
- int **fieldType**

4.547.1 Detailed Description

Definition at line 32 of file X3DParser.h.

The documentation for this struct was generated from the following file:

- src/lib/x3d_parser/X3DParser.h

4.548 navmode Struct Reference

Data Fields

- char * **key**
- int **type**

4.548.1 Detailed Description

Definition at line 553 of file Viewer.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.c

4.549 vrml.external.Node Class Reference

Public Member Functions

- String **getType** ()
- **EventIn** **getEventIn** (String name) throws InvalidEventInException
- **EventOut** **getEventOut** (String name) throws InvalidEventOutException

Data Fields

- int **EventType** = FieldTypes.UnknownType
- String **outNode**
- String **inNode**
- String **command**
- String **RLreturn**
- int **nodeptr** = 0
- int **offset** = 0
- int **datasize** = 0
- String **datatype**
- int **ScriptType** = 0

4.549.1 Detailed Description

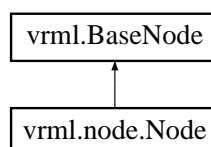
Definition at line 11 of file Node.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/Node.java

4.550 vrml.node.Node Class Reference

Inheritance diagram for vrml.node.Node:



Public Member Functions

- **Node** (String id)
- final **Field** **getEventIn** (String eventInName)
- final **ConstField** **getEventOut** (String eventOutName)
- final **Field** **getExposedField** (String exposedFieldName)

4.550.1 Detailed Description

Definition at line 12 of file Node.java.

The documentation for this class was generated from the following file:

- src/java/vrml/node/Node.java

4.551 nodedistance Struct Reference

Data Fields

- struct **X3D_Node** * **node**
- float **dist**

4.551.1 Detailed Description

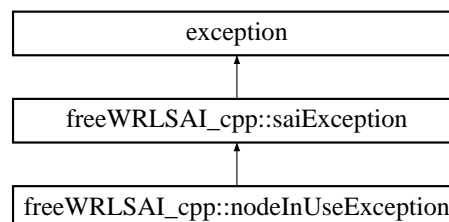
Definition at line 55 of file Component_Picking.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Picking.c

4.552 freeWRLSAI_cpp::nodeInUseException Class Reference

Inheritance diagram for freeWRLSAI_cpp::nodeInUseException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.552.1 Detailed Description

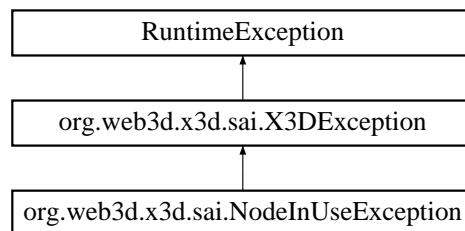
Definition at line 206 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAException.h

4.553 org.web3d.x3d.sai.NodeInUseException Class Reference

Inheritance diagram for org.web3d.x3d.sai.NodeInUseException:



Public Member Functions

- **NodeInUseException** (String msg)

4.553.1 Detailed Description

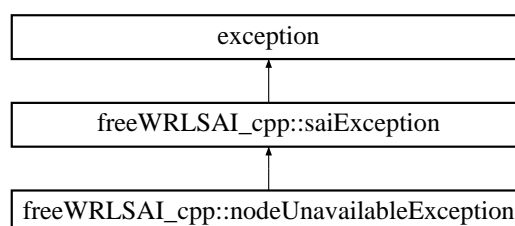
Definition at line 3 of file NodeInUseException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/NodeInUseException.java

4.554 freeWRLSAI_cpp::nodeUnavailableException Class Reference

Inheritance diagram for freeWRLSAI_cpp::nodeUnavailableException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.554.1 Detailed Description

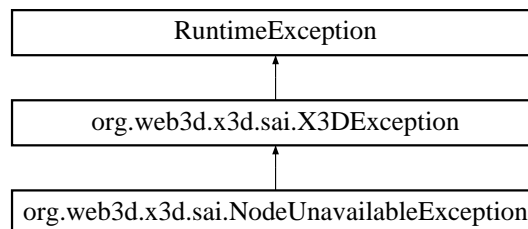
Definition at line 195 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAException.h

4.555 org.web3d.x3d.sai.NodeUnavailableException Class Reference

Inheritance diagram for org.web3d.x3d.sai.NodeUnavailableException:



Public Member Functions

- **NodeUnavailableException** (String msg)

4.555.1 Detailed Description

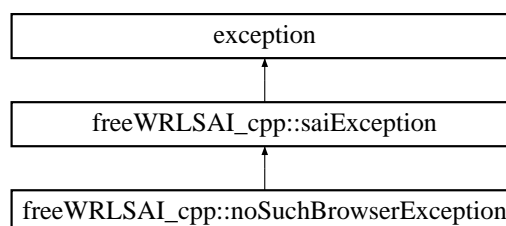
Definition at line 3 of file NodeUnavailableException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/NodeUnavailableException.java

4.556 freeWRLSAI_cpp::noSuchBrowserException Class Reference

Inheritance diagram for freeWRLSAI_cpp::noSuchBrowserException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.556.1 Detailed Description

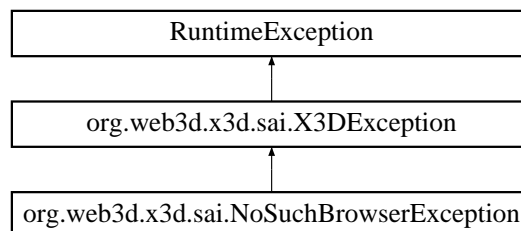
Definition at line 73 of file SAlexception.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAlexception.h

4.557 org.web3d.x3d.sai.NoSuchBrowserException Class Reference

Inheritance diagram for org.web3d.x3d.sai.NoSuchBrowserException:



Public Member Functions

- **NoSuchBrowserException** (String msg)

4.557.1 Detailed Description

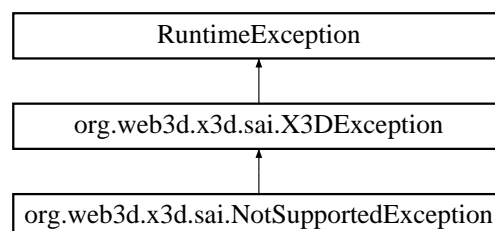
Definition at line 3 of file NoSuchBrowserException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/NoSuchBrowserException.java

4.558 org.web3d.x3d.sai.NotSupportedException Class Reference

Inheritance diagram for org.web3d.x3d.sai.NotSupportedException:



Public Member Functions

- **NotSupportedException** (String msg)

4.558.1 Detailed Description

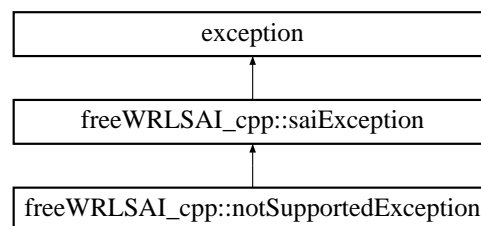
Definition at line 3 of file NotSupportedException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/NotSupportedException.java

4.559 freeWRLSAI_cpp::notSupportedException Class Reference

Inheritance diagram for freeWRLSAI_cpp::notSupportedException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.559.1 Detailed Description

Definition at line 229 of file SAexception.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAexception.h

4.560 NPClass Struct Reference

Data Fields

- uint32_t **structVersion**
- NPAllocateFunctionPtr **allocate**
- NPDeallocateFunctionPtr **deallocate**
- NPInvalidateFunctionPtr **invalidate**
- NPHasMethodFunctionPtr **hasMethod**
- NPInvokeFunctionPtr **invoke**
- NPInvokeDefaultFunctionPtr **invokeDefault**
- NPHasPropertyFunctionPtr **hasProperty**
- NPGetPropertyFunctionPtr **getProperty**
- NPSetPropertyFunctionPtr **setProperty**
- NPRemovePropertyFunctionPtr **removeProperty**
- NPEnumerationFunctionPtr **enumerate**
- NPConstructFunctionPtr **construct**

4.560.1 Detailed Description

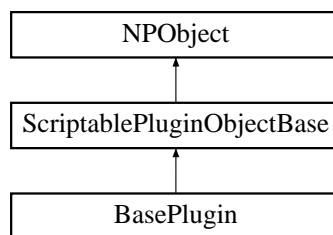
Definition at line 327 of file npruntime.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npruntime.h

4.561 NPObject Struct Reference

Inheritance diagram for NPObject:



Data Fields

- NPClass * **_class**
- uint32_t **referenceCount**

4.561.1 Detailed Description

Definition at line 355 of file npruntime.h.

The documentation for this struct was generated from the following file:

- src/plugin_win32/include/npruntime.h

4.562 nsByteRange Struct Reference

Data Fields

- PRInt32 **offset**
- PRUint32 **length**
- struct **nsByteRange** * **next**

4.562.1 Detailed Description

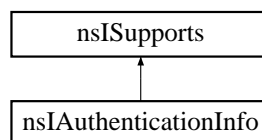
Definition at line 126 of file nsFileUtilities.idl.

The documentation for this struct was generated from the following files:

- src/plugin_win32/include/nsFileUtilities.idl
- src/plugin_win32/include/nsplugindefs.h

4.563 nsIAuthenticationInfo Interface Reference

Inheritance diagram for nsIAuthenticationInfo:



Data Fields

- readonly attribute const_char_ptr **username**
AuthenticationInfo (username/password pair)
- readonly attribute const_char_ptr **password**

4.563.1 Detailed Description

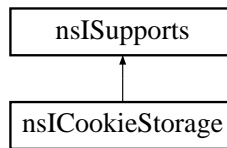
Definition at line 56 of file nsJVMAuthTools.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsJVMAuthTools.idl

4.564 nsICookieStorage Interface Reference

Inheritance diagram for nsICookieStorage:



Public Member Functions

- void **getCookie** (in string aCookieURL, in voidPtr aCookieBuffer, in PRUint32Ref aCookieSize)
Retrieves a cookie from the browser's persistent cookie store.
- void **setCookie** (in string aCookieURL, in constVoidPtr aCookieBuffer, in unsigned long aCookieSize)
Stores a cookie in the browser's persistent cookie store.

4.564.1 Detailed Description

Definition at line 51 of file nsICookieStorage.idl.

4.564.2 Member Function Documentation

4.564.2.1 getCookie()

```

void nsICookieStorage::getCookie (
    in string aCookieURL,
    in voidPtr aCookieBuffer,
    in PRUint32Ref aCookieSize )
  
```

Retrieves a cookie from the browser's persistent cookie store.

Parameters

<i>aCookieURL</i>	- URL string to look up cookie with.
<i>aCookieBuffer</i>	- buffer large enough to accomodate cookie data.
<i>aCookieSize</i>	- on input, size of the cookie buffer, on output cookie's size.

4.564.2.2 setCookie()

```

void nsICookieStorage::setCookie (
    in string aCookieURL,
  
```

```

    in constVoidPtr aCookieBuffer,
    in unsigned long aCookieSize )

```

Stores a cookie in the browser's persistent cookie store.

Parameters

<i>aCookieURL</i>	- URL string store cookie with.
<i>aCookieBuffer</i>	- buffer containing cookie data.
<i>aCookieSize</i>	- specifies size of cookie data.

The documentation for this interface was generated from the following file:

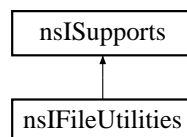
- src/plugin_win32/include/nsICookieStorage.idl

4.565 nsIFileUtilities Interface Reference

The **nsIFileUtilities** (p. 362) interface provides access to random file operations.

```
import "nsIFileUtilities.idl";
```

Inheritance diagram for nsIFileUtilities:



Public Member Functions

- void **getProgramPath** (out constCharPtr aProgramPath)
Returns the name of the browser executable program.
- void **getTempDirPath** (out constCharPtr aTempDirPath)
Returns the name of the temporary directory.
- void **newTempFileName** (in string aPrefix, in unsigned long aLength, in charPtr aBuffer)
Returns a unique temporary file name.

4.565.1 Detailed Description

The **nsIFileUtilities** (p. 362) interface provides access to random file operations.

To obtain: QueryInterface on **nsIPluginManager** (p. 399).

Definition at line 50 of file nsIFileUtilities.idl.

4.565.2 Member Function Documentation

4.565.2.1 getProgramPath()

```
void nsIFileUtilities::getProgramPath (
    out constCharPtr aProgramPath )
```

Returns the name of the browser executable program.

Parameters

<i>aProgramPath</i>	- the returned path to the program
---------------------	------------------------------------

Returns

- NS_OK if this operation was successful

4.565.2.2 getTempDirPath()

```
void nsFileUtilities::getTempDirPath (
    out constCharPtr aTempDirPath )
```

Returns the name of the temporary directory.

Parameters

<i>aTempDirPath</i>	- the returned path to the temp directory
---------------------	---

Returns

- NS_OK if this operation was successful

4.565.2.3 newTempFileName()

```
void nsFileUtilities::newTempFileName (
    in string aPrefix,
    in unsigned long aLength,
    in charPtr aBuffer )
```

Returns a unique temporary file name.

Parameters

<i>aPrefix</i>	- a string to prefix to the temporary file name
<i>aLength</i>	- the length of the resulting buffer to receive the data
<i>aBuffer</i>	- the returned temp file name

Returns

- NS_OK if this operation was successful

The documentation for this interface was generated from the following file:

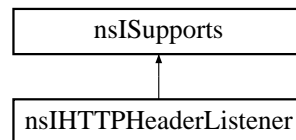
- src/plugin_win32/include/nsFileUtilities.idl

4.566 nsIHTTPHeaderListener Interface Reference

The **nsIHTTPHeaderListener** (p. 365) interface allows plugin authors to access HTTP Response headers after issuing an **nsIPluginHost** (p. 371)::{GetURL,PostURL}() call.

```
import "nsIHTTPHeaderListener.idl";
```

Inheritance diagram for nsIHTTPHeaderListener:



Public Member Functions

- void **newResponseHeader** (in string headerName, in string headerValue)
Called for each HTTP Response header.
- void **statusLine** (in string line)
Called once for the HTTP Response status line.

4.566.1 Detailed Description

The **nsIHTTPHeaderListener** (p. 365) interface allows plugin authors to access HTTP Response headers after issuing an **nsIPluginHost** (p. 371)::{GetURL,PostURL}() call.

IMPORTANT NOTE: The plugin author must provide an instance to {GetURL,PostURL}() that implements both **nsIPluginStreamListener** (p. 412) and **nsIHTTPHeaderListener** (p. 365). This instance is passed in through {GetURL,PostURL}()'s streamListener parameter. The browser will then QI thi streamListener to see if it implements **nsIHTTPHeaderListener** (p. 365).

Definition at line 55 of file nsIHTTPHeaderListener.idl.

4.566.2 Member Function Documentation

4.566.2.1 newResponseHeader()

```
void nsIHTTPHeaderListener::newResponseHeader (
    in string headerName,
    in string headerValue )
```

Called for each HTTP Response header.

NOTE: You must copy the values of the params.

4.566.2.2 statusLine()

```
void nsIHTTPHeaderListener::statusLine (
    in string line )
```

Called once for the HTTP Response status line.

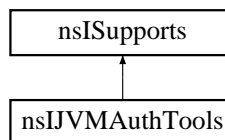
Value does NOT include a terminating newline. NOTE: You must copy this value.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIHTTPHeaderListener.idl

4.567 nsIJVMAuthTools Interface Reference

Inheritance diagram for nsIJVMAuthTools:



Public Member Functions

- **nsIAuthenticationInfo GetAuthenticationInfo** (in string protocol, in string host, in PRInt32 port, in string scheme, in string realm)
Export AuthenticationInfo interface to JPI.
- void **SetAuthenticationInfo** (in string protocol, in string host, in PRInt32 port, in string scheme, in string realm, in string username, in string password)
Import username/password pair from JPI.

4.567.1 Detailed Description

Definition at line 67 of file nsIJVMAuthTools.idl.

4.567.2 Member Function Documentation

4.567.2.1 GetAuthenticationInfo()

```
nsIAuthenticationInfo nsIJVMAuthTools::GetAuthenticationInfo (
    in string protocol,
    in string host,
    in PRInt32 port,
    in string scheme,
    in string realm )
```

Export AuthenticationInfo interface to JPI.

Parameters

<i>protocol</i>	the protocol that support (http/https)
<i>host</i>	host name
<i>port</i>	port number
<i>scheme</i>	scheme
<i>realm</i>	realm
<i>nsIAuthenticationInfo</i> (p. 360)	the AuthenticationInfo interface that export

Returns

NS_OK if success, other if fail

4.567.2.2 SetAuthenticationInfo()

```
void nsIJVMAuthTools::SetAuthenticationInfo (
    in string protocol,
    in string host,
    in PRInt32 port,
    in string scheme,
    in string realm,
    in string username,
    in string password )
```

Import username/password pair from JPI.

Parameters

<i>protocol</i>	the protocol that support (http/https)
<i>host</i>	host name
<i>port</i>	port number
<i>scheme</i>	scheme
<i>realm</i>	realm
<i>username</i>	user name
<i>password</i>	password

Returns

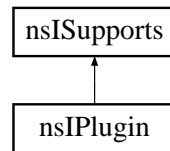
NS_OK if success, other if fail

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIJVMAuthTools.idl

4.568 nsIPlugin Interface Reference

Inheritance diagram for nsIPlugin:



Public Member Functions

- void **createPluginInstance** (out **nsIPluginInstance** aResult)
Creates a new plugin instance, based on a MIME type.
- void **initialize** ()
Initializes the plugin and will be called before any new instances are created.
- void **shutdown** ()
Called when the browser is done with the plugin factory, or when the plugin is disabled by the user.
- void **getMIMEDescription** (out constCharPtr aMIMEDescription)
Returns the MIME description for the plugin.
- void **getValue** (in nsPluginVariable aVariable, in voidPtr aValue)
Returns the value of a variable associated with the plugin.

4.568.1 Detailed Description

Definition at line 51 of file nsIPlugin.idl.

4.568.2 Member Function Documentation

4.568.2.1 createPluginInstance()

```
void nsIPlugin::createPluginInstance (
    out nsIPluginInstance aResult )
```

Creates a new plugin instance, based on a MIME type.

This allows different implemenations to be created depending on the specified MIME type.

4.568.2.2 getMIMEDescription()

```
void nsIPlugin::getMIMEDescription (
    out constCharPtr aMIMEDescription )
```

Returns the MIME description for the plugin.

The MIME description is a colon-separated string containg the plugin MIME type, plugin data file extension, and plugin name, e.g.:

"application/x-simple-plugin:smp:Simple Sample Plug-in"

(Corresponds to NPP_GetMIMEDescription.)

Parameters

<i>aMIMEDescription</i>	- the resulting MIME description
-------------------------	----------------------------------

Returns

- NS_OK if this operation was successful

4.568.2.3 `getValue()`

```
void nsIPlugin::getValue (
    in nsPluginVariable aVariable,
    in voidPtr aValue )
```

Returns the value of a variable associated with the plugin.

(Corresponds to NPP_GetValue.)

Parameters

<i>aVariable</i>	- the plugin variable to get
<i>aValue</i>	- the address of where to store the resulting value

Returns

- NS_OK if this operation was successful

4.568.2.4 `initialize()`

```
void nsIPlugin::initialize ( )
```

Initializes the plugin and will be called before any new instances are created.

It is passed browserInterfaces on which QueryInterface may be used to obtain an **nsIPluginManager** (p. 399), and other interfaces.

Parameters

<i>browserInterfaces</i>	- an object that allows access to other browser interfaces via QueryInterface
--------------------------	---

Returns

- NS_OK if this operation was successful

4.568.2.5 shutdown()

```
void nsIPlugin::shutdown ( )
```

Called when the browser is done with the plugin factory, or when the plugin is disabled by the user.

(Corresponds to NPP_Shutdown.)

Returns

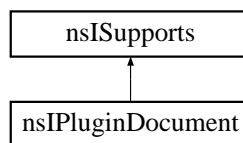
- NS_OK if this operation was successful

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPlugin.idl

4.569 nsIPluginDocument Interface Reference

Inheritance diagram for nsIPluginDocument:



Public Member Functions

- void **setStreamListener** (in nsIStreamListener aStreamListener)
Sets the stream listener for this plugin document.
- void **print** ()
Causes the plugin to print in full-page mode.

Data Fields

- readonly attribute boolean **willHandleInstantiation**
Check whether the document is planning to handle plug-in instantiation itself.

4.569.1 Detailed Description

Definition at line 42 of file nsIPluginDocument.idl.

4.569.2 Field Documentation

4.569.2.1 willHandleInstantiation

```
readonly attribute boolean nsIPluginDocument::willHandleInstantiation
```

Check whether the document is planning to handle plug-in instantiation itself.

If not, then the plugin content node should do it.

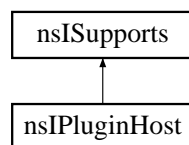
Definition at line 60 of file nsIPluginDocument.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginDocument.idl

4.570 nsIPluginHost Interface Reference

Inheritance diagram for nsIPluginHost:



Public Member Functions

- void **init** ()
- void **destroy** ()
- void **loadPlugins** ()
- void **reloadPlugins** (in boolean reloadPages)
Causes the plugins directory to be searched again for new plugin libraries.
- **nsIPlugin** **getPlugin** (in string aMimeType)
- void **instantiateEmbeddedPlugin** (in string aMimeType, in nsIURI aURL, in **nsIPluginInstanceOwner** aOwner)
- void **instantiateFullPagePlugin** (in string aMimeType, in nsIURI aURL, in nsIStreamListenerRef aStreamListener, in **nsIPluginInstanceOwner** aOwner)
- nsIStreamListener **instantiatePluginForChannel** (in nsIChannel aChannel, in **nsIPluginInstanceOwner** aOwner)
Instantiate an embedded plugin for an existing channel.
- void **setUpPluginInstance** (in string aMimeType, in nsIURI aURL, in **nsIPluginInstanceOwner** aOwner)
- void **isPluginEnabledForType** (in string aMimeType)
- void **isPluginEnabledForExtension** (in string aExtension, in constCharStarRef aMimeType)
- void **getPlugins** (in unsigned long aPluginCount, out nsIDOMPlugin aPluginArray)
- void **getPluginTags** (out unsigned long aPluginCount, [retval, array, size_is(aPluginCount)] out **nsIPluginTag** aResults)
- void **stopPluginInstance** (in **nsIPluginInstance** aInstance)
- void **handleBadPlugin** (in PRLibraryPtr aLibrary, in **nsIPluginInstance** instance)
- NS_IMETHOD **GetURL** (nsISupports *pluginInst, const char *url, const char *target=NULL, **nsIPluginStreamListener** *streamListener=NULL, const char *altHost=NULL, const char *referrer=NULL, PRBool forceJSEnabled=PR_FALSE)=0
Fetches a URL.

- **NS_IMETHOD PostURL** (nsISupports *pluginInst, const char *url, PRUint32 postDataLen, const char *postData, PRBool isFile=PR_FALSE, const char *target=NULL, **nsIPluginStreamListener** *stream↵ Listener=NULL, const char *altHost=NULL, const char *referrer=NULL, PRBool forceJSEnabled=PR_F↵ ALSE, PRUint32 postHeadersLength=0, const char *postHeaders=NULL)=0
Posts to a URL with post data and/or post headers.
- void **findProxyForURL** (in string aURL, out string aResult)
Returns the proxy info for a given URL.
- void **UserAgent** (in nativeChar resultingAgentString)
- void **setIsScriptableInstance** (in **nsIPluginInstance** aInstance, in boolean aScriptable)
To notify the plugin manager that the plugin created a script object.
- void **parsePostBufferToFixHeaders** (in string aInPostData, in unsigned long aInPostDataLen, out string aOutPostData, out unsigned long aOutPostDataLen)
This method parses post buffer to find out case insensitive "Content-length" string and CR or LF some where after that, then it assumes there is http headers in the input buffer and continue to search for end of headers (CRLF or LFLF).
- void **createTmpFileToPost** (in string aPostDataURL, out string aTmpFileName)
To create tmp file with Content len header in, it will use by http POST.
- void **newPluginNativeWindow** (out nsPluginNativeWindowPtr aPluginNativeWindow)
Creates a new plugin native window object.
- void **deletePluginNativeWindow** (in nsPluginNativeWindowPtr aPluginNativeWindow)
Deletes plugin native window object created by NewPluginNativeWindow.
- void **instantiateDummyJavaPlugin** (in **nsIPluginInstanceOwner** aOwner)
Instantiate a "dummy" java plugin if a java plugin that supports NPRuntime is installed.
- void **getPluginName** (in **nsIPluginInstance** aInstance, [shared] out string aPluginName)
Get the plugin name for the plugin instance.
- **nsIPluginTag** **getPluginTagForInstance** (in **nsIPluginInstance** aInstance)
Get the plugin tag associated with a given plugin instance.

Data Fields

- readonly attribute unsigned long **pluginCount**

4.570.1 Detailed Description

Definition at line 69 of file nsIPluginHost.idl.

4.570.2 Member Function Documentation

4.570.2.1 findProxyForURL()

```
void nsIPluginHost::findProxyForURL (
    in string aURL,
    out string aResult )
```

Returns the proxy info for a given URL.

The caller is required to free the resulting memory with nsIMalloc::Free. The result will be in the following format

i) "DIRECT" – no proxy ii) "PROXY xxx.xxx.xxx.xxx" – use proxy iii) "SOCKS xxx.xxx.xxx.xxx" – use SOCKS iv) Mixed. e.g. "PROXY 111.111.111.111;PROXY 112.112.112.112", "PROXY 111.111.111.111;SOCKS 112.112.↵ 112.112"....

Which proxy/SOCKS to use is determined by the plugin.

4.570.2.2 `getPluginName()`

```
void nsIPluginHost::getPluginName (
    in    nsIPluginInstance aInstance,
    [shared] out string aPluginName )
```

Get the plugin name for the plugin instance.

Parameters

<i>aInstance</i>	the plugin instance object
<i>aPluginName</i>	returns a pointer to a shared readonly string value, it's only valid for the lifetime of the plugin instance - you must copy the string value if you need it longer than that.

4.570.2.3 `getPluginTagForInstance()`

```
nsIPluginTag nsIPluginHost::getPluginTagForInstance (
    in    nsIPluginInstance aInstance )
```

Get the plugin tag associated with a given plugin instance.

Parameters

<i>aInstance</i>	the plugin instance object
------------------	----------------------------

Returns

plugin tag object

4.570.2.4 `GetURL()`

```
NS_IMETHOD nsIPluginHost::GetURL (
    nsISupports * pluginInst,
    const char * url,
    const char * target = NULL,
    nsIPluginStreamListener * streamListener = NULL,
    const char * altHost = NULL,
    const char * referrer = NULL,
    PRBool forceJSEnabled = PR_FALSE ) [pure virtual]
```

Fetches a URL.

(Corresponds to `NPN_GetURL` and `NPN_GetURLNotify`.)

Parameters

<i>pluginInst</i>	- the plugin making the request. If NULL, the URL is fetched in the background.
<i>url</i>	- the URL to fetch
<i>target</i>	- the target window into which to load the URL, or NULL if the data should be returned to the plugin via streamListener.
<i>streamListener</i>	- a stream listener to be used to return data to the plugin. May be NULL if target is not NULL.
<i>altHost</i>	- an IP-address string that will be used instead of the host specified in the URL. This is used to prevent DNS-spoofing attacks. Can be defaulted to NULL meaning use the host in the URL.
<i>referrer</i>	- the referring URL (may be NULL)
<i>forceJSEnabled</i>	- forces JavaScript to be enabled for 'javascript:' URLs, even if the user currently has JavaScript disabled (usually specify PR_FALSE)

Returns

- NS_OK if this operation was successful

4.570.2.5 instantiateDummyJavaPlugin()

```
void nsIPluginHost::instantiateDummyJavaPlugin (
    in nsIPluginInstanceOwner aOwner )
```

Instantiate a "dummy" java plugin if a java plugin that supports NPRuntime is installed.

This plugin is used for exposing window.java and window.Packages. If the java plugin supports NPRuntime and instantiation was successful, aOwners instance will be non-null, if not, it will be null.

4.570.2.6 instantiatePluginForChannel()

```
nsIStreamListener nsIPluginHost::instantiatePluginForChannel (
    in nsIChannel aChannel,
    in nsIPluginInstanceOwner aOwner )
```

Instantiate an embedded plugin for an existing channel.

The caller is responsible for opening the channel. It may or may not be already opened when this function is called.

4.570.2.7 parsePostBufferToFixHeaders()

```
void nsIPluginHost::parsePostBufferToFixHeaders (
    in string aInPostData,
    in unsigned long aInPostDataLen,
    out string aOutPostData,
    out unsigned long aOutPostDataLen )
```

This method parses post buffer to find out case insensitive "Content-length" string and CR or LF some where after that, then it assumes there is http headers in the input buffer and continue to search for end of headers (CRLF or LFLF).

It will *always malloc()* output buffer (caller is responsible to free it) if input buffer starts with LF, which comes from 4.x spec <http://developer.netscape.com/docs/manuals/communicator/plugin/pgfn2.htm#1007754> "If no custom headers are required, simply add a blank line ('\n') to the beginning of the file or buffer.", it skips that '

' and considers rest of the input buffer as data. If "Content-length" string and end of headers is found it substitutes single LF with CRLF in the headers, so the end of headers always will be CRLFCRLF (single CR in headers, if any, remain untouched) else it puts "Content-length: "+size_of_data+CRLFCRLF at the beginning of the output buffer and memcpy data to the output buffer

On failure outPostData and outPostDataLen will be set in 0.

Parameters

<i>aInPostData</i>	- the post data
<i>aInPostDataLen</i>	- the length aInPostData
<i>aOutPostData</i>	- the buffer
<i>aOutPostDataLen</i>	- the length of aOutPostData

4.570.2.8 PostURL()

```
NS_IMETHOD nsIPluginHost::PostURL (
    nsISupports * pluginInst,
    const char * url,
    PRUint32 postDataLen,
    const char * postData,
    PRBool isFile = PR_FALSE,
    const char * target = NULL,
    nsIPluginStreamListener * streamListener = NULL,
    const char * altHost = NULL,
    const char * referrer = NULL,
    PRBool forceJSEnabled = PR_FALSE,
    PRUint32 postHeadersLength = 0,
    const char * postHeaders = NULL ) [pure virtual]
```

Posts to a URL with post data and/or post headers.

(Corresponds to NPN_PostURL and NPN_PostURLNotify.)

Parameters

<i>pluginInst</i>	- the plugin making the request. If NULL, the URL is fetched in the background.
<i>url</i>	- the URL to fetch
<i>postDataLength</i>	- the length of postData (if non-NULL)
<i>postData</i>	- the data to POST. NULL specifies that there is not post data
<i>isFile</i>	- whether the postData specifies the name of a file to post instead of data. The file will be deleted afterwards.
<i>target</i>	- the target window into which to load the URL, or NULL if the data should be returned to the plugin via streamListener.
<i>streamListener</i>	- a stream listener to be used to return data to the plugin. May be NULL if target is not NULL.
<i>altHost</i>	- an IP-address string that will be used instead of the host specified in the URL. This is used to prevent DNS-spoofing attacks. Can be defaulted to NULL meaning use the host in the URL.
<i>referrer</i>	- the referring URL (may be NULL)
<i>forceJSEnabled</i>	- forces JavaScript to be enabled for 'javascript:' URLs, even if the user currently has JavaScript disabled (usually specify PR_FALSE)
<i>postHeadersLength</i>	- the length of postHeaders (if non-NULL)
<i>postHeaders</i>	- the headers to POST. Must be in the form of "HeaderName: HeaderValue\r\n". Each header, including the last, must be followed by "\r\n". NULL specifies that there are no post headers

Returns

- NS_OK if this operation was successful

4.570.2.9 reloadPlugins()

```
void nsIPluginHost::reloadPlugins (
    in boolean reloadPages )
```

Causes the plugins directory to be searched again for new plugin libraries.

Parameters

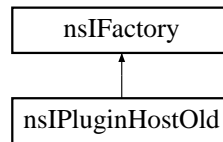
<i>reloadPages</i>	- indicates whether currently visible pages should also be reloaded
--------------------	---

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginHost.idl

4.571 nsIPluginHostOld Interface Reference

Inheritance diagram for nsIPluginHostOld:



Public Member Functions

- void **init** ()
- void **destroy** ()
- void **loadPlugins** ()
- **nsIPlugin** **getPluginFactory** (in string aMimeType)
- void **instantiateEmbeddedPlugin** (in string aMimeType, in nsIURI aURL, in **nsIPluginInstanceOwner** aOwner)
- void **instantiateFullPagePlugin** (in string aMimeType, in nsIURI aURL, in nsIStreamListenerRef aStreamListener, in **nsIPluginInstanceOwner** aOwner)
- nsIStreamListener **instantiatePluginForChannel** (in nsIChannel aChannel, in **nsIPluginInstanceOwner** aOwner)
Instantiate an embedded plugin for an existing channel.
- void **setUpPluginInstance** (in string aMimeType, in nsIURI aURL, in **nsIPluginInstanceOwner** aOwner)
- void **isPluginEnabledForType** (in string aMimeType)
- void **isPluginEnabledForExtension** (in string aExtension, in constCharStarRef aMimeType)
- void **getPlugins** (in unsigned long aPluginCount, out nsIDOMPlugin aPluginArray)
- void **getPluginTags** (out unsigned long aPluginCount, [retval, array, size_is(aPluginCount)] out **nsIPluginTag** aResults)
- void **stopPluginInstance** (in **nsIPluginInstance** aInstance)
- void **handleBadPlugin** (in PRLibraryPtr aLibrary, in **nsIPluginInstance** instance)

Data Fields

- readonly attribute unsigned long **pluginCount**

4.571.1 Detailed Description

Definition at line 64 of file nsIPluginHostOld.idl.

4.571.2 Member Function Documentation

4.571.2.1 instantiatePluginForChannel()

```

nsIStreamListener nsIPluginHostOld::instantiatePluginForChannel (
    in nsIChannel aChannel,
    in nsIPluginInstanceOwner aOwner )
  
```

Instantiate an embedded plugin for an existing channel.

The caller is responsible for opening the channel. It may or may not be already opened when this function is called.

The documentation for this interface was generated from the following file:

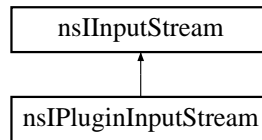
- src/plugin_win32/include/nsIPluginHostOld.idl

4.572 nsIPluginInputStream Interface Reference

The **nsIPluginInputStream** (p. 378) interface ...

```
import "nsIPluginInputStream.idl";
```

Inheritance diagram for nsIPluginInputStream:



Public Member Functions

- void **getLastModified** (out unsigned long aResult)
Corresponds to NPStream's lastmodified field.
- void **requestRead** (out **nsByteRange** aRangeList)

4.572.1 Detailed Description

The **nsIPluginInputStream** (p. 378) interface ...

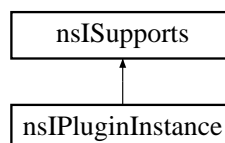
Definition at line 45 of file nsIPluginInputStream.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginInputStream.idl

4.573 nsIPluginInstance Interface Reference

Inheritance diagram for nsIPluginInstance:



Public Member Functions

- void **initialize** (in **nsIPluginInstanceOwner** aOwner, in string aMIMETYPE)
Initializes a newly created plugin instance.
- void **start** ()
Called to instruct the plugin instance to start.
- void **stop** ()
Called to instruct the plugin instance to stop, thereby suspending its state.
- void **setWindow** (in nsPluginWindowPtr aWindow)
Called when the window containing the plugin instance changes.
- void **newStreamToPlugin** (out **nsIPluginStreamListener** aListener)
Called to tell the plugin that the initial src/data stream is ready.
- void **newStreamFromPlugin** (in string aType, in string aTarget, out nsIOutputStream aResult)
This operation is called by the plugin instance when it wishes to send a stream of data to the browser.
- void **print** (in nsPluginPrintPtr aPlatformPrint)
Called to instruct the plugin instance to print itself to a printer.
- void **getValue** (in nsPluginInstanceVariable aVariable, in voidPtr aValue)
Returns the value of a variable associated with the plugin instance.
- void **handleEvent** (in nsPluginEventPtr aEvent, out boolean aHandled)
Handles an event.
- void **invalidateRect** (in nsPluginRectPtr aRect)
Corresponds to NPN_InvalidateRect.
- void **invalidateRegion** (in nsPluginRegion aRegion)
Corresponds to NPN_InvalidateRegion.
- void **forceRedraw** ()
Corresponds to NPN_ForceRedraw.
- void **getMIMETYPE** ([const, shared] out string aValue)
Returns the MIME type of the plugin instance.
- void **showStatus** (in string aMessage)
This operation causes status information to be displayed on the window associated with the plugin instance.
- void **invalidateOwner** ()
Drop our reference to our owner.
- JSObjectPtr **GetJSObject** (in JSContextPtr cx)
- void **pushPopupsEnabledState** (in boolean aEnabled)
- void **popPopupsEnabledState** ()
- void **defineJavaProperties** ()

Data Fields

- readonly attribute JSContextPtr **JSContext**
Get the JavaScript context to this plugin instance.
- attribute **nsIPluginInstanceOwner** owner
- readonly attribute AString **formValue**
- readonly attribute PRUint16 **pluginAPIVersion**

4.573.1 Detailed Description

Definition at line 57 of file nsIPluginInstance.idl.

4.573.2 Member Function Documentation

4.573.2.1 getMimeType()

```
void nsIPluginInstance::getMimeType (
    [const, shared] out string aValue )
```

Returns the MIME type of the plugin instance.

(Corresponds to NPP_New's MIMETYPE argument.)

Parameters

<i>aMimeType</i>	- resulting MIME type
------------------	-----------------------

Returns

- NS_OK if this operation was successful

4.573.2.2 getValue()

```
void nsIPluginInstance::getValue (
    in nsPluginInstanceVariable aVariable,
    in voidPtr aValue )
```

Returns the value of a variable associated with the plugin instance.

Parameters

<i>aVariable</i>	- the plugin instance variable to get
<i>aValue</i>	- the address of where to store the resulting value

Returns

- NS_OK if this operation was successful

4.573.2.3 handleEvent()

```
void nsIPluginInstance::handleEvent (
    in nsPluginEventPtr aEvent,
    out boolean aHandled )
```

Handles an event.

Note that for Unix and Mac the **nsPluginEvent** (p. 427) structure is different from the old NPEvent structure – it's no longer the native event record, but is instead a struct. This was done for future extensibility, and so that the Mac could receive the window argument too. For Windows and OS2, it's always been a struct, so there's no change for them.

(Corresponds to NPP_HandleEvent.)

Parameters

<i>aEvent</i>	- the event to be handled
<i>aHandled</i>	- set to PR_TRUE if event was handled

Returns

- NS_OK if this operation was successful

4.573.2.4 initialize()

```
void nsIPluginInstance::initialize (
    in  nsIPluginInstanceOwner aOwner,
    in  string aMIMEType )
```

Initializes a newly created plugin instance.

Parameters

<i>aOwner</i>	- the plugin instance owner
<i>aMime</i>	- the mime type for the instance

Returns

- NS_OK if this operation was successful

4.573.2.5 newStreamFromPlugin()

```
void nsIPluginInstance::newStreamFromPlugin (
    in  string aType,
    in  string aTarget,
    out nsIOutputStream aResult )
```

This operation is called by the plugin instance when it wishes to send a stream of data to the browser.

It constructs a new output stream to which the plugin may send the data. When complete, the Close and Release methods should be called on the output stream.

(Corresponds to NPN_NewStream.)

Parameters

<i>aType</i>	- MIME type of the stream to create
<i>aTarget</i>	- the target window name to receive the data
<i>aResult</i>	- the resulting output stream

Returns

- NS_OK if this operation was successful

4.573.2.6 newStreamToPlugin()

```
void nsIPluginInstance::newStreamToPlugin (
    out nsIPluginStreamListener aListener )
```

Called to tell the plugin that the initial src/data stream is ready.

Expects the plugin to return a **nsIPluginStreamListener** (p. 412).

(Corresponds to NPP_NewStream.)

Parameters

<i>aListener</i>	- listener the browser will use to give the plugin the data
------------------	---

Returns

- NS_OK if this operation was successful

4.573.2.7 print()

```
void nsIPluginInstance::print (
    in nsPluginPrintPtr aPlatformPrint )
```

Called to instruct the plugin instance to print itself to a printer.

(Corresponds to NPP_Print.)

Parameters

<i>aPlatformPrint</i>	- platform-specific printing information
-----------------------	--

Returns

- NS_OK if this operation was successful

4.573.2.8 setWindow()

```
void nsIPluginInstance::setWindow (
    in nsPluginWindowPtr aWindow )
```

Called when the window containing the plugin instance changes.

(Corresponds to NPP_SetWindow.)

Parameters

<i>aWindow</i>	- the plugin window structure
----------------	-------------------------------

Returns

- NS_OK if this operation was successful

4.573.2.9 showStatus()

```
void nsIPluginInstance::showStatus (
    in string aMessage )
```

This operation causes status information to be displayed on the window associated with the plugin instance.

(Corresponds to NPN_Status.)

Parameters

<i>aMessage</i>	- the status message to display
-----------------	---------------------------------

Returns

- NS_OK if this operation was successful

4.573.2.10 start()

```
void nsIPluginInstance::start ( )
```

Called to instruct the plugin instance to start.

This will be called after the plugin is first created and initialized, and may be called after the plugin is stopped (via the Stop method) if the plugin instance is returned to in the browser window's history.

Returns

- NS_OK if this operation was successful

4.573.2.11 stop()

```
void nsIPluginInstance::stop ( )
```

Called to instruct the plugin instance to stop, thereby suspending its state.

This method will be called whenever the browser window goes on to display another page and the page containing the plugin goes into the window's history list.

Returns

- NS_OK if this operation was successful

4.573.3 Field Documentation**4.573.3.1 JSContext**

```
readonly attribute JSContextPtr nsIPluginInstance::JSContext
```

Get the JavaScript context to this plugin instance.

Parameters

<i>aJSContext</i>	- the resulting JavaScript context
-------------------	------------------------------------

Returns

- NS_OK if this operation was successful

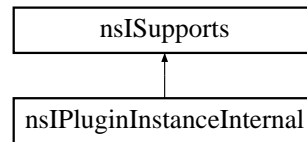
Definition at line 192 of file nsIPluginInstance.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginInstance.idl

4.574 nsIPluginInstanceInternal Class Reference

Inheritance diagram for nsIPluginInstanceInternal:



Public Member Functions

- virtual JSObject * **GetJSObject** (JSContext *cx)=0
- virtual nsresult **GetFormValue** (nsAString &aValue)=0
- virtual nsresult **PushPopupsEnabledState** (PRBool aEnabled)=0
- virtual nsresult **PopPopupsEnabledState** ()=0
- virtual PRUint16 **GetPluginAPIVersion** ()=0
- virtual nsresult **DefineJavaProperties** ()=0

4.574.1 Detailed Description

Definition at line 51 of file nsIPluginInstanceInternal.h.

The documentation for this class was generated from the following file:

- src/plugin_win32/include/nsIPluginInstanceInternal.h

4.575 nsIPluginInstanceOld Interface Reference

The **nsIPluginInstance** (p. 378) interface is the minimum interface plugin developers need to support in order to implement a plugin instance.

```
import "nsIPluginInstanceOld.idl";
```

Inheritance diagram for nsIPluginInstanceOld:



Public Member Functions

- void **initialize** (in **nsIPluginInstancePeer** aPeer)
Initializes a newly created plugin instance, passing to it the plugin instance peer which it should use for all communication back to the browser.
- void **start** ()
Called to instruct the plugin instance to start.
- void **stop** ()
Called to instruct the plugin instance to stop, thereby suspending its state.
- void **destroy** ()
Called to instruct the plugin instance to destroy itself.
- void **setWindow** (in nsPluginWindowPtr aWindow)
Called when the window containing the plugin instance changes.
- void **newStream** (out **nsIPluginStreamListener** aListener)
Called to tell the plugin that the initial src/data stream is ready.
- void **print** (in nsPluginPrintPtr aPlatformPrint)
Called to instruct the plugin instance to print itself to a printer.
- void **getValue** (in nsPluginInstanceVariable aVariable, in voidPtr aValue)
Returns the value of a variable associated with the plugin instance.
- void **handleEvent** (in nsPluginEventPtr aEvent, out boolean aHandled)
Handles an event.

Data Fields

- readonly attribute **nsIPluginInstancePeer** peer
Returns a reference back to the plugin instance peer.

4.575.1 Detailed Description

The **nsIPluginInstance** (p. 378) interface is the minimum interface plugin developers need to support in order to implement a plugin instance.

The plugin manager may QueryInterface for more specific types, e.g. **nsILiveConnectPluginInstance**.

(Corresponds to NPP object.)

The old NPP_Destroy call has been factored into two plugin instance methods:

Stop – called when the plugin instance is to be stopped (e.g. by displaying another plugin manager window, causing the page containing the plugin to become removed from the display).

Destroy – called once, before the plugin instance peer is to be destroyed. This method is used to destroy the plugin instance.

Definition at line 75 of file nsIPluginInstanceOld.idl.

4.575.2 Member Function Documentation

4.575.2.1 destroy()

```
void nsIPluginInstanceOld::destroy ( )
```

Called to instruct the plugin instance to destroy itself.

This is called when it become no longer possible to return to the plugin instance, either because the browser window's history list of pages is being trimmed, or because the window containing this page in the history is being closed.

Returns

- NS_OK if this operation was successful

4.575.2.2 getValue()

```
void nsIPluginInstanceOld::getValue (
    in nsPluginInstanceVariable aVariable,
    in voidPtr aValue )
```

Returns the value of a variable associated with the plugin instance.

Parameters

<i>aVariable</i>	- the plugin instance variable to get
<i>aValue</i>	- the address of where to store the resulting value

Returns

- NS_OK if this operation was successful

4.575.2.3 handleEvent()

```
void nsIPluginInstanceOld::handleEvent (
    in nsPluginEventPtr aEvent,
    out boolean aHandled )
```

Handles an event.

An nsIEventHandler can also get registered with with nsIPluginManager2::RegisterWindow and will be called whenever an event comes in for that window.

Note that for Unix and Mac the **nsPluginEvent** (p. 427) structure is different from the old NPEvent structure – it's no longer the native event record, but is instead a struct. This was done for future extensibility, and so that the Mac could receive the window argument too. For Windows and OS2, it's always been a struct, so there's no change for them.

(Corresponds to NPP_HandleEvent.)

Parameters

<i>aEvent</i>	- the event to be handled
<i>aHandled</i>	- set to PR_TRUE if event was handled

Returns

- NS_OK if this operation was successful

4.575.2.4 initialize()

```
void nsIPluginInstanceOld::initialize (
    in nsIPluginInstancePeer aPeer )
```

Initializes a newly created plugin instance, passing to it the plugin instance peer which it should use for all communication back to the browser.

Parameters

<i>aPeer</i>	- the corresponding plugin instance peer
--------------	--

Returns

- NS_OK if this operation was successful

4.575.2.5 newStream()

```
void nsIPluginInstanceOld::newStream (
    out nsIPluginStreamListener aListener )
```

Called to tell the plugin that the initial src/data stream is ready.

Expects the plugin to return a **nsIPluginStreamListener** (p. 412).

(Corresponds to NPP_NewStream.)

Parameters

<i>aListener</i>	- listener the browser will use to give the plugin the data
------------------	---

Returns

- NS_OK if this operation was successful

4.575.2.6 print()

```
void nsIPluginInstanceOld::print (
    in nsPluginPrintPtr aPlatformPrint )
```

Called to instruct the plugin instance to print itself to a printer.

(Corresponds to NPP_Print.)

Parameters

<i>aPlatformPrint</i>	- platform-specific printing information
-----------------------	--

Returns

- NS_OK if this operation was successful

4.575.2.7 setWindow()

```
void nsIPluginInstanceOld::setWindow (
    in nsPluginWindowPtr aWindow )
```

Called when the window containing the plugin instance changes.

(Corresponds to NPP_SetWindow.)

Parameters

<i>aWindow</i>	- the plugin window structure
----------------	-------------------------------

Returns

- NS_OK if this operation was successful

4.575.2.8 start()

```
void nsIPluginInstanceOld::start ( )
```

Called to instruct the plugin instance to start.

This will be called after the plugin is first created and initialized, and may be called after the plugin is stopped (via the Stop method) if the plugin instance is returned to in the browser window's history.

Returns

- NS_OK if this operation was successful

4.575.2.9 stop()

```
void nsIPluginInstanceOld::stop ( )
```

Called to instruct the plugin instance to stop, thereby suspending its state.

This method will be called whenever the browser window goes on to display another page and the page containing the plugin goes into the window's history list.

Returns

- NS_OK if this operation was successful

4.575.3 Field Documentation

4.575.3.1 peer

```
readonly attribute nsIPluginInstancePeer nsIPluginInstanceOld::peer
```

Returns a reference back to the plugin instance peer.

This method is used whenever the browser needs to obtain the peer back from a plugin instance. The implementation of this method should be sure to increment the reference count on the peer by calling AddRef.

Parameters

<i>aPeer</i>	- the resulting plugin instance peer
--------------	--------------------------------------

Returns

- NS_OK if this operation was successful

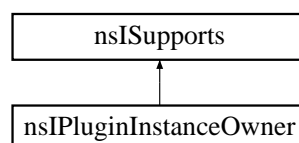
Definition at line 96 of file nsIPluginInstanceOld.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginInstanceOld.idl

4.576 nsIPluginInstanceOwner Interface Reference

Inheritance diagram for nsIPluginInstanceOwner:



Public Member Functions

- void **setInstance** (in **nsIPluginInstance** aInstance)
Let the owner know what its instance is.
- void **getInstance** (in nsIPluginInstanceRef aInstance)
Get the instance associated with this owner.
- nsresult **GetInstance** (**nsIPluginInstance** **aInstance)
- void **getWindow** (in nsPluginWindowStarRef aWindow)
Get a handle to the window structure of the owner.
- void **createWidget** ()
Create a place for the plugin to live in the owner's environment.
- NS_IMETHOD **GetURL** (const char *aURL, const char *aTarget, void *aPostData, PRUint32 aPostDataLen, void *aHeadersData, PRUint32 aHeadersDataLen, PRBool aIsFile=PR_FALSE)=0
Called when there is a valid target so that the proper frame can be updated with new content.
- void **showStatus** (in string aStatusMsg)
Show a status message in the host environment.
- NS_IMETHOD **ShowStatus** (const PRUnichar *aStatusMsg)=0
- void **invalidateRect** (in nsPluginRectPtr aRect)
Invalidate the rectangle.
- void **invalidateRegion** (in nsPluginRegion aRegion)
Invalidate the region.
- void **forceRedraw** ()
Force a redraw.
- void **getNetscapeWindow** (in voidPtr aValue)
Get NetscapeWindow, corresponds to NPNVnetscapeWindow.

Data Fields

- readonly attribute nsPluginMode **mode**
Get the display mode for the plugin instance.
- readonly attribute nsIDocument **document**
Get the associated document.

4.576.1 Detailed Description

Definition at line 48 of file nsIPluginInstanceOwner.idl.

4.576.2 Member Function Documentation

4.576.2.1 createWidget()

```
void nsIPluginInstanceOwner::createWidget ( )
```

Create a place for the plugin to live in the owner's environment.

this may or may not create a window depending on the windowless state of the plugin instance.

4.576.2.2 GetURL()

```
NS_IMETHOD nsIPluginInstanceOwner::GetURL (
    const char * aURL,
    const char * aTarget,
    void * aPostData,
    PRUint32 aPostDataLen,
    void * aHeadersData,
    PRUint32 aHeadersDataLen,
    PRBool aIsFile = PR_FALSE ) [pure virtual]
```

Called when there is a valid target so that the proper frame can be updated with new content.

will not be called with nsnull aTarget.

4.576.2.3 getWindow()

```
void nsIPluginInstanceOwner::getWindow (
    in nsPluginWindowStarRef aWindow )
```

Get a handle to the window structure of the owner.

This pointer cannot be made persistent by the caller.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginInstanceOwner.idl

4.577 nsIPluginInstancePeer Interface Reference

The **nsIPluginInstancePeer** (p.392) interface is the set of operations implemented by the browser to support a plugin instance.

```
import "nsIPluginInstancePeer.idl";
```

Inheritance diagram for nsIPluginInstancePeer:



Public Member Functions

- void **getValue** (in nsPluginInstancePeerVariable aVariable, in voidPtr aValue)
Returns the value of a variable associated with the plugin manager.
- void **newStream** (in nsMimeType aType, in string aTarget, out nsIOutputStream aResult)
This operation is called by the plugin instance when it wishes to send a stream of data to the browser.
- void **showStatus** (in string aMessage)
This operation causes status information to be displayed on the window associated with the plugin instance.
- void **setWindowSize** (in unsigned long aWidth, in unsigned long aHeight)
Set the desired size of the window in which the plugin instance lives.

Data Fields

- readonly attribute nsMimeType **MIMETYPE**
Returns the MIME type of the plugin instance.
- readonly attribute nsPluginMode **mode**
Returns the mode of the plugin instance, i.e.

4.577.1 Detailed Description

The **nsIPluginInstancePeer** (p. 392) interface is the set of operations implemented by the browser to support a plugin instance.

When a plugin instance is constructed, a **nsIPluginInstancePeer** (p. 392) is passed to its initializer representing the instantiation of the plugin on the page.

Other interfaces may be obtained from **nsIPluginInstancePeer** (p. 392) by calling QueryInterface, e.g. **nsIPluginTagInfo** (p. 416).

Definition at line 68 of file nsIPluginInstancePeer.idl.

4.577.2 Member Function Documentation

4.577.2.1 getValue()

```
void nsIPluginInstancePeer::getValue (
    in nsPluginInstancePeerVariable aVariable,
    in voidPtr aValue )
```

Returns the value of a variable associated with the plugin manager.

(Corresponds to NPN_GetValue.)

Parameters

<i>aVariable</i>	- the plugin manager variable to get
<i>aValue</i>	- the address of where to store the resulting value

Returns

- NS_OK if this operation was successful

4.577.2.2 newStream()

```
void nsIPluginInstancePeer::newStream (
    in nsMIMEType aType,
    in string aTarget,
    out nsIOutputStream aResult )
```

This operation is called by the plugin instance when it wishes to send a stream of data to the browser.

It constructs a new output stream to which the plugin may send the data. When complete, the Close and Release methods should be called on the output stream.

(Corresponds to NPN_NewStream.)

Parameters

<i>aType</i>	- MIME type of the stream to create
<i>aTarget</i>	- the target window name to receive the data
<i>aResult</i>	- the resulting output stream

Returns

- NS_OK if this operation was successful

4.577.2.3 setWindowSize()

```
void nsIPluginInstancePeer::setWindowSize (
    in unsigned long aWidth,
    in unsigned long aHeight )
```

Set the desired size of the window in which the plugin instance lives.

Parameters

<i>aWidth</i>	- new window width
<i>aHeight</i>	- new window height

Returns

- NS_OK if this operation was successful

4.577.2.4 showStatus()

```
void nsIPluginInstancePeer::showStatus (
    in string aMessage )
```

This operation causes status information to be displayed on the window associated with the plugin instance.

(Corresponds to NPN_Status.)

Parameters

<i>aMessage</i>	- the status message to display
-----------------	---------------------------------

Returns

- NS_OK if this operation was successful

4.577.3 Field Documentation

4.577.3.1 MIMETYPE

```
readonly attribute nsMIMETYPE nsIPluginInstancePeer::MIMETYPE
```

Returns the MIME type of the plugin instance.

(Corresponds to NPP_New's MIMETYPE argument.)

Parameters

<i>aMIMETYPE</i>	- resulting MIME type
------------------	-----------------------

Returns

- NS_OK if this operation was successful

Definition at line 88 of file nsIPluginInstancePeer.idl.

4.577.3.2 mode

```
readonly attribute nsPluginMode nsIPluginInstancePeer::mode
```

Returns the mode of the plugin instance, i.e.

whether the plugin is embedded in the html, or full page.

(Corresponds to NPP_New's mode argument.)

Parameters

<i>result</i>	- the resulting mode
---------------	----------------------

Returns

- NS_OK if this operation was successful

Definition at line 99 of file nsIPluginInstancePeer.idl.

The documentation for this interface was generated from the following file:

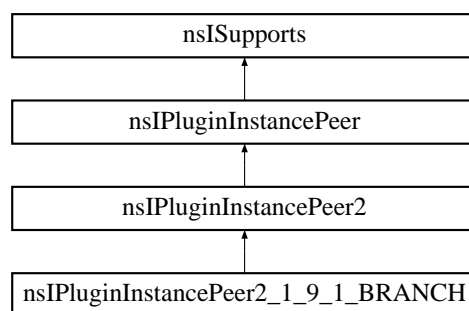
- src/plugin_win32/include/nsIPluginInstancePeer.idl

4.578 nsIPluginInstancePeer2 Interface Reference

The **nsIPluginInstancePeer2** (p. 396) interface extends the **nsIPluginInstancePeer** (p. 392) interface, providing access to functionality provided by newer browsers.

```
import "nsIPluginInstancePeer2.idl";
```

Inheritance diagram for nsIPluginInstancePeer2:



Data Fields

- readonly attribute JSObjectPtr **JSWindow**
Get the JavaScript window object corresponding to this plugin instance.
- readonly attribute unsigned long **JSThread**
Get the JavaScript execution thread corresponding to this plugin instance.
- readonly attribute JSContextPtr **JSContext**
Get the JavaScript context to this plugin instance.

Additional Inherited Members

4.578.1 Detailed Description

The **nsIPluginInstancePeer2** (p. 396) interface extends the **nsIPluginInstancePeer** (p. 392) interface, providing access to functionality provided by newer browsers.

All functionality in **nsIPluginInstancePeer** (p. 392) can be mapped to the 4.X plugin API.

Definition at line 65 of file nsIPluginInstancePeer2.idl.

4.578.2 Field Documentation

4.578.2.1 JSContext

```
readonly attribute JSContextPtr nsIPluginInstancePeer2::JSContext
```

Get the JavaScript context to this plugin instance.

Parameters

<i>aJSContext</i>	- the resulting JavaScript context
-------------------	------------------------------------

Returns

- NS_OK if this operation was successful

Definition at line 90 of file nsIPluginInstancePeer2.idl.

4.578.2.2 JSThread

```
readonly attribute unsigned long nsIPluginInstancePeer2::JSThread
```

Get the JavaScript execution thread corresponding to this plugin instance.

Parameters

<i>aJSThread</i>	- the resulting JavaScript thread id
------------------	--------------------------------------

Returns

- NS_OK if this operation was successful

Definition at line 82 of file nsIPluginInstancePeer2.idl.

4.578.2.3 JSWindow

```
readonly attribute JSObjectPtr nsIPluginInstancePeer2::JSWindow
```

Get the JavaScript window object corresponding to this plugin instance.

Parameters

<i>aJSWindow</i>	- the resulting JavaScript window object
------------------	--

Returns

- NS_OK if this operation was successful

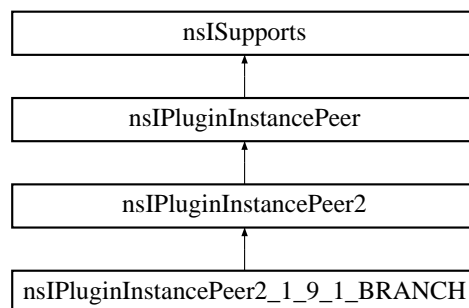
Definition at line 73 of file nsIPluginInstancePeer2.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginInstancePeer2.idl

4.579 nsIPluginInstancePeer2_1_9_1_BRANCH Interface Reference

Inheritance diagram for nsIPluginInstancePeer2_1_9_1_BRANCH:



Public Member Functions

- void **invalidateOwner** ()
Drop our reference to our owner.

Additional Inherited Members

4.579.1 Detailed Description

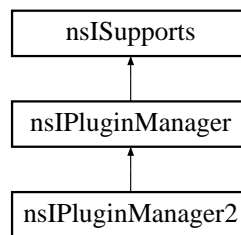
Definition at line 94 of file nsIPluginInstancePeer2.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginInstancePeer2.idl

4.580 nsIPluginManager Interface Reference

Inheritance diagram for nsIPluginManager:



Public Member Functions

- void **GetValue** (in nsPluginManagerVariable variable, in nativeVoid value)
Returns the value of a variable associated with the plugin manager.
- void **reloadPlugins** (in boolean reloadPages)
Causes the plugins directory to be searched again for new plugin libraries.
- void **UserAgent** (in nativeChar resultingAgentString)
Returns the user agent string for the browser.
- NS_IMETHOD **GetURL** (nsISupports *pluginInst, const char *url, const char *target=NULL, **nsIPluginStreamListener** *streamListener=NULL, const char *altHost=NULL, const char *referrer=NULL, PRBool forceJSEnabled=PR_FALSE)=0
Fetches a URL.
- NS_IMETHOD **PostURL** (nsISupports *pluginInst, const char *url, PRUint32 postDataLen, const char *postData, PRBool isFile=PR_FALSE, const char *target=NULL, **nsIPluginStreamListener** *streamListener=NULL, const char *altHost=NULL, const char *referrer=NULL, PRBool forceJSEnabled=PR_FALSE, PRUint32 postHeadersLength=0, const char *postHeaders=NULL)=0
Posts to a URL with post data and/or post headers.
- void **RegisterPlugin** (in REFNSIID aCID, in string aPluginName, in string aDescription, in nativeChar aMimeTypes, in nativeChar aMimeDescriptions, in nativeChar aFileExtensions, in long aCount)
Persistently register a plugin with the plugin manager.
- void **UnregisterPlugin** (in REFNSIID aCID)
Unregister a plugin from the plugin manager.
- NS_IMETHOD **GetURLWithHeaders** (nsISupports *pluginInst, const char *url, const char *target=NULL, **nsIPluginStreamListener** *streamListener=NULL, const char *altHost=NULL, const char *referrer=NULL, PRBool forceJSEnabled=PR_FALSE, PRUint32 getHeadersLength=0, const char *getHeaders=NULL)=0
Fetches a URL, with Headers.

4.580.1 Detailed Description

Definition at line 77 of file nsIPluginManager.idl.

4.580.2 Member Function Documentation

4.580.2.1 GetURL()

```
NS_IMETHOD nsIPluginManager::GetURL (
    nsISupports * pluginInst,
    const char * url,
    const char * target = NULL,
    nsIPluginStreamListener * streamListener = NULL,
    const char * altHost = NULL,
    const char * referrer = NULL,
    PRBool forceJSEnabled = PR_FALSE ) [pure virtual]
```

Fetches a URL.

(Corresponds to NPN_GetURL and NPN_GetURLNotify.)

Parameters

<i>pluginInst</i>	- the plugin making the request. If NULL, the URL is fetched in the background.
<i>url</i>	- the URL to fetch
<i>target</i>	- the target window into which to load the URL, or NULL if the data should be returned to the plugin via streamListener.
<i>streamListener</i>	- a stream listener to be used to return data to the plugin. May be NULL if target is not NULL.
<i>altHost</i>	- an IP-address string that will be used instead of the host specified in the URL. This is used to prevent DNS-spoofing attacks. Can be defaulted to NULL meaning use the host in the URL.
<i>referrer</i>	- the referring URL (may be NULL)
<i>forceJSEnabled</i>	- forces JavaScript to be enabled for 'javascript:' URLs, even if the user currently has JavaScript disabled (usually specify PR_FALSE)

Returns

- NS_OK if this operation was successful

4.580.2.2 GetURLWithHeaders()

```
NS_IMETHOD nsIPluginManager::GetURLWithHeaders (
    nsISupports * pluginInst,
    const char * url,
    const char * target = NULL,
    nsIPluginStreamListener * streamListener = NULL,
    const char * altHost = NULL,
    const char * referrer = NULL,
    PRBool forceJSEnabled = PR_FALSE,
    PRUint32 getHeadersLength = 0,
    const char * getHeaders = NULL ) [pure virtual]
```

Fetches a URL, with Headers.

See also

GetURL (p. 399). Identical except for additional params headers and headersLen

Parameters

<i>getHeadersLength</i>	- the length of getHeaders (if non-NULL)
<i>getHeaders</i>	- the headers to GET. Must be in the form of "HeaderName: HeaderValue\r\n". Each header, including the last, must be followed by "\r\n". NULL specifies that there are no get headers

Returns

- NS_OK if this operation was successful

4.580.2.3 GetValue()

```
void nsIPluginManager::GetValue (
    in nsPluginManagerVariable variable,
    in nativeVoid value )
```

Returns the value of a variable associated with the plugin manager.

(Corresponds to NPN_GetValue.)

Parameters

<i>variable</i>	- the plugin manager variable to get
<i>value</i>	- the address of where to store the resulting value

Returns

- NS_OK if this operation was successful

4.580.2.4 PostURL()

```
NS_IMETHOD nsIPluginManager::PostURL (
    nsISupports * pluginInst,
    const char * url,
    PRUint32 postDataLen,
    const char * postData,
    PRBool isFile = PR_FALSE,
    const char * target = NULL,
    nsIPluginStreamListener * streamListener = NULL,
    const char * altHost = NULL,
    const char * referrer = NULL,
    PRBool forceJSEnabled = PR_FALSE,
    PRUint32 postHeadersLength = 0,
    const char * postHeaders = NULL ) [pure virtual]
```

Posts to a URL with post data and/or post headers.

(Corresponds to NPN_PostURL and NPN_PostURLNotify.)

Parameters

<i>pluginInst</i>	- the plugin making the request. If NULL, the URL is fetched in the background.
<i>url</i>	- the URL to fetch
<i>postDataLength</i>	- the length of postData (if non-NULL)
<i>postData</i>	- the data to POST. NULL specifies that there is not post data
<i>isFile</i>	- whether the postData specifies the name of a file to post instead of data. The file will be deleted afterwards.
<i>target</i>	- the target window into which to load the URL, or NULL if the data should be returned to the plugin via streamListener.
<i>streamListener</i>	- a stream listener to be used to return data to the plugin. May be NULL if target is not NULL.
<i>altHost</i>	- an IP-address string that will be used instead of the host specified in the URL. This is used to prevent DNS-spoofing attacks. Can be defaulted to NULL meaning use the host in the URL.
<i>referrer</i>	- the referring URL (may be NULL)
<i>forceJSEnabled</i>	- forces JavaScript to be enabled for 'javascript:' URLs, even if the user currently has JavaScript disabled (usually specify PR_FALSE)
<i>postHeadersLength</i>	- the length of postHeaders (if non-NULL)
<i>postHeaders</i>	- the headers to POST. Must be in the form of "HeaderName: HeaderValue\r\n". Each header, including the last, must be followed by "\r\n". NULL specifies that there are no post headers

Returns

- NS_OK if this operation was successful

4.580.2.5 RegisterPlugin()

```
void nsIPluginManager::RegisterPlugin (
    in REFNSIID aCID,
    in string aPluginName,
    in string aDescription,
    in nativeChar aMimeTypes,
    in nativeChar aMimeDescriptions,
    in nativeChar aFileExtensions,
    in long aCount )
```

Persistently register a plugin with the plugin manager.

aMimeTypes, aMimeDescriptions, and aFileExtensions are parallel arrays that contain information about the MIME types that the plugin supports.

Parameters

<i>aCID</i>	- the plugin's CID
<i>aPluginName</i>	- the plugin's name
<i>aDescription</i>	- a description of the plugin
<i>aMimeTypes</i>	- an array of MIME types that the plugin is prepared to handle
<i>aMimeDescriptions</i>	- an array of descriptions for the MIME types that the plugin can handle.
<i>aFileExtensions</i>	- an array of file extensions for the MIME types that the plugin can handle.
<i>aCount</i>	- the number of elements in the aMimeTypes, aMimeDescriptions, and aFileExtensions arrays.

Returns

- NS_OK if the operation was successful.

4.580.2.6 reloadPlugins()

```
void nsIPluginManager::reloadPlugins (
    in boolean reloadPages )
```

Causes the plugins directory to be searched again for new plugin libraries.

(Corresponds to NPN_ReloadPlugins.)

Parameters

<i>reloadPages</i>	- indicates whether currently visible pages should also be reloaded
--------------------	---

4.580.2.7 UnregisterPlugin()

```
void nsIPluginManager::UnregisterPlugin (
    in REFNSIID aCID )
```

Unregister a plugin from the plugin manager.

Parameters

<i>aCID</i>	the CID of the plugin to unregister.
-------------	--------------------------------------

Returns

- NS_OK if the operation was successful.

4.580.2.8 UserAgent()

```
void nsIPluginManager::UserAgent (
    in nativeChar resultingAgentString )
```

Returns the user agent string for the browser.

(Corresponds to NPN_UserAgent.)

Parameters

<i>resultingAgentString</i>	- the resulting user agent string
-----------------------------	-----------------------------------

The documentation for this interface was generated from the following file:

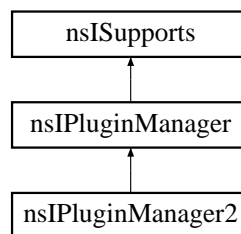
- src/plugin_win32/include/nsIPluginManager.idl

4.581 nsIPluginManager2 Interface Reference

Plugin Manager 2 Interface These extensions to **nsIPluginManager** (p. 399) are only available in Communicator 5.0.

```
import "nsIPluginManager2.idl";
```

Inheritance diagram for nsIPluginManager2:



Public Member Functions

- void **beginWaitCursor** ()
Puts up a wait cursor.
- void **endWaitCursor** ()
Restores the previous (non-wait) cursor.
- void **supportsURLProtocol** (in string aProtocol, out boolean aResult)
Returns true if a URL protocol (e.g.
- void **notifyStatusChange** (in **nsIPlugin** aPlugin, in nsresult aStatus)
This method may be called by the plugin to indicate that an error has occurred, e.g.
- void **findProxyForURL** (in string aURL, out string aResult)
Returns the proxy info for a given URL.
- void **registerWindow** (in nsIEventHandler aHandler, in nsPluginPlatformWindowRef aWindow)
Registers a top-level window with the browser.
- void **unregisterWindow** (in nsIEventHandler aHandler, in nsPluginPlatformWindowRef aWindow)
Unregisters a top-level window with the browser.
- void **allocateMenuID** (in nsIEventHandler aHandler, in boolean alsSubmenu, out short aResult)
Allocates a new menu ID (for the Mac).
- void **deallocateMenuID** (in nsIEventHandler aHandler, in short aMenuID)
Deallocates a menu ID (for the Mac).
- void **hasAllocatedMenuID** (in nsIEventHandler aHandler, in short aMenuID, out boolean aResult)
Indicates whether this event handler has allocated the given menu ID.

4.581.1 Detailed Description

Plugin Manager 2 Interface These extensions to **nsIPluginManager** (p. 399) are only available in Communicator 5.0.

Definition at line 50 of file nsIPluginManager2.idl.

4.581.2 Member Function Documentation

4.581.2.1 allocateMenuID()

```
void nsIPluginManager2::allocateMenuID (
    in nsIEventHandler aHandler,
    in boolean aIsSubmenu,
    out short aResult )
```

Allocates a new menu ID (for the Mac).

Parameters

<i>aHandler</i>	- the event handler for the window
<i>aIsSubmenu</i>	- whether this is a sub-menu ID or not
<i>aResult</i>	- the resulting menu ID

Returns

- NS_OK if this operation was successful

4.581.2.2 beginWaitCursor()

```
void nsIPluginManager2::beginWaitCursor ( )
```

Puts up a wait cursor.

Returns

- NS_OK if this operation was successful

4.581.2.3 deallocateMenuID()

```
void nsIPluginManager2::deallocateMenuID (
    in nsIEventHandler aHandler,
    in short aMenuID )
```

Deallocates a menu ID (for the Mac).

Parameters

<i>aHandler</i>	- the event handler for the window
<i>aMenuID</i>	- the menu ID

Returns

- NS_OK if this operation was successful

4.581.2.4 endWaitCursor()

```
void nsIPluginManager2::endWaitCursor ( )
```

Restores the previous (non-wait) cursor.

Returns

- NS_OK if this operation was successful

4.581.2.5 findProxyForURL()

```
void nsIPluginManager2::findProxyForURL (
    in string aURL,
    out string aResult )
```

Returns the proxy info for a given URL.

The caller is required to free the resulting memory with nsIMalloc::Free. The result will be in the following format

i) "DIRECT" – no proxy ii) "PROXY xxx.xxx.xxx.xxx" – use proxy iii) "SOCKS xxx.xxx.xxx.xxx" – use SOCKS iv) Mixed. e.g. "PROXY 111.111.111.111;PROXY 112.112.112.112", "PROXY 111.111.111.111;SOCKS 112.112.112.112"....

Which proxy/SOCKS to use is determined by the plugin.

4.581.2.6 hasAllocatedMenuID()

```
void nsIPluginManager2::hasAllocatedMenuID (
    in nsIEventHandler aHandler,
    in short aMenuID,
    out boolean aResult )
```

Indicates whether this event handler has allocated the given menu ID.

Parameters

<i>aHandler</i>	- the event handler for the window
<i>aMenuID</i>	- the menu ID
<i>aResult</i>	- returns PR_TRUE if the menu ID is allocated

Returns

- NS_OK if this operation was successful

4.581.2.7 notifyStatusChange()

```
void nsIPluginManager2::notifyStatusChange (
    in nsIPlugin aPlugin,
    in nsresult aStatus )
```

This method may be called by the plugin to indicate that an error has occurred, e.g.

that the plugin has failed or is shutting down spontaneously. This allows the browser to clean up any plugin-specific state.

Parameters

<i>aPlugin</i>	- the plugin whose status is changing
<i>aStatus</i>	- the error status value

Returns

- NS_OK if this operation was successful

4.581.2.8 registerWindow()

```
void nsIPluginManager2::registerWindow (
    in nsIEventHandler aHandler,
    in nsPluginPlatformWindowRef aWindow )
```

Registers a top-level window with the browser.

Events received by that window will be dispatched to the event handler specified.

Parameters

<i>aHandler</i>	- the event handler for the window
<i>aWindow</i>	- the platform window reference

Returns

- NS_OK if this operation was successful

4.581.2.9 supportsURLProtocol()

```
void nsIPluginManager2::supportsURLProtocol (
    in string aProtocol,
    out boolean aResult )
```

Returns true if a URL protocol (e.g.

"http") is supported.

Parameters

<i>aProtocol</i>	- the protocol name
<i>aResult</i>	- true if the protocol is supported

Returns

- NS_OK if this operation was successful

4.581.2.10 unregisterWindow()

```
void nsIPluginManager2::unregisterWindow (
    in nsIEventHandler aHandler,
    in nsPluginPlatformWindowRef aWindow )
```

Unregisters a top-level window with the browser.

The handler and window pair should be the same as that specified to RegisterWindow.

Parameters

<i>aHandler</i>	- the event handler for the window
<i>aWindow</i>	- the platform window reference

Returns

- NS_OK if this operation was successful

The documentation for this interface was generated from the following file:

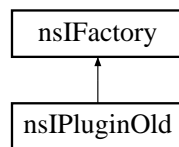
- src/plugin_win32/include/nsIPluginManager2.idl

4.582 nsIPluginOld Interface Reference

The **nsIPlugin** (p. 367) interface is the minimum interface plugin developers need to support in order to implement a plugin.

```
import "nsIPluginOld.idl";
```

Inheritance diagram for nsIPluginOld:



Public Member Functions

- void **createPluginInstance** (in nsISupports aOuter, in nsIIDRef aIID, in string aPluginMIMETYPE, [retval, iid_is(aIID)] out nsQIResult aResult)
Creates a new plugin instance, based on a MIME type.
- void **initialize** ()
Initializes the plugin and will be called before any new instances are created.
- void **shutdown** ()
Called when the browser is done with the plugin factory, or when the plugin is disabled by the user.
- void **getMIMEDescription** (out constCharPtr aMIMEDescription)
Returns the MIME description for the plugin.
- void **getValue** (in nsPluginVariable aVariable, in voidPtr aValue)
Returns the value of a variable associated with the plugin.

4.582.1 Detailed Description

The **nsIPlugin** (p. 367) interface is the minimum interface plugin developers need to support in order to implement a plugin.

The plugin manager may QueryInterface for more specific plugin types, e.g. nsILiveConnectPlugin.

The old NPP_New plugin operation is now subsumed by two operations:

CreateInstance – called once, after the plugin instance is created. This method is used to initialize the new plugin instance (although the actual plugin instance object will be created by the plugin manager).

nsIPluginInstance::Start – called when the plugin instance is to be started. This happens in two circumstances: (1) after the plugin instance is first initialized, and (2) after a plugin instance is returned to (e.g. by going back in the window history) after previously being stopped by the Stop method.

Definition at line 82 of file nsIPluginOld.idl.

4.582.2 Member Function Documentation

4.582.2.1 createPluginInstance()

```
void nsIPluginOld::createPluginInstance (
    in nsISupports aOuter,
    in nsIIDRef aIID,
    in string aPluginMIMEType,
    [retval, iid_is(aIID)] out nsQIResult aResult )
```

Creates a new plugin instance, based on a MIME type.

This allows different implementations to be created depending on the specified MIME type.

4.582.2.2 getMIMEDescription()

```
void nsIPluginOld::getMIMEDescription (
    out constCharPtr aMIMEDescription )
```

Returns the MIME description for the plugin.

The MIME description is a colon-separated string containing the plugin MIME type, plugin data file extension, and plugin name, e.g.:

"application/x-simple-plugin:smp:Simple LiveConnect Sample Plug-in"

(Corresponds to NPP_GetMIMEDescription.)

Parameters

<i>aMIMEDescription</i>	- the resulting MIME description
-------------------------	----------------------------------

Returns

- NS_OK if this operation was successful

4.582.2.3 getValue()

```
void nsIPluginOld::getValue (
    in nsPluginVariable aVariable,
    in voidPtr aValue )
```

Returns the value of a variable associated with the plugin.

(Corresponds to NPP_GetValue.)

Parameters

<i>aVariable</i>	- the plugin variable to get
<i>aValue</i>	- the address of where to store the resulting value

Returns

- NS_OK if this operation was successful

4.582.2.4 initialize()

```
void nsIPluginOld::initialize ( )
```

Initializes the plugin and will be called before any new instances are created.

It is passed browserInterfaces on which QueryInterface may be used to obtain an **nsIPluginManager** (p. 399), and other interfaces.

Parameters

<i>browserInterfaces</i>	- an object that allows access to other browser interfaces via QueryInterface
--------------------------	---

Returns

- NS_OK if this operation was successful

4.582.2.5 shutdown()

```
void nsIPluginOld::shutdown ( )
```

Called when the browser is done with the plugin factory, or when the plugin is disabled by the user.

(Corresponds to NPP_Shutdown.)

Returns

- NS_OK if this operation was successful

The documentation for this interface was generated from the following file:

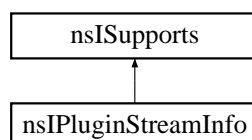
- src/plugin_win32/include/nsIPluginOld.idl

4.583 nsIPluginStreamInfo Interface Reference

nsIPluginStreamInfo (p. 411)

```
import "nsIPluginStreamInfo.idl";
```

Inheritance diagram for nsIPluginStreamInfo:



Public Member Functions

- void **isSeekable** (out boolean aSeekable)
- void **getURL** (out constCharPtr aURL)
- void **requestRead** (in nsByteRangePtr aRangeList)

Data Fields

- readonly attribute string **contentType**
- readonly attribute unsigned long **length**
- readonly attribute unsigned long **lastModified**
- attribute long **streamOffset**

4.583.1 Detailed Description

nsIPluginStreamInfo (p. 411)

DEPRECATED

Originally published XPCOM Plugin API is now deprecated Developers are welcome to use NPAPI, please refer to: <http://mozilla.org/projects/plugins/>

Definition at line 56 of file nsIPluginStreamInfo.idl.

The documentation for this interface was generated from the following file:

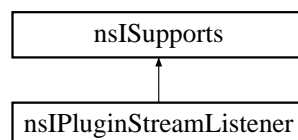
- src/plugin_win32/include/nsIPluginStreamInfo.idl

4.584 nsIPluginStreamListener Interface Reference

nsIPluginStreamListener (p. 412)

```
import "nsIPluginStreamListener.idl";
```

Inheritance diagram for nsIPluginStreamListener:



Public Member Functions

- void **onStartBinding** (in **nsIPluginStreamInfo** aPluginInfo)
Notify the observer that the URL has started to load.
- void **onDataAvailable** (in **nsIPluginStreamInfo** aPluginInfo, in nsIInputStream aInputStream, in unsigned long aLength)
Notify the client that data is available in the input stream.
- void **onFileAvailable** (in **nsIPluginStreamInfo** aPluginInfo, in string aFileName)
Notify the client that data is available in the file.
- void **onStopBinding** (in **nsIPluginStreamInfo** aPluginInfo, in nsresult aStatus)
Notify the observer that the URL has finished loading.

Data Fields

- readonly attribute nsPluginStreamType **streamType**
Gets the type of the stream.

4.584.1 Detailed Description

nsIPluginStreamListener (p. 412)

DEPRECATED

Originally published XPCOM Plugin API is now deprecated Developers are welcome to use NPAPI, please refer to: <http://mozilla.org/projects/plugins/> The **nsIPluginStreamListener** (p. 412) interface defines the minimum set of functionality that the browser will support if it allows plugins. Plugins can call QueryInterface to determine if a plugin manager implements more specific APIs or other browser interfaces for the plugin to use (e.g. nsINetworkManager).

Definition at line 64 of file nsIPluginStreamListener.idl.

4.584.2 Member Function Documentation

4.584.2.1 onDataAvailable()

```
void nsIPluginStreamListener::onDataAvailable (
    in  nsIPluginStreamInfo aPluginInfo,
    in  nsIInputStream aInputStream,
    in  unsigned long aLength )
```

Notify the client that data is available in the input stream.

This method is called whenever data is written into the input stream by the networking library...

Parameters

<i>aPluginInfo</i>	- plugin stream info
<i>aInputStream</i>	- the input stream containing the data. This stream can be either a blocking or non-blocking stream.
<i>aLength</i>	- the amount of data that was just pushed into the stream.

Returns

- the return value is currently ignored.

4.584.2.2 onFileAvailable()

```
void nsIPluginStreamListener::onFileAvailable (
    in nsIPluginStreamInfo aPluginInfo,
    in string aFileName )
```

Notify the client that data is available in the file.

Parameters

<i>aPluginInfo</i>	- plugin stream info
<i>aFileName</i>	- the name of the file containing the data

Returns

- the return value is currently ignored.

4.584.2.3 onStartBinding()

```
void nsIPluginStreamListener::onStartBinding (
    in nsIPluginStreamInfo aPluginInfo )
```

Notify the observer that the URL has started to load.

This method is called only once, at the beginning of a URL load.

Parameters

<i>aPluginInfo</i>	- plugin stream info
--------------------	----------------------

Returns

- the return value is currently ignored, in the future it may be used to cancel the URL load..

4.584.2.4 onStopBinding()

```
void nsIPluginStreamListener::onStopBinding (
    in nsIPluginStreamInfo aPluginInfo,
    in nsresult aStatus )
```

Notify the observer that the URL has finished loading.

This method is called once when the networking library has finished processing the URL transaction initiated via the nsINetService::Open(...) call.

This method is called regardless of whether the URL loaded successfully.

Parameters

<i>aPluginInfo</i>	- plugin stream info
<i>aStatus</i>	- reason why the stream has been terminated

Returns

- the return value is currently ignored.

4.584.3 Field Documentation

4.584.3.1 streamType

readonly attribute nsPluginStreamType nsIPluginStreamListener::streamType

Gets the type of the stream.

Parameters

<i>aStreamType</i>	- the type of the stream
--------------------	--------------------------

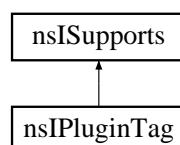
Definition at line 118 of file nsIPluginStreamListener.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIPluginStreamListener.idl

4.585 nsIPluginTag Interface Reference

Inheritance diagram for nsIPluginTag:



Data Fields

- readonly attribute UTF8String **description**
- readonly attribute UTF8String **filename**
- readonly attribute UTF8String **version**
- readonly attribute UTF8String **name**
- attribute boolean **disabled**
- attribute boolean **blocklisted**

4.585.1 Detailed Description

Definition at line 42 of file nsIPluginTag.idl.

The documentation for this interface was generated from the following file:

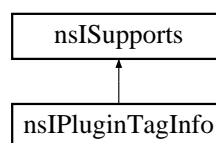
- src/plugin_win32/include/nsIPluginTag.idl

4.586 nsIPluginTagInfo Interface Reference

Plugin Tag Info Interface This interface provides information about the HTML tag on the page.

```
import "nsIPluginTagInfo.idl";
```

Inheritance diagram for nsIPluginTagInfo:



Public Member Functions

- void **getAttributes** (in PRUint16Ref aCount, in constCharStarConstStar aNames, in constCharStarConstStar aValues)
*QueryInterface on **nsIPluginInstancePeer** (p. 392) to get this.*
- void **getAttribute** (in string aName, out constCharPtr aResult)
Gets the value for the named attribute.
- void **getTagText** (out constCharPtr aTagText)
Get the complete text of the HTML tag that was used to instantiate this plugin.
- void **getParameters** (in PRUint16Ref aCount, in constCharStarConstStar aNames, in constCharStarConstStar aValues)
Get a ptr to the paired list of parameter names and values, returns the length of the array.
- void **getParameter** (in string aName, out constCharPtr aResult)
Get the value for the named parameter.
- void **getDocumentBase** (out constCharPtr aDocumentBase)
Get the document base.
- void **getDocumentEncoding** (out constCharPtr aDocumentEncoding)
Return an encoding whose name is specified in: <http://java.sun.com/products/jdk/1.4/docs/guide/intl/intl.doc.html#25303>.
- void **getAlignment** (out constCharPtr aEligment)
Get object alignment.

Data Fields

- readonly attribute nsPluginTagType **tagType**
Get the type of the HTML tag that was used ot instantiate this plugin.
- readonly attribute unsigned long **width**
Get object width.
- readonly attribute unsigned long **height**
Get object height.
- readonly attribute unsigned long **borderVertSpace**
Get border vertical space.
- readonly attribute unsigned long **borderHorizSpace**
Get border horizontal space.
- readonly attribute unsigned long **uniqueID**
Returns a unique id for the current document containing plugin.
- readonly attribute nsIDOMElement **DOMElement**
Returns the DOM element corresponding to the tag which references this plugin in the document.

4.586.1 Detailed Description

Plugin Tag Info Interface This interface provides information about the HTML tag on the page.

Some day this might get superseded by a DOM API.

Definition at line 63 of file nsIPluginTagInfo.idl.

4.586.2 Member Function Documentation

4.586.2.1 `getAttribute()`

```
void nsIPluginTagInfo::getAttribute (
    in string aName,
    out constCharPtr aResult )
```

Gets the value for the named attribute.

Parameters

<i>aName</i>	- the name of the attribute to find
<i>aResult</i>	- the resulting attribute

Returns

- NS_OK if this operation was successful, NS_ERROR_FAILURE if this operation failed. result is set to NULL if the attribute is not found else to the found value.

4.586.2.2 `getAttributes()`

```
void nsIPluginTagInfo::getAttributes (
    in PRUint16Ref aCount,
    in constCharStarConstStar aNames,
    in constCharStarConstStar aValues )
```

QueryInterface on **nsIPluginInstancePeer** (p. 392) to get this.

(Corresponds to NPP_New's argc, argn, and argv arguments.) Get a ptr to the paired list of attribute names and values, returns the length of the array.

Each name or value is a null-terminated string.

4.586.2.3 `getParameter()`

```
void nsIPluginTagInfo::getParameter (
    in string aName,
    out constCharPtr aResult )
```

Get the value for the named parameter.

Returns null if the parameter was not set.

Parameters

<i>aName</i>	- name of the parameter
<i>aResult</i>	- parameter value

Returns

- NS_OK if this operation was successful

4.586.2.4 `getParameters()`

```
void nsIPluginTagInfo::getParameters (
    in PRUint16Ref aCount,
    in constCharStarConstStar aNames,
    in constCharStarConstStar aValues )
```

Get a ptr to the paired list of parameter names and values, returns the length of the array.

Each name or value is a null-terminated string.

4.586.3 Field Documentation

4.586.3.1 `DOMElement`

readonly attribute nsIDOMElement nsIPluginTagInfo::DOMElement

Returns the DOM element corresponding to the tag which references this plugin in the document.

Parameters

<i>aDOMElement</i>	- resulting DOM element
--------------------	-------------------------

Returns

- NS_OK if this operation was successful

Definition at line 168 of file nsIPluginTagInfo.idl.

4.586.3.2 tagType

```
readonly attribute nsPluginTagType nsIPluginTagInfo::tagType
```

Get the type of the HTML tag that was used to instantiate this plugin.

Currently supported tags are EMBED, OBJECT and APPLET.

Definition at line 93 of file nsIPluginTagInfo.idl.

The documentation for this interface was generated from the following file:

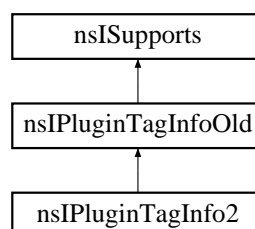
- src/plugin_win32/include/nsIPluginTagInfo.idl

4.587 nsIPluginTagInfo2 Interface Reference

nsIPluginTagInfo2 (p. 419)

```
import "nsIPluginTagInfo2.idl";
```

Inheritance diagram for nsIPluginTagInfo2:



Public Member Functions

- void **getTagText** (out constCharPtr aTagText)
Get the complete text of the HTML tag that was used to instantiate this plugin.
- void **getParameters** (in PRUint16Ref aCount, in constCharStarConstStar aNames, in constCharStarConstStar aValues)
Get a ptr to the paired list of parameter names and values, returns the length of the array.
- void **getParameter** (in string aName, out constCharPtr aResult)
Get the value for the named parameter.
- void **getDocumentBase** (out constCharPtr aDocumentBase)
Get the document base.
- void **getDocumentEncoding** (out constCharPtr aDocumentEncoding)
Return an encoding whose name is specified in: <http://java.sun.com/products/jdk/1.4.2/docs/guide/intl/intl.doc.html#25303>.
- void **getAlignment** (out constCharPtr aEligment)
Get object alignment.

Data Fields

- readonly attribute nsPluginTagType **tagType**
Get the type of the HTML tag that was used to instantiate this plugin.
- readonly attribute unsigned long **width**
Get object width.
- readonly attribute unsigned long **height**
Get object height.
- readonly attribute unsigned long **borderVertSpace**
Get border vertical space.
- readonly attribute unsigned long **borderHorizSpace**
Get border horizontal space.
- readonly attribute unsigned long **uniqueID**
Returns a unique id for the current document containing plugin.
- readonly attribute nsIDOMElement **DOMElement**
Returns the DOM element corresponding to the tag which references this plugin in the document.

4.587.1 Detailed Description

nsIPluginTagInfo2 (p. 419)

DEPRECATED

Originally published XPCOM Plugin API is now deprecated Developers are welcome to use NPAPI, please refer to: <http://mozilla.org/projects/plugins/>

Definition at line 52 of file nsIPluginTagInfo2.idl.

4.587.2 Member Function Documentation

4.587.2.1 `getParameter()`

```
void nsIPluginTagInfo2::getParameter (
    in string aName,
    out constCharPtr aResult )
```

Get the value for the named parameter.

Returns null if the parameter was not set.

Parameters

<i>aName</i>	- name of the parameter
<i>aResult</i>	- parameter value

Returns

- NS_OK if this operation was successful

4.587.2.2 getParameters()

```
void nsIPluginTagInfo2::getParameters (
    in PRUint16Ref aCount,
    in constCharStarConstStar aNames,
    in constCharStarConstStar aValues )
```

Get a ptr to the paired list of parameter names and values, returns the length of the array.

Each name or value is a null-terminated string.

4.587.3 Field Documentation**4.587.3.1 DOMElement**

```
readonly attribute nsIDOMElement nsIPluginTagInfo2::DOMElement
```

Returns the DOM element corresponding to the tag which references this plugin in the document.

Parameters

<i>aDOMElement</i>	- resulting DOM element
--------------------	-------------------------

Returns

- NS_OK if this operation was successful

Definition at line 133 of file nsIPluginTagInfo2.idl.

4.587.3.2 tagType

```
readonly attribute nsPluginTagType nsIPluginTagInfo2::tagType
```

Get the type of the HTML tag that was used to instantiate this plugin.

Currently supported tags are EMBED, OBJECT and APPLET.

Definition at line 58 of file nsIPluginTagInfo2.idl.

The documentation for this interface was generated from the following file:

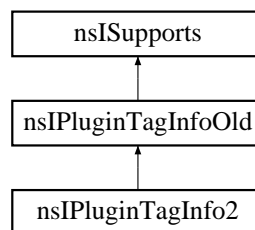
- src/plugin_win32/include/nsIPluginTagInfo2.idl

4.588 nsIPluginTagInfoOld Interface Reference

Plugin Tag Info Interface This interface provides information about the HTML tag on the page.

```
import "nsIPluginTagInfoOld.idl";
```

Inheritance diagram for nsIPluginTagInfoOld:



Public Member Functions

- void **getAttributes** (in PRUint16Ref aCount, in constCharStarConstStar aNames, in constCharStarConstStar aValues)
*QueryInterface on **nsIPluginInstancePeer** (p. 392) to get this.*
- void **getAttribute** (in string aName, out constCharPtr aResult)
Gets the value for the named attribute.

4.588.1 Detailed Description

Plugin Tag Info Interface This interface provides information about the HTML tag on the page.

Some day this might get superseded by a DOM API.

Definition at line 64 of file nsIPluginTagInfoOld.idl.

4.588.2 Member Function Documentation

4.588.2.1 getAttribute()

```
void nsIPluginTagInfoOld::getAttribute (
    in string aName,
    out constCharPtr aResult )
```

Gets the value for the named attribute.

Parameters

<i>aName</i>	- the name of the attribute to find
<i>aResult</i>	- the resulting attribute

Returns

- NS_OK if this operation was successful, NS_ERROR_FAILURE if this operation failed. result is set to NULL if the attribute is not found else to the found value.

4.588.2.2 `getAttributes()`

```
void nsIPluginTagInfoOld::getAttributes (
    in PRUint16Ref aCount,
    in constCharStarConstStar aNames,
    in constCharStarConstStar aValues )
```

QueryInterface on **nsIPluginInstancePeer** (p. 392) to get this.

(Corresponds to NPP_New's argc, argn, and argv arguments.) Get a ptr to the paired list of attribute names and values, returns the length of the array.

Each name or value is a null-terminated string.

The documentation for this interface was generated from the following file:

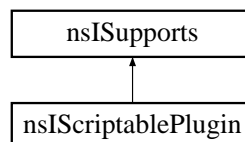
- src/plugin_win32/include/nsIPluginTagInfoOld.idl

4.589 **nsIScriptablePlugin Interface Reference**

Interface for exposing scriptable plugin methods to JavaScript via XPCConnect.

```
import "nsIScriptablePlugin.idl";
```

Inheritance diagram for nsIScriptablePlugin:



Data Fields

- readonly attribute nsQIResult **scriptablePeer**
The object to be wrapped and exposed to JavaScript.
- readonly attribute nsIIDPtr **scriptableInterface**
The interface that XPCConnect should use when exposing the peer object to JavaScript.

4.589.1 Detailed Description

Interface for exposing scriptable plugin methods to JavaScript via XPCConnect.

Definition at line 45 of file nsIScriptablePlugin.idl.

4.589.2 Field Documentation

4.589.2.1 scriptableInterface

```
readonly attribute nsIIDPtr nsIScriptablePlugin::scriptableInterface
```

The interface that XPCConnect should use when exposing the peer object to JavaScript.

All scriptable methods on the interface will be available to JavaScript.

Definition at line 58 of file nsIScriptablePlugin.idl.

4.589.2.2 scriptablePeer

```
readonly attribute nsQIResult nsIScriptablePlugin::scriptablePeer
```

The object to be wrapped and exposed to JavaScript.

It should be an XPCOM object, and it can be the same object as the plugin.

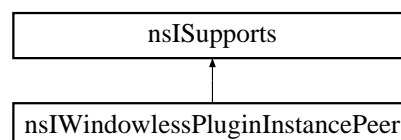
Definition at line 51 of file nsIScriptablePlugin.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIScriptablePlugin.idl

4.590 nsIWindowlessPluginInstancePeer Interface Reference

Inheritance diagram for nsIWindowlessPluginInstancePeer:



Public Member Functions

- void **invalidateRect** (in nsPluginRectPtr aRect)
Corresponds to NPN_InvalidateRect.
- void **invalidateRegion** (in nsPluginRegion aRegion)
Corresponds to NPN_InvalidateRegion.
- void **forceRedraw** ()
Corresponds to NPN_ForceRedraw.

4.590.1 Detailed Description

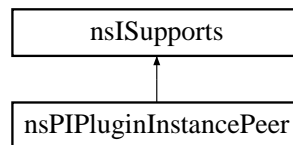
Definition at line 46 of file nsIWindowlessPlugInstPeer.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsIWindowlessPlugInstPeer.idl

4.591 nsPIPluginInstancePeer Interface Reference

Inheritance diagram for nsPIPluginInstancePeer:



Data Fields

- readonly attribute **nsIPluginInstanceOwner owner**

4.591.1 Detailed Description

Definition at line 45 of file nsPIPluginInstancePeer.idl.

The documentation for this interface was generated from the following file:

- src/plugin_win32/include/nsPIPluginInstancePeer.idl

4.592 nsPluginEmbedPrint Struct Reference

Data Fields

- **nsPluginWindow window**
- void * **platformPrint**

4.592.1 Detailed Description

Definition at line 313 of file nsFileUtilities.idl.

The documentation for this struct was generated from the following files:

- src/plugin_win32/include/nsFileUtilities.idl
- src/plugin_win32/include/nsplugindefs.h

4.593 nsPluginEvent Struct Reference

Data Fields

- void * **event**

4.593.1 Detailed Description

Definition at line 327 of file nsFileUtilities.idl.

The documentation for this struct was generated from the following files:

- src/plugin_win32/include/nsFileUtilities.idl
- src/plugin_win32/include/nsplugindefs.h

4.594 nsPluginFullPrint Struct Reference

Data Fields

- PRBool **pluginPrinted**
- PRBool **printOne**
- void * **platformPrint**

4.594.1 Detailed Description

Definition at line 305 of file nsFileUtilities.idl.

The documentation for this struct was generated from the following files:

- src/plugin_win32/include/nsFileUtilities.idl
- src/plugin_win32/include/nsplugindefs.h

4.595 nsPluginLogging Class Reference

Static Public Attributes

- static PRLogModuleInfo * **gNPNLog**
- static PRLogModuleInfo * **gNPPLog**
- static PRLogModuleInfo * **gPluginLog**

4.595.1 Detailed Description

Definition at line 85 of file nsPluginLogging.h.

The documentation for this class was generated from the following file:

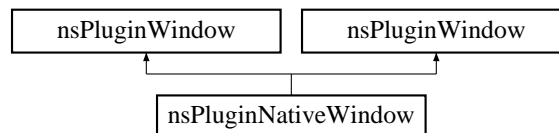
- src/plugin_win32/include/nsPluginLogging.h

4.596 nsPluginNativeWindow Class Reference

base class for native plugin window implementations

```
import "nsIPluginHost.idl";
```

Inheritance diagram for nsPluginNativeWindow:



Public Member Functions

- nsresult **GetPluginInstance** (nsCOMPtr< **nsIPluginInstance** > &aPluginInstance)
!!! CAUTION !!!
- nsresult **SetPluginInstance** (**nsIPluginInstance** *aPluginInstance)
- nsresult **GetPluginWidget** (nsIWidget **aWidget)
- nsresult **SetPluginWidget** (nsIWidget *aWidget)
- virtual nsresult **CallSetWindow** (nsCOMPtr< **nsIPluginInstance** > &aPluginInstance)
- nsresult **GetPluginInstance** (nsCOMPtr< **nsIPluginInstance** > &aPluginInstance)
!!! CAUTION !!!
- nsresult **SetPluginInstance** (**nsIPluginInstance** *aPluginInstance)
- nsresult **GetPluginWidget** (nsIWidget **aWidget)
- nsresult **SetPluginWidget** (nsIWidget *aWidget)
- virtual nsresult **CallSetWindow** (nsCOMPtr< **nsIPluginInstance** > &aPluginInstance)

Protected Attributes

- nsCOMPtr< **nsIPluginInstance** > **mPluginInstance**
- nsCOMPtr< nsIWidget > **mWidget**

Additional Inherited Members

4.596.1 Detailed Description

base class for native plugin window implementations

Definition at line 54 of file nsIPluginHost.idl.

4.596.2 Member Function Documentation

4.596.2.1 GetPluginInstance() [1/2]

```
nsresult nsPluginNativeWindow::GetPluginInstance (
    nsCOMPtr< nsIPluginInstance > & aPluginInstance ) [inline]
```

!!! CAUTION !!!

The base class `|nsPluginWindow|` is defined as a struct in **nsplugindefs.h** (p. ??), thus it does not have a destructor of its own. One should never attempt to delete `|nsPluginNativeWindow|` object instance (or derivatives) using a pointer of `|nsPluginWindow *|` type. Should such necessity occur it must be properly casted first.

Definition at line 76 of file nsIPluginHost.idl.

4.596.2.2 GetPluginInstance() [2/2]

```
nsresult nsPluginNativeWindow::GetPluginInstance (
    nsCOMPtr< nsIPluginInstance > & aPluginInstance ) [inline]
```

!!! CAUTION !!!

The base class `|nsPluginWindow|` is defined as a struct in **nsplugindefs.h** (p. ??), thus it does not have a destructor of its own. One should never attempt to delete `|nsPluginNativeWindow|` object instance (or derivatives) using a pointer of `|nsPluginWindow *|` type. Should such necessity occur it must be properly casted first.

Definition at line 76 of file nsPluginNativeWindow.h.

The documentation for this class was generated from the following files:

- src/plugin_win32/include/nsIPluginHost.idl
- src/plugin_win32/include/nsPluginNativeWindow.h

4.597 nsPluginPrint Struct Reference

Data Fields

- PRUint16 **mode**
- - union {
 - nsPluginFullPrint** fullPrint
 - nsPluginEmbedPrint** embedPrint
 - print**
- - union {
 - nsPluginFullPrint** fullPrint
 - nsPluginEmbedPrint** embedPrint
 - print**

4.597.1 Detailed Description

Definition at line 318 of file nsFileUtilities.idl.

The documentation for this struct was generated from the following files:

- src/plugin_win32/include/nsFileUtilities.idl
- src/plugin_win32/include/nsplugindefs.h

4.598 nsPluginRect Struct Reference

Data Fields

- PRUint16 **top**
- PRUint16 **left**
- PRUint16 **bottom**
- PRUint16 **right**

4.598.1 Detailed Description

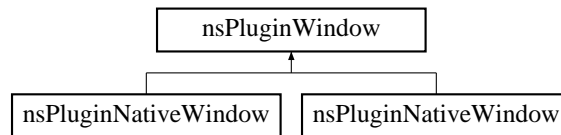
Definition at line 132 of file nsFileUtilities.idl.

The documentation for this struct was generated from the following files:

- src/plugin_win32/include/nsFileUtilities.idl
- src/plugin_win32/include/nsplugindefs.h

4.599 nsPluginWindow Struct Reference

Inheritance diagram for nsPluginWindow:



Data Fields

- nsPluginPort * **window**
- PRInt32 **x**
- PRInt32 **y**
- PRUint32 **width**
- PRUint32 **height**
- **nsPluginRect clipRect**
- nsPluginWindowType **type**

4.599.1 Detailed Description

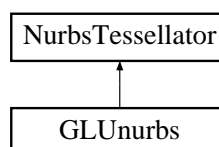
Definition at line 289 of file nsFileUtilities.idl.

The documentation for this struct was generated from the following files:

- src/plugin_win32/include/nsFileUtilities.idl
- src/plugin_win32/include/nsplugindefs.h

4.600 NurbsTessellator Class Reference

Inheritance diagram for NurbsTessellator:



Public Member Functions

- **NurbsTessellator** (**BasicCurveEvaluator** &c, **BasicSurfaceEvaluator** &e)
- void **getnurbsproperty** (long, INREAL *)
- void **getnurbsproperty** (long, long, INREAL *)
- void **setnurbsproperty** (long, INREAL)
- void **setnurbsproperty** (long, long, INREAL)
- void **setnurbsproperty** (long, long, INREAL *)
- void **setnurbsproperty** (long, long, INREAL *, long, long)
- virtual void **bgnrender** (void)
- virtual void **endrender** (void)
- virtual void **makeobj** (int n)
- virtual void **closeobj** (void)
- virtual void **errorHandler** (int)
- void **bgnsurface** (long)
- void **endsurface** (void)
- void **bgncurve** (long)
- void **endcurve** (void)
- void **pwlcurve** (long, INREAL[], long, long)
- void **nurbscurve** (long, INREAL[], long, INREAL[], long, long)
- void **nurbssurface** (long, INREAL[], long, INREAL[], long, long, INREAL[], long, long, long)
- void **defineMap** (long, long, long)
- void **redefineMaps** (void)
- void **discardRecording** (void *)
- void * **beginRecording** (void)
- void **endRecording** (void)
- void **playRecording** (void *)
- void **set_domain_distance_u_rate** (REAL u_rate)
- void **set_domain_distance_v_rate** (REAL v_rate)
- void **set_is_domain_distance_sampling** (int flag)

Data Fields

- **Pool** quiltPool

Protected Attributes

- **Renderhints** renderhints
- **Maplist** maplist
- **Backend** backend

4.600.1 Detailed Description

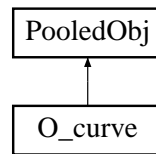
Definition at line 53 of file nurbstess.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/nurbstess.h
- src/libnurbs/internals/nurbsinterfac.cc
- src/libnurbs/internals/nurbstess.cc

4.601 O_curve Struct Reference

Inheritance diagram for O_curve:



Data Fields

- - union {
 - O_nurbscurve * o_nurbscurve**
 - O_pwlcurve * o_pwlcurve**
 - } **curve**
- Curvetype **curvetype**
- **O_curve * next**
- **O_surface * owner**
- int **used**
- int **save**
- long **nuid**

Additional Inherited Members

4.601.1 Detailed Description

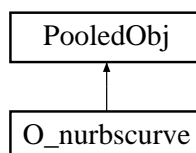
Definition at line 55 of file reader.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/reader.h

4.602 O_nurbscurve Struct Reference

Inheritance diagram for O_nurbscurve:



Public Member Functions

- **O_nurbscurve** (long _type)

Data Fields

- **Quilt * bezier_curves**
- long **type**
- REAL **tesselation**
- int **method**
- **O_nurbcurve * next**
- int **used**
- int **save**
- **O_curve * owner**

4.602.1 Detailed Description

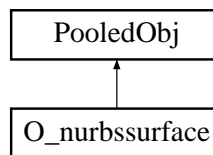
Definition at line 70 of file reader.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/reader.h

4.603 O_nurbssurface Struct Reference

Inheritance diagram for O_nurbssurface:



Public Member Functions

- **O_nurbssurface** (long _type)

Data Fields

- **Quilt * bezier_patches**
- long **type**
- **O_surface * owner**
- **O_nurbssurface * next**
- int **save**
- int **used**

4.603.1 Detailed Description

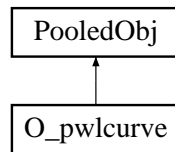
Definition at line 101 of file reader.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/reader.h

4.604 O_pwlcurve Class Reference

Inheritance diagram for O_pwlcurve:



Public Member Functions

- **O_pwlcurve** (long, long, INREAL *, long, **TrimVertex** *)

Data Fields

- **TrimVertex** * pts
- int npts
- **O_pwlcurve** * next
- int used
- int save
- **O_curve** * owner

4.604.1 Detailed Description

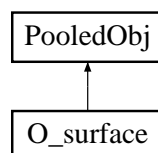
Definition at line 83 of file reader.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/reader.h
- src/libnurbs/internals/reader.cc

4.605 O_surface Struct Reference

Inheritance diagram for O_surface:



Data Fields

- **O_nurbssurface** * o_nurbssurface
- **O_trim** * o_trim
- int save
- long nuid

Additional Inherited Members

4.605.1 Detailed Description

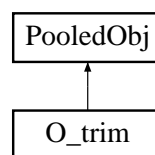
Definition at line 112 of file reader.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/reader.h

4.606 O_trim Struct Reference

Inheritance diagram for O_trim:



Data Fields

- `O_curve * o_curve`
- `O_trim * next`
- `int save`

Additional Inherited Members

4.606.1 Detailed Description

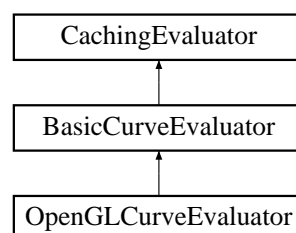
Definition at line 94 of file reader.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/reader.h

4.607 OpenGLCurveEvaluator Class Reference

Inheritance diagram for OpenGLCurveEvaluator:



Public Member Functions

- void **range1f** (long, REAL *, REAL *)
- void **domain1f** (REAL, REAL)
- void **addMap** (CurveMap *)
- void **enable** (long)
- void **disable** (long)
- void **bgnmap1f** (long)
- void **map1f** (long, REAL, REAL, long, long, REAL *)
- void **mapgrid1f** (long, REAL, REAL)
- void **mapmesh1f** (long, long, long)
- void **evalpoint1i** (long)
- void **evalcoord1f** (long, REAL)
- void **endmap1f** (void)
- void **bgnline** (void)
- void **endline** (void)
- void **put_vertices_call_back** (int flag)
- void **putCallBack** (GLenum which, _GLUfuncptr fn)
- void **set_callback_userdata** (void *data)
- void **inMap1f** (int which, int dimension, REAL ulower, REAL uupper, int ustride, int uorder, REAL *ctlpoints)
- void **inPreEvaluate** (int order, REAL vprime, REAL *coeff)
- void **inDoDomain1** (**curveEvalMachine** *em, REAL u, REAL *retPoint)
- void **inDoEvalCoord1** (REAL u)
- void **inMapMesh1f** (int umin, int umax)
- void (GLAPIENTRY *beginCallBackN)(GLenum type)
- void (GLAPIENTRY *endCallBackN)(void)
- void (GLAPIENTRY *vertexCallBackN)(const GLfloat *vert)
- void (GLAPIENTRY *normalCallBackN)(const GLfloat *normal)
- void (GLAPIENTRY *colorCallBackN)(const GLfloat *color)
- void (GLAPIENTRY *texcoordCallBackN)(const GLfloat *texcoord)
- void (GLAPIENTRY *beginCallBackData)(GLenum type)
- void (GLAPIENTRY *endCallBackData)(void *data)
- void (GLAPIENTRY *vertexCallBackData)(const GLfloat *vert)
- void (GLAPIENTRY *normalCallBackData)(const GLfloat *normal)
- void (GLAPIENTRY *colorCallBackData)(const GLfloat *color)
- void (GLAPIENTRY *texcoordCallBackData)(const GLfloat *texcoord)
- void **beginCallBack** (GLenum type, void *data)
- void **endCallBack** (void *data)
- void **vertexCallBack** (const GLfloat *vert, void *data)
- void **normalCallBack** (const GLfloat *normal, void *data)
- void **colorCallBack** (const GLfloat *color, void *data)
- void **texcoordCallBack** (const GLfloat *texcoord, void *data)

Data Fields

- **curveEvalMachine** em_vertex
- **curveEvalMachine** em_normal
- **curveEvalMachine** em_color
- **curveEvalMachine** em_texcoord
- int **vertex_flag**
- int **normal_flag**
- int **color_flag**
- int **texcoord_flag**
- REAL **global_grid_u0**
- REAL **global_grid_u1**
- int **global_grid_nu**
- void * **data**
- void * **userData**

Additional Inherited Members

4.607.1 Detailed Description

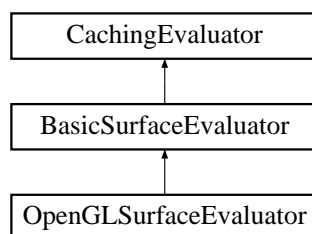
Definition at line 67 of file glcurveval.h.

The documentation for this class was generated from the following files:

- src/libnurbs/interface/glcurveval.h
- src/libnurbs/interface/glcurveval.cc
- src/libnurbs/interface/incurveeval.cc

4.608 OpenGLSurfaceEvaluator Class Reference

Inheritance diagram for OpenGLSurfaceEvaluator:



Public Member Functions

- void **polymode** (long style)
- void **range2f** (long, REAL *, REAL *)
- void **domain2f** (REAL, REAL, REAL, REAL)
- void **addMap** (SurfaceMap *)
- void **enable** (long)
- void **disable** (long)
- void **bgnmap2f** (long)
- void **map2f** (long, REAL, REAL, long, long, REAL, REAL, long, long, REAL *)
- void **mapgrid2f** (long, REAL, REAL, long, REAL, REAL)
- void **mapmesh2f** (long, long, long, long, long)
- void **evalcoord2f** (long, REAL, REAL)
- void **evalpoint2i** (long, long)
- void **endmap2f** (void)
- void **bgnline** (void)
- void **endline** (void)
- void **bgnclosedline** (void)
- void **endclosedline** (void)
- void **bgntmesh** (void)
- void **swaptmesh** (void)
- void **endtmesh** (void)
- void **bgnqstrip** (void)
- void **endqstrip** (void)
- void **bgntfan** (void)
- void **endtfan** (void)

- void **evalUStrip** (int n_upper, REAL v_upper, REAL *upper_val, int n_lower, REAL v_lower, REAL *lower_val)
- void **evalVStrip** (int n_left, REAL u_left, REAL *left_val, int n_right, REAL u_right, REAL *right_val)
- void **coord2f** (REAL, REAL)
- void **point2i** (long, long)
- void **newtmeshvert** (REAL, REAL)
- void **newtmeshvert** (long, long)
- void **putCallback** (GLenum which, _GLUfuncptr fn)
- int **get_vertices_call_back** ()
- void **put_vertices_call_back** (int flag)
- void **put_callback_auto_normal** (int flag)
- int **get_callback_auto_normal** ()
- void **set_callback_userData** (void *data)
- void **LOD_eval_list** (int level)

Additional Inherited Members

4.608.1 Detailed Description

Definition at line 101 of file `glsurfeval.h`.

The documentation for this class was generated from the following files:

- `src/libnurbs/interface/glsurfeval.h`
- `src/libnurbs/interface/glsurfeval.cc`
- `src/libnurbs/interface/insurfeval.cc`

4.609 `opened_file` Struct Reference

Data Fields

- char * **fileFileName**
- int **fileDescriptor**
- int **fileDataSize**
- char * **fileData**
- int **imageHeight**
- int **imageWidth**
- bool **imageAlpha**
- int **imageChannels**

4.609.1 Detailed Description

Definition at line 46 of file `io_files.h`.

The documentation for this struct was generated from the following file:

- `src/lib/io_files.h`

4.610 orient_XYZA Struct Reference

Data Fields

- GLDOUBLE **x**
- GLDOUBLE **y**
- GLDOUBLE **z**
- GLDOUBLE **a**

4.610.1 Detailed Description

Definition at line 35 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/Structs.h

4.611 particle Struct Reference

Data Fields

- float **age**
- float **lifespan**
- float **size** [2]
- float **position** [3]
- float **velocity** [3]
- float **origin** [3]
- float **mass**
- float **surfaceArea**

4.611.1 Detailed Description

Definition at line 335 of file Component_ParticleSystems.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_ParticleSystems.c

4.612 Patch Class Reference

Public Member Functions

- **Patch** (**Quilt** *, REAL *, REAL *, **Patch** *)
- **Patch** (**Patch** &, int, REAL, **Patch** *)
- void **bbox** (void)
- void **clamp** (void)
- void **getstepsize** (void)
- int **cullCheck** (void)
- int **needsSubdivision** (int)
- int **needsSamplingSubdivision** (void)
- int **needsNonSamplingSubdivision** (void)
- int **get_uorder** ()
- int **get_vorder** ()

Friends

- class **Subdivider**
- class **Quilt**
- class **Patchlist**

4.612.1 Detailed Description

Definition at line 62 of file patch.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/patch.h
- src/libnurbs/internals/patch.cc

4.613 Patchlist Class Reference

Public Member Functions

- **Patchlist** (**Quilt** *, REAL *, REAL *)
- **Patchlist** (**Patchlist** &, int, REAL)
- void **bbox** ()
- int **cullCheck** (void)
- void **getstepsize** (void)
- int **needsNonSamplingSubdivision** (void)
- int **needsSamplingSubdivision** (void)
- int **needsSubdivision** (int)
- REAL **getStepsize** (int)
- void **getRanges** (REAL ranges[4])
- int **get_uorder** ()
- int **get_vorder** ()

Friends

- class **Subdivider**

4.613.1 Detailed Description

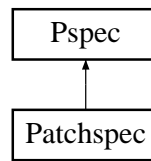
Definition at line 45 of file patchlist.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/patchlist.h
- src/libnurbs/internals/patchlist.cc

4.614 Patchspec Struct Reference

Inheritance diagram for Patchspec:



Public Member Functions

- void **clamp** (REAL)
- void **getstepsize** (REAL)
- void **singleStep** (void)

Data Fields

- int **order**
- int **stride**

4.614.1 Detailed Description

Definition at line 54 of file patch.h.

The documentation for this struct was generated from the following files:

- src/libnurbs/internals/patch.h
- src/libnurbs/internals/patch.cc

4.615 pBindable Struct Reference

Data Fields

- struct **sNavInfo** **naviinfo**
- **bindablestack** **bstack**

4.615.1 Detailed Description

Definition at line 91 of file Bindable.c.

The documentation for this struct was generated from the following file:

- src/lib/x3d_parser/Bindable.c

4.616 pcollision Struct Reference

Data Fields

- float * **prd_newc_floats**
- unsigned int **prd_newc_floats_size**
- struct **point_XYZ** * **prd_normals**
- int **prd_normals_size**
- struct **point_XYZ** * **clippedPoly1**
- int **clippedPoly1Size**
- struct **point_XYZ** * **clippedPoly2**
- int **clippedPoly2Size**
- struct **point_XYZ** * **clippedPoly3**
- int **clippedPoly3Size**
- struct **point_XYZ** * **clippedPoly4**
- int **clippedPoly4Size**
- struct **point_XYZ** * **clippedPoly5**
- int **clippedPoly5Size**
- struct **point_XYZ** **res**
- double **get_poly_mindisp**
- struct **sCollisionInfo** **CollisionInfo**
- struct **sFallInfo** **FallInfo**
- bool **OpenCL_Collision_Program_initialized**

4.616.1 Detailed Description

Definition at line 79 of file Collision.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Collision.c

4.617 pcommon Struct Reference

Data Fields

- float **myFps**
- int **target_frames_per_second**
- char **myMenuStatus** [MAXSTAT]
- char **messagebar** [MAXSTAT]
- char **fpsbar** [16]
- char **distbar** [16]
- char **window_title** [MAXTITLE]
- int **cursorStyle**
- int **promptForURL**
- int **promptForFile**
- int **sb_hasString**
- char **buffer** [200]
- int **showConsoleText**
- void * **colorScheme**

- int **colorSchemeChanged**
- int **pin_statusbar**
- int **pin_menubar**
- int **want_menubar**
- int **want_statusbar**
- struct **Vector** * **keyvals**
- float **density_factor**
- int **pedal**
- int **hover**

4.617.1 Detailed Description

Definition at line 58 of file common.c.

The documentation for this struct was generated from the following file:

- src/lib/ui/common.c

4.618 pComponent_CubeMapTexturing Struct Reference

Data Fields

- **Stack** * **gencube_stack**

4.618.1 Detailed Description

Definition at line 1156 of file Component_CubeMapTexturing.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_CubeMapTexturing.c

4.619 pComponent_EnvironSensor Struct Reference

Data Fields

- int **candoVisibility**

4.619.1 Detailed Description

- can we do a VisibiltySensor? Only if we have OpenGL support for OcclusionCulling */

Definition at line 51 of file Component_EnvironSensor.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_EnvironSensor.c

4.620 pComponent_Followers Struct Reference

Data Fields

- int **something**

4.620.1 Detailed Description

Definition at line 55 of file Component_Followers.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Followers.c

4.621 pComponent_Geometry3D Struct Reference

Data Fields

- int **junk**
- struct **sCollisionGeometry collisionSphere**
- struct **sCollisionGeometry collisionCylinder**
- struct **sCollisionGeometry collisionCone**

4.621.1 Detailed Description

Definition at line 77 of file Component_Geometry3D.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Geometry3D.c

4.622 pComponent_Geospatial Struct Reference

Data Fields

- int **geoLodLevel**

4.622.1 Detailed Description

Definition at line 307 of file Component_Geospatial.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Geospatial.c

4.623 pComponent_HAnim Struct Reference

Data Fields

- struct **X3D_HAnimHumanoid** * **HH**
- double **HHMatrix** [16]

4.623.1 Detailed Description

Definition at line 243 of file Component_HAnim.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_HAnim.c

4.624 pComponent_KeyDevice Struct Reference

Data Fields

- struct **Vector** * **keySink**

4.624.1 Detailed Description

Definition at line 274 of file Component_KeyDevice.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_KeyDevice.c

4.625 pComponent_Layering Struct Reference

Data Fields

- int **layerId**
- int **saveActive**
- int **binding_stack_set**
- struct **X3D_Node** * **layersetnode**

4.625.1 Detailed Description

Definition at line 66 of file Component_Layering.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Layering.c

4.626 pComponent_Layout Struct Reference

Data Fields

- **Stack * layout_scale_stack**

4.626.1 Detailed Description

Definition at line 76 of file Component_Layout.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Layout.c

4.627 pComponent_NURBS Struct Reference

Data Fields

- void * **nada**

4.627.1 Detailed Description

Definition at line 56 of file Component_NURBS.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_NURBS.c

4.628 pComponent_ParticleSystems Struct Reference

Data Fields

- int **something**

4.628.1 Detailed Description

Definition at line 57 of file Component_ParticleSystems.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_ParticleSystems.c

4.629 pComponent_Picking Struct Reference

Data Fields

- **Stack * stack_nodesdistance**
- **Stack * stack_intersections**
- **Stack * stack_pointsinside**

4.629.1 Detailed Description

Definition at line 60 of file Component_Picking.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Picking.c

4.630 pComponent_ProgrammableShaders Struct Reference

Data Fields

- **Stack * effect_stack**
- int **effectCount**

4.630.1 Detailed Description

Definition at line 108 of file Component_ProgrammableShaders.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_ProgrammableShaders.c

4.631 pComponent_Rendering Struct Reference

Data Fields

- **Stack * clipplane_stack**
- float **clipplanes** [4 *FW_MAXCLIPPLANES]

4.631.1 Detailed Description

Definition at line 48 of file Component_Rendering.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Rendering.c

4.632 pComponent_RigidBodyPhysics Struct Reference

Data Fields

- int **something**

4.632.1 Detailed Description

Definition at line 64 of file Component_RigidBodyPhysics.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_RigidBodyPhysics.c

4.633 pComponent_Shape Struct Reference

Data Fields

- struct **matpropstruct** **appearanceProperties**
- struct **X3D_Node** * **this_textureTransform**
- struct **X3D_TwoSidedMaterial** * **material_twoSided**
- struct **X3D_Material** * **material_oneSided**
- struct **X3D_Node** * **userShaderNode**

4.633.1 Detailed Description

Definition at line 49 of file Component_Shape.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Shape.c

4.634 pComponent_Sound Struct Reference

Data Fields

- int **soundWarned**
- int **SoundSourceNumber**
- void * **alContext**
- float **AC_LastDuration** [50]

4.634.1 Detailed Description

Definition at line 97 of file Component_Sound.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Sound.c

4.635 pComponent_Text Struct Reference

Data Fields

- FT_Library **library**
- FT_Face **font_face** [num_fonts]
- int **font_state** [num_fonts]
- FT_Glyph **glyphs** [MAX_GLYPHS]
- int **cur_glyph**
- int **TextVerbose**
- int **rowvec_allocn**
- **row32** * **rowvec**
- FT_Outline_Funcs **FW_outline_interface**
- char * **font_directory**
- char **thisfontname** [fp_name_len]
- double **pen_x**
- double **pen_y**
- double **shrink_x**
- double **shrink_y**
- float **TextZdist**
- double **size**
- double **pointsize**
- int **myff**
- int **FW_RIA** [500]
- int **FW_RIA_idx**
- struct **X3D_PolyRep** * **FW_rep_**
- int **FW_pointctr**
- int **indx_count**
- int **coordmaxsize**
- int **cindexmaxsize**
- int **contour_started**
- FT_Vector **last_point**
- int **FW_Vertex**
- int **started**
- GLfloat * **textpanel_vert**
- GLfloat * **textpanel_tex**
- GLushort * **textpanel_ind**
- int **textpanel_size**
- int **textpanel_vert_size**
- int **textpanel_tex_size**
- int **textpanel_ind_size**
- struct **Vector** * **font_table**
- struct **Vector** * **atlas_table**
- GLuint **positionLoc**

- GLuint **texCoordLoc**
- GLuint **textureLoc**
- GLuint **color4fLoc**
- GLuint **textureID**
- GLuint **blendLoc**
- GLuint **modelviewLoc**
- GLuint **projectionLoc**
- GLuint **programObject**

4.635.1 Detailed Description

Definition at line 232 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.636 pComponent_VolumeRendering Struct Reference

Data Fields

- GLuint **front_texture**
- GLuint **back_texture**
- GLint **ifbobuffer**
- GLint **idepthbuffer**
- int **width**
- int **height**
- GLfloat * **quad**

4.636.1 Detailed Description

Definition at line 184 of file Component_VolumeRendering.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_VolumeRendering.c

4.637 pConsoleMessage Struct Reference

Data Fields

- int **androidFreeSlot**
- char ** **androidMessageSlot**
- int **androidHaveUnreadMessages**
- char **FWbuffer** [STRING_LENGTH]
- int **maxLineLength**
- int **maxLines**
- int **tabSpaces**
- void(* **callback** [2])(char *)
- void(* **callbackB** [4])(void *, char *)
- void * **dataB** [4]
- int **nbackB**

4.637.1 Detailed Description

Definition at line 55 of file ConsoleMessage.c.

The documentation for this struct was generated from the following file:

- src/lib/main/ConsoleMessage.c

4.638 pCParse Struct Reference

Data Fields

- int **ijunk**

4.638.1 Detailed Description

Definition at line 50 of file CParse.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParse.c

4.639 pCParserParser Struct Reference

Data Fields

- char **fw_outline** [2000]
- int **foundInputErrors**
- int **latest_protoDefNumber**

4.639.1 Detailed Description

Definition at line 65 of file CParserParser.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParserParser.c

4.640 pCRoutes Struct Reference

Data Fields

- struct **FirstStruct** * **ClockEvents**
- int **num_ClockEvents**
- int **size_ClockEvents**
- int **CRoutes_Initiated**
- int **CRoutes_Count**
- int **CRoutes_MAX**
- int **initialEventBeforeRoutesCount**
- int **preRouteTableSize**
- struct **initialRouteStruct** * **preEvents**
- pthread_mutex_t **preRouteLock**
- struct **Vector** * **routesToRegister**
- pthread_mutex_t **insertRouteLock**
- int **thisIntTimeStamp**
- struct **CRStruct** * **CRoutes**
- struct **Vector** * **ScriptControl**
- int **JSMMaxScript**
- struct **CRjsnameStruct** * **JSParamnames**

4.640.1 Detailed Description

Definition at line 225 of file CRoutes.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CRoutes.c

4.641 pCScripts Struct Reference

Data Fields

- int **handleCnt**

4.641.1 Detailed Description

Definition at line 69 of file CScripts.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/CScripts.c

4.642 pCursorDraw Struct Reference

Data Fields

- GLuint **textureID**
- int **done**

4.642.1 Detailed Description

Definition at line 191 of file CursorDraw.c.

The documentation for this struct was generated from the following file:

- src/lib/ui/CursorDraw.c

4.643 pdisplay Struct Reference

Data Fields

- **freewrl_params_t** params
- **s_renderer_capabilities_t** rdr_caps
- char **myMenuStatus** [MAXSTAT]
- int **multi_window_capable**

4.643.1 Detailed Description

Definition at line 80 of file display.c.

The documentation for this struct was generated from the following file:

- src/lib/display.c

4.644 pEAI_C_CommonFunctions Struct Reference

Data Fields

- struct **VRMLParser** * parser

4.644.1 Detailed Description

Definition at line 59 of file EAI_C_CommonFunctions.c.

The documentation for this struct was generated from the following file:

- src/lib/input/EAI_C_CommonFunctions.c

4.645 pEAICore Struct Reference

Data Fields

- pthread_mutex_t **eaibufferlock**
- char **EAIListenerData** [8192]

4.645.1 Detailed Description

Definition at line 160 of file EAIEventsIn.c.

The documentation for this struct was generated from the following file:

- src/lib/input/EAIEventsIn.c

4.646 pEAIEventsIn Struct Reference

Data Fields

- int **oldCount**
- int **waiting_for_anchor**
- struct **X3D_Anchor** **EAI_AnchorNode**

4.646.1 Detailed Description

Definition at line 129 of file EAIEventsIn.c.

The documentation for this struct was generated from the following file:

- src/lib/input/EAIEventsIn.c

4.647 pEAHelpers Struct Reference

Data Fields

- struct **Vector** * **EAINodeIndex**

4.647.1 Detailed Description

Definition at line 97 of file EAHelpers.c.

The documentation for this struct was generated from the following file:

- src/lib/input/EAHelpers.c

4.648 pedal_state Struct Reference

Data Fields

- int **x**
- int **y**
- int **rx**
- int **ry**
- int **isDown**
- int **initialized**

4.648.1 Detailed Description

Definition at line 2979 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.649 pFrustum Struct Reference

Data Fields

- GLuint * **OccQueries**
- GLuint **potentialOccluderCount**
- void ** **occluderNodePointer**
- GLuint **OccQuerySize**
- GLuint **OccResultsAvailable**

4.649.1 Detailed Description

Definition at line 88 of file Frustum.c.

The documentation for this struct was generated from the following file:

- src/lib/opengl/Frustum.c

4.650 pict Struct Reference

Data Fields

- unsigned int **temp_ref**
- unsigned int **code_type**
- unsigned int **vbv_delay**
- int **full_pel_forw_vector**
- unsigned int **forw_r_size**
- unsigned int **forw_f**
- int **full_pel_back_vector**
- unsigned int **back_r_size**
- unsigned int **back_f**
- char * **extra_info**
- char * **ext_data**
- char * **user_data**

4.650.1 Detailed Description

Definition at line 131 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.651 pict_image Struct Reference

Data Fields

- unsigned char * **luminance**
- unsigned char * **Cr**
- unsigned char * **Cb**
- unsigned char * **display**
- int **locked**
- TimeStamp **show_time**

4.651.1 Detailed Description

Definition at line 105 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.652 pJScript Struct Reference

Data Fields

- JSRuntime * **runtime**
- JSClass **globalClass**
- jsval **JSglobal_return_value**
- int **ijunk**

4.652.1 Detailed Description

Definition at line 95 of file JScript.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/JScript.c

4.653 pjsUtils Struct Reference

Data Fields

- int **insetSFStr**
- JSBool **reportWarnings**

4.653.1 Detailed Description

Definition at line 83 of file jsUtils.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsUtils.c

4.654 pjsVRMLBrowser Struct Reference

Data Fields

- int **ijunk**
- jsval **JSCreate_global_return_val**

4.654.1 Detailed Description

Definition at line 1324 of file jsVRMLBrowser.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsVRMLBrowser.c

4.655 pjsVRMLClasses Struct Reference

Data Fields

- struct **ECMAValueStruct** **ECMAValues** [ECMAValueTableSize]
- int **maxECMAVal**

4.655.1 Detailed Description

Definition at line 78 of file jsVRMLClasses.c.

The documentation for this struct was generated from the following file:

- src/lib/world_script/jsVRMLClasses.c

4.656 pLoadTextures Struct Reference

Data Fields

- **s_list_t** * **texture_request_list**
- bool **loader_waiting**
- **s_list_t** * **texture_list**
- int **TextureParsing**

4.656.1 Detailed Description

- is the texture thread up and running yet? */

Definition at line 98 of file LoadTextures.c.

The documentation for this struct was generated from the following file:

- src/lib/OpenGL/LoadTextures.c

4.657 pMainloop Struct Reference

Data Fields

- int **onScreen**
- int **doEvents**
- char * **PluginFullPath**
- int **num_SensorEvents**
- GLint **viewPort2** [10]
- GLint **viewpointScreenX** [2]
- GLint **viewpointScreenY** [2]
- int **maxbuffers**
- int **bufferarray** [2]
- double **BrowserStartTime**
- double **BrowserInitTime**
- int **keypress_wait_for_settle**
- char * **keypress_string**
- struct **SensStruct** * **SensorEvents**
- unsigned int **loop_count**
- unsigned int **once**
- unsigned int **slowloop_count**
- int **lastDeltax**
- int **lastDeltay**
- int **lastxx**
- int **lastyy**
- int **ntouch**
- unsigned int **currentTouch**
- struct **Touch** **touchlist** [20]
- int **EMULATE_MULTITOUCH**
- FILE * **logfile**
- FILE * **logerr**

- char * **logfname**
- int **logging**
- int **keySensorMode**
- int **draw_initialized**
- int **keywait**
- char **keywaitstring** [25]
- int **fps_sleep_remainder**
- double **screenorientationmatrix** [16]
- double **viewtransformmatrix** [16]
- double **posorimatrix** [16]
- double **stereooffsetmatrix** [2][16]
- int **targets_initialized**
- **targetwindow** **cwindows** [4]
- void * **hyper_switch** [4]
- int **hyper_case** [4]
- int **nwindow**
- int **windex**
- **Stack** * **_vportstack**
- **Stack** * **_stagesstack**
- **Stack** * **_framebufferstack**
- struct **Vector** * **contenttype_registry**
- int **mouseDown**
- int **mouseOver**
- struct **pedal_state** **pedalstate**

4.657.1 Detailed Description

Definition at line 2986 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.658 Point Struct Reference

Data Fields

- double **x**
- double **y**

4.658.1 Detailed Description

Definition at line 3 of file point_in_poly.c.

The documentation for this struct was generated from the following files:

- src/SSR/point_in_poly.c
- src/SSR/SSRServer.c

4.659 point_XYZ Struct Reference

Data Fields

- GLDOUBLE **x**
- GLDOUBLE **y**
- GLDOUBLE **z**

4.659.1 Detailed Description

Definition at line 34 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/Structs.h

4.660 point_XYZ3 Struct Reference

Data Fields

- struct **point_XYZ** **p1**
- struct **point_XYZ** **p2**
- struct **point_XYZ** **p3**

4.660.1 Detailed Description

Definition at line 65 of file RenderFuncs.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/RenderFuncs.c

4.661 pointer2pointer Struct Reference

Data Fields

- struct **X3D_Node** * **pp**
- struct **X3D_Node** * **pn**

4.661.1 Detailed Description

Definition at line 3836 of file CParseParser.c.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.c

4.662 polygon Struct Reference

Data Fields

- int **n**
- double * **pts**

4.662.1 Detailed Description

Definition at line 767 of file SSRServer.c.

The documentation for this struct was generated from the following file:

- src/SSR/SSRServer.c

4.663 polyrep_combiner_data Struct Reference

Data Fields

- float * **coords**
- int * **counter**
- int * **ria**
- int * **riaindex**

4.663.1 Detailed Description

Definition at line 931 of file headers.h.

The documentation for this struct was generated from the following file:

- src/lib/main/headers.h

4.664 Pool Class Reference

Public Member Functions

- **Pool** (int, int, const char *)
- void * **new_buffer** (void)
- void **free_buffer** (void *)
- void **clear** (void)

Protected Types

- enum **Magic** { **is_allocated** = 0xf3a1, **is_free** = 0xf1a2 }

Protected Attributes

- **Buffer * freelist**
- char * **blocklist** [NBLOCKS]
- int **nextblock**
- char * **curblock**
- int **buffersize**
- int **nextsize**
- int **nextfree**
- int **initsize**
- const char * **name**
- Magic **magic**

4.664.1 Detailed Description

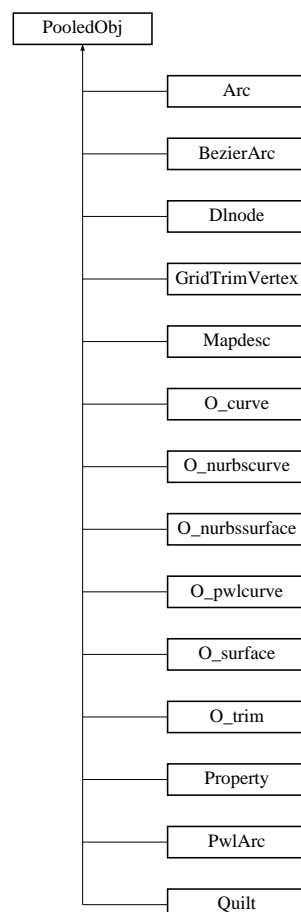
Definition at line 50 of file bufpool.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/bufpool.h
- src/libnurbs/internals/bufpool.cc

4.665 PooledObj Class Reference

Inheritance diagram for PooledObj:



Public Member Functions

- void * **operator new** (size_t, **Pool** &)
- void * **operator new** (size_t, void *)
- void * **operator new** (size_t s)
- void **operator delete** (void *)
- void **operator delete** (void *, **Pool** &)
- void **deleteMe** (**Pool** &)

4.665.1 Detailed Description

Definition at line 118 of file bufpool.h.

The documentation for this class was generated from the following file:

- src/libnurbs/internals/bufpool.h

4.666 pOpenGL_Utils Struct Reference

Data Fields

- struct **Vector** * **linearNodeTable**
- int **potentialHoleCount**
- float **cc_red**
- float **cc_green**
- float **cc_blue**
- float **cc_alpha**
- pthread_mutex_t **memtablelock**
- MATRIX4 **FW_ModelView** [MAX_LARGE_MATRIX_STACK]
- MATRIX4 **FW_ProjectionView** [MAX_SMALL_MATRIX_STACK]
- MATRIX4 **FW_TextureView** [MAX_SMALL_MATRIX_STACK]
- int **modelviewTOS**
- int **projectionviewTOS**
- int **textureviewTOS**
- int **whichMode**
- GLDOUBLE * **currentMatrix**
- struct **Vector** * **myShaderTable**
- int **userDefinedShaderCount**
- char * **userDefinedFragmentShader** [MAX_USER_DEFINED_SHADERS]
- char * **userDefinedVertexShader** [MAX_USER_DEFINED_SHADERS]
- int **shadingStyle**
- int **maxStackUsed**

4.666.1 Detailed Description

Definition at line 180 of file OpenGL_Utils.c.

The documentation for this struct was generated from the following file:

- src/lib/opengl/OpenGL_Utils.c

4.667 pPluginSocket Struct Reference

Data Fields

- pthread_mutex_t **mylocker**
- fd_set **rfds**
- struct timeval **tv**
- char **return_url** [FILENAME_MAX]

4.667.1 Detailed Description

Definition at line 62 of file PluginSocket.c.

The documentation for this struct was generated from the following file:

- src/lib/plugin/PluginSocket.c

4.668 ppluginUtils Struct Reference

Data Fields

- int **waitingForURLtoLoad**
- resource_item_t * **plugin_res**

4.668.1 Detailed Description

Definition at line 70 of file pluginUtils.c.

The documentation for this struct was generated from the following file:

- src/lib/plugin/pluginUtils.c

4.669 pProdCon Struct Reference

Data Fields

- struct Vector * **viewpointNodes**
- struct Vector * **fogNodes**
- struct Vector * **backgroundNodes**
- struct Vector * **navigationNodes**
- int **_P_LOCK_VAR**
- s_list_t * **resource_list_to_parse**
- s_list_t * **frontend_list_to_get**
- int **frontend_gets_files**
- struct PSStruct **psp**
- int **inputThreadParsing**
- int **haveParsedCParsed**
- int **frontend_res_count**

4.669.1 Detailed Description

Definition at line 121 of file ProdCon.c.

The documentation for this struct was generated from the following file:

- src/lib/main/ProdCon.c

4.670 PQhandleElem Struct Reference

Data Fields

- PQkey **key**
- PQhandle **node**

4.670.1 Detailed Description

Definition at line 84 of file priorityq-heap.h.

The documentation for this struct was generated from the following file:

- src/libtess/priorityq-heap.h

4.671 PQnode Struct Reference

Data Fields

- PQhandle **handle**

4.671.1 Detailed Description

Definition at line 83 of file priorityq-heap.h.

The documentation for this struct was generated from the following file:

- src/libtess/priorityq-heap.h

4.672 pRasterFont Struct Reference

Data Fields

- struct **X3D_Text** **myText**
- struct **X3D_FontStyle** **myFont**
- bool **rf_initialized**
- int **xf_color**
- vec4f_t **xf_colors** [3]

4.672.1 Detailed Description

Definition at line 57 of file RasterFont.c.

The documentation for this struct was generated from the following file:

- src/lib/opengl/RasterFont.c

4.673 pRenderFuncs Struct Reference

Data Fields

- int **profile_entry_count**
- struct **profile_entry** **profile_entries** [100]
- int **profiling_on**
- float **light_linAtten** [MAX_LIGHT_STACK]
- float **light_constAtten** [MAX_LIGHT_STACK]
- float **light_quadAtten** [MAX_LIGHT_STACK]
- float **light_spotCutoffAngle** [MAX_LIGHT_STACK]
- float **light_spotBeamWidth** [MAX_LIGHT_STACK]
- shaderVec4 **light_amb** [MAX_LIGHT_STACK]
- shaderVec4 **light_dif** [MAX_LIGHT_STACK]
- shaderVec4 **light_pos** [MAX_LIGHT_STACK]
- shaderVec4 **light_spec** [MAX_LIGHT_STACK]
- shaderVec4 **light_spotDir** [MAX_LIGHT_STACK]
- float **light_radius** [MAX_LIGHT_STACK]
- GLint **lightType** [MAX_LIGHT_STACK]
- int **nextFreeLight**
- int **refreshLightUniforms**
- unsigned int **currentLoop**
- unsigned int **lastLoop**
- unsigned int **sendCount**
- GLint **lightOnOff** [MAX_LIGHT_STACK]
- GLint **lightChanged** [MAX_LIGHT_STACK]
- GLint **lastShader**
- void * **empty_group**
- struct **point_XYZ** **hyper_r1** **hyper_r2**
- struct **currayhit** **rayph**
- struct **X3D_Node** * **rootNode**
- struct **Vector** * **libraries**
- struct **X3D_Anchor** * **AnchorsAnchor**
- struct **currayhit** **rayHit**
- struct **trenderstate** **renderstate**
- int **renderLevel**
- GLint **currentShader**
- **Stack** * **render_geom_stack**
- **Stack** * **sensor_stack**
- **Stack** * **ray_stack**
- **Stack** * **shaderflags_stack**
- **Stack** * **fog_stack**
- **Stack** * **localLight_stack**
- struct **point_XYZ3** **t_r123**
- struct **point_XYZ** **hp**
- **Stack** * **usehits_stack**
- **Stack** * **usehitsB_stack**
- **Stack** * **pickablegroupdata_stack**
- **Stack** * **draw_call_params_stack**

4.673.1 Detailed Description

Definition at line 88 of file RenderFuncs.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/RenderFuncs.c

4.674 pRenderTextures Struct Reference

Data Fields

- struct **multiTexParams textureParameterStack** [MAX_MULTITEXTURE]

4.674.1 Detailed Description

Definition at line 49 of file RenderTextures.c.

The documentation for this struct was generated from the following file:

- src/lib/opengl/RenderTextures.c

4.675 presources Struct Reference

Data Fields

- struct **Vector * resStack**
- **resource_item_t * lastBaseResource**

4.675.1 Detailed Description

Definition at line 57 of file resources.c.

The documentation for this struct was generated from the following file:

- src/lib/resources.c

4.676 primStream Class Reference

Public Member Functions

- **primStream** (Int sizeLengths, Int sizeVertices)
- Int **get_n_prims** ()
- Int **get_type** (Int i)
- Int **get_length** (Int i)
- Real * **get_vertices** ()
- void **begin** ()
- void **insert** (Real u, Real v)
- void **insert** (Real v[2])
- void **end** (Int type)
- Int **num_triangles** ()
- void **triangle** (Real A[2], Real B[2], Real C[2])
- void **print** ()
- void **draw** ()

4.676.1 Detailed Description

Definition at line 44 of file primitiveStream.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/primitiveStream.h
- src/libnurbs/nurbtess/primitiveStream.cc

4.677 PriorityQ Struct Reference

Data Fields

- **PQnode** * **nodes**
- **PQhandleElem** * **handles**
- long **size**
- long **max**
- PQhandle **freeList**
- int **initialized**
- int(* **leq**)(PQkey key1, PQkey key2)
- PriorityQHeap * **heap**
- PQkey * **keys**
- PQkey ** **order**
- PQhandle **size**
- PQhandle **max**

4.677.1 Detailed Description

Definition at line 86 of file priorityq-heap.h.

The documentation for this struct was generated from the following files:

- src/libtess/priorityq-heap.h
- src/libtess/priorityq-sort.h
- src/libtess/priorityq.h

4.678 profile_entry Struct Reference

Data Fields

- char * **name**
- double **start**
- double **accum**
- int **hits**

4.678.1 Detailed Description

Definition at line 58 of file RenderFuncs.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/RenderFuncs.c

4.679 org.web3d.x3d.sai.ProfileInfo Interface Reference

Inheritance diagram for org.web3d.x3d.sai.ProfileInfo:



Public Member Functions

- String **getName** ()
- String **getTitle** ()
- **ComponentInfo** [] **getComponents** ()
- String **toX3DString** ()

4.679.1 Detailed Description

Definition at line 3 of file ProfileInfo.java.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/ProfileInfo.java`

4.680 proftablestruct Struct Reference

Data Fields

- `int` **profileName**
- `const int *` **profileTable**
- `int` **level**

4.680.1 Detailed Description

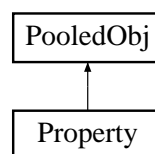
Definition at line 236 of file capabilitiesHandler.c.

The documentation for this struct was generated from the following file:

- `src/lib/x3d_parser/capabilitiesHandler.c`

4.681 Property Struct Reference

Inheritance diagram for Property:



Public Member Functions

- **Property** (`long` _type, `long` _tag, `INREAL` _value)
- **Property** (`long` _tag, `INREAL` _value)

Data Fields

- `long` **type**
- `long` **tag**
- `REAL` **value**
- `int` **save**

4.681.1 Detailed Description

Definition at line 120 of file reader.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/reader.h

4.682 ProtoDefinition Struct Reference

Data Fields

- indexT **protoDefNumber**
- struct **Vector** * **iface**
- struct **Vector** * **deconstructedProtoBody**
- int **estimatedBodyLen**
- char * **protoName**
- int **isCopy**
- int **isExtern**

4.682.1 Detailed Description

Definition at line 92 of file CParseParser.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.h

4.683 ProtoFieldDecl Struct Reference

Data Fields

- indexT **mode**
- indexT **type**
- indexT **name**
- char * **cname**
- char * **fieldString**
- BOOL **alreadySet**
- union **anyVrml defaultVal**
- struct **Vector** * **scriptDests**

4.683.1 Detailed Description

Definition at line 38 of file CParseParser.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.h

4.684 pSensInterps Struct Reference

Data Fields

- int **stub**

4.684.1 Detailed Description

Definition at line 64 of file SensInterps.c.

The documentation for this struct was generated from the following file:

- src/lib/input/SensInterps.c

4.685 pSnapshot Struct Reference

Data Fields

- int **snapRawCount**
- int **snapGoodCount**
- int **snapGif**
- char * **snapsnapB**
- const char * **default_seqtmp**
- char * **seqtmp**
- int **doSnapshot**
- int **doPrintshot**
- int **savedSnapshot**
- int **modeTesting**

4.685.1 Detailed Description

- snapshot stuff */* need to re-implement this for OSX generating QTVR */

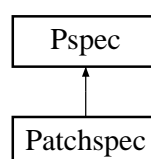
Definition at line 75 of file Snapshot.c.

The documentation for this struct was generated from the following file:

- src/lib/main/Snapshot.c

4.686 Pspec Struct Reference

Inheritance diagram for Pspec:



Data Fields

- REAL **range** [3]
- REAL **sidestep** [2]
- REAL **stepsize**
- REAL **minstepsize**
- int **needsSubdivision**

4.686.1 Detailed Description

Definition at line 46 of file patch.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/patch.h

4.687 PSStruct Struct Reference

Data Fields

- unsigned **type**
- char * **inp**
- void * **ptr**
- unsigned **ofs**
- int **zeroBind**
- int **bind**
- char * **path**
- int * **comp**
- char * **fieldname**
- int **jparamcount**
- struct **Uni_String** * **sv**

4.687.1 Detailed Description

Definition at line 103 of file ProdCon.c.

The documentation for this struct was generated from the following file:

- src/lib/main/ProdCon.c

4.688 pstatusbar Struct Reference

Data Fields

- int **initDone**
- int **screenWidth**
- int **screenHeight**
- double **screenRatio**

4.688.1 Detailed Description

Definition at line 65 of file `statusbar.c`.

The documentation for this struct was generated from the following file:

- `src/lib/ui/statusbar.c`

4.689 pStreamPoly Struct Reference

Data Fields

- int **Sindex**
- int **Tindex**
- GLfloat **minVals** [3]
- GLfloat **Ssize**

4.689.1 Detailed Description

Definition at line 82 of file `StreamPoly.c`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/StreamPoly.c`

4.690 pTess Struct Reference

Data Fields

- int **global_IFS_Coords** [TESS_MAX_COORDS]

4.690.1 Detailed Description

Definition at line 68 of file `Tess.c`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/Tess.c`

4.691 pTextures Struct Reference

Data Fields

- struct **Vector** * **activeTextureTable**
- **textureTableIndexStruct_s** * **loadThisTexture**
- int **currentlyWorkingOn**
- int **textureInProcess**

4.691.1 Detailed Description

Definition at line 89 of file Textures.c.

The documentation for this struct was generated from the following file:

- src/lib/opengl/Textures.c

4.692 pViewer Struct Reference

Data Fields

- int **examineCounter**
- int **viewer_initialized**
- **X3D_Viewer_Walk** viewer_walk
- **X3D_Viewer_Examine** viewer_examine
- **X3D_Viewer_Fly** viewer_fly
- **X3D_Viewer_Spherical** viewer_ypz
- FILE * **exfly_in_file**
- struct **point_XYZ** viewer_lastP
- int **exflyMethod**
- int **StereoInitializedOnce**
- GLboolean **acMask** [3][3]
- double **viewpoint2rootnode** [16]
- double **viewpointnew2rootnode** [16]
- int **vp2rnSaved**
- double **old2new** [16]
- double **identity** [16]
- double **tickFrac**
- **Quaternion** sq
- double **sp** [3]
- int **keychord**
- int **dragchord**

4.692.1 Detailed Description

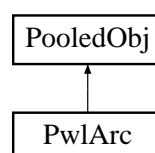
Definition at line 78 of file Viewer.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.c

4.693 PwIArc Class Reference

Inheritance diagram for PwIArc:



Public Member Functions

- **PwIArc** (int, **TrimVertex** *)
- **PwIArc** (int, **TrimVertex** *, long)

Data Fields

- **TrimVertex** * **pts**
- int **npts**
- long **type**

4.693.1 Detailed Description

Definition at line 44 of file pwIarc.h.

The documentation for this class was generated from the following file:

- src/libnurbs/internals/pwIarc.h

4.694 pX3DParser Struct Reference

Data Fields

- struct **VRMLLexer** * **myLexer**
- **Stack** * **DEFedNodes**
- int **CDATA_TextMallocSize**
- int **in3_3_fieldValue**
- int **in3_3_fieldIndex**
- int **X3DParserRecurseLevel**
- XML_Parser **x3dparser** [PROTOINSTANCE_MAX_LEVELS]
- XML_Parser **currentX3DParser**
- int **currentParserMode** [PROTOINSTANCE_MAX_LEVELS]
- int **currentParserModelIndex**
- struct **xml_user_data** * **user_data**

4.694.1 Detailed Description

Definition at line 278 of file X3DParser.c.

The documentation for this struct was generated from the following file:

- src/lib/x3d_parser/X3DParser.c

4.695 quaternion Struct Reference

Data Fields

- double **w**
- double **x**
- double **y**
- double **z**

4.695.1 Detailed Description

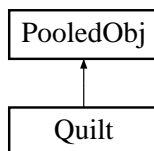
Definition at line 70 of file quaternion.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/quaternion.h

4.696 Quilt Class Reference

Inheritance diagram for Quilt:



Public Member Functions

- **Quilt** (**Mapdesc** *)
- void **deleteMe** (**Pool** &)
- void **toBezier** (**Knotvector** &, INREAL *, long)
- void **toBezier** (**Knotvector** &, **Knotvector** &, INREAL *, long)
- void **select** (REAL *, REAL *)
- int **getDimension** (void)
- void **download** (**Backend** &)
- void **downloadAll** (REAL *, REAL *, **Backend** &)
- int **isCulled** (void)
- void **getRange** (REAL *, REAL *, **Flist** &, **Flist** &)
- void **getRange** (REAL *, REAL *, int, **Flist** &)
- void **getRange** (REAL *, REAL *, **Flist** &)
- void **findRates** (**Flist** &slist, **Flist** &tlist, REAL[2])
- void **findSampleRates** (**Flist** &slist, **Flist** &tlist)
- void **show** ()

Data Fields

- **Mapdesc** * **mapdesc**
- REAL * **cpts**
- **Quiltspec** **qspec** [MAXDIM]
- **Quiltspec_ptr** **eqspec**
- **Quilt** * **next**

4.696.1 Detailed Description

Definition at line 64 of file quilt.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/quilt.h
- src/libnurbs/internals/quilt.cc
- src/libnurbs/internals/tobezier.cc

4.697 Quiltspec Struct Reference

Data Fields

- int **stride**
- int **width**
- int **offset**
- int **order**
- int **index**
- int **bdry** [2]
- REAL **step_size**
- Knot * **breakpoints**

4.697.1 Detailed Description

Definition at line 51 of file quilt.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/quilt.h

4.698 rb1 Struct Reference

Data Fields

- int **head**
- int **tail**
- int **noOfElements**
- void * **data**

4.698.1 Detailed Description

Definition at line 8 of file ringbuf.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/ringbuf.h

4.699 rectBlock Class Reference

Public Member Functions

- **rectBlock** (**gridBoundaryChain** *left, **gridBoundaryChain** *right, Int beginVline, Int endVline)
- Int **get_upGridLineIndex** ()
- Int **get_lowGridLineIndex** ()
- Int * **get_leftIndices** ()
- Int * **get_rightIndices** ()
- Int **num_quads** ()
- void **print** ()
- void **draw** (Real *u_values, Real *v_values)

4.699.1 Detailed Description

Definition at line 39 of file rectBlock.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/rectBlock.h
- src/libnurbs/nurbtess/rectBlock.cc

4.700 rectBlockArray Class Reference

Public Member Functions

- **rectBlockArray** (Int s)
- Int **get_n_elements** ()
- **rectBlock** * **get_element** (Int i)
- void **insert** (**rectBlock** *newBlock)
- Int **num_quads** ()
- void **print** ()
- void **draw** (Real *u_values, Real *v_values)

4.700.1 Detailed Description

Definition at line 61 of file rectBlock.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/rectBlock.h
- src/libnurbs/nurbtess/rectBlock.cc

4.701 reflexChain Class Reference

Public Member Functions

- **reflexChain** (Int size, Int isIncreasing)
- void **insert** (Real u, Real v)
- void **insert** (Real v[2])
- void **processNewVertex** (Real v[2], **primStream** *pStream)
- void **outputFan** (Real v[2], **primStream** *pStream)
- void **processNewVertex** (Real v[2], **Backend** *backend)
- void **outputFan** (Real v[2], **Backend** *backend)
- void **print** ()

4.701.1 Detailed Description

Definition at line 43 of file monoTriangulation.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/monoTriangulation.h
- src/libnurbs/internals/monoTriangulationBackend.cc
- src/libnurbs/nurbtess/monoTriangulation.cc

4.702 Renderhints Class Reference

Public Member Functions

- void **init** (void)
- int **isProperty** (long)
- REAL **getProperty** (long)
- void **setProperty** (long, REAL)

Data Fields

- REAL **display_method**
- REAL **errorchecking**
- REAL **subdivisions**
- REAL **tmp1**
- int **displaydomain**
- int **maxsubdivisions**
- int **wiretris**
- int **wirequads**

4.702.1 Detailed Description

Definition at line 41 of file renderhints.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/renderhints.h
- src/libnurbs/internals/renderhints.cc

4.703 resource_item Struct Reference

Data Fields

- struct **resource_item** * **parent**
- **s_list_t** * **children**
- bool **network**
- bool **new_root**
- resource_type_t **type**
- resource_status_t **status**
- resource_actions_t **actions**
- bool **complete**
- void * **ectx**
- void * **whereToPlaceData**
- int **offsetFromWhereToPlaceData**
- int **textureNumber**
- **s_list_t** * **m_request**
- char * **URLrequest**
- char * **URLbase**
- char * **temp_dir**
- char * **afterPoundCharacters**
- char * **parsed_request**
- char * **actual_file**
- void * **cached_files**
- void * **opened_files**
- char **four_first_bytes** [4]
- resource_media_type_t **media_type**
- int **treat_as_root**
- pthread_t * **_loadThread**
- void * **tg**
- int(* **_loadFunc**)(void *)

4.703.1 Detailed Description

Definition at line 99 of file resources.h.

The documentation for this struct was generated from the following file:

- src/lib/resources.h

4.704 row32 Struct Reference

Data Fields

- int **allocn**
- int **len32**
- unsigned int * **str32**
- int **glyphstartindex**
- double **hrowsize**
- double **vcolsize**
- double **widestchar**
- **chardata** * **chr**

4.704.1 Detailed Description

Definition at line 210 of file `Component_Text.c`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/Component_Text.c`

4.705 **s_renderer_capabilities_t** Struct Reference

Data Fields

- `const char *` **renderer**
- `const char *` **version**
- `const char *` **vendor**
- `const char *` **extensions**
- `float` **versionf**
- `bool` **have_GL_VERSION_1_1**
- `bool` **have_GL_VERSION_1_2**
- `bool` **have_GL_VERSION_1_3**
- `bool` **have_GL_VERSION_1_4**
- `bool` **have_GL_VERSION_1_5**
- `bool` **have_GL_VERSION_2_0**
- `bool` **have_GL_VERSION_2_1**
- `bool` **have_GL_VERSION_3_0**
- `bool` **av_multitexture**
- `bool` **av_npot_texture**
- `bool` **av_texture_rect**
- `bool` **av_occlusion_q**
- `int` **texture_units**
- `int` **runtime_max_texture_size**
- `int` **system_max_texture_size**
- `float` **anisotropicDegree**
- `GLboolean` **quadBuffer**

4.705.1 Detailed Description

Definition at line 441 of file `display.h`.

The documentation for this struct was generated from the following file:

- `src/lib/display.h`

4.706 s_shader_capabilities Struct Reference

Data Fields

- GLint **compiledOK**
- GLuint **myShaderProgram**
- GLint **myMaterialAmbient**
- GLint **myMaterialDiffuse**
- GLint **myMaterialSpecular**
- GLint **myMaterialShininess**
- GLint **myMaterialEmission**
- GLint **myMaterialBackAmbient**
- GLint **myMaterialBackDiffuse**
- GLint **myMaterialBackSpecular**
- GLint **myMaterialBackShininess**
- GLint **myMaterialBackEmission**
- GLint **myPointSize**
- bool **haveLightInShader**
- GLint **lightcount**
- GLint **lightType** [MAX_LIGHTS]
- GLint **lightAmbient** [MAX_LIGHTS]
- GLint **lightDiffuse** [MAX_LIGHTS]
- GLint **lightSpecular** [MAX_LIGHTS]
- GLint **lightPosition** [MAX_LIGHTS]
- GLint **lightSpotDir** [MAX_LIGHTS]
- GLint **lightAtten** [MAX_LIGHTS]
- GLint **lightSpotCutoffAngle** [MAX_LIGHTS]
- GLint **lightSpotBeamWidth** [MAX_LIGHTS]
- GLint **lightRadius** [MAX_LIGHTS]
- GLint **ModelViewMatrix**
- GLint **ProjectionMatrix**
- GLint **NormalMatrix**
- GLint **ModelViewInverseMatrix**
- GLint **TextureMatrix** [MAX_MULTITEXTURE]
- GLint **Vertices**
- GLint **Normals**
- GLint **Colours**
- GLint **TexCoords** [MAX_MULTITEXTURE]
- GLint **FogCoords**
- GLint **TextureUnit** [MAX_MULTITEXTURE]
- GLint **TextureMode** [MAX_MULTITEXTURE]
- GLint **TextureSource** [MAX_MULTITEXTURE]
- GLint **TextureFunction** [MAX_MULTITEXTURE]
- GLint **textureCount**
- GLint **multitextureColor**
- GLint **tex3dTiles**
- GLint **tex3dUseVertex**
- GLint **repeatSTR**
- GLint **magFilter**
- GLint **hatchColour**
- GLint **hatchPercent**
- GLint **hatchScale**
- GLint **filledBool**
- GLint **hatchedBool**

- GLint **algorithm**
- GLint **texCoordGenType**
- GLint **fogColor**
- GLint **fogvisibilityRange**
- GLint **fogScale**
- GLint **fogType**
- GLint **fogHaveCoords**
- GLint **clipplanes**
- GLint **nclipplanes**

4.706.1 Detailed Description

Definition at line 344 of file display.h.

The documentation for this struct was generated from the following file:

- src/lib/display.h

4.707 freeWRLSAI_cpp::saiBrowser Class Reference

Public Member Functions

- virtual **saiBrowser** * **getBrowser** (const SAIParameter *pParams)=0
- virtual **saiBrowser** * **createBrowser** (const SAIParameter *pParams, std::map< std::string, std::string > *pProperties)=0
- virtual const char * **getName** ()=0
- virtual const char * **getVersion** ()=0
- virtual float **getCurrentSpeed** ()=0
- virtual float **getCurrentFrameRate** ()=0
- virtual void **replaceWorld** (const char *sceneURI)=0
- virtual void **loadURL** (const char *sceneURL)=0
- virtual void **setDescription** (const char *strDescription)=0
- virtual **saiScene** * **createX3DFromString** (const char *strX3DSource)=0
- virtual void **updateControl** (unsigned int nAction)=0
- virtual void **registerBrowserInterest** (unsigned int nAction, **saiBrowser** *pRequester)=0
- virtual std::map< std::string, std::string > * **getRenderingProperties** ()=0
- virtual std::map< std::string, std::string > * **getBrowserProperties** ()=0
- virtual void **changeViewpoint** (unsigned int nAction)=0
- virtual void **print** ()=0
- virtual void **dispose** ()=0
- virtual bool **setBrowserOption** (const char *strOptionName, void *pOptionValue)=0
- virtual const std::vector< **saiProfileDeclaration** * > * **getSupportedProfiles** ()=0
- virtual const **saiProfileDeclaration** * **getProfile** (const char *strProfileName)=0
- virtual const std::map< std::string, **saiComponent** * > * **getSupportedComponents** ()=0
- virtual const **saiComponent** * **getComponent** (const char *strComponentName)=0
- virtual const **saiExecutionContext** * **getExecutionContext** ()=0
- virtual **saiExecutionContext** * **createScene** ()=0
- virtual **saiExecutionContext** * **importDocument** (const char *DOMdocURI)=0
- virtual **saiExecutionContext** * **createX3DFromStream** (void *pStreambuf)=0
- virtual **saiExecutionContext** * **createX3DFromUrl** (const char *srcURL)=0

4.707.1 Detailed Description

Definition at line 32 of file SAIBrowser.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIBrowser.h

4.708 freeWRLSAI_cpp::saiComponent Class Reference

Public Member Functions

- virtual const char * **getComponentName** ()=0

4.708.1 Detailed Description

Definition at line 47 of file SAIGlobals.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIGlobals.h

4.709 freeWRLSAI_cpp::saiCustomException Class Reference

Inheritance diagram for freeWRLSAI_cpp::saiCustomException:



Public Member Functions

- **saiCustomException** (const char *strWhat, const char *strFile, int strLine, const char *strFunc)
- virtual const char * **what** ()

Data Fields

- std::string **m_strWhat**

Additional Inherited Members

4.709.1 Detailed Description

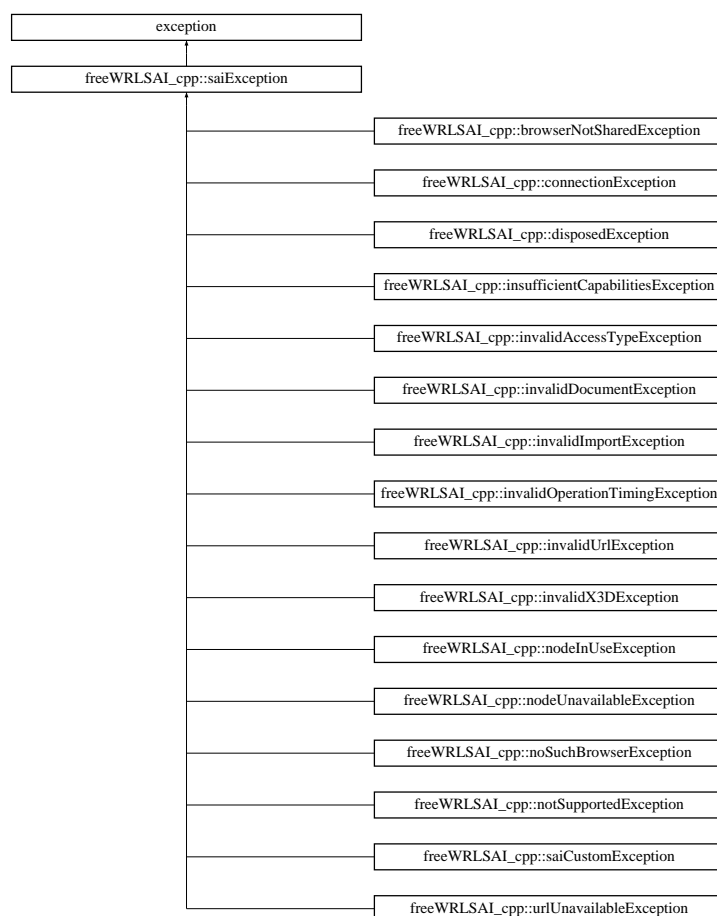
Definition at line 310 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAException.h

4.710 freeWRLSAI_cpp::saiException Class Reference

Inheritance diagram for freeWRLSAI_cpp::saiException:



Public Member Functions

- virtual const char * **what** ()
- virtual int **GetError** ()

Protected Attributes

- int **m_nErrorCode**

4.710.1 Detailed Description

Definition at line 56 of file SAException.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAException.h

4.711 freeWRLSAI_cpp::saiExecutionContext Class Reference

Public Types

- enum **saiContextType** { **saiGenericContext** = 0, **saiSceneContext**, **saiUndefinedContext** }

Public Member Functions

- virtual saiContextType **getContextType** ()=0
- virtual const char * **getSpecificationVersion** ()=0
- virtual int **getEncoding** ()=0
- virtual const char * **getWorldURL** ()=0
- virtual **saiNode** * **getNode** (const char *strNodeName, int nAction)=0
- virtual **saiNode** * **createNode** (const char *strNodeType)=0
- virtual **saiNode** * **createProto** (const char *strProtoName)=0
- virtual saiProtoDeclaration * **getProtoDeclaration** (const char *strProtoName)=0
- virtual void **protoDeclarationHandling** (const char *strProtoName, **saiNode** *pNode, int nAction)=0
- virtual saiProtoDeclaration * **getExternProtoDeclaration** (const char *strProtoName)=0
- virtual void **externProtoDeclarationHandling** (const char *strProtoName, **saiNode** *pNode, int nAction)=0
- virtual std::vector< **saiNode** * > * **getRootNodes** ()=0
- virtual std::vector< **saiRoute** * > * **getRoutes** ()=0
- virtual void **dispose** ()=0
- virtual **saiProfileDeclaration** * **getProfile** ()=0
- virtual std::map< std::string, **saiComponent** * > * **getComponents** ()=0

4.711.1 Detailed Description

Definition at line 45 of file SAExecutionContext.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAExecutionContext.h

4.712 freeWRLSAI_cpp::saiField Class Reference

Public Types

- enum **saiFieldAccess** { **initializeOnly** = 0, **inputOnly**, **outputOnly**, **inputOutput** }

Public Member Functions

- virtual saiFieldAccess **getAccessType** ()=0
- virtual int **getType** ()=0
- virtual const char * **getName** ()=0
- virtual void **dispose** ()=0
- virtual const saiFieldValuePtr **getValue** ()=0
- virtual void **setValue** (const saiFieldValuePtr pValue)=0

4.712.1 Detailed Description

Definition at line 35 of file SAIField.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIField.h

4.713 freeWRLSAI_cpp::saiNode Class Reference

Public Member Functions

- virtual const char * **getTypeName** ()=0
- virtual const char * **getType** ()=0
- virtual **saiField** * **getField** (const char *strFieldName)=0
- virtual std::vector< **saiField** * > * **getFieldDefinitions** (const char *strNodeType)=0
- virtual void **dispose** ()=0

4.713.1 Detailed Description

Definition at line 31 of file SAINode.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAINode.h

4.714 freeWRLSAI_cpp::saiProfileDeclaration Class Reference

Public Member Functions

- virtual const char * **getProfileName** ()=0
- virtual std::map< std::string, **saiComponent** * > **getComponentDeclaration** ()=0

4.714.1 Detailed Description

Definition at line 55 of file SAIGlobals.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIGlobals.h

4.715 freeWRLSAI_cpp::saiProto Class Reference

Public Types

- enum **saiLoadState** { **NOT_STARTED** = 0, **IN_PROGRESS**, **COMPLETE**, **FAILED** }

Public Member Functions

- virtual bool **isExternproto** ()=0
- virtual **saiNode** * **createInstance** (const char *strProtoDeclaration)=0
- virtual std::vector< **saiField** * > * **getFieldDefinitions** ()=0
- virtual saiLoadState **checkLoadState** ()=0
- virtual void **requestImmediateLoad** ()=0

4.715.1 Detailed Description

Definition at line 32 of file SAIproto.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIproto.h

4.716 freeWRLSAI_cpp::saiRoute Class Reference

Public Member Functions

- virtual const **saiNode** * **getSourceNode** ()=0
- virtual const **saiField** * **getSourceField** ()=0
- virtual const **saiNode** * **getDestinationNode** ()=0
- virtual const **saiField** * **getDestinationField** ()=0
- virtual void **dispose** ()=0

4.716.1 Detailed Description

Definition at line 32 of file SAIroute.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIroute.h

4.717 freeWRLSAI_cpp::saiScene Class Reference

Public Member Functions

- virtual const char * **getMetaData** (const char *strKey)=0
- virtual void **setMetaData** (const char *strKey, const char *strMetadata)=0
- virtual void **rootNodeHandling** (const **saiNode** *pTargetNode, int nAction)=0
- virtual void **AddRootNode** (const **saiNode** *pNodeToAdd)=0
- virtual void **RemoveRootNode** (const **saiNode** *pNodeToRemove)=0

4.717.1 Detailed Description

Definition at line 34 of file SAIScene.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAIScene.h

4.718 sampledLine Class Reference

Public Member Functions

- **sampledLine** (Int n_points)
- **sampledLine** (Int n_points, Real pts[][2])
- **sampledLine** (Real pt1[2], Real pt2[2])
- void **init** (Int n_points, Real2 *pts)
- void **setPoint** (Int i, Real p[2])
- **sampledLine** * **insert** (**sampledLine** *nline)
- void **deleteList** ()
- Int **get_npoints** ()
- Real2 * **get_points** ()
- void **tessellate** (Real u_reso, Real v_reso)
- void **tessellateAll** (Real u_reso, Real v_reso)
- void **print** ()

Data Fields

- **sampledLine** * **next**

4.718.1 Detailed Description

Definition at line 38 of file sampledLine.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/sampledLine.h
- src/libnurbs/nurbtess/sampledLine.cc

4.719 sCollisionGeometry Struct Reference

Data Fields

- struct **point_XYZ** * **pts**
- struct **point_XYZ** * **tpts**
- ctri * **tris**
- int **ntris**
- cquad * **quads**
- int **nquads**
- int **npts**
- double **smin** [3]
- double **smax** [3]

4.719.1 Detailed Description

Definition at line 63 of file Component_Geometry3D.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Geometry3D.c

4.720 sCollisionInfo Struct Reference

Data Fields

- struct **point_XYZ** **Offset**
- int **Count**
- double **Maximum2**

4.720.1 Detailed Description

Definition at line 50 of file Collision.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Collision.h

4.721 screentextdata Struct Reference

Data Fields

- int **nalloc**
- int **nrow**
- **row32** * **rowvec**
- void * **atlasfont**
- float **size**
- float **faceheight**
- float **emsize**

4.721.1 Detailed Description

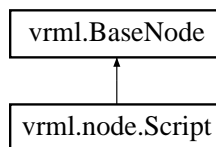
Definition at line 222 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.722 vrml.node.Script Class Reference

Inheritance diagram for vrml.node.Script:



Public Member Functions

- void **initialize** ()
- final **Field** **getEventOut** (String eventOutName)
- void **processEvents** (final int count, final **Event** events[])
- void **processEvent** (**Event** event)
- void **eventsProcessed** ()
- void **shutdown** ()

Protected Member Functions

- final **Field** **getField** (String fieldName)
- final **Field** **getEventIn** (String eventInName)

4.722.1 Detailed Description

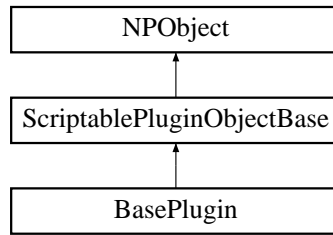
Definition at line 10 of file Script.java.

The documentation for this class was generated from the following file:

- src/java/vrml/node/Script.java

4.723 ScriptableObjectBase Class Reference

Inheritance diagram for ScriptableObjectBase:



Public Member Functions

- **ScriptableObjectBase** (**NPP** npp)
- virtual void **Invalidate** ()
- virtual bool **HasMethod** (NPIdentifier name)
- virtual bool **Invoke** (NPIdentifier name, const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)
- virtual bool **InvokeDefault** (const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)
- virtual bool **HasProperty** (NPIdentifier name)
- virtual bool **GetProperty** (NPIdentifier name, **NPVariant** *result)
- virtual bool **SetProperty** (NPIdentifier name, const **NPVariant** *value)
- virtual bool **RemoveProperty** (NPIdentifier name)
- virtual bool **Enumerate** (NPIdentifier **identifier, uint32_t *count)
- virtual bool **Construct** (const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)

Static Public Member Functions

- static void **_Deallocate** (**NPObject** *npobj)
- static void **_Invalidate** (**NPObject** *npobj)
- static bool **_HasMethod** (**NPObject** *npobj, NPIdentifier name)
- static bool **_Invoke** (**NPObject** *npobj, NPIdentifier name, const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)
- static bool **_InvokeDefault** (**NPObject** *npobj, const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)
- static bool **_HasProperty** (**NPObject** *npobj, NPIdentifier name)
- static bool **_GetProperty** (**NPObject** *npobj, NPIdentifier name, **NPVariant** *result)
- static bool **_SetProperty** (**NPObject** *npobj, NPIdentifier name, const **NPVariant** *value)
- static bool **_RemoveProperty** (**NPObject** *npobj, NPIdentifier name)
- static bool **_Enumerate** (**NPObject** *npobj, NPIdentifier **identifier, uint32_t *count)
- static bool **_Construct** (**NPObject** *npobj, const **NPVariant** *args, uint32_t argCount, **NPVariant** *result)

Protected Attributes

- **NPP** mNpp

Additional Inherited Members

4.723.1 Detailed Description

Definition at line 68 of file ScriptablePluginObjectBase.h.

The documentation for this class was generated from the following files:

- src/plugin_win32/ScriptablePluginObjectBase.h
- src/plugin_win32/ScriptablePluginObjectBase.cpp

4.724 ScriptFieldDecl Struct Reference

Data Fields

- struct **FieldDecl** * **fieldDecl**
- char * **ASCIIvalue**
- int **valueChanged**
- union **anyVrml** **value**
- BOOL **valueSet**
- int **eventInSet**
- struct **Shader_Script** * **script**

4.724.1 Detailed Description

Definition at line 55 of file CScripts.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/CScripts.h

4.725 ScriptFieldInstanceInfo Struct Reference

Data Fields

- struct **ScriptFieldDecl** * **decl**
- struct **Shader_Script** * **script**

4.725.1 Detailed Description

Definition at line 79 of file CScripts.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/CScripts.h

4.726 ScriptParamList Struct Reference

Data Fields

- struct **ScriptParamList** * **next**
- indexT **kind**
- indexT **type**
- char * **field**
- union **anyVrml** **value**

4.726.1 Detailed Description

Definition at line 146 of file CScripts.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/CScripts.h

4.727 SensStruct Struct Reference

Data Fields

- struct **X3D_Node** * **fromnode**
- struct **X3D_Node** * **datanode**
- void(* **interpptr**)(void *, int, int, int)

4.727.1 Detailed Description

Definition at line 128 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.728 sFallInfo Struct Reference

Data Fields

- double **fallHeight**
- double **fallStep**
- double **hfall**
- double **hclimb**
- int **isFall**
- int **canFall**
- int **isClimb**
- int **hits**
- int **walking**
- int **smoothStep**
- int **allowClimbing**
- GLDOUBLE **collision2avatar** [16]
- GLDOUBLE **avatar2collision** [16]
- int **checkFall**
- int **checkCylinder**
- int **checkPenetration**
- int **canPenetrate**
- int **isPenetrate**
- GLDOUBLE **penMin** [3]
- GLDOUBLE **penMax** [3]
- struct **point_XYZ** **penvec**
- double **penRadius**
- struct **point_XYZ** **pen correction**
- double **pendisp**

4.728.1 Detailed Description

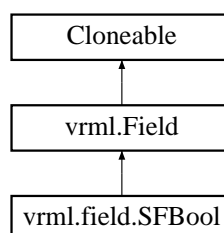
Definition at line 137 of file Collision.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Collision.h

4.729 vrml.field.SFBool Class Reference

Inheritance diagram for vrml.field.SFBool:



Public Member Functions

- **SFBool** (boolean value)
- boolean **getValue** ()
- void **setValue** (boolean value)
- void **setValue** (**ConstSFBool** sfBool)
- void **setValue** (**SFBool** sfBool)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.729.1 Detailed Description

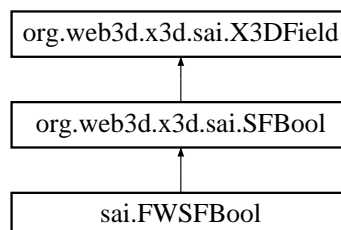
Definition at line 10 of file SFBool.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFBool.java

4.730 org.web3d.x3d.sai.SFBool Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFBool:



Public Member Functions

- boolean **getValue** ()
- void **setValue** (boolean value)

4.730.1 Detailed Description

Definition at line 3 of file SFBool.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFBool.java

4.731 SFCOLOR Struct Reference

Data Fields

- float **c** [3]

4.731.1 Detailed Description

Definition at line 2461 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.732 org.web3d.x3d.sai.SFCOLOR Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFCOLOR:



Public Member Functions

- void **getValue** (float[] value)
- void **setValue** (float[] value)

4.732.1 Detailed Description

Definition at line 3 of file SFCOLOR.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFCOLOR.java

4.733 vrml.field.SFColor Class Reference

Inheritance diagram for vrml.field.SFColor:



Public Member Functions

- **SFColor** (float red, float green, float blue)
- void **getValue** (float[] values)
- float **getRed** ()
- float **getGreen** ()
- float **getBlue** ()
- void **setValue** (float red, float green, float blue)
- void **setValue** (float[] values)
- void **setValue** (**ConstSFColor** sfColor)
- void **setValue** (**SFColor** sfColor)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.733.1 Detailed Description

Definition at line 10 of file SFColor.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFColor.java

4.734 SFColorRGBA Struct Reference

Data Fields

- float **c** [4]
- float **r** [4]

4.734.1 Detailed Description

Definition at line 2463 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.735 org.web3d.x3d.sai.SFColorRGBA Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFColorRGBA:



Public Member Functions

- void **getValue** (float[] value)
- void **setValue** (float[] value)

4.735.1 Detailed Description

Definition at line 3 of file SFColorRGBA.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFColorRGBA.java

4.736 org.web3d.x3d.sai.SFDouble Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFDouble:



Public Member Functions

- double **getValue** ()
- void **setValue** (double value)

4.736.1 Detailed Description

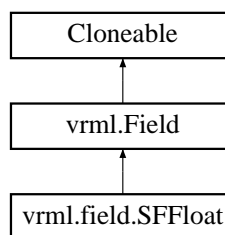
Definition at line 3 of file SFDouble.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFDouble.java

4.737 vrml.field.SFFloat Class Reference

Inheritance diagram for vrml.field.SFFloat:



Public Member Functions

- **SFFloat** (float f)
- float **getValue** ()
- void **setValue** (float f)
- void **setValue** (**ConstSFFloat** sfFloat)
- void **setValue** (**SFFloat** sfFloat)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.737.1 Detailed Description

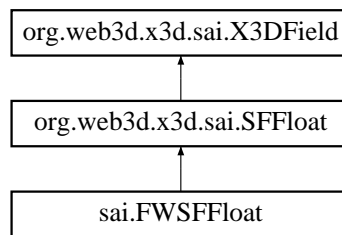
Definition at line 10 of file SFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFFloat.java

4.738 org.web3d.x3d.sai.SFFloat Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFFloat:



Public Member Functions

- float **getValue** ()
- void **setValue** (float value)

4.738.1 Detailed Description

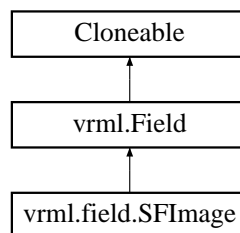
Definition at line 3 of file SFFloat.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFFloat.java

4.739 vrml.field.SFImage Class Reference

Inheritance diagram for vrml.field.SFImage:



Public Member Functions

- **SFImage** (int width, int height, int components, byte[] pixels)
- int **getWidth** ()
- int **getHeight** ()
- int **getComponents** ()
- byte [] **getPixels** ()
- void **setValue** (int width, int height, int components, byte[] pixels)
- void **setValue** (**ConstSFImage** sflmage)
- void **setValue** (**SFImage** sflmage)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.739.1 Detailed Description

Definition at line 10 of file SFIImage.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFIImage.java

4.740 org.web3d.x3d.sai.SFIImage Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFIImage:



Public Member Functions

- int **getWidth** ()
- int **getHeight** ()
- int **getComponents** ()
- void **getPixels** (int[] pixels)
- java.awt.image.WritableRenderedImage **getImage** ()
- void **setValue** (int width, int height, int components, int[] pixels)
- void **setImage** (java.awt.image.RenderedImage image)
- void **setSubImage** (java.awt.image.RenderedImage image, int srcWidth, int srcHeight, int srcXOffset, int srcYOffset, int destXOffset, int destYOffset)

4.740.1 Detailed Description

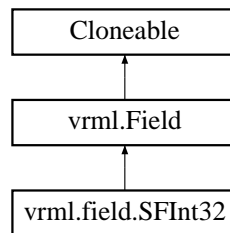
Definition at line 3 of file SFIImage.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFIImage.java

4.741 vrml.field.SFInt32 Class Reference

Inheritance diagram for vrml.field.SFInt32:



Public Member Functions

- **SFInt32** (int value)
- int **getValue** ()
- void **setValue** (int value)
- void **setValue** (**ConstSFInt32** sfInt32)
- void **setValue** (**SFInt32** sfInt32)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.741.1 Detailed Description

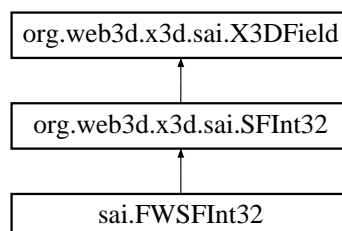
Definition at line 10 of file SFInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFInt32.java

4.742 org.web3d.x3d.sai.SFInt32 Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFInt32:



Public Member Functions

- int **getValue** ()
- void **setValue** (int value)

4.742.1 Detailed Description

Definition at line 3 of file SFInt32.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFInt32.java

4.743 SFMatrix3d Struct Reference

Data Fields

- double **c** [9]

4.743.1 Detailed Description

Definition at line 2479 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.744 SFMatrix3f Struct Reference

Data Fields

- float **c** [9]

4.744.1 Detailed Description

Definition at line 2477 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.745 SFMatrix4d Struct Reference

Data Fields

- double **c** [16]

4.745.1 Detailed Description

Definition at line 2483 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.746 SFMatrix4f Struct Reference

Data Fields

- float **c** [16]

4.746.1 Detailed Description

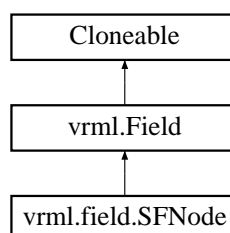
Definition at line 2481 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.747 vrml.field.SFNode Class Reference

Inheritance diagram for vrml.field.SFNode:



Public Member Functions

- **SFNode** (**BaseNode** node)
- **BaseNode** **getValue** ()
- void **setValue** (**BaseNode** node)
- void **setValue** (**ConstSFNode** sfNode)
- void **setValue** (**SFNode** sfNode)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.747.1 Detailed Description

Definition at line 10 of file SFNode.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFNode.java

4.748 org.web3d.x3d.sai.SFNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFNode:



Public Member Functions

- **X3DNode** **getValue** ()
- void **setValue** (**X3DNode** value) throws InvalidNodeException

4.748.1 Detailed Description

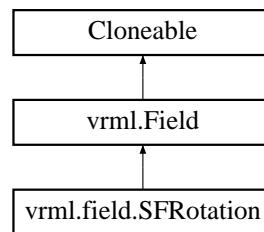
Definition at line 3 of file SFNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFNode.java

4.749 vrml.field.SFRotation Class Reference

Inheritance diagram for vrml.field.SFRotation:



Public Member Functions

- **SFRotation** (float axisX, float axisY, float axisZ, float angle)
- void **getValue** (float[] values)
- void **setValue** (float axisX, float axisY, float axisZ, float angle)
- void **setValue** (float[] values)
- void **setValue** (**ConstSFRotation** sfRotation)
- void **setValue** (**SFRotation** sfRotation)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.749.1 Detailed Description

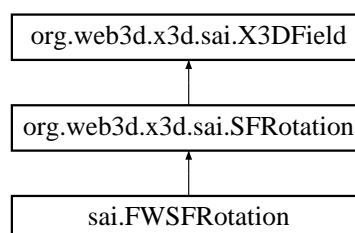
Definition at line 10 of file SFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFRotation.java

4.750 org.web3d.x3d.sai.SFRotation Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFRotation:



Public Member Functions

- void **getValue** (float[] value)
- void **setValue** (float[] value)

4.750.1 Detailed Description

Definition at line 3 of file SFRotation.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFRotation.java

4.751 SFRotation Struct Reference

Data Fields

- float **c** [4]
- float **r** [4]

4.751.1 Detailed Description

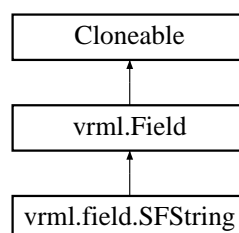
Definition at line 2451 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.752 vrml.field.SFString Class Reference

Inheritance diagram for vrml.field.SFString:



Public Member Functions

- **SFString** (String s)
- String **getValue** ()
- void **setValue** (String s)
- void **setValue** (**ConstSFString** sfString)
- void **setValue** (**SFString** sfString)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.752.1 Detailed Description

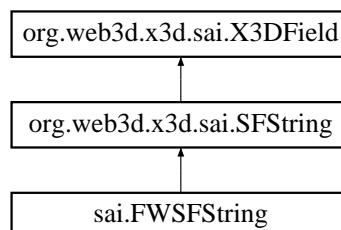
Definition at line 10 of file SFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFString.java

4.753 org.web3d.x3d.sai.SFString Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFString:



Public Member Functions

- String **getValue** ()
- void **setValue** (String value)

4.753.1 Detailed Description

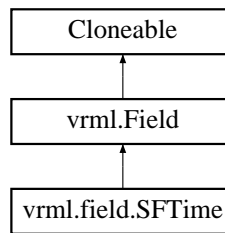
Definition at line 3 of file SFString.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFString.java

4.754 vrml.field.SFTime Class Reference

Inheritance diagram for vrml.field.SFTime:



Public Member Functions

- **SFTime** (double value)
- double **getValue** ()
- void **setValue** (double value)
- void **setValue** (**ConstSFTime** sfTime)
- void **setValue** (**SFTime** sfTime)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.754.1 Detailed Description

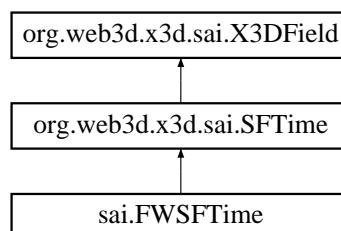
Definition at line 10 of file SFTime.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFTime.java

4.755 org.web3d.x3d.sai.SFTime Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFTime:



Public Member Functions

- double **getValue** ()
- long **getJavaValue** ()
- void **setValue** (double value)
- void **setValue** (long value)

4.755.1 Detailed Description

Definition at line 3 of file SFTIME.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFTIME.java

4.756 SFVec2d Struct Reference

Data Fields

- double **c** [2]

4.756.1 Detailed Description

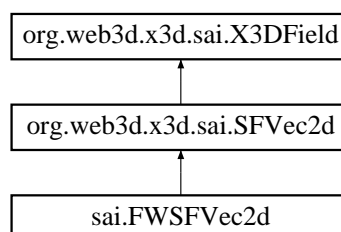
Definition at line 2485 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.757 org.web3d.x3d.sai.SFVec2d Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFVec2d:



Public Member Functions

- void **getValue** (double[] value)
- void **setValue** (double[] value)

4.757.1 Detailed Description

Definition at line 3 of file SFVec2d.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFVec2d.java

4.758 SFVec2f Struct Reference

Data Fields

- float **c** [2]

4.758.1 Detailed Description

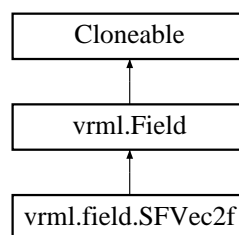
Definition at line 2469 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.759 vrml.field.SFVec2f Class Reference

Inheritance diagram for vrml.field.SFVec2f:



Public Member Functions

- **SFVec2f** (float x, float y)
- void **getValue** (float[] values)
- float **getX** ()
- float **getY** ()
- void **setValue** (float x, float y)
- void **setValue** (float[] values)
- void **setValue** (**ConstSFVec2f** sfVec2f)
- void **setValue** (**SFVec2f** sfVec2f)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.759.1 Detailed Description

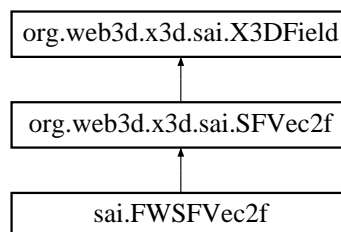
Definition at line 10 of file SFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFVec2f.java

4.760 org.web3d.x3d.sai.SFVec2f Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFVec2f:



Public Member Functions

- void **getValue** (float[] value)
- void **setValue** (float[] value)

4.760.1 Detailed Description

Definition at line 3 of file SFVec2f.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFVec2f.java

4.761 SFVec3d Struct Reference

Data Fields

- double **c** [3]

4.761.1 Detailed Description

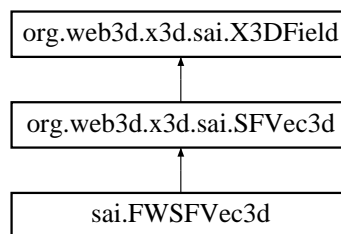
Definition at line 2473 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.762 org.web3d.x3d.sai.SFVec3d Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFVec3d:



Public Member Functions

- void **getValue** (double[] value)
- void **setValue** (double[] value)

4.762.1 Detailed Description

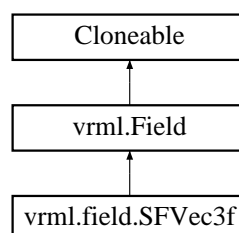
Definition at line 3 of file SFVec3d.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFVec3d.java

4.763 vrml.field.SFVec3f Class Reference

Inheritance diagram for vrml.field.SFVec3f:



Public Member Functions

- **SFVec3f** (float x, float y, float z)
- void **getValue** (float[] values)
- float **getX** ()
- float **getY** ()
- float **getZ** ()
- void **setValue** (float x, float y, float z)
- void **setValue** (float[] values)
- void **setValue** (**ConstSFVec3f** sfVec3f)
- void **setValue** (**SFVec3f** sfVec3f)
- String **toString** ()
- void **__fromPerl** (BufferedReader in) throws IOException
- void **__toPerl** (PrintWriter out) throws IOException

Additional Inherited Members

4.763.1 Detailed Description

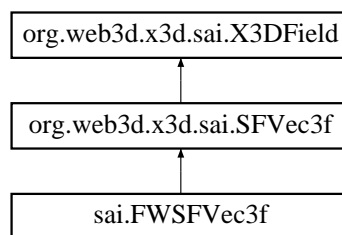
Definition at line 10 of file SFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/field/SFVec3f.java

4.764 org.web3d.x3d.sai.SFVec3f Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFVec3f:



Public Member Functions

- void **getValue** (float[] value)
- void **setValue** (float[] value)

4.764.1 Detailed Description

Definition at line 3 of file SFVec3f.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFVec3f.java

4.765 SFVec3f Struct Reference

Data Fields

- float **c** [3]

4.765.1 Detailed Description

Definition at line 2453 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/Structs.h

4.766 SFVec4d Struct Reference

Data Fields

- double **c** [4]

4.766.1 Detailed Description

Definition at line 2489 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.767 SFVec4f Struct Reference

Data Fields

- float **c** [4]

4.767.1 Detailed Description

Definition at line 2487 of file Structs.h.

The documentation for this struct was generated from the following files:

- src/lib/vrml_parser/Structs.h
- src/libeai/EAI_C.h

4.768 Shader_Script Struct Reference

Data Fields

- struct **X3D_Node** * **ShaderScriptNode**
- int **num**
- BOOL **loaded**
- struct **Vector** * **fields**

4.768.1 Detailed Description

Definition at line 112 of file CScripts.h.

The documentation for this struct was generated from the following file:

- src/lib/world_script/CScripts.h

4.769 shaderflagsstruct Struct Reference

Data Fields

- int **base**
- int **effects**
- int **usershaders**
- int **volume**

4.769.1 Detailed Description

Definition at line 62 of file Component_Shape.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Shape.h

4.770 shaderTableEntry Struct Reference

Data Fields

- **shaderflagsstruct** **whichOne**
- **s_shader_capabilities_t** * **myCapabilities**

4.770.1 Detailed Description

Definition at line 88 of file OpenGL_Utils.c.

The documentation for this struct was generated from the following file:

- src/lib/opengl/OpenGL_Utils.c

4.771 slice Struct Reference

Data Fields

- unsigned int **vert_pos**
- unsigned int **quant_scale**
- char * **extra_info**

4.771.1 Detailed Description

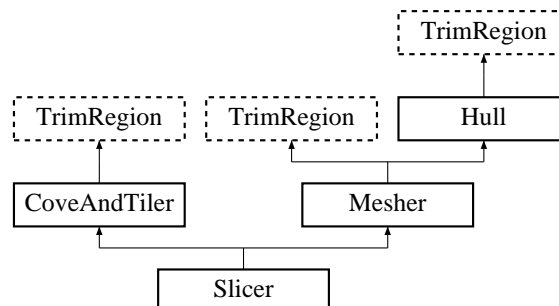
Definition at line 150 of file mpeg_berkley.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/mpeg_berkley.h

4.772 Slicer Class Reference

Inheritance diagram for Slicer:



Public Member Functions

- **Slicer** (**Backend** &)
- void **slice** (Arc_ptr)
- void **slice_old** (Arc_ptr)
- void **slice_new** (Arc_ptr)
- void **evalStream** (**primStream** *)
- void **evalRbArray** (**rectBlockArray** *rbArray, **gridWrap** *grid)
- void **outline** (Arc_ptr)
- void **setstriptessellation** (REAL, REAL)
- void **setisolines** (int)
- void **set_ulinear** (int ulinear_flag)
- void **set_vlinear** (int vlinear_flag)

Additional Inherited Members

4.772.1 Detailed Description

Definition at line 49 of file slicer.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/slicer.h
- src/libnurbs/internals/slicer.cc

4.773 sNavInfo Struct Reference

Data Fields

- double **width**
- double **height**
- double **step**

4.773.1 Detailed Description

Definition at line 96 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/Structs.h

4.774 SNDFILE Struct Reference

Data Fields

- int **type**
- FILE * **fd**
- char **data** [MAXBUFSIZE]
- int **dataptr**
- int **wavdataoffset**
- float **pitch**
- int **bytes_remaining**
- int **ampl**
- int **balance**
- **fmtChnk** FormatChunk
- **datChnk** DataChunk

4.774.1 Detailed Description

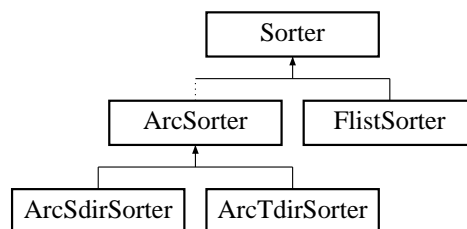
Definition at line 75 of file soundheader.h.

The documentation for this struct was generated from the following file:

- src/sound/soundheader.h

4.775 Sorter Class Reference

Inheritance diagram for Sorter:



Public Member Functions

- **Sorter** (int es)
- void **qsort** (void *a, int n)

Protected Member Functions

- virtual int **qscmp** (char *, char *)
- virtual void **qsexc** (char *i, char *j)
- virtual void **qstexc** (char *i, char *j, char *k)

4.775.1 Detailed Description

Definition at line 36 of file sorter.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/sorter.h
- src/libnurbs/internals/sorter.cc

4.776 Splinespec Struct Reference

Public Member Functions

- **Splinespec** (int)
- void **kspecinit** (**Knotvector** &)
- void **kspecinit** (**Knotvector** &, **Knotvector** &)
- void **select** (void)
- void **layout** (long)
- void **setupquilt** (Quilt_ptr)
- void **copy** (INREAL *)
- void **transform** (void)

Data Fields

- **Knotspec** * **kspec**
- int **dim**
- REAL * **outcpts**

4.776.1 Detailed Description

Definition at line 95 of file tobezier.cc.

The documentation for this struct was generated from the following file:

- src/libnurbs/internals/tobezier.cc

4.777 ssr Struct Reference

Data Fields

- char * **name**
- char * **ip**
- char * **port**
- void * **next**
- double **extent** [6]
- int **levels_available**

4.777.1 Detailed Description

Definition at line 552 of file SSRServer.c.

The documentation for this struct was generated from the following file:

- src/SSR/SSRServer.c

4.778 SSR_request Struct Reference

Data Fields

- int **type**
- pthread_mutex_t **requester_mutex**
- pthread_cond_t **requester_condition**
- double **quat4** [4]
- double **vec3** [3]
- char * **blob**
- int **len**
- int **answered**
- int **LOD**
- int **levels_available**
- int **status**
- double **extent** [6]
- int **isInside**
- double **avatarHeight**
- double **fov**

4.778.1 Detailed Description

Definition at line 7 of file SSRhelper.h.

The documentation for this struct was generated from the following file:

- src/lib/SSRhelper.h

4.779 stage Struct Reference

Data Fields

- tcontenttype **t1**
- int **type**
- unsigned int **ibuffer**
- unsigned int **itexturebuffer**
- unsigned int **idepthbuffer**
- ivec4 **ivport**
- BOOL **clear_zbuffer**
- int **even_odd_frame**

4.779.1 Detailed Description

Definition at line 2121 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.780 StoredVertex Class Reference

Public Member Functions

- void **saveEvalCoord** (REAL x, REAL y)
- void **saveEvalPoint** (long x, long y)
- void **invoke** (**OpenGLSurfaceEvaluator** *eval)

4.780.1 Detailed Description

Definition at line 85 of file glsurfeval.h.

The documentation for this class was generated from the following file:

- src/libnurbs/interface/glsurfeval.h

4.781 Subdivider Class Reference

Public Member Functions

- **Subdivider** (**Renderhints** &, **Backend** &)
- void **clear** (void)
- void **beginTrims** (void)
- void **beginLoop** (void)
- void **addArc** (REAL *, **Quilt** *, long)
- void **addArc** (int, **TrimVertex** *, long)
- void **endLoop** (void)
- void **endTrims** (void)
- void **beginQuilts** (void)
- void **addQuilt** (**Quilt** *)
- void **endQuilts** (void)
- void **drawCurves** (void)
- void **drawSurfaces** (long)
- int **ccwTurn_sl** (Arc_ptr, Arc_ptr)
- int **ccwTurn_sr** (Arc_ptr, Arc_ptr)
- int **ccwTurn_tl** (Arc_ptr, Arc_ptr)
- int **ccwTurn_tr** (Arc_ptr, Arc_ptr)
- void **setJumpbuffer** (JumpBuffer *)
- void **set_domain_distance_u_rate** (REAL u_rate)
- void **set_domain_distance_v_rate** (REAL v_rate)
- void **set_is_domain_distance_sampling** (int flag)

4.781.1 Detailed Description

Definition at line 55 of file subdivider.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/subdivider.h
- src/libnurbs/internals/ccw.cc
- src/libnurbs/internals/curvesub.cc
- src/libnurbs/internals/intersect.cc
- src/libnurbs/internals/monotonizer.cc
- src/libnurbs/internals/splitarcs.cc
- src/libnurbs/internals/subdivider.cc

4.782 surfEvalMachine Struct Reference

Data Fields

- REAL **uprime**
- REAL **vprime**
- int **k**
- REAL **u1**
- REAL **u2**
- int **ustride**
- int **uorder**
- REAL **v1**
- REAL **v2**
- int **vstride**
- int **vorder**
- REAL **ctlPoints** [IN_MAX_BEZIER_ORDER * IN_MAX_BEZIER_ORDER * IN_MAX_DIMENSION]
- REAL **ucoeff** [IN_MAX_BEZIER_ORDER]
- REAL **vcoeff** [IN_MAX_BEZIER_ORDER]
- REAL **ucoeffDeriv** [IN_MAX_BEZIER_ORDER]
- REAL **vcoeffDeriv** [IN_MAX_BEZIER_ORDER]

4.782.1 Detailed Description

Definition at line 64 of file glsurfeval.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/interface/glsurfeval.h

4.783 sweepRange Struct Reference

Data Fields

- **directedLine** * **left**
- Int **leftType**
- **directedLine** * **right**
- Int **rightType**

4.783.1 Detailed Description

Definition at line 70 of file partitionY.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/nurbtess/partitionY.h

4.784 targetwindow Struct Reference

Data Fields

- **contenttype** * **stage**
- void * **hwnd**
- BOOL **swapbuf**
- **ivec4** **ivport**
- **freewrl_params_t** **params**
- struct **targetwindow** * **next**

4.784.1 Detailed Description

Definition at line 2954 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.785 iiglobal::tBindable Struct Reference

Data Fields

- void * **naviinfo**
- int **activeLayer**
- void * **bstacks**
- void * **prv**

4.785.1 Detailed Description

Definition at line 408 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.786 iiglobal::tcollision Struct Reference

Data Fields

- void * **prv**

4.786.1 Detailed Description

Definition at line 241 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.787 iiglobal::tcommon Struct Reference

Data Fields

- void * **prv**

4.787.1 Detailed Description

Definition at line 430 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.788 iiglobal::tComponent_CubeMapTexturing Struct Reference

Data Fields

- void * **prv**

4.788.1 Detailed Description

Definition at line 244 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.789 iiglobal::tComponent_EnvironSensor Struct Reference

Data Fields

- void * **prv**

4.789.1 Detailed Description

Definition at line 247 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.790 iiglobal::tComponent_Followers Struct Reference

Data Fields

- void * **prv**

4.790.1 Detailed Description

Definition at line 277 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.791 iiglobal::tComponent_Geometry3D Struct Reference

Data Fields

- void * **prv**

4.791.1 Detailed Description

Definition at line 250 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.792 iiglobal::tComponent_Geospatial Struct Reference

Data Fields

- void * **prv**

4.792.1 Detailed Description

Definition at line 253 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.793 iiglobal::tComponent_HAnim Struct Reference

Data Fields

- void * **prv**

4.793.1 Detailed Description

Definition at line 256 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.794 iiglobal::tComponent_KeyDevice Struct Reference

Data Fields

- void * **prv**

4.794.1 Detailed Description

Definition at line 280 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.795 iiglobal::tComponent_Layering Struct Reference

Data Fields

- void * **prv**

4.795.1 Detailed Description

Definition at line 259 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.796 iiglobal::tComponent_Layout Struct Reference

Data Fields

- void * **prv**

4.796.1 Detailed Description

Definition at line 262 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.797 iiglobal::tComponent_NURBS Struct Reference

Data Fields

- void * **prv**

4.797.1 Detailed Description

Definition at line 265 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.798 iiglobal::tComponent_ParticleSystems Struct Reference

Data Fields

- void * **prv**

4.798.1 Detailed Description

Definition at line 268 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.799 iiglobal::tComponent_Picking Struct Reference

Data Fields

- void * **prv**

4.799.1 Detailed Description

Definition at line 294 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.800 iiglobal::tComponent_ProgrammableShaders Struct Reference

Data Fields

- void * **prv**

4.800.1 Detailed Description

Definition at line 271 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.801 iiglobal::tComponent_Rendering Struct Reference

Data Fields

- void * **prv**

4.801.1 Detailed Description

Definition at line 297 of file `iglobal.h`.

The documentation for this struct was generated from the following file:

- `src/lib/iglobal.h`

4.802 `iiglobal::tComponent_RigidBodyPhysics` Struct Reference

Data Fields

- `void * prv`

4.802.1 Detailed Description

Definition at line 274 of file `iglobal.h`.

The documentation for this struct was generated from the following file:

- `src/lib/iglobal.h`

4.803 `iiglobal::tComponent_Shape` Struct Reference

Data Fields

- `void * prv`

4.803.1 Detailed Description

Definition at line 300 of file `iglobal.h`.

The documentation for this struct was generated from the following file:

- `src/lib/iglobal.h`

4.804 `iiglobal::tComponent_Sound` Struct Reference

Data Fields

- `int sound_from_audioclip`
- `int SoundEngineStarted`
- `void * prv`

4.804.1 Detailed Description

Definition at line 303 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.805 iiglobal::tComponent_Text Struct Reference

Data Fields

- void * **prv**

4.805.1 Detailed Description

Definition at line 309 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.806 iiglobal::tComponent_VolumeRendering Struct Reference

Data Fields

- void * **prv**

4.806.1 Detailed Description

Definition at line 315 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.807 iiglobal::tComponent_VRML1 Struct Reference

Data Fields

- void * **prv**

4.807.1 Detailed Description

Definition at line 312 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.808 iiglobal::tConsoleMessage Struct Reference

Data Fields

- int **consMsgCount**
- int **Console_writeToHud**
- void * **prv**

4.808.1 Detailed Description

Definition at line 128 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.809 tcontenttype Struct Reference

Data Fields

- int **itype**
- **contenttype** * **contents**
- **contenttype** * **next**
- **contenttype** * **pnext**
- float **viewport** [4]
- void(* **render**)(void *self)
- int(* **pick**)(void *self, int mev, int butnum, int mouseX, int mouseY, unsigned int ID, int windex)

4.809.1 Detailed Description

Definition at line 441 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.810 iiglobal::tCParse Struct Reference

Data Fields

- void * **globalParser**
- void * **prv**

4.810.1 Detailed Description

Definition at line 370 of file iiglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iiglobal.h

4.811 iiglobal::tCParseParser Struct Reference

Data Fields

- void * **prv**

4.811.1 Detailed Description

Definition at line 374 of file iiglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iiglobal.h

4.812 iiglobal::tCRoutes Struct Reference

Data Fields

- int **CRoutesExtra**
- void * **JSSFpointer**
- int **max_script_found**
- int **max_script_found_and_initialized**
- int **jsnameindex**
- int **MAXJSparamNames**
- void * **prv**

4.812.1 Detailed Description

Definition at line 377 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.813 iiglobal::tCScripts Struct Reference

Data Fields

- void * **prv**

4.813.1 Detailed Description

Definition at line 389 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.814 iiglobal::tCursorDraw Struct Reference

Data Fields

- void * **prv**

4.814.1 Detailed Description

Definition at line 433 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.815 iiglobal::tdisplay Struct Reference

Data Fields

- void * **params**
- int **_global_gl_err**
- bool **display_initialized**
- int **screenWidth**
- int **screenHeight**
- char * **window_title**
- int **shutterGlasses**
- void * **rdr_caps**
- void * **prv**

4.815.1 Detailed Description

Definition at line 43 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.816 iiglobal::tEAI_C_CommonFunctions Struct Reference

Data Fields

- int **eaiverbose**
- void * **prv**

4.816.1 Detailed Description

Definition at line 104 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.817 iiglobal::tEAICore Struct Reference

Data Fields

- char * **EAIbuffer**
- int **EAIbufcount**
- int **EAIbufpos**
- int **EAIbufsize**
- char * **EAIListenerData**
- void * **prv**

4.817.1 Detailed Description

Definition at line 116 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.818 iiglobal::tEAEventsIn Struct Reference

Data Fields

- void * **prv**

4.818.1 Detailed Description

Definition at line 108 of file iiglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iiglobal.h

4.819 iiglobal::tEAHelpers Struct Reference

Data Fields

- char * **outBuffer**
- int **outBufferLen**
- void * **prv**

4.819.1 Detailed Description

Definition at line 111 of file iiglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iiglobal.h

4.820 text_combiner_data Struct Reference

Data Fields

- float * **coords**
- int * **counter**
- int * **ria**
- int * **riaindex**

4.820.1 Detailed Description

Definition at line 924 of file headers.h.

The documentation for this struct was generated from the following file:

- src/lib/main/headers.h

4.821 textureTableIndexStruct Struct Reference

Data Fields

- struct **X3D_Node** * **scenegraphNode**
- int **nodeType**
- int **status**
- int **hasAlpha**
- GLuint **OpenGLTexture**
- GLuint **ifbobuffer**
- GLuint **idepthbuffer**
- int **frames**
- char * **filename**
- int **x**
- int **y**
- int **z**
- int **tiles** [3]
- unsigned char * **texdata**
- GLint **repeatSTR** [3]
- GLint **magFilter**
- int **textureNumber**
- int **channels**

4.821.1 Detailed Description

Definition at line 37 of file Textures.h.

The documentation for this struct was generated from the following file:

- src/lib/opengl/Textures.h

4.822 textureVertexInfo Struct Reference

Data Fields

- GLfloat * **pre_canned_textureCoords**
- GLint **TC_size**
- GLenum **TC_type**
- GLsizei **TC_stride**
- GLvoid * **TC_pointer**
- void * **next**
- GLint **VBO**

4.822.1 Detailed Description

Definition at line 67 of file Textures.h.

The documentation for this struct was generated from the following file:

- src/lib/opengl/Textures.h

4.823 iiglobal::tFrustum Struct Reference

Data Fields

- int **OccFailed**
- void * **prv**

4.823.1 Detailed Description

Definition at line 190 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.824 iiglobal::tinternalc Struct Reference

Data Fields

- bool **global_strictParsing**
- bool **global_plugin_print**
- bool **global_occlusion_disable**
- unsigned **user_request_texture_size**
- bool **global_print_opengl_errors**
- bool **global_trace_threads**
- void * **prv**

4.824.1 Detailed Description

Definition at line 54 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.825 iiglobal::tJScript Struct Reference

Data Fields

- void * **JSglobal_return_val**
- void * **prv**

4.825.1 Detailed Description

Definition at line 392 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.826 iiglobal::tjsUtils Struct Reference

Data Fields

- void * **prv**

4.826.1 Detailed Description

Definition at line 396 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.827 iiglobal::tjsVRMLBrowser Struct Reference

Data Fields

- void * **JSCreate_global_return_val**
- void * **prv**

4.827.1 Detailed Description

Definition at line 399 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.828 iiglobal::tjsVRMLClasses Struct Reference

Data Fields

- void * **prv**

4.828.1 Detailed Description

Definition at line 405 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.829 iiglobal::tLoadTextures Struct Reference

Data Fields

- void * **prv**

4.829.1 Detailed Description

Definition at line 194 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.830 tm_unz_s Struct Reference

Data Fields

- ulnt **tm_sec**
- ulnt **tm_min**
- ulnt **tm_hour**
- ulnt **tm_mday**
- ulnt **tm_mon**
- ulnt **tm_year**

4.830.1 Detailed Description

Definition at line 84 of file unzip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.h

4.831 tm_zip_s Struct Reference

Data Fields

- `uint tm_sec`
- `uint tm_min`
- `uint tm_hour`
- `uint tm_mday`
- `uint tm_mon`
- `uint tm_year`

4.831.1 Detailed Description

Definition at line 89 of file zip.h.

The documentation for this struct was generated from the following file:

- `src/libminizip/zip.h`

4.832 iiglobal::tMainloop Struct Reference

Data Fields

- `float gl_linewidth`
- `int currentFileVersion`
- `double TickTime`
- `double lastTime`
- `double BrowserFPS`
- `double BrowserSpeed`
- `const char * BrowserDescription`
- `int HaveSensitive`
- `int AllowNavDrag`
- `int trisThisLoop`
- `int clipPlane`
- `int SHIFT`
- `int CTRL`
- `void * prv`
- `char * tmpFileLocation`
- `char * url`
- `char * scene_name`
- `char * scene_suff`
- `int scene_profile`
- `int * scene_components`
- `char * replaceWorldRequest`
- `void * replaceWorldRequestMulti`
- `void * _vportstack`
- `void * _stagesstack`
- `void * _framebufferstack`
- `int screenOrientation2`
- `int pickray_x`
- `int pickray_y`
- `float fieldOfView`

4.832.1 Detailed Description

Definition at line 133 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.833 iiglobal::tOpenGL_Utils Struct Reference

Data Fields

- int **displayDepth**
- int **cc_changed**
- void * **prv**

4.833.1 Detailed Description

Definition at line 199 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.834 Touch Struct Reference

Data Fields

- int **buttonState**
- int **mev**
- unsigned int **ID**
- int **inUse**
- float **angle**
- int **x**
- int **y**
- float **fx**
- float **fy**
- int **dragStart**
- int **dragEnd**
- int **windex**
- void * **stageld**
- int **rx**
- int **ry**
- int **claimant**
- int **passed**
- struct **X3D_Node** * **CursorOverSensitive**
- struct **X3D_Node** * **oldCOS**
- struct **X3D_Node** * **lastPressedOver**
- struct **X3D_Node** * **lastOver**
- int **lastOverButtonPressed**
- void * **hypersensitive**
- int **hyperhit**
- double **justModel** [16]
- struct **point_XYZ** **hp**

4.834.1 Detailed Description

Definition at line 149 of file MainLoop.c.

The documentation for this struct was generated from the following file:

- src/lib/main/MainLoop.c

4.835 iiglobal::tPluginSocket Struct Reference

Data Fields

- void * **prv**

4.835.1 Detailed Description

Definition at line 235 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.836 iiglobal::tpluginUtils Struct Reference

Data Fields

- void * **prv**

4.836.1 Detailed Description

Definition at line 238 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.837 iiglobal::tProdCon Struct Reference

Data Fields

- struct **Vector** * **viewpointNodes**
- int **currboundvpno**
- struct **X3D_Node** * **setViewpointBindInRender**
- struct **X3D_Node** * **setFogBindInRender**
- struct **X3D_Node** * **setBackgroundBindInRender**
- struct **X3D_Node** * **setNavigationBindInRender**
- void * **savedParser**
- void * **prv**

4.837.1 Detailed Description

Definition at line 166 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.838 treeNode Struct Reference

Data Fields

- void * **key**
- struct **treeNode** * **parent**
- struct **treeNode** * **left**
- struct **treeNode** * **right**

4.838.1 Detailed Description

Definition at line 36 of file searchTree.h.

The documentation for this struct was generated from the following file:

- src/libnurbs/nurbtess/searchTree.h

4.839 iiglobal::tRenderFuncs Struct Reference

Data Fields

- int **BrowserAction**
- double **hitPointDist**
- float **hyp_save_posn** [3]
- float **hyp_save_norm** [3]
- float **ray_save_posn** [3]
- void * **hypersensitive**
- int **hyperhit**
- void * **hp**
- void * **rayHit**
- int **lightingOn**
- int **have_transparency**
- int **last_texture_type**
- unsigned int **boundTextureStack** [10]
- int **textureStackTop**
- void * **texturenode**
- void * **shapenode**
- void * **prv**

4.839.1 Detailed Description

Definition at line 318 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.840 trenderstate Struct Reference

Data Fields

- int **render_sensitive**
- int **render_picking**
- int **render_vp**
- int **render_light**
- int **render_proximity**
- int **render_other**
- int **verbose**
- int **render_blend**
- int **render_geom**
- int **render_collision**
- int **render_cube**

4.840.1 Detailed Description

Definition at line 759 of file headers.h.

The documentation for this struct was generated from the following file:

- src/lib/main/headers.h

4.841 iiglobal::tRenderTextures Struct Reference

Data Fields

- void * **textureParameterStack**
- void * **prv**

4.841.1 Detailed Description

Definition at line 220 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.842 iiglobal::tresources Struct Reference

Data Fields

- void * **root_res**
- void * **prv**

4.842.1 Detailed Description

Definition at line 66 of file iiglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iiglobal.h

4.843 Trimline Class Reference

Public Member Functions

- void **init** (**TrimVertex** *)
- void **init** (long, Arc_ptr, long)
- void **getNextPt** (void)
- void **getPrevPt** (void)
- void **getNextPts** (REAL, **Backend** &)
- void **getPrevPts** (REAL, **Backend** &)
- void **getNextPts** (Arc_ptr)
- void **getPrevPts** (Arc_ptr)
- **TrimVertex** * **next** (void)
- **TrimVertex** * **prev** (void)
- **TrimVertex** * **first** (void)
- **TrimVertex** * **last** (void)

4.843.1 Detailed Description

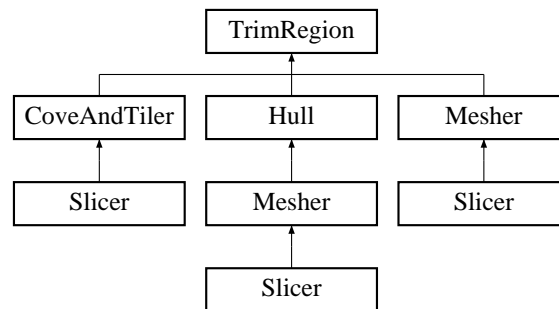
Definition at line 46 of file trimline.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/trimline.h
- src/libnurbs/internals/trimline.cc

4.844 TrimRegion Class Reference

Inheritance diagram for TrimRegion:



Public Member Functions

- void **init** (REAL)
- void **advance** (REAL, REAL, REAL)
- void **setDu** (REAL)
- void **init** (long, Arc_ptr)
- void **getPts** (Arc_ptr)
- void **getPts** (Backend &)
- void **getGridExtent** (TrimVertex *, TrimVertex *)
- void **getGridExtent** (void)
- int **canTile** (void)

Data Fields

- Trimline left
- Trimline right
- Gridline top
- Gridline bot
- Uarray uarray

4.844.1 Detailed Description

Definition at line 46 of file trimregion.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/trimregion.h
- src/libnurbs/internals/trimregion.cc

4.845 TrimVertex Class Reference

Data Fields

- REAL **param** [2]
- long **nuid**

4.845.1 Detailed Description

Definition at line 43 of file trimvertex.h.

The documentation for this class was generated from the following file:

- src/libnurbs/internals/trimvertex.h

4.846 TrimVertexPool Class Reference

Public Member Functions

- void **clear** (void)
- **TrimVertex** * **get** (int)

4.846.1 Detailed Description

Definition at line 45 of file trimvertpool.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/trimvertpool.h
- src/libnurbs/internals/trimvertpool.cc

4.847 iiglobal::tSensInterps Struct Reference

Data Fields

- void * **prv**

4.847.1 Detailed Description

Definition at line 125 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.848 iiglobal::tSnapshot Struct Reference

Data Fields

- bool **doSnapshot**
- bool **doPrintshot**
- int **snapGoodCount**
- void * **prv**

4.848.1 Detailed Description

Definition at line 98 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.849 iiglobal::tstatusbar Struct Reference

Data Fields

- void * **prv**

4.849.1 Detailed Description

Definition at line 367 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.850 iiglobal::tStreamPoly Struct Reference

Data Fields

- void * **prv**

4.850.1 Detailed Description

Definition at line 353 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.851 iiglobal::tTess Struct Reference

Data Fields

- int * **global_IFS_Coords**
- int **global_IFS_Coord_count**
- void * **global_tessobj**
- void * **prv**

4.851.1 Detailed Description

Definition at line 356 of file iiglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iiglobal.h

4.852 iiglobal::tTextures Struct Reference

Data Fields

- unsigned int * **global_tcin**
- int **global_tcin_count**
- void * **global_tcin_lastParent**
- unsigned int **defaultBlankTexture**
- void * **prv**

4.852.1 Detailed Description

Definition at line 225 of file iiglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iiglobal.h

4.853 iiglobal::tthreads Struct Reference

Data Fields

- pthread_t **disposeThread**
- pthread_t **mainThread**
- pthread_t **DispThrd**
- pthread_t **PCthread**
- pthread_t **loadThread**
- pthread_mutex_t **mutex_resource_tree**
- pthread_mutex_t **mutex_resource_list**
- pthread_cond_t **resource_list_condition**
- pthread_mutex_t **mutex_frontend_list**
- pthread_mutex_t **mutex_texture_list**
- pthread_cond_t **texture_list_condition**
- BOOL **ResourceThreadRunning**
- BOOL **TextureThreadRunning**
- BOOL **ResourceThreadWaiting**
- BOOL **TextureThreadWaiting**
- int **MainLoopQuit**
- int **flushing**
- void * **prv**

4.853.1 Detailed Description

Definition at line 71 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.854 iiglobal::tViewer Struct Reference

Data Fields

- int **stereotype**
- void * **prv**

4.854.1 Detailed Description

Definition at line 363 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.855 iiglobal::tX3DParser Struct Reference

Data Fields

- int **parentIndex**
- char * **CDATA_Text**
- int **CDATA_Text_curlen**
- void * **prv**

4.855.1 Detailed Description

Definition at line 423 of file iglobal.h.

The documentation for this struct was generated from the following file:

- src/lib/iglobal.h

4.856 Uarray Class Reference

Public Member Functions

- long **init** (REAL, Arc_ptr, Arc_ptr)

Data Fields

- `REAL * uarray`

4.856.1 Detailed Description

Definition at line 44 of file `uarray.h`.

The documentation for this class was generated from the following files:

- `src/libnurbs/internals/uarray.h`
- `src/libnurbs/internals/uarray.cc`

4.857 un1 Union Reference

Data Fields

- `int i`
- `float f`
- `void * p`

4.857.1 Detailed Description

Definition at line 2 of file `ringbuf.h`.

The documentation for this union was generated from the following file:

- `src/lib/scenegraph/ringbuf.h`

4.858 Uni_String Struct Reference

Data Fields

- `int len`
- `char * strptr`
- `int touched`
- `size_t len`

4.858.1 Detailed Description

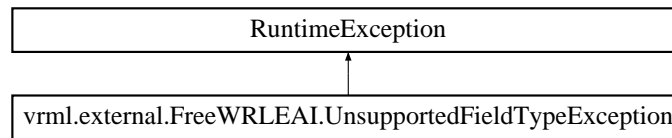
Definition at line 51 of file `Structs.h`.

The documentation for this struct was generated from the following files:

- `src/lib/vrml_parser/Structs.h`
- `src/libeai/EAI_C.h`

4.859 vrml.external.FreeWRLEAI.UnsupportedFieldTypeException Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.UnsupportedFieldTypeException:



Public Member Functions

- **UnsupportedFieldTypeException** (String str)

4.859.1 Detailed Description

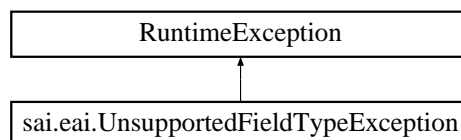
Definition at line 19 of file `UnsupportedFieldTypeException.java`.

The documentation for this class was generated from the following file:

- `src/java/vrml/external/FreeWRLEAI/UnsupportedFieldTypeException.java`

4.860 sai.eai.UnsupportedFieldTypeException Class Reference

Inheritance diagram for sai.eai.UnsupportedFieldTypeException:



Public Member Functions

- **UnsupportedFieldTypeException** (String str)

4.860.1 Detailed Description

Definition at line 19 of file `UnsupportedFieldTypeException.java`.

The documentation for this class was generated from the following file:

- `src/java/sai/eai/UnsupportedFieldTypeException.java`

4.861 unz64_file_pos_s Struct Reference

Data Fields

- ZPOS64_T **pos_in_zip_directory**
- ZPOS64_T **num_of_file**

4.861.1 Detailed Description

Definition at line 272 of file unzip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.h

4.862 unz64_s Struct Reference

Data Fields

- **zlib_filefunc64_32_def** z_filefunc
- int **is64bitOpenFunction**
- voidpf **filestream**
- **unz_global_info64** gi
- ZPOS64_T **byte_before_the_zipfile**
- ZPOS64_T **num_file**
- ZPOS64_T **pos_in_central_dir**
- ZPOS64_T **current_file_ok**
- ZPOS64_T **central_pos**
- ZPOS64_T **size_central_dir**
- ZPOS64_T **offset_central_dir**
- **unz_file_info64** cur_file_info
- **unz_file_info64_internal** cur_file_info_internal
- **file_in_zip64_read_info_s** * pfile_in_zip_read
- int **encrypted**
- int **isZip64**

4.862.1 Detailed Description

Definition at line 165 of file unzip.c.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.c

4.863 unz_file_info64_internal_s Struct Reference

Data Fields

- ZPOS64_T **offset_curfile**

4.863.1 Detailed Description

Definition at line 126 of file unzip.c.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.c

4.864 unz_file_info64_s Struct Reference

Data Fields

- uLong **version**
- uLong **version_needed**
- uLong **flag**
- uLong **compression_method**
- uLong **dosDate**
- uLong **crc**
- ZPOS64_T **compressed_size**
- ZPOS64_T **uncompressed_size**
- uLong **size_filename**
- uLong **size_file_extra**
- uLong **size_file_comment**
- uLong **disk_num_start**
- uLong **internal_fa**
- uLong **external_fa**
- tm_unz **tmu_date**

4.864.1 Detailed Description

Definition at line 111 of file unzip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.h

4.865 unz_file_info_s Struct Reference

Data Fields

- uLong **version**
- uLong **version_needed**
- uLong **flag**
- uLong **compression_method**
- uLong **dosDate**
- uLong **crc**
- uLong **compressed_size**
- uLong **uncompressed_size**
- uLong **size_filename**
- uLong **size_file_extra**
- uLong **size_file_comment**
- uLong **disk_num_start**
- uLong **internal_fa**
- uLong **external_fa**
- **tm_unz** **tmu_date**

4.865.1 Detailed Description

Definition at line 132 of file unzip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.h

4.866 unz_file_pos_s Struct Reference

Data Fields

- uLong **pos_in_zip_directory**
- uLong **num_of_file**

4.866.1 Detailed Description

Definition at line 258 of file unzip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.h

4.867 unz_global_info64_s Struct Reference

Data Fields

- ZPOS64_T **number_entry**
- uLong **size_comment**

4.867.1 Detailed Description

Definition at line 96 of file unzip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.h

4.868 unz_global_info_s Struct Reference

Data Fields

- uLong **number_entry**
- uLong **size_comment**

4.868.1 Detailed Description

Definition at line 103 of file unzip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/unzip.h

4.869 org.web3d.x3d.sai.URLUnavailableException Class Reference

Inheritance diagram for org.web3d.x3d.sai.URLUnavailableException:



Public Member Functions

- **URLUnavailableException** (String msg)

4.869.1 Detailed Description

Definition at line 3 of file URLUnavailableException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/URLUnavailableException.java

4.870 freeWRLSAI_cpp::urlUnavailableException Class Reference

Inheritance diagram for freeWRLSAI_cpp::urlUnavailableException:



Public Member Functions

- virtual const char * **what** ()

Additional Inherited Members

4.870.1 Detailed Description

Definition at line 240 of file SAexception.h.

The documentation for this class was generated from the following file:

- src/SAI_Cpp/SAexception.h

4.871 usehit Struct Reference

Data Fields

- struct **X3D_Node** * **node**
- double **mvm** [16]
- void * **userdata**

4.871.1 Detailed Description

Definition at line 83 of file RenderFuncs.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/RenderFuncs.h

4.872 Varray Class Reference

Public Member Functions

- long **init** (REAL, **Arc** *, **Arc** *)

Data Fields

- REAL * **varray**
- REAL **vval** [1000]
- long **voffset** [1000]
- long **numquads**

4.872.1 Detailed Description

Definition at line 43 of file varray.h.

The documentation for this class was generated from the following files:

- src/libnurbs/internals/varray.h
- src/libnurbs/internals/varray.cc

4.873 vec2 Struct Reference

Data Fields

- float **X**
- float **Y**

4.873.1 Detailed Description

Definition at line 2958 of file Component_Text.c.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Component_Text.c

4.874 vec4 Struct Reference

Data Fields

- float **X**
- float **Y**
- float **Z**
- float **W**

4.874.1 Detailed Description

Definition at line 722 of file MainLoop.c.

The documentation for this struct was generated from the following files:

- src/lib/main/MainLoop.c
- src/lib/scenegraph/Component_Text.c

4.875 Vector Struct Reference

Data Fields

- int **n**
- int **allocn**
- void * **data**

4.875.1 Detailed Description

Definition at line 36 of file Vector.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Vector.h

4.876 vertexArray Class Reference

Public Member Functions

- **vertexArray** (Int s)
- **vertexArray** (Real vertices[][2], Int nVertices)
- void **appendVertex** (Real *ptr)
- Real * **getVertex** (Int i)
- Real ** **getArray** ()
- Int **getNumElements** ()
- Int **findIndexAbove** (Real v)
- Int **findIndexAboveGen** (Real v, Int startIndex, Int endIndex)
- Int **findIndexBelowGen** (Real v, Int startIndex, Int endIndex)
- Int **findIndexStrictBelowGen** (Real v, Int startIndex, Int endIndex)
- Int **findIndexFirstAboveEqualGen** (Real v, Int startIndex, Int endIndex)
- Int **skipEqualityFromStart** (Real v, Int start, Int end)
- Int **findDecreaseChainFromEnd** (Int begin, Int end)
- void **print** ()

4.876.1 Detailed Description

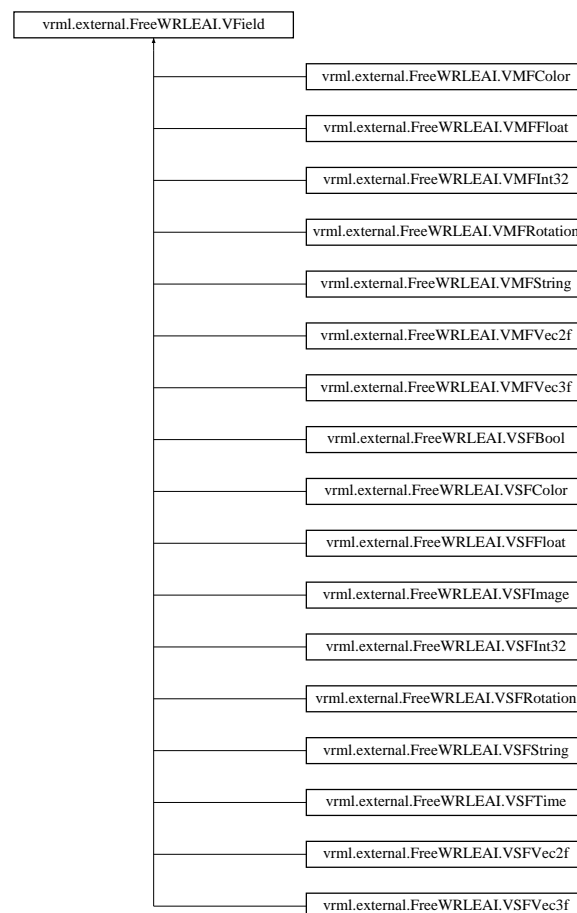
Definition at line 77 of file monoTriangulation.h.

The documentation for this class was generated from the following files:

- src/libnurbs/nurbtess/monoTriangulation.h
- src/libnurbs/nurbtess/monoTriangulation.cc

4.877 vrml.external.FreeWRLEAI.VField Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VField:



Public Member Functions

- byte **getType** ()
- abstract void **write** (DataOutputStream out) throws IOException

Static Public Attributes

- static final byte **NOTHING** = -1
- static final byte **SFBOOL** = 0
- static final byte **SFCOLOR** = 1
- static final byte **SFFLOAT** = 2
- static final byte **SFIMAGE** = 3
- static final byte **SFINT32** = 4
- static final byte **SFNODE** = 5
- static final byte **SFROTATION** = 6
- static final byte **SFSTRING** = 7
- static final byte **SFTIME** = 8
- static final byte **SFVEC2F** = 9
- static final byte **SFVEC3F** = 10
- static final byte **MFCOLOR** = 11
- static final byte **MFFLOAT** = 12
- static final byte **MFINT32** = 13
- static final byte **MFNODE** = 14
- static final byte **MFROTATION** = 15
- static final byte **MFSTRING** = 16
- static final byte **MFVEC2F** = 17
- static final byte **MFVEC3F** = 18

4.877.1 Detailed Description

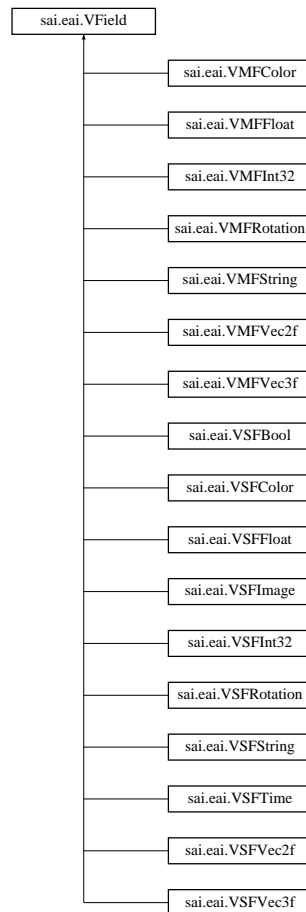
Definition at line 24 of file VField.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VField.java

4.878 sai.eai.VField Class Reference

Inheritance diagram for sai.eai.VField:



Public Member Functions

- byte **getType** ()
- abstract void **write** (DataOutputStream out) throws IOException

Static Public Attributes

- static final byte **NOTHING** = -1
- static final byte **SFBOOL** = 0
- static final byte **SFCOLOR** = 1
- static final byte **SFFLOAT** = 2
- static final byte **SFIMAGE** = 3
- static final byte **SFINT32** = 4
- static final byte **SFNODE** = 5
- static final byte **SFROTATION** = 6
- static final byte **SFSTRING** = 7
- static final byte **SFTIME** = 8
- static final byte **SFVEC2F** = 9
- static final byte **SFVEC3F** = 10
- static final byte **MFCOLOR** = 11
- static final byte **MFFLOAT** = 12
- static final byte **MFINT32** = 13
- static final byte **MFNODE** = 14
- static final byte **MFROTATION** = 15
- static final byte **MFSTRING** = 16
- static final byte **MFVEC2F** = 17
- static final byte **MFVEC3F** = 18

4.878.1 Detailed Description

Definition at line 24 of file VField.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VField.java

4.879 vid_stream Struct Reference

Data Fields

- unsigned int **h_size**
- unsigned int **v_size**
- unsigned int **mb_height**
- unsigned int **mb_width**
- unsigned char **aspect_ratio**
- unsigned char **picture_rate**
- unsigned int **bit_rate**
- unsigned int **vbv_buffer_size**
- int **const_param_flag**
- unsigned char **intra_quant_matrix** [8][8]
- unsigned char **non_intra_quant_matrix** [8][8]
- char * **ext_data**
- char * **user_data**
- **GoP** group
- **Pict** picture
- **Slice** slice
- **Macroblock** mblock
- **Block** block
- int **state**
- int **bit_offset**
- unsigned int * **buffer**
- int **buf_length**
- unsigned int * **buf_start**
- int **max_buf_length**
- int **film_has_ended**
- int **sys_layer**
- unsigned int **num_left**
- unsigned int **leftover_bytes**
- int **EOF_flag**
- FILE * **input**
- long **seekValue**
- int **swap**
- int **Parse_done**
- int **gAudioStreamID**
- int **gVideoStreamID**
- int **gReservedStreamID**
- int **right_for**
- int **down_for**
- int **right_half_for**
- int **down_half_for**

- unsigned int **curBits**
- int **matched_depth**
- char * **filename**
- int **ditherType**
- char * **ditherFlags**
- int **totNumFrames**
- double **realTimeStart**
- **PictImage** * **past**
- **PictImage** * **future**
- **PictImage** * **current**
- **PictImage** * **ring** [RING_BUF_SIZE]
- int **ppm_width**
- int **ppm_height**
- int **ppm_modulus**

4.879.1 Detailed Description

Definition at line 191 of file `mpeg_berkley.h`.

The documentation for this struct was generated from the following file:

- `src/lib/scenegraph/mpeg_berkley.h`

4.880 viewer Struct Reference

Data Fields

- struct **point_XYZ** **Pos**
- struct **point_XYZ** **AntiPos**
- struct **point_XYZ** **currentPosInModel**
- **Quaternion** **Quat**
- **Quaternion** **AntiQuat**
- **Quaternion** **bindTimeQuat**
- int **headlight**
- int **collision**
- double **speed**
- double **Dist**
- int **isStereo**
- int **isStereoB**
- int **iside**
- int **isideB**
- int **sidebyside**
- int **updown**
- int **updownB**
- int **shutterGlasses**
- int **haveQuadbuffer**
- int **anaglyph**
- int **anaglyphB**
- int **dominantEye**
- int **eitherDominantEye**
- double **stereoParameter**

- double **eyehalf**
- double **eyehalfangle**
- double **screendist**
- double **eyedist**
- int **iprog** [2]
- unsigned int **buffer**
- int **oktypes** [18]
- **X3D_Viewer_Walk** walk
- **X3D_Viewer_Examine** examine
- **X3D_Viewer_Fly** fly
- **X3D_Viewer_Spherical** ypz
- **X3D_Viewer_InPlane** inplane
- struct **point_XYZ** VPvelocity
- int **SLERPing2**
- int **SLERPing2justStarted**
- int **SLERPing**
- double **startSLERPtime**
- int **SLERPing3**
- int **type**
- int **lastType**
- int **LookatMode**
- int **transitionType**
- double **transitionTime**
- double **lasttime**
- struct **point_XYZ** startSLERPPos
- struct **point_XYZ** startSLERPAntiPos
- **Quaternion** startSLERPQuat
- **Quaternion** startSLERPAntiQuat
- **Quaternion** startSLERPbindTimeQuat
- **Quaternion** prepVPQuat
- **Quaternion** startSLERPprepVPQuat
- double **startSLERPDist**
- double **endSLERPDist**
- struct **point_XYZ** endSLERPPos
- **Quaternion** endSLERPQuat
- struct **X3D_GeoViewpoint** * GeoSpatialNode
- int **doExamineModeDistanceCalculations**
- int **ortho**
- double **orthoField** [4]
- int **screenOrientation**
- double **nearPlane**
- double **farPlane**
- double **xcenter**
- double **backgroundPlane**
- GLDOUBLE **fieldofview**
- GLDOUBLE **fovZoom**
- int **wasBound**

4.880.1 Detailed Description

Definition at line 196 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.881 viewer_examine Struct Reference

Data Fields

- struct **point_XYZ** **Origin**
- **Quaternion** **OQuat**
- **Quaternion** **SQuat**
- double **ODist**
- double **SY**

4.881.1 Detailed Description

Definition at line 153 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.882 viewer_fly Struct Reference

Data Fields

- double **Velocity** [2][3]
- **KeyHit** **down** [2][3]
- int **ndown** [2][3]
- **KeyHit** **wasDown** [2][3][10]
- double **lasttime**

4.882.1 Detailed Description

Definition at line 187 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.883 viewer_inplane Struct Reference

Data Fields

- double **x**
- double **y**
- double **xx**
- double **yy**
- int **on**
- int **ibut**

4.883.1 Detailed Description

Definition at line 167 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.884 viewer_walk Struct Reference

Data Fields

- double **SX**
- double **SY**
- double **XD**
- double **YD**
- double **ZD**
- double **RD**

4.884.1 Detailed Description

Definition at line 143 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.885 viewer_ypz Struct Reference

Data Fields

- double **ypz0** [3]
- double **ypz** [3]
- float **x**
- float **y**

4.885.1 Detailed Description

Definition at line 161 of file Viewer.h.

The documentation for this struct was generated from the following file:

- src/lib/scenegraph/Viewer.h

4.886 vrml.external.FreeWRLEAI.VIP Class Reference

Static Public Member Functions

- static String **fieldName** (short value)

Static Public Attributes

- static final short **QUIT** = -1
- static final short **MESSAGE** = -2
- static final short **ADD_OBJECT** = -3
- static final short **REMOVE_OBJECT** = -4
- static final short **PRIVATE_MESSAGE** = -5
- static final short **CREATE_OBJECT** = -6
- static final short **USER_INFO** = -7
- static final short **SELF_INFO** = -8
- static final short **SSRC** = -9
- static final short **TRANSFERREQUEST** = -10
- static final short **TRANSFERACCEPT** = -11
- static final short **TRANSFERREJECT** = -12
- static final short **TRANSFERREQUESTADD** = -13
- static final short **FILEREQUEST** = -14
- static final short **FRQRESPONSE** = -15
- static final short **POSITION** = 0
- static final short **ORIENTATION** = 1
- static final short **SCALE** = 2
- static final short **NAME** = 3
- static final short **OWNER** = 4
- static final short **PARENT** = 5
- static final short **CHILDREN** = 6
- static final short **DROPPED** = 7
- static final short **NUM_FIELDS** = 4
- static final short **MAX_GESTURES** = 10
- static final short **MAX_CHILDREN** = 50

4.886.1 Detailed Description

Definition at line 19 of file VIP.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VIP.java

4.887 sai.eai.VIP Class Reference

Static Public Member Functions

- static String **fieldName** (short value)

Static Public Attributes

- static final short **QUIT** = -1
- static final short **MESSAGE** = -2
- static final short **ADD_OBJECT** = -3
- static final short **REMOVE_OBJECT** = -4
- static final short **PRIVATE_MESSAGE** = -5
- static final short **CREATE_OBJECT** = -6
- static final short **USER_INFO** = -7
- static final short **SELF_INFO** = -8
- static final short **SSRC** = -9
- static final short **TRANSFERREQUEST** = -10
- static final short **TRANSFERACCEPT** = -11
- static final short **TRANSFERREJECT** = -12
- static final short **TRANSFERREQUESTADD** = -13
- static final short **FILEREQUEST** = -14
- static final short **FRQRESPONSE** = -15
- static final short **POSITION** = 0
- static final short **ORIENTATION** = 1
- static final short **SCALE** = 2
- static final short **NAME** = 3
- static final short **OWNER** = 4
- static final short **PARENT** = 5
- static final short **CHILDREN** = 6
- static final short **DROPPED** = 7
- static final short **NUM_FIELDS** = 4
- static final short **MAX_GESTURES** = 10
- static final short **MAX_CHILDREN** = 50

4.887.1 Detailed Description

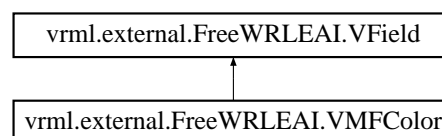
Definition at line 19 of file VIP.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VIP.java

4.888 vrml.external.FreeWRLEAI.VMFCOLOR Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VMFCOLOR:



Public Member Functions

- **VMFColor** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.888.1 Detailed Description

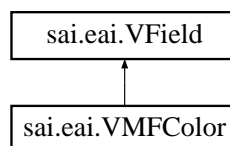
Definition at line 21 of file VMFColor.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VMFColor.java

4.889 sai.eai.VMFColor Class Reference

Inheritance diagram for sai.eai.VMFColor:



Public Member Functions

- **VMFColor** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.889.1 Detailed Description

Definition at line 21 of file VMFColor.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VMFColor.java

4.890 sai.eai.VMFFloat Class Reference

Inheritance diagram for sai.eai.VMFFloat:



Public Member Functions

- **VMFFloat** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.890.1 Detailed Description

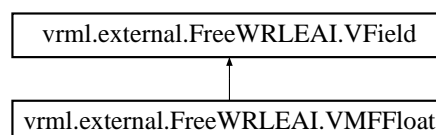
Definition at line 21 of file VMFFloat.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VMFFloat.java

4.891 vrml.external.FreeWRLEAI.VMFFloat Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VMFFloat:



Public Member Functions

- **VMFFloat** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.891.1 Detailed Description

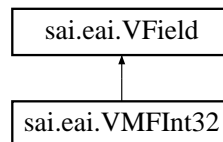
Definition at line 21 of file VMFFloat.java.

The documentation for this class was generated from the following file:

- `src/java/vrml/external/FreeWRLEAI/VMFFloat.java`

4.892 sai.eai.VMFIInt32 Class Reference

Inheritance diagram for `sai.eai.VMFIInt32`:



Public Member Functions

- **VMFIInt32** (`DataInputStream in`) throws `IOException`
- void **write** (`DataOutputStream out`) throws `IOException`
- byte **getType** ()

Additional Inherited Members

4.892.1 Detailed Description

Definition at line 21 of file VMFIInt32.java.

The documentation for this class was generated from the following file:

- `src/java/sai/eai/VMFIInt32.java`

4.893 vrml.external.FreeWRLEAI.VMFIInt32 Class Reference

Inheritance diagram for `vrml.external.FreeWRLEAI.VMFIInt32`:



Public Member Functions

- **VMFInt32** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.893.1 Detailed Description

Definition at line 21 of file VMFInt32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VMFInt32.java

4.894 sai.eai.VMFRotation Class Reference

Inheritance diagram for sai.eai.VMFRotation:



Public Member Functions

- **VMFRotation** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.894.1 Detailed Description

Definition at line 21 of file VMFRotation.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VMFRotation.java

4.895 vrml.external.FreeWRLEAI.VMFRotation Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VMFRotation:



Public Member Functions

- **VMFRotation** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.895.1 Detailed Description

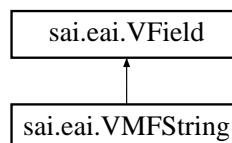
Definition at line 21 of file VMFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VMFRotation.java

4.896 sai.eai.VMFString Class Reference

Inheritance diagram for sai.eai.VMFString:



Public Member Functions

- **VMFString** (DataInputStream in) throws IOException
- **VMFString** (String[] strings)
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()
- String [] **getValue** ()
- String **get1Value** (int pos)
- String **toString** ()

Additional Inherited Members

4.896.1 Detailed Description

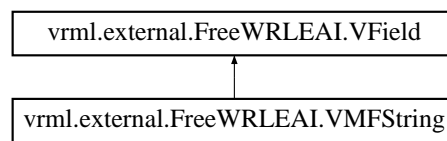
Definition at line 21 of file VMFString.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VMFString.java

4.897 vrml.external.FreeWRLEAI.VMFString Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VMFString:



Public Member Functions

- **VMFString** (DataInputStream in) throws IOException
- **VMFString** (String[] strings)
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()
- String [] **getValue** ()
- String **get1Value** (int pos)
- String **toString** ()

Additional Inherited Members

4.897.1 Detailed Description

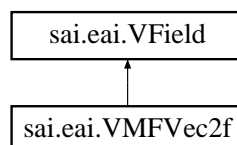
Definition at line 21 of file VMFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VMFString.java

4.898 sai.eai.VMFVec2f Class Reference

Inheritance diagram for sai.eai.VMFVec2f:



Public Member Functions

- **VMFVec2f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.898.1 Detailed Description

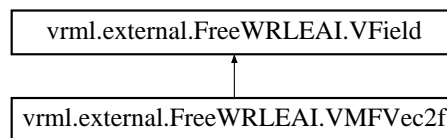
Definition at line 21 of file VMFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VMFVec2f.java

4.899 vrml.external.FreeWRLEAI.VMFVec2f Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VMFVec2f:



Public Member Functions

- **VMFVec2f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.899.1 Detailed Description

Definition at line 21 of file VMFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VMFVec2f.java

4.900 vrml.external.FreeWRLEAI.VMFVec3f Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VMFVec3f:



Public Member Functions

- **VMFVec3f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.900.1 Detailed Description

Definition at line 21 of file VMFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VMFVec3f.java

4.901 sai.eai.VMFVec3f Class Reference

Inheritance diagram for sai.eai.VMFVec3f:



Public Member Functions

- **VMFVec3f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.901.1 Detailed Description

Definition at line 21 of file VMFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VMFVec3f.java

4.902 void3 Struct Reference

Data Fields

- void * **one**
- void * **two**
- void * **three**

4.902.1 Detailed Description

Definition at line 664 of file headers.h.

The documentation for this struct was generated from the following file:

- src/lib/main/headers.h

4.903 VRMLLexer Struct Reference

Data Fields

- char * **nextIn**
- char * **startOfStringPtr** [LEXER_INPUT_STACK_MAX]
- char * **curID**
- BOOL **isEof**
- int **lexerInputLevel**
- char * **oldNextIn** [LEXER_INPUT_STACK_MAX]
- **Stack** * **userNodeNames**
- struct **Vector** * **userNodeTypesVec**
- **Stack** * **userNodeTypesStack**
- struct **Vector** * **user_initializeOnly**
- struct **Vector** * **user_inputOutput**
- struct **Vector** * **user_inputOnly**
- struct **Vector** * **user_outputOnly**

4.903.1 Detailed Description

Definition at line 50 of file CParseLexer.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseLexer.h

4.904 sai.eai.VRMLObject Class Reference

Public Member Functions

- **VRMLObject** (int id, String URL, **VRMLObjectObserver** observer)
- String [] **getFieldNames** ()
- **VField** **getField** (short field)
- void **setName** (String name)
- void **setField** (short field, **VField** value)
- String **toString** ()
- void **load** ()

Data Fields

- int **id**
- String **URL**
- **VRMLObject** **next**
- String [] **gestures**
- boolean **loaded** = false

Protected Member Functions

- void **doSetField** (short field, **VField** value)

Protected Attributes

- String **name**
- String [] **fieldNames**
- **VRMLObjectObserver** **observer**
- **VField** [] **fields**

4.904.1 Detailed Description

Definition at line 23 of file VRMLObject.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VRMLObject.java

4.905 vrml.external.FreeWRLEAI.VRMLObject Class Reference

Public Member Functions

- **VRMLObject** (int id, String URL, **VRMLObjectObserver** observer)
- String [] **getFieldNames** ()
- **VField** **getField** (short field)
- void **setName** (String name)
- void **setField** (short field, **VField** value)
- String **toString** ()
- void **load** ()

Data Fields

- int **id**
- String **URL**
- **VRMLObject** **next**
- String [] **gestures**
- boolean **loaded** = false

Protected Member Functions

- void **doSetField** (short field, **VField** value)

Protected Attributes

- String **name**
- String [] **fieldNames**
- **VRMLObjectObserver** **observer**
- **VField** [] **fields**

4.905.1 Detailed Description

Definition at line 23 of file VRMLObject.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VRMLObject.java

4.906 vrml.external.FreeWRLEAI.VRMLObjectObserver Interface Reference

Public Member Functions

- void **onClicked** (**VRMLObject** obj)
- void **onLoaded** (**VRMLObject** obj)

4.906.1 Detailed Description

Definition at line 19 of file VRMLObjectObserver.java.

The documentation for this interface was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VRMLObjectObserver.java

4.907 sai.eai.VRMLObjectObserver Interface Reference

Public Member Functions

- void **onClicked** (**VRMLObject** obj)
- void **onLoaded** (**VRMLObject** obj)

4.907.1 Detailed Description

Definition at line 19 of file VRMLObjectObserver.java.

The documentation for this interface was generated from the following file:

- src/java/sai/eai/VRMLObjectObserver.java

4.908 VRMLParser Struct Reference

Data Fields

- struct **VRMLLexer** * **lexer**
- void * **ectx**
- void * **ptr**
- unsigned **ofs**
- struct **ProtoDefinition** * **curPROTO**
- **Stack** * **DEFedNodes**
- struct **Vector** * **PROTOs**
- int **parsingX3DfromXML**
- **Stack** * **brotoDEFedNodes**

4.908.1 Detailed Description

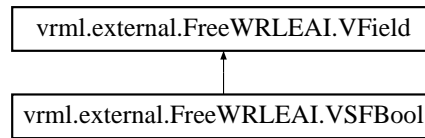
Definition at line 148 of file CParseParser.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml_parser/CParseParser.h

4.909 vrml.external.FreeWRLEAI.VSFBool Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFBool:



Public Member Functions

- **VSFBool** (boolean value)
- **VSFBool** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- boolean **getValue** ()
- byte **getType** ()

Additional Inherited Members

4.909.1 Detailed Description

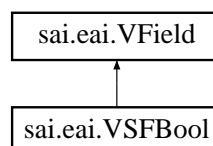
Definition at line 21 of file VSFBool.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFBool.java

4.910 sai.eai.VSFBool Class Reference

Inheritance diagram for sai.eai.VSFBool:



Public Member Functions

- **VSFBool** (boolean value)
- **VSFBool** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- boolean **getValue** ()
- byte **getType** ()

Additional Inherited Members

4.910.1 Detailed Description

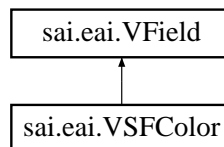
Definition at line 21 of file VSFBool.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFBool.java

4.911 sai.eai.VSFCOLOR Class Reference

Inheritance diagram for sai.eai.VSFCOLOR:



Public Member Functions

- **VSFCOLOR** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.911.1 Detailed Description

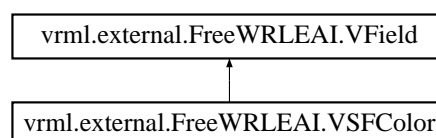
Definition at line 21 of file VSFCOLOR.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFCOLOR.java

4.912 vrml.external.FreeWRLEAI.VSFCOLOR Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFCOLOR:



Public Member Functions

- **VSFCOLOR** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.912.1 Detailed Description

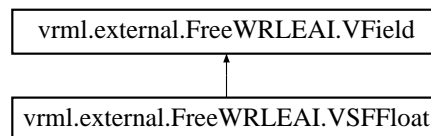
Definition at line 21 of file VSFCOLOR.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFCOLOR.java

4.913 vrml.external.FreeWRLEAI.VSFFloat Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFFloat:



Public Member Functions

- **VSFFloat** (float value) throws IOException
- **VSFFloat** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.913.1 Detailed Description

Definition at line 20 of file VSFFloat.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFFloat.java

4.914 sai.eai.VSFFloat Class Reference

Inheritance diagram for sai.eai.VSFFloat:



Public Member Functions

- **VSFFloat** (float value) throws IOException
- **VSFFloat** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.914.1 Detailed Description

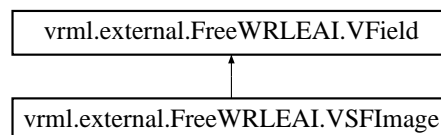
Definition at line 20 of file VSFFloat.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFFloat.java

4.915 vrml.external.FreeWRLEAI.VSFIImage Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFIImage:



Public Member Functions

- **VSFIImage** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.915.1 Detailed Description

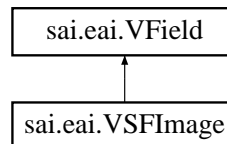
Definition at line 21 of file VSFImage.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFImage.java

4.916 sai.eai.VSFImage Class Reference

Inheritance diagram for sai.eai.VSFImage:



Public Member Functions

- **VSFImage** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.916.1 Detailed Description

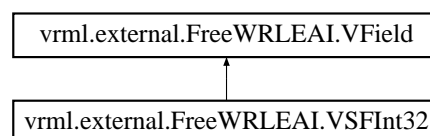
Definition at line 21 of file VSFImage.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFImage.java

4.917 vrml.external.FreeWRLEAI.VSFInt32 Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFInt32:



Public Member Functions

- **VSField32** (DataInputStream in) throws IOException
- **VSField32** (int v)
- void **write** (DataOutputStream out) throws IOException
- int **getValue** ()
- byte **getType** ()

Additional Inherited Members

4.917.1 Detailed Description

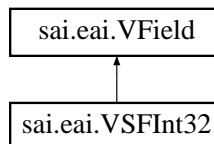
Definition at line 21 of file VSField32.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSField32.java

4.918 sai.eai.VSField32 Class Reference

Inheritance diagram for sai.eai.VSField32:



Public Member Functions

- **VSField32** (DataInputStream in) throws IOException
- **VSField32** (int v)
- void **write** (DataOutputStream out) throws IOException
- int **getValue** ()
- byte **getType** ()

Additional Inherited Members

4.918.1 Detailed Description

Definition at line 21 of file VSField32.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSField32.java

4.919 sai.eai.VSFRotation Class Reference

Inheritance diagram for sai.eai.VSFRotation:



Public Member Functions

- **VSFRotation** (float axisX, float axisY, float axisZ, float angle)
- **VSFRotation** (float[] values)
- **VSFRotation** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- String **toString** ()
- byte **getType** ()
- float[] **getValue** ()
- double **getAngle** ()

Additional Inherited Members

4.919.1 Detailed Description

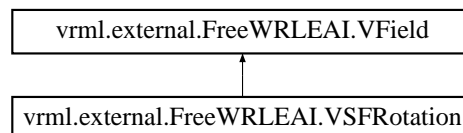
Definition at line 20 of file VSFRotation.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VsFRotation.java

4.920 vrml.external.FreeWRLEAI.VSFRotation Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFRotation:



Public Member Functions

- **VSFRotation** (float axisX, float axisY, float axisZ, float angle)
- **VSFRotation** (float[] values)
- **VSFRotation** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- String **toString** ()
- byte **getType** ()
- float[] **getValue** ()
- double **getAngle** ()

Additional Inherited Members

4.920.1 Detailed Description

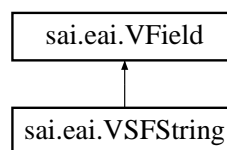
Definition at line 20 of file VSFRotation.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFRotation.java

4.921 sai.eai.VSFString Class Reference

Inheritance diagram for sai.eai.VSFString:



Public Member Functions

- **VSFString** (String s)
- **VSFString** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- String **toString** ()
- String **getValue** ()
- byte **getType** ()

Additional Inherited Members

4.921.1 Detailed Description

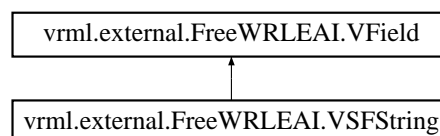
Definition at line 21 of file VSFString.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFString.java

4.922 vrml.external.FreeWRLEAI.VSFString Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFString:



Public Member Functions

- **VSFString** (String s)
- **VSFString** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- String **toString** ()
- String **getValue** ()
- byte **getType** ()

Additional Inherited Members

4.922.1 Detailed Description

Definition at line 21 of file VSFString.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFString.java

4.923 sai.eai.VSFTIME Class Reference

Inheritance diagram for sai.eai.VSFTIME:



Public Member Functions

- **VSFTIME** (double time)
- **VSFTIME** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()
- double **getValue** ()

Additional Inherited Members

4.923.1 Detailed Description

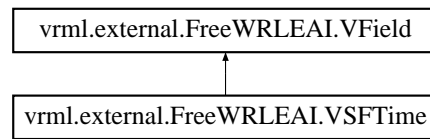
Definition at line 21 of file VSFTIME.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFTIME.java

4.924 vrml.external.FreeWRLEAI.VSFTIME Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFTIME:



Public Member Functions

- **VSFTIME** (double time)
- **VSFTIME** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()
- double **getValue** ()

Additional Inherited Members

4.924.1 Detailed Description

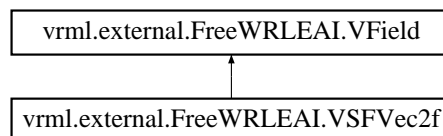
Definition at line 21 of file VSFTIME.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSTIME.java

4.925 vrml.external.FreeWRLEAI.VSFVec2f Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFVec2f:



Public Member Functions

- **VSFVec2f** (float x, float y, float z)
- **VSFVec2f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.925.1 Detailed Description

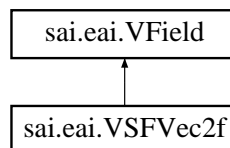
Definition at line 21 of file VSFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFVec2f.java

4.926 sai.eai.VSFVec2f Class Reference

Inheritance diagram for sai.eai.VSFVec2f:



Public Member Functions

- **VSFVec2f** (float x, float y, float z)
- **VSFVec2f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

Additional Inherited Members

4.926.1 Detailed Description

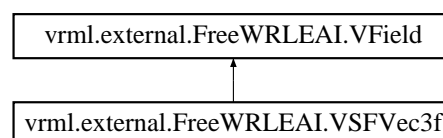
Definition at line 21 of file VSFVec2f.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFVec2f.java

4.927 vrml.external.FreeWRLEAI.VSFVec3f Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFVec3f:



Public Member Functions

- **VSFVec3f** (float x, float y, float z)
- **VSFVec3f** (float[] values)
- **VSFVec3f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- String **toString** ()
- byte **getType** ()
- float [] **getValue** ()
- **VSFVec3f plus** (VSFVec3f v)
- **VSFVec3f minus** (VSFVec3f v)
- **VSFVec3f times** (float s)
- double **getDistance** (VSFVec3f v)
- double **getAngle** (VSFVec3f v)

Additional Inherited Members

4.927.1 Detailed Description

Definition at line 19 of file VSFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VSFVec3f.java

4.928 sai.eai.VSFVec3f Class Reference

Inheritance diagram for sai.eai.VSFVec3f:



Public Member Functions

- **VSFVec3f** (float x, float y, float z)
- **VSFVec3f** (float[] values)
- **VSFVec3f** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- String **toString** ()
- byte **getType** ()
- float [] **getValue** ()
- **VSFVec3f plus** (VSFVec3f v)
- **VSFVec3f minus** (VSFVec3f v)
- **VSFVec3f times** (float s)
- double **getDistance** (VSFVec3f v)
- double **getAngle** (VSFVec3f v)

Additional Inherited Members

4.928.1 Detailed Description

Definition at line 19 of file VSFVec3f.java.

The documentation for this class was generated from the following file:

- src/java/sai/eai/VSFVec3f.java

4.929 walk_cbdata Struct Reference

Data Fields

- int(* **fkey**)(const char * **key**, int index, **cson_value** *val, void *cbdata)
- int(* **fval**)(**cson_value** *val, int index, void *cbdata)
- void * **data**
- void * **arr**
- int **arrtype**

4.929.1 Detailed Description

Definition at line 234 of file SSRServer.c.

The documentation for this struct was generated from the following file:

- src/SSR/SSRServer.c

4.930 WEB3DNATIVE Struct Reference

Data Fields

- int **fieldType**
- ```
union {
 void * native
 union anyVrml * anyvrml
};
```
- int \* **valueChanged**
- int **kind**
- char **gc**

### 4.930.1 Detailed Description

Definition at line 81 of file FWTYPE.h.

The documentation for this struct was generated from the following file:

- src/lib/world\_script/FWTYPE.h

## 4.931 X3D\_Anchor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **Uni\_String** \* **description**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **parameter**
- struct **Multi\_String** **url**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- void \* **\_parentResource**

### 4.931.1 Detailed Description

Definition at line 2603 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.932 X3D\_Appearance Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **fillProperties**
- struct **X3D\_Node** \* **lineProperties**
- struct **X3D\_Node** \* **material**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **shaders**
- struct **Multi\_Node** **effects**
- struct **X3D\_Node** \* **texture**
- struct **X3D\_Node** \* **textureTransform**

### 4.932.1 Detailed Description

Definition at line 2632 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.933 X3D\_Arc2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- float **endAngle**
- float **radius**
- float **startAngle**
- struct **Multi\_Vec2f** **\_\_points**
- int **\_\_numPoints**

### 4.933.1 Detailed Description

Definition at line 2658 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.934 X3D\_ArcClose2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **closureType**
- float **endAngle**
- float **radius**
- int **solid**
- float **startAngle**
- struct **Multi\_Vec2f** **\_\_points**
- int **\_\_numPoints**

### 4.934.1 Detailed Description

Definition at line 2682 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.935 X3D\_AudioClip Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **description**
- int **loop**
- struct **X3D\_Node** \* **metadata**
- double **pauseTime**
- float **pitch**
- double **resumeTime**
- double **startTime**
- double **stopTime**
- struct **Multi\_String** **url**
- double **duration\_changed**
- double **elapsedTime**
- int **isActive**
- int **isPaused**
- void \* **\_parentResource**
- int **\_\_loadstatus**
- void \* **\_\_loadResource**
- int **\_\_sourceNumber**
- double **\_\_inittime**
- double **\_\_lasttime**

### 4.935.1 Detailed Description

Definition at line 2708 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.936 X3D\_BackdropBackground Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- double **bindTime**
- int **isBound**
- float **transparency**
- struct **SFColor** **color**
- struct **X3D\_Node** \* **metadata**
- int **\_\_texture**
- int **\_\_VBO**
- struct **Multi\_String** **url**

### 4.936.1 Detailed Description

Definition at line 2745 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.937 X3D\_Background Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**

- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **Multi\_Float** **groundAngle**
- struct **Multi\_Color** **groundColor**
- struct **Multi\_Float** **skyAngle**
- struct **Multi\_Color** **skyColor**
- double **bindTime**
- int **isBound**
- int **\_layerId**
- void \* **\_parentResource**
- struct **Multi\_Vec3f** **\_\_points**
- struct **Multi\_Color** **\_\_colours**
- int **\_\_quadcount**
- float **transparency**
- struct **Multi\_String** **frontUrl**
- struct **Multi\_String** **backUrl**
- struct **Multi\_String** **topUrl**
- struct **Multi\_String** **bottomUrl**
- struct **Multi\_String** **leftUrl**
- struct **Multi\_String** **rightUrl**
- struct **X3D\_Node** \* **metadata**
- int **\_\_textureright**
- struct **X3D\_Node** \* **\_\_frontTexture**
- struct **X3D\_Node** \* **\_\_backTexture**
- struct **X3D\_Node** \* **\_\_topTexture**
- struct **X3D\_Node** \* **\_\_bottomTexture**
- struct **X3D\_Node** \* **\_\_leftTexture**
- struct **X3D\_Node** \* **\_\_rightTexture**
- int **\_\_VBO**

#### 4.937.1 Detailed Description

Definition at line 2772 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.938 X3D\_BallJoint Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **anchorPoint**
- struct **X3D\_Node** \* **body1**
- struct **X3D\_Node** \* **body2**
- struct **Multi\_String** **forceOutput**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **body1AnchorPoint**
- struct **SFVec3f** **body2AnchorPoint**
- void \* **\_joint**
- int **\_forceout**
- struct **SFVec3f** **\_\_old\_anchorPoint**
- struct **X3D\_Node** \* **\_\_old\_body1**
- struct **X3D\_Node** \* **\_\_old\_body2**

#### 4.938.1 Detailed Description

Definition at line 2818 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.939 X3D\_Billboard Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **SFVec3f** **axisOfRotation**
- struct **Multi\_Node** **children**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **X3D\_Node** \* **metadata**
- double **\_rotationAngle**

### 4.939.1 Detailed Description

Definition at line 2848 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.940 X3D\_BlendedVolumeStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **surfaceNormals**
- struct **X3D\_Node** \* **renderStyle**
- struct **X3D\_Node** \* **voxels**
- float **weightConstant1**
- float **weightConstant2**
- struct **Uni\_String** \* **weightFunction1**
- struct **Uni\_String** \* **weightFunction2**
- struct **X3D\_Node** \* **weightTransferFunction1**
- struct **X3D\_Node** \* **weightTransferFunction2**
- struct **Multi\_Int32\_fbohandles**
- int **\_weightFunction1**
- int **\_weightFunction2**

### 4.940.1 Detailed Description

Definition at line 2875 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.941 X3D\_BooleanFilter Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- int **inputFalse**
- int **inputNegate**
- int **inputTrue**
- struct **X3D\_Node** \* **metadata**

### 4.941.1 Detailed Description

Definition at line 2907 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.942 X3D\_BooleanSequencer Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **next**
- int **previous**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Bool** **keyValue**
- int **value\_changed**
- struct **X3D\_Node** \* **metadata**

#### 4.942.1 Detailed Description

Definition at line 2930 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.943 X3D\_BooleanToggle Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- int **toggle**
- struct **X3D\_Node** \* **metadata**

#### 4.943.1 Detailed Description

Definition at line 2955 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.944 X3D\_BooleanTrigger Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- double **set\_triggerTime**
- int **triggerTrue**
- struct **X3D\_Node** \* **metadata**

#### 4.944.1 Detailed Description

Definition at line 2976 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.945 X3D\_BoundaryEnhancementVolumeStyle Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- float **boundaryOpacity**
- float **opacityFactor**
- float **retainedOpacity**

#### 4.945.1 Detailed Description

Definition at line 2997 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.946 X3D\_BoundedPhysicsModel Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **geometry**
- struct **X3D\_Node** \* **metadata**

### 4.946.1 Detailed Description

Definition at line 3020 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.947 X3D\_Box Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **size**
- int **solid**
- struct **Multi\_Vec3f** **\_\_points**



#### 4.947.1 Detailed Description

Definition at line 3041 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.948 X3D\_CADAssembly Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **Multi\_Node** **\_sortedChildren**

#### 4.948.1 Detailed Description

Definition at line 3063 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.949 X3D\_CADFace Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **X3D\_Node** \* **shape**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

### 4.949.1 Detailed Description

Definition at line 3090 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.950 X3D\_CADLayer Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Multi\_Bool** **visible**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

### 4.950.1 Detailed Description

Definition at line 3113 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.951 X3D\_CADPart Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **SFVec3f** **center**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFRotation** **scaleOrientation**
- struct **SFVec3f** **translation**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_\_do\_center**
- int **\_\_do\_trans**
- int **\_\_do\_rotation**
- int **\_\_do\_scaleO**
- int **\_\_do\_scale**
- int **\_\_do\_anything**
- struct **Multi\_Node** **\_sortedChildren**

### 4.951.1 Detailed Description

Definition at line 3140 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.952 X3D\_CalibratedCameraSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- int **isActive**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **description**
- struct **Multi\_Int32** **image**
- struct **SFVec2f** **focalPoint**
- float **fieldOfView**
- struct **Uni\_String** \* **fovMode**
- float **aspectRatio**

### 4.952.1 Detailed Description

Definition at line 3178 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.953 X3D\_CartoonVolumeStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **surfaceNormals**
- struct **SFColorRGBA** **orthogonalColor**
- struct **SFColorRGBA** **parallelColor**
- int **colorSteps**

#### 4.953.1 Detailed Description

Definition at line 3205 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.954 X3D\_Circle2D Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- float **radius**
- struct **Multi\_Vec2f** **\_\_points**
- int **\_\_numPoints**

#### 4.954.1 Detailed Description

Definition at line 3229 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.955 X3D\_ClipPlane Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec4f** **plane**

#### 4.955.1 Detailed Description

Definition at line 3251 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.956 X3D\_CollidableOffset Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **translation**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_\_do\_trans**
- int **\_\_do\_rotation**
- struct **X3D\_Node** \* **collidable**
- void \* **\_geom**
- struct **SFRotation** **\_initialRotation**
- struct **SFVec3f** **\_initialTranslation**
- int **\_initialized**
- void \* **\_csensor**

#### 4.956.1 Detailed Description

Definition at line 3272 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.957 X3D\_CollidableShape Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **translation**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_\_do\_trans**
- int **\_\_do\_rotation**
- struct **X3D\_Node** \* **shape**
- void \* **\_geom**
- struct **SFRotation** **\_initialRotation**
- struct **SFVec3f** **\_initialTranslation**
- int **\_initialized**
- void \* **\_csensor**

### 4.957.1 Detailed Description

Definition at line 3304 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.958 X3D\_Collision Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**

- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- int **enabled**
- int **collide**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **X3D\_Node** \* **proxy**
- double **collideTime**
- struct **X3D\_Node** \* **metadata**
- int **\_\_hit**

#### 4.958.1 Detailed Description

Definition at line 3336 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.959 X3D\_CollisionCollection Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** **appliedParameters**
- float **bounce**
- struct **Multi\_Node** **collidables**
- int **enabled**
- struct **SFVec2f** **frictionCoefficients**
- struct **X3D\_Node** \* **metadata**



- float **minBounceSpeed**
- struct **SFVec2f** **slipFactors**
- float **softnessConstantForceMix**
- float **softnessErrorCorrection**
- struct **SFVec2f** **surfaceSpeed**
- void \* **\_class**
- void \* **\_csensor**
- int **\_appliedParametersMask**

#### 4.959.1 Detailed Description

Definition at line 3366 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.960 X3D\_CollisionSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **collider**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **intersections**
- struct **Multi\_Node** **contacts**
- int **isActive**

#### 4.960.1 Detailed Description

Definition at line 3398 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.961 X3D\_CollisionSpace Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **collidables**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- int **useGeometry**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- void \* **\_space**

### 4.961.1 Detailed Description

Definition at line 3422 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.962 X3D\_Color Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Color** **color**
- struct **X3D\_Node** \* **metadata**

#### 4.962.1 Detailed Description

Definition at line 3447 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.963 X3D\_ColorChaser Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- int **isActive**
- double **duration**
- double **\_bufferendtime**
- double **\_steptime**
- struct **SFColor** **value\_changed**
- struct **SFColor** **initialDestination**
- struct **SFColor** **initialValue**
- struct **SFColor** **set\_destination**
- struct **SFColor** **set\_value**
- void \* **\_buffer**
- struct **SFColor** **\_previousvalue**
- struct **SFColor** **\_destination**

#### 4.963.1 Detailed Description

Definition at line 3467 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.964 X3D\_ColorDamper Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- double **tau**
- float **tolerance**
- int **isActive**
- int **order**
- double **\_tau**
- double **\_lasttick**
- int **\_takefirstinput**
- struct **SFColor** **value\_changed**
- struct **SFColor** **initialDestination**
- struct **SFColor** **initialValue**
- struct **SFColor** **set\_destination**
- struct **SFColor** **set\_value**
- void \* **\_values**
- struct **SFColor** **\_input**

### 4.964.1 Detailed Description

Definition at line 3500 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.965 X3D\_ColorInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Color** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFColor** **value\_changed**

### 4.965.1 Detailed Description

Definition at line 3535 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.966 X3D\_ColorRGBA Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_ColorRGBA** **color**
- struct **X3D\_Node** \* **metadata**

### 4.966.1 Detailed Description

Definition at line 3558 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.967 X3D\_ComposedCubeMapTexture Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **back**
- struct **X3D\_Node** \* **bottom**
- struct **X3D\_Node** \* **front**
- struct **X3D\_Node** \* **left**
- struct **X3D\_Node** \* **top**
- struct **X3D\_Node** \* **right**
- void \* **\_parentResource**

### 4.967.1 Detailed Description

Definition at line 3578 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.968 X3D\_ComposedShader Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **activate**
- struct **Multi\_Node** parts
- int **isSelected**
- int **isValid**
- struct **Uni\_String** \* **language**
- struct **X3D\_Node** \* **metadata**
- int **\_initialized**
- struct **X3D\_Node** \* **\_shaderUserDefinedFields**
- int **\_shaderUserNumber**
- pthread\_t **\_shaderLoadThread**
- int **\_retrievedURLData**

### 4.968.1 Detailed Description

Definition at line 3604 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.969 X3D\_ComposedTexture3D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**

- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **texture**
- struct **X3D\_Node** \* **textureProperties**
- int **repeatS**
- int **repeatT**
- int **repeatR**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**

#### 4.969.1 Detailed Description

Definition at line 3633 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.970 X3D\_ComposedVolumeStyle Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **renderStyle**

#### 4.970.1 Detailed Description

Definition at line 3659 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.971 X3D\_CompositeVolumeStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **renderStyle**

### 4.971.1 Detailed Description

Definition at line 3680 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.972 X3D\_Cone Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- int **bottom**
- float **bottomRadius**
- float **height**
- int **side**
- int **solid**
- struct **Multi\_Vec3f** **\_\_sidepoints**
- struct **Multi\_Vec3f** **\_\_botpoints**
- struct **Multi\_Vec3f** **\_\_normals**
- int **\_\_coneVBO**
- int **\_\_coneTriangles**
- void \* **\_\_wireindices**

### 4.972.1 Detailed Description

Definition at line 3701 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.973 X3D\_ConeEmitter Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **angle**
- struct **SFVec3f** **direction**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **position**
- float **speed**
- float **variation**
- float **mass**
- float **surfaceArea**

### 4.973.1 Detailed Description

Definition at line 3731 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.974 X3D\_Contact Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** **appliedParameters**
- struct **X3D\_Node** \* **body1**
- struct **X3D\_Node** \* **body2**
- float **bounce**
- struct **SFVec3f** **contactNormal**
- float **depth**
- struct **SFVec2f** **frictionCoefficients**
- struct **SFVec3f** **frictionDirection**
- struct **X3D\_Node** \* **geometry1**
- struct **X3D\_Node** \* **geometry2**
- struct **X3D\_Node** \* **metadata**
- float **minBounceSpeed**
- struct **SFVec3f** **position**
- struct **SFVec2f** **slipCoefficients**
- float **softnessConstantForceMix**
- float **softnessErrorCorrection**
- struct **SFVec2f** **surfaceSpeed**
- int **\_appliedParameters**

### 4.974.1 Detailed Description

Definition at line 3757 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.975 X3D\_Contour2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**

### 4.975.1 Detailed Description

Definition at line 3793 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.976 X3D\_ContourPolyline2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2d** **controlPoint**
- struct **Multi\_Vec2f** **point**

#### 4.976.1 Detailed Description

Definition at line 3816 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.977 X3D\_Coordinate Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec3f** **point**
- struct **X3D\_Node** \* **metadata**

#### 4.977.1 Detailed Description

Definition at line 3837 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.978 X3D\_CoordinateChaser Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- int **isActive**
- double **duration**
- double **\_bufferendtime**
- double **\_steptime**
- struct **Multi\_Vec3f** **value\_changed**
- struct **Multi\_Vec3f** **initialDestination**
- struct **Multi\_Vec3f** **initialValue**
- struct **Multi\_Vec3f** **set\_destination**
- struct **Multi\_Vec3f** **set\_value**
- void \* **\_buffer**
- struct **Multi\_Vec3f** **\_previousvalue**
- struct **Multi\_Vec3f** **\_destination**

#### 4.978.1 Detailed Description

Definition at line 3857 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.979 X3D\_CoordinateDamper Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- double **tau**
- float **tolerance**

- int **isActive**
- int **order**
- double **\_tau**
- double **\_lasttick**
- int **\_takefirstinput**
- struct **Multi\_Vec3f** **value\_changed**
- struct **Multi\_Vec3f** **initialDestination**
- struct **Multi\_Vec3f** **initialValue**
- struct **Multi\_Vec3f** **set\_destination**
- struct **Multi\_Vec3f** **set\_value**
- void \* **\_values**
- struct **Multi\_Vec3f** **\_input**

#### 4.979.1 Detailed Description

Definition at line 3890 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.980 X3D\_CoordinateDouble Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3d** **point**

#### 4.980.1 Detailed Description

Definition at line 3925 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.981 X3D\_CoordinateInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec3f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3f** **value\_changed**
- int **\_GPU\_Routes\_out**
- int **\_CPU\_Routes\_out**
- int **\_keyVBO**
- int **\_keyValueVBO**

### 4.981.1 Detailed Description

Definition at line 3945 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.982 X3D\_CoordinateInterpolator2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec2f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **value\_changed**



### 4.982.1 Detailed Description

Definition at line 3972 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.983 X3D\_Cylinder Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- int **bottom**
- float **height**
- float **radius**
- int **side**
- int **solid**
- int **top**
- struct **Multi\_Vec3f** **\_\_points**
- struct **Multi\_Vec3f** **\_\_normals**
- int **\_\_cylinderVBO**
- int **\_\_cylinderTriangles**
- void \* **\_\_wireindices**

### 4.983.1 Detailed Description

Definition at line 3995 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.984 X3D\_CylinderSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **autoOffset**
- struct **SFRotation** **axisRotation**
- float **diskAngle**
- int **enabled**
- float **maxAngle**
- float **minAngle**
- float **offset**
- int **isActive**
- int **isOver**
- struct **Uni\_String** \* **description**
- struct **SFRotation** **rotation\_changed**
- struct **SFVec3f** **trackPoint\_changed**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **\_oldtrackPoint**
- struct **SFRotation** **\_oldrotation**
- struct **SFVec3f** **\_origPoint**
- float **\_radius**
- int **\_dlchange**
- int **\_\_oldEnabled**

### 4.984.1 Detailed Description

Definition at line 4025 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.985 X3D\_DirectionalLight Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **ambientIntensity**
- struct **SFColor** **color**
- struct **SFVec3f** **direction**
- int **global**
- float **intensity**
- struct **X3D\_Node** \* **metadata**
- int **on**
- struct **SFVec4f** **\_dir**
- struct **SFVec4f** **\_col**
- struct **SFVec4f** **\_amb**

### 4.985.1 Detailed Description

Definition at line 4115 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.986 X3D\_DISEntityManager Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**

- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **address**
- int **applicationID**
- struct **Multi\_Node** mapping
- struct **X3D\_Node** \* **metadata**
- int **port**
- int **siteID**
- struct **Multi\_Node** **addedEntities**
- struct **Multi\_Node** **removedEntities**

#### 4.986.1 Detailed Description

Definition at line 4062 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.987 X3D\_DISEntityTypeMapping Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- int **category**
- int **country**
- int **domain**
- int **extra**
- int **kind**
- int **specific**
- int **subcategory**

### 4.987.1 Detailed Description

Definition at line 4088 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.988 X3D\_Disk2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- float **innerRadius**
- float **outerRadius**
- int **solid**
- struct **Multi\_Vec2f** **\_\_points**
- struct **Multi\_Vec2f** **\_\_texCoords**
- int **\_\_numPoints**
- int **\_\_simpleDisk**
- void \* **\_\_wireindices**

### 4.988.1 Detailed Description

Definition at line 4143 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.989 X3D\_DoubleAxisHingeJoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **anchorPoint**
- struct **SFVec3f** **axis1**
- struct **SFVec3f** **axis2**
- struct **X3D\_Node** \* **body1**
- struct **X3D\_Node** \* **body2**
- float **desiredAngularVelocity1**
- float **desiredAngularVelocity2**
- struct **Multi\_String** **forceOutput**
- float **maxAngle1**
- float **maxTorque1**
- float **maxTorque2**
- struct **X3D\_Node** \* **metadata**
- float **minAngle1**
- float **stopBounce1**
- float **stopConstantForceMix1**
- float **stopErrorCorrection1**
- float **suspensionErrorCorrection**
- float **suspensionForce**
- struct **SFVec3f** **body1AnchorPoint**
- struct **SFVec3f** **body1Axis**
- struct **SFVec3f** **body2AnchorPoint**
- struct **SFVec3f** **body2Axis**
- float **hinge1Angle**
- float **hinge1AngleRate**
- float **hinge2Angle**
- float **hinge2AngleRate**
- void \* **\_joint**
- int **\_forceout**
- struct **SFVec3f** **\_\_old\_anchorPoint**
- struct **SFVec3f** **\_\_old\_axis1**
- struct **SFVec3f** **\_\_old\_axis2**
- struct **X3D\_Node** \* **\_\_old\_body1**
- struct **X3D\_Node** \* **\_\_old\_body2**
- void \* **\_motor1**
- void \* **\_motor2**
- float **axis1Angle**

### 4.989.1 Detailed Description

Definition at line 4170 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.990 X3D\_EaseInEaseOut Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Vec2f** **easeInEaseOut**
- struct **Multi\_Float** **key**
- struct **X3D\_Node** \* **metadata**
- float **modifiedFraction\_changed**

### 4.990.1 Detailed Description

Definition at line 4224 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.991 X3D\_EdgeEnhancementVolumeStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **surfaceNormals**
- struct **SFColorRGBA** **edgeColor**
- float **gradientThreshold**

### 4.991.1 Detailed Description

Definition at line 4247 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.992 X3D\_Effect Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **activate**
- struct **Multi\_Node** **parts**



- int **isSelected**
- int **isValid**
- struct **Uni\_String** \* **language**
- struct **X3D\_Node** \* **metadata**
- int **\_initialized**
- struct **X3D\_Node** \* **\_shaderUserDefinedFields**
- int **\_shaderUserNumber**
- pthread\_t **\_shaderLoadThread**
- int **\_retrievedURLData**

#### 4.992.1 Detailed Description

Definition at line 4270 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.993 X3D\_EffectPart Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- struct **Uni\_String** \* **type**
- int **\_\_loadstatus**
- void \* **\_parentResource**
- void \* **\_\_loadResource**
- struct **X3D\_Node** \* **\_shaderUserDefinedFields**

#### 4.993.1 Detailed Description

Definition at line 4299 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.994 X3D\_ElevationGrid Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Float** **set\_height**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- float **creaseAngle**
- struct **Multi\_Float** **height**
- int **normalPerVertex**
- int **solid**
- int **xDimension**
- float **xSpacing**
- int **zDimension**
- float **zSpacing**
- struct **Multi\_Int32** **\_coordIndex**

### 4.994.1 Detailed Description

Definition at line 4324 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.995 X3D\_EspduTransform Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- float **set\_articulationParameterValue0**
- float **set\_articulationParameterValue1**
- float **set\_articulationParameterValue2**
- float **set\_articulationParameterValue3**
- float **set\_articulationParameterValue4**
- float **set\_articulationParameterValue5**
- float **set\_articulationParameterValue6**
- float **set\_articulationParameterValue7**
- struct **Uni\_String** \* **address**
- int **applicationID**
- int **articulationParameterCount**
- struct **Multi\_Int32** **articulationParameterDesignatorArray**
- struct **Multi\_Int32** **articulationParameterChangeIndicatorArr**
- struct **Multi\_Int32** **articulationParameterIdPartAttachedToAr**
- struct **Multi\_Int32** **articulationParameterTypeArray**
- struct **Multi\_Float** **articulationParameterArray**
- struct **SFVec3f** **center**
- struct **Multi\_Node** **children**
- int **collisionType**
- int **deadReckoning**
- struct **SFVec3f** **detonationLocation**
- struct **SFVec3f** **detonationRelativeLocation**
- int **detonationResult**
- int **enabled**
- int **entityCategory**
- int **entityCountry**
- int **entityDomain**
- int **entityExtra**
- int **entityID**
- int **entityKind**
- int **entitySpecific**
- int **entitySubCategory**
- int **eventApplicationID**
- int **eventEntityID**

- int **eventNumber**
- int **eventSiteID**
- int **fired1**
- int **fired2**
- int **fireMissionIndex**
- float **firingRange**
- int **firingRate**
- int **forceID**
- int **fuse**
- struct **SFVec3f** **linearVelocity**
- struct **SFVec3f** **linearAcceleration**
- struct **Uni\_String** \* **marking**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **multicastRelayHost**
- int **multicastRelayPort**
- int **munitionApplicationID**
- struct **SFVec3f** **munitionEndPoint**
- int **munitionEntityID**
- int **munitionQuantity**
- int **munitionSiteID**
- struct **SFVec3f** **munitionStartPoint**
- struct **Uni\_String** \* **networkMode**
- int **port**
- double **readInterval**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFRotation** **scaleOrientation**
- int **siteID**
- struct **SFVec3f** **translation**
- int **warhead**
- double **writeInterval**
- float **articulationParameterValue0\_changed**
- float **articulationParameterValue1\_changed**
- float **articulationParameterValue2\_changed**
- float **articulationParameterValue3\_changed**
- float **articulationParameterValue4\_changed**
- float **articulationParameterValue5\_changed**
- float **articulationParameterValue6\_changed**
- float **articulationParameterValue7\_changed**
- double **collideTime**
- double **detonateTime**
- double **firedTime**
- int **isActive**
- int **isCollided**
- int **isDetonated**
- int **isNetworkReader**
- int **isNetworkWriter**
- int **isRtpHeaderHeard**
- int **isStandAlone**
- double **timestamp**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **rtpHeaderExpected**

### 4.995.1 Detailed Description

Definition at line 4360 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.996 X3D\_ExplosionEmitter Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **position**
- float **speed**
- float **variation**
- float **mass**
- float **surfaceArea**

### 4.996.1 Detailed Description

Definition at line 4468 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.997 X3D\_Extrusion Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec2f** **set\_crossSection**
- struct **Multi\_Rotation** **set\_orientation**
- struct **Multi\_Vec2f** **set\_scale**
- struct **Multi\_Vec3f** **set\_spine**
- struct **X3D\_Node** \* **metadata**
- int **beginCap**
- int **ccw**
- int **convex**
- float **creaseAngle**
- struct **Multi\_Vec2f** **crossSection**
- int **endCap**
- struct **Multi\_Rotation** **orientation**
- struct **Multi\_Vec2f** **scale**
- int **solid**
- struct **Multi\_Vec3f** **spine**

### 4.997.1 Detailed Description

Definition at line 4492 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.998 X3D\_FillProperties Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **filled**
- struct **SFColor** **hatchColor**
- int **hatched**
- int **hatchStyle**
- struct **X3D\_Node** \* **metadata**
- int **\_enabled**
- struct **SFVec2f** **\_hatchScale**

### 4.998.1 Detailed Description

Definition at line 4525 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.999 X3D\_FloatVertexAttribute Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Float** **value**
- struct **Uni\_String** \* **name**
- int **numComponents**
- struct **X3D\_Node** \* **metadata**

#### 4.999.1 Detailed Description

Definition at line 4550 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

### 4.1000 X3D\_Fog Struct Reference

#### Data Fields

- `int _nodeType`
- `int _renderFlags`
- `int _hit`
- `int _change`
- `int _ichange`
- `struct Vector * _parentVector`
- `double _dist`
- `float _extent [6]`
- `struct X3D_PolyRep * _intern`
- `int referenceCount`
- `int _defaultContainer`
- `void * _gc`
- `struct X3D_Node * _executionContext`
- `struct SFCOLOR color`
- `struct Uni_String * fogType`
- `float visibilityRange`
- `float __fogScale`
- `int __fogType`
- `int set_bind`
- `double bindTime`
- `int isBound`
- `int _layerId`
- `struct X3D_Node * metadata`

#### 4.1000.1 Detailed Description

Definition at line 4572 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`



## 4.1001 X3D\_FogCoordinate Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Float** **depth**
- struct **X3D\_Node** \* **metadata**

### 4.1001.1 Detailed Description

Definition at line 4600 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1002 X3D\_FontStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **family**
- int **horizontal**
- struct **Multi\_String** **justify**
- struct **Uni\_String** \* **language**
- int **leftToRight**
- float **size**
- float **spacing**
- struct **Uni\_String** \* **style**
- int **topToBottom**

#### 4.1002.1 Detailed Description

Definition at line 4620 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

### 4.1003 X3D\_ForcePhysicsModel Struct Reference

#### Data Fields

- `int _nodeType`
- `int _renderFlags`
- `int _hit`
- `int _change`
- `int _ichange`
- `struct Vector * _parentVector`
- `double _dist`
- `float _extent [6]`
- `struct X3D_PolyRep * _intern`
- `int referenceCount`
- `int _defaultContainer`
- `void * _gc`
- `struct X3D_Node * _executionContext`
- `int enabled`
- `struct SFVec3f force`
- `struct X3D_Node * metadata`

#### 4.1003.1 Detailed Description

Definition at line 4648 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

## 4.1004 X3D\_GeneratedCubeMapTexture Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**
- struct **Multi\_Node** **\_\_subTextures**
- int **\_\_regenSubTextures**
- struct **Uni\_String** \* **update**
- int **size**

### 4.1004.1 Detailed Description

Definition at line 4669 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1005 X3D\_GeoCoordinate Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3d** **point**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **Multi\_Vec3f** **\_\_movedCoords**

#### 4.1005.1 Detailed Description

Definition at line 4695 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1006 X3D\_GeoElevationGrid Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Double** **set\_height**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- float **yScale**
- int **ccw**
- int **colorPerVertex**
- double **creaseAngle**
- struct **SFVec3d** **geoGridOrigin**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- struct **Multi\_Double** **height**
- int **normalPerVertex**
- int **solid**
- int **xDimension**
- double **xSpacing**
- int **zDimension**
- double **zSpacing**
- struct **Multi\_Int32** **\_coordIndex**
- struct **Multi\_Int32** **\_\_geoSystem**

#### 4.1006.1 Detailed Description

Definition at line 4719 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1007 X3D\_GeoLocation Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **SFVec3d** **geoCoords**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **SFVec3d** **\_\_movedCoords**
- struct **SFVec4d** **\_\_localOrient**
- struct **SFVec3d** **\_\_oldgeoCoords**
- struct **Multi\_Node** **\_\_oldChildren**
- struct **Multi\_Node** **\_sortedChildren**

#### 4.1007.1 Detailed Description

Definition at line 4802 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1008 X3D\_GeoLOD Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **children**
- int **level\_changed**
- struct **SFVec3d** **center**
- struct **Multi\_String** **child1Url**
- struct **Multi\_String** **child2Url**
- struct **Multi\_String** **child3Url**
- struct **Multi\_String** **child4Url**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- float **range**
- struct **Multi\_String** **rootUrl**
- struct **Multi\_Node** **rootNode**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **SFVec3d** **\_\_movedCoords**
- int **\_\_inRange**
- struct **X3D\_Node** \* **\_\_child1Node**
- struct **X3D\_Node** \* **\_\_child2Node**
- struct **X3D\_Node** \* **\_\_child3Node**
- struct **X3D\_Node** \* **\_\_child4Node**
- struct **X3D\_Node** \* **\_\_rootUrl**
- int **\_\_childloadstatus**
- int **\_\_rooturlloadstatus**
- int **\_\_level**

### 4.1008.1 Detailed Description

Definition at line 4758 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1009 X3D\_GeoMetadata Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** data
- struct **Multi\_String** summary
- struct **Multi\_String** url
- struct **X3D\_Node** \* **metadata**

### 4.1009.1 Detailed Description

Definition at line 4836 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1010 X3D\_GeoOrigin Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3d** geoCoords
- struct **Multi\_String** geoSystem
- struct **X3D\_Node** \* **metadata**
- int **rotateYUp**
- struct **Multi\_Int32** \_\_geoSystem
- struct **SFVec3d** \_\_movedCoords
- struct **SFVec3d** \_\_oldgeoCoords
- struct **Multi\_String** \_\_oldMFString
- struct **SFVec4d** \_\_rotyup

#### 4.1010.1 Detailed Description

Definition at line 4858 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1011 X3D\_GeoPositionInterpolator Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec3d** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3d** **geovalue\_changed**
- struct **SFVec3f** **value\_changed**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **Multi\_Vec3d** **\_\_movedValue**
- struct **Multi\_Float** **\_\_oldKeyPtr**
- struct **Multi\_Vec3d** **\_\_oldKeyValuePtr**

#### 4.1011.1 Detailed Description

Definition at line 4885 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1012 X3D\_GeoProximitySensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **SFVec3d** **geoCenter**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **size**
- struct **SFVec3f** **centerOfRotation\_changed**
- double **enterTime**
- double **exitTime**
- struct **SFVec3d** **geoCoord\_changed**
- int **isActive**
- struct **SFRotation** **orientation\_changed**
- struct **SFVec3f** **position\_changed**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- int **\_\_hit**
- struct **SFVec3f** **\_\_t1**
- struct **SFRotation** **\_\_t2**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **SFVec3d** **\_\_movedCoords**
- struct **SFVec4d** **\_\_localOrient**
- int **\_\_oldEnabled**
- struct **SFVec3d** **\_\_oldGeoCenter**
- struct **SFVec3f** **\_\_oldSize**

### 4.1012.1 Detailed Description

Definition at line 4915 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1013 X3D\_GeoTouchSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **description**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **hitNormal\_changed**
- struct **SFVec3f** **hitPoint\_changed**
- struct **SFVec2f** **hitTexCoord\_changed**
- struct **SFVec3d** **hitGeoCoord\_changed**
- int **isActive**
- int **isOver**
- double **touchTime**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **SFVec3f** **\_oldhitNormal**
- struct **SFVec3f** **\_oldhitPoint**
- struct **SFVec2f** **\_oldhitTexCoord**
- int **\_\_oldEnabled**

### 4.1013.1 Detailed Description

Definition at line 4955 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1014 X3D\_GeoTransform Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **SFVec3d** **geoCenter**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFRotation** **scaleOrientation**
- struct **SFVec3f** **translation**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- int **\_\_do\_center**
- int **\_\_do\_trans**
- int **\_\_do\_rotation**
- int **\_\_do\_scaleO**
- int **\_\_do\_scale**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **SFVec3d** **\_\_movedCoords**
- struct **SFVec4d** **\_\_localOrient**
- struct **SFVec3d** **\_\_oldGeoCenter**
- struct **Multi\_Node** **\_\_oldChildren**
- struct **Multi\_Node** **\_sortedChildren**

### 4.1014.1 Detailed Description

Definition at line 4990 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1015 X3D\_GeoViewpoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- double **bindTime**
- int **isBound**
- struct **Uni\_String** \* **description**
- int **jump**
- float **fieldOfView**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **orientation**
- struct **SFVec3d** **position**
- int **\_layerId**
- int **\_donethispass**
- struct **SFRotation** **set\_orientation**
- struct **SFVec3d** **set\_position**
- int **headlight**
- struct **Multi\_String** **navType**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- float **speedFactor**
- struct **Multi\_Int32** **\_\_geoSystem**
- struct **SFVec3d** **\_\_movedPosition**
- struct **SFRotation** **\_\_movedOrientation**
- struct **Uni\_String** \* **\_\_oldSFString**
- float **\_\_oldFieldOfView**
- int **\_\_oldHeadlight**
- int **\_\_oldJump**
- struct **Multi\_String** **\_\_oldMFString**

### 4.1015.1 Detailed Description

Definition at line 5033 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1016 X3D\_Group Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **Multi\_Node** **\_sortedChildren**

### 4.1016.1 Detailed Description

Definition at line 5077 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1017 X3D\_HAnimDisplacer Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **coordIndex**
- struct **Multi\_Vec3f** **displacements**
- struct **Uni\_String** \* **name**
- float **weight**
- struct **X3D\_Node** \* **metadata**

#### 4.1017.1 Detailed Description

Definition at line 5103 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1018 X3D\_HAnimHumanoid Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **center**
- struct **Multi\_String** **info**
- struct **Multi\_Node** **joints**
- struct **Uni\_String** \* **name**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFRotation** **scaleOrientation**
- struct **Multi\_Node** **segments**
- struct **Multi\_Node** **sites**
- struct **Multi\_Node** **skeleton**
- struct **Multi\_Node** **skin**
- struct **X3D\_Node** \* **skinCoord**
- struct **X3D\_Node** \* **skinNormal**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **SFVec3f** **translation**
- struct **Uni\_String** \* **version**
- struct **Multi\_Node** **viewpoints**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **X3D\_Node** \* **metadata**
- void \* **\_JT**
- void \* **\_PVI**
- void \* **\_PVW**
- int **\_NV**
- void \* **\_origCoords**
- void \* **\_origNorms**

### 4.1018.1 Detailed Description

Definition at line 5126 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1019 X3D\_HAnimJoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **SFVec3f** **center**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFRotation** **scaleOrientation**
- struct **SFVec3f** **translation**
- struct **Multi\_Node** **displacers**
- struct **SFRotation** **limitOrientation**
- struct **Multi\_Float** **llimit**
- struct **Uni\_String** \* **name**
- struct **Multi\_Int32** **skinCoordIndex**
- struct **Multi\_Float** **skinCoordWeight**
- struct **Multi\_Float** **stiffness**
- struct **Multi\_Float** **ulimit**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **X3D\_Node** \* **metadata**
- int **\_\_do\_center**
- int **\_\_do\_trans**
- int **\_\_do\_rotation**
- int **\_\_do\_scaleO**
- int **\_\_do\_scale**
- int **\_\_do\_anything**

### 4.1019.1 Detailed Description

Definition at line 5170 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1020 X3D\_HAnimSegment Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **Uni\_String** \* **name**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **SFVec3f** **centerOfMass**
- struct **X3D\_Node** \* **coord**
- struct **Multi\_Node** **displacers**
- float **mass**
- struct **Multi\_Float** **momentsOfInertia**
- struct **X3D\_Node** \* **metadata**
- void \* **\_origCoords**

### 4.1020.1 Detailed Description

Definition at line 5214 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1021 X3D\_HAnimSite Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **Uni\_String** \* **name**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **SFVec3f** **center**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFRotation** **scaleOrientation**
- struct **SFVec3f** **translation**
- struct **X3D\_Node** \* **metadata**
- int **\_\_do\_center**
- int **\_\_do\_trans**
- int **\_\_do\_rotation**
- int **\_\_do\_scaleO**
- int **\_\_do\_scale**
- int **\_\_do\_anything**

### 4.1021.1 Detailed Description

Definition at line 5246 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1022 X3D\_ImageBackdropBackground Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- double **bindTime**
- int **isBound**
- float **transparency**
- struct **SFColor** **color**
- struct **X3D\_Node** \* **metadata**
- int **\_\_texture**
- int **\_\_VBO**
- struct **Multi\_Int32** **image**

### 4.1022.1 Detailed Description

Definition at line 5283 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1023 X3D\_ImageCubeMapTexture Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**

- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**
- struct **Multi\_Node** **\_\_subTextures**
- int **\_\_regenSubTextures**
- struct **Multi\_String** **url**

#### 4.1023.1 Detailed Description

Definition at line 5310 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1024 X3D\_ImageTexture Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- int **repeatS**
- int **repeatT**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**

#### 4.1024.1 Detailed Description

Definition at line 5335 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1025 X3D\_ImageTexture3D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- int **repeatS**
- int **repeatT**
- int **repeatR**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**
- int **\_needs\_gradient**

### 4.1025.1 Detailed Description

Definition at line 5360 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1026 X3D\_IndexedFaceSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**

- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_colorIndex**
- struct **Multi\_Int32** **set\_coordIndex**
- struct **Multi\_Int32** **set\_normalIndex**
- struct **Multi\_Int32** **set\_texCoordIndex**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- struct **Multi\_Int32** **colorIndex**
- int **colorPerVertex**
- int **convex**
- struct **Multi\_Int32** **coordIndex**
- float **creaseAngle**
- struct **Multi\_Int32** **normalIndex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **texCoordIndex**

#### 4.1026.1 Detailed Description

Definition at line 5387 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1027 X3D\_IndexedLineSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_colorIndex**
- struct **Multi\_Int32** **set\_coordIndex**

- struct **Multi\_Node** attrib
- struct **X3D\_Node** \* color
- struct **X3D\_Node** \* coord
- struct **X3D\_Node** \* fogCoord
- struct **X3D\_Node** \* metadata
- struct **Multi\_Int32** colorIndex
- int colorPerVertex
- struct **Multi\_Int32** coordIndex
- void \* \_\_vertArr
- void \* \_\_vertIndx
- void \* \_\_xcolours
- void \* \_\_vertices
- void \* \_\_vertexCount
- int \_\_segCount

#### 4.1027.1 Detailed Description

Definition at line 5426 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1028 X3D\_IndexedQuadSet Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_index**
- struct **Multi\_Node** attrib
- struct **X3D\_Node** \* color
- struct **X3D\_Node** \* coord
- struct **X3D\_Node** \* fogCoord
- struct **X3D\_Node** \* metadata
- struct **X3D\_Node** \* normal
- struct **X3D\_Node** \* texCoord
- int **ccw**
- struct **Multi\_Int32** **index**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **\_coordIndex**

#### 4.1028.1 Detailed Description

Definition at line 5460 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1029 X3D\_IndexedTriangleFanSet Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_index**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **index**
- struct **Multi\_Int32** **\_coordIndex**

#### 4.1029.1 Detailed Description

Definition at line 5492 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1030 X3D\_IndexedTriangleSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_index**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **index**
- struct **Multi\_Int32** **\_coordIndex**

### 4.1030.1 Detailed Description

Definition at line 5524 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1031 X3D\_IndexedTriangleStripSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**



- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_index**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **index**
- struct **Multi\_Int32** **\_coordIndex**

#### 4.1031.1 Detailed Description

Definition at line 5556 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1032 X3D\_Inline Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **\_\_children**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

- struct **Multi\_Node\_sortedChildren**
- struct **Multi\_Node\_addChildren**
- struct **Multi\_Node\_removeChildren**
- struct **Multi\_Node\_\_sibAffectors**
- void \* **\_\_protoDeclares**
- void \* **\_\_externProtoDeclares**
- void \* **\_\_nodes**
- void \* **\_\_subcontexts**
- void \* **\_\_GC**
- void \* **\_\_protoDef**
- int **\_\_protoFlags**
- struct **X3D\_Node** \* **\_\_prototype**
- struct **X3D\_Node** \* **\_\_parentProto**
- void \* **\_\_ROUTES**
- void \* **\_\_EXPORTS**
- void \* **\_\_IMPORTS**
- void \* **\_\_DEFnames**
- void \* **\_\_IS**
- void \* **\_\_scripts**
- struct **Multi\_String** **url**
- struct **Multi\_String** **\_\_oldurl**
- void \* **\_\_afterPound**
- int **\_\_loadstatus**
- void \* **\_parentResource**
- void \* **\_\_loadResource**
- void \* **\_\_typename**
- int **load**
- int **\_\_oldload**

#### 4.1032.1 Detailed Description

Definition at line 5588 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1033 X3D\_IntegerSequencer Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**

- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **next**
- int **previous**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Int32** **keyValue**
- int **value\_changed**
- struct **X3D\_Node** \* **metadata**

#### 4.1033.1 Detailed Description

Definition at line 5638 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1034 X3D\_IntegerTrigger Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- int **integerKey**
- int **triggerValue**
- struct **X3D\_Node** \* **metadata**

#### 4.1034.1 Detailed Description

Definition at line 5663 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1035 X3D\_IsoSurfaceVolumeData Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **dimensions**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **voxels**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- void \* **\_boxtris**
- struct **Multi\_Node** **renderStyle**
- float **contourStepSize**
- struct **X3D\_Node** \* **gradients**
- float **surfaceTolerance**
- struct **Multi\_Float** **surfaceValues**

### 4.1035.1 Detailed Description

Definition at line 5685 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1036 X3D\_KeySensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**

- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- int **actionKeyPress**
- int **actionKeyRelease**
- int **altKey**
- int **controlKey**
- int **isActive**
- struct **Uni\_String** \* **keyPress**
- struct **Uni\_String** \* **keyRelease**
- int **shiftKey**
- struct **X3D\_Node** \* **metadata**
- int **\_\_oldEnabled**

#### 4.1036.1 Detailed Description

Definition at line 5714 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1037 X3D\_Layer Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- int **isPickable**
- struct **X3D\_Node** \* **viewport**

#### 4.1037.1 Detailed Description

Definition at line 5775 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1038 X3D\_LayerSet Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **activeLayer**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **layers**
- struct **Multi\_Int32** **order**

#### 4.1038.1 Detailed Description

Definition at line 5800 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1039 X3D\_Layout Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** align
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Float** offset
- struct **Multi\_String** offsetUnits
- struct **Multi\_String** scaleMode
- struct **Multi\_Float** size
- struct **Multi\_String** sizeUnits
- struct **Multi\_Int32** \_align
- struct **Multi\_Int32** \_offsetUnits
- struct **Multi\_Int32** \_scaleMode
- struct **Multi\_Int32** \_sizeUnits
- struct **Multi\_Float** \_scale

### 4.1039.1 Detailed Description

Definition at line 5822 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1040 X3D\_LayoutGroup Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **X3D\_Node** \* **layout**
- struct **X3D\_Node** \* **viewport**

#### 4.1040.1 Detailed Description

Definition at line 5852 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1041 X3D\_LayoutLayer Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- int **isPickable**
- struct **X3D\_Node** \* **viewport**
- struct **X3D\_Node** \* **layout**



#### 4.1041.1 Detailed Description

Definition at line 5879 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1042 X3D\_LinePickSensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **objectType**
- struct **X3D\_Node** \* **pickingGeometry**
- struct **Multi\_Node** **pickTarget**
- int **isActive**
- struct **Multi\_Node** **pickedGeometry**
- struct **Uni\_String** \* **intersectionType**
- struct **Uni\_String** \* **sortOrder**
- struct **Uni\_String** \* **matchCriterion**
- int **\_\_oldEnabled**
- struct **Multi\_Vec3f** **pickedPoint**
- struct **Multi\_Vec3f** **pickedNormal**
- struct **Multi\_Vec3f** **pickedTextureCoordinate**

#### 4.1042.1 Detailed Description

Definition at line 5905 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1043 X3D\_LineProperties Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **applied**
- int **linetype**
- float **linewidthScaleFactor**
- struct **X3D\_Node** \* **metadata**

### 4.1043.1 Detailed Description

Definition at line 5937 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1044 X3D\_LineSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **autoOffset**
- struct **SFVec3f** **direction**
- int **enabled**

- float **maxPosition**
- float **minPosition**
- float **offset**
- int **isActive**
- int **isOver**
- struct **Uni\_String** \* **description**
- struct **SFVec3f** **trackPoint\_changed**
- struct **SFVec3f** **translation\_changed**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **\_oldtrackPoint**
- struct **SFVec3f** **\_oldtranslation**
- struct **SFVec3f** **\_origPoint**
- int **\_\_oldEnabled**

#### 4.1044.1 Detailed Description

Definition at line 5959 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1045 X3D\_LineSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **fogCoord**
- struct **Multi\_Int32** **vertexCount**
- void \* **\_\_vertArr**
- void \* **\_\_vertIndx**
- int **\_\_segCount**

#### 4.1045.1 Detailed Description

Definition at line 5993 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1046 X3D\_LoadSensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- double **timeOut**
- struct **Multi\_Node** **watchList**
- int **isActive**
- int **isLoaded**
- double **loadTime**
- float **progress**
- int **\_\_loading**
- int **\_\_finishedloading**
- double **\_\_StartLoadTime**
- int **\_\_oldEnabled**

#### 4.1046.1 Detailed Description

Definition at line 6020 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1047 X3D\_LocalFog Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFColor** **color**
- struct **Uni\_String** \* **fogType**
- float **visibilityRange**
- float **\_\_fogScale**
- int **\_\_fogType**
- int **enabled**
- struct **X3D\_Node** \* **metadata**

### 4.1047.1 Detailed Description

Definition at line 6050 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1048 X3D\_LOD Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**

- struct **Multi\_Node** addChildren
- struct **Multi\_Node** removeChildren
- struct **Multi\_Node** \_\_sibAffectors
- struct **Multi\_Node** level
- struct **Multi\_Node** children
- struct **SFVec3f** center
- struct **Multi\_Float** range
- struct **SFVec3f** bboxCenter
- struct **SFVec3f** bboxSize
- struct **X3D\_Node** \* metadata
- int levelChanged
- int forceTransitions
- int \_\_isX3D
- void \* \_\_selected

#### 4.1048.1 Detailed Description

Definition at line 5743 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1049 X3D\_Material Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **ambientIntensity**
- struct **SFColor** **diffuseColor**
- struct **SFColor** **emissiveColor**
- struct **X3D\_Node** \* **metadata**
- float **shininess**
- struct **SFColor** **specularColor**
- float **transparency**
- struct **Multi\_Float** **\_verifiedColor**

#### 4.1049.1 Detailed Description

Definition at line 6075 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1050 X3D\_Matrix3VertexAttribute Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix3f** value
- struct **Uni\_String** \* **name**
- struct **X3D\_Node** \* **metadata**

#### 4.1050.1 Detailed Description

Definition at line 6101 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1051 X3D\_Matrix4VertexAttribute Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Matrix4f** value
- struct **Uni\_String** \* **name**

#### 4.1051.1 Detailed Description

Definition at line 6122 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1052 X3D\_MetadataBoolean Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Bool** value

#### 4.1052.1 Detailed Description

Definition at line 6143 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1053 X3D\_MetadataDouble Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Double** value

### 4.1053.1 Detailed Description

Definition at line 6165 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1054 X3D\_MetadataFloat Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Float** value

#### 4.1054.1 Detailed Description

Definition at line 6187 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1055 X3D\_MetadataInteger Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Int32** value

#### 4.1055.1 Detailed Description

Definition at line 6209 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1056 X3D\_MetadataMFBool Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Bool** value
- struct **Multi\_Bool** valueChanged
- struct **Multi\_Bool** setValue
- double **tickTime**

### 4.1056.1 Detailed Description

Definition at line 6231 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1057 X3D\_MetadataMFColor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Color** value
- struct **Multi\_Color** valueChanged
- struct **Multi\_Color** setValue
- double **tickTime**

#### 4.1057.1 Detailed Description

Definition at line 6253 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1058 X3D\_MetadataMFCOLORRGBA Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_ColorRGBA** value
- struct **Multi\_ColorRGBA** valueChanged
- struct **Multi\_ColorRGBA** setValue
- double **tickTime**

#### 4.1058.1 Detailed Description

Definition at line 6275 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1059 X3D\_MetadataMFDouble Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Double** **value**
- struct **Multi\_Double** **valueChanged**
- struct **Multi\_Double** **setValue**
- double **tickTime**

### 4.1059.1 Detailed Description

Definition at line 6297 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1060 X3D\_MetadataMFFloat Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Float** **value**
- struct **Multi\_Float** **valueChanged**
- struct **Multi\_Float** **setValue**
- double **tickTime**

#### 4.1060.1 Detailed Description

Definition at line 6319 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1061 X3D\_MetadataMFloat32 Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** value
- struct **Multi\_Int32** valueChanged
- struct **Multi\_Int32** setValue
- double **tickTime**

#### 4.1061.1 Detailed Description

Definition at line 6341 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1062 X3D\_MetadataMFMatrix3d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix3d** value
- struct **Multi\_Matrix3d** valueChanged
- struct **Multi\_Matrix3d** setValue
- double **tickTime**

### 4.1062.1 Detailed Description

Definition at line 6363 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1063 X3D\_MetadataMFMatrix3f Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix3f** value
- struct **Multi\_Matrix3f** valueChanged
- struct **Multi\_Matrix3f** setValue
- double **tickTime**

#### 4.1063.1 Detailed Description

Definition at line 6385 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1064 X3D\_MetadataMFMatrix4d Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix4d** value
- struct **Multi\_Matrix4d** valueChanged
- struct **Multi\_Matrix4d** setValue
- double **tickTime**

#### 4.1064.1 Detailed Description

Definition at line 6407 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1065 X3D\_MetadataMFMatrix4f Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix4f** value
- struct **Multi\_Matrix4f** valueChanged
- struct **Multi\_Matrix4f** setValue
- double **tickTime**

### 4.1065.1 Detailed Description

Definition at line 6429 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1066 X3D\_MetadataMFNode Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** value
- struct **Multi\_Node** valueChanged
- struct **Multi\_Node** setValue
- double **tickTime**

#### 4.1066.1 Detailed Description

Definition at line 6451 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1067 X3D\_MetadataMFRotation Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Rotation** value
- struct **Multi\_Rotation** valueChanged
- struct **Multi\_Rotation** setValue
- double **tickTime**

#### 4.1067.1 Detailed Description

Definition at line 6473 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1068 X3D\_MetadataMFString Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** value
- struct **Multi\_String** valueChanged
- struct **Multi\_String** setValue
- double **tickTime**

### 4.1068.1 Detailed Description

Definition at line 6495 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1069 X3D\_MetadataMFTime Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Time** value
- struct **Multi\_Time** valueChanged
- struct **Multi\_Time** setValue
- double **tickTime**

#### 4.1069.1 Detailed Description

Definition at line 6517 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1070 X3D\_MetadataMFVec2d Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec2d** value
- struct **Multi\_Vec2d** valueChanged
- struct **Multi\_Vec2d** setValue
- double **tickTime**

#### 4.1070.1 Detailed Description

Definition at line 6539 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1071 X3D\_MetadataMFVec2f Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec2f** value
- struct **Multi\_Vec2f** valueChanged
- struct **Multi\_Vec2f** setValue
- double **tickTime**

### 4.1071.1 Detailed Description

Definition at line 6561 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1072 X3D\_MetadataMFVec3d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec3d** value
- struct **Multi\_Vec3d** valueChanged
- struct **Multi\_Vec3d** setValue
- double **tickTime**

#### 4.1072.1 Detailed Description

Definition at line 6583 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1073 X3D\_MetadataMFVec3f Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec3f** value
- struct **Multi\_Vec3f** valueChanged
- struct **Multi\_Vec3f** setValue
- double **tickTime**

#### 4.1073.1 Detailed Description

Definition at line 6605 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1074 X3D\_MetadataMFVec4d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec4d** value
- struct **Multi\_Vec4d** valueChanged
- struct **Multi\_Vec4d** setValue
- double **tickTime**

### 4.1074.1 Detailed Description

Definition at line 6627 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1075 X3D\_MetadataMFVec4f Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec4f** value
- struct **Multi\_Vec4f** valueChanged
- struct **Multi\_Vec4f** setValue
- double **tickTime**

#### 4.1075.1 Detailed Description

Definition at line 6649 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1076 X3D\_MetadataSet Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Node** **value**

#### 4.1076.1 Detailed Description

Definition at line 7133 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1077 X3D\_MetadataSFBool Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **value**
- int **valueChanged**
- int **setValue**
- double **tickTime**

### 4.1077.1 Detailed Description

Definition at line 6671 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1078 X3D\_MetadataSFColor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFColor** **value**
- struct **SFColor** **valueChanged**
- struct **SFColor** **setValue**
- double **tickTime**

#### 4.1078.1 Detailed Description

Definition at line 6693 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

### 4.1079 X3D\_MetadataSFCOLORRGBA Struct Reference

#### Data Fields

- `int _nodeType`
- `int _renderFlags`
- `int _hit`
- `int _change`
- `int _ichange`
- `struct Vector * _parentVector`
- `double _dist`
- `float _extent [6]`
- `struct X3D_PolyRep * _intern`
- `int referenceCount`
- `int _defaultContainer`
- `void * _gc`
- `struct X3D_Node * _executionContext`
- `struct SFCOLORRGBA value`
- `struct SFCOLORRGBA valueChanged`
- `struct SFCOLORRGBA setValue`
- `double tickTime`

#### 4.1079.1 Detailed Description

Definition at line 6715 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

## 4.1080 X3D\_MetadataSFDouble Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- double **value**
- double **valueChanged**
- double **setValue**
- double **tickTime**

### 4.1080.1 Detailed Description

Definition at line 6737 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1081 X3D\_MetadataSFFloat Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **value**
- float **valueChanged**
- float **setValue**
- double **tickTime**

#### 4.1081.1 Detailed Description

Definition at line 6759 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1082 X3D\_MetadataSfImage Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **value**
- struct **Multi\_Int32** **valueChanged**
- struct **Multi\_Int32** **setValue**
- double **tickTime**

#### 4.1082.1 Detailed Description

Definition at line 6781 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1083 X3D\_MetadataSFInt32 Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **value**
- int **valueChanged**
- int **setValue**
- double **tickTime**

### 4.1083.1 Detailed Description

Definition at line 6803 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1084 X3D\_MetadataSFMatrix3d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFMatrix3d** **value**
- struct **SFMatrix3d** **valueChanged**
- struct **SFMatrix3d** **setValue**
- double **tickTime**

#### 4.1084.1 Detailed Description

Definition at line 6825 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1085 X3D\_MetadataSfMatrix3f Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SfMatrix3f** **value**
- struct **SfMatrix3f** **valueChanged**
- struct **SfMatrix3f** **setValue**
- double **tickTime**

#### 4.1085.1 Detailed Description

Definition at line 6847 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1086 X3D\_MetadataSFMatrix4d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFMatrix4d** **value**
- struct **SFMatrix4d** **valueChanged**
- struct **SFMatrix4d** **setValue**
- double **tickTime**

### 4.1086.1 Detailed Description

Definition at line 6869 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1087 X3D\_MetadataSFMatrix4f Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFMatrix4f** **value**
- struct **SFMatrix4f** **valueChanged**
- struct **SFMatrix4f** **setValue**
- double **tickTime**

#### 4.1087.1 Detailed Description

Definition at line 6891 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1088 X3D\_MetadataSFNode Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **value**
- struct **X3D\_Node** \* **valueChanged**
- struct **X3D\_Node** \* **setValue**
- double **tickTime**

#### 4.1088.1 Detailed Description

Definition at line 6913 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1089 X3D\_MetadataSFRotation Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFRotation** value
- struct **SFRotation** valueChanged
- struct **SFRotation** setValue
- double **tickTime**

### 4.1089.1 Detailed Description

Definition at line 6935 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1090 X3D\_MetadataSFString Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **value**
- struct **Uni\_String** \* **valueChanged**
- struct **Uni\_String** \* **setValue**
- double **tickTime**

#### 4.1090.1 Detailed Description

Definition at line 6957 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1091 X3D\_MetadataSFTIME Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- double **value**
- double **valueChanged**
- double **setValue**
- double **tickTime**

#### 4.1091.1 Detailed Description

Definition at line 6979 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1092 X3D\_MetadataSFVec2d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec2d** **value**
- struct **SFVec2d** **valueChanged**
- struct **SFVec2d** **setValue**
- double **tickTime**

### 4.1092.1 Detailed Description

Definition at line 7001 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1093 X3D\_MetadataSFVec2f Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec2f** **value**
- struct **SFVec2f** **valueChanged**
- struct **SFVec2f** **setValue**
- double **tickTime**

#### 4.1093.1 Detailed Description

Definition at line 7023 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

### 4.1094 X3D\_MetadataSFVec3d Struct Reference

#### Data Fields

- `int _nodeType`
- `int _renderFlags`
- `int _hit`
- `int _change`
- `int _ichange`
- `struct Vector * _parentVector`
- `double _dist`
- `float _extent [6]`
- `struct X3D_PolyRep * _intern`
- `int referenceCount`
- `int _defaultContainer`
- `void * _gc`
- `struct X3D_Node * _executionContext`
- `struct SFVec3d value`
- `struct SFVec3d valueChanged`
- `struct SFVec3d setValue`
- `double tickTime`

#### 4.1094.1 Detailed Description

Definition at line 7045 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

## 4.1095 X3D\_MetadataSFVec3f Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **value**
- struct **SFVec3f** **valueChanged**
- struct **SFVec3f** **setValue**
- double **tickTime**

### 4.1095.1 Detailed Description

Definition at line 7067 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1096 X3D\_MetadataSFVec4d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec4d** **value**
- struct **SFVec4d** **valueChanged**
- struct **SFVec4d** **setValue**
- double **tickTime**

#### 4.1096.1 Detailed Description

Definition at line 7089 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

#### 4.1097 X3D\_MetadataSFVec4f Struct Reference

##### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec4f** **value**
- struct **SFVec4f** **valueChanged**
- struct **SFVec4f** **setValue**
- double **tickTime**

#### 4.1097.1 Detailed Description

Definition at line 7111 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1098 X3D\_MetadataString Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_String** value

### 4.1098.1 Detailed Description

Definition at line 7155 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1099 X3D\_MotorJoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **axis1Angle**
- float **axis1Torque**
- float **axis2Angle**

- float **axis2Torque**
- float **axis3Angle**
- float **axis3Torque**
- struct **X3D\_Node \* body1**
- struct **X3D\_Node \* body2**
- int **enabledAxes**
- struct **Multi\_String forceOutput**
- struct **X3D\_Node \* metadata**
- struct **SFVec3f motor1Axis**
- struct **SFVec3f motor2Axis**
- struct **SFVec3f motor3Axis**
- float **stop1Bounce**
- float **stop1ErrorCorrection**
- float **stop2Bounce**
- float **stop2ErrorCorrection**
- float **stop3Bounce**
- float **stop3ErrorCorrection**
- float **motor1Angle**
- float **motor1AngleRate**
- float **motor2Angle**
- float **motor2AngleRate**
- float **motor3Angle**
- float **motor3AngleRate**
- int **autoCalc**
- void \* **\_joint**
- int **\_forceout**
- struct **SFVec3f \_\_old\_motor1Axis**
- struct **SFVec3f \_\_old\_motor2Axis**
- struct **SFVec3f \_\_old\_motor3Axis**
- struct **X3D\_Node \* \_\_old\_body1**
- struct **X3D\_Node \* \_\_old\_body2**
- float **\_\_old\_axis1Angle**
- float **\_\_old\_axis2Angle**
- float **\_\_old\_axis3Angle**

#### 4.1099.1 Detailed Description

Definition at line 7177 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1100 X3D\_MovieTexture Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **description**
- int **loop**
- struct **X3D\_Node** \* **metadata**
- double **pauseTime**
- float **pitch**
- double **resumeTime**
- double **startTime**
- double **stopTime**
- struct **Multi\_String** **url**
- double **duration\_changed**
- double **elapsedTime**
- int **isActive**
- int **isPaused**
- void \* **\_parentResource**
- int **\_\_loadstatus**
- void \* **\_\_loadResource**
- int **\_\_sourceNumber**
- double **\_\_inittime**
- double **\_\_lasttime**
- int **repeatS**
- int **repeatT**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- float **speed**
- float **\_\_frac**
- int **\_\_ctex**
- int **\_\_lowest**
- int **\_\_highest**
- void \* **\_\_fw\_movie**

### 4.1100.1 Detailed Description

Definition at line 7232 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1101 X3D\_MultiTexture Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **alpha**
- struct **SFColor** **color**
- struct **Multi\_String** **function**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **mode**
- struct **Multi\_String** **source**
- struct **Multi\_Node** **texture**
- void \* **\_\_xparams**

### 4.1101.1 Detailed Description

Definition at line 7279 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1102 X3D\_MultiTextureCoordinate Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **texCoord**

#### 4.1102.1 Detailed Description

Definition at line 7305 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1103 X3D\_MultiTextureTransform Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node textureTransform**

#### 4.1103.1 Detailed Description

Definition at line 7325 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1104 X3D\_NavigationInfo Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **Multi\_Float** **avatarSize**
- int **headlight**
- float **speed**
- struct **Multi\_String** **type**
- float **visibilityLimit**
- int **isBound**
- int **\_layerId**
- struct **Multi\_String** **transitionType**
- double **bindTime**
- struct **X3D\_Node** \* **metadata**
- double **transitionTime**
- int **transitionComplete**

#### 4.1104.1 Detailed Description

Definition at line 7345 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1105 X3D\_Node Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**

#### 4.1105.1 Detailed Description

Definition at line 2502 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1106 X3D\_Normal Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3f** **vector**

### 4.1106.1 Detailed Description

Definition at line 7376 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1107 X3D\_NormalInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec3f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3f** **value\_changed**

### 4.1107.1 Detailed Description

Definition at line 7396 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1108 X3D\_NurbsCurve Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **knot**
- int **order**
- int **tessellation**
- int **closed**
- float **\_tscale**
- struct **Multi\_Vec3f** **\_\_points**
- int **\_\_numPoints**

### 4.1108.1 Detailed Description

Definition at line 7419 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1109 X3D\_NurbsCurve2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2d** **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **knot**
- int **order**
- int **tessellation**
- int **closed**
- float **\_tscale**

### 4.1109.1 Detailed Description

Definition at line 7447 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1110 X3D\_NurbsOrientationInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**

- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **knot**
- int **order**
- float **set\_fraction**
- struct **SFRotation** **value\_changed**
- struct **Multi\_Float\_knot**
- struct **Multi\_Vec4f\_xyzw**
- int **\_OK**
- struct **SFVec2f\_knotrange**

#### 4.1110.1 Detailed Description

Definition at line 7473 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1111 X3D\_NurbsPatchSurface Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **uKnot**
- int **uOrder**
- int **uDimension**
- int **uTessellation**
- int **uClosed**
- struct **Multi\_Double** **vKnot**
- int **vOrder**
- int **vDimension**
- int **vTessellation**
- int **vClosed**
- struct **X3D\_Node** \* **texCoord**
- int **solid**
- float **\_tscale**



#### 4.1111.1 Detailed Description

Definition at line 7502 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1112 X3D\_NurbsPositionInterpolator Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **knot**
- int **order**
- float **set\_fraction**
- struct **SFVec3f** **value\_changed**
- struct **Multi\_Float** **\_knot**
- struct **Multi\_Vec4f** **\_xyzw**
- int **\_OK**
- struct **SFVec2f** **\_knotrange**

#### 4.1112.1 Detailed Description

Definition at line 7536 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1113 X3D\_NurbsSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addGeometry**
- struct **Multi\_Node** **removeGeometry**
- struct **Multi\_Node** **geometry**
- struct **X3D\_Node** \* **metadata**
- float **tessellationScale**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

### 4.1113.1 Detailed Description

Definition at line 7565 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1114 X3D\_NurbsSurfaceInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**

- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **uKnot**
- int **uOrder**
- int **uDimension**
- struct **Multi\_Double** **vKnot**
- int **vOrder**
- int **vDimension**
- struct **SFVec2f** **set\_fraction**
- struct **SFVec3f** **position\_changed**
- struct **SFVec3f** **normal\_changed**
- struct **Multi\_Float** **\_uKnot**
- struct **Multi\_Float** **\_vKnot**
- struct **Multi\_Vec4f** **\_controlPoint**
- int **\_OK**

#### 4.1114.1 Detailed Description

Definition at line 7590 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1115 X3D\_NurbsSweptSurface Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **crossSectionCurve**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **trajectoryCurve**
- int **ccw**
- int **solid**
- struct **Uni\_String** \* **method**
- struct **X3D\_Node** \* **\_patch**
- int **\_method**

#### 4.1115.1 Detailed Description

Definition at line 7624 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1116 X3D\_NurbsSwungSurface Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **profileCurve**
- struct **X3D\_Node** \* **trajectoryCurve**
- int **ccw**
- int **solid**
- struct **X3D\_Node** \* **\_patch**

#### 4.1116.1 Detailed Description

Definition at line 7650 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1117 X3D\_NurbsTextureCoordinate Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **controlPoint**
- struct **Multi\_Float** **weight**
- struct **Multi\_Double** **uKnot**
- int **uOrder**
- int **uDimension**
- struct **Multi\_Double** **vKnot**
- int **vOrder**
- int **vDimension**
- struct **Multi\_Float** **\_uKnot**
- struct **Multi\_Float** **\_vKnot**
- struct **Multi\_Vec4f** **\_controlPoint**

### 4.1117.1 Detailed Description

Definition at line 7674 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1118 X3D\_NurbsTrimmedSurface Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **uKnot**
- int **uOrder**
- int **uDimension**
- int **uTessellation**
- int **uClosed**
- struct **Multi\_Double** **vKnot**
- int **vOrder**
- int **vDimension**
- int **vTessellation**
- int **vClosed**
- struct **X3D\_Node** \* **texCoord**
- int **solid**
- struct **Multi\_Node** **addTrimmingContour**
- struct **Multi\_Node** **removeTrimmingContour**
- struct **Multi\_Node** **trimmingContour**
- float **\_tscale**

#### 4.1118.1 Detailed Description

Definition at line 7704 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1119 X3D\_OpacityMapVolumeStyle Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **transferFunction**

#### 4.1119.1 Detailed Description

Definition at line 7782 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1120 X3D\_OrientationChaser Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- int **isActive**
- double **duration**
- double **\_bufferendtime**
- double **\_steptime**
- struct **SFRotation** **value\_changed**
- struct **SFRotation** **initialDestination**
- struct **SFRotation** **initialValue**
- struct **SFRotation** **set\_destination**
- struct **SFRotation** **set\_value**
- void \* **\_buffer**
- struct **SFRotation** **\_previousvalue**
- struct **SFRotation** **\_destination**

#### 4.1120.1 Detailed Description

Definition at line 7803 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1121 X3D\_OrientationDamper Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- double **tau**
- float **tolerance**
- int **isActive**
- int **order**
- double **\_tau**
- double **\_lasttick**
- int **\_takefirstinput**
- struct **SFRotation** **value\_changed**
- struct **SFRotation** **initialDestination**
- struct **SFRotation** **initialValue**
- struct **SFRotation** **set\_destination**
- struct **SFRotation** **set\_value**
- void \* **\_values**
- struct **SFRotation** **\_input**

### 4.1121.1 Detailed Description

Definition at line 7836 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1122 X3D\_OrientationInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Rotation** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **value\_changed**

### 4.1122.1 Detailed Description

Definition at line 7871 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1123 X3D\_OrthoViewpoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- double **bindTime**

- int **isBound**
- struct **Uni\_String** \* **description**
- int **jump**
- struct **Multi\_Float** **fieldOfView**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **orientation**
- struct **SFVec3f** **position**
- int **\_layerId**
- int **\_donethispass**
- struct **SFVec3f** **centerOfRotation**
- int **retainUserOffsets**

#### 4.1123.1 Detailed Description

Definition at line 7894 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1124 X3D\_OSC\_Sensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **Uni\_String** \* **description**
- struct **Uni\_String** \* **protocol**
- struct **Uni\_String** \* **listenfor**
- int **port**
- struct **Uni\_String** \* **filter**
- struct **Uni\_String** \* **handler**
- struct **Multi\_String** **talksTo**
- int **FIFOsize**
- int **int32Inp**
- float **floatInp**
- struct **Uni\_String** \* **stringInp**
- int **gotEvents**
- struct **X3D\_Node** \* **metadata**

- struct **Multi\_Node\_talkToNodes**
- int **\_status**
- void \* **\_int32InpFIFO**
- void \* **\_floatInpFIFO**
- void \* **\_stringInpFIFO**
- void \* **\_int32OutFIFO**
- void \* **\_floatOutFIFO**
- void \* **\_stringOutFIFO**
- struct **X3D\_Node \* \_\_oldmetadata**

#### 4.1124.1 Detailed Description

Definition at line 7741 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1125 X3D\_PackagedShader Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector \* \_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep \* \_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node \* \_executionContext**
- int **activate**
- struct **X3D\_Node \* metadata**
- struct **Multi\_String url**
- int **isSelected**
- int **isValid**
- struct **Uni\_String \* language**
- int **\_initialized**
- int **\_shaderUserNumber**
- struct **X3D\_Node \* \_shaderUserDefinedFields**
- pthread\_t **\_shaderLoadThread**
- int **\_retrievedURLData**

### 4.1125.1 Detailed Description

Definition at line 7925 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1126 X3D\_ParticleSystem Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **appearance**
- struct **X3D\_Node** \* **geometry**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_shaderflags\_base**
- int **\_shaderflags\_effects**
- int **\_shaderflags\_usershaders**
- int **createParticles**
- int **enabled**
- float **lifetimeVariation**
- int **maxParticles**
- float **particleLifetime**
- struct **SFVec2f** **particleSize**
- int **isActive**
- struct **X3D\_Node** \* **colorRamp**
- struct **Multi\_Float** **colorKey**
- struct **X3D\_Node** \* **emitter**
- struct **Uni\_String** \* **geometryType**
- struct **Multi\_Node** **physics**
- struct **X3D\_Node** \* **texCoordRamp**
- struct **Multi\_Float** **texCoordKey**
- void \* **\_tris**
- void \* **\_ttex**
- void \* **\_ltex**
- void \* **\_particles**
- double **\_lasttime**
- int **\_geometryType**
- float **\_remainder**

#### 4.1126.1 Detailed Description

Definition at line 7954 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1127 X3D\_PickableGroup Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **objectType**
- int **pickable**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

#### 4.1127.1 Detailed Description

Definition at line 8001 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1128 X3D\_PixelTexture Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **image**
- struct **X3D\_Node** \* **metadata**
- int **repeatS**
- int **repeatT**
- struct **X3D\_Node** \* **textureProperties**
- void \* **\_parentResource**
- int **\_\_textureTableIndex**

### 4.1128.1 Detailed Description

Definition at line 8028 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1129 X3D\_PixelTexture3D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**

- struct **Multi\_Int32** image
- struct **X3D\_Node** \* metadata
- int repeatS
- int repeatT
- int repeatR
- struct **X3D\_Node** \* textureProperties
- int \_\_textureTableIndex
- void \* \_parentResource
- int \_needs\_gradient

#### 4.1129.1 Detailed Description

Definition at line 8053 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1130 X3D\_PlaneSensor Struct Reference

#### Data Fields

- int \_nodeType
- int \_renderFlags
- int \_hit
- int \_change
- int \_ichange
- struct **Vector** \* \_parentVector
- double \_dist
- float \_extent [6]
- struct **X3D\_PolyRep** \* \_intern
- int referenceCount
- int \_defaultContainer
- void \* \_gc
- struct **X3D\_Node** \* \_executionContext
- int autoOffset
- struct **SFRotation** axisRotation
- int enabled
- struct **SFVec2f** maxPosition
- struct **SFVec2f** minPosition
- struct **SFVec3f** offset
- int isActive
- int isOver
- struct **Uni\_String** \* description
- struct **SFVec3f** trackPoint\_changed
- struct **SFVec3f** translation\_changed
- struct **X3D\_Node** \* metadata
- struct **SFVec3f** \_oldtrackPoint
- struct **SFVec3f** \_oldtranslation
- struct **SFVec3f** \_origPoint
- int \_\_oldEnabled

#### 4.1130.1 Detailed Description

Definition at line 8080 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`

### 4.1131 X3D\_PointEmitter Struct Reference

#### Data Fields

- `int _nodeType`
- `int _renderFlags`
- `int _hit`
- `int _change`
- `int _ichange`
- `struct Vector * _parentVector`
- `double _dist`
- `float _extent [6]`
- `struct X3D_PolyRep * _intern`
- `int referenceCount`
- `int _defaultContainer`
- `void * _gc`
- `struct X3D_Node * _executionContext`
- `struct SFVec3f direction`
- `struct X3D_Node * metadata`
- `struct SFVec3f position`
- `float speed`
- `float variation`
- `float mass`
- `float surfaceArea`

#### 4.1131.1 Detailed Description

Definition at line 8114 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`



## 4.1132 X3D\_PointLight Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **ambientIntensity**
- struct **SFVec3f** **attenuation**
- struct **SFColor** **color**
- int **global**
- float **intensity**
- struct **SFVec3f** **location**
- struct **X3D\_Node** \* **metadata**
- int **on**
- float **radius**
- struct **SFVec4f** **\_loc**
- struct **SFVec4f** **\_col**
- struct **SFVec4f** **\_amb**

### 4.1132.1 Detailed Description

Definition at line 8139 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1133 X3D\_PointPickSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **objectType**
- struct **X3D\_Node** \* **pickingGeometry**
- struct **Multi\_Node** **pickTarget**
- int **isActive**
- struct **Multi\_Node** **pickedGeometry**
- struct **Uni\_String** \* **intersectionType**
- struct **Uni\_String** \* **sortOrder**
- struct **Uni\_String** \* **matchCriterion**
- int **\_\_oldEnabled**
- struct **Multi\_Vec3f** **pickedPoint**
- int **\_oldisActive**
- struct **Multi\_Node** **\_oldpickTarget**
- struct **Multi\_Node** **\_oldpickedGeometry**
- struct **Multi\_Vec3f** **\_oldpickedPoint**
- struct **SFVec3f** **\_bboxCenter**
- struct **SFVec3f** **\_bboxSize**
- struct **Uni\_String** \* **set\_intersectionType**
- struct **Uni\_String** \* **set\_sortOrder**

#### 4.1133.1 Detailed Description

Definition at line 8169 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1134 X3D\_PointSet Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**

- struct **Multi\_Node** attrib
- struct **X3D\_Node** \* color
- struct **X3D\_Node** \* coord
- struct **X3D\_Node** \* fogCoord
- struct **X3D\_Node** \* metadata
- int **\_pointsVBO**
- int **\_coloursVBO**
- int **\_npoints**
- int **\_colourSize**

#### 4.1134.1 Detailed Description

Definition at line 8207 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1135 X3D\_Polyline2D Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **lineSegments**

#### 4.1135.1 Detailed Description

Definition at line 8234 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1136 X3D\_PolylineEmitter Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_coordIndex**
- struct **X3D\_Node** \* **coord**
- struct **SFVec3f** **direction**
- struct **X3D\_Node** \* **metadata**
- float **speed**
- float **variation**
- struct **Multi\_Int32** **coordIndex**
- float **mass**
- float **surfaceArea**
- int **\_method**
- int **\_nseg**
- void \* **\_segs**
- void \* **\_portions**

### 4.1136.1 Detailed Description

Definition at line 8254 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1137 X3D\_Polypoint2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **point**

### 4.1137.1 Detailed Description

Definition at line 8285 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1138 X3D\_PolyRep Struct Reference

### Data Fields

- int **irep\_change**
- int **ccw**
- int **ntri**
- int **streamed**
- GLuint \* **cindex**
- GLuint \* **colindex**
- GLuint \* **norindex**
- GLuint \* **tcindex**
- ushort \* **tri\_indices**
- ushort \* **wire\_indices**
- float \* **actualCoord**
- float \* **actualFog**
- float \* **color**
- float \* **normal**
- float \* **flat\_normal**
- int **last\_normal\_type**
- int **last\_index\_type**
- float \* **GeneratedTexCoords** [4]
- int **ntexdim** [4]
- int **ntcoord**
- int **tcoordtype**
- int **texgentype**
- GLfloat **minVals** [3]
- GLfloat **maxVals** [3]
- GLfloat **transparency**
- int **isRGBAColorNode**
- GLuint **VBO\_buffers** [VBO\_COUNT]

### 4.1138.1 Detailed Description

Definition at line 62 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1139 X3D\_PositionChaser Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- int **isActive**
- double **duration**
- double **\_bufferendtime**
- double **\_steptime**
- struct **SFVec3f** **value\_changed**
- struct **SFVec3f** **initialDestination**
- struct **SFVec3f** **initialValue**
- struct **SFVec3f** **set\_destination**
- struct **SFVec3f** **set\_value**
- void \* **\_buffer**
- struct **SFVec3f** **\_previousvalue**
- struct **SFVec3f** **\_destination**

### 4.1139.1 Detailed Description

Definition at line 8305 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1140 X3D\_PositionChaser2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- int **isActive**
- double **duration**
- double **\_bufferendtime**
- double **\_steptime**
- struct **SFVec2f** **value\_changed**
- struct **SFVec2f** **initialDestination**
- struct **SFVec2f** **initialValue**
- struct **SFVec2f** **set\_destination**
- struct **SFVec2f** **set\_value**
- void \* **\_buffer**
- struct **SFVec2f** **\_previousvalue**
- struct **SFVec2f** **\_destination**

### 4.1140.1 Detailed Description

Definition at line 8338 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1141 X3D\_PositionDamper Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- double **tau**
- float **tolerance**
- int **isActive**
- int **order**
- double **\_tau**
- double **\_lasttick**
- int **\_takefirstinput**
- struct **SFVec3f** **value\_changed**
- struct **SFVec3f** **initialDestination**
- struct **SFVec3f** **initialValue**
- struct **SFVec3f** **set\_destination**
- struct **SFVec3f** **set\_value**
- void \* **\_values**
- struct **SFVec3f** **\_input**

### 4.1141.1 Detailed Description

Definition at line 8371 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1142 X3D\_PositionDamper2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- double **tau**
- float **tolerance**
- int **isActive**
- int **order**
- double **\_tau**
- double **\_lasttick**
- int **\_takefirstinput**
- struct **SFVec2f** **value\_changed**
- struct **SFVec2f** **initialDestination**
- struct **SFVec2f** **initialValue**
- struct **SFVec2f** **set\_destination**
- struct **SFVec2f** **set\_value**
- void \* **\_values**
- struct **SFVec2f** **\_input**

### 4.1142.1 Detailed Description

Definition at line 8406 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1143 X3D\_PositionInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec3f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **value\_changed**

### 4.1143.1 Detailed Description

Definition at line 8441 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1144 X3D\_PositionInterpolator2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec2f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec2f** **value\_changed**

#### 4.1144.1 Detailed Description

Definition at line 8464 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1145 X3D\_PrimitivePickSensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **objectType**
- struct **X3D\_Node** \* **pickingGeometry**
- struct **Multi\_Node** **pickTarget**
- int **isActive**
- struct **Multi\_Node** **pickedGeometry**
- struct **Uni\_String** \* **intersectionType**
- struct **Uni\_String** \* **sortOrder**
- struct **Uni\_String** \* **matchCriterion**
- int **\_\_oldEnabled**

#### 4.1145.1 Detailed Description

Definition at line 8487 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1146 X3D\_ProgramShader Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **activate**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **programs**
- int **isSelected**
- int **isValid**
- struct **Uni\_String** \* **language**
- int **\_initialized**
- int **\_shaderUserNumber**
- pthread\_t **\_shaderLoadThread**
- int **\_retrievedURLData**

### 4.1146.1 Detailed Description

Definition at line 8516 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1147 X3D\_ProjectionVolumeStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- float **intensityThreshold**
- struct **Uni\_String** \* **type**
- int **\_type**

### 4.1147.1 Detailed Description

Definition at line 8544 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1148 X3D\_Proto Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **\_\_children**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **Multi\_Node** **\_sortedChildren**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- void \* **\_\_protoDeclares**
- void \* **\_\_externProtoDeclares**
- void \* **\_\_nodes**
- void \* **\_\_subcontexts**
- void \* **\_\_GC**
- void \* **\_\_protoDef**
- int **\_\_protoFlags**
- struct **X3D\_Node** \* **\_\_prototype**
- struct **X3D\_Node** \* **\_\_parentProto**
- void \* **\_\_ROUTES**
- void \* **\_\_EXPORTS**
- void \* **\_\_IMPORTS**
- void \* **\_\_DEFnames**
- void \* **\_\_IS**
- void \* **\_\_scripts**
- struct **Multi\_String** **url**
- struct **Multi\_String** **\_\_oldurl**
- void \* **\_\_afterPound**
- int **\_\_loadstatus**
- void \* **\_parentResource**
- void \* **\_\_loadResource**
- void \* **\_\_typename**
- int **load**
- int **\_\_oldload**

#### 4.1148.1 Detailed Description

Definition at line 8567 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1149 X3D\_ProximitySensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **center**
- struct **SFVec3f** **size**
- int **enabled**
- int **isActive**
- struct **SFVec3f** **position\_changed**
- struct **SFRotation** **orientation\_changed**
- double **enterTime**
- double **exitTime**
- struct **SFVec3f** **centerOfRotation\_changed**
- struct **X3D\_Node** \* **metadata**
- int **\_\_hit**
- struct **SFVec3f** **\_\_t1**
- struct **SFRotation** **\_\_t2**
- int **\_\_oldEnabled**

#### 4.1149.1 Detailed Description

Definition at line 8617 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1150 X3D\_QuadSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **\_coordIndex**

### 4.1150.1 Detailed Description

Definition at line 8649 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1151 X3D\_ReceiverPdu Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **address**
- int **applicationID**
- int **enabled**
- int **entityID**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **multicastRelayHost**
- int **multicastRelayPort**
- struct **Uni\_String** \* **networkMode**
- int **port**
- int **radioID**
- float **readInterval**
- float **receivedPower**
- int **receiverState**
- int **rtpHeaderExpected**
- int **siteID**
- int **transmitterApplicationID**
- int **transmitterEntityID**
- int **transmitterRadioID**
- int **transmitterSiteID**
- int **whichGeometry**
- float **writeInterval**
- int **isActive**
- int **isNetworkReader**
- int **isNetworkWriter**
- int **isRtpHeaderHeard**
- int **isStandAlone**
- double **timestamp**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

#### 4.1151.1 Detailed Description

Definition at line 8679 of file Structs.h.

The documentation for this struct was generated from the following file:

- `src/lib/vrml_parser/Structs.h`



## 4.1152 X3D\_Rectangle2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec2f** **size**
- int **solid**
- struct **Multi\_Vec3f** **\_\_points**
- int **\_\_numPoints**

### 4.1152.1 Detailed Description

Definition at line 8726 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1153 X3D\_RigidBody Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **angularDampingFactor**
- struct **SFVec3f** **angularVelocity**

- int **autoDamp**
- int **autoDisable**
- struct **SFVec3f** **centerOfMass**
- float **disableAngularSpeed**
- float **disableLinearSpeed**
- float **disableTime**
- int **enabled**
- struct **SFVec3f** **finiteRotationAxis**
- int **fixed**
- struct **Multi\_Vec3f** **forces**
- struct **Multi\_Node** **geometry**
- struct **SFMatrix3f** **inertia**
- float **linearDampingFactor**
- struct **SFVec3f** **linearVelocity**
- float **mass**
- struct **X3D\_Node** \* **massDensityModel**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **orientation**
- struct **SFVec3f** **position**
- struct **Multi\_Vec3f** **torques**
- int **useFiniteRotation**
- int **useGlobalGravity**
- void \* **\_body**
- struct **SFVec3f** **\_\_old\_angularVelocity**
- struct **SFVec3f** **\_\_old\_centerOfMass**
- struct **SFVec3f** **\_\_old\_finiteRotationAxis**
- struct **SFVec3f** **\_\_old\_linearVelocity**
- struct **SFRotation** **\_\_old\_orientation**
- struct **SFVec3f** **\_\_old\_position**
- void \* **\_\_geomIdentityTransform**

#### 4.1153.1 Detailed Description

Definition at line 8749 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1154 X3D\_RigidBodyCollection Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **set\_contacts**
- int **autoDisable**
- struct **Multi\_Node** **bodies**
- float **constantForceMix**
- float **contactSurfaceThickness**
- float **disableAngularSpeed**
- float **disableLinearSpeed**
- float **disableTime**
- int **enabled**
- float **errorCorrection**
- struct **SFVec3f** **gravity**
- int **iterations**
- struct **Multi\_Node** **joints**
- float **maxCorrectionSpeed**
- struct **X3D\_Node** \* **metadata**
- int **preferAccuracy**
- struct **X3D\_Node** \* **collider**
- void \* **\_world**
- void \* **\_group**

#### 4.1154.1 Detailed Description

Definition at line 8799 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1155 X3D\_ScalarChaser Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**

- void \* **\_p**
- void \* **\_t**
- int **isActive**
- double **duration**
- double **\_bufferendtime**
- double **\_steptime**
- float **value\_changed**
- float **initialDestination**
- float **initialValue**
- float **set\_destination**
- float **set\_value**
- void \* **\_buffer**
- float **\_previousvalue**
- float **\_destination**

#### 4.1155.1 Detailed Description

Definition at line 8836 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1156 X3D\_ScalarDamper Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- double **tau**
- float **tolerance**
- int **isActive**
- int **order**
- double **\_tau**
- double **\_lasttick**
- int **\_takefirstinput**
- float **value\_changed**
- float **initialDestination**
- float **initialValue**
- float **set\_destination**
- float **set\_value**
- void \* **\_values**
- float **\_input**

### 4.1156.1 Detailed Description

Definition at line 8869 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1157 X3D\_ScalarInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Float** **keyValue**
- struct **X3D\_Node** \* **metadata**
- float **value\_changed**

### 4.1157.1 Detailed Description

Definition at line 8904 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1158 X3D\_ScreenFontStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **family**
- int **horizontal**
- struct **Multi\_String** **justify**
- struct **Uni\_String** \* **language**
- int **leftToRight**
- float **pointSize**
- float **spacing**
- struct **Uni\_String** \* **style**
- int **topToBottom**

### 4.1158.1 Detailed Description

Definition at line 8927 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1159 X3D\_ScreenGroup Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**

- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

#### 4.1159.1 Detailed Description

Definition at line 8955 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1160 X3D\_Script Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** **url**
- int **directOutput**
- int **mustEvaluate**
- struct **X3D\_Node** \* **metadata**
- void \* **\_\_scriptObj**
- void \* **\_parentResource**

#### 4.1160.1 Detailed Description

Definition at line 8980 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1161 X3D\_SegmentedVolumeData Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **dimensions**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **voxels**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- void \* **\_boxtris**
- struct **Multi\_Node** **renderStyle**
- struct **Multi\_Bool** **segmentEnabled**
- struct **X3D\_Node** \* **segmentIdentifiers**

### 4.1161.1 Detailed Description

Definition at line 9004 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1162 X3D\_ShadedVolumeStyle Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**



- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **surfaceNormals**
- int **lighting**
- int **shadows**
- struct **X3D\_Node** \* **material**
- struct **Uni\_String** \* **phaseFunction**
- int **\_phaseFunction**

#### 4.1162.1 Detailed Description

Definition at line 9031 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1163 X3D\_ShaderPart Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- struct **Uni\_String** \* **type**
- int **\_\_loadstatus**
- void \* **\_parentResource**
- void \* **\_\_loadResource**
- struct **X3D\_Node** \* **\_shaderUserDefinedFields**

#### 4.1163.1 Detailed Description

Definition at line 9057 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1164 X3D\_ShaderProgram Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- struct **Uni\_String** \* **type**
- int **\_\_loadstatus**
- void \* **\_parentResource**
- void \* **\_\_loadResource**
- struct **X3D\_Node** \* **\_shaderUserDefinedFields**

### 4.1164.1 Detailed Description

Definition at line 9082 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1165 X3D\_Shape Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**

- struct **X3D\_Node** \* **appearance**
- struct **X3D\_Node** \* **geometry**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_shaderflags\_base**
- int **\_shaderflags\_effects**
- int **\_shaderflags\_usershaders**
- int **\_\_visible**
- int **\_\_occludeCheckCount**
- int **\_\_Samples**

#### 4.1165.1 Detailed Description

Definition at line 9107 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1166 X3D\_SignalPdu Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **address**
- int **applicationID**
- struct **Multi\_Int32** **data**
- int **dataLength**
- int **enabled**
- int **encodingScheme**
- int **entityID**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **multicastRelayHost**
- int **multicastRelayPort**
- struct **Uni\_String** \* **networkMode**
- int **port**
- int **radioID**
- float **readInterval**

- int **rtpHeaderExpected**
- int **sampleRate**
- int **samples**
- int **siteID**
- int **tdlType**
- int **whichGeometry**
- float **writeInterval**
- int **isActive**
- int **isNetworkReader**
- int **isNetworkWriter**
- int **isRtpHeaderHeard**
- int **isStandAlone**
- double **timestamp**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

#### 4.1166.1 Detailed Description

Definition at line 9136 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1167 X3D\_SilhouetteEnhancementVolumeStyle Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **surfaceNormals**
- float **silhouetteBoundaryOpacity**
- float **silhouetteRetainedOpacity**
- float **silhouetteSharpness**

### 4.1167.1 Detailed Description

Definition at line 9183 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1168 X3D\_SingleAxisHingeJoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **anchorPoint**
- struct **SFVec3f** **axis**
- struct **X3D\_Node** \* **body1**
- struct **X3D\_Node** \* **body2**
- struct **Multi\_String** **forceOutput**
- float **maxAngle**
- struct **X3D\_Node** \* **metadata**
- float **minAngle**
- float **stopBounce**
- float **stopErrorCorrection**
- float **angle**
- float **angleRate**
- struct **SFVec3f** **body1AnchorPoint**
- struct **SFVec3f** **body2AnchorPoint**
- void \* **\_joint**
- int **\_forceout**
- struct **SFVec3f** **\_\_old\_anchorPoint**
- struct **SFVec3f** **\_\_old\_axis**
- struct **X3D\_Node** \* **\_\_old\_body1**
- struct **X3D\_Node** \* **\_\_old\_body2**

### 4.1168.1 Detailed Description

Definition at line 9207 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1169 X3D\_SliderJoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **axis**
- struct **X3D\_Node** \* **body1**
- struct **X3D\_Node** \* **body2**
- struct **Multi\_String** **forceOutput**
- float **maxSeparation**
- struct **X3D\_Node** \* **metadata**
- float **minSeparation**
- float **sliderForce**
- float **stopBounce**
- float **stopErrorCorrection**
- float **separation**
- float **separationRate**
- void \* **\_joint**
- int **\_forceout**
- struct **SFVec3f** **\_\_old\_axis**
- struct **X3D\_Node** \* **\_\_old\_body1**
- struct **X3D\_Node** \* **\_\_old\_body2**

### 4.1169.1 Detailed Description

Definition at line 9245 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1170 X3D\_Sound Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **direction**
- float **intensity**
- struct **SFVec3f** **location**
- float **maxBack**
- float **maxFront**
- struct **X3D\_Node** \* **metadata**
- float **minBack**
- float **minFront**
- float **priority**
- struct **X3D\_Node** \* **source**
- int **spatialize**
- int **\_\_sourceNumber**
- struct **SFVec3f** **\_\_lastlocation**
- double **\_\_lasttime**

### 4.1170.1 Detailed Description

Definition at line 9280 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1171 X3D\_Sphere Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**

- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- float **radius**
- int **solid**
- struct **Multi\_Vec3f** **\_\_points**
- int **\_sideVBO**
- int **\_\_SphereIndxVBO**
- void \* **\_\_pindices**
- int **\_\_wireindicesVBO**

#### 4.1171.1 Detailed Description

Definition at line 9312 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1172 X3D\_SphereSensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **autoOffset**
- int **enabled**
- struct **SFRotation** **offset**
- int **isActive**
- struct **SFRotation** **rotation\_changed**
- struct **SFVec3f** **trackPoint\_changed**
- struct **SFVec3f** **\_oldtrackPoint**
- struct **SFRotation** **\_oldrotation**
- int **isOver**
- struct **Uni\_String** \* **description**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **\_origPoint**
- struct **SFVec3f** **\_origNormalizedPoint**
- float **\_radius**
- int **\_\_oldEnabled**



#### 4.1172.1 Detailed Description

Definition at line 9338 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1173 X3D\_SplinePositionInterpolator Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- int **closed**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec3f** **keyValue**
- struct **Multi\_Vec3f** **keyVelocity**
- struct **X3D\_Node** \* **metadata**
- int **normalizeVelocity**
- struct **SFVec3f** **value\_changed**
- struct **Multi\_Vec3f** **\_T0**
- struct **Multi\_Vec3f** **\_T1**

#### 4.1173.1 Detailed Description

Definition at line 9371 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1174 X3D\_SplinePositionInterpolator2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- int **closed**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec2f** **keyValue**
- struct **Multi\_Vec2f** **keyVelocity**
- struct **X3D\_Node** \* **metadata**
- int **normalizeVelocity**
- struct **SFVec2f** **value\_changed**
- struct **Multi\_Vec2f** **\_T0**
- struct **Multi\_Vec2f** **\_T1**

### 4.1174.1 Detailed Description

Definition at line 9399 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1175 X3D\_SplineScalarInterpolator Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**

- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- int **closed**
- struct **Multi\_Float** **key**
- struct **Multi\_Float** **keyValue**
- struct **Multi\_Float** **keyVelocity**
- struct **X3D\_Node** \* **metadata**
- int **normalizeVelocity**
- float **value\_changed**
- struct **Multi\_Float\_T0**
- struct **Multi\_Float\_T1**

#### 4.1175.1 Detailed Description

Definition at line 9427 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1176 X3D\_SpotLight Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **ambientIntensity**
- struct **SFVec3f** **attenuation**
- float **beamWidth**
- struct **SFColor** **color**
- float **cutOffAngle**
- struct **SFVec3f** **direction**
- int **global**
- float **intensity**
- struct **SFVec3f** **location**
- struct **X3D\_Node** \* **metadata**
- int **on**
- float **radius**
- struct **SFVec4f** **\_dir**
- struct **SFVec4f** **\_loc**
- struct **SFVec4f** **\_col**
- struct **SFVec4f** **\_amb**

#### 4.1176.1 Detailed Description

Definition at line 9455 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1177 X3D\_SquadOrientationInterpolator Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Rotation** **keyValue**
- struct **X3D\_Node** \* **metadata**
- int **normalizeVelocity**
- int **closed**
- struct **SFRotation** **value\_changed**
- struct **Multi\_Float** **\_normkey**
- struct **Multi\_Rotation** **\_normkeyValue**

#### 4.1177.1 Detailed Description

Definition at line 9489 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1178 X3D\_StaticGroup Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **children**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **Multi\_Node** **\_\_sibAffectors**
- int **\_\_transparency**
- int **\_\_solid**
- struct **Multi\_Node** **\_sortedChildren**

### 4.1178.1 Detailed Description

Definition at line 9516 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1179 X3D\_StringSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**

- struct **X3D\_Node** \* **\_executionContext**
- int **deletionAllowed**
- int **enabled**
- struct **Uni\_String** \* **enteredText**
- struct **Uni\_String** \* **finalText**
- int **isActive**
- struct **X3D\_Node** \* **metadata**
- int **\_initialized**
- int **\_\_oldEnabled**

#### 4.1179.1 Detailed Description

Definition at line 9542 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1180 X3D\_SurfaceEmitter Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_coordIndex**
- struct **X3D\_Node** \* **metadata**
- float **speed**
- float **variation**
- struct **Multi\_Int32** **coordIndex**
- float **mass**
- struct **X3D\_Node** \* **surface**
- float **surfaceArea**
- struct **X3D\_Node** \* **geometry**
- void \* **\_ifs**

### 4.1180.1 Detailed Description

Definition at line 9568 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1181 X3D\_Switch Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **choice**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- int **whichChoice**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_\_isX3D**

### 4.1181.1 Detailed Description

Definition at line 9596 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1182 X3D\_Teapot Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- int **solid**
- void \* **\_\_ifsnode**

### 4.1182.1 Detailed Description

Definition at line 9624 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1183 X3D\_TexCoordChaser2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- int **isActive**



- double **duration**
- double **\_bufferendtime**
- double **\_steptime**
- struct **Multi\_Vec2f** **value\_changed**
- struct **Multi\_Vec2f** **initialDestination**
- struct **Multi\_Vec2f** **initialValue**
- struct **Multi\_Vec2f** **set\_destination**
- struct **Multi\_Vec2f** **set\_value**
- void \* **\_buffer**
- struct **Multi\_Vec2f** **\_previousvalue**
- struct **Multi\_Vec2f** **\_destination**

#### 4.1183.1 Detailed Description

Definition at line 9645 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1184 X3D\_TexCoordDamper2D Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- void \* **\_p**
- void \* **\_t**
- double **tau**
- float **tolerance**
- int **isActive**
- int **order**
- double **\_tau**
- double **\_lasttick**
- int **\_takefirstinput**
- struct **Multi\_Vec2f** **value\_changed**
- struct **Multi\_Vec2f** **initialDestination**
- struct **Multi\_Vec2f** **initialValue**
- struct **Multi\_Vec2f** **set\_destination**
- struct **Multi\_Vec2f** **set\_value**
- void \* **\_values**
- struct **Multi\_Vec2f** **\_input**

#### 4.1184.1 Detailed Description

Definition at line 9678 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1185 X3D\_Text Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **fontStyle**
- struct **Multi\_Float** **length**
- float **maxExtent**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **string**
- struct **Multi\_Vec2f** **lineBounds**
- struct **SFVec3f** **origin**
- int **solid**
- struct **SFVec2f** **textBounds**
- int **\_isScreen**
- void \* **\_screendata**

#### 4.1185.1 Detailed Description

Definition at line 9713 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1186 X3D\_TextureBackground Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **Multi\_Float** **groundAngle**
- struct **Multi\_Color** **groundColor**
- struct **Multi\_Float** **skyAngle**
- struct **Multi\_Color** **skyColor**
- double **bindTime**
- int **isBound**
- int **\_layerId**
- struct **X3D\_Node** \* **metadata**
- void \* **\_parentResource**
- struct **Multi\_Vec3f** **\_\_points**
- struct **Multi\_Vec3f** **\_\_colours**
- int **\_\_quadcount**
- int **\_\_VBO**
- struct **X3D\_Node** \* **frontTexture**
- struct **X3D\_Node** \* **backTexture**
- struct **X3D\_Node** \* **topTexture**
- struct **X3D\_Node** \* **bottomTexture**
- struct **X3D\_Node** \* **leftTexture**
- struct **X3D\_Node** \* **rightTexture**
- struct **Multi\_Float** **transparency**

### 4.1186.1 Detailed Description

Definition at line 9742 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1187 X3D\_TextureCoordinate Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **point**

### 4.1187.1 Detailed Description

Definition at line 9781 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1188 X3D\_TextureCoordinate3D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3f** **point**

#### 4.1188.1 Detailed Description

Definition at line 9801 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1189 X3D\_TextureCoordinate4D Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec4f** **point**

#### 4.1189.1 Detailed Description

Definition at line 9821 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1190 X3D\_TextureCoordinateGenerator Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **mode**
- struct **Multi\_Float** **parameter**

### 4.1190.1 Detailed Description

Definition at line 9841 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1191 X3D\_TextureProperties Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **anisotropicDegree**
- struct **SFColorRGBA** **borderColor**
- int **borderWidth**
- struct **Uni\_String** \* **boundaryModeS**
- struct **Uni\_String** \* **boundaryModeT**
- struct **Uni\_String** \* **boundaryModeR**
- struct **Uni\_String** \* **magnificationFilter**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **minificationFilter**
- struct **Uni\_String** \* **textureCompression**
- float **texturePriority**
- int **generateMipMaps**

### 4.1191.1 Detailed Description

Definition at line 9862 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1192 X3D\_TextureTransform Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec2f** **center**
- struct **X3D\_Node** \* **metadata**
- float **rotation**
- struct **SFVec2f** **scale**
- struct **SFVec2f** **translation**

### 4.1192.1 Detailed Description

Definition at line 9892 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1193 X3D\_TextureTransform3D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **center**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFVec3f** **translation**

#### 4.1193.1 Detailed Description

Definition at line 9915 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1194 X3D\_TextureTransformMatrix3D Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **SFMatrix4f** **matrix**

#### 4.1194.1 Detailed Description

Definition at line 9938 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1195 X3D\_TimeSensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]



- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- double **cycleInterval**
- int **enabled**
- int **loop**
- struct **X3D\_Node** \* **metadata**
- double **pauseTime**
- double **resumeTime**
- double **startTime**
- double **stopTime**
- double **cycleTime**
- double **elapsedTime**
- float **fraction\_changed**
- int **isActive**
- double **isPaused**
- double **time**
- double **\_\_inittime**
- double **\_\_ctflag**
- int **\_\_oldEnabled**
- double **\_\_lasttime**

#### 4.1195.1 Detailed Description

Definition at line 9958 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1196 X3D\_TimeTrigger Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- double **triggerTime**
- struct **X3D\_Node** \* **metadata**

#### 4.1196.1 Detailed Description

Definition at line 9994 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1197 X3D\_ToneMappedVolumeStyle Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **surfaceNormals**
- struct **SFColorRGBA** **coolColor**
- struct **SFColorRGBA** **warmColor**

#### 4.1197.1 Detailed Description

Definition at line 10015 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1198 X3D\_TouchSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **SFVec3f** **hitNormal\_changed**
- struct **SFVec3f** **hitPoint\_changed**
- struct **SFVec2f** **hitTexCoord\_changed**
- struct **SFVec3f** **\_oldhitNormal**
- struct **SFVec3f** **\_oldhitPoint**
- struct **SFVec2f** **\_oldhitTexCoord**
- int **isActive**
- int **isOver**
- struct **Uni\_String** \* **description**
- double **touchTime**
- struct **X3D\_Node** \* **metadata**
- int **\_\_oldEnabled**

### 4.1198.1 Detailed Description

Definition at line 10038 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1199 X3D\_TrackingSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**

- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **SFVec3f** **position**
- struct **SFRotation** **rotation**
- int **isActive**
- struct **Uni\_String** \* **description**
- struct **X3D\_Node** \* **metadata**
- int **isPositionAvailable**
- int **isRotationAvailable**

#### 4.1199.1 Detailed Description

Definition at line 10069 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1200 X3D\_Transform Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **SFVec3f** **center**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **rotation**
- struct **SFVec3f** **scale**
- struct **SFRotation** **scaleOrientation**
- struct **SFVec3f** **translation**
- struct **SFVec3f** **bboxCenter**

- struct **SFVec3f** **bboxSize**
- int **\_\_do\_center**
- int **\_\_do\_trans**
- int **\_\_do\_rotation**
- int **\_\_do\_scaleO**
- int **\_\_do\_scale**
- int **\_\_do\_anything**
- struct **Multi\_Node** **\_sortedChildren**

#### 4.1200.1 Detailed Description

Definition at line 10095 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1201 X3D\_TransformSensor Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **center**
- struct **SFVec3f** **size**
- int **enabled**
- int **isActive**
- struct **SFVec3f** **position\_changed**
- struct **SFRotation** **orientation\_changed**
- double **enterTime**
- double **exitTime**
- struct **X3D\_Node** \* **targetObject**
- struct **X3D\_Node** \* **metadata**
- int **\_\_hit**
- struct **SFVec3f** **\_\_t1**
- struct **SFRotation** **\_\_t2**
- int **\_\_oldEnabled**

#### 4.1201.1 Detailed Description

Definition at line 10132 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1202 X3D\_TransmitterPdu Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **address**
- struct **SFVec3f** **antennaLocation**
- int **antennaPatternLength**
- int **antennaPatternType**
- int **applicationID**
- int **cryptoKeyID**
- int **cryptoSystem**
- int **enabled**
- int **entityID**
- int **frequency**
- int **inputSource**
- int **lengthOfModulationParameters**
- struct **X3D\_Node** \* **metadata**
- int **modulationTypeDetail**
- int **modulationTypeMajor**
- int **modulationTypeSpreadSpectrum**
- int **modulationTypeSystem**
- struct **Uni\_String** \* **multicastRelayHost**
- int **multicastRelayPort**
- struct **Uni\_String** \* **networkMode**
- int **port**
- float **power**
- int **radioEntityTypeCategory**
- int **radioEntityTypeCountry**
- int **radioEntityTypeDomain**
- int **radioEntityTypeKind**
- int **radioEntityTypeNomenclature**

- int **radioEntityTypeNomenclatureVersion**
- int **radioID**
- float **readInterval**
- struct **SFVec3f** **relativeAntennaLocation**
- int **rtpHeaderExpected**
- int **siteID**
- float **transmitFrequencyBandwidth**
- int **transmitState**
- int **whichGeometry**
- float **writeInterval**
- int **isActive**
- int **isNetworkReader**
- int **isNetworkWriter**
- int **isRtpHeaderHeard**
- int **isStandAlone**
- double **timestamp**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

#### 4.1202.1 Detailed Description

Definition at line 10164 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1203 X3D\_TriangleFanSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **Multi\_Int32** **fanCount**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **\_coordIndex**

#### 4.1203.1 Detailed Description

Definition at line 10227 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1204 X3D\_TriangleSet Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**
- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **\_coordIndex**

#### 4.1204.1 Detailed Description

Definition at line 10258 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h



## 4.1205 X3D\_TriangleSet2D Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **vertices**
- int **solid**
- struct **Multi\_Vec2f** **\_\_texCoords**
- void \* **\_\_wireindices**

### 4.1205.1 Detailed Description

Definition at line 10288 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1206 X3D\_TriangleStripSet Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **attrib**
- struct **X3D\_Node** \* **color**

- struct **X3D\_Node** \* **coord**
- struct **X3D\_Node** \* **fogCoord**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **normal**
- struct **Multi\_Int32** **stripCount**
- struct **X3D\_Node** \* **texCoord**
- int **ccw**
- int **colorPerVertex**
- int **normalPerVertex**
- int **solid**
- struct **Multi\_Int32** **\_coordIndex**

#### 4.1206.1 Detailed Description

Definition at line 10311 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1207 X3D\_TwoSidedMaterial Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- float **ambientIntensity**
- float **backAmbientIntensity**
- struct **SFColor** **backDiffuseColor**
- struct **SFColor** **backEmissiveColor**
- float **backShininess**
- struct **SFColor** **backSpecularColor**
- float **backTransparency**
- struct **SFColor** **diffuseColor**
- struct **SFColor** **emissiveColor**
- struct **X3D\_Node** \* **metadata**
- float **shininess**
- int **separateBackColor**
- struct **SFColor** **specularColor**
- float **transparency**
- struct **Multi\_Float** **\_verifiedFrontColor**
- struct **Multi\_Float** **\_verifiedBackColor**

### 4.1207.1 Detailed Description

Definition at line 10342 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1208 X3D\_UniversalJoint Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **anchorPoint**
- struct **SFVec3f** **axis1**
- struct **SFVec3f** **axis2**
- struct **X3D\_Node** \* **body1**
- struct **X3D\_Node** \* **body2**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **forceOutput**
- float **stop1Bounce**
- float **stop1ErrorCorrection**
- float **stop2Bounce**
- float **stop2ErrorCorrection**
- struct **SFVec3f** **body1AnchorPoint**
- struct **SFVec3f** **body1Axis**
- struct **SFVec3f** **body2AnchorPoint**
- struct **SFVec3f** **body2Axis**
- void \* **\_joint**
- int **\_forceout**
- struct **SFVec3f** **\_\_old\_anchorPoint**
- struct **SFVec3f** **\_\_old\_axis1**
- struct **SFVec3f** **\_\_old\_axis2**
- struct **X3D\_Node** \* **\_\_old\_body1**
- struct **X3D\_Node** \* **\_\_old\_body2**

#### 4.1208.1 Detailed Description

Definition at line 10376 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1209 X3D\_Viewpoint Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- double **bindTime**
- int **isBound**
- struct **Uni\_String** \* **description**
- int **jump**
- float **fieldOfView**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **orientation**
- struct **SFVec3f** **position**
- int **\_layerId**
- int **\_donethispass**
- struct **SFVec3f** **centerOfRotation**
- int **retainUserOffsets**
- struct **Uni\_String** \* **fovMode**
- float **aspectRatio**

#### 4.1209.1 Detailed Description

Definition at line 10416 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1210 X3D\_ViewpointGroup Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **center**
- struct **Multi\_Node** **children**
- struct **Uni\_String** \* **description**
- int **displayed**
- struct **X3D\_Node** \* **metadata**
- int **retainUserOffsets**
- struct **SFVec3f** **size**
- struct **X3D\_Node** \* **\_\_proxNode**

### 4.1210.1 Detailed Description

Definition at line 10449 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1211 X3D\_Viewport Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**

- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **\_\_sibAffectors**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Float** **clipBoundary**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

#### 4.1211.1 Detailed Description

Definition at line 10475 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1212 X3D\_Virt Struct Reference

#### Data Fields

- void(\* **prep** )(void \*)
- void(\* **rend** )(void \*)
- void(\* **children** )(void \*)
- void(\* **fin** )(void \*)
- void(\* **rendray** )(void \*)
- void(\* **mkpolyrep** )(void \*)
- void(\* **proximity** )(void \*)
- void(\* **other** )(void \*)
- void(\* **collision** )(void \*)
- void(\* **compile** )(void \*, void \*, void \*, void \*, void \*, void \*)

#### 4.1212.1 Detailed Description

Definition at line 37 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1213 X3D\_VisibilitySensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **center**
- int **enabled**
- struct **SFVec3f** **size**
- double **enterTime**
- double **exitTime**
- int **isActive**
- struct **X3D\_Node** \* **metadata**
- int **\_\_visible**
- int **\_\_occludeCheckCount**
- struct **Multi\_Vec3f** **\_\_points**
- int **\_\_Samples**
- int **\_\_oldEnabled**

### 4.1213.1 Detailed Description

Definition at line 10501 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1214 X3D\_VolumeData Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]

- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **dimensions**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **voxels**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- void \* **\_boxtris**
- struct **X3D\_Node** \* **renderStyle**

#### 4.1214.1 Detailed Description

Definition at line 10531 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

### 4.1215 X3D\_VolumeEmitter Struct Reference

#### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **set\_coordIndex**
- struct **X3D\_Node** \* **coord**
- struct **SFVec3f** **direction**
- struct **X3D\_Node** \* **metadata**
- float **speed**
- float **variation**
- struct **Multi\_Int32** **coordIndex**
- int **internal**
- float **mass**
- float **surfaceArea**
- void \* **\_ifs**



### 4.1215.1 Detailed Description

Definition at line 10556 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1216 X3D\_VolumePickSensor Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **objectType**
- struct **X3D\_Node** \* **pickingGeometry**
- struct **Multi\_Node** **pickTarget**
- int **isActive**
- struct **Multi\_Node** **pickedGeometry**
- struct **Uni\_String** \* **intersectionType**
- struct **Uni\_String** \* **sortOrder**
- struct **Uni\_String** \* **matchCriterion**
- int **\_\_oldEnabled**

### 4.1216.1 Detailed Description

Definition at line 10585 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1217 X3D\_WindPhysicsModel Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **direction**
- int **enabled**
- float **gustiness**
- struct **X3D\_Node** \* **metadata**
- float **speed**
- float **turbulence**
- float **\_frameSpeed**

### 4.1217.1 Detailed Description

Definition at line 10614 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1218 X3D\_WorldInfo Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- void \* **\_gc**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** **info**
- struct **Uni\_String** \* **title**
- struct **X3D\_Node** \* **metadata**

### 4.1218.1 Detailed Description

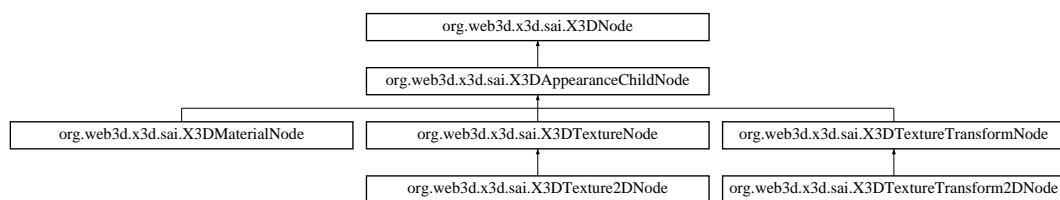
Definition at line 10639 of file Structs.h.

The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/Structs.h

## 4.1219 org.web3d.x3d.sai.X3DAppearanceChildNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DAppearanceChildNode:



### Additional Inherited Members

### 4.1219.1 Detailed Description

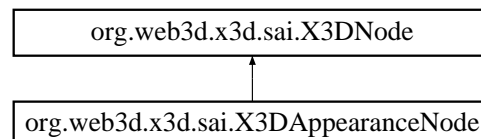
Definition at line 3 of file X3DAppearanceChildNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DAppearanceChildNode.java

## 4.1220 org.web3d.x3d.sai.X3DAppearanceNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DAppearanceNode:



### Additional Inherited Members

### 4.1220.1 Detailed Description

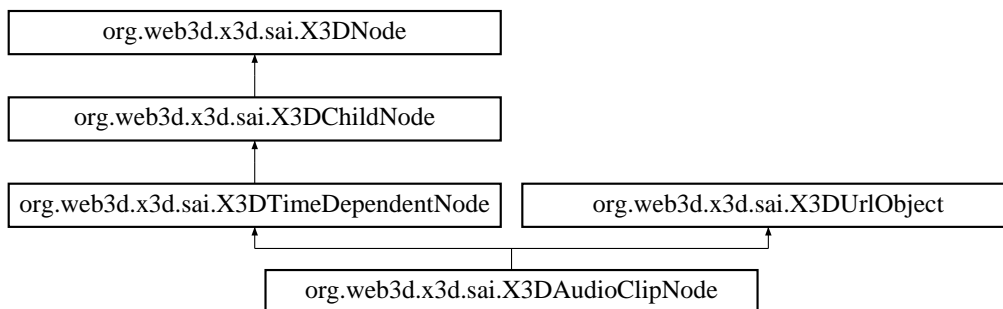
Definition at line 3 of file X3DAppearanceNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DAppearanceNode.java

## 4.1221 org.web3d.x3d.sai.X3DAudioClipNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DAudioClipNode:



### Public Member Functions

- String **getDescription** ()
- void **setDescription** ()
- float **getPitch** ()
- void **setPitch** (float pitch) throws InvalidFieldValueException
- double **getDuration** ()
- void **setDuration** (double time)

### 4.1221.1 Detailed Description

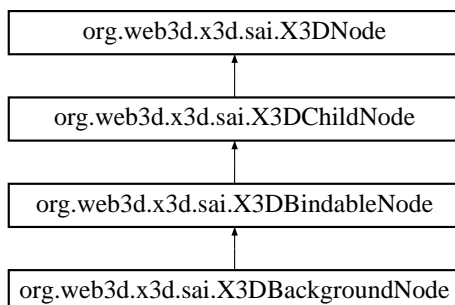
Definition at line 3 of file X3DAudioClipNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DAudioClipNode.java

## 4.1222 org.web3d.x3d.sai.X3DBackgroundNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DBackgroundNode:



## Public Member Functions

- int **getNumSkyAngle** ()
- void **getSkyAngle** (float[] angles)
- void **setSkyAngle** (float[] angles)
- int **getNumGroundAngle** ()
- void **getGroundAngle** (float[] angle)
- void **setGroundAngle** (float[] angle)
- int **getNumSkyColor** ()
- void **getSkyColor** (float[] colors)
- void **setSkyColor** (float[] colors)
- int **getNumGroundColor** ()
- void **getGroundColor** (float[] color)
- void **setGroundColor** (float[] color)

### 4.1222.1 Detailed Description

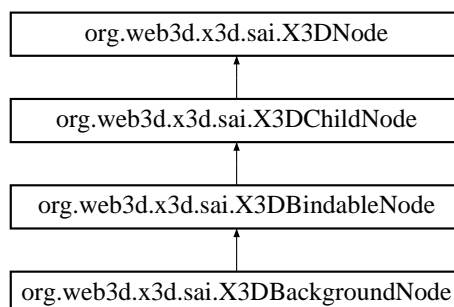
Definition at line 3 of file X3DBackgroundNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DBackgroundNode.java

## 4.1223 org.web3d.x3d.sai.X3DBindableNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DBindableNode:



## Public Member Functions

- void **setBind** (boolean enable)
- boolean **isBound** ()
- double **getBindTime** ()

### 4.1223.1 Detailed Description

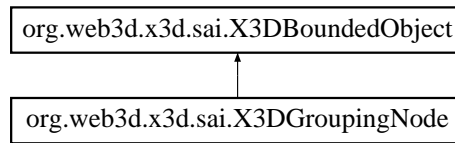
Definition at line 3 of file X3DBindableNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DBindableNode.java

## 4.1224 org.web3d.x3d.sai.X3DBoundedObject Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DBoundedObject:



### 4.1224.1 Detailed Description

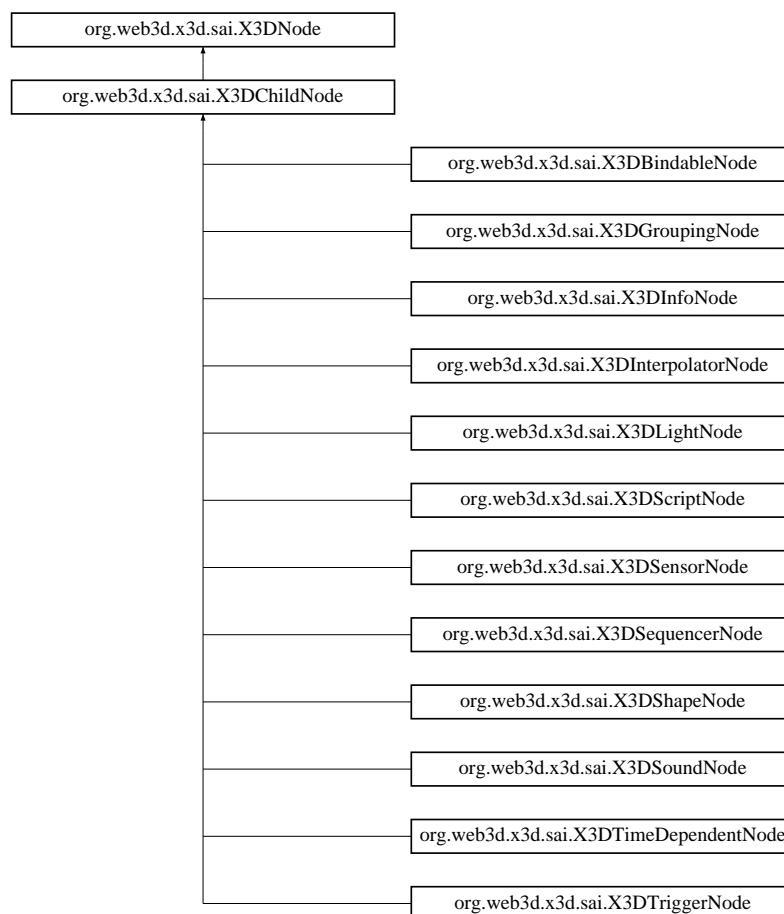
Definition at line 3 of file `X3DBoundedObject.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DBoundedObject.java`

## 4.1225 org.web3d.x3d.sai.X3DChildNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DChildNode:



## Additional Inherited Members

### 4.1225.1 Detailed Description

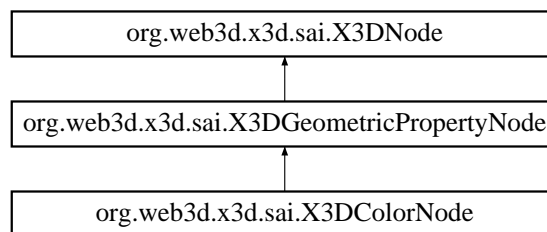
Definition at line 3 of file X3DChildNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DChildNode.java

## 4.1226 org.web3d.x3d.sai.X3DColorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DColorNode:



## Public Member Functions

- int **getNumColors** ()
- int **getNumComponents** ()
- void **setColor** (float[] colors)
- void **getColor** (float[] color)

### 4.1226.1 Detailed Description

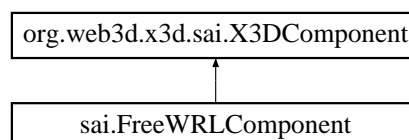
Definition at line 3 of file X3DColorNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DColorNode.java

## 4.1227 org.web3d.x3d.sai.X3DComponent Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DComponent:



## Public Member Functions

- **ExternalBrowser** **getBrowser** ()
- Object **getImplementation** ()
- void **shutdown** ()

### 4.1227.1 Detailed Description

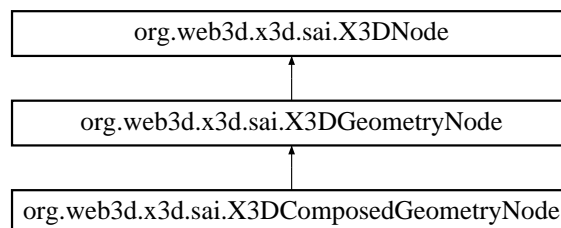
Definition at line 3 of file X3DComponent.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DComponent.java

## 4.1228 org.web3d.x3d.sai.X3DComposedGeometryNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DComposedGeometryNode:



## Public Member Functions

- **X3DNode** **getColor** ()
- void **setColor** ( **X3DColorNode** node)
- void **setColor** ( **X3DProtoInstance** comp)
- **X3DNode** **getCoord** ()
- void **setCoord** ( **X3DCoordinateNode** node)
- void **setCoord** ( **X3DProtoInstance** node)
- **X3DNode** **getTexCoord** ()
- void **setTexCoord** ( **X3DTextureCoordinateNode** node)
- void **setTexCoord** ( **X3DProtoInstance** node)
- **X3DNode** **getNormal** ()
- void **setNormal** ( **X3DNormalNode** node)
- void **setNormal** ( **X3DProtoInstance** node)
- boolean **getIsSolid** ()
- void **setIsSolid** (boolean solid)
- boolean **getIsCCW** ()
- void **setIsCCW** (boolean ccw)
- boolean **getColorPerVertex** ()
- void **setColorPerVertex** (boolean perVertex)
- boolean **getNormalPerVertex** ()
- void **setNormalPerVertex** (boolean perVertex)



### 4.1228.1 Detailed Description

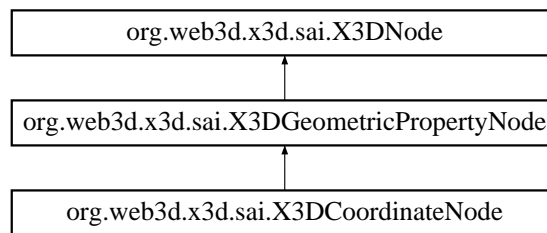
Definition at line 3 of file X3DComposedGeometryNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DComposedGeometryNode.java

## 4.1229 org.web3d.x3d.sai.X3DCoordinateNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DCoordinateNode:



### Public Member Functions

- int **getNumCoordinates** ()
- void **setPoint** (float[] points)
- void **getPoint** (float[] points)

### 4.1229.1 Detailed Description

Definition at line 3 of file X3DCoordinateNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DCoordinateNode.java

## 4.1230 org.web3d.x3d.sai.X3DDragSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DDragSensorNode:



## Public Member Functions

- void **setAutoOffset** (boolean newAutoOffset)
- boolean **getAutoOffset** ()
- void **getTrackPoint** (float[] points)

### 4.1230.1 Detailed Description

Definition at line 3 of file X3DDragSensorNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DDragSensorNode.java

## 4.1231 org.web3d.x3d.sai.X3DEnvironmentalSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DEnvironmentalSensorNode:



## Public Member Functions

- double **getEnterTime** ()
- double **getExitTime** ()
- void **getCenter** (float[] pos)
- void **setCenter** (float[] pos)
- void **getSize** (float[] size)
- void **setSize** (float[] size)

### 4.1231.1 Detailed Description

Definition at line 3 of file X3DEnvironmentalSensorNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DEnvironmentalSensorNode.java

## 4.1232 org.web3d.x3d.sai.X3DException Class Reference

Inheritance diagram for org.web3d.x3d.sai.X3DException:



### Public Member Functions

- **X3DException** (String msg)

#### 4.1232.1 Detailed Description

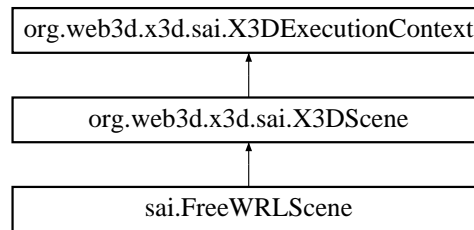
Definition at line 3 of file X3DException.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DException.java

## 4.1233 org.web3d.x3d.sai.X3DExecutionContext Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DExecutionContext:



### Public Member Functions

- String **getSpecificationVersion** () throws InvalidExecutionContextException
- int **getEncoding** () throws InvalidExecutionContextException
- **ProfileInfo** **getProfile** () throws InvalidExecutionContextException
- **ComponentInfo** [] **getComponents** () throws InvalidExecutionContextException
- String **getWorldURL** () throws InvalidExecutionContextException
- **X3DNode** **getNamedNode** (String nodeName) throws InvalidExecutionContextException, Node←UnavailableException, InvalidNameException
- **X3DNode** **getImportedNode** (String nodeName) throws InvalidExecutionContextException, Node←UnavailableException, InvalidNameException
- **X3DNode** **createNode** (String nodeName) throws InvalidExecutionContextException, InvalidName←Exception
- **X3DProtoInstance** **createProto** (String protoName) throws InvalidExecutionContextException, Invalid←NameException
- void **updateNamedNode** (String nodeName, **X3DNode** nodeRef) throws InvalidExecutionContextException, InvalidNameException, ImportedNodeException
- void **updateImportedNode** (String nodeName, String importedName, **X3DNode** nodeRef) throws Invalid←ExecutionContextException, InvalidNameException, ImportedNodeException
- void **removeNamedNode** (String nodeName) throws InvalidExecutionContextException, InvalidName←Exception
- void **removeImportedNode** (String nodeName) throws InvalidExecutionContextException, InvalidName←Exception
- **X3DProtoDeclaration** **getProtoDeclaration** (String protoName) throws InvalidExecutionContextException, InvalidNameException
- void **updateProtoDeclaration** (String protoName, **X3DProtoDeclaration** newDeclaration) throws Invalid←ExecutionContextException, InvalidNameException
- void **removeProtoDeclaration** (String protoName) throws InvalidExecutionContextException, Invalid←NameException
- **X3DExternProtoDeclaration** **getExternProtoDeclaration** (String protoName) throws InvalidExecution←ContextException, InvalidNameException, URLUnavailableException
- void **updateExternProtoDeclaration** (String protoName, **X3DExternProtoDeclaration** newDeclaration) throws InvalidExecutionContextException
- void **removeExternProtoDeclaration** (String protoName) throws InvalidExecutionContextException
- **X3DNode** [] **getRootNodes** () throws InvalidExecutionContextException
- **X3DRoute** [] **getRoutes** () throws InvalidExecutionContextException
- **X3DRoute** **addRoute** ( **X3DNode** startNode, String starttName, **X3DNode** endNode, String endEvent) throws InvalidExecutionContextException, InvalidNodeException, InvalidFieldException
- void **removeRoute** ( **X3DRoute** route) throws InvalidExecutionContextException

#### 4.1233.1 Detailed Description

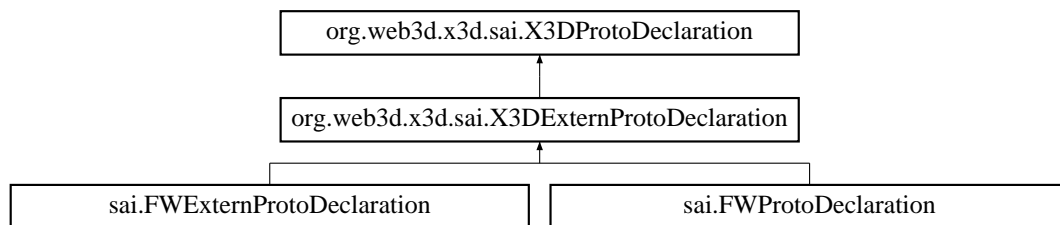
Definition at line 3 of file X3DExecutionContext.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DExecutionContext.java

### 4.1234 org.web3d.x3d.sai.X3DExternProtoDeclaration Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DExternProtoDeclaration:



#### Public Member Functions

- `int getLoadState ()` throws `InvalidOperationTimingException`, `InvalidProtoException`
- `void loadNow ()` throws `InvalidOperationTimingException`, `InvalidProtoException`

#### 4.1234.1 Detailed Description

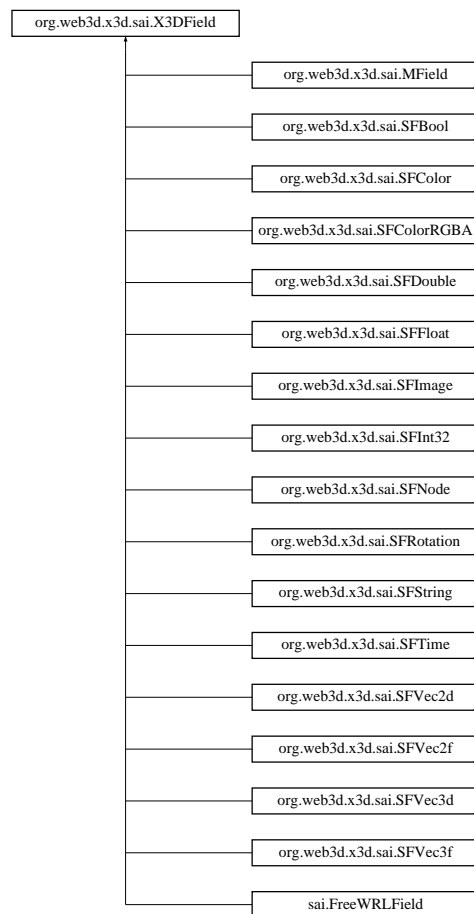
Definition at line 3 of file X3DExternProtoDeclaration.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DExternProtoDeclaration.java

### 4.1235 org.web3d.x3d.sai.X3DField Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DField:



## Public Member Functions

- **X3DFieldDefinition** **getDefinition** () throws InvalidFieldException, ConnectionException
- boolean **isReadable** () throws InvalidFieldException, ConnectionException
- boolean **isWritable** () throws InvalidFieldException, ConnectionException
- void **addX3DEventListener** ( **X3DFieldEventListener** l) throws InvalidFieldException, ConnectionException
- void **removeX3DEventListener** ( **X3DFieldEventListener** l) throws InvalidFieldException, ConnectionException
- void **setUserData** (Object data) throws InvalidFieldException, ConnectionException
- Object **getUserData** () throws InvalidFieldException, ConnectionException
- void **dispose** ()

### 4.1235.1 Detailed Description

Definition at line 3 of file X3DField.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DField.java

## 4.1236 org.web3d.x3d.sai.X3DFieldDefinition Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DFieldDefinition:



### Public Member Functions

- String **getName** ()
- int **getAccessType** ()
- int **getFieldType** ()
- String **getFieldTypeString** ()

#### 4.1236.1 Detailed Description

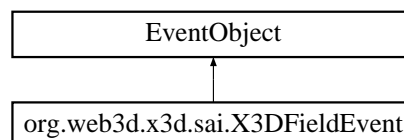
Definition at line 3 of file X3DFieldDefinition.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DFieldDefinition.java

## 4.1237 org.web3d.x3d.sai.X3DFieldEvent Class Reference

Inheritance diagram for org.web3d.x3d.sai.X3DFieldEvent:



### Public Member Functions

- **X3DFieldEvent** (Object src, double t, Object d)
- double **getTime** ()
- Object **getData** ()

#### 4.1237.1 Detailed Description

Definition at line 4 of file X3DFieldEvent.java.

The documentation for this class was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DFieldEvent.java

## 4.1238 org.web3d.x3d.sai.X3DFieldEventListener Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DFieldEventListener:



### Public Member Functions

- void **readableFieldChanged** ( **X3DFieldEvent** evt)

### 4.1238.1 Detailed Description

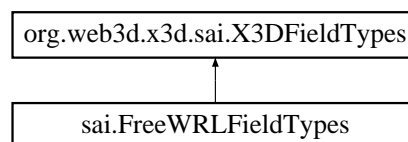
Definition at line 3 of file `X3DFieldEventListener.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DFieldEventListener.java`

## 4.1239 org.web3d.x3d.sai.X3DFieldTypes Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DFieldTypes:



### Data Fields

- int **INPUT\_ONLY** = 1
- int **INITIALIZE\_ONLY** = 2
- int **INPUT\_OUTPUT** = 3
- int **OUTPUT\_ONLY** = 4
- int **SFBOOL** = 1
- int **MFBOOL** = 2
- int **SFCOLOR** = 21
- int **MFCOLOR** = 22
- int **SFCOLORRGBA** = 23
- int **MFCOLORRGBA** = 24
- int **SFDOUBLE** = 7
- int **MFDOUBLE** = 8
- int **SFFLOAT** = 5



- int **MFLOAT** = 6
- int **SFIMAGE** = 25
- int **MFIMAGE** = 26
- int **SFINT32** = 3
- int **MFINT32** = 4
- int **SFNODE** = 11
- int **MFNODE** = 12
- int **SFROTATION** = 19
- int **MFROTATION** = 20
- int **SFSTRING** = 27
- int **MFSTRING** = 28
- int **SFTIME** = 9
- int **MFTIME** = 10
- int **SFVEC2F** = 13
- int **MFVEC2F** = 14
- int **SFVEC3F** = 15
- int **MFVEC3F** = 16
- int **SFVEC3D** = 17
- int **MFVEC3D** = 18
- int **SFVEC2D** = 29
- int **MFVEC2D** = 30

#### 4.1239.1 Detailed Description

Definition at line 3 of file X3DFieldTypes.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DFieldTypes.java

## 4.1240 org.web3d.x3d.sai.X3DFontStyleNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DFontStyleNode:



### Public Member Functions

- Font **getFont** ()
- int **getHorizontalJustification** ()
- int **getVerticalJustification** ()
- float **getSpacing** ()
- float **getSize** ()
- boolean **isTopToBottom** ()
- boolean **isLeftToRight** ()

## Data Fields

- int **PLAIN\_STYLE** = java.awt.Font.PLAIN
- int **ITALIC\_STYLE** = java.awt.Font.ITALIC
- int **BOLD\_STYLE** = java.awt.Font.BOLD
- int **BOLDITALIC\_STYLE** = java.awt.Font.BOLD + java.awt.Font.ITALIC
- int **BEGIN\_JUSTIFY** = 1
- int **END\_JUSTIFY** = 2
- int **MIDDLE\_JUSTIFY** = 3
- int **FIRST\_JUSTIFY** = 4

### 4.1240.1 Detailed Description

Definition at line 4 of file X3DFontStyleNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DFontStyleNode.java

## 4.1241 org.web3d.x3d.sai.X3DGeometricPropertyNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DGeometricPropertyNode:



## Additional Inherited Members

### 4.1241.1 Detailed Description

Definition at line 3 of file X3DGeometricPropertyNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DGeometricPropertyNode.java

## 4.1242 org.web3d.x3d.sai.X3DGeometryNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DGeometryNode:



## Additional Inherited Members

### 4.1242.1 Detailed Description

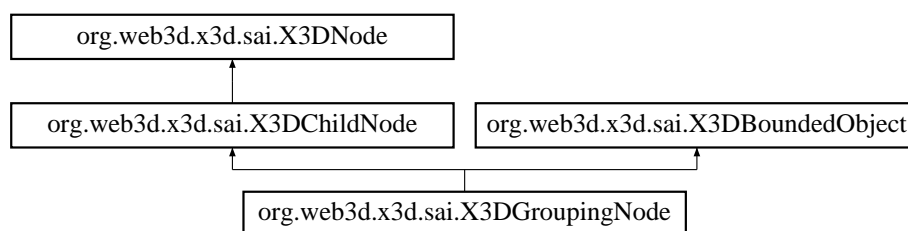
Definition at line 3 of file X3DGeometryNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DGeometryNode.java

## 4.1243 org.web3d.x3d.sai.X3DGroupingNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DGroupingNode:



## Public Member Functions

- void **getChildren** ( `X3DNode[]` nodes)
- void **setChildren** ( `X3DNode[]` kids) throws `InvalidNodeException`
- void **addChildren** ( `X3DNode[]` added) throws `InvalidNodeException`
- void **removeChildren** ( `X3DNode[]` removed) throws `InvalidNodeException`
- void **removeChild** ( `X3DNode` removed) throws `InvalidNodeException`
- int **getNumChildren** ()

### 4.1243.1 Detailed Description

Definition at line 3 of file X3DGroupingNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DGroupingNode.java

## 4.1244 org.web3d.x3d.sai.X3DInfoNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DInfoNode:



## Additional Inherited Members

### 4.1244.1 Detailed Description

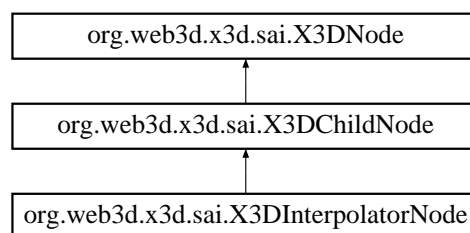
Definition at line 3 of file X3DInfoNode.java.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DInfoNode.java`

## 4.1245 `org.web3d.x3d.sai.X3DInterpolatorNode` Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DInterpolatorNode`:



## Public Member Functions

- void **setFraction** (float value)
- int **getNumKeys** ()
- void **setKey** (float[] keys)
- void **getKey** (float[] keys)

### 4.1245.1 Detailed Description

Definition at line 3 of file X3DInterpolatorNode.java.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DInterpolatorNode.java`

## 4.1246 `org.web3d.x3d.sai.X3DKeyDeviceSensorNode` Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DKeyDeviceSensorNode`:



## Additional Inherited Members

### 4.1246.1 Detailed Description

Definition at line 3 of file X3DKeyDeviceSensorNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DKeyDeviceSensorNode.java

## 4.1247 org.web3d.x3d.sai.X3DLightNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DLightNode:



## Public Member Functions

- boolean **getOn** ()
- void **setOn** (boolean state)
- float **getAmbientIntensity** ()
- void **setAmbientIntensity** (float intensity) throws InvalidFieldValueException
- void **getColor** (float[] color)
- void **setColor** (float[] color) throws InvalidFieldValueException
- void **getIntensity** ()
- void **setIntensity** (float newIntensity) throws InvalidFieldValueException

### 4.1247.1 Detailed Description

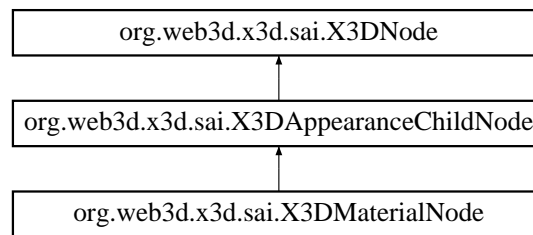
Definition at line 3 of file X3DLightNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DLightNode.java

## 4.1248 org.web3d.x3d.sai.X3DMaterialNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DMaterialNode:



### Additional Inherited Members

#### 4.1248.1 Detailed Description

Definition at line 3 of file X3DMaterialNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DMaterialNode.java

## 4.1249 org.web3d.x3d.sai.X3DMetadataObject Interface Reference

### Public Member Functions

- void **setStandard** (String std)
- String **getStandard** ()
- void **setName** (String name)
- String **getName** ()

#### 4.1249.1 Detailed Description

Definition at line 3 of file X3DMetadataObject.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DMetadataObject.java

## 4.1250 org.web3d.x3d.sai.X3DNetworkSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DNetworkSensorNode:



### Additional Inherited Members

#### 4.1250.1 Detailed Description

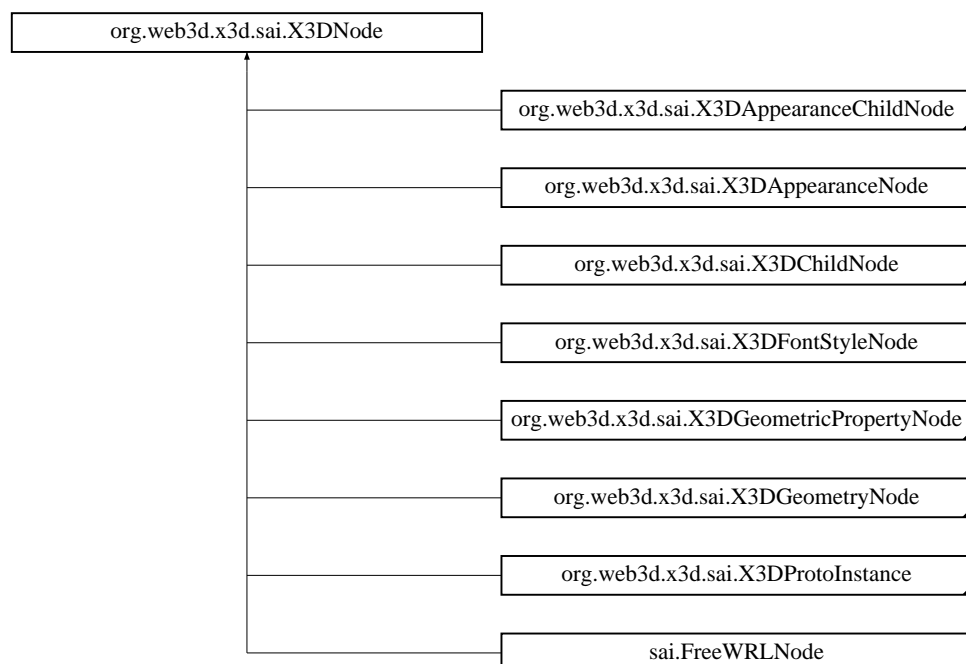
Definition at line 3 of file X3DNetworkSensorNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DNetworkSensorNode.java

## 4.1251 org.web3d.x3d.sai.X3DNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DNode:



## Public Member Functions

- void **setMetadata** ( **X3DMetadataObject** data) throws `InvalidNodeException`, `ConnectionException`
- **X3DMetadataObject** **getMetadata** () throws `InvalidNodeException`, `ConnectionException`
- String **getNodeName** () throws `InvalidNodeException`, `ConnectionException`
- **X3DFieldDefinition** [] **getFieldDefinitions** () throws `InvalidNodeException`, `ConnectionException`
- int [] **getNodeTypes** () throws `InvalidNodeException`, `ConnectionException`
- **X3DField** **getField** (String name) throws `InvalidNameException`, `InvalidNodeException`, `ConnectionException`
- void **dispose** ()

### 4.1251.1 Detailed Description

Definition at line 3 of file `X3DNode.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DNode.java`

## 4.1252 org.web3d.x3d.sai.X3DNodeTypes Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DNodeTypes`:



## Data Fields

- int **X3DBoundedObject** = 1
- int **X3DBounded2DObject** = 2
- int **X3DURLObject** = 3
- int **X3DAppearanceNode** = 10
- int **X3DAppearanceChildNode** = 11
- int **X3DMaterialNode** = 12
- int **X3DTextureNode** = 13
- int **X3DTexture2DNode** = 14
- int **X3DTexture3DNode** = 15
- int **X3DTextureTransformNode** = 16
- int **X3DTextureTransform2DNode** = 17
- int **X3DGeometryNode** = 18
- int **X3DTextNode** = 19
- int **X3DParametricGeometryNode** = 20
- int **X3DGeometricPropertyNode** = 21
- int **X3DColorNode** = 22
- int **X3DCoordinateNode** = 23
- int **X3DNormalNode** = 24



- int **X3DTextureCoordinateNode** = 25
- int **X3DFontStyleNode** = 26
- int **X3DProtoInstance** = 27
- int **X3DChildNode** = 28
- int **X3DBindableNode** = 29
- int **X3DBackgroundNode** = 30
- int **X3DGroupingNode** = 31
- int **X3DShapeNode** = 32
- int **X3DInterpolatorNode** = 33
- int **X3DLightNode** = 34
- int **X3DScriptNode** = 35
- int **X3DSensorNode** = 36
- int **X3DEnvironmentalSensorNode** = 37
- int **X3DKeyDeviceSensorNode** = 38
- int **X3DNetworkSensorNode** = 39
- int **X3DPointingDeviceSensorNode** = 40
- int **X3DDragSensorNode** = 41
- int **X3DTouchSensorNode** = 42
- int **X3DSequencerNode** = 43
- int **X3DTimeDependentNode** = 44
- int **X3DSoundSourceNode** = 45
- int **X3DTriggerNode** = 46
- int **X3DInfoNode** = 47

#### 4.1252.1 Detailed Description

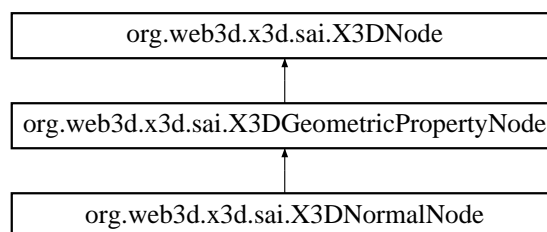
Definition at line 3 of file X3DNodeTypes.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DNodeTypes.java

### 4.1253 org.web3d.x3d.sai.X3DNormalNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DNormalNode:



#### Public Member Functions

- int **getNumNormals** ()
- void **setVector** (float[] value)
- void **getVector** (float[] value)

#### 4.1253.1 Detailed Description

Definition at line 3 of file X3DNormalNode.java.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DNormalNode.java`

### 4.1254 `org.web3d.x3d.sai.X3DParametricGeometryNode` Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DParametricGeometryNode`:



#### Additional Inherited Members

#### 4.1254.1 Detailed Description

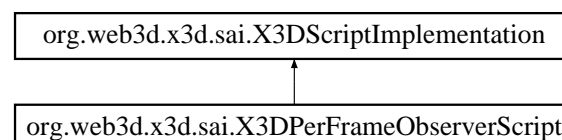
Definition at line 3 of file X3DParametricGeometryNode.java.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DParametricGeometryNode.java`

### 4.1255 `org.web3d.x3d.sai.X3DPerFrameObserverScript` Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DPerFrameObserverScript`:



#### Public Member Functions

- `void prepareEvents ()`

### 4.1255.1 Detailed Description

Definition at line 3 of file X3DPerFrameObserverScript.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DPerFrameObserverScript.java

## 4.1256 org.web3d.x3d.sai.X3DPointingDeviceSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DPointingDeviceSensorNode:



### Additional Inherited Members

### 4.1256.1 Detailed Description

Definition at line 3 of file X3DPointingDeviceSensorNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DPointingDeviceSensorNode.java

## 4.1257 org.web3d.x3d.sai.X3DProtoDeclaration Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DProtoDeclaration:



## Public Member Functions

- **X3DProtoInstance createInstance ()** throws `InvalidOperationTimingException`, `InvalidProtoException`
- **X3DFieldDefinition [] getFieldDefinitions ()** throws `InvalidOperationTimingException`, `InvalidProtoException`
- void **dispose ()**

### 4.1257.1 Detailed Description

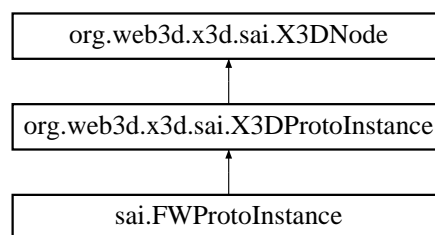
Definition at line 3 of file `X3DProtoDeclaration.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DProtoDeclaration.java`

## 4.1258 org.web3d.x3d.sai.X3DProtoInstance Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DProtoInstance`:



## Public Member Functions

- int [] **getImplementationTypes ()**

### 4.1258.1 Detailed Description

Definition at line 3 of file `X3DProtoInstance.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DProtoInstance.java`

## 4.1259 org.web3d.x3d.sai.X3DRoute Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DRoute`:



## Public Member Functions

- **X3DNode getSourceNode** () throws InvalidOperationTimingException, InvalidRouteException
- String **getSourceField** () throws InvalidOperationTimingException, InvalidRouteException
- **X3DNode getDestinationNode** () throws InvalidOperationTimingException, InvalidRouteException
- String **getDestinationField** () throws InvalidOperationTimingException, InvalidRouteException
- void **dispose** () throws InvalidOperationTimingException

### 4.1259.1 Detailed Description

Definition at line 3 of file X3DRoute.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DRoute.java

## 4.1260 org.web3d.x3d.sai.X3DScene Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DScene:



## Public Member Functions

- String **getMetaData** (String **key**) throws InvalidExecutionContextException
- void **setMetaData** (String **key**, String value) throws InvalidExecutionContextException
- **X3DNode getExportedNode** (String nodeName) throws InvalidExecutionContextException, Node↔UnavailableException, InvalidNameException
- void **updateExportedNode** (String nodeName, String newName) throws InvalidExecutionContextException, InvalidNameException
- void **removeExportedNode** (String nodeName) throws InvalidExecutionContextException, InvalidName↔Exception
- void **addRootNode** ( **X3DNode** rootNode) throws InvalidExecutionContextException, NodeInUseException, InsufficientCapabilitiesException
- void **removeRootNode** ( **X3DNode** rootNode) throws InvalidExecutionContextException
- void **dispose** ()

### 4.1260.1 Detailed Description

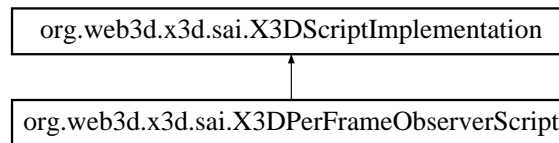
Definition at line 3 of file X3DScene.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DScene.java

## 4.1261 org.web3d.x3d.sai.X3DScriptImplementation Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DScriptImplementation:



### Public Member Functions

- void **setBrowser** ( **Browser** browser)
- void **setFields** ( **X3DScriptNode** externalView, java.util.Map fields)
- void **initialize** ()
- void **eventsProcessed** ()
- void **shutdown** ()

### 4.1261.1 Detailed Description

Definition at line 3 of file `X3DScriptImplementation.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DScriptImplementation.java`

## 4.1262 org.web3d.x3d.sai.X3DScriptNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DScriptNode:



### Additional Inherited Members

### 4.1262.1 Detailed Description

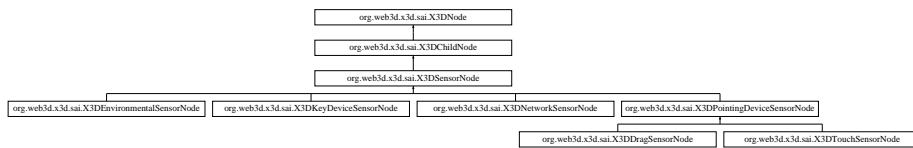
Definition at line 3 of file `X3DScriptNode.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DScriptNode.java`

## 4.1263 org.web3d.x3d.sai.X3DSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DSensorNode:



### Public Member Functions

- void **setEnabled** (boolean state)
- boolean **getEnabled** ()
- boolean **getIsActive** ()

#### 4.1263.1 Detailed Description

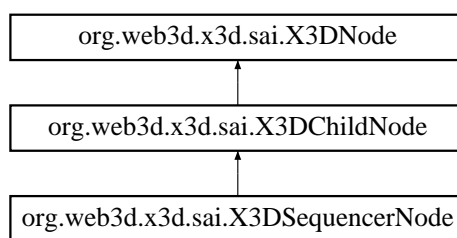
Definition at line 3 of file X3DSensorNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DSensorNode.java

## 4.1264 org.web3d.x3d.sai.X3DSequencerNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DSequencerNode:



### Public Member Functions

- void **setFraction** (float fraction)
- int **getNumKey** ()
- void **getKey** (float[] keys)
- void **setKey** (float[] keys)
- int **getNumKeyValue** ()

#### 4.1264.1 Detailed Description

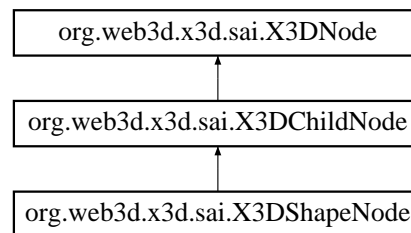
Definition at line 3 of file X3DSequencerNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DSequencerNode.java

#### 4.1265 org.web3d.x3d.sai.X3DShapeNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DShapeNode:



##### Public Member Functions

- **X3DNode** **getAppearance** ()
- void **setAppearance** ( **X3DAppearanceNode** app)
- void **setAppearance** ( **X3DProtolInstance** app)
- **X3DNode** **getGeometry** ()
- void **setGeometry** ( **X3DGeometryNode** geom)
- void **setGeometry** ( **X3DProtolInstance** geom)

#### 4.1265.1 Detailed Description

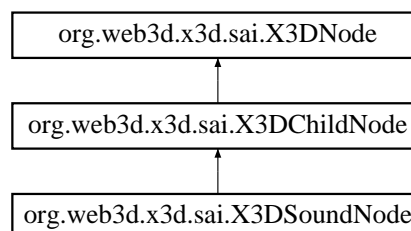
Definition at line 3 of file X3DShapeNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DShapeNode.java

#### 4.1266 org.web3d.x3d.sai.X3DSoundNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DSoundNode:





## Additional Inherited Members

### 4.1266.1 Detailed Description

Definition at line 3 of file X3DSoundNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DSoundNode.java

## 4.1267 org.web3d.x3d.sai.X3DSoundSourceNode Interface Reference

### Public Member Functions

- float **getPitch** ()
- void **setPitch** (float pitch) throws InvalidFieldValueException
- void **setDescription** (String text)
- String **getDescription** (String text)

### 4.1267.1 Detailed Description

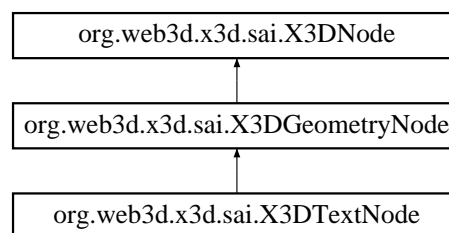
Definition at line 3 of file X3DSoundSourceNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DSoundSourceNode.java

## 4.1268 org.web3d.x3d.sai.X3DTextNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTextNode:



### Public Member Functions

- void **setFontStyle** ( X3DFontStyleNode fs)
- void **setFontStyle** ( X3DProtoInstance fs)
- X3DNode **getFontStyle** ()
- int **getNumText** ()
- void **setText** (String[] text)
- void **getText** (String[] text)

#### 4.1268.1 Detailed Description

Definition at line 3 of file X3DTextNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTextNode.java

#### 4.1269 org.web3d.x3d.sai.X3DTexture2DNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTexture2DNode:



#### Public Member Functions

- void **setRepeatS** (boolean state)
- boolean **getRepeatS** ()
- void **setRepeatT** (boolean state)
- boolean **getRepeatT** ()

#### 4.1269.1 Detailed Description

Definition at line 3 of file X3DTexture2DNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTexture2DNode.java

#### 4.1270 org.web3d.x3d.sai.X3DTextureCoordinateNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTextureCoordinateNode:



## Public Member Functions

- int **getNumCoordinates** ()
- int **getNumComponents** ()
- void **setPoint** (float[] points)
- void **getPoint** (float[] points)

### 4.1270.1 Detailed Description

Definition at line 3 of file X3DTextureCoordinateNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTextureCoordinateNode.java

## 4.1271 org.web3d.x3d.sai.X3DTextureNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTextureNode:



## Additional Inherited Members

### 4.1271.1 Detailed Description

Definition at line 3 of file X3DTextureNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTextureNode.java

## 4.1272 org.web3d.x3d.sai.X3DTextureTransform2DNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTextureTransform2DNode:



## Public Member Functions

- void **getCenter** (float[ ] position)
- void **setCenter** (float[ ] position)
- float **getRotation** ()
- void **setRotation** (float angle)
- void **getScale** (float[ ] scale)
- void **setScale** (float[ ] scale)
- void **getTranslation** (float[ ] trans)
- void **setTranslation** (float[ ] trans)

### 4.1272.1 Detailed Description

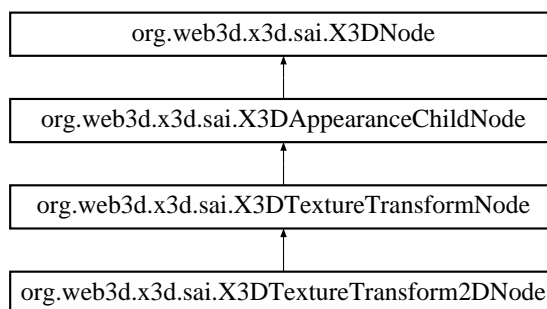
Definition at line 3 of file X3DTextureTransform2DNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTextureTransform2DNode.java

## 4.1273 org.web3d.x3d.sai.X3DTextureTransformNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTextureTransformNode:



## Additional Inherited Members

### 4.1273.1 Detailed Description

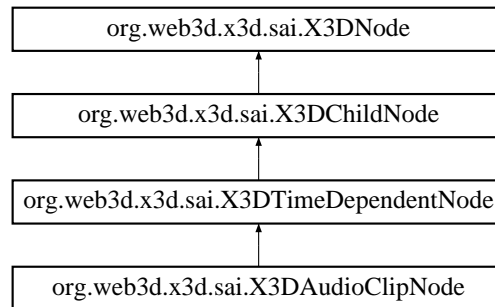
Definition at line 3 of file X3DTextureTransformNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTextureTransformNode.java

## 4.1274 org.web3d.x3d.sai.X3DTimeDependentNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTimeDependentNode:



### Public Member Functions

- boolean **getIsActive** ()
- boolean **getIsPaused** ()
- double **getElapsedTime** ()
- void **setNumLoops** (float count)
- float **getNumLoops** ()
- void **setLoop** (boolean loop)
- boolean **getLoop** ()
- void **setStartTime** (double time)
- double **getStartTime** ()
- void **setStopTime** (double time)
- double **getStopTime** ()
- void **setPauseTime** (double time)
- double **getPauseTime** ()
- void **setUnPauseTime** (double time)
- double **getUnPauseTime** ()

### 4.1274.1 Detailed Description

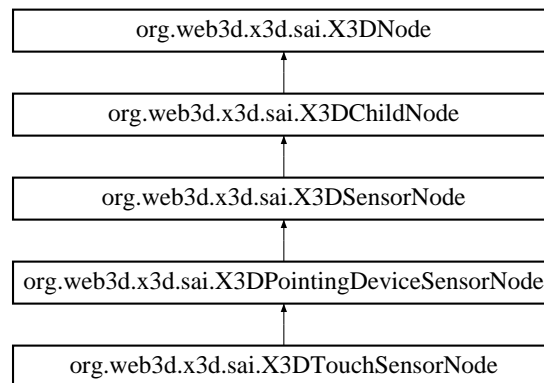
Definition at line 3 of file X3DTimeDependentNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTimeDependentNode.java

## 4.1275 org.web3d.x3d.sai.X3DTouchSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTouchSensorNode:



### Public Member Functions

- boolean **getIsOver** ()
- double **getEnterTime** ()
- double **getTouchTime** ()

### 4.1275.1 Detailed Description

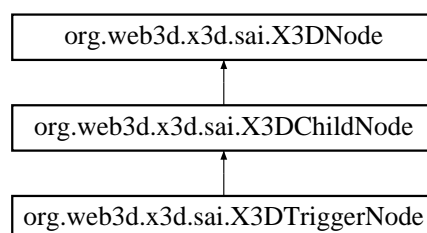
Definition at line 3 of file `X3DTouchSensorNode.java`.

The documentation for this interface was generated from the following file:

- `src/java/org/web3d/x3d/sai/X3DTouchSensorNode.java`

## 4.1276 org.web3d.x3d.sai.X3DTriggerNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTriggerNode:



## Additional Inherited Members

### 4.1276.1 Detailed Description

Definition at line 3 of file X3DTriggerNode.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTriggerNode.java

## 4.1277 org.web3d.x3d.sai.X3DUrlObject Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DUrlObject:



## Public Member Functions

- int **getNumUrls** ()
- void **geturl** (String[] urls)
- void **setUrl** (String[] urls)

### 4.1277.1 Detailed Description

Definition at line 3 of file X3DUrlObject.java.

The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DUrlObject.java

## 4.1278 xml\_user\_data Struct Reference

## Data Fields

- **Stack \* context**
- **Stack \* nodes**
- **Stack \* atts**
- **Stack \* modes**
- **Stack \* fields**

#### 4.1278.1 Detailed Description

Definition at line 69 of file X3DParser.c.

The documentation for this struct was generated from the following file:

- `src/lib/x3d_parser/X3DParser.c`

### 4.1279 XY Struct Reference

#### Data Fields

- `int x`
- `int y`

#### 4.1279.1 Detailed Description

Definition at line 211 of file CursorDraw.c.

The documentation for this struct was generated from the following file:

- `src/lib/ui/CursorDraw.c`

### 4.1280 zip64\_internal Struct Reference

#### Data Fields

- `zlib_filefunc64_32_def z_filefunc`
- `voidpf filestream`
- `linkedlist_data central_dir`
- `int in_opened_file_inzip`
- `curfile64_info ci`
- `ZPOS64_T begin_pos`
- `ZPOS64_T add_position_when_writting_offset`
- `ZPOS64_T number_entry`
- `char * globalcomment`

#### 4.1280.1 Detailed Description

Definition at line 165 of file zip.c.

The documentation for this struct was generated from the following file:

- `src/libminizip/zip.c`



## 4.1281 zip\_fileinfo Struct Reference

### Data Fields

- **tm\_zip** **tmz\_date**
- uLong **dosDate**
- uLong **internal\_fa**
- uLong **external\_fa**

### 4.1281.1 Detailed Description

Definition at line 99 of file zip.h.

The documentation for this struct was generated from the following file:

- src/libminizip/zip.h

## 4.1282 zlib\_filefunc64\_32\_def\_s Struct Reference

### Data Fields

- **zlib\_filefunc64\_def** **zfile\_func64**
- open\_file\_func **zopen32\_file**
- tell\_file\_func **ztell32\_file**
- seek\_file\_func **zseek32\_file**

### 4.1282.1 Detailed Description

Definition at line 170 of file ioapi.h.

The documentation for this struct was generated from the following file:

- src/libminizip/ioapi.h

## 4.1283 zlib\_filefunc64\_def\_s Struct Reference

### Data Fields

- open64\_file\_func **zopen64\_file**
- read\_file\_func **zread\_file**
- write\_file\_func **zwrite\_file**
- tell64\_file\_func **ztell64\_file**
- seek64\_file\_func **zseek64\_file**
- close\_file\_func **zclose\_file**
- testerror\_file\_func **zerror\_file**
- voidpf **opaque**

#### 4.1283.1 Detailed Description

Definition at line 154 of file ioapi.h.

The documentation for this struct was generated from the following file:

- src/libminizip/ioapi.h

### 4.1284 zlib\_filefunc\_def\_s Struct Reference

#### Data Fields

- open\_file\_func **zopen\_file**
- read\_file\_func **zread\_file**
- write\_file\_func **zwrite\_file**
- tell\_file\_func **ztell\_file**
- seek\_file\_func **zseek\_file**
- close\_file\_func **zclose\_file**
- testerror\_file\_func **zerror\_file**
- voidpf **opaque**

#### 4.1284.1 Detailed Description

Definition at line 138 of file ioapi.h.

The documentation for this struct was generated from the following file:

- src/libminizip/ioapi.h

### 4.1285 zone Struct Reference

#### Data Fields

- char \* **name**
- **Point** **center**
- **Point** \* **poly**
- int **n**
- char \* **ssrname**
- void \* **ssr**
- void \* **next**

#### 4.1285.1 Detailed Description

Definition at line 543 of file SSRServer.c.

The documentation for this struct was generated from the following file:

- src/SSR/SSRServer.c

# Index

- \_BrowserNative, 51
- \_CRnodeStruct, 52
- \_FW\_PluginInstance, 52
- \_GLwDrawingAreaClassPart, 53
- \_GLwDrawingAreaClassRec, 53
- \_GLwDrawingAreaRec, 53
- \_NPP, 66
- \_NPByteRange, 63
- \_NPEmbedPrint, 64
- \_NPFullPrint, 64
- \_NPImageExpose, 65
- \_NPNetscapeFuncs, 65
- \_NPPluginFuncs, 67
- \_NPPrint, 67
- \_NPRect, 68
- \_NPSavedData, 68
- \_NPSize, 68
- \_NPStream, 69
- \_NPString, 69
- \_NPVariant, 69
- \_NPWindow, 70
- \_SFColorNative, 71
- \_SFColorRGBANative, 71
- \_SFImageNative, 72
- \_SFNodeNative, 72
- \_SFRotationNative, 72
- \_SFVec2fNative, 73
- \_SFVec3dNative, 73
- \_SFVec3fNative, 73
- \_SFVec4dNative, 74
- \_SFVec4fNative, 74
- \_X3DNode, 75
- \_cd\_list\_t, 51
- \_intX3DEventIn, 63
- \_intX3D\_MFBool, 54
- \_intX3D\_MFColor, 54
- \_intX3D\_MFColorRGBA, 54
- \_intX3D\_MFFloat, 55
- \_intX3D\_MFImage, 55
- \_intX3D\_MFInt32, 55
- \_intX3D\_MFNode, 56
- \_intX3D\_MFRotation, 56
- \_intX3D\_MFString, 56
- \_intX3D\_MFTime, 57
- \_intX3D\_MFVec2d, 57
- \_intX3D\_MFVec2f, 57
- \_intX3D\_MFVec3d, 58
- \_intX3D\_MFVec3f, 58
- \_intX3D\_SFBool, 58
- \_intX3D\_SFColor, 59
- \_intX3D\_SFColorRGBA, 59
- \_intX3D\_SFFloat, 59
- \_intX3D\_SFImage, 60
- \_intX3D\_SFInt32, 60
- \_intX3D\_SFNode, 60
- \_intX3D\_SFRotation, 61
- \_intX3D\_SFString, 61
- \_intX3D\_SFTime, 61
- \_intX3D\_SFVec2d, 62
- \_intX3D\_SFVec2f, 62
- \_intX3D\_SFVec3d, 62
- \_intX3D\_SFVec3f, 63
- \_s\_list\_t, 70
- \_urlRequest, 74
- ActiveRegion, 75
- allocateMenuID
  - nsIPluginManager2, 405
- allowComments
  - cson\_parse\_opt, 144
- anyVrml, 76
- api
  - cson\_value, 147
- Arc, 76
- ArcSdirSorter, 77
- ArcSorter, 78
- ArcTdirSorter, 79
- ArcTessellator, 79
- ArgListType, 80
- Atlas, 80
- AtlasEntry, 80
- AtlasEntrySet, 81
- AtlasFont, 81
- BUTitem, 99
- Backend, 82
- BasePlugin, 83
- BasicCurveEvaluator, 84
- BasicSurfaceEvaluator, 85
- beginWaitCursor
  - nsIPluginManager2, 405
- BezierArc, 86
- bezierPatch, 86
- bezierPatchMesh, 87
- Bin, 87
- bindablestack, 88
- block, 88
- Breakpt, 89
- brotoDefpair, 89

- brotoIS, 90
- brotoRoute, 90
- brouteEnd, 90
- Buffer, 99
- CPlugin, 132
  - CPlugin, 132
- CR\_RegStruct, 133
- CRStruct, 134
- CRjsnameStruct, 133
- CRscriptStruct, 134
- CachedVertex, 100
- CachingEvaluator, 100
- callback
  - JSON\_config, 305
- callback\_ctx
  - JSON\_config, 305
- capacity
  - cson\_buffer, 136
- cbDataExactName, 101
- cbDataRootNameAndRouteDir, 101
- CdllFreeWRL, 102
- chardata, 103
- chaser\_ptrs, 103
- cleanup
  - cson\_value\_api, 149
- cline, 104
- coded\_block\_pattern\_entry, 104
- colorScheme, 104
- command, 105
- connection\_info\_struct, 106
- consoleLine, 107
- contenttype, 124
- contenttype\_captiontext, 125
- contenttype\_e3dmouse, 125
- contenttype\_layer, 126
- contenttype\_multitouch, 126
- contenttype\_orientation, 126
- contenttype\_quadrant, 127
- contenttype\_scene, 127
- contenttype\_splitter, 127
- contenttype\_statusbar, 128
- contenttype\_stereo\_anaglyph, 128
- contenttype\_stereo\_shutter, 128
- contenttype\_stereo\_sidebyside, 129
- contenttype\_stereo\_updown, 129
- contenttype\_switch, 129
- contenttype\_textpanel, 130
- contenttype\_texturegrid, 131
- CoveAndTiler, 131
- createPluginInstance
  - nsIPlugin, 368
  - nsIPluginOld, 409
- createWidget
  - nsIPluginInstanceOwner, 391
- cson\_array, 135
- cson\_buffer, 136
  - capacity, 136
  - mem, 137
  - timesExpanded, 137
  - used, 137
- cson\_data\_source\_StringSource\_, 138
  - end, 138
  - pos, 138
  - str, 138
- cson\_kv, 139
- cson\_kv\_list, 139
- cson\_object, 140
- cson\_object\_iterator, 141
- cson\_output\_opt, 141
  - escapeForwardSlashes, 142
  - indentation, 142
  - maxDepth, 142
- cson\_parse\_info, 143
- cson\_parse\_opt, 144
  - allowComments, 144
- cson\_parser, 144
- cson\_string, 145
- cson\_value, 146
  - api, 147
  - refcount, 147
  - value, 148
- cson\_value\_api, 148
  - cleanup, 149
- cson\_value\_list, 149
- curfile64\_info, 150
- currayhit, 150
- Curve, 151
- curveEvalMachine, 151
- Curvelist, 152
- DDS\_header, 153
- DOMElement
  - nsIPluginTagInfo, 418
  - nsIPluginTagInfo2, 422
- dampener\_ptrs, 152
- datChnk, 153
- dct\_dc\_size\_entry, 153
- DdsLoadInfo, 154
- deallocateMenuID
  - nsIPluginManager2, 405
- depth
  - JSON\_config, 305
- destroy
  - nsIPluginInstanceOld, 386
- Dict, 155
- DictNode, 155
- directedLine, 156
- DisplayList, 157
- Dlnode, 158
- draw\_call\_params, 159
- duk\_\_bigint, 159
- duk\_\_compile\_raw\_args, 159
- duk\_\_compiler\_stkstate, 160
- duk\_\_decode\_context, 160
- duk\_\_encode\_context, 161
- duk\_\_exp\_limits, 161
- duk\_\_id\_lookup\_result, 161

- duk\_\_numconv\_stringify\_ctx, 162
- duk\_\_objlit\_state, 162
- duk\_\_pcall\_prop\_args, 163
- duk\_\_re\_disjunction\_info, 163
- duk\_\_transform\_context, 163
- duk\_activation, 164
- duk\_bitdecoder\_ctx, 164
- duk\_bitencoder\_ctx, 164
- duk\_breakpoint, 165
- duk\_bufwriter\_ctx, 165
- duk\_catcher, 166
- duk\_compiler\_ctx, 166
- duk\_compiler\_func, 167
- duk\_compiler\_instr, 168
- duk\_double\_union, 168
- duk\_function\_list\_entry, 169
- duk\_harray, 169
- duk\_hbuffer, 169
- duk\_hbuffer\_dynamic, 170
- duk\_hbuffer\_external, 170
- duk\_hbuffer\_fixed, 170
- duk\_hbufobj, 171
- duk\_hcompfunc, 171
- duk\_heap, 172
- duk\_heaphdr, 172
- duk\_heaphdr\_string, 173
- duk\_hnatfunc, 173
- duk\_hobject, 174
- duk\_hstring, 174
- duk\_hstring\_external, 174
- duk\_hthread, 175
- duk\_internal\_thread\_state, 176
- duk\_ispec, 176
- duk\_ivalue, 176
- duk\_jmpbuf, 177
- duk\_json\_dec\_ctx, 177
- duk\_json\_enc\_ctx, 178
- duk\_labelinfo, 178
- duk\_lexer\_codepoint, 179
- duk\_lexer\_ctx, 179
- duk\_lexer\_point, 179
- duk\_ljstate, 180
- duk\_memory\_functions, 180
- duk\_number\_list\_entry, 181
- duk\_propaccessor, 181
- duk\_propdesc, 181
- duk\_propvalue, 182
- duk\_re\_compiler\_ctx, 182
- duk\_re\_matcher\_ctx, 183
- duk\_re\_token, 183
- duk\_strcache, 184
- duk\_strtab\_entry, 184
- duk\_thread\_state, 184
- duk\_time\_components, 185
- duk\_token, 185
- duk\_tval\_unused, 186
- EAI\_ListenerStruct, 186
- EAINodeIndexStruct, 191
- EAINodeParams, 191
- ECMAValueStruct, 194
- EdgePair, 194
- end
  - cson\_data\_source\_StringSource\_, 138
- endWaitCursor
  - nsIPluginManager2, 406
- escapeForwardSlashes
  - cson\_output\_opt, 142
- extrusion, 219
- FWBITMAPFILEHEADER, 237
- FWBITMAPINFOHEADER, 238
- FWBITMAPINFO, 237
- FWFunctionSpec, 240
- FWJavaScriptClassLoader
  - vrml::FWJavaScriptClassLoader, 242
- FWPropertySpec, 253
- FWRGBQUAD, 254
- FWSNDMSG, 264
- FWTYPE, 265
- FWVAL, 265
- FX, 266
- FaceCount, 220
- FieldDecl, 221
- file\_in\_zip64\_read\_info\_s, 222
- findProxyForURL
  - nsIPluginHost, 372
  - nsIPluginManager2, 406
- FirstStruct, 223
- Flist, 223
- FlistSorter, 224
- flychord, 224
- fmtChnk, 225
- free
  - JSON\_config, 306
- freeWRLSAI\_cpp::\_SAIParameter, 71
- freeWRLSAI\_cpp::InvalidReadableFieldException, 296
- freeWRLSAI\_cpp::InvalidWritableFieldException, 300
- freeWRLSAI\_cpp::browserNotSharedException, 98
- freeWRLSAI\_cpp::connectionException, 107
- freeWRLSAI\_cpp::disposedException, 157
- freeWRLSAI\_cpp::insufficientCapabilitiesException, 281
- freeWRLSAI\_cpp::invalidAccessTypeException, 283
- freeWRLSAI\_cpp::invalidBrowserException, 283
- freeWRLSAI\_cpp::invalidDocumentException, 284
- freeWRLSAI\_cpp::invalidExecutionContextException, 288
- freeWRLSAI\_cpp::invalidFieldException, 290
- freeWRLSAI\_cpp::invalidImportException, 292
- freeWRLSAI\_cpp::invalidNodeException, 293
- freeWRLSAI\_cpp::invalidOperationTimingException, 295
- freeWRLSAI\_cpp::invalidUrlException, 298
- freeWRLSAI\_cpp::invalidX3DException, 301
- freeWRLSAI\_cpp::noSuchBrowserException, 356
- freeWRLSAI\_cpp::nodeInUseException, 354
- freeWRLSAI\_cpp::nodeUnavailableException, 355
- freeWRLSAI\_cpp::notSupportedException, 358

- freeWRLSAI\_cpp::saiBrowser, 485
- freeWRLSAI\_cpp::saiComponent, 486
- freeWRLSAI\_cpp::saiCustomException, 486
- freeWRLSAI\_cpp::saiException, 487
- freeWRLSAI\_cpp::saiExecutionContext, 488
- freeWRLSAI\_cpp::saiField, 488
- freeWRLSAI\_cpp::saiNode, 489
- freeWRLSAI\_cpp::saiProfileDeclaration, 489
- freeWRLSAI\_cpp::saiProto, 490
- freeWRLSAI\_cpp::saiRoute, 490
- freeWRLSAI\_cpp::saiScene, 491
- freeWRLSAI\_cpp::urlUnavailableException, 561
- freewrl\_params, 225
- ftype, 236
- fw\_MaterialParameters, 237
- GLUface, 266
- GLUhalfEdge, 267
- GLUmesh, 267
- GLUnurbs, 267
- GLUtesselator, 268
- GLUvertex, 269
- GLwDrawingAreaCallbackStruct, 270
- GLwDrawingAreaPart, 270
- GUIElement, 274
- GUINamedType, 274
- GUIScreen, 274
- getAttribute
  - nsIPluginTagInfo, 417
  - nsIPluginTagInfoOld, 423
- getAttributes
  - nsIPluginTagInfo, 417
  - nsIPluginTagInfoOld, 424
- GetAuthenticationInfo
  - nsIJVMAuthTools, 366
- getCookie
  - nsICookieStorage, 361
- getMIMEDescription
  - nsIPlugin, 368
  - nsIPluginOld, 410
- getMIMEType
  - nsIPluginInstance, 380
- getParameter
  - nsIPluginTagInfo, 418
  - nsIPluginTagInfo2, 420
- getParameters
  - nsIPluginTagInfo, 418
  - nsIPluginTagInfo2, 422
- GetPluginInstance
  - nsPluginNativeWindow, 429
- getPluginName
  - nsIPluginHost, 372
- getPluginTagForInstance
  - nsIPluginHost, 373
- getProgramPath
  - nsIFileUtilities, 363
- getTempDirPath
  - nsIFileUtilities, 364
- GetURLWithHeaders
  - nsIPluginManager, 400
- GetURL
  - nsIPluginHost, 373
  - nsIPluginInstanceOwner, 391
  - nsIPluginManager, 399
- GetValue
  - nsIPluginManager, 401
- getValue
  - nsIPlugin, 369
  - nsIPluginInstance, 380
  - nsIPluginInstanceOld, 387
  - nsIPluginInstancePeer, 393
  - nsIPluginOld, 410
- getWindow
  - nsIPluginInstanceOwner, 392
- GoP, 271
- gridBoundaryChain, 271
- GridTrimVertex, 272
- GridVertex, 273
- gridWrap, 273
- Gridline, 272
- handleEvent
  - nsIPluginInstance, 380
  - nsIPluginInstanceOld, 387
- hasAllocatedMenuID
  - nsIPluginManager2, 406
- Hull, 275
- IMEXPORT, 279
- iiglobal, 277
- iiglobal::tBindable, 527
- iiglobal::tCParse, 536
- iiglobal::tCParseParser, 536
- iiglobal::tCRoutes, 536
- iiglobal::tCScripts, 537
- iiglobal::tComponent\_CubeMapTexturing, 528
- iiglobal::tComponent\_EnviroSensor, 528
- iiglobal::tComponent\_Followers, 529
- iiglobal::tComponent\_Geometry3D, 529
- iiglobal::tComponent\_Geospatial, 529
- iiglobal::tComponent\_HAnim, 530
- iiglobal::tComponent\_KeyDevice, 530
- iiglobal::tComponent\_Layering, 530
- iiglobal::tComponent\_Layout, 531
- iiglobal::tComponent\_NURBS, 531
- iiglobal::tComponent\_ParticleSystems, 531
- iiglobal::tComponent\_Picking, 532
- iiglobal::tComponent\_ProgrammableShaders, 532
- iiglobal::tComponent\_Rendering, 532
- iiglobal::tComponent\_RigidBodyPhysics, 533
- iiglobal::tComponent\_Shape, 533
- iiglobal::tComponent\_Sound, 533
- iiglobal::tComponent\_Text, 534
- iiglobal::tComponent\_VRML1, 534
- iiglobal::tComponent\_VolumeRendering, 534
- iiglobal::tConsoleMessage, 535
- iiglobal::tCursorDraw, 537
- iiglobal::tEAI\_C\_CommonFunctions, 538

- iiGlobal::tEAICore, 538
- iiGlobal::tEAIEventsIn, 539
- iiGlobal::tEAHelpers, 539
- iiGlobal::tFrustum, 541
- iiGlobal::tJScript, 541
- iiGlobal::tLoadTextures, 543
- iiGlobal::tMainloop, 544
- iiGlobal::tOpenGL\_Utills, 545
- iiGlobal::tPluginSocket, 546
- iiGlobal::tProdCon, 546
- iiGlobal::tRenderFuncs, 547
- iiGlobal::tRenderTextures, 548
- iiGlobal::tSensInterps, 551
- iiGlobal::tSnapshot, 551
- iiGlobal::tStreamPoly, 552
- iiGlobal::tTess, 552
- iiGlobal::tTextures, 553
- iiGlobal::tViewer, 554
- iiGlobal::tX3DParser, 554
- iiGlobal::tcollision, 527
- iiGlobal::tcommon, 528
- iiGlobal::tdisplay, 537
- iiGlobal::tinternalc, 541
- iiGlobal::tjsUtills, 542
- iiGlobal::tjsVRMLBrowser, 542
- iiGlobal::tjsVRMLClasses, 542
- iiGlobal::tpluginUtills, 546
- iiGlobal::tresources, 549
- iiGlobal::tstatusbar, 552
- iiGlobal::tthreads, 553
- indentation
  - cson\_output\_opt, 142
- initialRouteStruct, 280
- initialize
  - nsIPlugin, 369
  - nsIPluginInstance, 381
  - nsIPluginInstanceOld, 388
  - nsIPluginOld, 411
- instantiateDummyJavaPlugin
  - nsIPluginHost, 374
- instantiatePluginForChannel
  - nsIPluginHost, 374
  - nsIPluginHostOld, 377
- intTableIndex, 282
- intersection\_info, 282
- InvalidEventInException
  - vrml::external::exception::InvalidEventInException, 286
- InvalidNodeException
  - vrml::external::exception::InvalidNodeException, 294
- InvalidVrmlException
  - vrml::external::exception::InvalidVrmlException, 299
- ivec2, 303
- ivec4, 303
- JMATRIX, 304
- JSContext
  - nsIPluginInstance, 384
  - nsIPluginInstancePeer2, 397
- JSLoadPropElement, 304
- JSON\_config, 304
  - callback, 305
  - callback\_ctx, 305
  - depth, 305
  - free, 306
  - malloc, 306
- JSON\_parser\_struct, 307
- JSON\_value\_struct, 307
- JSThread
  - nsIPluginInstancePeer2, 397
- JSWindow
  - nsIPluginInstancePeer2, 397
- Jarcloc, 303
- key, 308
- keyHit, 308
- keyval, 308
- Knotspec, 309
- Knotvector, 310
- layout\_scale\_item, 310
- layoutmode, 311
- linkedList\_data\_s, 311
- linkedList\_datablock\_internal\_s, 311
- MIMEType
  - nsIPluginInstancePeer, 395
- macroblock, 312
- malloc
  - JSON\_config, 306
- Mapdesc, 312
- Maplist, 314
- matpropstruct, 314
- maxDepth
  - cson\_output\_opt, 142
- mb\_addr\_inc\_entry, 317
- mb\_type\_entry, 317
- mem
  - cson\_buffer, 137
- Meshier, 318
- mode
  - nsIPluginInstancePeer, 395
- mode\_name, 340
- monoChain, 341
- Monotonizer, 341
- motion\_vectors\_entry, 342
- Multi\_Any, 342
- Multi\_Bool, 342
- Multi\_Color, 343
- Multi\_ColorRGBA, 343
- Multi\_Double, 344
- Multi\_Float, 344
- Multi\_Int32, 344
- Multi\_Matrix3d, 345
- Multi\_Matrix3f, 345
- Multi\_Matrix4d, 346

- Multi\_Matrix4f, 346
- Multi\_Node, 346
- Multi\_Rotation, 347
- Multi\_String, 347
- Multi\_Time, 348
- Multi\_Vec2d, 348
- Multi\_Vec2f, 348
- Multi\_Vec3d, 349
- Multi\_Vec3f, 349
- Multi\_Vec4d, 350
- Multi\_Vec4f, 350
- multiTexParams, 350
- myArgs, 351
- MyVertex, 351
- 
- NPCClass, 359
- NPObject, 359
- name\_num, 352
- nameValuePairs, 352
- navmode, 352
- newResponseHeader
  - nsIHTTPHeaderListener, 365
- newStream
  - nsIPluginInstanceOld, 388
  - nsIPluginInstancePeer, 394
- newStreamFromPlugin
  - nsIPluginInstance, 381
- newStreamToPlugin
  - nsIPluginInstance, 382
- newTempFileName
  - nsIFileUtilities, 364
- nodedistance, 354
- notifyStatusChange
  - nsIPluginManager2, 407
- nsByteRange, 360
- nsIAuthenticationInfo, 360
- nsICookieStorage, 361
  - getCookie, 361
  - setCookie, 361
- nsIFileUtilities, 362
  - getProgramPath, 363
  - getTempDirPath, 364
  - newTempFileName, 364
- nsIHTTPHeaderListener, 365
  - newResponseHeader, 365
  - statusLine, 365
- nsIJVMAuthTools, 366
  - GetAuthenticationInfo, 366
  - SetAuthenticationInfo, 367
- nsIPlugin, 367
  - createPluginInstance, 368
  - getMIMEDescription, 368
  - getValue, 369
  - initialize, 369
  - shutdown, 369
- nsIPluginDocument, 370
  - willHandleInstantiation, 370
- nsIPluginHost, 371
  - findProxyForURL, 372
  - getPluginName, 372
  - getPluginTagForInstance, 373
  - GetURL, 373
  - instantiateDummyJavaPlugin, 374
  - instantiatePluginForChannel, 374
  - parsePostBufferToFixHeaders, 374
  - PostURL, 375
  - reloadPlugins, 376
- nsIPluginHostOld, 376
  - instantiatePluginForChannel, 377
- nsIPluginInputStream, 378
- nsIPluginInstance, 378
  - getMIMEType, 380
  - getValue, 380
  - handleEvent, 380
  - initialize, 381
  - JSContext, 384
  - newStreamFromPlugin, 381
  - newStreamToPlugin, 382
  - print, 382
  - setWindow, 383
  - showStatus, 383
  - start, 383
  - stop, 384
- nsIPluginInstanceInternal, 384
- nsIPluginInstanceOld, 385
  - destroy, 386
  - getValue, 387
  - handleEvent, 387
  - initialize, 388
  - newStream, 388
  - peer, 390
  - print, 388
  - setWindow, 389
  - start, 389
  - stop, 389
- nsIPluginInstanceOwner, 390
  - createWidget, 391
  - GetURL, 391
  - getWindow, 392
- nsIPluginInstancePeer, 392
  - getValue, 393
  - MIMEType, 395
  - mode, 395
  - newStream, 394
  - setWindowSize, 394
  - showStatus, 394
- nsIPluginInstancePeer2, 396
  - JSContext, 397
  - JSThread, 397
  - JSWindow, 397
- nsIPluginInstancePeer2\_1\_9\_1\_BRANCH, 398
- nsIPluginManager, 399
  - GetURLWithHeaders, 400
  - GetURL, 399
  - GetValue, 401
  - PostURL, 401
  - RegisterPlugin, 402



- reloadPlugins, 403
- UnregisterPlugin, 403
- UserAgent, 403
- nsIPluginManager2, 404
  - allocateMenuID, 405
  - beginWaitCursor, 405
  - deallocateMenuID, 405
  - endWaitCursor, 406
  - findProxyForURL, 406
  - hasAllocatedMenuID, 406
  - notifyStatusChange, 407
  - registerWindow, 407
  - supportsURLProtocol, 408
  - unregisterWindow, 408
- nsIPluginOld, 409
  - createPluginInstance, 409
  - getMIMEDescription, 410
  - getValue, 410
  - initialize, 411
  - shutdown, 411
- nsIPluginStreamInfo, 411
- nsIPluginStreamListener, 412
  - onDataAvailable, 413
  - onFileAvailable, 413
  - onStartBinding, 414
  - onStopBinding, 414
  - streamType, 415
- nsIPluginTag, 415
- nsIPluginTagInfo, 416
  - DOMElement, 418
  - getAttribute, 417
  - getAttributes, 417
  - getParameter, 418
  - getParameters, 418
  - tagType, 419
- nsIPluginTagInfo2, 419
  - DOMElement, 422
  - getParameter, 420
  - getParameters, 422
  - tagType, 422
- nsIPluginTagInfoOld, 423
  - getAttribute, 423
  - getAttributes, 424
- nsIScriptablePlugin, 424
  - scriptableInterface, 425
  - scriptablePeer, 425
- nsIWindowlessPluginInstancePeer, 425
- nsIPluginInstancePeer, 426
- nsPluginEmbedPrint, 426
- nsPluginEvent, 427
- nsPluginFullPrint, 427
- nsPluginLogging, 428
- nsPluginNativeWindow, 428
  - GetPluginInstance, 429
- nsPluginPrint, 430
- nsPluginRect, 430
- nsPluginWindow, 431
- NurbsTessellator, 431
- O\_curve, 433
- O\_nurbscurve, 433
- O\_nurbssurface, 434
- O\_pwlcure, 435
- O\_surface, 435
- O\_trim, 436
- onDataAvailable
  - nsIPluginStreamListener, 413
- onFileAvailable
  - nsIPluginStreamListener, 413
- onStartBinding
  - nsIPluginStreamListener, 414
- onStopBinding
  - nsIPluginStreamListener, 414
- OpenGLCurveEvaluator, 436
- OpenGLSurfaceEvaluator, 438
- opened\_file, 439
- org.web3d.x3d.sai.Browser, 91
- org.web3d.x3d.sai.BrowserEvent, 94
- org.web3d.x3d.sai.BrowserFactoryImpl, 95
- org.web3d.x3d.sai.BrowserInterface, 97
- org.web3d.x3d.sai.BrowserListener, 98
- org.web3d.x3d.sai.BrowserNotSharedException, 99
- org.web3d.x3d.sai.ComponentInfo, 105
- org.web3d.x3d.sai.ConnectionException, 106
- org.web3d.x3d.sai.ExternalBrowser, 219
- org.web3d.x3d.sai.ImportedNodeException, 280
- org.web3d.x3d.sai.InsufficientCapabilitiesException, 281
- org.web3d.x3d.sai.InvalidBrowserException, 284
- org.web3d.x3d.sai.InvalidDocumentException, 285
- org.web3d.x3d.sai.InvalidExecutionContextException, 288
- org.web3d.x3d.sai.InvalidFieldException, 290
- org.web3d.x3d.sai.InvalidFieldValueException, 291
- org.web3d.x3d.sai.InvalidNameException, 292
- org.web3d.x3d.sai.InvalidNodeException, 293
- org.web3d.x3d.sai.InvalidOperationTimingException, 295
- org.web3d.x3d.sai.InvalidProtoException, 296
- org.web3d.x3d.sai.InvalidRouteException, 297
- org.web3d.x3d.sai.InvalidURLErrorException, 298
- org.web3d.x3d.sai.InvalidX3DException, 302
- org.web3d.x3d.sai.MFBool, 318
- org.web3d.x3d.sai.MFColor, 320
- org.web3d.x3d.sai.MFColorRGBA, 321
- org.web3d.x3d.sai.MFDouble, 321
- org.web3d.x3d.sai.MFFloat, 322
- org.web3d.x3d.sai.MFImage, 326
- org.web3d.x3d.sai.MFInt32, 327
- org.web3d.x3d.sai.MFNode, 328
- org.web3d.x3d.sai.MFRotation, 330
- org.web3d.x3d.sai.MFString, 332
- org.web3d.x3d.sai.MFTime, 334
- org.web3d.x3d.sai.MFVec2d, 335
- org.web3d.x3d.sai.MFVec2f, 337
- org.web3d.x3d.sai.MFVec3d, 338
- org.web3d.x3d.sai.MFVec3f, 339

- org.web3d.x3d.sai.MField, 324
- org.web3d.x3d.sai.Matrix, 315
- org.web3d.x3d.sai.Matrix3, 315
- org.web3d.x3d.sai.Matrix4, 316
- org.web3d.x3d.sai.NoSuchBrowserException, 357
- org.web3d.x3d.sai.NodeInUseException, 355
- org.web3d.x3d.sai.NodeUnavailableException, 356
- org.web3d.x3d.sai.NotSupportedException, 357
- org.web3d.x3d.sai.ProfileInfo, 470
- org.web3d.x3d.sai.SFBool, 498
- org.web3d.x3d.sai.SFColor, 499
- org.web3d.x3d.sai.SFColorRGBA, 501
- org.web3d.x3d.sai.SFDouble, 501
- org.web3d.x3d.sai.SFFloat, 503
- org.web3d.x3d.sai.SFImage, 504
- org.web3d.x3d.sai.SFInt32, 505
- org.web3d.x3d.sai.SFNode, 508
- org.web3d.x3d.sai.SFRotation, 509
- org.web3d.x3d.sai.SFString, 511
- org.web3d.x3d.sai.SFTime, 512
- org.web3d.x3d.sai.SFVec2d, 513
- org.web3d.x3d.sai.SFVec2f, 515
- org.web3d.x3d.sai.SFVec3d, 516
- org.web3d.x3d.sai.SFVec3f, 517
- org.web3d.x3d.sai.URLUnavailableException, 560
- org.web3d.x3d.sai.X3DAppearanceChildNode, 813
- org.web3d.x3d.sai.X3DAppearanceNode, 813
- org.web3d.x3d.sai.X3DAudioClipNode, 814
- org.web3d.x3d.sai.X3DBackgroundNode, 814
- org.web3d.x3d.sai.X3DBindableNode, 815
- org.web3d.x3d.sai.X3DBoundedObject, 816
- org.web3d.x3d.sai.X3DChildNode, 816
- org.web3d.x3d.sai.X3DColorNode, 817
- org.web3d.x3d.sai.X3DComponent, 817
- org.web3d.x3d.sai.X3DComposedGeometryNode, 818
- org.web3d.x3d.sai.X3DCoordinateNode, 819
- org.web3d.x3d.sai.X3DDragSensorNode, 819
- org.web3d.x3d.sai.X3DEnvironmentalSensorNode, 820
- org.web3d.x3d.sai.X3DException, 821
- org.web3d.x3d.sai.X3DExecutionContext, 822
- org.web3d.x3d.sai.X3DExternProtoDeclaration, 823
- org.web3d.x3d.sai.X3DField, 823
- org.web3d.x3d.sai.X3DFieldDefinition, 825
- org.web3d.x3d.sai.X3DFieldEvent, 825
- org.web3d.x3d.sai.X3DFieldEventListener, 826
- org.web3d.x3d.sai.X3DFieldTypes, 826
- org.web3d.x3d.sai.X3DFontStyleNode, 827
- org.web3d.x3d.sai.X3DGeometricPropertyNode, 828
- org.web3d.x3d.sai.X3DGeometryNode, 828
- org.web3d.x3d.sai.X3DGroupingNode, 829
- org.web3d.x3d.sai.X3DInfoNode, 829
- org.web3d.x3d.sai.X3DInterpolatorNode, 830
- org.web3d.x3d.sai.X3DKeyDeviceSensorNode, 830
- org.web3d.x3d.sai.X3DLightNode, 831
- org.web3d.x3d.sai.X3DMaterialNode, 832
- org.web3d.x3d.sai.X3DMetadataObject, 832
- org.web3d.x3d.sai.X3DNetworkSensorNode, 833
- org.web3d.x3d.sai.X3DNode, 833
- org.web3d.x3d.sai.X3DNodeTypes, 834
- org.web3d.x3d.sai.X3DNormalNode, 835
- org.web3d.x3d.sai.X3DParametricGeometryNode, 836
- org.web3d.x3d.sai.X3DPerFrameObserverScript, 836
- org.web3d.x3d.sai.X3DPointingDeviceSensorNode, 837
- org.web3d.x3d.sai.X3DProtoDeclaration, 837
- org.web3d.x3d.sai.X3DProtoInstance, 838
- org.web3d.x3d.sai.X3DRoute, 838
- org.web3d.x3d.sai.X3DScene, 839
- org.web3d.x3d.sai.X3DScriptImplementation, 840
- org.web3d.x3d.sai.X3DScriptNode, 840
- org.web3d.x3d.sai.X3DSensorNode, 841
- org.web3d.x3d.sai.X3DSequencerNode, 841
- org.web3d.x3d.sai.X3DShapeNode, 842
- org.web3d.x3d.sai.X3DSoundNode, 842
- org.web3d.x3d.sai.X3DSoundSourceNode, 843
- org.web3d.x3d.sai.X3DTextNode, 843
- org.web3d.x3d.sai.X3DTexture2DNode, 844
- org.web3d.x3d.sai.X3DTextureCoordinateNode, 844
- org.web3d.x3d.sai.X3DTextureNode, 845
- org.web3d.x3d.sai.X3DTextureTransform2DNode, 845
- org.web3d.x3d.sai.X3DTextureTransformNode, 846
- org.web3d.x3d.sai.X3DTimeDependentNode, 847
- org.web3d.x3d.sai.X3DTouchSensorNode, 848
- org.web3d.x3d.sai.X3DTriggerNode, 848
- org.web3d.x3d.sai.X3DUrlObject, 849
- orient\_XYZA, 440
- pBindable, 442
- pCParse, 452
- pCParseParser, 452
- pCRoutes, 453
- pCScripts, 453
- pComponent\_CubeMapTexturing, 444
- pComponent\_EnvironSensor, 444
- pComponent\_Followers, 445
- pComponent\_Geometry3D, 445
- pComponent\_Geospatial, 445
- pComponent\_HAnim, 446
- pComponent\_KeyDevice, 446
- pComponent\_Layering, 446
- pComponent\_Layout, 447
- pComponent\_NURBS, 447
- pComponent\_ParticleSystems, 447
- pComponent\_Picking, 448
- pComponent\_ProgrammableShaders, 448
- pComponent\_Rendering, 448
- pComponent\_RigidBodyPhysics, 449
- pComponent\_Shape, 449
- pComponent\_Sound, 449
- pComponent\_Text, 450
- pComponent\_VolumeRendering, 451
- pConsoleMessage, 451
- pCursorDraw, 454
- pEAI\_C\_CommonFunctions, 454
- pEAICore, 455
- pEAIEventsIn, 455
- pEAISensors, 455
- pFrustum, 456

- pJScript, 457
- pLoadTextures, 459
- pMainloop, 459
- pOpenGL\_Utils, 464
- pPluginSocket, 465
- pProdCon, 465
- PQhandleElem, 466
- PQnode, 466
- pRasterFont, 466
- pRenderFuncs, 467
- pRenderTextures, 468
- PSStruct, 474
- pSensInterps, 473
- pSnapshot, 473
- pStreamPoly, 475
- pTess, 475
- pTextures, 475
- pViewer, 476
- pX3DParser, 477
- parsePostBufferToFixHeaders
  - nsIPluginHost, 374
- particle, 440
- Patch, 440
- Patchlist, 441
- Patchspec, 442
- pcollision, 443
- pcommon, 443
- pdisplay, 454
- pedal\_state, 456
- peer
  - nsIPluginInstanceOld, 390
- pict, 456
- pict\_image, 457
- pjsUtils, 458
- pjsVRMLBrowser, 458
- pjsVRMLClasses, 458
- Point, 460
- point\_XYZ3, 461
- point\_XYZ, 461
- pointer2pointer, 461
- polygon, 462
- polyrep\_combiner\_data, 462
- Pool, 462
- PooledObj, 463
- pos
  - cson\_data\_source\_StringSource\_, 138
- PostURL
  - nsIPluginHost, 375
  - nsIPluginManager, 401
- ppluginUtils, 465
- presources, 468
- primStream, 469
- print
  - nsIPluginInstance, 382
  - nsIPluginInstanceOld, 388
- PriorityQ, 469
- profile\_entry, 470
- proftablestruct, 471
- Property, 471
- ProtoDefinition, 472
- ProtoFieldDecl, 472
- Pspec, 473
- pstatusbar, 474
- PwlArc, 476
- quaternion, 478
- Quilt, 478
- Quiltspec, 479
- rb1, 479
- rectBlock, 480
- rectBlockArray, 480
- refcount
  - cson\_value, 147
- reflexChain, 481
- RegisterPlugin
  - nsIPluginManager, 402
- registerWindow
  - nsIPluginManager2, 407
- reloadPlugins
  - nsIPluginHost, 376
  - nsIPluginManager, 403
- Renderhints, 481
- resource\_item, 482
- row32, 482
- s\_renderer\_capabilities\_t, 483
- s\_shader\_capabilities, 484
- sCollisionGeometry, 492
- sCollisionInfo, 492
- SFColor, 499
- SFColorRGBA, 500
- SFMatrix3d, 506
- SFMatrix3f, 506
- SFMatrix4d, 507
- SFMatrix4f, 507
- SFRotation, 510
- SFVec2d, 513
- SFVec2f, 514
- SFVec3d, 515
- SFVec3f, 518
- SFVec4d, 518
- SFVec4f, 518
- sFallInfo, 497
- SNDFILE, 521
- sNavInfo, 521
- SSR\_request, 524
- sai.BrowserFactory, 95
- sai.BrowserGlobals, 96
- sai.eai.EAIAsyncMessage, 187
- sai.eai.EAIAsyncQueue, 188
- sai.eai.EAIAsyncThread, 188
- sai.eai.EAIMessage, 190
- sai.eai.EAIinThread, 189
- sai.eai.EAIoutQueue, 192
- sai.eai.EAIoutThread, 193
- sai.eai.UnsupportedFieldException, 556

- sai.eai.VField, 565
- sai.eai.VIP, 572
- sai.eai.VMFCColor, 574
- sai.eai.VMFFloat, 575
- sai.eai.VMFInt32, 576
- sai.eai.VMFRotation, 577
- sai.eai.VMFString, 578
- sai.eai.VMFVec2f, 579
- sai.eai.VMFVec3f, 581
- sai.eai.VRMLObject, 583
- sai.eai.VRMLObjectObserver, 585
- sai.eai.VSFBBool, 586
- sai.eai.VSFCColor, 587
- sai.eai.VSFFloat, 589
- sai.eai.VSFImage, 590
- sai.eai.VSFInt32, 591
- sai.eai.VSFRotation, 592
- sai.eai.VSFString, 593
- sai.eai.VSFTTime, 594
- sai.eai.VSFVec2f, 596
- sai.eai.VSFVec3f, 597
- sai.FWComponentInfo, 238
- sai.FWExternProtoDeclaration, 239
- sai.FWMFCColor, 243
- sai.FWMFCColorRGBA, 243
- sai.FWMFDouble, 244
- sai.FWMFFloat, 245
- sai.FWMFInt32, 246
- sai.FWMFNode, 246
- sai.FWMFRotation, 247
- sai.FWMFString, 248
- sai.FWMFVec2d, 249
- sai.FWMFVec2f, 249
- sai.FWMFVec3d, 250
- sai.FWMFVec3f, 251
- sai.FWProfInfo, 252
- sai.FWProfileInfo, 252
- sai.FWProtoDeclaration, 253
- sai.FWProtoInstance, 254
- sai.FWRoute, 255
- sai.FWSFBool, 255
- sai.FWSFCColor, 256
- sai.FWSFCColorRGBA, 257
- sai.FWSFDouble, 257
- sai.FWSFFloat, 258
- sai.FWSFImage, 258
- sai.FWSFInt32, 259
- sai.FWSFNode, 260
- sai.FWSFRotation, 260
- sai.FWSFString, 261
- sai.FWSFTTime, 261
- sai.FWSFVec2d, 262
- sai.FWSFVec2f, 263
- sai.FWSFVec3d, 263
- sai.FWSFVec3f, 264
- sai.FreeWRLBrowser, 226
- sai.FreeWRLBrowserInfo, 228
- sai.FreeWRLComponent, 228
- sai.FreeWRLField, 229
- sai.FreeWRLFieldDefinition, 230
- sai.FreeWRLFieldTypes, 231
- sai.FreeWRLMField, 232
- sai.FreeWRLNode, 233
- sai.FreeWRLNodeTypes, 233
- sai.FreeWRLRendererInfo, 234
- sai.FreeWRLScene, 235
- sampledLine, 491
- screenextdata, 492
- ScriptFieldDecl, 495
- ScriptFieldInstanceInfo, 495
- ScriptParamList, 496
- scriptableInterface
  - nsIScriptablePlugin, 425
- scriptablePeer
  - nsIScriptablePlugin, 425
- ScriptablePluginObjectBase, 494
- SensStruct, 496
- SetAuthenticationInfo
  - nsIJVMAuthTools, 367
- setCookie
  - nsICookieStorage, 361
- setWindow
  - nsIPluginInstance, 383
  - nsIPluginInstanceOld, 389
- setWindowSize
  - nsIPluginInstancePeer, 394
- Shader\_Script, 519
- shaderTableEntry, 519
- shaderflagsstruct, 519
- showStatus
  - nsIPluginInstance, 383
  - nsIPluginInstancePeer, 394
- shutdown
  - nsIPlugin, 369
  - nsIPluginOld, 411
- slice, 520
- Slicer, 520
- Sorter, 522
- Splinespec, 523
- ssr, 523
- stage, 524
- start
  - nsIPluginInstance, 383
  - nsIPluginInstanceOld, 389
- statusLine
  - nsIHTTPHeaderListener, 365
- stop
  - nsIPluginInstance, 384
  - nsIPluginInstanceOld, 389
- StoredVertex, 525
- str
  - cson\_data\_source\_StringSource\_, 138
- streamType
  - nsIPluginStreamListener, 415
- Subdivider, 525
- supportsURLProtocol

- nsIPluginManager2, 408
- surfEvalMachine, 526
- sweepRange, 526
- tagType
  - nsIPluginTagInfo, 419
  - nsIPluginTagInfo2, 422
- targetwindow, 527
- tcontenttype, 535
- text\_combiner\_data, 539
- textureTableIndexStruct, 540
- textureVertexInfo, 540
- timesExpanded
  - cson\_buffer, 137
- tm\_unz\_s, 543
- tm\_zip\_s, 544
- Touch, 545
- treeNode, 547
- trenderstate, 548
- TrimRegion, 550
- TrimVertex, 550
- TrimVertexPool, 551
- Trimline, 549
- Uarray, 554
- un1, 555
- Uni\_String, 555
- UnregisterPlugin
  - nsIPluginManager, 403
- unregisterWindow
  - nsIPluginManager2, 408
- unz64\_file\_pos\_s, 557
- unz64\_s, 557
- unz\_file\_info64\_internal\_s, 558
- unz\_file\_info64\_s, 558
- unz\_file\_info\_s, 559
- unz\_file\_pos\_s, 559
- unz\_global\_info64\_s, 559
- unz\_global\_info\_s, 560
- used
  - cson\_buffer, 137
- usehit, 561
- UserAgent
  - nsIPluginManager, 403
- VRMLLexer, 582
- VRMLParser, 585
- value
  - cson\_value, 148
- Varray, 562
- vec2, 562
- vec4, 562
- Vector, 563
- vertexArray, 563
- vid\_stream, 567
- viewer, 568
- viewer\_examine, 570
- viewer\_fly, 570
- viewer\_inplane, 570
- viewer\_walk, 571
- viewer\_yyz, 571
- void3, 582
- vrml.BaseNode, 83
- vrml.Browser, 92
- vrml.ConstField, 108
- vrml.ConstMField, 110
- vrml.Event, 194
- vrml.external.Browser, 92
- vrml.external.BrowserGlobals, 96
- vrml.external.BrowserInterface, 97
- vrml.external.exception.InvalidEventInException, 286
- vrml.external.exception.InvalidEventOutException, 287
- vrml.external.exception.InvalidNodeException, 294
- vrml.external.exception.InvalidVrmlException, 299
- vrml.external.field.EventIn, 195
- vrml.external.field.EventInMFColor, 196
- vrml.external.field.EventInMFFloat, 197
- vrml.external.field.EventInMFInt32, 197
- vrml.external.field.EventInMFNode, 198
- vrml.external.field.EventInMFRotation, 198
- vrml.external.field.EventInMFString, 199
- vrml.external.field.EventInMFVec2f, 199
- vrml.external.field.EventInMFVec3f, 200
- vrml.external.field.EventInSFBool, 200
- vrml.external.field.EventInSFColor, 201
- vrml.external.field.EventInSFFloat, 201
- vrml.external.field.EventInSFImage, 202
- vrml.external.field.EventInSFInt32, 202
- vrml.external.field.EventInSFNode, 203
- vrml.external.field.EventInSFRotation, 203
- vrml.external.field.EventInSFString, 204
- vrml.external.field.EventInSFTime, 204
- vrml.external.field.EventInSFVec2f, 205
- vrml.external.field.EventInSFVec3f, 205
- vrml.external.field.EventOut, 206
- vrml.external.field.EventOutMFColor, 207
- vrml.external.field.EventOutMFFloat, 207
- vrml.external.field.EventOutMFInt32, 209
- vrml.external.field.EventOutMFNode, 209
- vrml.external.field.EventOutMFRotation, 210
- vrml.external.field.EventOutMFString, 211
- vrml.external.field.EventOutMFVec2f, 211
- vrml.external.field.EventOutMFVec3f, 212
- vrml.external.field.EventOutMField, 208
- vrml.external.field.EventOutObserver, 212
- vrml.external.field.EventOutSFBool, 213
- vrml.external.field.EventOutSFColor, 213
- vrml.external.field.EventOutSFFloat, 214
- vrml.external.field.EventOutSFImage, 214
- vrml.external.field.EventOutSFInt32, 215
- vrml.external.field.EventOutSFNode, 216
- vrml.external.field.EventOutSFRotation, 216
- vrml.external.field.EventOutSFString, 217
- vrml.external.field.EventOutSFTime, 217
- vrml.external.field.EventOutSFVec2f, 218
- vrml.external.field.EventOutSFVec3f, 218
- vrml.external.field.FieldTypes, 222

- vrml.external.FreeWRLEAI.EAIAsyncMessage, 187
- vrml.external.FreeWRLEAI.EAIAsyncQueue, 187
- vrml.external.FreeWRLEAI.EAIAsyncThread, 189
- vrml.external.FreeWRLEAI.EAIMessage, 191
- vrml.external.FreeWRLEAI.EAInThread, 190
- vrml.external.FreeWRLEAI.EAOutQueue, 192
- vrml.external.FreeWRLEAI.EAOutThread, 193
- vrml.external.FreeWRLEAI.UnsupportedFieldType↔  
Exception, 556
- vrml.external.FreeWRLEAI.VField, 564
- vrml.external.FreeWRLEAI.VIP, 572
- vrml.external.FreeWRLEAI.VMFCColor, 573
- vrml.external.FreeWRLEAI.VMFFloat, 575
- vrml.external.FreeWRLEAI.VMFIInt32, 576
- vrml.external.FreeWRLEAI.VMFRotation, 578
- vrml.external.FreeWRLEAI.VMFString, 579
- vrml.external.FreeWRLEAI.VMFVec2f, 580
- vrml.external.FreeWRLEAI.VMFVec3f, 581
- vrml.external.FreeWRLEAI.VRMLObject, 584
- vrml.external.FreeWRLEAI.VRMLObjectObserver, 584
- vrml.external.FreeWRLEAI.VSFBBool, 586
- vrml.external.FreeWRLEAI.VSFCColor, 587
- vrml.external.FreeWRLEAI.VSFFloat, 588
- vrml.external.FreeWRLEAI.VSFImage, 589
- vrml.external.FreeWRLEAI.VSFIInt32, 590
- vrml.external.FreeWRLEAI.VSFRotation, 592
- vrml.external.FreeWRLEAI.VSFString, 593
- vrml.external.FreeWRLEAI.VSFTime, 595
- vrml.external.FreeWRLEAI.VSFVec2f, 595
- vrml.external.FreeWRLEAI.VSFVec3f, 596
- vrml.external.IBrowser, 275
- vrml.external.Node, 353
- vrml.FWCreateField, 239
- vrml.FWHelper, 240
- vrml.FWJavaScript, 241
- vrml.FWJavaScriptBinding, 241
- vrml.FWJavaScriptClassLoader, 242
- vrml.Field, 220
- vrml.field.ConstMFCColor, 108
- vrml.field.ConstMFFloat, 109
- vrml.field.ConstMFIInt32, 111
- vrml.field.ConstMFNode, 112
- vrml.field.ConstMFRotation, 113
- vrml.field.ConstMFString, 114
- vrml.field.ConstMFTIME, 114
- vrml.field.ConstMFVec2f, 115
- vrml.field.ConstMFVec3f, 116
- vrml.field.ConstSFBool, 117
- vrml.field.ConstSFColor, 117
- vrml.field.ConstSFFloat, 118
- vrml.field.ConstSFImage, 119
- vrml.field.ConstSFIInt32, 120
- vrml.field.ConstSFNode, 120
- vrml.field.ConstSFRotation, 121
- vrml.field.ConstSFString, 122
- vrml.field.ConstSFTime, 122
- vrml.field.ConstSFVec2f, 123
- vrml.field.ConstSFVec3f, 124
- vrml.field.MFCColor, 319
- vrml.field.MFFloat, 323
- vrml.field.MFIInt32, 327
- vrml.field.MFNode, 329
- vrml.field.MFRotation, 331
- vrml.field.MFString, 332
- vrml.field.MFTIME, 333
- vrml.field.MFVec2f, 336
- vrml.field.MFVec3f, 338
- vrml.field.SFBool, 497
- vrml.field.SFCColor, 500
- vrml.field.SFFloat, 502
- vrml.field.SFImage, 503
- vrml.field.SFIInt32, 505
- vrml.field.SFNode, 507
- vrml.field.SFRotation, 509
- vrml.field.SFString, 510
- vrml.field.SFTime, 512
- vrml.field.SFVec2f, 514
- vrml.field.SFVec3f, 516
- vrml.InvalidEventInException, 285
- vrml.InvalidEventOutException, 287
- vrml.InvalidExposedFieldException, 289
- vrml.InvalidFieldChangeException, 289
- vrml.InvalidFieldException, 291
- vrml.InvalidRouteException, 297
- vrml.InvalidVRMLSyntaxException, 300
- vrml.InvalidX3DSyntaxException, 302
- vrml.MField, 325
- vrml.node.Node, 353
- vrml.node.Script, 493
- vrml::FWJavaScriptClassLoader  
FWJavaScriptClassLoader, 242
- vrml::external::exception::InvalidEventInException  
InvalidEventInException, 286
- vrml::external::exception::InvalidNodeException  
InvalidNodeException, 294
- vrml::external::exception::InvalidVrmlException  
InvalidVrmlException, 299
- WEB3DNATIVE, 598
- walk\_cbdata, 598
- willHandleInstantiation  
nsIPluginDocument, 370
- X3D\_Ancor, 599
- X3D\_Appearance, 600
- X3D\_Arc2D, 600
- X3D\_ArcClose2D, 601
- X3D\_AudioClip, 602
- X3D\_BackdropBackground, 603
- X3D\_Background, 603
- X3D\_BallJoint, 604
- X3D\_Billboard, 605
- X3D\_BlendedVolumeStyle, 606
- X3D\_BooleanFilter, 607
- X3D\_BooleanSequencer, 607
- X3D\_BooleanToggle, 608
- X3D\_BooleanTrigger, 608

X3D\_BoundaryEnhancementVolumeStyle, 609  
X3D\_BoundedPhysicsModel, 610  
X3D\_Box, 610  
X3D\_CADAssembly, 611  
X3D\_CADFace, 612  
X3D\_CADLayer, 612  
X3D\_CADPart, 613  
X3D\_CalibratedCameraSensor, 614  
X3D\_CartoonVolumeStyle, 614  
X3D\_Circle2D, 615  
X3D\_ClipPlane, 615  
X3D\_CollidableOffset, 616  
X3D\_CollidableShape, 617  
X3D\_Collision, 617  
X3D\_CollisionCollection, 618  
X3D\_CollisionSensor, 619  
X3D\_CollisionSpace, 620  
X3D\_Color, 620  
X3D\_ColorChaser, 621  
X3D\_ColorDamper, 622  
X3D\_ColorInterpolator, 623  
X3D\_ColorRGBA, 623  
X3D\_ComposedCubeMapTexture, 624  
X3D\_ComposedShader, 625  
X3D\_ComposedTexture3D, 625  
X3D\_ComposedVolumeStyle, 626  
X3D\_CompositeVolumeStyle, 627  
X3D\_Cone, 627  
X3D\_ConeEmitter, 628  
X3D\_Contact, 629  
X3D\_Contour2D, 630  
X3D\_ContourPolyline2D, 630  
X3D\_Coordinate, 631  
X3D\_CoordinateChaser, 631  
X3D\_CoordinateDamper, 632  
X3D\_CoordinateDouble, 633  
X3D\_CoordinateInterpolator, 634  
X3D\_CoordinateInterpolator2D, 634  
X3D\_Cylinder, 635  
X3D\_CylinderSensor, 636  
X3D\_DISEntityManager, 637  
X3D\_DISEntityTypeMapping, 638  
X3D\_DirectionalLight, 637  
X3D\_Disk2D, 639  
X3D\_DoubleAxisHingeJoint, 640  
X3D\_EaseInEaseOut, 641  
X3D\_EdgeEnhancementVolumeStyle, 642  
X3D\_Effect, 642  
X3D\_EffectPart, 643  
X3D\_ElevationGrid, 644  
X3D\_EspduTransform, 645  
X3D\_ExplosionEmitter, 647  
X3D\_Extrusion, 648  
X3D\_FillProperties, 649  
X3D\_FloatVertexAttribute, 649  
X3D\_Fog, 650  
X3D\_FogCoordinate, 651  
X3D\_FontStyle, 651  
X3D\_ForcePhysicsModel, 652  
X3D\_GeneratedCubeMapTexture, 653  
X3D\_GeoCoordinate, 653  
X3D\_GeoElevationGrid, 654  
X3D\_GeoLOD, 656  
X3D\_GeoLocation, 655  
X3D\_GeoMetadata, 657  
X3D\_GeoOrigin, 657  
X3D\_GeoPositionInterpolator, 658  
X3D\_GeoProximitySensor, 659  
X3D\_GeoTouchSensor, 660  
X3D\_GeoTransform, 661  
X3D\_GeoViewpoint, 662  
X3D\_Group, 663  
X3D\_HAnimDisplacer, 663  
X3D\_HAnimHumanoid, 664  
X3D\_HAnimJoint, 665  
X3D\_HAnimSegment, 666  
X3D\_HAnimSite, 667  
X3D\_ImageBackdropBackground, 668  
X3D\_ImageCubeMapTexture, 668  
X3D\_ImageTexture, 669  
X3D\_ImageTexture3D, 670  
X3D\_IndexedFaceSet, 670  
X3D\_IndexedLineSet, 671  
X3D\_IndexedQuadSet, 672  
X3D\_IndexedTriangleFanSet, 673  
X3D\_IndexedTriangleSet, 674  
X3D\_IndexedTriangleStripSet, 674  
X3D\_Inline, 675  
X3D\_IntegerSequencer, 676  
X3D\_IntegerTrigger, 677  
X3D\_IsoSurfaceVolumeData, 678  
X3D\_KeySensor, 678  
X3D\_LOD, 687  
X3D\_Layer, 679  
X3D\_LayerSet, 680  
X3D\_Layout, 681  
X3D\_LayoutGroup, 681  
X3D\_LayoutLayer, 682  
X3D\_LinePickSensor, 683  
X3D\_LineProperties, 684  
X3D\_LineSensor, 684  
X3D\_LineSet, 685  
X3D\_LoadSensor, 686  
X3D\_LocalFog, 687  
X3D\_Material, 688  
X3D\_Matrix3VertexAttribute, 689  
X3D\_Matrix4VertexAttribute, 689  
X3D\_MetadataBoolean, 690  
X3D\_MetadataDouble, 691  
X3D\_MetadataFloat, 691  
X3D\_MetadataInteger, 692  
X3D\_MetadataMFBBool, 693  
X3D\_MetadataMFCColor, 693  
X3D\_MetadataMFCColorRGBA, 694  
X3D\_MetadataMFDDouble, 695  
X3D\_MetadataMFFloat, 695

X3D\_MetadataMFIInt32, 696  
X3D\_MetadataMFMatrix3d, 697  
X3D\_MetadataMFMatrix3f, 697  
X3D\_MetadataMFMatrix4d, 698  
X3D\_MetadataMFMatrix4f, 699  
X3D\_MetadataMFNode, 699  
X3D\_MetadataMFRotation, 700  
X3D\_MetadataMFString, 701  
X3D\_MetadataMFTime, 701  
X3D\_MetadataMFVec2d, 702  
X3D\_MetadataMFVec2f, 703  
X3D\_MetadataMFVec3d, 703  
X3D\_MetadataMFVec3f, 704  
X3D\_MetadataMFVec4d, 705  
X3D\_MetadataMFVec4f, 705  
X3D\_MetadataSFBool, 707  
X3D\_MetadataSFColor, 707  
X3D\_MetadataSFColorRGBA, 708  
X3D\_MetadataSFDouble, 709  
X3D\_MetadataSFFloat, 709  
X3D\_MetadataSFImage, 710  
X3D\_MetadataSFInt32, 711  
X3D\_MetadataSFMMatrix3d, 711  
X3D\_MetadataSFMMatrix3f, 712  
X3D\_MetadataSFMMatrix4d, 713  
X3D\_MetadataSFMMatrix4f, 713  
X3D\_MetadataSFNode, 714  
X3D\_MetadataSFRotation, 715  
X3D\_MetadataSFString, 715  
X3D\_MetadataSFTime, 716  
X3D\_MetadataSFVec2d, 717  
X3D\_MetadataSFVec2f, 717  
X3D\_MetadataSFVec3d, 718  
X3D\_MetadataSFVec3f, 719  
X3D\_MetadataSFVec4d, 719  
X3D\_MetadataSFVec4f, 720  
X3D\_MetadataSet, 706  
X3D\_MetadataString, 721  
X3D\_MotorJoint, 721  
X3D\_MovieTexture, 723  
X3D\_MultiTexture, 724  
X3D\_MultiTextureCoordinate, 724  
X3D\_MultiTextureTransform, 725  
X3D\_NavigationInfo, 725  
X3D\_Node, 726  
X3D\_Normal, 727  
X3D\_NormalInterpolator, 727  
X3D\_NurbsCurve, 728  
X3D\_NurbsCurve2D, 729  
X3D\_NurbsOrientationInterpolator, 729  
X3D\_NurbsPatchSurface, 730  
X3D\_NurbsPositionInterpolator, 731  
X3D\_NurbsSet, 732  
X3D\_NurbsSurfaceInterpolator, 732  
X3D\_NurbsSweptSurface, 733  
X3D\_NurbsSwungSurface, 734  
X3D\_NurbsTextureCoordinate, 735  
X3D\_NurbsTrimmedSurface, 735  
X3D\_OSC\_Sensor, 740  
X3D\_OpacityMapVolumeStyle, 736  
X3D\_OrientationChaser, 737  
X3D\_OrientationDamper, 738  
X3D\_OrientationInterpolator, 739  
X3D\_OrthoViewpoint, 739  
X3D\_PackagedShader, 741  
X3D\_ParticleSystem, 742  
X3D\_PickableGroup, 743  
X3D\_PixelTexture, 744  
X3D\_PixelTexture3D, 744  
X3D\_PlaneSensor, 745  
X3D\_PointEmitter, 746  
X3D\_PointLight, 747  
X3D\_PointPickSensor, 747  
X3D\_PointSet, 748  
X3D\_PolyRep, 751  
X3D\_Polyline2D, 749  
X3D\_PolylineEmitter, 750  
X3D\_Polypoint2D, 750  
X3D\_PositionChaser, 752  
X3D\_PositionChaser2D, 753  
X3D\_PositionDamper, 754  
X3D\_PositionDamper2D, 755  
X3D\_PositionInterpolator, 756  
X3D\_PositionInterpolator2D, 756  
X3D\_PrimitivePickSensor, 757  
X3D\_ProgramShader, 758  
X3D\_ProjectionVolumeStyle, 758  
X3D\_Proto, 759  
X3D\_ProximitySensor, 760  
X3D\_QuadSet, 761  
X3D\_ReceiverPdu, 761  
X3D\_Rectangle2D, 763  
X3D\_RigidBody, 763  
X3D\_RigidBodyCollection, 764  
X3D\_ScalarChaser, 765  
X3D\_ScalarDamper, 766  
X3D\_ScalarInterpolator, 767  
X3D\_ScreenFontStyle, 768  
X3D\_ScreenGroup, 768  
X3D\_Script, 769  
X3D\_SegmentedVolumeData, 770  
X3D\_ShadedVolumeStyle, 770  
X3D\_ShaderPart, 771  
X3D\_ShaderProgram, 772  
X3D\_Shape, 772  
X3D\_SignalPdu, 773  
X3D\_SilhouetteEnhancementVolumeStyle, 774  
X3D\_SingleAxisHingeJoint, 775  
X3D\_SliderJoint, 776  
X3D\_Sound, 777  
X3D\_Sphere, 777  
X3D\_SphereSensor, 778  
X3D\_SplinePositionInterpolator, 779  
X3D\_SplinePositionInterpolator2D, 780  
X3D\_SplineScalarInterpolator, 780  
X3D\_SpotLight, 781



X3D\_SquadOrientationInterpolator, 782  
X3D\_StaticGroup, 783  
X3D\_StringSensor, 783  
X3D\_SurfaceEmitter, 784  
X3D\_Switch, 785  
X3D\_Teapot, 786  
X3D\_TexCoordChaser2D, 786  
X3D\_TexCoordDamper2D, 787  
X3D\_Text, 788  
X3D\_TextureBackground, 789  
X3D\_TextureCoordinate, 790  
X3D\_TextureCoordinate3D, 790  
X3D\_TextureCoordinate4D, 791  
X3D\_TextureCoordinateGenerator, 791  
X3D\_TextureProperties, 792  
X3D\_TextureTransform, 793  
X3D\_TextureTransform3D, 793  
X3D\_TextureTransformMatrix3D, 794  
X3D\_TimeSensor, 794  
X3D\_TimeTrigger, 795  
X3D\_ToneMappedVolumeStyle, 796  
X3D\_TouchSensor, 797  
X3D\_TrackingSensor, 797  
X3D\_Transform, 798  
X3D\_TransformSensor, 799  
X3D\_TransmitterPdu, 800  
X3D\_TriangleFanSet, 801  
X3D\_TriangleSet, 802  
X3D\_TriangleSet2D, 803  
X3D\_TriangleStripSet, 803  
X3D\_TwoSidedMaterial, 804  
X3D\_UniversalJoint, 805  
X3D\_Viewpoint, 806  
X3D\_ViewpointGroup, 807  
X3D\_Viewport, 807  
X3D\_Virt, 808  
X3D\_VisibilitySensor, 809  
X3D\_VolumeData, 809  
X3D\_VolumeEmitter, 810  
X3D\_VolumePickSensor, 811  
X3D\_WindPhysicsModel, 812  
X3D\_WorldInfo, 812  
xml\_user\_data, 849  
XY, 850  
  
zip64\_internal, 850  
zip\_fileinfo, 851  
zlib\_filefunc64\_32\_def\_s, 851  
zlib\_filefunc64\_def\_s, 851  
zlib\_filefunc\_def\_s, 852  
zone, 852