

FreeWRL/FreeX3D

3.0.0

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# Chapter 1

## Hierarchical Index

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## Chapter 3

# Data Structure Documentation

### 3.1 `_BrowserNative` Struct Reference

#### Data Fields

- int **dummyEntry**

#### 3.1.1 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

### 3.2 `_cd_list_t` Struct Reference

#### Data Fields

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

#### 3.2.1 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

### 3.3 `_CRnodeStruct` Struct Reference

#### Data Fields

- struct **X3D\_Node** \* **routeToNode**
- int **foffset**

#### 3.3.1 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

### 3.4 `_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**

#### 3.4.1 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

## 3.5 \_intX3D\_MFBool Struct Reference

### Data Fields

- int **type**
- int **n**
- **\_intX3D\_SFBool \* p**

#### 3.5.1 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

## 3.6 \_intX3D\_MFColor Struct Reference

### Data Fields

- int **type**
- int **n**
- **\_intX3D\_SFColor \* p**

#### 3.6.1 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

## 3.7 \_intX3D\_MFColorRGBA Struct Reference

### Data Fields

- int **type**
- int **n**
- **\_intX3D\_SFColorRGBA \* p**

#### 3.7.1 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

## 3.8 `_intX3D_MFFloat` Struct Reference

### Data Fields

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

### 3.8.1 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`

## 3.9 `_intX3D_MFImage` Struct Reference

### Data Fields

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

### 3.9.1 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`

## 3.10 `_intX3D_MFInt32` Struct Reference

### Data Fields

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

### 3.10.1 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`



## 3.11 \_intX3D\_MFNode Struct Reference

### Data Fields

- int **type**
- int **n**
- \_intX3D\_SFNode \* **p**

#### 3.11.1 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

## 3.12 \_intX3D\_MFRotation Struct Reference

### Data Fields

- int **type**
- int **n**
- \_intX3D\_SFRotation \* **p**

#### 3.12.1 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

## 3.13 \_intX3D\_MFString Struct Reference

### Data Fields

- int **type**
- int **n**
- \_intX3D\_SFString \* **p**

#### 3.13.1 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

## 3.14 `_intX3D_MFTime` Struct Reference

### Data Fields

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

### 3.14.1 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`

## 3.15 `_intX3D_MFVec2d` Struct Reference

### Data Fields

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

### 3.15.1 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`

## 3.16 `_intX3D_MFVec2f` Struct Reference

### Data Fields

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

### 3.16.1 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`

## 3.17 `_intX3D_MFVec3d` Struct Reference

### Data Fields

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

#### 3.17.1 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`

## 3.18 `_intX3D_MFVec3f` Struct Reference

### Data Fields

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

#### 3.18.1 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`

## 3.19 `_intX3D_SFBool` Struct Reference

### Data Fields

- `int type`
- `int value`

#### 3.19.1 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`

## 3.20 `_intX3D_SFColor` Struct Reference

### Data Fields

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

### 3.20.1 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

## 3.21 `_intX3D_SFColorRGBA` Struct Reference

### Data Fields

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

### 3.21.1 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

## 3.22 `_intX3D_SFFloat` Struct Reference

### Data Fields

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

### 3.22.1 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

## 3.23 \_intX3D\_SFImage Struct Reference

### Data Fields

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

#### 3.23.1 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

## 3.24 \_intX3D\_SFInt32 Struct Reference

### Data Fields

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

#### 3.24.1 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

## 3.25 \_intX3D\_SFNode Struct Reference

### Data Fields

- int **type**
- int **adr**

#### 3.25.1 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

## 3.26 `_intX3D_SFRotation` Struct Reference

### Data Fields

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

### 3.26.1 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

## 3.27 `_intX3D_SFString` Struct Reference

### Data Fields

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

### 3.27.1 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

## 3.28 `_intX3D_SFTime` Struct Reference

### Data Fields

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

### 3.28.1 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

## 3.29 \_intX3D\_SFVec2d Struct Reference

### Data Fields

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

#### 3.29.1 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

## 3.30 \_intX3D\_SFVec2f Struct Reference

### Data Fields

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

#### 3.30.1 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

## 3.31 \_intX3D\_SFVec3d Struct Reference

### Data Fields

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

#### 3.31.1 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

### 3.32 `_intX3D_SFVec3f` Struct Reference

#### Data Fields

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

#### 3.32.1 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

### 3.33 `_intX3DEventIn` Struct Reference

#### Data Fields

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

#### 3.33.1 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

### 3.34 `_s_list_t` Struct Reference

#### Data Fields

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



### 3.34.1 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

## 3.35 **\_SFCColorNative Struct Reference**

### Data Fields

- int **valueChanged**
- struct **SFCColor v**

### 3.35.1 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

## 3.36 **\_SFCColorRGBANative Struct Reference**

### Data Fields

- int **valueChanged**
- struct **SFCColorRGBA v**

### 3.36.1 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

## 3.37 **\_SFImageNative Struct Reference**

### Data Fields

- int **valueChanged**

### 3.37.1 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

## 3.38 \_SFNodeNative Struct Reference

### Data Fields

- int **valueChanged**
- struct **X3D\_Node** \* **handle**
- char \* **X3DString**
- int **fieldsExpanded**

### 3.38.1 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

## 3.39 \_SFRotationNative Struct Reference

### Data Fields

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

### 3.39.1 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

## 3.40 \_SFVec2fNative Struct Reference

### Data Fields

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

### 3.40.1 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

## 3.41 **\_SFVec3dNative Struct Reference**

### Data Fields

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

### 3.41.1 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

## 3.42 **\_SFVec3fNative Struct Reference**

### Data Fields

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

### 3.42.1 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

## 3.43 **\_SFVec4dNative Struct Reference**

### Data Fields

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

### 3.43.1 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

## 3.44 `_SFVec4fNative` Struct Reference

### Data Fields

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

### 3.44.1 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

## 3.45 `_urlRequest` Struct Reference

### Data Fields

- char **url** [FILENAME\_MAX]
- void \* **instance**
- unsigned int **notifyCode**

### 3.45.1 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

## 3.46 \_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**

### 3.46.1 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`

## 3.47 ActiveRegion Struct Reference

### Data Fields

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

### 3.47.1 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

## 3.48 anyVrml Union Reference

### 3.48.1 Detailed Description

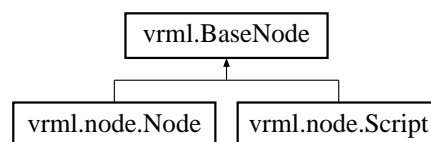
Definition at line 55 of file CParseGeneral.h.

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

- src/lib/vrml\_parser/CParseGeneral.h

## 3.49 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** ()

### 3.49.1 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

## 3.50 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**

### 3.50.1 Detailed Description

Definition at line 182 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.51 brotoDefpair Struct Reference

### Data Fields

- struct **X3D\_Node** \* **node**
- char \* **name**

### 3.51.1 Detailed Description

Definition at line 153 of file CParseParser.h.

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

- src/lib/vrml\_parser/CParseParser.h

## 3.52 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**

### 3.52.1 Detailed Description

Definition at line 5215 of file CParseParser.c.

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

- src/lib/vrml\_parser/CParseParser.c

## 3.53 brotoRoute Struct Reference

### Data Fields

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

### 3.53.1 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

## 3.54 brouteEnd Struct Reference

### Data Fields

- int **weak**
- char \* **cnode**
- char \* **cfield**
- struct **X3D\_Node** \* **node**
- int **ifield**
- int **ftype**

### 3.54.1 Detailed Description

Definition at line 62 of file CRoutes.h.

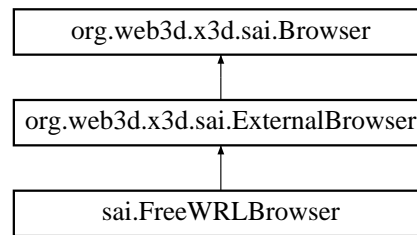
The documentation for this struct was generated from the following file:

- src/lib/vrml\_parser/CRoutes.h



## 3.55 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** ()

### 3.55.1 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

## 3.56 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

### 3.56.1 Detailed Description

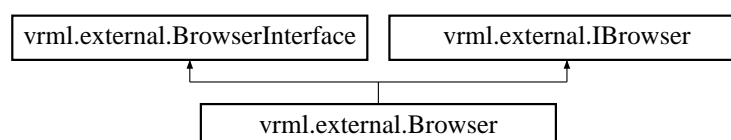
Definition at line 4 of file Browser.java.

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

- src/java/vrml/Browser.java

## 3.57 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 IllegalArgumentException↵
- void **deleteRoute** (**Node** fromNode, String fromEventOut, **Node** toNode, String toEventIn) throws IllegalArgumentException↵
- 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)

### 3.57.1 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

## 3.58 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

### 3.58.1 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

## 3.59 sai.BrowserFactory Class Reference

### Static Public Member Functions

- static void **setBrowserFactoryImpl** (**BrowserFactoryImpl** fac) throws IllegalArgumentException, X3D↵Exception, SecurityException
- static **X3DComponent createX3DComponent** (Map params) throws NotSupportedException
- static **ExternalBrowser getBrowser** (Applet applet) throws NotSupportedException, NoSuchBrowser↵Exception
- static **ExternalBrowser getBrowser** (Applet applet, String frameName, int index) throws NotSupported↵Exception, NoSuchBrowserException
- static **ExternalBrowser getBrowser** (InetAddress address, int port) throws NotSupportedException, No↵SuchBrowserException, UnknownHostException, ConnectionException

### 3.59.1 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

## 3.60 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, NoSuch↵BrowserException, UnknownHostException, ConnectionException
- **X3DComponent createX3DComponent** (Map args) throws NotSupportedException

### 3.60.1 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

## 3.61 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

### 3.61.1 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

## 3.62 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

### 3.62.1 Detailed Description

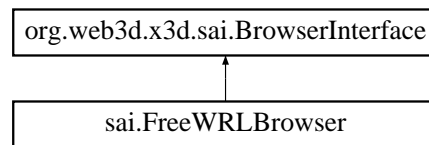
Definition at line 7 of file BrowserGlobals.java.

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

- src/java/sai/BrowserGlobals.java

## 3.63 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)

#### 3.63.1 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

## 3.64 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)

#### 3.64.1 Detailed Description

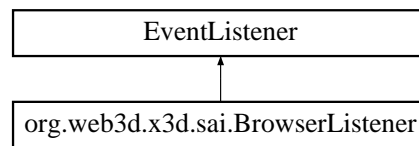
Definition at line 8 of file BrowserInterface.java.

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

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

### 3.65 org.web3d.x3d.sai.BrowserListener Interface Reference

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



#### Public Member Functions

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

#### 3.65.1 Detailed Description

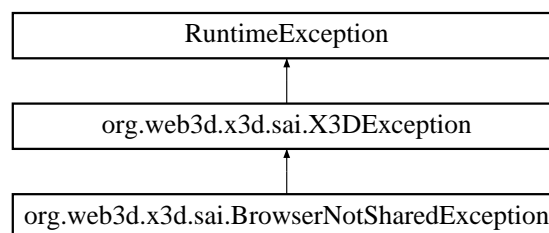
Definition at line 6 of file BrowserListener.java.

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

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

### 3.66 org.web3d.x3d.sai.BrowserNotSharedException Class Reference

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



#### Public Member Functions

- **BrowserNotSharedException** (String msg)

#### 3.66.1 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



## 3.67 CachedVertex Struct Reference

### Data Fields

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

### 3.67.1 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

## 3.68 cbDataExactName Struct Reference

### Data Fields

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

### 3.68.1 Detailed Description

Definition at line 6238 of file CParseParser.c.

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

- src/lib/vrml\_parser/CParseParser.c

## 3.69 cbDataRootNameAndRouteDir Struct Reference

### Data Fields

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

### 3.69.1 Detailed Description

Definition at line 6280 of file CParseParser.c.

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

- src/lib/vrml\_parser/CParseParser.c

## 3.70 coded\_block\_pattern\_entry Struct Reference

### Data Fields

- unsigned int **cbp**
- int **num\_bits**

### 3.70.1 Detailed Description

Definition at line 770 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.71 colorScheme Struct Reference

### Data Fields

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

### 3.71.1 Detailed Description

Definition at line 277 of file common.c.

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

- src/lib/ui/common.c

## 3.72 command Struct Reference

### Data Fields

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

### 3.72.1 Detailed Description

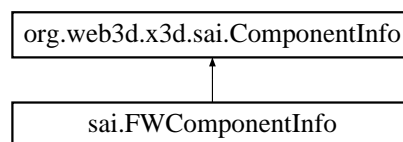
Definition at line 630 of file common.c.

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

- src/lib/ui/common.c

## 3.73 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** ()

### 3.73.1 Detailed Description

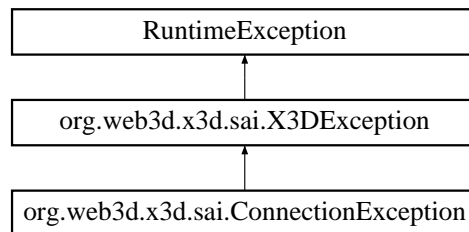
Definition at line 3 of file ComponentInfo.java.

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

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

### 3.74 org.web3d.x3d.sai.ConnectionException Class Reference

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



#### Public Member Functions

- **ConnectionException** (String msg)

#### 3.74.1 Detailed Description

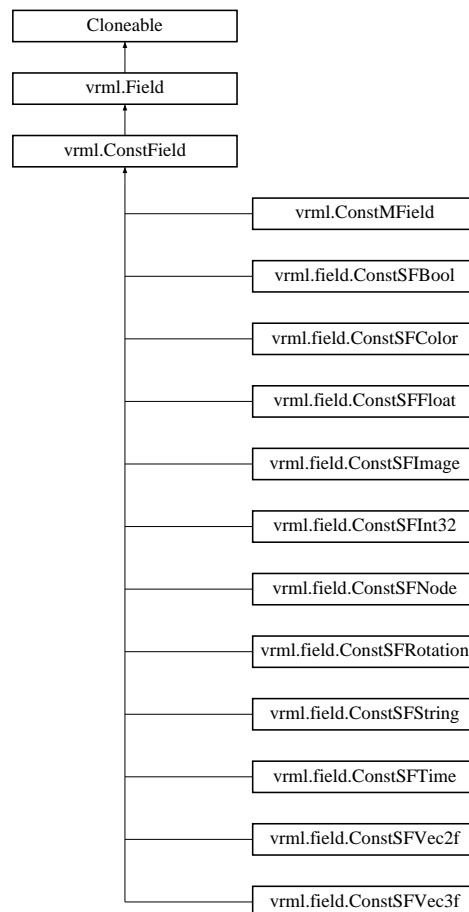
Definition at line 3 of file ConnectionException.java.

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

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

### 3.75 vrml.ConstField Class Reference

Inheritance diagram for vrml.ConstField:



### Additional Inherited Members

#### 3.75.1 Detailed Description

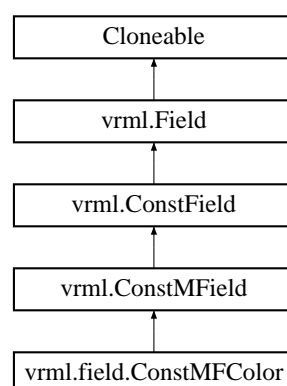
Definition at line 3 of file ConstField.java.

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

- src/java/vrml/ConstField.java

## 3.76 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

### 3.76.1 Detailed Description

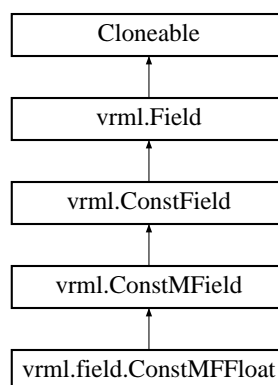
Definition at line 10 of file ConstMFCOLOR.java.

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

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

## 3.77 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

### 3.77.1 Detailed Description

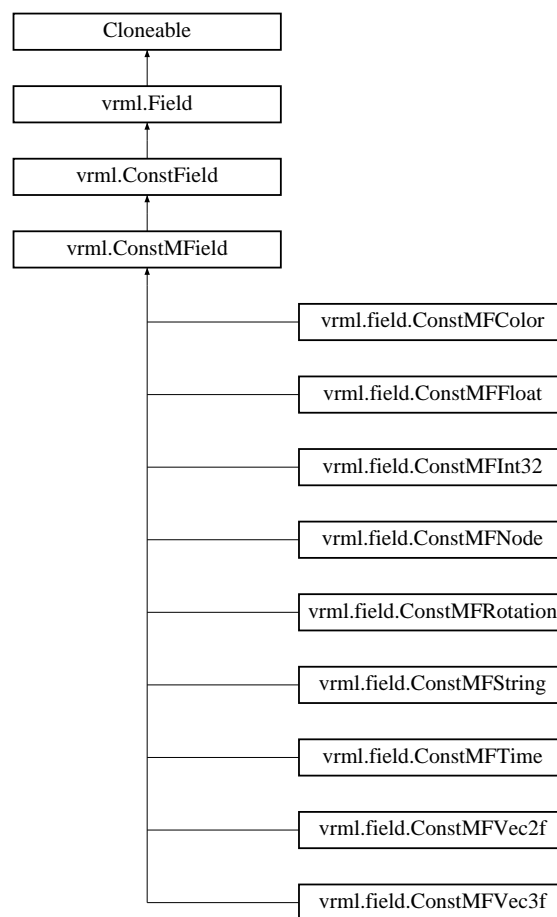
Definition at line 10 of file ConstMFFloat.java.

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

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

## 3.78 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)

### 3.78.1 Detailed Description

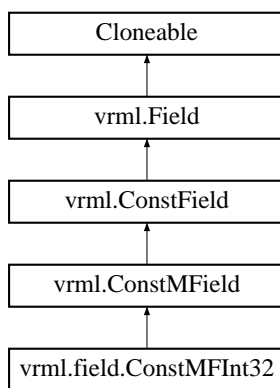
Definition at line 4 of file ConstMField.java.

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

- src/java/vrml/ConstMField.java

## 3.79 vrml.field.ConstMFlnt32 Class Reference

Inheritance diagram for vrml.field.ConstMFlnt32:



## Public Member Functions

- **ConstMFlnt32** (int[] value)
- **ConstMFlnt32** (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

### 3.79.1 Detailed Description

Definition at line 10 of file ConstMFlnt32.java.

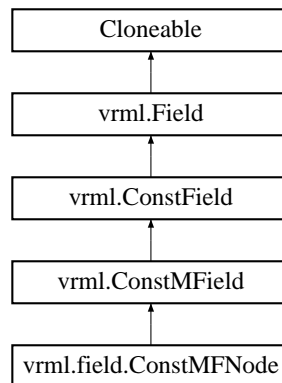
The documentation for this class was generated from the following file:

- src/java/vrml/field/ConstMFlnt32.java



## 3.80 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

#### 3.80.1 Detailed Description

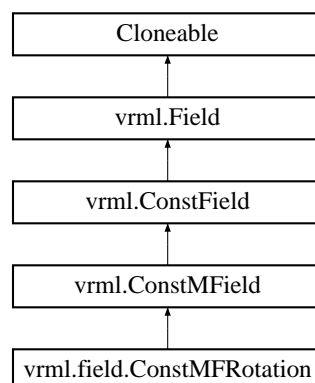
Definition at line 10 of file ConstMFNode.java.

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

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

## 3.81 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

### 3.81.1 Detailed Description

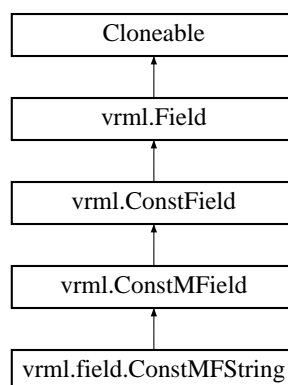
Definition at line 10 of file ConstMFRotation.java.

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

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

## 3.82 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

### 3.82.1 Detailed Description

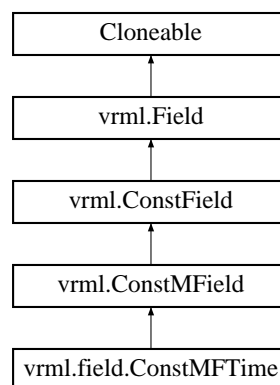
Definition at line 10 of file ConstMFString.java.

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

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

## 3.83 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

### 3.83.1 Detailed Description

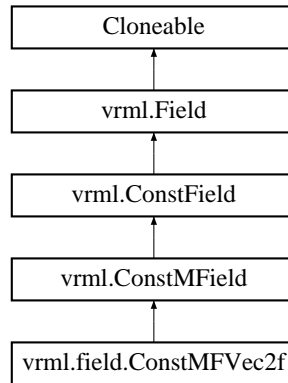
Definition at line 10 of file ConstMFTIME.java.

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

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

### 3.84 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

##### 3.84.1 Detailed Description

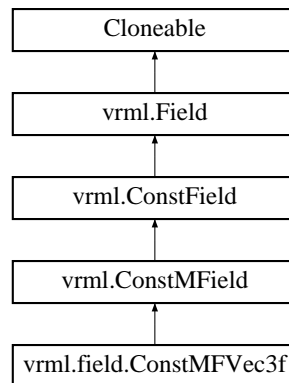
Definition at line 10 of file `ConstMFVec2f.java`.

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

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

### 3.85 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

##### 3.85.1 Detailed Description

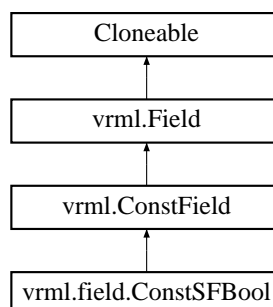
Definition at line 10 of file ConstMFVec3f.java.

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

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

### 3.86 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

### 3.86.1 Detailed Description

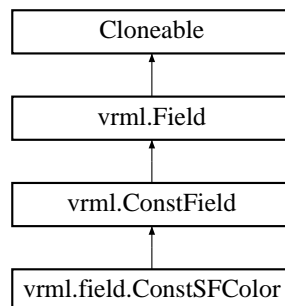
Definition at line 10 of file ConstSFBool.java.

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

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

## 3.87 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

### 3.87.1 Detailed Description

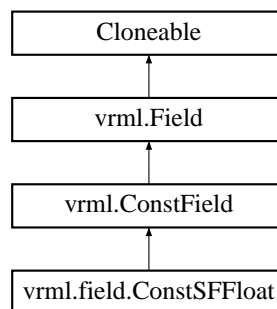
Definition at line 10 of file ConstSFCOLOR.java.

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

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

## 3.88 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

### 3.88.1 Detailed Description

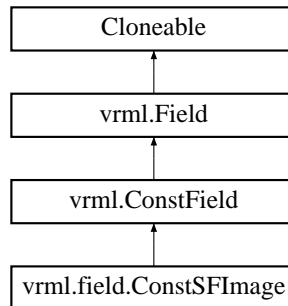
Definition at line 10 of file ConstSFFloat.java.

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

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

### 3.89 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

##### 3.89.1 Detailed Description

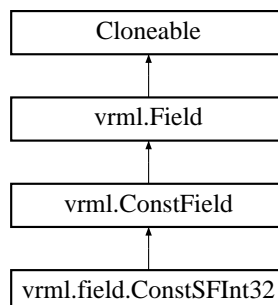
Definition at line 10 of file ConstSfImage.java.

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

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

### 3.90 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

### 3.90.1 Detailed Description

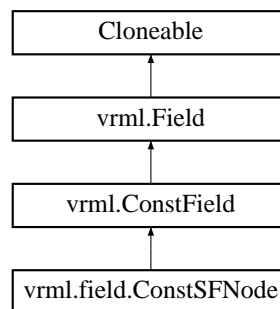
Definition at line 10 of file ConstSFInt32.java.

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

- src/java/vrml/field/ConstSFInt32.java

## 3.91 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

### 3.91.1 Detailed Description

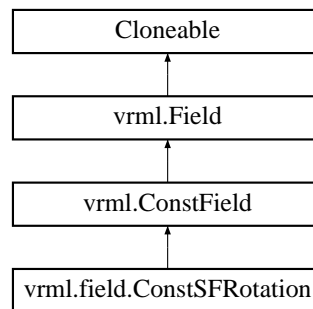
Definition at line 10 of file ConstSFNode.java.

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

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

### 3.92 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

#### 3.92.1 Detailed Description

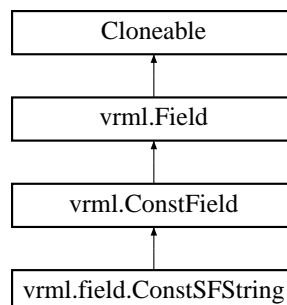
Definition at line 10 of file ConstSFRotation.java.

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

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

### 3.93 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

### 3.93.1 Detailed Description

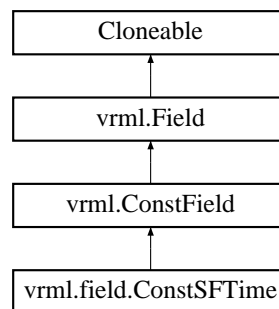
Definition at line 10 of file ConstSFString.java.

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

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

## 3.94 vrml.field.ConstSFTTime Class Reference

Inheritance diagram for vrml.field.ConstSFTTime:



## Public Member Functions

- **ConstSFTTime** (double value)
- double **getValue** ()
- String **toString** ()
- void **\_\_fromPerl** (BufferedReader in) throws IOException
- void **\_\_toPerl** (PrintWriter out) throws IOException

## Additional Inherited Members

### 3.94.1 Detailed Description

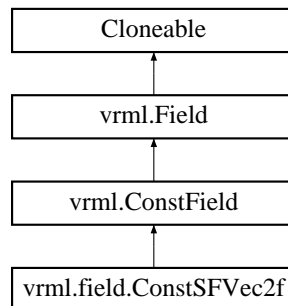
Definition at line 10 of file ConstSFTTime.java.

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

- src/java/vrml/field/ConstSFTTime.java

### 3.95 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

#### 3.95.1 Detailed Description

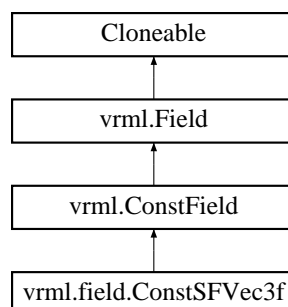
Definition at line 10 of file ConstSFVec2f.java.

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

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

### 3.96 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

### 3.96.1 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

## 3.97 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 **scrdir**
- int **extra**

### 3.97.1 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

## 3.98 CRjsnameStruct Struct Reference

### Data Fields

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

### 3.98.1 Detailed Description

Definition at line 185 of file CScripts.h.

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

- src/lib/world\_script/CScripts.h

## 3.99 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**

### 3.99.1 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

## 3.100 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**

### 3.100.1 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

## 3.101 currayhit Struct Reference

### Data Fields

- struct **X3D\_Node** \* **hitNode**
- GLDOUBLE **modelMatrix** [16]
- GLDOUBLE **projMatrix** [16]

### 3.101.1 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

## 3.102 datChnk Struct Reference

### Data Fields

- char **chunkID** [4]
- int32\_t **chunkSize**

### 3.102.1 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

## 3.103 dct\_dc\_size\_entry Struct Reference

### Data Fields

- unsigned int **value**
- int **num\_bits**

### 3.103.1 Detailed Description

Definition at line 797 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.104 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]

### 3.104.1 Detailed Description

Definition at line 149 of file Component\_CubeMapTexturing.h.

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

- src/lib/scenegraph/Component\_CubeMapTexturing.h



## 3.105 DdsLoadInfo Struct Reference

### Data Fields

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

### 3.105.1 Detailed Description

Definition at line 128 of file Component\_CubeMapTexturing.c.

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

- src/lib/scenegraph/Component\_CubeMapTexturing.c

## 3.106 Dict Struct Reference

### Data Fields

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

### 3.106.1 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

## 3.107 DictNode Struct Reference

### Data Fields

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

### 3.107.1 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

## 3.108 EAI\_ListenerStruct Struct Reference

### Data Fields

- int **FreeWRL\_RegisterNumber**
- int **type**
- int **datasize**
- void \* **dataArea**
- void \* **arg**
- void(\* **functionHandler**)(X3DNode \*, double, void \*arg)

### 3.108.1 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

## 3.109 vrml.external.FreeWRLEAI.EAIAsyncMessage Class Reference

### Data Fields

- String **value**
- int **EventNumber**
- **EAIAsyncMessage** prev
- **EAIAsyncMessage** next

### 3.109.1 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

## 3.110 sai.eai.EAIAsyncMessage Class Reference

### Data Fields

- String **value**
- int **EventNumber**
- **EAIAsyncMessage** prev
- **EAIAsyncMessage** next

### 3.110.1 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

## 3.111 vrml.external.FreeWRLEAI.EAIAsyncQueue Class Reference

### Public Member Functions

- synchronized void **enqueue** (**EAIAsyncMessage** msg)
- synchronized **EAIAsyncMessage** **dequeue** ()
- boolean **isEmpty** ()

### 3.111.1 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

## 3.112 sai.eai.EAIAsyncQueue Class Reference

### Public Member Functions

- synchronized void **enqueue** (**EAIAsyncMessage** msg)
- synchronized **EAIAsyncMessage** **dequeue** ()
- boolean **isEmpty** ()

### 3.112.1 Detailed Description

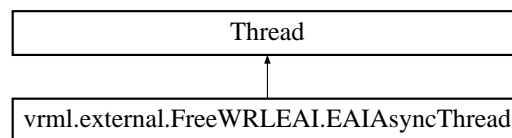
Definition at line 20 of file `EAIAsyncQueue.java`.

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

- `src/java/sai/eai/EAIAsyncQueue.java`

## 3.113 `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** ()

### 3.113.1 Detailed Description

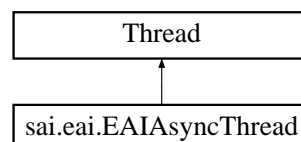
Definition at line 34 of file `EAIAsyncThread.java`.

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

- `src/java/vrml/external/FreeWRLEAI/EAIAsyncThread.java`

## 3.114 `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** ()

### 3.114.1 Detailed Description

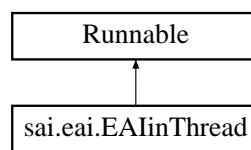
Definition at line 36 of file EAIAsyncThread.java.

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

- src/java/sai/eai/EAIAsyncThread.java

## 3.115 sai.eai.EAInThread Class Reference

Inheritance diagram for sai.eai.EAInThread:



### Public Member Functions

- **EAInThread** (Socket s, Applet d, PrintWriter pwtoBrowserjava, **BrowserInterface** me)
- void **run** ()

### 3.115.1 Detailed Description

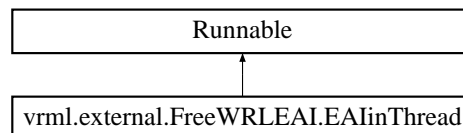
Definition at line 12 of file EAInThread.java.

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

- src/java/sai/eai/EAInThread.java

## 3.116 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** ()

### 3.116.1 Detailed Description

Definition at line 13 of file EAlinThread.java.

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

- src/java/vrml/external/FreeWRLEAI/EAlinThread.java

## 3.117 sai.eai.EAIMessage Class Reference

### Public Member Functions

- **EAIMessage** (String thismsg)

### Data Fields

- String **mmm**
- **EAIMessage** prev
- **EAIMessage** next

### 3.117.1 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

## 3.118 vrml.external.FreeWRLEAI.EAIMessage Class Reference

### Public Member Functions

- **EAIMessage** (String thismsg)

### Data Fields

- String **mmm**
- **EAIMessage** prev
- **EAIMessage** next

### 3.118.1 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

## 3.119 EAINodeIndexStruct Struct Reference

### Data Fields

- struct **X3D\_Node** \* **actualNodePtr**
- int **nodeType**
- struct **Vector** \* **nodeParams**

### 3.119.1 Detailed Description

Definition at line 142 of file EAIHelpers.c.

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

- src/lib/input/EAIHelpers.c

## 3.120 EAINodeParams Struct Reference

### Data Fields

- struct **X3D\_Node** \* **thisFieldNodePointer**
- int **fieldOffset**
- int **datalen**
- int **typeString**
- int **scripttype**
- char \* **invokedPROTOValue**

### 3.120.1 Detailed Description

Definition at line 133 of file EAIHelpers.c.

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

- src/lib/input/EAIHelpers.c

## 3.121 sai.eai.EAloutQueue Class Reference

### Public Member Functions

- synchronized void **enqueue** (**EAIMessage** msg)
- synchronized **EAIMessage** **dequeue** ()
- boolean **isEmpty** ()

### 3.121.1 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

## 3.122 vrml.external.FreeWRLEAI.EAloutQueue Class Reference

### Public Member Functions

- synchronized void **enqueue** (**EAI**Message msg)
- synchronized **EAI**Message **dequeue** ()
- boolean **isEmpty** ()

### 3.122.1 Detailed Description

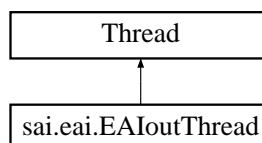
Definition at line 21 of file EAloutQueue.java.

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

- src/java/vrml/external/FreeWRLEAI/EAloutQueue.java

## 3.123 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** ()

### 3.123.1 Detailed Description

Definition at line 33 of file EAloutThread.java.

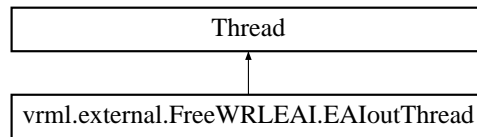
The documentation for this class was generated from the following file:

- src/java/sai/eai/EAloutThread.java



## 3.124 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** ()

#### 3.124.1 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

## 3.125 EdgePair Struct Reference

### Data Fields

- **GLUhalfEdge e**
- **GLUhalfEdge eSym**

#### 3.125.1 Detailed Description

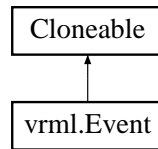
Definition at line 59 of file mesh.c.

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

- src/libtess/mesh.c
- src/libtess/tess.c

### 3.126 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** ()

#### 3.126.1 Detailed Description

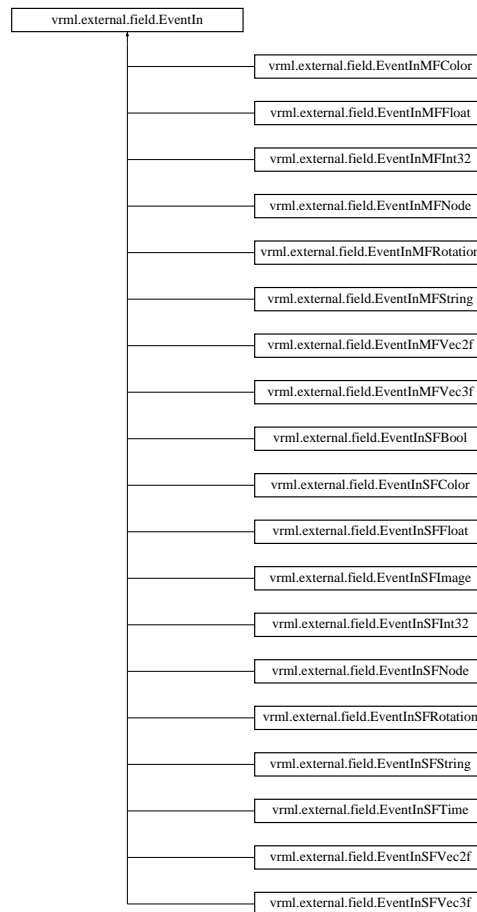
Definition at line 4 of file Event.java.

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

- src/java/vrml/Event.java

### 3.127 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**

### 3.127.1 Detailed Description

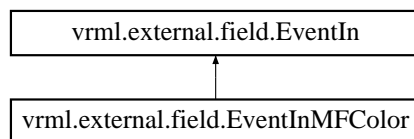
Definition at line 5 of file EventIn.java.

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

- src/java/vrml/external/field/EventIn.java

### 3.128 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

#### 3.128.1 Detailed Description

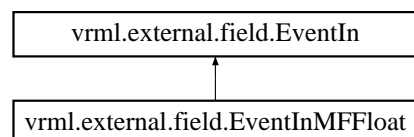
Definition at line 6 of file EventInMFCOLOR.java.

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

- src/java/vrml/external/field/EventInMFCOLOR.java

### 3.129 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

#### 3.129.1 Detailed Description

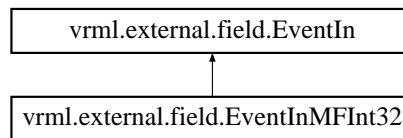
Definition at line 6 of file EventInMFFloat.java.

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

- src/java/vrml/external/field/EventInMFFloat.java

## 3.130 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

#### 3.130.1 Detailed Description

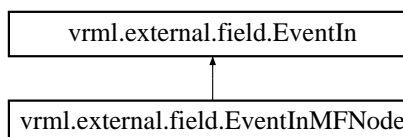
Definition at line 6 of file `EventInMFINt32.java`.

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

- `src/java/vrml/external/field/EventInMFINt32.java`

## 3.131 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

#### 3.131.1 Detailed Description

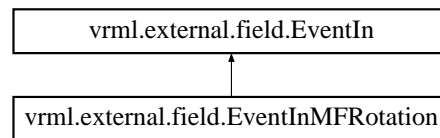
Definition at line 6 of file `EventInMFNode.java`.

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

- `src/java/vrml/external/field/EventInMFNode.java`

### 3.132 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

#### 3.132.1 Detailed Description

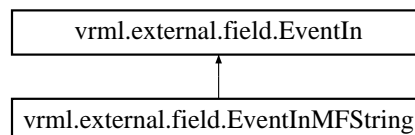
Definition at line 6 of file `EventInMFRotation.java`.

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

- `src/java/vrml/external/field/EventInMFRotation.java`

### 3.133 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

#### 3.133.1 Detailed Description

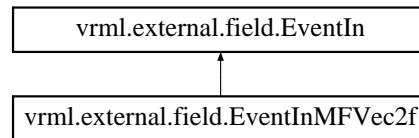
Definition at line 5 of file `EventInMFString.java`.

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

- `src/java/vrml/external/field/EventInMFString.java`

## 3.134 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

#### 3.134.1 Detailed Description

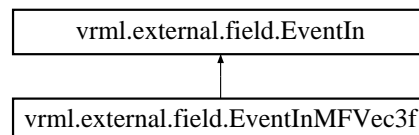
Definition at line 6 of file `EventInMFVec2f.java`.

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

- `src/java/vrml/external/field/EventInMFVec2f.java`

## 3.135 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

#### 3.135.1 Detailed Description

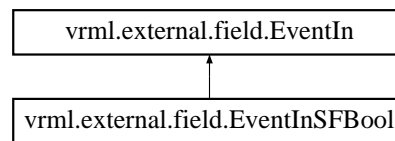
Definition at line 6 of file `EventInMFVec3f.java`.

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

- `src/java/vrml/external/field/EventInMFVec3f.java`

### 3.136 vrml.external.field.EventInSFBool Class Reference

Inheritance diagram for vrml.external.field.EventInSFBool:



#### Public Member Functions

- void **setValue** (boolean value)

#### Additional Inherited Members

#### 3.136.1 Detailed Description

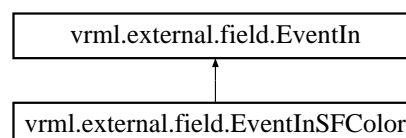
Definition at line 5 of file EventInSFBool.java.

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

- src/java/vrml/external/field/EventInSFBool.java

### 3.137 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

#### 3.137.1 Detailed Description

Definition at line 5 of file EventInSFColor.java.

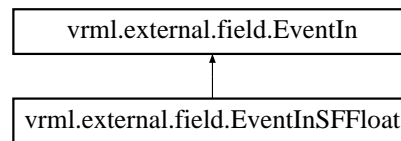
The documentation for this class was generated from the following file:

- src/java/vrml/external/field/EventInSFColor.java



## 3.138 vrml.external.field.EventInSFFloat Class Reference

Inheritance diagram for vrml.external.field.EventInSFFloat:



### Public Member Functions

- void **setValue** (float value)

### Additional Inherited Members

#### 3.138.1 Detailed Description

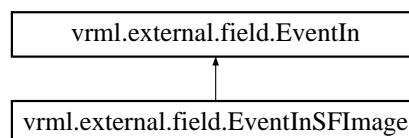
Definition at line 5 of file EventInSFFloat.java.

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

- src/java/vrml/external/field/EventInSFFloat.java

## 3.139 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

#### 3.139.1 Detailed Description

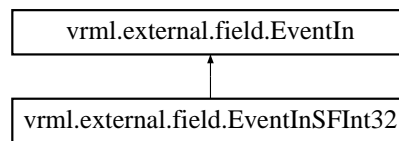
Definition at line 7 of file EventInSFImage.java.

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

- src/java/vrml/external/field/EventInSFImage.java

### 3.140 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

#### 3.140.1 Detailed Description

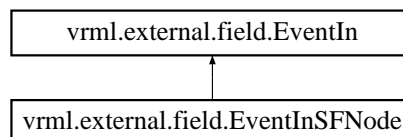
Definition at line 6 of file EventInSFInt32.java.

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

- src/java/vrml/external/field/EventInSFInt32.java

### 3.141 vrml.external.field.EventInSFNode Class Reference

Inheritance diagram for vrml.external.field.EventInSFNode:



#### Public Member Functions

- void **setValue** (**Node** node)

#### Additional Inherited Members

#### 3.141.1 Detailed Description

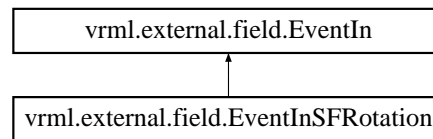
Definition at line 6 of file EventInSFNode.java.

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

- src/java/vrml/external/field/EventInSFNode.java

## 3.142 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

#### 3.142.1 Detailed Description

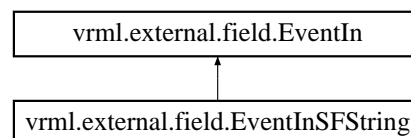
Definition at line 5 of file EventInSFRotation.java.

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

- src/java/vrml/external/field/EventInSFRotation.java

## 3.143 vrml.external.field.EventInSFString Class Reference

Inheritance diagram for vrml.external.field.EventInSFString:



### Public Member Functions

- void **setValue** (String value)

### Additional Inherited Members

#### 3.143.1 Detailed Description

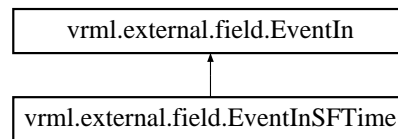
Definition at line 6 of file EventInSFString.java.

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

- src/java/vrml/external/field/EventInSFString.java

### 3.144 vrml.external.field.EventInSFTIME Class Reference

Inheritance diagram for vrml.external.field.EventInSFTIME:



#### Public Member Functions

- void **setValue** (double value)

#### Additional Inherited Members

#### 3.144.1 Detailed Description

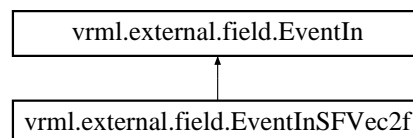
Definition at line 6 of file EventInSFTIME.java.

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

- src/java/vrml/external/field/EventInSFTIME.java

### 3.145 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

#### 3.145.1 Detailed Description

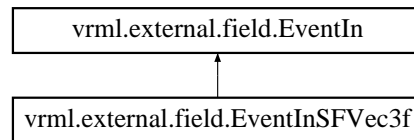
Definition at line 5 of file EventInSFVec2f.java.

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

- src/java/vrml/external/field/EventInSFVec2f.java

## 3.146 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

#### 3.146.1 Detailed Description

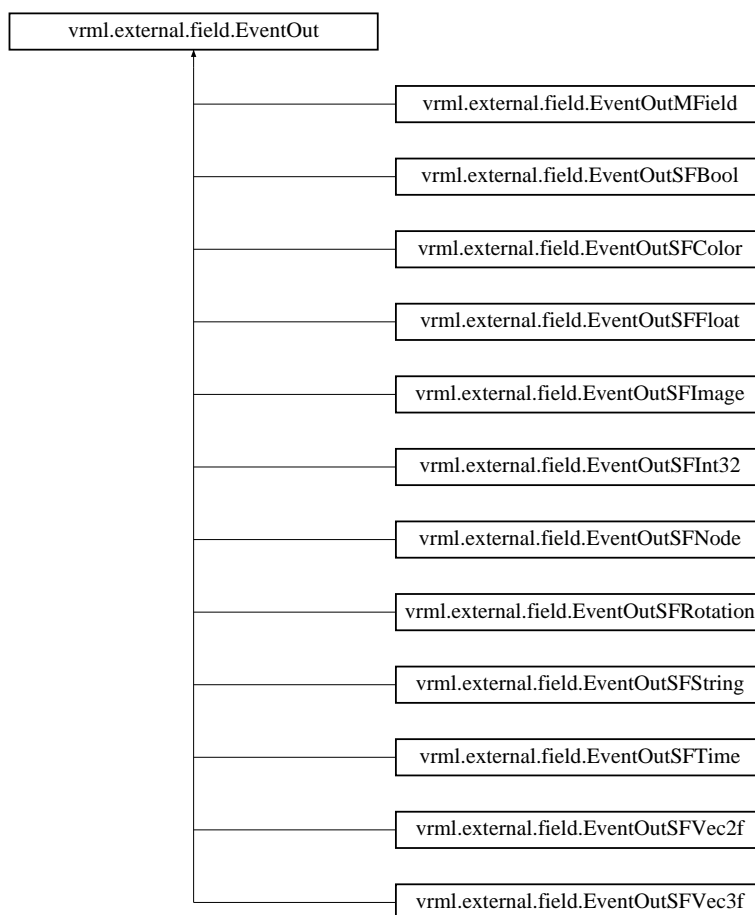
Definition at line 5 of file EventInSFVec3f.java.

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

- src/java/vrml/external/field/EventInSFVec3f.java

## 3.147 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

### 3.147.1 Detailed Description

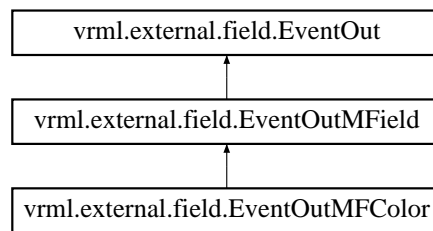
Definition at line 6 of file EventOut.java.

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

- src/java/vrml/external/field/EventOut.java

## 3.148 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

#### 3.148.1 Detailed Description

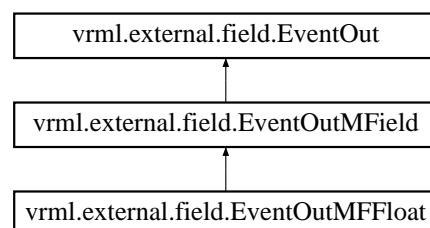
Definition at line 8 of file EventOutMFCOLOR.java.

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

- src/java/vrml/external/field/EventOutMFCOLOR.java

## 3.149 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

### 3.149.1 Detailed Description

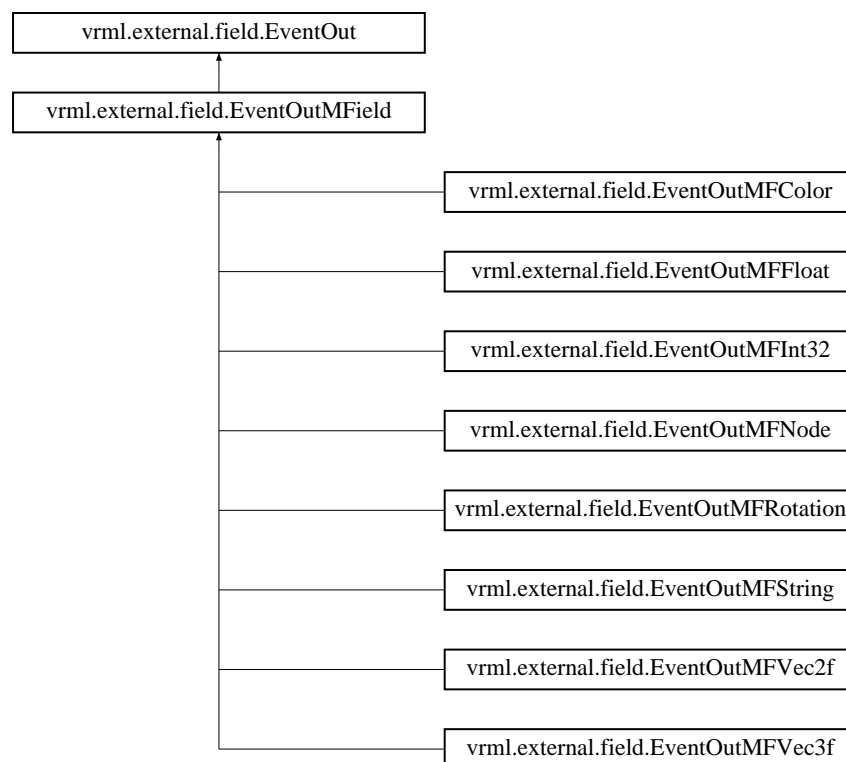
Definition at line 8 of file EventOutMFFloat.java.

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

- `src/java/vrml/external/field/EventOutMFFloat.java`

## 3.150 vrml.external.field.EventOutMField Class Reference

Inheritance diagram for vrml.external.field.EventOutMField:



## Public Member Functions

- `int getSize ()`

## Additional Inherited Members

### 3.150.1 Detailed Description

Definition at line 7 of file EventOutMField.java.

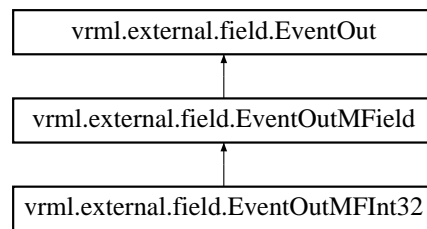
The documentation for this class was generated from the following file:

- `src/java/vrml/external/field/EventOutMField.java`



## 3.151 vrml.external.field.EventOutMField32 Class Reference

Inheritance diagram for vrml.external.field.EventOutMField32:



### Public Member Functions

- `int[] getValue ()`
- `int get1Value (int index)`

### Additional Inherited Members

#### 3.151.1 Detailed Description

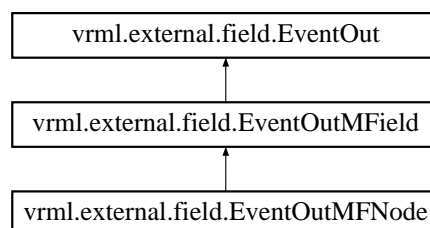
Definition at line 8 of file EventOutMField32.java.

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

- `src/java/vrml/external/field/EventOutMField32.java`

## 3.152 vrml.external.field.EventOutMFieldNode Class Reference

Inheritance diagram for vrml.external.field.EventOutMFieldNode:



### Public Member Functions

- `Node[] getValue ()`
- `Node get1Value (int index)`

## Additional Inherited Members

### 3.152.1 Detailed Description

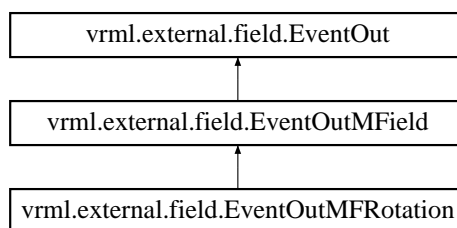
Definition at line 8 of file EventOutMFNode.java.

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

- src/java/vrml/external/field/EventOutMFNode.java

## 3.153 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

### 3.153.1 Detailed Description

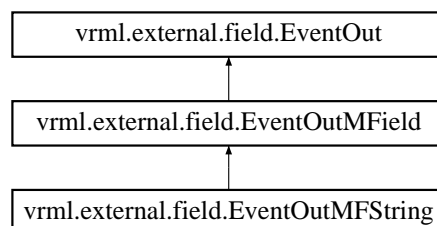
Definition at line 8 of file EventOutMFRotation.java.

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

- src/java/vrml/external/field/EventOutMFRotation.java

## 3.154 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

### 3.154.1 Detailed Description

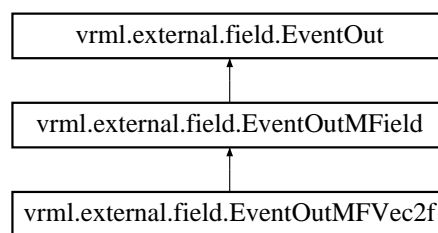
Definition at line 7 of file EventOutMFString.java.

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

- `src/java/vrml/external/field/EventOutMFString.java`

## 3.155 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

### 3.155.1 Detailed Description

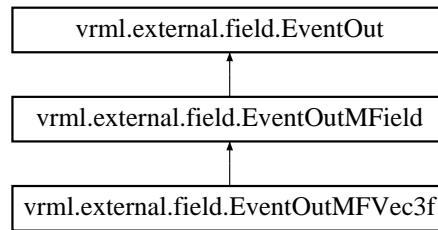
Definition at line 8 of file EventOutMFVec2f.java.

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

- `src/java/vrml/external/field/EventOutMFVec2f.java`

### 3.156 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

##### 3.156.1 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

### 3.157 vrml.external.field.EventOutObserver Interface Reference

#### Public Member Functions

- void **callback** (**EventOut** value, double timeStamp, Object userData)

##### 3.157.1 Detailed Description

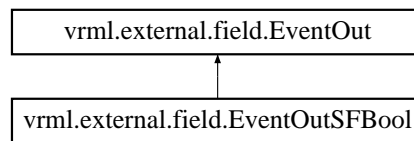
Definition at line 8 of file EventOutObserver.java.

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

- src/java/vrml/external/field/EventOutObserver.java

## 3.158 vrml.external.field.EventOutSFBool Class Reference

Inheritance diagram for vrml.external.field.EventOutSFBool:



### Public Member Functions

- boolean **getValue** ()

### Additional Inherited Members

#### 3.158.1 Detailed Description

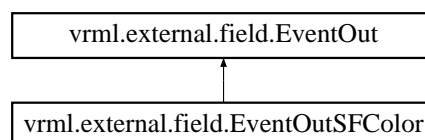
Definition at line 7 of file EventOutSFBool.java.

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

- src/java/vrml/external/field/EventOutSFBool.java

## 3.159 vrml.external.field.EventOutSFColor Class Reference

Inheritance diagram for vrml.external.field.EventOutSFColor:



### Public Member Functions

- float[] **getValue** ()

### Additional Inherited Members

#### 3.159.1 Detailed Description

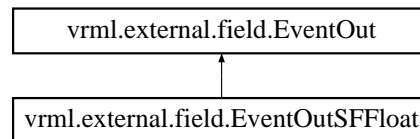
Definition at line 7 of file EventOutSFColor.java.

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

- src/java/vrml/external/field/EventOutSFColor.java

### 3.160 vrml.external.field.EventOutSFFloat Class Reference

Inheritance diagram for vrml.external.field.EventOutSFFloat:



#### Public Member Functions

- float **getValue** ()

#### Additional Inherited Members

#### 3.160.1 Detailed Description

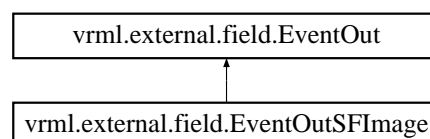
Definition at line 7 of file EventOutSFFloat.java.

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

- src/java/vrml/external/field/EventOutSFFloat.java

### 3.161 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

### 3.161.1 Detailed Description

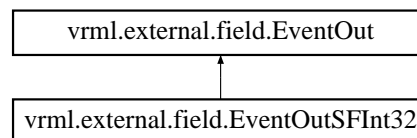
Definition at line 7 of file EventOutSFImage.java.

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

- src/java/vrml/external/field/EventOutSFImage.java

## 3.162 vrml.external.field.EventOutSFInt32 Class Reference

Inheritance diagram for vrml.external.field.EventOutSFInt32:



## Public Member Functions

- int **getValue** ()

## Additional Inherited Members

### 3.162.1 Detailed Description

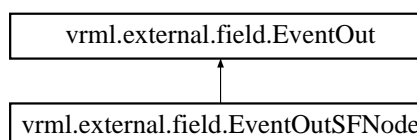
Definition at line 7 of file EventOutSFInt32.java.

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

- src/java/vrml/external/field/EventOutSFInt32.java

## 3.163 vrml.external.field.EventOutSFNode Class Reference

Inheritance diagram for vrml.external.field.EventOutSFNode:



## Public Member Functions

- **Node** `getValue ()`

## Additional Inherited Members

### 3.163.1 Detailed Description

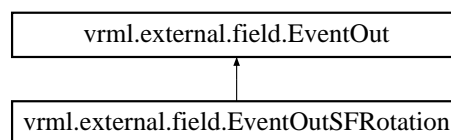
Definition at line 8 of file `EventOutSFNode.java`.

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

- `src/java/vrml/external/field/EventOutSFNode.java`

## 3.164 `vrml.external.field.EventOutSFRotation` Class Reference

Inheritance diagram for `vrml.external.field.EventOutSFRotation`:



## Public Member Functions

- `float[]` **getValue ()**

## Additional Inherited Members

### 3.164.1 Detailed Description

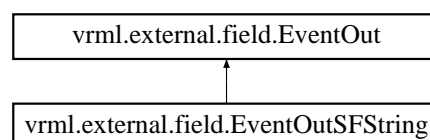
Definition at line 6 of file `EventOutSFRotation.java`.

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

- `src/java/vrml/external/field/EventOutSFRotation.java`

## 3.165 `vrml.external.field.EventOutSFString` Class Reference

Inheritance diagram for `vrml.external.field.EventOutSFString`:





## Public Member Functions

- String **getValue** ()

## Additional Inherited Members

### 3.165.1 Detailed Description

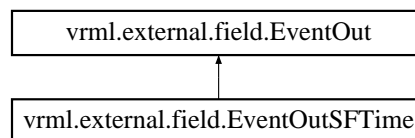
Definition at line 7 of file EventOutSFString.java.

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

- src/java/vrml/external/field/EventOutSFString.java

## 3.166 vrml.external.field.EventOutSFTime Class Reference

Inheritance diagram for vrml.external.field.EventOutSFTime:



## Public Member Functions

- double **getValue** ()

## Additional Inherited Members

### 3.166.1 Detailed Description

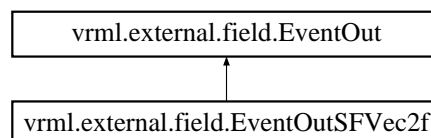
Definition at line 7 of file EventOutSFTime.java.

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

- src/java/vrml/external/field/EventOutSFTime.java

## 3.167 vrml.external.field.EventOutSFVec2f Class Reference

Inheritance diagram for vrml.external.field.EventOutSFVec2f:



## Public Member Functions

- float[] **getValue** ()

## Additional Inherited Members

### 3.167.1 Detailed Description

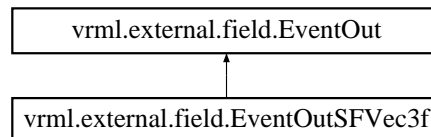
Definition at line 6 of file EventOutSFVec2f.java.

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

- src/java/vrml/external/field/EventOutSFVec2f.java

## 3.168 vrml.external.field.EventOutSFVec3f Class Reference

Inheritance diagram for vrml.external.field.EventOutSFVec3f:



## Public Member Functions

- float[] **getValue** ()

## Additional Inherited Members

### 3.168.1 Detailed Description

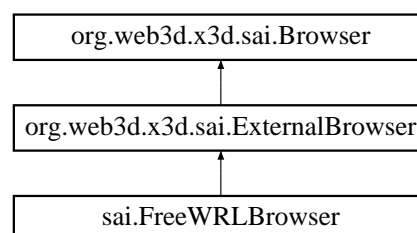
Definition at line 6 of file EventOutSFVec3f.java.

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

- src/java/vrml/external/field/EventOutSFVec3f.java

## 3.169 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`

### 3.169.1 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`

## 3.170 FaceCount Struct Reference

### Data Fields

- long **size**
- **GLUhalfEdge** \* **eStart**
- void(\* **render** )(GLUtesselator \*, GLUhalfEdge \*, long)

### 3.170.1 Detailed Description

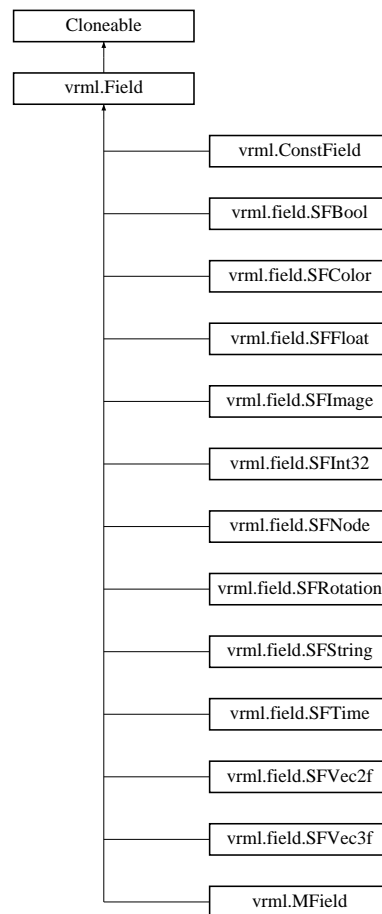
Definition at line 49 of file `render.c`.

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

- `src/libtess/render.c`

## 3.171 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** ()

### 3.171.1 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

## 3.172 FieldDecl Struct Reference

### Data Fields

- indexT **PKWmode**
- indexT **fieldType**
- indexT **lexerNameIndex**
- indexT **JSparamNameIndex**
- int **shaderVariableID**

### 3.172.1 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

## 3.173 fieldNodeState Struct Reference

### Data Fields

- int **parsingMFSFNode**
- struct **X3D\_Node** \* **fieldHolder**
- int **fieldHolderInitialized**
- struct **ScriptFieldDecl** \* **mfnodeSdecl**
- int **myObj\_num**
- struct **Shader\_Script** \* **myObj**

### 3.173.1 Detailed Description

Definition at line 112 of file X3DProtoScript.c.

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

- src/lib/x3d\_parser/X3DProtoScript.c



## 3.176 flychord Struct Reference

### Data Fields

- int **chord**
- **Key arrows** [4]

### 3.176.1 Detailed Description

Definition at line 1696 of file Viewer.c.

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

- src/lib/scenegraph/Viewer.c

## 3.177 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**

### 3.177.1 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

## 3.178 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**

### 3.178.1 Detailed Description

Initialization.

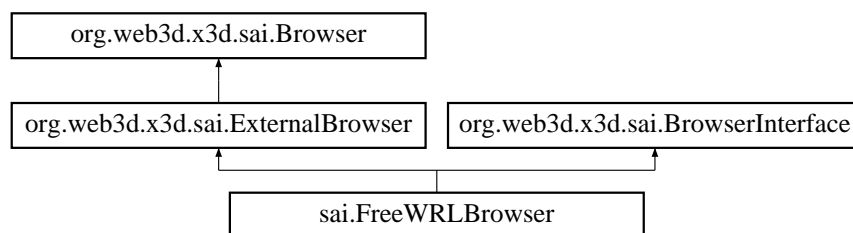
Definition at line 69 of file libFreeWRL.h.

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

- src/lib/libFreeWRL.h

## 3.179 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 EVreply, 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)

#### 3.179.1 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

## 3.180 sai.FreeWRLBrowserInfo Class Reference

### Static Public Member Functions

- static void **setBrowserProperty** (int property, boolean value)
- static boolean **getBrowserProperty** (int property)
- static Map **getBrowserProperties** ()

#### 3.180.1 Detailed Description

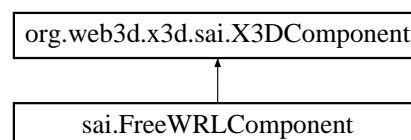
Definition at line 5 of file FreeWRLBrowserInfo.java.

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

- src/java/sai/FreeWRLBrowserInfo.java

## 3.181 sai.FreeWRLComponent Class Reference

Inheritance diagram for sai.FreeWRLComponent:



## Public Member Functions

- **ExternalBrowser** `getBrowser ()`
- Object `getImplementation ()`
- void **shutdown** ()

### 3.181.1 Detailed Description

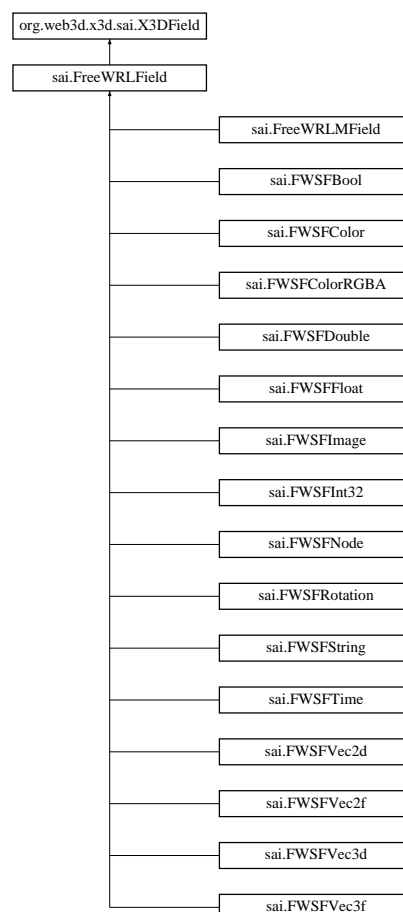
Definition at line 4 of file FreeWRLComponent.java.

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

- `src/java/sai/FreeWRLComponent.java`

## 3.182 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

### 3.182.1 Detailed Description

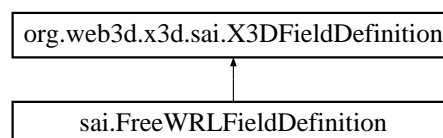
Definition at line 4 of file `FreeWRLField.java`.

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

- `src/java/sai/FreeWRLField.java`

## 3.183 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**

### 3.183.1 Detailed Description

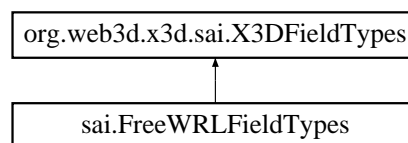
Definition at line 4 of file FreeWRLFieldDefinition.java.

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

- src/java/sai/FreeWRLFieldDefinition.java

## 3.184 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

### 3.184.1 Detailed Description

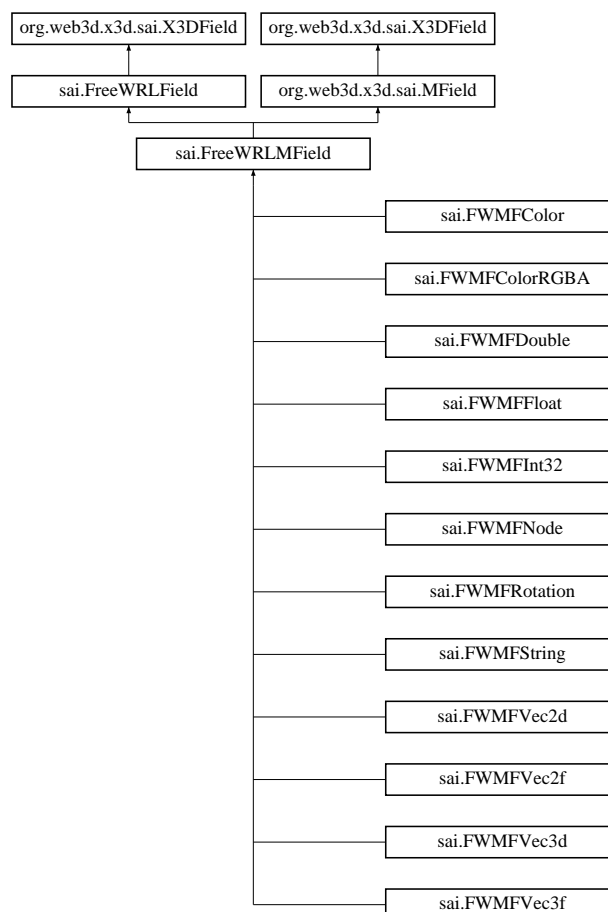
Definition at line 5 of file FreeWRLFieldTypes.java.

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

- src/java/sai/FreeWRLFieldTypes.java

## 3.185 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↔Exception

## Additional Inherited Members

### 3.185.1 Detailed Description

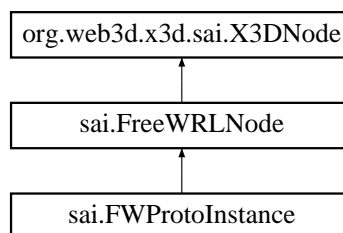
Definition at line 5 of file FreeWRLMField.java.

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

- src/java/sai/FreeWRLMField.java

## 3.186 sai.FreeWRLNode Class Reference

Inheritance diagram for sai.FreeWRLNode:



## Public Member Functions

- **FreeWRLNode** (**FreeWRLBrowser** b)
- String **toString** ()
- boolean **equals** (Object o)
- String **getNodeName** () throws InvalidNodeException, ConnectionException
- void **setPerlPtr** (String p)
- String **getPerlPtr** ()
- String **getName** ()
- int[] **getNodeType** () throws InvalidNodeException, ConnectionException
- **X3DFieldDefinition**[] **getFieldDefinitions** () throws InvalidNodeException, ConnectionException
- **X3DField** **getField** (String fieldName) throws InvalidNameException, InvalidNodeException, Connection↔Exception
- void **dispose** () throws InvalidNodeException
- void **setNodeName** (String n)
- void **setType** (int t)
- void **setPointer** (String p)
- String **getPointer** ()
- void **setMetadata** (**X3DMetadataObject** data) throws InvalidNodeException, ConnectionException
- **X3DMetadataObject** **getMetadata** () throws InvalidNodeException, ConnectionException

### 3.186.1 Detailed Description

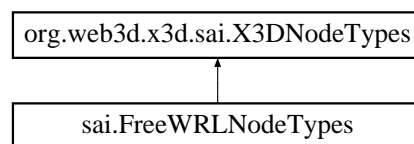
Definition at line 6 of file FreeWRLNode.java.

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

- src/java/sai/FreeWRLNode.java

## 3.187 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



### 3.187.1 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

## 3.188 sai.FreeWRLRendererInfo Class Reference

### Static Public Member Functions

- static void **setRenderingProperty** (String **key**, Object value)
- static Object **getRenderingProperty** (String **key**)
- static Map **getRenderingProperties** ()

### 3.188.1 Detailed Description

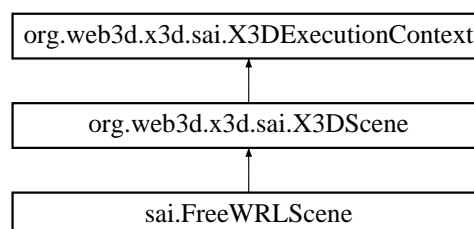
Definition at line 5 of file FreeWRLRendererInfo.java.

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

- src/java/sai/FreeWRLRendererInfo.java

## 3.189 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** ()

### 3.189.1 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

## 3.190 fw\_MaterialParameters Struct Reference

### Data Fields

- float **emission** [4]
- float **ambient** [4]
- float **diffuse** [4]
- float **specular** [4]
- float **shininess**

### 3.190.1 Detailed Description

Definition at line 74 of file Component\_Shape.h.

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

- src/lib/scenegraph/Component\_Shape.h

## 3.191 FWBITMAPFILEHEADER Struct Reference

### Data Fields

- FDWORD **bfSize**
- FWORD **bfReserved1**
- FWORD **bfReserved2**
- FDWORD **bfOffBits**

### 3.191.1 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

### 3.192 FWBITMAPINFO Struct Reference

#### Data Fields

- **FWBITMAPINFOHEADER bmiHeader**
- **FWRGBQUAD bmiColors [1]**

#### 3.192.1 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

### 3.193 FWBITMAPINFOHEADER Struct Reference

#### Data Fields

- **FDWORD biSize**
- **FLONG biWidth**
- **FLONG biHeight**
- **WORD biPlanes**
- **WORD biBitCount**
- **FDWORD biCompression**
- **FDWORD biSizeImage**
- **FLONG biXPelsPerMeter**
- **FLONG biYPelsPerMeter**
- **FDWORD biClrUsed**
- **FDWORD biClrImportant**

#### 3.193.1 Detailed Description

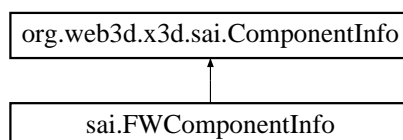
Definition at line 294 of file Snapshot.c.

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

- src/lib/main/Snapshot.c

### 3.194 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** ()

### 3.194.1 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

## 3.195 vrml.FWCreateField Class Reference

### Static Public Member Functions

- static **Field createField** (String type)
- static **ConstField createConstField** (String type)

### 3.195.1 Detailed Description

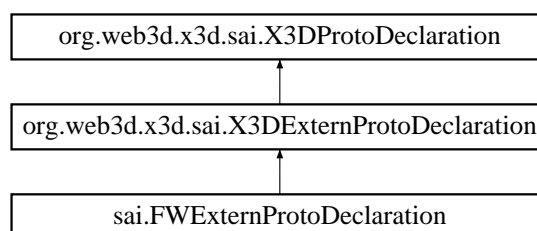
Definition at line 5 of file FWCreateField.java.

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

- src/java/vrml/FWCreateField.java

## 3.196 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** ()

### 3.196.1 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`

## 3.197 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)

### 3.197.1 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`

## 3.198 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`

### 3.198.1 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

## 3.199 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** ()

### 3.199.1 Detailed Description

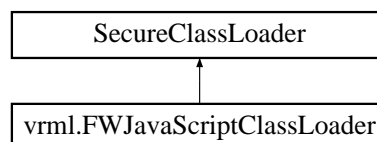
Definition at line 5 of file FWJavaScriptBinding.java.

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

- src/java/vrml/FWJavaScriptBinding.java

## 3.200 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

### 3.200.1 Detailed Description

Definition at line 13 of file FWJavaScriptClassLoader.java.

### 3.200.2 Constructor & Destructor Documentation

#### 3.200.2.1 vrml.FWJavaScriptClassLoader.FWJavaScriptClassLoader ( String url ) [inline]

##### Parameters

<i>url</i>	base url for loading classes.
------------	-------------------------------

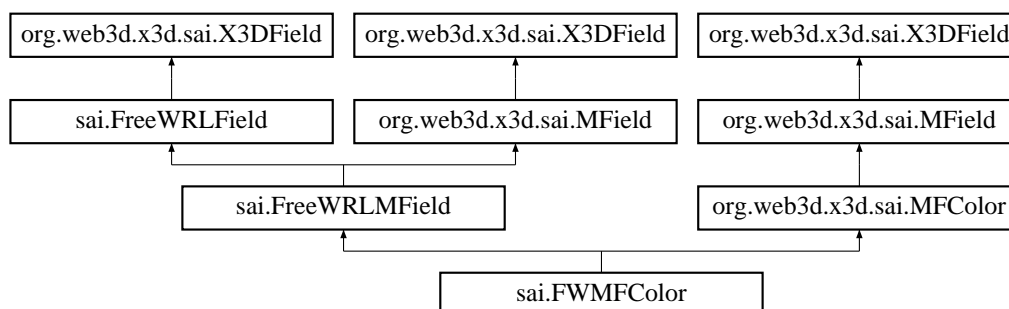
Definition at line 21 of file FWJavaScriptClassLoader.java.

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

- src/java/vrml/FWJavaScriptClassLoader.java

## 3.201 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↵ Exception
- void **setValue** (int numVals, float[][] value) throws ArrayIndexOutOfBoundsException, IllegalArgumentException↵ Exception
- 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

### 3.201.1 Detailed Description

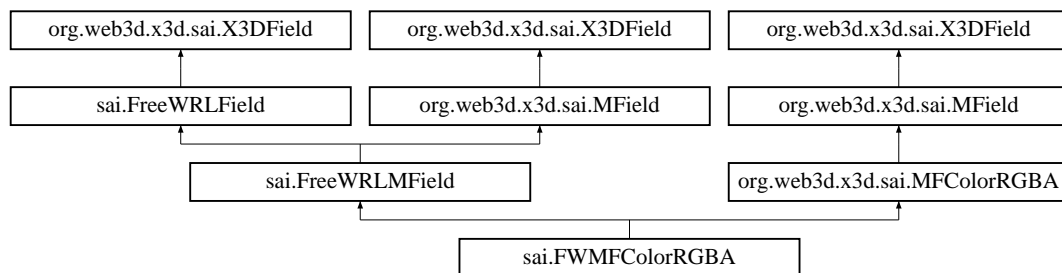
Definition at line 6 of file FWMFColor.java.

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

- src/java/sai/FWMFColor.java

## 3.202 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

### 3.202.1 Detailed Description

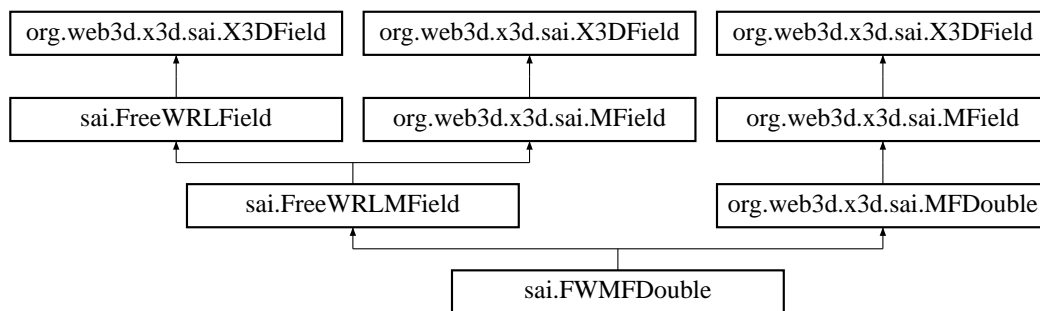
Definition at line 5 of file FWMFCOLORRGBA.java.

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

- src/java/sai/FWMFCOLORRGBA.java

## 3.203 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

### 3.203.1 Detailed Description

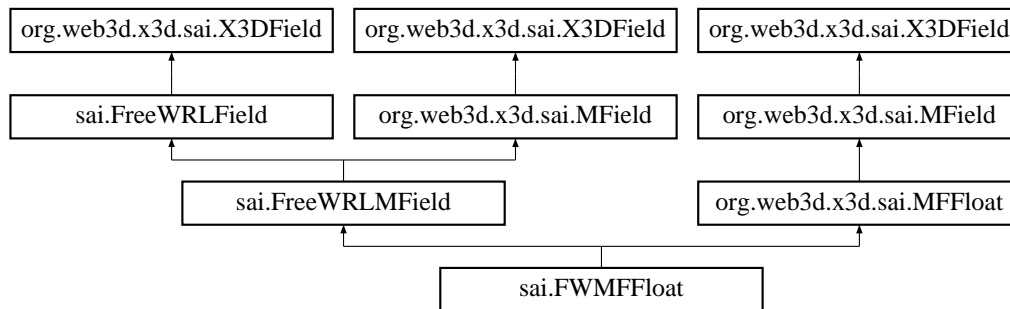
Definition at line 5 of file FWMFDOUBLE.java.

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

- src/java/sai/FWMFDOUBLE.java

## 3.204 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

#### 3.204.1 Detailed Description

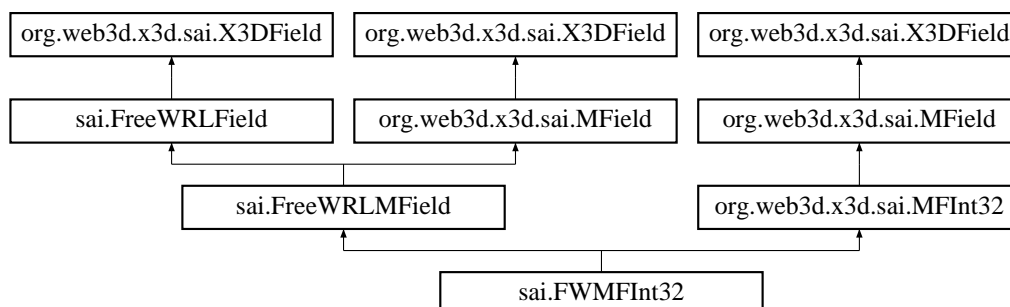
Definition at line 5 of file FWMFFloat.java.

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

- src/java/sai/FWMFFloat.java

## 3.205 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

### 3.205.1 Detailed Description

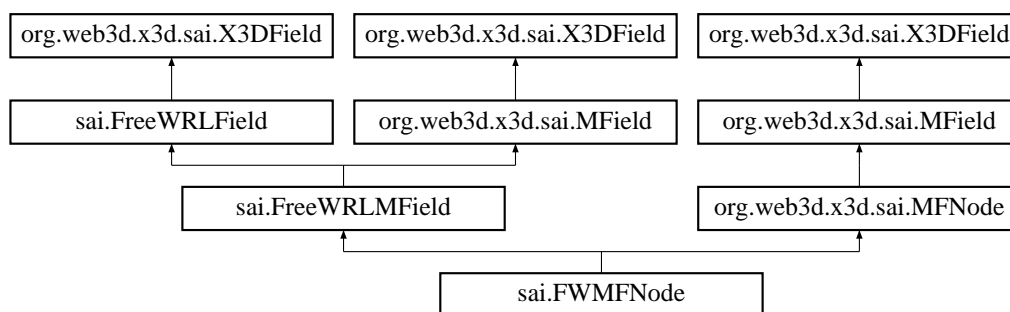
Definition at line 5 of file FWMFInt32.java.

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

- src/java/sai/FWMFInt32.java

## 3.206 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

### 3.206.1 Detailed Description

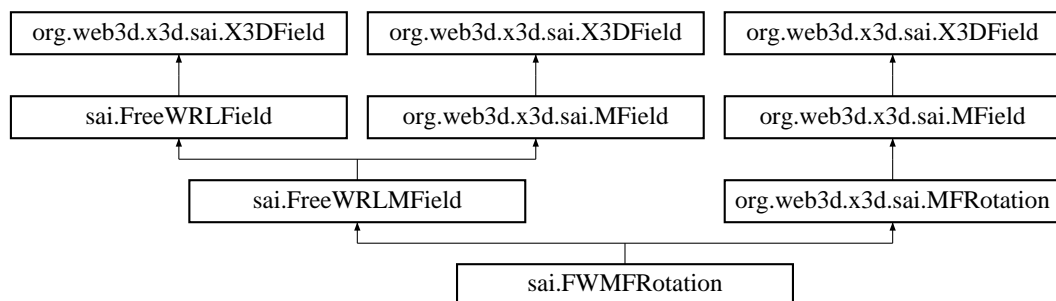
Definition at line 5 of file FWMFNode.java.

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

- src/java/sai/FWMFNode.java

## 3.207 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

### 3.207.1 Detailed Description

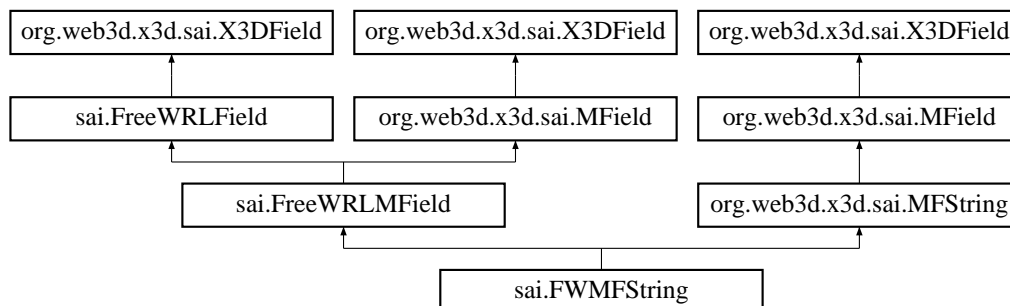
Definition at line 5 of file FWMFRotation.java.

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

- src/java/sai/FWMFRotation.java

### 3.208 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

#### 3.208.1 Detailed Description

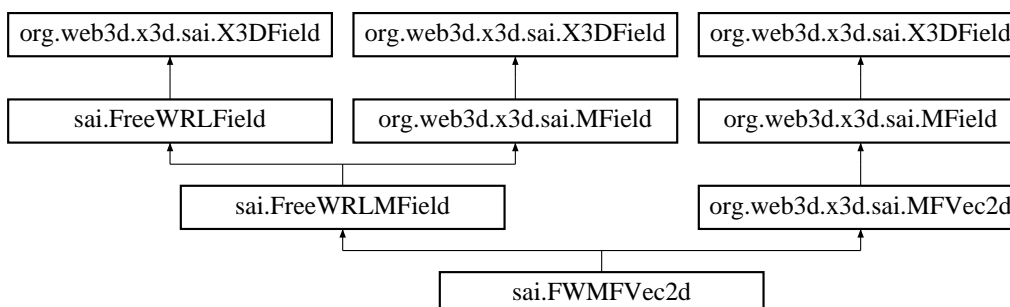
Definition at line 5 of file FWMFString.java.

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

- src/java/sai/FWMFString.java

### 3.209 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

### 3.209.1 Detailed Description

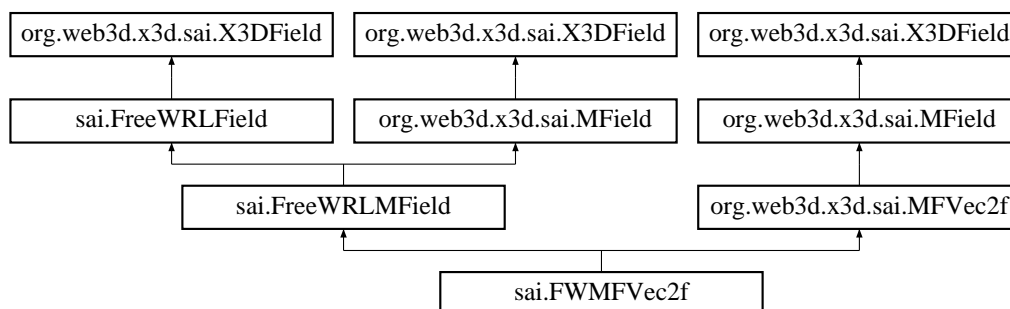
Definition at line 5 of file `FWMFVec2d.java`.

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

- `src/java/sai/FWMFVec2d.java`

## 3.210 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

### 3.210.1 Detailed Description

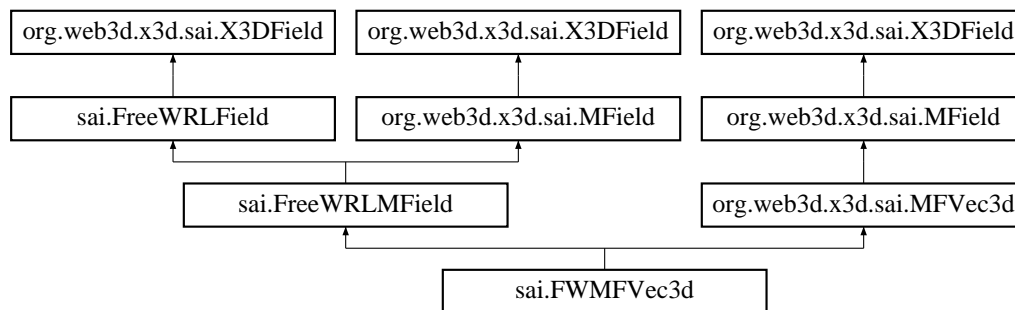
Definition at line 5 of file FWMFVec2f.java.

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

- src/java/sai/FWMFVec2f.java

## 3.211 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

### 3.211.1 Detailed Description

Definition at line 5 of file FWMFVec3d.java.

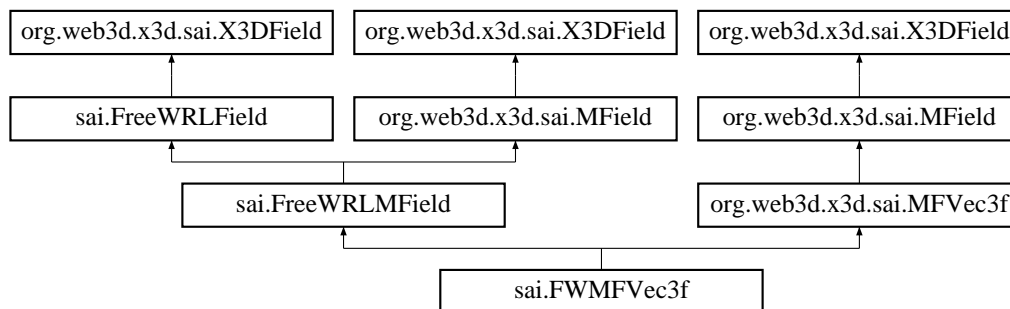
The documentation for this class was generated from the following file:

- src/java/sai/FWMFVec3d.java



## 3.212 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

#### 3.212.1 Detailed Description

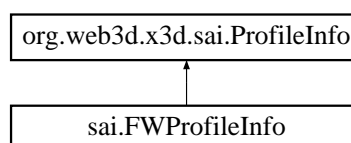
Definition at line 5 of file `FWMFVec3f.java`.

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

- `src/java/sai/FWMFVec3f.java`

## 3.213 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** ()

### 3.213.1 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

## 3.214 sai.FWProflInfo 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

### 3.214.1 Detailed Description

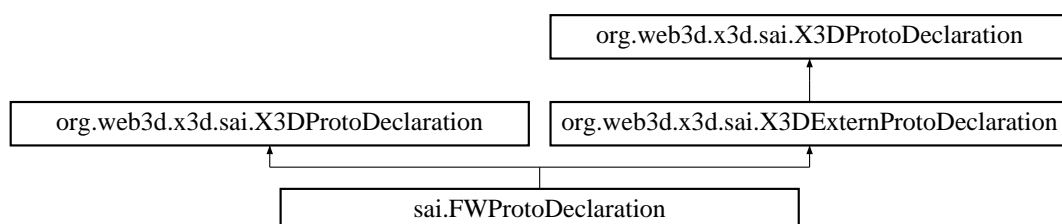
Definition at line 5 of file FWProflInfo.java.

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

- src/java/sai/FWProflInfo.java

## 3.215 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** ()

### 3.215.1 Detailed Description

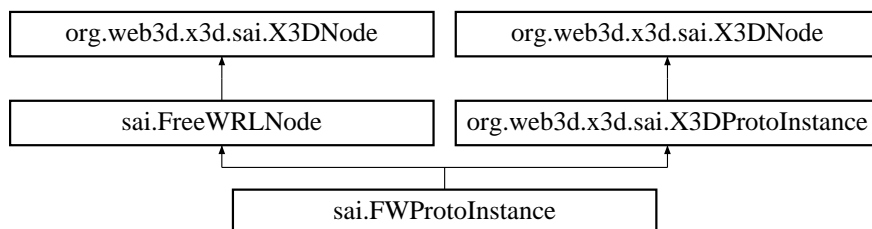
Definition at line 5 of file FWProtoDeclaration.java.

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

- src/java/sai/FWProtoDeclaration.java

## 3.216 sai.FWProtoInstance Class Reference

Inheritance diagram for sai.FWProtoInstance:



## Public Member Functions

- **FWProtoInstance** (FreeWRLBrowser b)
- int[] **getImplementationTypes** ()

### 3.216.1 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

### 3.217 FWRGBQUAD Struct Reference

#### Data Fields

- FBYTE **rgbBlue**
- FBYTE **rgbGreen**
- FBYTE **rgbRed**
- FBYTE **rgbReserved**

#### 3.217.1 Detailed Description

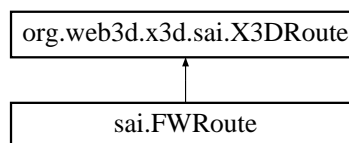
Definition at line 317 of file Snapshot.c.

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

- src/lib/main/Snapshot.c

### 3.218 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** ()

#### 3.218.1 Detailed Description

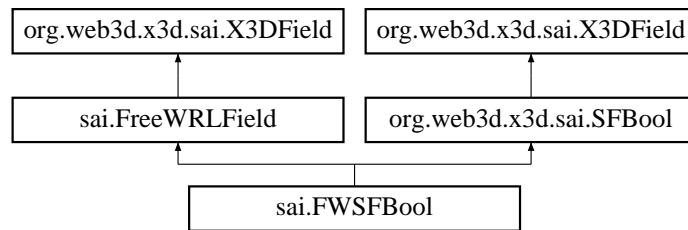
Definition at line 4 of file FWRoute.java.

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

- src/java/sai/FWRoute.java

## 3.219 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

#### 3.219.1 Detailed Description

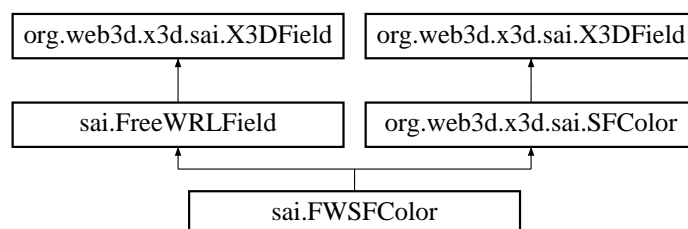
Definition at line 4 of file FWSFBool.java.

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

- src/java/sai/FWSFBool.java

## 3.220 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

### 3.220.1 Detailed Description

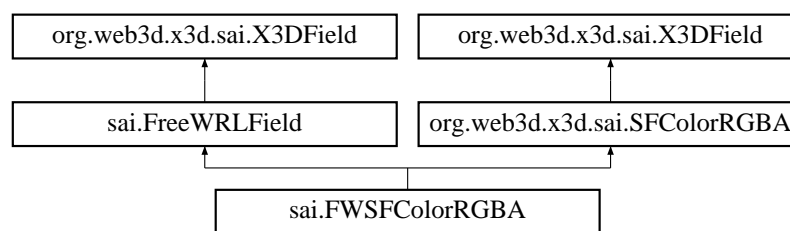
Definition at line 5 of file FWSFColor.java.

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

- src/java/sai/FWSFColor.java

## 3.221 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

### 3.221.1 Detailed Description

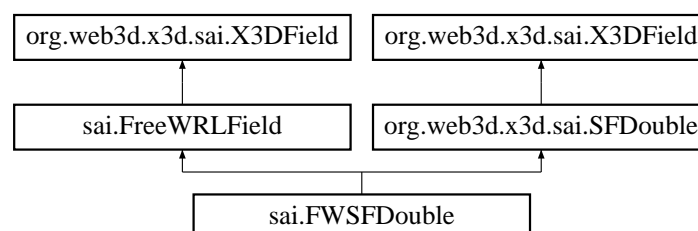
Definition at line 5 of file FWSFColorRGBA.java.

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

- src/java/sai/FWSFColorRGBA.java

## 3.222 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

### 3.222.1 Detailed Description

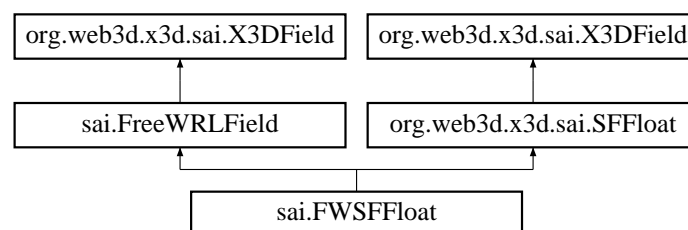
Definition at line 4 of file FWSFDouble.java.

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

- src/java/sai/FWSFDouble.java

## 3.223 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

### 3.223.1 Detailed Description

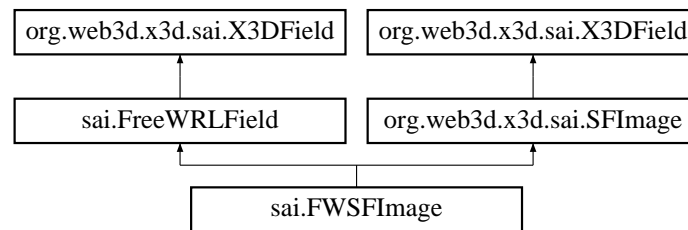
Definition at line 4 of file FWSFFloat.java.

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

- src/java/sai/FWSFFloat.java

### 3.224 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

#### 3.224.1 Detailed Description

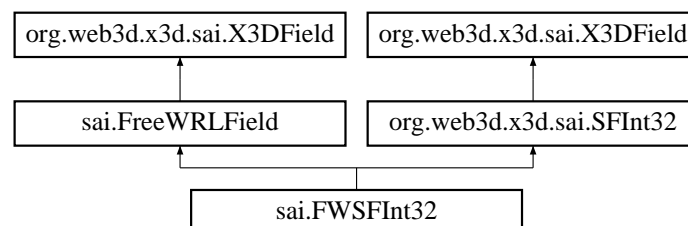
Definition at line 7 of file FWSFImage.java.

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

- src/java/sai/FWSFImage.java

### 3.225 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

### 3.225.1 Detailed Description

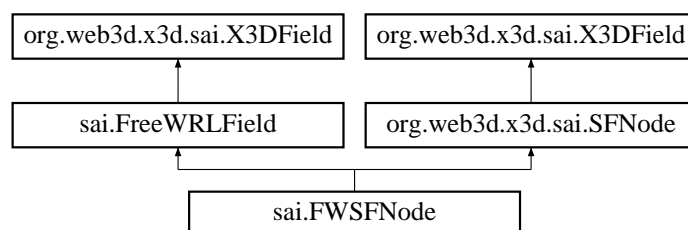
Definition at line 4 of file FWSFInt32.java.

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

- src/java/sai/FWSFInt32.java

## 3.226 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

### 3.226.1 Detailed Description

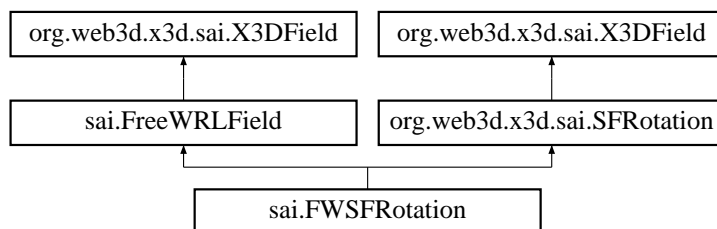
Definition at line 4 of file FWSFNode.java.

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

- src/java/sai/FWSFNode.java

### 3.227 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

#### 3.227.1 Detailed Description

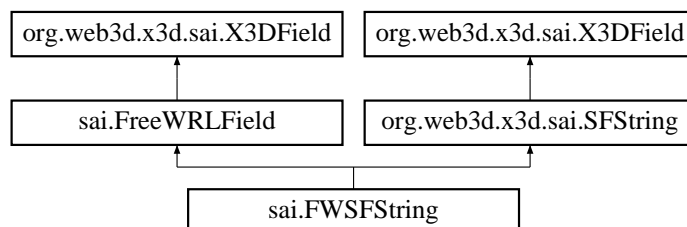
Definition at line 5 of file FWSFRotation.java.

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

- src/java/sai/FWSFRotation.java

### 3.228 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

### 3.228.1 Detailed Description

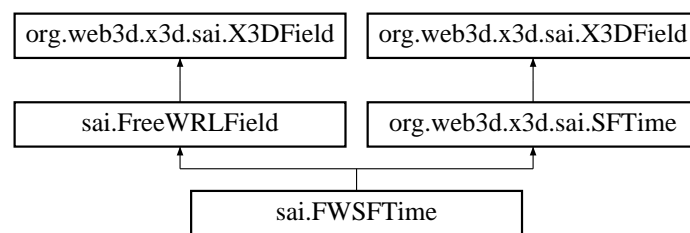
Definition at line 4 of file FWSFString.java.

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

- src/java/sai/FWSFString.java

## 3.229 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

### 3.229.1 Detailed Description

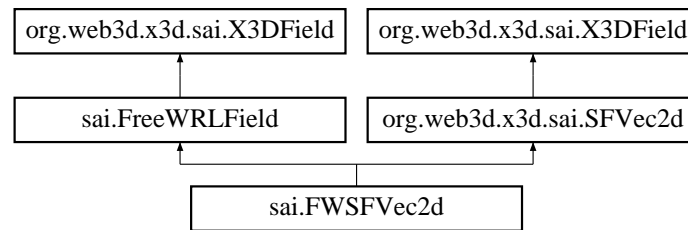
Definition at line 4 of file FWSFTime.java.

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

- src/java/sai/FWSFTime.java

### 3.230 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

#### 3.230.1 Detailed Description

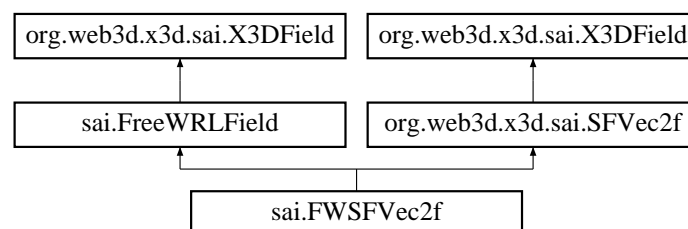
Definition at line 5 of file FWSFVec2d.java.

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

- src/java/sai/FWSFVec2d.java

### 3.231 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

### 3.231.1 Detailed Description

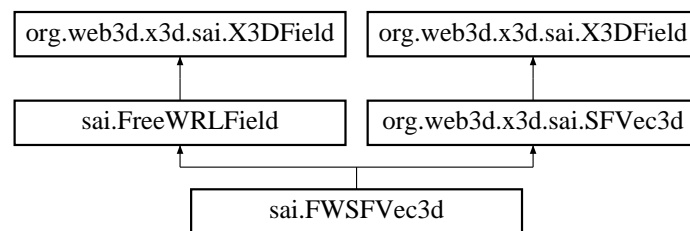
Definition at line 5 of file FWSFVec2f.java.

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

- src/java/sai/FWSFVec2f.java

## 3.232 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

### 3.232.1 Detailed Description

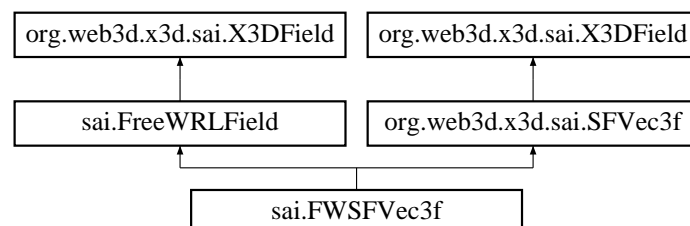
Definition at line 5 of file FWSFVec3d.java.

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

- src/java/sai/FWSFVec3d.java

## 3.233 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

### 3.233.1 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`

## 3.234 FWSNDMSG Struct Reference

### Data Fields

- long **mtype**
- char **msg** [SNDMAXMSGSIZE]

### 3.234.1 Detailed Description

Definition at line 48 of file `sounds.h`.

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

- `src/lib/scenegraph/sounds.h`
- `src/sound/soundheader.h`

## 3.235 FXY Struct Reference

### Data Fields

- GLfloat **x**
- GLfloat **y**

### 3.235.1 Detailed Description

Definition at line 218 of file `CursorDraw.c`.

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

- `src/lib/ui/CursorDraw.c`

## 3.236 GLUface Struct Reference

### Data Fields

- **GLUface \* next**
- **GLUface \* prev**
- **GLUhalfEdge \* anEdge**
- **void \* data**
- **GLUface \* trail**
- GLboolean **marked**
- GLboolean **inside**

### 3.236.1 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

## 3.237 GLUhalfEdge Struct Reference

### Data Fields

- **GLUhalfEdge \* next**
- **GLUhalfEdge \* Sym**
- **GLUhalfEdge \* Onext**
- **GLUhalfEdge \* Lnext**
- **GLUvertex \* Org**
- **GLUface \* Lface**
- **ActiveRegion \* activeRegion**
- int **winding**

### 3.237.1 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

## 3.238 GLUmesh Struct Reference

### Data Fields

- **GLUvertex vHead**
- **GLUface fHead**
- **GLUhalfEdge eHead**
- **GLUhalfEdge eHeadSym**

### 3.238.1 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

## 3.239 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**



### 3.239.1 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

## 3.240 GLUvertex Struct Reference

### Data Fields

- **GLUvertex \* next**
- **GLUvertex \* prev**
- **GLUhalfEdge \* anEdge**
- void \* **data**
- GLdouble **coords** [3]
- GLdouble **s**
- GLdouble **t**
- long **pqHandle**

### 3.240.1 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

## 3.241 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**

### 3.241.1 Detailed Description

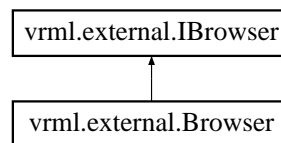
Definition at line 116 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.242 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 IllegalArgumentException↔
- void **deleteRoute** (**Node** fromNode, String fromEventOut, **Node** toNode, String toEventIn) throws IllegalArgumentException↔
- 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)

### 3.242.1 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

## 3.243 iiglobal Struct Reference

### Data Structures

- struct **tBindable**
- struct **tcollision**
- struct **tcommon**
- struct **tComponent\_EnvironSensor**
- struct **tComponent\_Geometry3D**
- struct **tComponent\_Geospatial**
- struct **tComponent\_HAnim**
- struct **tComponent\_KeyDevice**
- struct **tComponent\_NURBS**
- struct **tComponent\_Shape**
- struct **tComponent\_Sound**
- struct **tComponent\_Text**
- struct **tComponent\_VRML1**
- struct **tConsoleMessage**
- struct **tCParse**
- struct **tCParseParser**
- struct **tCProto**
- 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**
- struct **tX3DProtoScript**

## 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\_EnvironSensor Component\_EnvironSensor**
- struct **iiglobal::tComponent\_Geometry3D Component\_Geometry3D**
- struct **iiglobal::tComponent\_Geospatial Component\_Geospatial**
- struct **iiglobal::tComponent\_HAnim Component\_HAnim**
- struct **iiglobal::tComponent\_NURBS Component\_NURBS**
- struct **iiglobal::tComponent\_KeyDevice Component\_KeyDevice**
- 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::tRenderFuncs RenderFuncs**
- struct **iiglobal::tStreamPoly StreamPoly**
- struct **iiglobal::tTess Tess**
- struct **iiglobal::tViewer Viewer**
- struct **iiglobal::tstatusbar statusbar**
- struct **iiglobal::tCParse CParse**
- struct **iiglobal::tCParseParser CParseParser**
- struct **iiglobal::tCProto CProto**
- 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::tX3DProtoScript** X3DProtoScript
- struct **iiglobal::tcommon** common
- struct **iiglobal::tCursorDraw** CursorDraw

### 3.243.1 Detailed Description

Definition at line 42 of file `iglobal.h`.

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

- `src/lib/iglobal.h`

## 3.244 IMEXPORT Struct Reference

### Data Fields

- struct **X3D\_Node** \* **nodeptr**
- char \* **inlinename**
- char \* **mxname**
- char \* **as**

### 3.244.1 Detailed Description

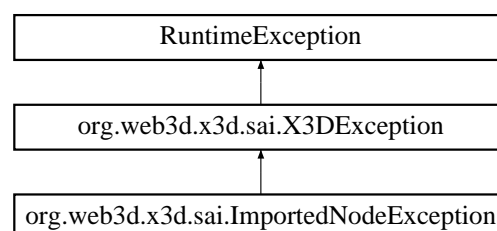
Definition at line 158 of file `CParserParser.h`.

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

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

## 3.245 org.web3d.x3d.sai.ImportedException Class Reference

Inheritance diagram for `org.web3d.x3d.sai.ImportedException`:



## Public Member Functions

- **ImportedNodeException** (String msg)

### 3.245.1 Detailed Description

Definition at line 3 of file ImportedNodeException.java.

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

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

## 3.246 initialRouteStruct Struct Reference

### Data Fields

- struct **X3D\_Node** \* **from**
- size\_t **totalptr**

### 3.246.1 Detailed Description

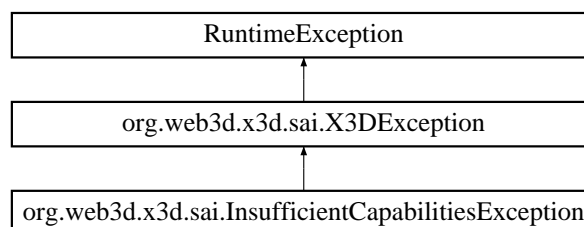
Definition at line 209 of file CRoutes.c.

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

- src/lib/vrml\_parser/CRoutes.c

## 3.247 org.web3d.x3d.sai.InsufficientCapabilitiesException Class Reference

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



## Public Member Functions

- **InsufficientCapabilitiesException** (String msg)

### 3.247.1 Detailed Description

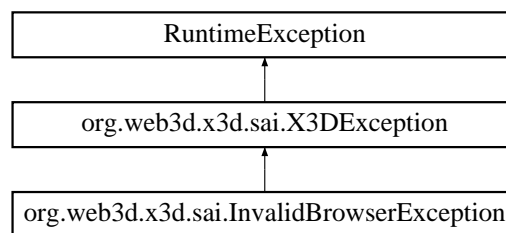
Definition at line 3 of file `InsufficientCapabilitiesException.java`.

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

- `src/java/org/web3d/x3d/sai/InsufficientCapabilitiesException.java`

## 3.248 org.web3d.x3d.sai.InvalidBrowserException Class Reference

Inheritance diagram for `org.web3d.x3d.sai.InvalidBrowserException`:



### Public Member Functions

- **InvalidBrowserException** (String msg)

### 3.248.1 Detailed Description

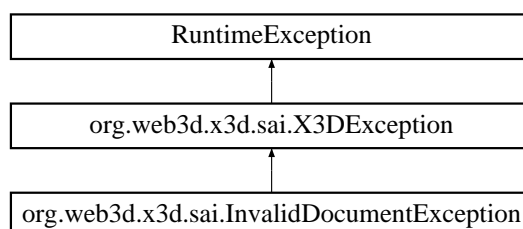
Definition at line 3 of file `InvalidBrowserException.java`.

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

- `src/java/org/web3d/x3d/sai/InvalidBrowserException.java`

## 3.249 org.web3d.x3d.sai.InvalidDocumentException Class Reference

Inheritance diagram for `org.web3d.x3d.sai.InvalidDocumentException`:



## Public Member Functions

- **InvalidDocumentException** (String msg)

### 3.249.1 Detailed Description

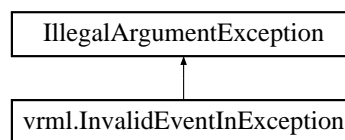
Definition at line 3 of file InvalidDocumentException.java.

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

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

## 3.250 vrml.InvalidEventInException Class Reference

Inheritance diagram for vrml.InvalidEventInException:



## Public Member Functions

- **InvalidEventInException** (String s)

### 3.250.1 Detailed Description

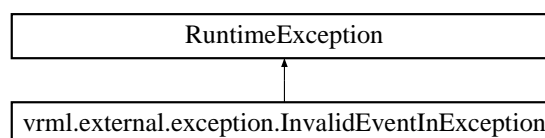
Definition at line 6 of file InvalidEventInException.java.

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

- src/java/vrml/InvalidEventInException.java

## 3.251 vrml.external.exception.InvalidEventInException Class Reference

Inheritance diagram for vrml.external.exception.InvalidEventInException:





## Public Member Functions

- **InvalidEventInException ()**  
Constructs an **InvalidEventInException** (p. 172) with no detail message.
- **InvalidEventInException (String s)**  
Constructs an **InvalidEventInException** (p. 172) with the specified detail message.

### 3.251.1 Detailed Description

Definition at line 3 of file InvalidEventInException.java.

### 3.251.2 Constructor & Destructor Documentation

#### 3.251.2.1 vrml.external.exception.InvalidEventInException.InvalidEventInException ( String s ) [inline]

Constructs an **InvalidEventInException** (p. 172) with the specified detail message.

A detail message is a String that describes this particular exception.

#### Parameters

s	the detail message
---	--------------------

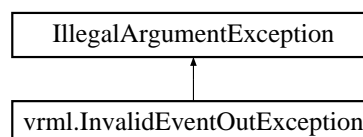
Definition at line 17 of file InvalidEventInException.java.

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

- src/java/vrml/external/exception/InvalidEventInException.java

## 3.252 vrml.InvalidEventOutException Class Reference

Inheritance diagram for vrml.InvalidEventOutException:



## Public Member Functions

- **InvalidEventOutException (String s)**

### 3.252.1 Detailed Description

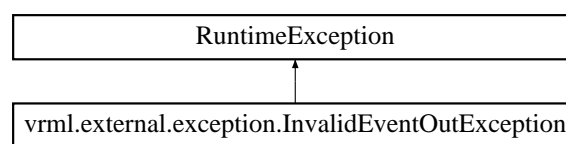
Definition at line 6 of file InvalidEventOutException.java.

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

- src/java/vrml/InvalidEventOutException.java

## 3.253 vrml.external.exception.InvalidEventOutException Class Reference

Inheritance diagram for vrml.external.exception.InvalidEventOutException:



### Public Member Functions

- **InvalidEventOutException** (String s)

### 3.253.1 Detailed Description

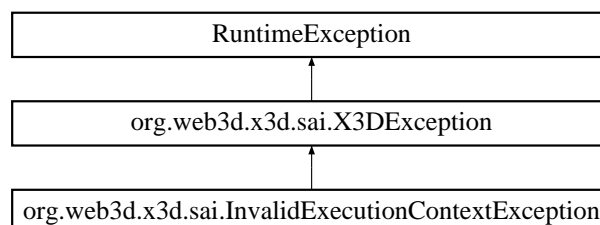
Definition at line 3 of file InvalidEventOutException.java.

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

- src/java/vrml/external/exception/InvalidEventOutException.java

## 3.254 org.web3d.x3d.sai.InvalidExecutionContextException Class Reference

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



### Public Member Functions

- **InvalidExecutionContextException** (String msg)

### 3.254.1 Detailed Description

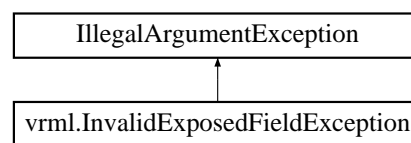
Definition at line 3 of file InvalidExecutionContextException.java.

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

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

## 3.255 vrml.InvalidExposedFieldException Class Reference

Inheritance diagram for vrml.InvalidExposedFieldException:



### Public Member Functions

- **InvalidExposedFieldException** (String s)

### 3.255.1 Detailed Description

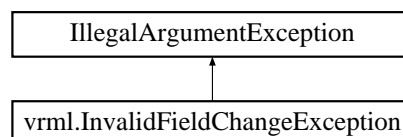
Definition at line 6 of file InvalidExposedFieldException.java.

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

- src/java/vrml/InvalidExposedFieldException.java

## 3.256 vrml.InvalidFieldChangeException Class Reference

Inheritance diagram for vrml.InvalidFieldChangeException:



### Public Member Functions

- **InvalidFieldChangeException** (String s)

### 3.256.1 Detailed Description

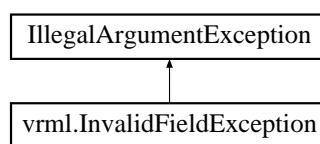
Definition at line 6 of file InvalidFieldChangeException.java.

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

- src/java/vrml/InvalidFieldChangeException.java

## 3.257 vrml.InvalidFieldException Class Reference

Inheritance diagram for vrml.InvalidFieldException:



### Public Member Functions

- **InvalidFieldException** (String s)

### 3.257.1 Detailed Description

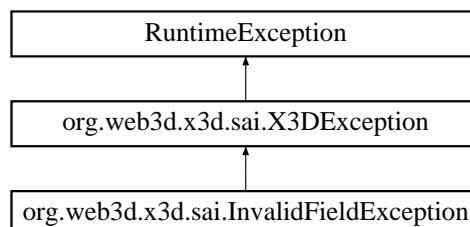
Definition at line 6 of file InvalidFieldException.java.

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

- src/java/vrml/InvalidFieldException.java

## 3.258 org.web3d.x3d.sai.InvalidFieldException Class Reference

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



### Public Member Functions

- **InvalidFieldException** (String msg)

### 3.258.1 Detailed Description

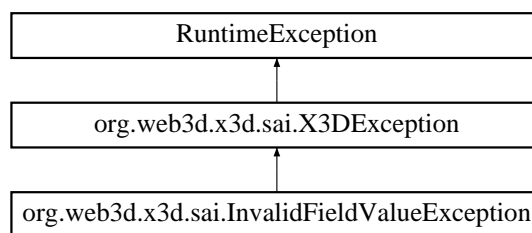
Definition at line 3 of file InvalidFieldValueException.java.

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

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

## 3.259 org.web3d.x3d.sai.InvalidFieldValueException Class Reference

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



### Public Member Functions

- **InvalidFieldValueException** (String msg)

### 3.259.1 Detailed Description

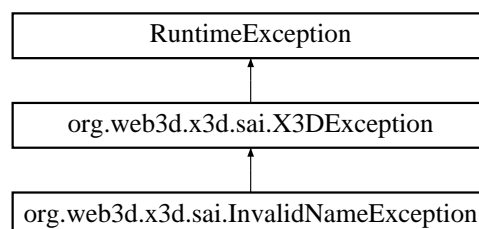
Definition at line 3 of file InvalidFieldValueException.java.

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

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

## 3.260 org.web3d.x3d.sai.InvalidNameException Class Reference

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



## Public Member Functions

- **InvalidNameException** (String str)

### 3.260.1 Detailed Description

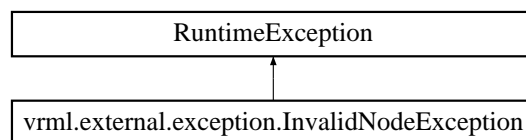
Definition at line 3 of file InvalidNameException.java.

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

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

## 3.261 vrml.external.exception.InvalidNodeException Class Reference

Inheritance diagram for vrml.external.exception.InvalidNodeException:



## Public Member Functions

- **InvalidNodeException** ()  
Constructs an **InvalidNodeException** (p. 178) with no detail message.
- **InvalidNodeException** (String s)  
Constructs an **InvalidNodeException** (p. 178) with the specified detail message.

### 3.261.1 Detailed Description

Definition at line 3 of file InvalidNodeException.java.

### 3.261.2 Constructor & Destructor Documentation

#### 3.261.2.1 vrml.external.exception.InvalidNodeException.InvalidNodeException ( String s ) [inline]

Constructs an **InvalidNodeException** (p. 178) with the specified detail message.

A detail message is a String that describes this particular exception.

#### Parameters

s	the detail message
---	--------------------

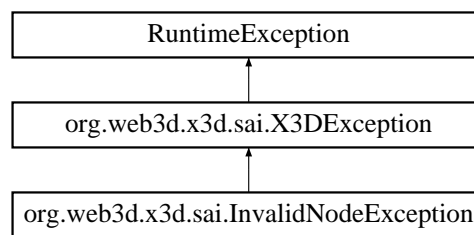
Definition at line 17 of file InvalidNodeException.java.

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

- src/java/vrml/external/exception/InvalidNodeException.java

### 3.262 org.web3d.x3d.sai.InvalidNodeException Class Reference

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



#### Public Member Functions

- **InvalidNodeException** (String str)

#### 3.262.1 Detailed Description

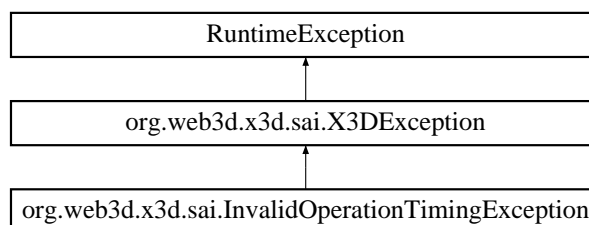
Definition at line 3 of file InvalidNodeException.java.

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

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

### 3.263 org.web3d.x3d.sai.InvalidOperationTimingException Class Reference

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



#### Public Member Functions

- **InvalidOperationTimingException** (String msg)

### 3.263.1 Detailed Description

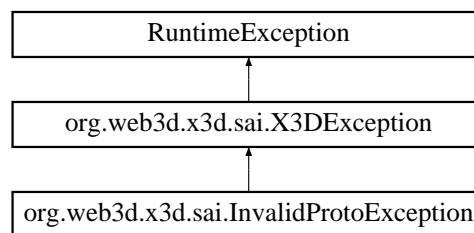
Definition at line 3 of file `InvalidOperationTimingException.java`.

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

- `src/java/org/web3d/x3d/sai/InvalidOperationTimingException.java`

## 3.264 `org.web3d.x3d.sai.InvalidProtoException` Class Reference

Inheritance diagram for `org.web3d.x3d.sai.InvalidProtoException`:



### Public Member Functions

- **`InvalidProtoException`** (`String msg`)

### 3.264.1 Detailed Description

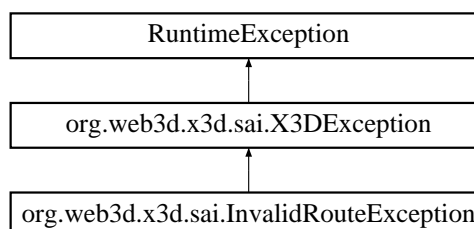
Definition at line 3 of file `InvalidProtoException.java`.

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

- `src/java/org/web3d/x3d/sai/InvalidProtoException.java`

## 3.265 `org.web3d.x3d.sai.InvalidRouteException` Class Reference

Inheritance diagram for `org.web3d.x3d.sai.InvalidRouteException`:





## Public Member Functions

- **InvalidRouteException** (String msg)

### 3.265.1 Detailed Description

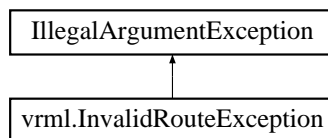
Definition at line 3 of file InvalidRouteException.java.

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

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

## 3.266 vrml.InvalidRouteException Class Reference

Inheritance diagram for vrml.InvalidRouteException:



## Public Member Functions

- **InvalidRouteException** (String s)

### 3.266.1 Detailed Description

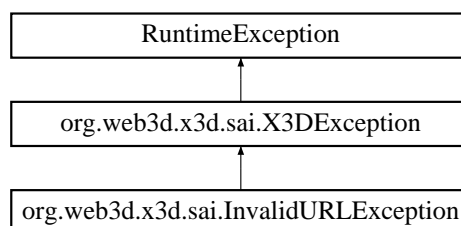
Definition at line 6 of file InvalidRouteException.java.

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

- src/java/vrml/InvalidRouteException.java

## 3.267 org.web3d.x3d.sai.InvalidURLException Class Reference

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



## Public Member Functions

- **InvalidURLException** (String str)

### 3.267.1 Detailed Description

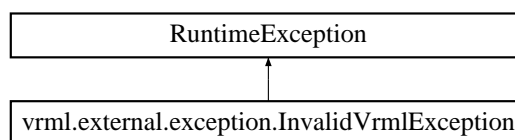
Definition at line 3 of file InvalidURLException.java.

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

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

## 3.268 vrml.external.exception.InvalidVrmlException Class Reference

Inheritance diagram for vrml.external.exception.InvalidVrmlException:



## Public Member Functions

- **InvalidVrmlException** ()  
Constructs an **InvalidVrmlException** (p. 182) with no detail message.
- **InvalidVrmlException** (String s)  
Constructs an **InvalidVrmlException** (p. 182) with the specified detail message.

### 3.268.1 Detailed Description

Definition at line 3 of file InvalidVrmlException.java.

### 3.268.2 Constructor & Destructor Documentation

#### 3.268.2.1 vrml.external.exception.InvalidVrmlException.InvalidVrmlException ( String s ) [inline]

Constructs an **InvalidVrmlException** (p. 182) with the specified detail message.

A detail message is a String that describes this particular exception.

#### Parameters

<i>s</i>	the detail message
----------	--------------------

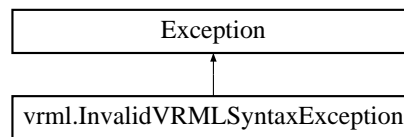
Definition at line 17 of file InvalidVrmlException.java.

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

- src/java/vrml/external/exception/InvalidVrmlException.java

## 3.269 vrml.InvalidVRMLSyntaxException Class Reference

Inheritance diagram for vrml.InvalidVRMLSyntaxException:



### Public Member Functions

- **InvalidVRMLSyntaxException** (String s)

### 3.269.1 Detailed Description

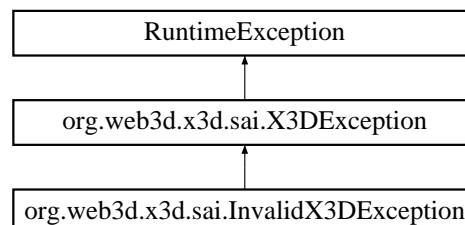
Definition at line 3 of file InvalidVRMLSyntaxException.java.

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

- src/java/vrml/InvalidVRMLSyntaxException.java

## 3.270 org.web3d.x3d.sai.InvalidX3DException Class Reference

Inheritance diagram for org.web3d.x3d.sai.InvalidX3DException:



### Public Member Functions

- **InvalidX3DException** (String str)

### 3.270.1 Detailed Description

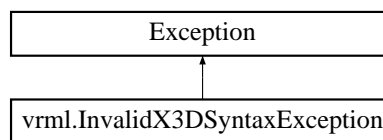
Definition at line 3 of file InvalidX3DException.java.

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

- `src/java/org/web3d/x3d/sai/InvalidX3DException.java`

## 3.271 vrml.InvalidX3DSyntaxException Class Reference

Inheritance diagram for `vrml.InvalidX3DSyntaxException`:



### Public Member Functions

- **InvalidX3DSyntaxException** (String s)

### 3.271.1 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`

## 3.272 key Struct Reference

### Data Fields

- char **key**
- unsigned int **hit**

### 3.272.1 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`

## 3.273 keyHit Struct Reference

### Data Fields

- int **direction**
- double **epoch**
- double **era**
- int **once**

### 3.273.1 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

## 3.274 keypressTuple Struct Reference

### Data Fields

- int **key**
- int **type**

### 3.274.1 Detailed Description

Definition at line 123 of file MainLoop.c.

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

- src/lib/main/MainLoop.c

## 3.275 keyval Struct Reference

### Data Fields

- char \* **key**
- char \* **val**

### 3.275.1 Detailed Description

Definition at line 49 of file common.c.

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

- src/lib/ui/common.c

## 3.276 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**

### 3.276.1 Detailed Description

Definition at line 158 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.277 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**

### 3.277.1 Detailed Description

Definition at line 82 of file Component\_Shape.h.

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

- src/lib/scenegraph/Component\_Shape.h

## 3.278 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)

### 3.278.1 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

## 3.279 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

### 3.279.1 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`

## 3.280 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** scaleOrientation, **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



### 3.280.1 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

## 3.281 mb\_addr\_inc\_entry Struct Reference

### Data Fields

- int **value**
- int **num\_bits**

### 3.281.1 Detailed Description

Definition at line 753 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.282 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**

### 3.282.1 Detailed Description

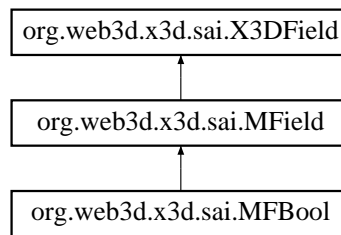
Definition at line 759 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

### 3.283 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)

#### 3.283.1 Detailed Description

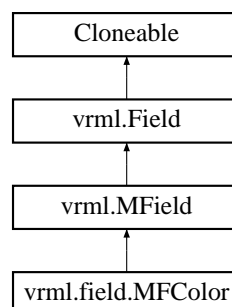
Definition at line 3 of file MFBool.java.

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

- `src/java/org/web3d/x3d/sai/MFBool.java`

### 3.284 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

### 3.284.1 Detailed Description

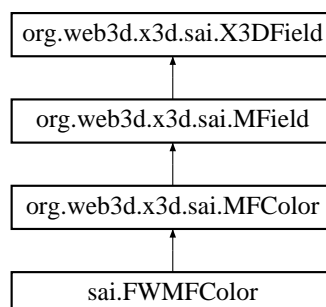
Definition at line 10 of file MFColor.java.

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

- src/java/vrml/field/MFColor.java

## 3.285 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)

### 3.285.1 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

## 3.286 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)

### 3.286.1 Detailed Description

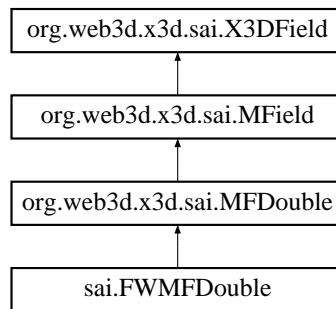
Definition at line 3 of file MFCOLORRGBA.java.

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

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

## 3.287 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)

### 3.287.1 Detailed Description

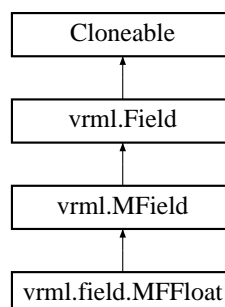
Definition at line 3 of file MFDouble.java.

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

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

## 3.288 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

### 3.288.1 Detailed Description

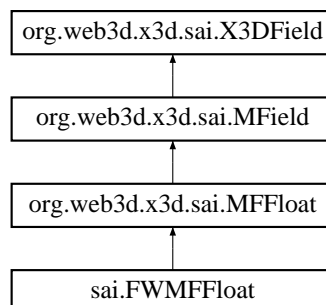
Definition at line 10 of file MFFloat.java.

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

- src/java/vrml/field/MFFloat.java

## 3.289 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)

### 3.289.1 Detailed Description

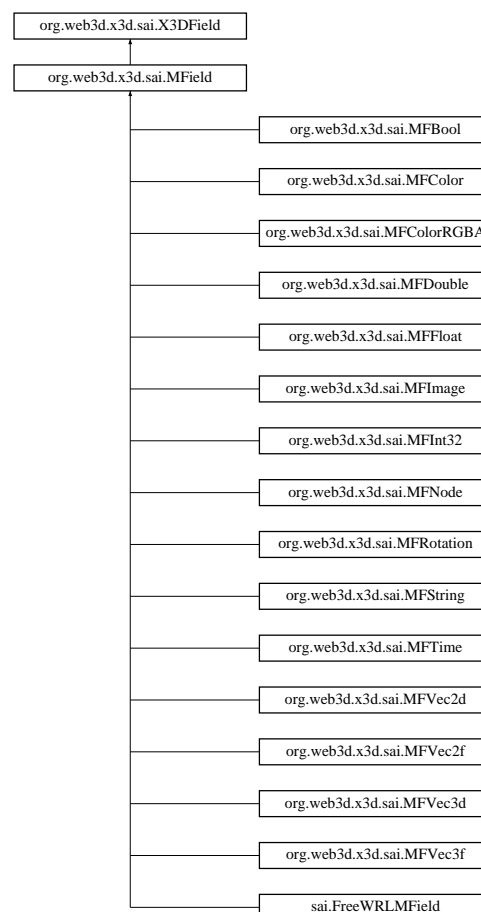
Definition at line 3 of file MFFloat.java.

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

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

## 3.290 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

### 3.290.1 Detailed Description

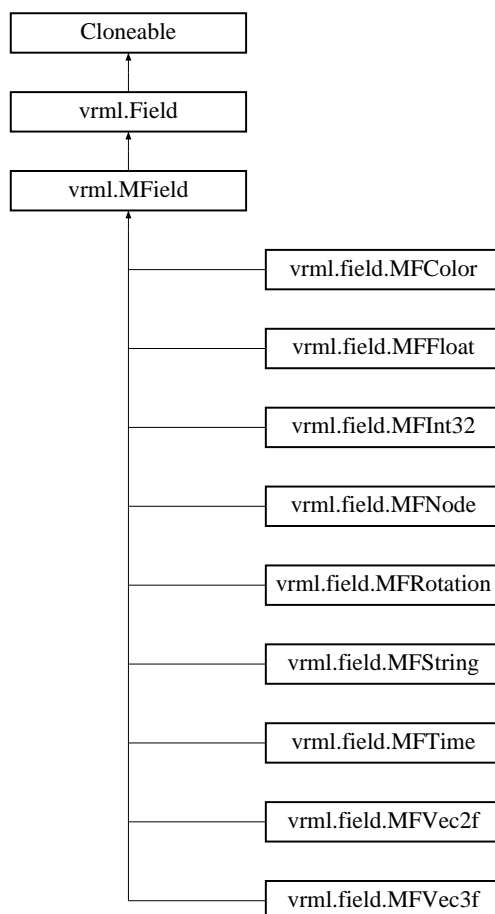
Definition at line 3 of file MField.java.

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

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

## 3.291 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)

### 3.291.1 Detailed Description

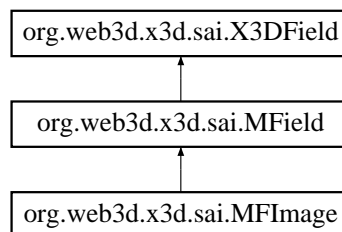
Definition at line 4 of file MField.java.

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

- src/java/vrml/MField.java

## 3.292 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)

### 3.292.1 Detailed Description

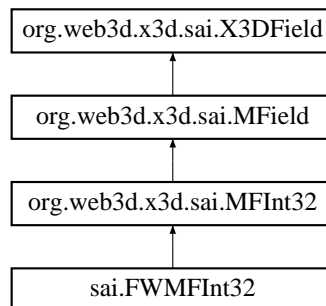
Definition at line 4 of file MFImage.java.

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

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

## 3.293 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)

### 3.293.1 Detailed Description

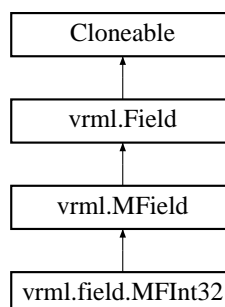
Definition at line 3 of file MFInt32.java.

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

- src/java/org/web3d/x3d/sai/MFInt32.java

## 3.294 vrml.field.MFInt32 Class Reference

Inheritance diagram for vrml.field.MFInt32:



## Public Member Functions

- **MFInt32** (int[] value)
- **MFInt32** (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, **SFInt32** sflnt32)
- void **set1Value** (int index, **ConstSFInt32** sflnt32)
- void **addValue** (int value)
- void **addValue** (**SFInt32** sflnt32)
- void **addValue** (**ConstSFInt32** sflnt32)
- void **insertValue** (int index, int value)
- void **insertValue** (int index, **SFInt32** sflnt32)
- void **insertValue** (int index, **ConstSFInt32** sflnt32)
- String **toString** ()
- void **\_\_fromPerl** (BufferedReader in) throws IOException
- void **\_\_toPerl** (PrintWriter out) throws IOException

## Additional Inherited Members

### 3.294.1 Detailed Description

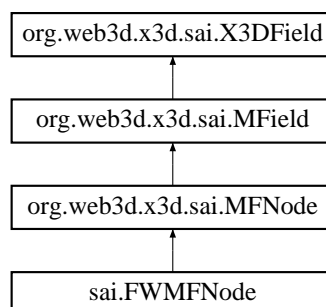
Definition at line 10 of file MFInt32.java.

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

- src/java/vrml/field/MFInt32.java

## 3.295 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)

### 3.295.1 Detailed Description

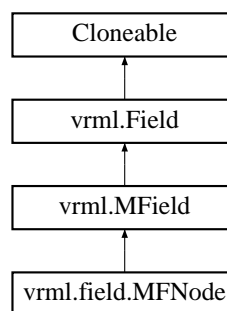
Definition at line 3 of file MFNode.java.

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

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

## 3.296 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

### 3.296.1 Detailed Description

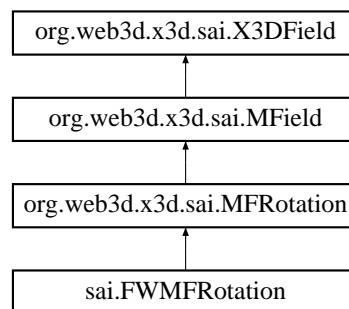
Definition at line 10 of file MFNode.java.

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

- src/java/vrml/field/MFNode.java

## 3.297 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)

### 3.297.1 Detailed Description

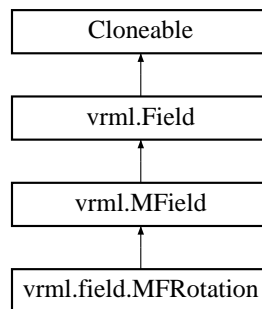
Definition at line 3 of file MFRotation.java.

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

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

### 3.298 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

#### 3.298.1 Detailed Description

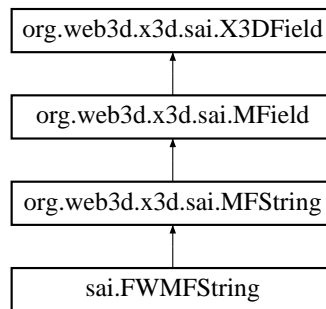
Definition at line 10 of file MFRotation.java.

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

- src/java/vrml/field/MFRotation.java

## 3.299 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)

### 3.299.1 Detailed Description

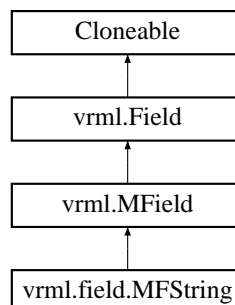
Definition at line 3 of file MFString.java.

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

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

## 3.300 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

### 3.300.1 Detailed Description

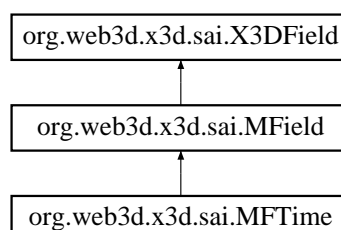
Definition at line 10 of file MFString.java.

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

- src/java/vrml/field/MFString.java

## 3.301 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)

### 3.301.1 Detailed Description

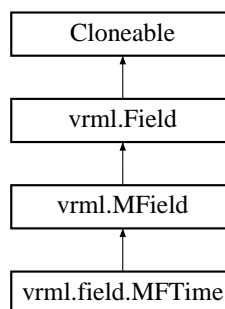
Definition at line 3 of file MFTime.java.

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

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

## 3.302 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

### 3.302.1 Detailed Description

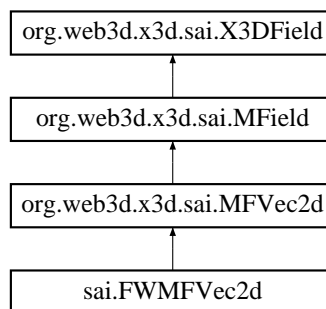
Definition at line 10 of file MFTIME.java.

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

- src/java/vrml/field/MFTIME.java

## 3.303 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)

### 3.303.1 Detailed Description

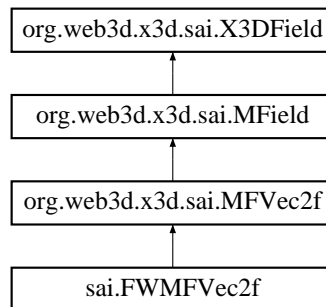
Definition at line 3 of file MFVec2d.java.

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

- src/java/org/web3d/x3d/sai/MFVec2d.java

### 3.304 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)

#### 3.304.1 Detailed Description

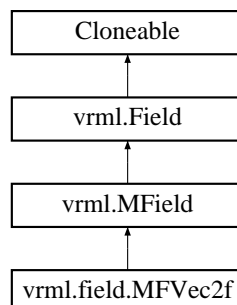
Definition at line 3 of file MFVec2f.java.

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

- src/java/org/web3d/x3d/sai/MFVec2f.java

### 3.305 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

### 3.305.1 Detailed Description

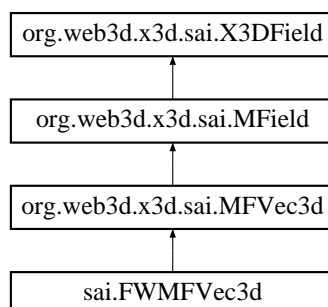
Definition at line 10 of file MFVec2f.java.

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

- src/java/vrml/field/MFVec2f.java

## 3.306 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)

### 3.306.1 Detailed Description

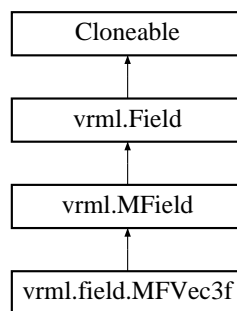
Definition at line 3 of file MFVec3d.java.

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

- src/java/org/web3d/x3d/sai/MFVec3d.java

## 3.307 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

### 3.307.1 Detailed Description

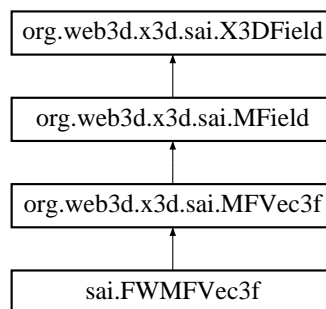
Definition at line 10 of file MFVec3f.java.

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

- src/java/vrml/field/MFVec3f.java

## 3.308 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)

### 3.308.1 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

## 3.309 motion\_vectors\_entry Struct Reference

### Data Fields

- int **code**
- int **num\_bits**

### 3.309.1 Detailed Description

Definition at line 782 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.310 mouseTuple Struct Reference

### Data Fields

- int **mev**
- unsigned int **button**
- float **x**
- float **y**
- int **ix**
- int **iy**
- int **ID**

### 3.310.1 Detailed Description

Definition at line 127 of file MainLoop.c.

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

- src/lib/main/MainLoop.c

## 3.311 Multi\_Bool Struct Reference

### Data Fields

- int **n**
- int \* **p**
- size\_t **n**

### 3.311.1 Detailed Description

Definition at line 1874 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

## 3.312 Multi\_Color Struct Reference

### Data Fields

- int **n**
- struct **SFColor** \* **p**
- size\_t **n**

### 3.312.1 Detailed Description

Definition at line 1880 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

## 3.313 Multi\_ColorRGBA Struct Reference

### Data Fields

- int **n**
- struct **SFColorRGBA** \* **p**
- size\_t **n**

### 3.313.1 Detailed Description

Definition at line 1882 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



## 3.314 Multi\_Double Struct Reference

### Data Fields

- int **n**
- double \* **p**
- size\_t **n**

### 3.314.1 Detailed Description

Definition at line 1894 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

## 3.315 Multi\_Float Struct Reference

### Data Fields

- int **n**
- float \* **p**
- size\_t **n**

### 3.315.1 Detailed Description

Definition at line 1868 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

## 3.316 Multi\_Int32 Struct Reference

### Data Fields

- int **n**
- int \* **p**
- size\_t **n**

### 3.316.1 Detailed Description

Definition at line 1876 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

## 3.317 Multi\_Matrix3d Struct Reference

### Data Fields

- int **n**
- struct **SFMatrix3d** \* **p**
- size\_t **n**

### 3.317.1 Detailed Description

Definition at line 1898 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

## 3.318 Multi\_Matrix3f Struct Reference

### Data Fields

- int **n**
- struct **SFMatrix3f** \* **p**
- size\_t **n**

### 3.318.1 Detailed Description

Definition at line 1896 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

## 3.319 Multi\_Matrix4d Struct Reference

### Data Fields

- int **n**
- struct **SFMatrix4d** \* **p**
- size\_t **n**

### 3.319.1 Detailed Description

Definition at line 1902 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

## 3.320 Multi\_Matrix4f Struct Reference

### Data Fields

- int **n**
- struct **SFMatrix4f** \* **p**
- size\_t **n**

### 3.320.1 Detailed Description

Definition at line 1900 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

## 3.321 Multi\_Node Struct Reference

### Data Fields

- int **n**
- struct **X3D\_Node** \*\* **p**
- size\_t **n**
- void \*\* **p**

### 3.321.1 Detailed Description

Definition at line 1878 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

## 3.322 Multi\_Rotation Struct Reference

### Data Fields

- int **n**
- struct **SFRotation** \* **p**
- size\_t **n**

### 3.322.1 Detailed Description

Definition at line 1870 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

## 3.323 Multi\_String Struct Reference

### Data Fields

- int **n**
- struct **Uni\_String** \*\* **p**
- size\_t **n**

### 3.323.1 Detailed Description

Definition at line 1886 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

## 3.324 Multi\_Time Struct Reference

### Data Fields

- int **n**
- double \* **p**
- size\_t **n**

### 3.324.1 Detailed Description

Definition at line 1884 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

## 3.325 Multi\_Vec2d Struct Reference

### Data Fields

- int **n**
- struct **SFVec2d** \* **p**
- size\_t **n**

### 3.325.1 Detailed Description

Definition at line 1904 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

## 3.326 Multi\_Vec2f Struct Reference

### Data Fields

- int **n**
- struct **SFVec2f** \* **p**
- size\_t **n**

### 3.326.1 Detailed Description

Definition at line 1888 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

## 3.327 Multi\_Vec3d Struct Reference

### Data Fields

- int **n**
- struct **SFVec3d** \* **p**
- size\_t **n**

### 3.327.1 Detailed Description

Definition at line 1892 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

## 3.328 Multi\_Vec3f Struct Reference

### Data Fields

- int **n**
- struct **SFVec3f** \* **p**
- size\_t **n**
- struct **SFColor** \* **p**

### 3.328.1 Detailed Description

Definition at line 1872 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

## 3.329 Multi\_Vec4d Struct Reference

### Data Fields

- int **n**
- struct **SFVec4d** \* **p**
- size\_t **n**

### 3.329.1 Detailed Description

Definition at line 1908 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

## 3.330 Multi\_Vec4f Struct Reference

### Data Fields

- int **n**
- struct **SFVec4f** \* **p**
- size\_t **n**

### 3.330.1 Detailed Description

Definition at line 1906 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

## 3.331 multiTexParams Struct Reference

### Data Fields

- int **multitex\_mode**
- int **multitex\_source**
- int **multitex\_function**

### 3.331.1 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

## 3.332 myArgs Struct Reference

### Data Fields

- struct **X3D\_Node** \* **node**
- **ttglobal** **tg**

### 3.332.1 Detailed Description

Definition at line 129 of file Component\_ProgrammableShaders.c.

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

- src/lib/scenegraph/Component\_ProgrammableShaders.c

## 3.333 MyVertex Struct Reference

### Data Fields

- struct **SFVec3f** **vert**
- struct **SFVec3f** **norm**
- struct **SFVec2f** **tc**
- struct **SFColorRGBA** **col**

### 3.333.1 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



## 3.334 nameValuePairs Struct Reference

### Data Fields

- char \* **fieldName**
- char \* **fieldValue**
- int **fieldType**

#### 3.334.1 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

## 3.335 navmode Struct Reference

### Data Fields

- char \* **key**
- int **type**

#### 3.335.1 Detailed Description

Definition at line 485 of file Viewer.c.

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

- src/lib/scenegraph/Viewer.c

## 3.336 NestedProtoField Struct Reference

### Data Fields

- struct **ProtoFieldDecl** \* **origField**
- struct **ProtoFieldDecl** \* **localField**

#### 3.336.1 Detailed Description

Definition at line 248 of file CProto.h.

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

- src/lib/vrml\_parser/CProto.h

### 3.337 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

#### 3.337.1 Detailed Description

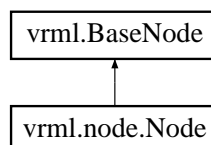
Definition at line 11 of file Node.java.

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

- src/java/vrml/external/Node.java

### 3.338 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)

### 3.338.1 Detailed Description

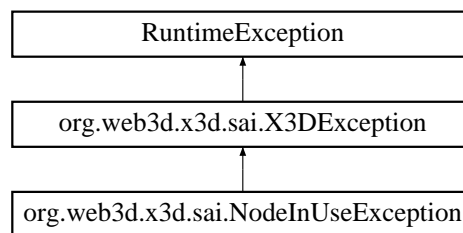
Definition at line 12 of file Node.java.

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

- src/java/vrml/node/Node.java

## 3.339 org.web3d.x3d.sai.NodeInUseException Class Reference

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



### Public Member Functions

- **NodeInUseException** (String msg)

### 3.339.1 Detailed Description

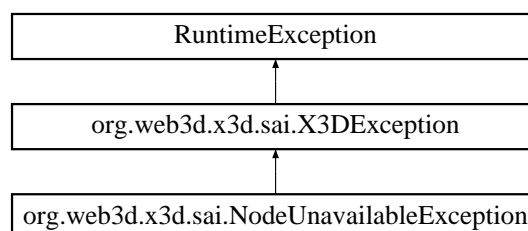
Definition at line 3 of file NodeInUseException.java.

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

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

## 3.340 org.web3d.x3d.sai.NodeUnavailableException Class Reference

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



## Public Member Functions

- **NodeUnavailableException** (String msg)

### 3.340.1 Detailed Description

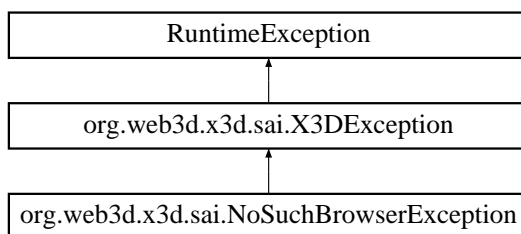
Definition at line 3 of file NodeUnavailableException.java.

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

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

## 3.341 org.web3d.x3d.sai.NoSuchBrowserException Class Reference

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



## Public Member Functions

- **NoSuchBrowserException** (String msg)

### 3.341.1 Detailed Description

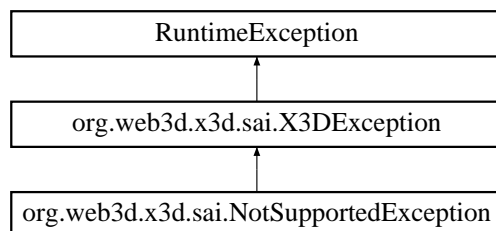
Definition at line 3 of file NoSuchBrowserException.java.

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

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

## 3.342 org.web3d.x3d.sai.NotSupportedException Class Reference

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



## Public Member Functions

- **NotSupportedException** (String msg)

### 3.342.1 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`

## 3.343 `opened_file` Struct Reference

### Data Fields

- `char *` **fileFileName**
- `int` **fileDescriptor**
- `int` **fileDataSize**
- `char *` **fileData**
- `int` **imageHeight**
- `int` **imageWidth**
- `bool` **imageAlpha**

### 3.343.1 Detailed Description

Definition at line 44 of file `io_files.h`.

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

- `src/lib/io_files.h`

## 3.344 `orient_XYZA` Struct Reference

### Data Fields

- `GLDOUBLE` **x**
- `GLDOUBLE` **y**
- `GLDOUBLE` **z**
- `GLDOUBLE` **a**

### 3.344.1 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`

### 3.345 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**

#### 3.345.1 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

### 3.346 pcommon Struct Reference

#### Data Fields

- float **myFps**
- int **target\_frames\_per\_second**
- char **myMenuStatus** [MAXSTAT]
- char **messagebar** [MAXSTAT]
- char **window\_title** [MAXTITLE]
- int **cursorStyle**
- int **promptForURL**
- int **promptForFile**
- int **sb\_hasString**
- char **buffer** [200]
- void \* **colorScheme**
- int **colorSchemeChanged**
- int **pin\_statusbar**
- int **pin\_menubar**
- struct **Vector** \* **keyvals**

### 3.346.1 Detailed Description

Definition at line 55 of file common.c.

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

- src/lib/ui/common.c

## 3.347 pComponent\_EnvironSensor Struct Reference

### Data Fields

- int **candoVisibility**

### 3.347.1 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

## 3.348 pComponent\_Geometry3D Struct Reference

### Data Fields

- int **junk**
- struct **sCollisionGeometry collisionSphere**
- struct **sCollisionGeometry collisionCylinder**
- struct **sCollisionGeometry collisionCone**

### 3.348.1 Detailed Description

Definition at line 76 of file Component\_Geometry3D.c.

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

- src/lib/scenegraph/Component\_Geometry3D.c

## 3.349 pComponent\_Geospatial Struct Reference

### Data Fields

- int **geoLodLevel**

### 3.349.1 Detailed Description

Definition at line 305 of file Component\_Geospatial.c.

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

- src/lib/scenegraph/Component\_Geospatial.c

## 3.350 pComponent\_HAnim Struct Reference

### Data Fields

- void \* **HAnimSkinCoord**
- void \* **HAnimSkinNormal**

### 3.350.1 Detailed Description

Definition at line 50 of file Component\_HAnim.c.

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

- src/lib/scenegraph/Component\_HAnim.c

## 3.351 pComponent\_KeyDevice Struct Reference

### Data Fields

- struct **Vector** \* **keySink**

### 3.351.1 Detailed Description

Definition at line 273 of file Component\_KeyDevice.c.

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

- src/lib/scenegraph/Component\_KeyDevice.c

## 3.352 pComponent\_NURBS Struct Reference

### Data Fields

- void \* **nada**



### 3.352.1 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

## 3.353 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**

### 3.353.1 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

## 3.354 pComponent\_Sound Struct Reference

### Data Fields

- int **soundWarned**
- int **SoundSourceNumber**
- void \* **alContext**
- float **AC\_LastDuration** [50]

### 3.354.1 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

### 3.355 pComponent\_Text Struct Reference

#### Data Fields

- FT\_Library **library**
- FT\_Face **font\_face** [num\_fonts]
- int **font\_opened** [num\_fonts]
- FT\_Glyph **glyphs** [MAX\_GLYPHS]
- int **cur\_glyph**
- int **TextVerbose**
- FT\_Outline\_Funcs **FW\_outline\_interface**
- char \* **font\_directory**
- char **thisfontname** [fp\_name\_len]
- double **pen\_x**
- double **pen\_y**
- float **TextZdist**
- double **x\_size**
- double **y\_size**
- int **myff**
- int **FW\_RIA** [500]
- int **FW\_RIA\_indx**
- 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**

#### 3.355.1 Detailed Description

Definition at line 80 of file Component\_Text.c.

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

- src/lib/scenegraph/Component\_Text.c

### 3.356 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 \*)

### 3.356.1 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

## 3.357 pCParse Struct Reference

### Data Fields

- int **ijunk**

### 3.357.1 Detailed Description

Definition at line 51 of file CParse.c.

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

- src/lib/vrml\_parser/CParse.c

## 3.358 pCParseParser Struct Reference

### Data Fields

- char **fw\_outline** [2000]
- int **foundInputErrors**
- int **useBrotos**

### 3.358.1 Detailed Description

Definition at line 65 of file CParseParser.c.

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

- src/lib/vrml\_parser/CParseParser.c

## 3.359 pCProto Struct Reference

### Data Fields

- indexT **latest\_protoDefNumber**
- indexT **nextFabricatedDef**
- struct **Vector** \* **protoDefVec**

### 3.359.1 Detailed Description

Definition at line 127 of file CProto.c.

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

- src/lib/vrml\_parser/CProto.c

## 3.360 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 **CRscriptStruct** \* **ScriptControl**
- int **JSMAXScript**
- struct **CRjsnameStruct** \* **JSParamnames**

### 3.360.1 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

## 3.361 pCScripts Struct Reference

### Data Fields

- int **handleCnt**

### 3.361.1 Detailed Description

Definition at line 68 of file CScripts.c.

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

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

## 3.362 pCursorDraw Struct Reference

### Data Fields

- GLuint **textureID**
- int **done**

### 3.362.1 Detailed Description

Definition at line 190 of file CursorDraw.c.

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

- src/lib/ui/CursorDraw.c

## 3.363 pEAI\_C\_CommonFunctions Struct Reference

### Data Fields

- struct **VRMLParser** \* **parser**

### 3.363.1 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

## 3.364 pEAICore Struct Reference

### Data Fields

- pthread\_mutex\_t **eaibufferlock**

### 3.364.1 Detailed Description

Definition at line 161 of file EAEventsIn.c.

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

- src/lib/input/EAEventsIn.c

## 3.365 pEAEventsIn Struct Reference

### Data Fields

- int **oldCount**
- int **waiting\_for\_anchor**
- struct **X3D\_Anchor** **EAI\_AnchorNode**

### 3.365.1 Detailed Description

Definition at line 130 of file EAEventsIn.c.

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

- src/lib/input/EAEventsIn.c

## 3.366 pEAHelpers Struct Reference

### Data Fields

- struct **Vector** \* **EAINodeIndex**

### 3.366.1 Detailed Description

Definition at line 98 of file EAHelpers.c.

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

- src/lib/input/EAHelpers.c

## 3.367 pFrustum Struct Reference

### Data Fields

- GLuint \* **OccQueries**
- GLuint **potentialOccluderCount**
- void \*\* **occluderNodePointer**
- GLuint **OccQuerySize**
- GLuint **OccResultsAvailable**

### 3.367.1 Detailed Description

Definition at line 88 of file Frustum.c.

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

- src/lib/opencv/Frustum.c

## 3.368 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**

### 3.368.1 Detailed Description

Definition at line 131 of file mpeg.h.

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

- src/lib/scenagraph/mpeg.h

## 3.369 pict\_image Struct Reference

### Data Fields

- unsigned char \* **luminance**
- unsigned char \* **Cr**
- unsigned char \* **Cb**
- unsigned char \* **display**
- int **locked**
- TimeStamp **show\_time**

### 3.369.1 Detailed Description

Definition at line 105 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.370 pJScript Struct Reference

### Data Fields

- int **ijunk**

### 3.370.1 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

## 3.371 playbackRecord Struct Reference

### Data Fields

- int **frame**
- double **dtime**
- int \* **mousetuples**
- int **mouseCount**
- char \* **keystrokes**
- int **keyCount**

### 3.371.1 Detailed Description

Definition at line 136 of file MainLoop.c.

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

- src/lib/main/MainLoop.c



## 3.372 pLoadTextures Struct Reference

### Data Fields

- **s\_list\_t** \* texture\_request\_list
- bool loader\_waiting
- **s\_list\_t** \* texture\_list
- int TextureParsing

### 3.372.1 Detailed Description

- is the texture thread up and running yet? \*/

Definition at line 82 of file LoadTextures.c.

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

- src/lib/openssl/LoadTextures.c

## 3.373 pMainloop Struct Reference

### Data Fields

- int onScreen
- int doEvents
- char \* PluginFullPath
- int num\_SensorEvents
- GLint viewport2 [10]
- GLint viewpointScreenX [2]
- GLint viewpointScreenY [2]
- struct X3D\_Node \* CursorOverSensitive
- struct X3D\_Node \* oldCOS
- int NavigationMode
- int ButDown [20][8]
- int currentCursor
- int lastMouseEvent
- struct X3D\_Node \* lastPressedOver
- struct X3D\_Node \* lastOver
- int lastOverButtonPressed
- 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 slowloop\_count
- int lastDeltax
- int lastDeltay

- int **lastxx**
- int **lastyy**
- int **ntouch**
- int **currentTouch**
- struct **Touch touchlist** [20]
- int **EMULATE\_MULTITOUCH**
- FILE \* **recordingFile**
- char \* **recordingFName**
- int **modeRecord**
- int **modeFixture**
- int **modePlayback**
- int **fwplayOpened**
- char \* **nameTest**
- int **frameNum**
- struct **playbackRecord** \* **playback**
- int **playbackCount**
- struct **keypressTuple keypressQueue** [50]
- int **keypressQueueCount**
- struct **mouseTuple mouseQueue** [50]
- int **mouseQueueCount**
- FILE \* **logfile**
- FILE \* **logerr**
- char \* **logfname**
- int **logging**
- int **keySensorMode**
- int **draw\_initialized**
- int **keywait**
- char **keywaitstring** [25]
- int **fps\_sleep\_remainder**

### 3.373.1 Detailed Description

Definition at line 145 of file MainLoop.c.

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

- src/lib/main/MainLoop.c

## 3.374 point\_XYZ Struct Reference

### Data Fields

- GLDOUBLE **x**
- GLDOUBLE **y**
- GLDOUBLE **z**

### 3.374.1 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

## 3.375 point\_XYZ3 Struct Reference

### Data Fields

- struct **point\_XYZ** p1
- struct **point\_XYZ** p2
- struct **point\_XYZ** p3

### 3.375.1 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

## 3.376 pointer2pointer Struct Reference

### Data Fields

- struct **X3D\_Node** \* pp
- struct **X3D\_Node** \* pn

### 3.376.1 Detailed Description

Definition at line 4948 of file CParseParser.c.

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

- src/lib/vrml\_parser/CParseParser.c

## 3.377 PointerHash Struct Reference

### Data Fields

- struct **Vector** \* data [POINTER\_HASH\_SIZE]

### 3.377.1 Detailed Description

Definition at line 209 of file CProto.h.

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

- src/lib/vrml\_parser/CProto.h

## 3.378 PointerHashEntry Struct Reference

### Data Fields

- struct **X3D\_Node** \* **original**
- struct **X3D\_Node** \* **copy**

### 3.378.1 Detailed Description

Definition at line 202 of file CProto.h.

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

- src/lib/vrml\_parser/CProto.h

## 3.379 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]
- MATRIX4 **FW\_PickrayView** [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]
- bool **usePhongShaders**
- int **maxStackUsed**

### 3.379.1 Detailed Description

Definition at line 122 of file OpenGL\_Utils.c.

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

- src/lib/opengl/OpenGL\_Utils.c

## 3.380 pPluginSocket Struct Reference

### Data Fields

- pthread\_mutex\_t **mylocker**
- fd\_set **rfds**
- struct timeval **tv**
- char **return\_url** [FILENAME\_MAX]

### 3.380.1 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

## 3.381 ppluginUtils Struct Reference

### Data Fields

- int **waitingForURLtoLoad**
- resource\_item\_t \* **plugin\_res**

### 3.381.1 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

## 3.382 pProdCon Struct Reference

### Data Fields

- 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**

### 3.382.1 Detailed Description

Definition at line 120 of file ProdCon.c.

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

- src/lib/main/ProdCon.c

## 3.383 PQhandleElem Struct Reference

### Data Fields

- PQkey **key**
- PQhandle **node**

### 3.383.1 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

## 3.384 PQnode Struct Reference

### Data Fields

- PQhandle **handle**

### 3.384.1 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

## 3.385 pRasterFont Struct Reference

### Data Fields

- struct **X3D\_Text** **myText**
- struct **X3D\_FontStyle** **myFont**
- bool **rf\_initialized**
- int **xf\_color**
- vec4f\_t **xf\_colors** [3]

### 3.385.1 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

## 3.386 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**
- 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 rayHitHyper
- struct **trenderstate** renderstate
- int **renderLevel**
- GLint **currentShader**
- **Stack** \* **render\_geom\_stack**
- **Stack** \* **sensor\_stack**
- **Stack** \* **ray\_stack**

### 3.386.1 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

## 3.387 pRenderTextures Struct Reference

### Data Fields

- void \* **nada**

### 3.387.1 Detailed Description

Definition at line 36 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.388 presources Struct Reference

### Data Fields

- struct **Vector** \* **resStack**
- **resource\_item\_t** \* **lastBaseResource**



### 3.388.1 Detailed Description

Definition at line 56 of file resources.c.

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

- src/lib/resources.c

## 3.389 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**

### 3.389.1 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

## 3.390 profile\_entry Struct Reference

### Data Fields

- char \* **name**
- double **start**
- double **accum**
- int **hits**

### 3.390.1 Detailed Description

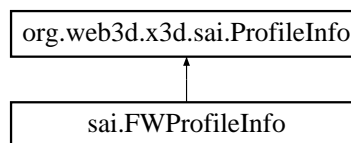
Definition at line 58 of file RenderFuncs.c.

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

- src/lib/scenegraph/RenderFuncs.c

## 3.391 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** ()

### 3.391.1 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

## 3.392 proftablestruct Struct Reference

### Data Fields

- int **profileName**
- const int \* **profileTable**
- int **level**

### 3.392.1 Detailed Description

Definition at line 234 of file capabilitiesHandler.c.

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

- src/lib/x3d\_parser/capabilitiesHandler.c

## 3.393 ProtoDefinition Struct Reference

### Data Fields

- indexT **protoDefNumber**
- struct **Vector** \* **iface**
- struct **Vector** \* **deconstructedProtoBody**
- int **estimatedBodyLen**
- char \* **protoName**
- int **isCopy**
- int **isExtern**

### 3.393.1 Detailed Description

Definition at line 162 of file CProto.h.

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

- src/lib/vrml\_parser/CProto.h

## 3.394 ProtoElementPointer Struct Reference

### Data Fields

- char \* **stringToken**
- indexT **isNODE**
- indexT **isKEYWORD**
- indexT **terminalSymbol**
- indexT **fabricatedDef**

### 3.394.1 Detailed Description

Definition at line 47 of file CProto.h.

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

- src/lib/vrml\_parser/CProto.h

## 3.395 ProtoFieldDecl Struct Reference

### Data Fields

- indexT **mode**
- indexT **type**
- indexT **name**
- char \* **cname**
- char \* **fieldString**
- BOOL **alreadySet**
- union **anyVrml** **defaultVal**
- struct **Vector** \* **scriptDests**

### 3.395.1 Detailed Description

Definition at line 70 of file CProto.h.

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

- src/lib/vrml\_parser/CProto.h

## 3.396 protoInsert Struct Reference

### Data Fields

- struct **ProtoDefinition** \* **vrmlProtoDef**
- int **xmlProtoDef**

### 3.396.1 Detailed Description

Definition at line 1678 of file CProto.c.

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

- src/lib/vrml\_parser/CProto.c

## 3.397 PROTOInstanceEntry Struct Reference

### Data Fields

- char \* **name** [PROTOINSTANCE\_MAX\_PARAMS]
- char \* **value** [PROTOINSTANCE\_MAX\_PARAMS]
- int **type** [PROTOINSTANCE\_MAX\_PARAMS]
- char \* **defName**
- int **container**
- int **paircount**
- int **uniqueNumber**

### 3.397.1 Detailed Description

Definition at line 82 of file X3DProtoScript.c.

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

- src/lib/x3d\_parser/X3DProtoScript.c

## 3.398 PROTOnameStruct Struct Reference

### Data Fields

- char \* **definedProtoName**
- char \* **url**
- FILE \* **fileDescriptor**
- char \* **fileName**
- int **charLen**
- int **fileOpen**
- int **isExternProto**
- struct **Shader\_Script** \* **fieldDefs**

### 3.398.1 Detailed Description

Definition at line 94 of file X3DProtoScript.c.

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

- src/lib/x3d\_parser/X3DProtoScript.c

## 3.399 ProtoRoute Struct Reference

### Data Fields

- struct **X3D\_Node** \* **from**
- struct **X3D\_Node** \* **to**
- uintptr\_t **fromOfs**
- uintptr\_t **toOfs**
- size\_t **len**
- int **dir**

### 3.399.1 Detailed Description

Definition at line 128 of file CProto.h.

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

- src/lib/vrml\_parser/CProto.h

## 3.400 pSensInterps Struct Reference

### Data Fields

- int **stub**

### 3.400.1 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

## 3.401 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**

### 3.401.1 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

## 3.402 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**

### 3.402.1 Detailed Description

Definition at line 102 of file ProdCon.c.

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

- src/lib/main/ProdCon.c

## 3.403 pstatusbar Struct Reference

### Data Fields

- int **initDone**
- int **screenWidth**
- int **screenHeight**
- double **screenRatio**

### 3.403.1 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

## 3.404 pStreamPoly Struct Reference

### Data Fields

- int **Sindex**
- int **Tindex**
- GLfloat **minVals** [3]
- GLfloat **Ssize**

### 3.404.1 Detailed Description

Definition at line 81 of file StreamPoly.c.

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

- src/lib/scenegraph/StreamPoly.c

### 3.405 pTess Struct Reference

#### Data Fields

- int **global\_IFS\_Coords** [TESS\_MAX\_COORDS]

#### 3.405.1 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

### 3.406 pTextures Struct Reference

#### Data Fields

- struct **Vector** \* **activeTextureTable**
- **textureTableIndexStruct\_s** \* **loadThisTexture**
- int **currentlyWorkingOn**
- int **textureInProcess**

#### 3.406.1 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

### 3.407 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 **StereolInitializedOnce**
- GLboolean **acMask** [3][3]
- **X3D\_Viewer** Viewer
- 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**



### 3.407.1 Detailed Description

Definition at line 75 of file Viewer.c.

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

- src/lib/scenegraph/Viewer.c

## 3.408 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**

### 3.408.1 Detailed Description

Definition at line 235 of file X3DParser.c.

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

- src/lib/x3d\_parser/X3DParser.c

## 3.409 pX3DProtoScript Struct Reference

### Data Fields

- int **currentProtoDeclare**
- int **MAXProtos**
- int **curProDecStackInd**
- int **currentProtoInstance** [PROTOINSTANCE\_MAX\_LEVELS]
- int **curProtoInsStackInd**
- struct **PROTOInstanceEntry** **ProtoInstanceTable** [PROTOINSTANCE\_MAX\_LEVELS]
- struct **PROTOnameStruct** \* **PROTONames**
- struct **fieldNodeState** **fieldNodeParsingStateA** [PROTOINSTANCE\_MAX\_LEVELS]
- struct **fieldNodeState** **fieldNodeParsingStateB** [PARENTSTACKSIZE]

### 3.409.1 Detailed Description

Definition at line 125 of file X3DProtoScript.c.

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

- src/lib/x3d\_parser/X3DProtoScript.c

## 3.410 quaternion Struct Reference

### Data Fields

- double **w**
- double **x**
- double **y**
- double **z**

### 3.410.1 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

## 3.411 rb1 Struct Reference

### Data Fields

- int **head**
- int **tail**
- int **noOfElements**
- void \* **data**

### 3.411.1 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

## 3.412 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 \*)

### 3.412.1 Detailed Description

Definition at line 98 of file resources.h.

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

- src/lib/resources.h

## 3.413 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**

### 3.413.1 Detailed Description

Definition at line 405 of file display.h.

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

- src/lib/display.h

## 3.414 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 **TextureMatrix**
- GLint **Vertices**
- GLint **Normals**
- GLint **Colours**
- GLint **TexCoords**
- GLint **TextureUnit** [MAX\_MULTITEXTURE]
- GLint **TextureMode** [MAX\_MULTITEXTURE]
- GLint **textureCount**
- GLint **hatchColour**
- GLint **hatchPercent**
- GLint **hatchScale**
- GLint **filledBool**
- GLint **hatchedBool**
- GLint **algorithm**
- GLint **texCoordGenType**

#### 3.414.1 Detailed Description

Definition at line 328 of file display.h.

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

- src/lib/display.h

### 3.415 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]

#### 3.415.1 Detailed Description

Definition at line 62 of file Component\_Geometry3D.c.

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

- src/lib/scenegraph/Component\_Geometry3D.c

## 3.416 sCollisionInfo Struct Reference

### Data Fields

- struct **point\_XYZ** **Offset**
- int **Count**
- double **Maximum2**

### 3.416.1 Detailed Description

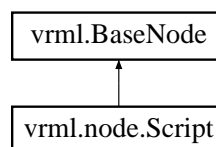
Definition at line 47 of file Collision.h.

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

- src/lib/scenegraph/Collision.h

## 3.417 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)

### 3.417.1 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

## 3.418 ScriptFieldDecl Struct Reference

### Data Fields

- struct **FieldDecl** \* **fieldDecl**
- char \* **ASCIIvalue**
- int **valueChanged**
- union **anyVrml** **value**
- BOOL **valueSet**
- int **eventInSet**
- struct **Shader\_Script** \* **script**

### 3.418.1 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

## 3.419 ScriptFieldInstanceInfo Struct Reference

### Data Fields

- struct **ScriptFieldDecl** \* **decl**
- struct **Shader\_Script** \* **script**

### 3.419.1 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

## 3.420 ScriptParamList Struct Reference

### Data Fields

- struct **ScriptParamList** \* **next**
- indexT **kind**
- indexT **type**
- char \* **field**
- union **anyVrml** **value**

### 3.420.1 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

## 3.421 SensStruct Struct Reference

### Data Fields

- struct **X3D\_Node** \* **fromnode**
- struct **X3D\_Node** \* **datanode**
- void(\* **interpptr** )(void \*, int, int, int)

### 3.421.1 Detailed Description

Definition at line 108 of file MainLoop.c.

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

- src/lib/main/MainLoop.c

## 3.422 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**



### 3.422.1 Detailed Description

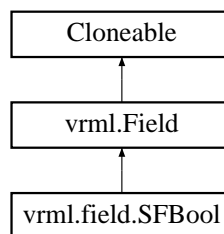
Definition at line 134 of file Collision.h.

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

- src/lib/scenegraph/Collision.h

## 3.423 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

### 3.423.1 Detailed Description

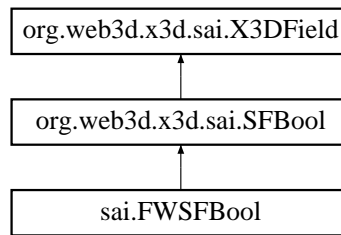
Definition at line 10 of file SFBool.java.

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

- src/java/vrml/field/SFBool.java

### 3.424 org.web3d.x3d.sai.SFBool Interface Reference

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



#### Public Member Functions

- boolean **getValue** ()
- void **setValue** (boolean value)

#### 3.424.1 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

### 3.425 SFColor Struct Reference

#### Data Fields

- float **c** [3]

#### 3.425.1 Detailed Description

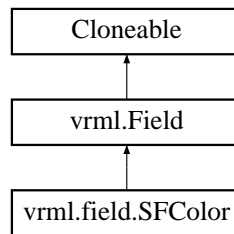
Definition at line 1879 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h
- src/libeai/EAI\_C.h

## 3.426 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

#### 3.426.1 Detailed Description

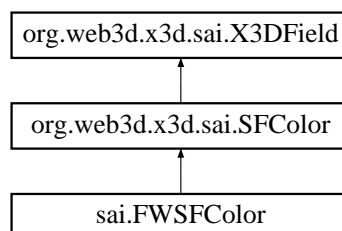
Definition at line 10 of file SFColor.java.

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

- src/java/vrml/field/SFColor.java

## 3.427 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)

### 3.427.1 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

## 3.428 SFCOLORRGBA Struct Reference

### Data Fields

- float **c** [4]
- float **r** [4]

### 3.428.1 Detailed Description

Definition at line 1881 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

## 3.429 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)

### 3.429.1 Detailed Description

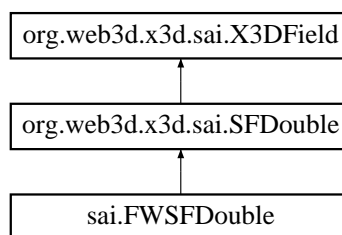
Definition at line 3 of file SFColorRGBA.java.

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

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

## 3.430 org.web3d.x3d.sai.SFDouble Interface Reference

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



### Public Member Functions

- double **getValue** ()
- void **setValue** (double value)

### 3.430.1 Detailed Description

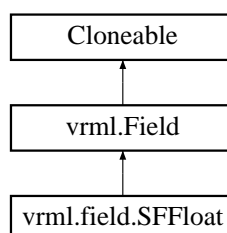
Definition at line 3 of file SFDouble.java.

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

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

## 3.431 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

### 3.431.1 Detailed Description

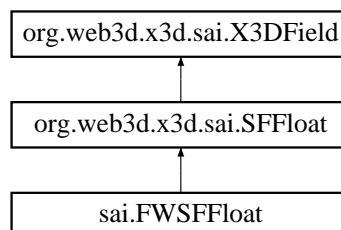
Definition at line 10 of file SFFloat.java.

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

- src/java/vrml/field/SFFloat.java

## 3.432 org.web3d.x3d.sai.SFFloat Interface Reference

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



## Public Member Functions

- float **getValue** ()
- void **setValue** (float value)

### 3.432.1 Detailed Description

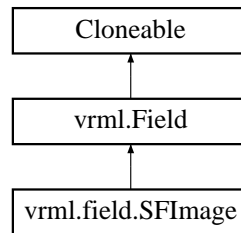
Definition at line 3 of file SFFloat.java.

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

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

### 3.433 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

#### 3.433.1 Detailed Description

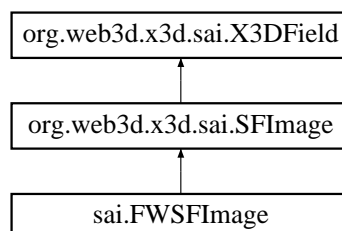
Definition at line 10 of file SFImage.java.

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

- src/java/vrml/field/SFImage.java

### 3.434 org.web3d.x3d.sai.SFImage Interface Reference

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



## 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)

### 3.434.1 Detailed Description

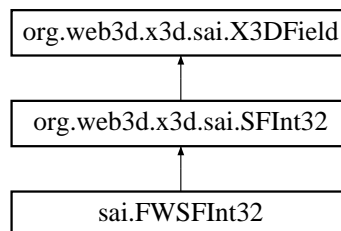
Definition at line 3 of file SFIImage.java.

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

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

## 3.435 org.web3d.x3d.sai.SFInt32 Interface Reference

Inheritance diagram for org.web3d.x3d.sai.SFInt32:



## Public Member Functions

- int **getValue** ()
- void **setValue** (int value)

### 3.435.1 Detailed Description

Definition at line 3 of file SFInt32.java.

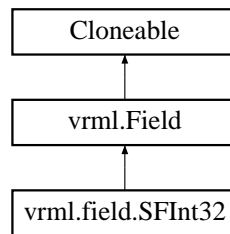
The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/SFInt32.java



## 3.436 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** sflnt32)
- void **setValue** (**SFInt32** sflnt32)
- String **toString** ()
- void **\_\_fromPerl** (BufferedReader in) throws IOException
- void **\_\_toPerl** (PrintWriter out) throws IOException

### Additional Inherited Members

#### 3.436.1 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

## 3.437 SFMatrix3d Struct Reference

### Data Fields

- double **c** [9]

#### 3.437.1 Detailed Description

Definition at line 1897 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

### 3.438 SFMatrix3f Struct Reference

#### Data Fields

- float **c** [9]

#### 3.438.1 Detailed Description

Definition at line 1895 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

### 3.439 SFMatrix4d Struct Reference

#### Data Fields

- double **c** [16]

#### 3.439.1 Detailed Description

Definition at line 1901 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

### 3.440 SFMatrix4f Struct Reference

#### Data Fields

- float **c** [16]

#### 3.440.1 Detailed Description

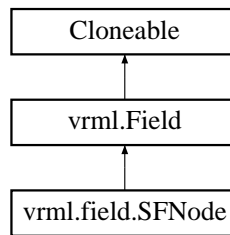
Definition at line 1899 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h
- src/libeai/EAI\_C.h

## 3.441 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

#### 3.441.1 Detailed Description

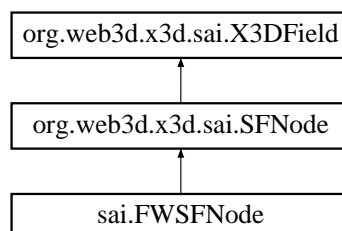
Definition at line 10 of file SFNode.java.

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

- src/java/vrml/field/SFNode.java

## 3.442 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

### 3.442.1 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

## 3.443 SFRotation Struct Reference

### Data Fields

- float **c** [4]
- float **r** [4]

### 3.443.1 Detailed Description

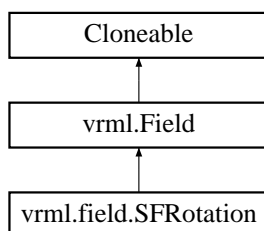
Definition at line 1869 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h
- src/libeai/EAI\_C.h

## 3.444 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

### 3.444.1 Detailed Description

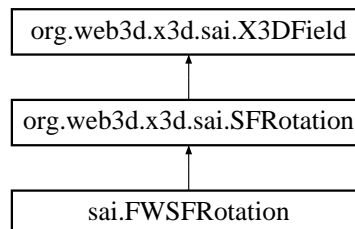
Definition at line 10 of file SFRotation.java.

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

- src/java/vrml/field/SFRotation.java

## 3.445 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)

### 3.445.1 Detailed Description

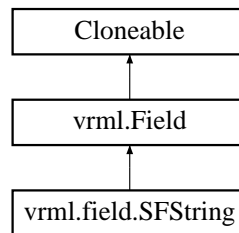
Definition at line 3 of file SFRotation.java.

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

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

### 3.446 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

#### 3.446.1 Detailed Description

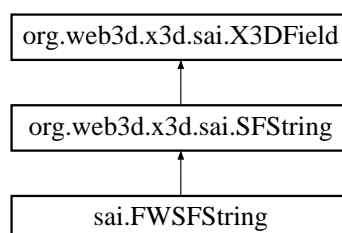
Definition at line 10 of file SFString.java.

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

- src/java/vrml/field/SFString.java

### 3.447 org.web3d.x3d.sai.SFString Interface Reference

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



## Public Member Functions

- String **getValue** ()
- void **setValue** (String value)

### 3.447.1 Detailed Description

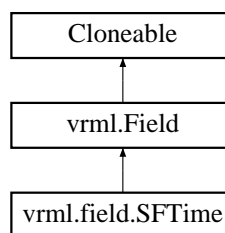
Definition at line 3 of file SFString.java.

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

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

## 3.448 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

### 3.448.1 Detailed Description

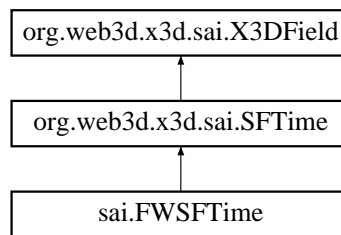
Definition at line 10 of file SFTime.java.

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

- src/java/vrml/field/SFTime.java

### 3.449 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)

#### 3.449.1 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

### 3.450 SFVec2d Struct Reference

#### Data Fields

- double **c** [2]

#### 3.450.1 Detailed Description

Definition at line 1903 of file Structs.h.

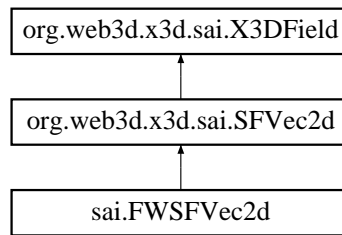
The documentation for this struct was generated from the following files:

- src/lib/vrml\_parser/Structs.h
- src/libeai/EAI\_C.h



## 3.451 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)

#### 3.451.1 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

## 3.452 SFVec2f Struct Reference

### Data Fields

- float **c** [2]

#### 3.452.1 Detailed Description

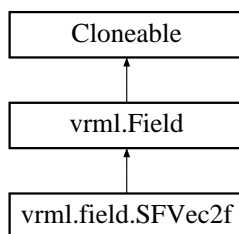
Definition at line 1887 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h
- src/libeai/EAI\_C.h

### 3.453 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

#### 3.453.1 Detailed Description

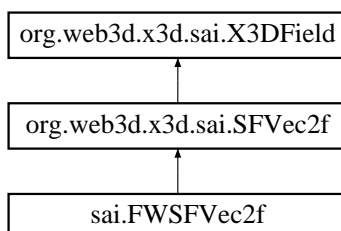
Definition at line 10 of file SFVec2f.java.

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

- src/java/vrml/field/SFVec2f.java

### 3.454 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)

### 3.454.1 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

## 3.455 SFVec3d Struct Reference

### Data Fields

- double **c** [3]

### 3.455.1 Detailed Description

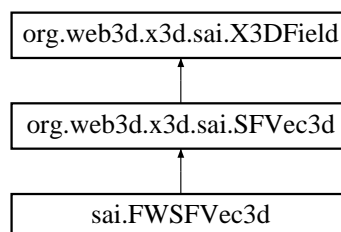
Definition at line 1891 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h
- src/libeai/EAI\_C.h

## 3.456 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)

### 3.456.1 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`

## 3.457 SFVec3f Struct Reference

### Data Fields

- float **c** [3]

### 3.457.1 Detailed Description

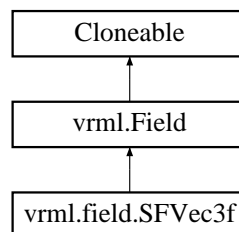
Definition at line 1871 of file Structs.h.

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

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

## 3.458 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

### 3.458.1 Detailed Description

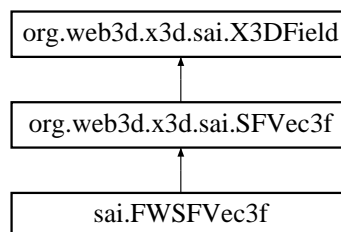
Definition at line 10 of file SFVec3f.java.

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

- src/java/vrml/field/SFVec3f.java

## 3.459 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)

### 3.459.1 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

## 3.460 SFVec4d Struct Reference

## Data Fields

- double **c** [4]

### 3.460.1 Detailed Description

Definition at line 1907 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

## 3.461 SFVec4f Struct Reference

### Data Fields

- float **c** [4]

### 3.461.1 Detailed Description

Definition at line 1905 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

## 3.462 Shader\_Script Struct Reference

### Data Fields

- struct **X3D\_Node** \* **ShaderScriptNode**
- int **num**
- BOOL **loaded**
- struct **Vector** \* **fields**

### 3.462.1 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

## 3.463 shaderTableEntry Struct Reference

### Data Fields

- unsigned int **whichOne**
- **s\_shader\_capabilities\_t** \* **myCapabilities**

#### 3.463.1 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

## 3.464 slice Struct Reference

### Data Fields

- unsigned int **vert\_pos**
- unsigned int **quant\_scale**
- char \* **extra\_info**

#### 3.464.1 Detailed Description

Definition at line 150 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

## 3.465 sNavInfo Struct Reference

### Data Fields

- double **width**
- double **height**
- double **step**

#### 3.465.1 Detailed Description

Definition at line 87 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.466 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

### 3.466.1 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

## 3.467 stripState Struct Reference

### Data Fields

- int **type**
- struct **Vector** **pv**
- struct **Vector** **nv**

### 3.467.1 Detailed Description

Definition at line 324 of file Component\_NURBS.c.

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

- src/lib/scenegraph/Component\_NURBS.c

## 3.468 iiglobal::tBindable Struct Reference

### Data Fields

- struct **sNavilInfo** **naviinfo**
- struct **Vector** \* **background\_stack**
- struct **Vector** \* **viewpoint\_stack**
- struct **Vector** \* **navigation\_stack**
- struct **Vector** \* **fog\_stack**
- void \* **prv**



### 3.468.1 Detailed Description

Definition at line 391 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.469 iiglobal::tcollision Struct Reference

### Data Fields

- void \* **prv**

### 3.469.1 Detailed Description

Definition at line 254 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.470 iiglobal::tcommon Struct Reference

### Data Fields

- void \* **prv**

### 3.470.1 Detailed Description

Definition at line 409 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.471 iiglobal::tComponent\_EnvironSensor Struct Reference

### Data Fields

- void \* **prv**

### 3.471.1 Detailed Description

Definition at line 257 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.472 iiglobal::tComponent\_Geometry3D Struct Reference

### Data Fields

- void \* **prv**

### 3.472.1 Detailed Description

Definition at line 260 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.473 iiglobal::tComponent\_Geospatial Struct Reference

### Data Fields

- void \* **prv**

### 3.473.1 Detailed Description

Definition at line 263 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.474 iiglobal::tComponent\_HAnim Struct Reference

### Data Fields

- void \* **prv**

### 3.474.1 Detailed Description

Definition at line 266 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.475 iiglobal::tComponent\_KeyDevice Struct Reference

### Data Fields

- void \* **prv**

### 3.475.1 Detailed Description

Definition at line 272 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.476 iiglobal::tComponent\_NURBS Struct Reference

### Data Fields

- void \* **prv**

### 3.476.1 Detailed Description

Definition at line 269 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.477 iiglobal::tComponent\_Shape Struct Reference

### Data Fields

- void \* **prv**

### 3.477.1 Detailed Description

Definition at line 291 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.478 iiglobal::tComponent\_Sound Struct Reference

### Data Fields

- int **sound\_from\_audioclip**
- int **SoundEngineStarted**
- void \* **prv**

### 3.478.1 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

## 3.479 iiglobal::tComponent\_Text Struct Reference

### Data Fields

- void \* **prv**

### 3.479.1 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

## 3.480 iiglobal::tComponent\_VRML1 Struct Reference

### Data Fields

- void \* **prv**

### 3.480.1 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

## 3.481 iiglobal::tConsoleMessage Struct Reference

### Data Fields

- int **consMsgCount**
- int **Console\_writeToHud**
- void \* **prv**

### 3.481.1 Detailed Description

Definition at line 146 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.482 iiglobal::tCParse Struct Reference

### Data Fields

- void \* **globalParser**
- void \* **prv**

### 3.482.1 Detailed Description

Definition at line 349 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.483 iiglobal::tCParserParser Struct Reference

### Data Fields

- void \* **prv**

### 3.483.1 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

## 3.484 iiglobal::tCProto Struct Reference

### Data Fields

- void \* **prv**

### 3.484.1 Detailed Description

Definition at line 356 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.485 iiglobal::tCRoutes Struct Reference

### Data Fields

- int **CRoutesExtra**
- void \* **JSSFpointer**
- int \* **scr\_act**
- int **max\_script\_found**
- int **max\_script\_found\_and\_initialized**
- int **jsnameindex**
- int **MAXJSparamNames**
- void \* **prv**

### 3.485.1 Detailed Description

Definition at line 359 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.486 iiglobal::tCScripts Struct Reference

### Data Fields

- void \* **prv**

### 3.486.1 Detailed Description

Definition at line 372 of file iiglobal.h.

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

- src/lib/iiglobal.h

## 3.487 iiglobal::tCursorDraw Struct Reference

### Data Fields

- void \* **prv**

### 3.487.1 Detailed Description

Definition at line 412 of file iiglobal.h.

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

- src/lib/iiglobal.h

## 3.488 iiglobal::tdisplay Struct Reference

### Data Fields

- **freewrl\_params\_t** params
- GLenum **\_global\_gl\_err**
- bool **display\_initialized**
- int **view\_height**
- int **view\_width**
- int **screenWidth**
- int **screenHeight**
- double **screenRatio**
- char \* **window\_title**
- int **mouse\_x**
- int **mouse\_y**
- int **show\_mouse**
- int **shutterGlasses**
- int **quadbuff\_stereo\_mode**
- **s\_renderer\_capabilities\_t** rdr\_caps
- float **myFps**
- char **myMenuStatus** [MAXSTAT]
- void \* **prv**

### 3.488.1 Detailed Description

Definition at line 44 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.489 iiglobal::tEAI\_C\_CommonFunctions Struct Reference

### Data Fields

- int **eaiverbose**
- void \* **prv**

### 3.489.1 Detailed Description

Definition at line 122 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.490 iiglobal::tEAICore Struct Reference

### Data Fields

- char \* **EAIbuffer**
- int **EAIbufcount**
- int **EAIbufpos**
- int **EAIbufsize**
- char **EAIListenerData** [8192]
- void \* **prv**

### 3.490.1 Detailed Description

Definition at line 134 of file iglobal.h.

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

- src/lib/iglobal.h



## 3.491 iiglobal::tEAEventsIn Struct Reference

### Data Fields

- void \* **prv**

### 3.491.1 Detailed Description

Definition at line 126 of file iiglobal.h.

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

- src/lib/iiglobal.h

## 3.492 iiglobal::tEAHelpers Struct Reference

### Data Fields

- char \* **outBuffer**
- int **outBufferLen**
- void \* **prv**

### 3.492.1 Detailed Description

Definition at line 129 of file iiglobal.h.

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

- src/lib/iiglobal.h

## 3.493 textureTableIndexStruct Struct Reference

### Data Fields

- struct **X3D\_Node** \* **scenegraphNode**
- int **nodeType**
- int **status**
- int **hasAlpha**
- GLuint **OpenGLTexture**
- int **frames**
- char \* **filename**
- int **x**
- int **y**
- unsigned char \* **texdata**
- GLint **Src**
- GLint **Trc**
- int **textureNumber**

### 3.493.1 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

## 3.494 textureVertexInfo Struct Reference

### Data Fields

- GLfloat \* **pre\_canned\_textureCoords**
- GLint **TC\_size**
- GLenum **TC\_type**
- GLsizei **TC\_stride**
- GLvoid \* **TC\_pointer**

### 3.494.1 Detailed Description

Definition at line 62 of file Textures.h.

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

- src/lib/opengl/Textures.h

## 3.495 iiglobal::tFrustum Struct Reference

### Data Fields

- int **OccFailed**
- void \* **prv**

### 3.495.1 Detailed Description

Definition at line 206 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.496 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**

### 3.496.1 Detailed Description

Definition at line 73 of file `iglobal.h`.

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

- `src/lib/iglobal.h`

## 3.497 iiglobal::tJScript Struct Reference

### Data Fields

- void \* **JSglobal\_return\_val**
- void \* **prv**

### 3.497.1 Detailed Description

Definition at line 375 of file `iglobal.h`.

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

- `src/lib/iglobal.h`

## 3.498 iiglobal::tjsUtils Struct Reference

### Data Fields

- void \* **prv**

### 3.498.1 Detailed Description

Definition at line 379 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.499 iiglobal::tjsVRMLBrowser Struct Reference

### Data Fields

- void \* **JSCreate\_global\_return\_val**
- void \* **prv**

### 3.499.1 Detailed Description

Definition at line 382 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.500 iiglobal::tjsVRMLClasses Struct Reference

### Data Fields

- void \* **prv**

### 3.500.1 Detailed Description

Definition at line 388 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.501 iiglobal::tLoadTextures Struct Reference

### Data Fields

- void \* **prv**

### 3.501.1 Detailed Description

Definition at line 210 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.502 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 **trisThisLoop**
- int **clipPlane**
- int **SHIFT**
- int **CTRL**
- int **currentX** [20]
- int **currentY** [20]
- void \* **prv**
- char \* **tmpFileLocation**
- char \* **url**
- char \* **scene\_name**
- char \* **scene\_suff**
- int **scene\_profile**
- int \* **scene\_components**
- char \* **replaceWorldRequest**
- void \* **replaceWorldRequestMulti**

### 3.502.1 Detailed Description

Definition at line 151 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.503 iiglobal::tOpenGL\_Utils Struct Reference

### Data Fields

- int **displayDepth**
- int **cc\_changed**
- void \* **prv**

### 3.503.1 Detailed Description

Definition at line 215 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.504 Touch Struct Reference

### Data Fields

- int **button**
- bool **isDown**
- int **mev**
- int **ID**
- float **angle**
- int **x**
- int **y**

### 3.504.1 Detailed Description

Definition at line 113 of file MainLoop.c.

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

- src/lib/main/MainLoop.c

## 3.505 iiglobal::tPluginSocket Struct Reference

### Data Fields

- void \* **prv**

### 3.505.1 Detailed Description

Definition at line 248 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.506 iiglobal::tpluginUtils Struct Reference

### Data Fields

- void \* **prv**

### 3.506.1 Detailed Description

Definition at line 251 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.507 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**

### 3.507.1 Detailed Description

Definition at line 176 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.508 iiglobal::tRenderFuncs Struct Reference

### Data Fields

- int **BrowserAction**
- double **hitPointDist**
- struct **SFColor** **hyp\_save\_posn** **hyp\_save\_norm** **ray\_save\_posn**
- void \* **hypersensitive**
- int **hyperhit**
- struct **point\_XYZ** **hp**
- void \* **prv**
- void \* **rayHit**
- void \* **rayHitHyper**
- struct **point\_XYZ** **t\_r1** **t\_r2** **t\_r3**
- int **usingAffinePickmatrix**
- int **lightingOn**
- int **have\_transparency**
- int **last\_texture\_type**
- GLuint **boundTextureStack** [10]
- int **textureStackTop**

### 3.508.1 Detailed Description

Definition at line 306 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.509 trenderstate Struct Reference

### Data Fields

- int **render\_sensitive**
- int **render\_vp**
- int **render\_light**
- int **render\_proximity**
- int **render\_other**
- int **verbose**
- int **render\_blend**
- int **render\_geom**
- int **render\_collision**

### 3.509.1 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

## 3.510 iiglobal::tRenderTextures Struct Reference

### Data Fields

- struct **multiTexParams textureParameterStack** [MAX\_MULTITEXTURE]
- void \* **prv**

### 3.510.1 Detailed Description

Definition at line 236 of file iglobal.h.

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

- src/lib/iglobal.h



## 3.511 iiglobal::tresources Struct Reference

### Data Fields

- **resource\_item\_t \* root\_res**
- **void \* prv**

#### 3.511.1 Detailed Description

Definition at line 85 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.512 iiglobal::tSensInterps Struct Reference

### Data Fields

- **void \* prv**

#### 3.512.1 Detailed Description

Definition at line 143 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.513 iiglobal::tSnapshot Struct Reference

### Data Fields

- **bool doSnapshot**
- **bool doPrintshot**
- **int snapGoodCount**
- **void \* prv**

#### 3.513.1 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

## 3.514 iiglobal::tstatusbar Struct Reference

### Data Fields

- void \* **prv**

### 3.514.1 Detailed Description

Definition at line 346 of file iiglobal.h.

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

- src/lib/iiglobal.h

## 3.515 iiglobal::tStreamPoly Struct Reference

### Data Fields

- void \* **prv**

### 3.515.1 Detailed Description

Definition at line 334 of file iiglobal.h.

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

- src/lib/iiglobal.h

## 3.516 iiglobal::tTess Struct Reference

### Data Fields

- int \* **global\_IFS\_Coords**
- int **global\_IFS\_Coord\_count**
- **GLUtriangulatorObj** \* **global\_tessobj**
- void \* **prv**

### 3.516.1 Detailed Description

Definition at line 337 of file iiglobal.h.

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

- src/lib/iiglobal.h

## 3.517 iiglobal::tTextures Struct Reference

### Data Fields

- GLuint \* **global\_tcin**
- int **global\_tcin\_count**
- void \* **global\_tcin\_lastParent**
- GLuint **defaultBlankTexture**
- void \* **prv**

### 3.517.1 Detailed Description

Definition at line 240 of file `iglobal.h`.

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

- `src/lib/iglobal.h`

## 3.518 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**

### 3.518.1 Detailed Description

Definition at line 89 of file `iglobal.h`.

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

- `src/lib/iglobal.h`

## 3.519 iiglobal::tViewer Struct Reference

### Data Fields

- void \* **prv**

### 3.519.1 Detailed Description

Definition at line 343 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.520 iiglobal::tX3DParser Struct Reference

### Data Fields

- int **parentIndex**
- struct **X3D\_Node** \* **parentStack** [PARENTSTACKSIZE]
- char \* **CDATA\_Text**
- int **CDATA\_Text\_curlen**
- void \* **prv**

### 3.520.1 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

## 3.521 iiglobal::tX3DProtoScript Struct Reference

### Data Fields

- void \* **prv**

### 3.521.1 Detailed Description

Definition at line 406 of file iglobal.h.

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

- src/lib/iglobal.h

## 3.522 un1 Union Reference

### Data Fields

- int **i**
- float **f**
- void \* **p**

### 3.522.1 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

## 3.523 Uni\_String Struct Reference

### Data Fields

- int **len**
- char \* **strptr**
- int **touched**
- size\_t **len**

### 3.523.1 Detailed Description

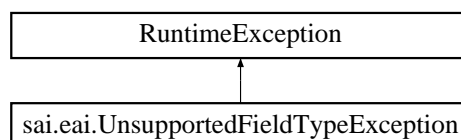
Definition at line 51 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h
- src/libeai/EAI\_C.h

## 3.524 sai.eai.UnsupportedFieldTypeException Class Reference

Inheritance diagram for sai.eai.UnsupportedFieldTypeException:



## Public Member Functions

- **UnsupportedFieldTypeException** (String str)

### 3.524.1 Detailed Description

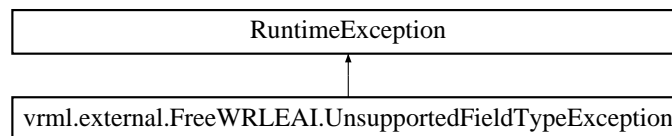
Definition at line 19 of file UnsupportedFieldTypeException.java.

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

- src/java/sai/eai/UnsupportedFieldTypeException.java

## 3.525 vrml.external.FreeWRLEAI.UnsupportedFieldTypeException Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.UnsupportedFieldTypeException:



## Public Member Functions

- **UnsupportedFieldTypeException** (String str)

### 3.525.1 Detailed Description

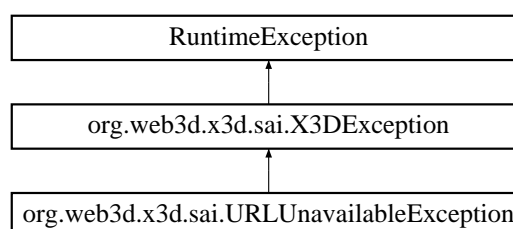
Definition at line 19 of file UnsupportedFieldTypeException.java.

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

- src/java/vrml/external/FreeWRLEAI/UnsupportedFieldTypeException.java

## 3.526 org.web3d.x3d.sai.URLUnavailableException Class Reference

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



## Public Member Functions

- **URLUnavailableException** (String msg)

### 3.526.1 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

## 3.527 Vector Struct Reference

### Data Fields

- int **n**
- int **allocn**
- void \* **data**

### 3.527.1 Detailed Description

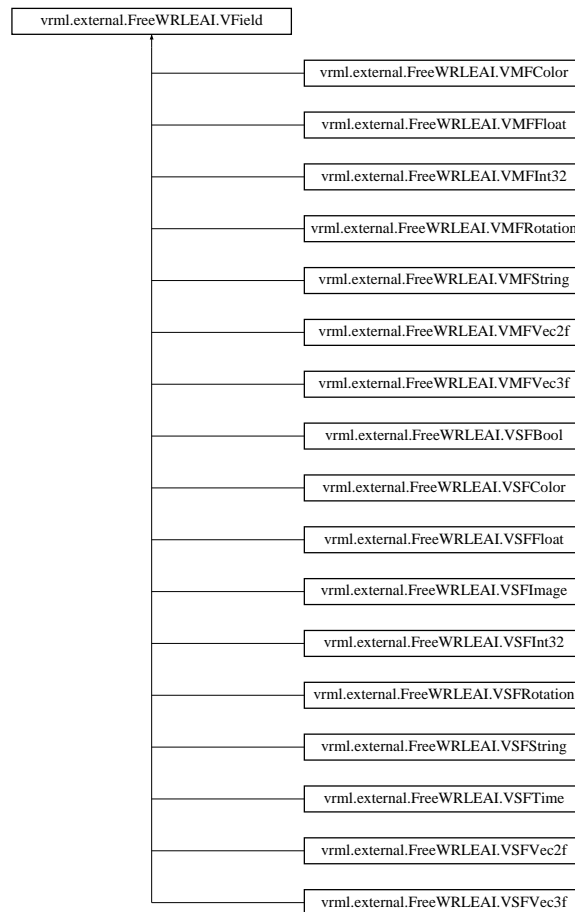
Definition at line 36 of file Vector.h.

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

- src/lib/scenegraph/Vector.h

## 3.528 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



### 3.528.1 Detailed Description

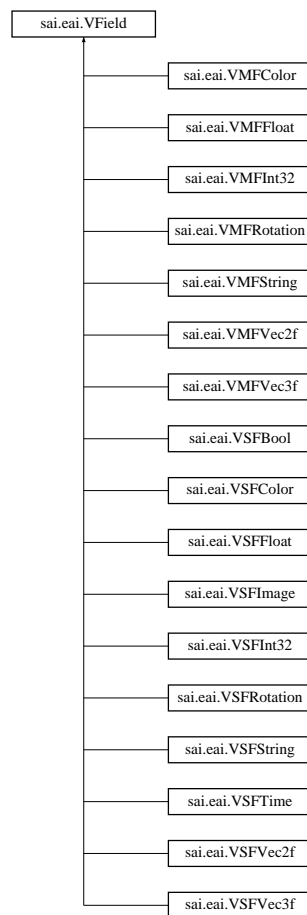
Definition at line 24 of file VField.java.

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

- src/java/vrml/external/FreeWRLEAI/VField.java

## 3.529 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

### 3.529.1 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

## 3.530 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**

### 3.530.1 Detailed Description

Definition at line 191 of file mpeg.h.

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

- src/lib/scenegraph/mpeg.h

### 3.531 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 **iside**
- int **sidebyside**
- int **updown**
- int **shutterGlasses**
- int **haveQuadbuffer**
- int **anaglyph**
- int **dominantEye**
- double **stereoParameter**
- double **eyehalf**
- double **eyehalfangle**
- double **screendist**
- double **eyedist**
- int **ipro** [2]
- unsigned int **buffer**
- int **oktypes** [16]
- **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 **backgroundPlane**
- GLDOUBLE **fieldofview**
- GLDOUBLE **fovZoom**
- int **wasBound**

### 3.531.1 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

## 3.532 viewer\_examine Struct Reference

### Data Fields

- struct **point\_XYZ** **Origin**
- **Quaternion** **OQuat**
- **Quaternion** **SQuat**
- double **ODist**
- double **SY**

### 3.532.1 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

## 3.533 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**

### 3.533.1 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

## 3.534 viewer\_inplane Struct Reference

### Data Fields

- double **x**
- double **y**
- double **xx**
- double **yy**
- int **on**
- int **ibut**

### 3.534.1 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

## 3.535 viewer\_walk Struct Reference

### Data Fields

- double **SX**
- double **SY**
- double **XD**
- double **YD**
- double **ZD**
- double **RD**

### 3.535.1 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

## 3.536 viewer\_ypz Struct Reference

### Data Fields

- double **ypz0** [3]
- double **ypz** [3]
- float **x**
- float **y**

### 3.536.1 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

## 3.537 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

### 3.537.1 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

## 3.538 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

### 3.538.1 Detailed Description

Definition at line 19 of file VIP.java.

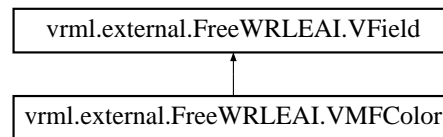
The documentation for this class was generated from the following file:

- src/java/vrml/external/FreeWRLEAI/VIP.java



## 3.539 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

#### 3.539.1 Detailed Description

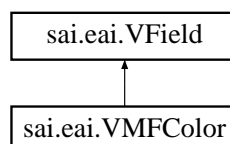
Definition at line 21 of file VMFCOLOR.java.

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

- src/java/vrml/external/FreeWRLEAI/VMFCOLOR.java

## 3.540 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

### 3.540.1 Detailed Description

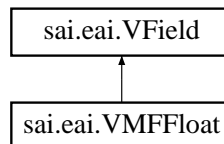
Definition at line 21 of file VMFColor.java.

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

- src/java/sai/eai/VMFColor.java

## 3.541 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

### 3.541.1 Detailed Description

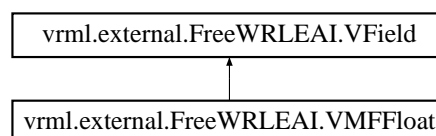
Definition at line 21 of file VMFFloat.java.

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

- src/java/sai/eai/VMFFloat.java

## 3.542 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

### 3.542.1 Detailed Description

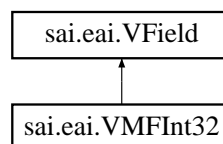
Definition at line 21 of file VMFFloat.java.

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

- src/java/vrml/external/FreeWRLEAI/VMFFloat.java

## 3.543 sai.eai.VMFloat32 Class Reference

Inheritance diagram for sai.eai.VMFloat32:



## Public Member Functions

- **VMFloat32** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

## Additional Inherited Members

### 3.543.1 Detailed Description

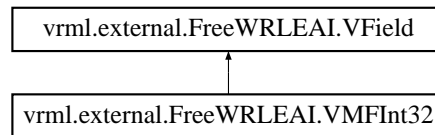
Definition at line 21 of file VMFloat32.java.

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

- src/java/sai/eai/VMFloat32.java

### 3.544 vrml.external.FreeWRLEAI.VMFIInt32 Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VMFIInt32:



#### Public Member Functions

- **VMFIInt32** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

#### Additional Inherited Members

#### 3.544.1 Detailed Description

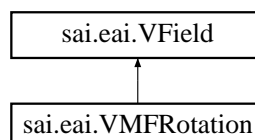
Definition at line 21 of file VMFIInt32.java.

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

- src/java/vrml/external/FreeWRLEAI/VMFIInt32.java

### 3.545 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

### 3.545.1 Detailed Description

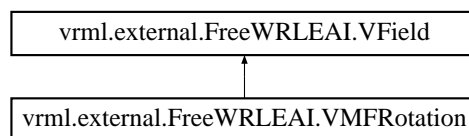
Definition at line 21 of file VMFRotation.java.

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

- src/java/sai/eai/VMFRotation.java

## 3.546 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

### 3.546.1 Detailed Description

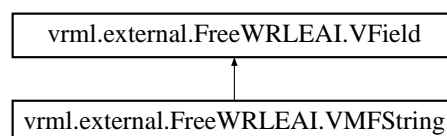
Definition at line 21 of file VMFRotation.java.

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

- src/java/vrml/external/FreeWRLEAI/VMFRotation.java

## 3.547 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

### 3.547.1 Detailed Description

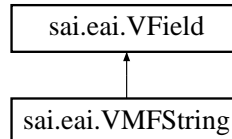
Definition at line 21 of file VMFString.java.

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

- src/java/vrml/external/FreeWRLEAI/VMFString.java

## 3.548 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

### 3.548.1 Detailed Description

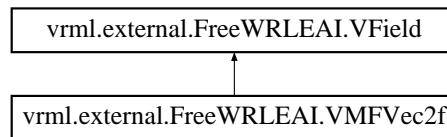
Definition at line 21 of file VMFString.java.

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

- src/java/sai/eai/VMFString.java

## 3.549 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

#### 3.549.1 Detailed Description

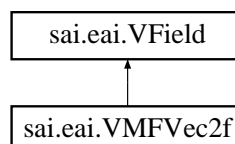
Definition at line 21 of file VMFVec2f.java.

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

- src/java/vrml/external/FreeWRLEAI/VMFVec2f.java

## 3.550 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

### 3.550.1 Detailed Description

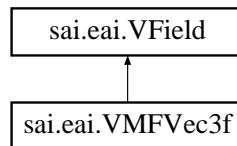
Definition at line 21 of file VMFVec2f.java.

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

- src/java/sai/eai/VMFVec2f.java

## 3.551 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

### 3.551.1 Detailed Description

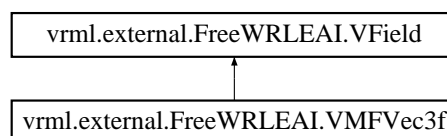
Definition at line 21 of file VMFVec3f.java.

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

- src/java/sai/eai/VMFVec3f.java

## 3.552 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

### 3.552.1 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

## 3.553 void3 Struct Reference

### Data Fields

- void \* **one**
- void \* **two**
- void \* **three**

### 3.553.1 Detailed Description

Definition at line 665 of file headers.h.

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

- src/lib/main/headers.h

## 3.554 VRMLLexer Struct Reference

### Data Fields

- char \* **nextIn**
- char \* **startOfStringPtr** [LEXER\_INPUT\_STACK\_MAX]
- char \* **curlD**
- 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**

### 3.554.1 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

## 3.555 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**

### 3.555.1 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

## 3.556 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**

### 3.556.1 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

## 3.557 sai.eai.VRMLObjectObserver Interface Reference

### Public Member Functions

- void **onClicked** (**VRMLObject** obj)
- void **onLoaded** (**VRMLObject** obj)

### 3.557.1 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

## 3.558 vrml.external.FreeWRLEAI.VRMLObjectObserver Interface Reference

### Public Member Functions

- void **onClicked** (VRMLObject obj)
- void **onLoaded** (VRMLObject obj)

### 3.558.1 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

## 3.559 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**

### 3.559.1 Detailed Description

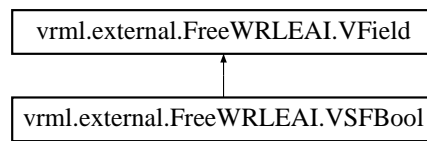
Definition at line 66 of file CParseParser.h.

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

- src/lib/vrml\_parser/CParseParser.h

## 3.560 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

#### 3.560.1 Detailed Description

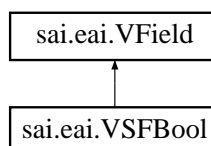
Definition at line 21 of file VSFBool.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFBool.java

## 3.561 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

### 3.561.1 Detailed Description

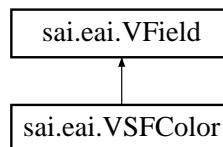
Definition at line 21 of file VSFBool.java.

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

- src/java/sai/eai/VSFBool.java

## 3.562 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

### 3.562.1 Detailed Description

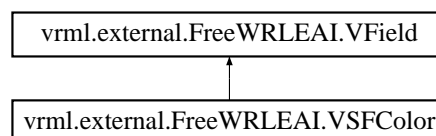
Definition at line 21 of file VSFColor.java.

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

- src/java/sai/eai/VSFColor.java

## 3.563 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

### 3.563.1 Detailed Description

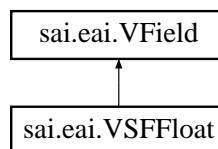
Definition at line 21 of file VSFColor.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFColor.java

## 3.564 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

### 3.564.1 Detailed Description

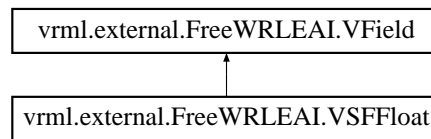
Definition at line 20 of file VSFFloat.java.

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

- src/java/sai/eai/VSFFloat.java

### 3.565 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

#### 3.565.1 Detailed Description

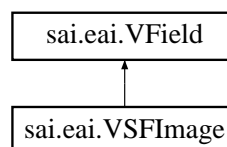
Definition at line 20 of file VSFFloat.java.

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

- src/java/vrml/external/FreeWRLEAI/VSSFFloat.java

### 3.566 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

### 3.566.1 Detailed Description

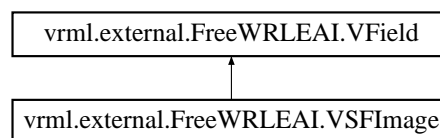
Definition at line 21 of file VSImage.java.

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

- src/java/sai/eai/VImage.java

## 3.567 vrml.external.FreeWRLEAI.VSImage Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSImage:



## Public Member Functions

- **VSImage** (DataInputStream in) throws IOException
- void **write** (DataOutputStream out) throws IOException
- byte **getType** ()

## Additional Inherited Members

### 3.567.1 Detailed Description

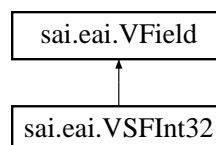
Definition at line 21 of file VSImage.java.

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

- src/java/vrml/external/FreeWRLEAI/VImage.java

## 3.568 sai.eai.VSInt32 Class Reference

Inheritance diagram for sai.eai.VSInt32:



## Public Member Functions

- **VSFInt32** (DataInputStream in) throws IOException
- **VSFInt32** (int v)
- void **write** (DataOutputStream out) throws IOException
- int **getValue** ()
- byte **getType** ()

## Additional Inherited Members

### 3.568.1 Detailed Description

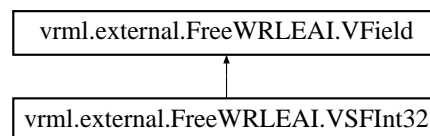
Definition at line 21 of file VSFInt32.java.

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

- src/java/sai/eai/VSFInt32.java

## 3.569 vrml.external.FreeWRLEAI.VSFInt32 Class Reference

Inheritance diagram for vrml.external.FreeWRLEAI.VSFInt32:



## Public Member Functions

- **VSFInt32** (DataInputStream in) throws IOException
- **VSFInt32** (int v)
- void **write** (DataOutputStream out) throws IOException
- int **getValue** ()
- byte **getType** ()

## Additional Inherited Members

### 3.569.1 Detailed Description

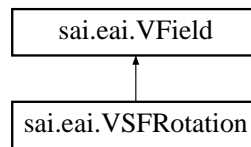
Definition at line 21 of file VSFInt32.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFInt32.java

## 3.570 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

#### 3.570.1 Detailed Description

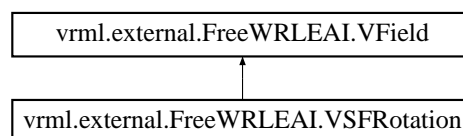
Definition at line 20 of file VSFRotation.java.

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

- src/java/sai/eai/VSFRotation.java

## 3.571 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

### 3.571.1 Detailed Description

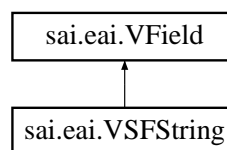
Definition at line 20 of file VSFRotation.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFRotation.java

## 3.572 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

### 3.572.1 Detailed Description

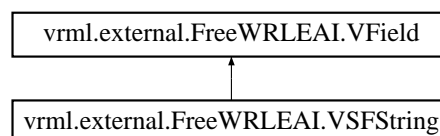
Definition at line 21 of file VSFString.java.

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

- src/java/sai/eai/VSFString.java

## 3.573 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

### 3.573.1 Detailed Description

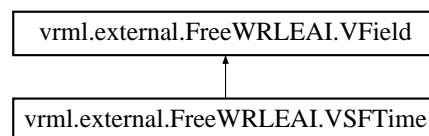
Definition at line 21 of file VSFString.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFString.java

## 3.574 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

### 3.574.1 Detailed Description

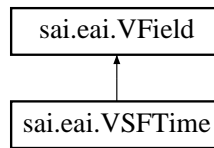
Definition at line 21 of file VSFTIME.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFTIME.java

### 3.575 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

#### 3.575.1 Detailed Description

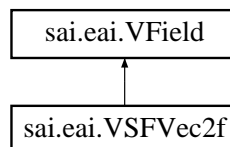
Definition at line 21 of file VSFTIME.java.

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

- src/java/sai/eai/VSTIME.java

### 3.576 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

### 3.576.1 Detailed Description

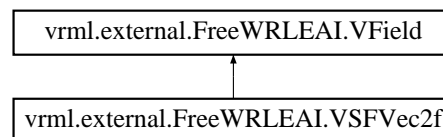
Definition at line 21 of file VSFVec2f.java.

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

- src/java/sai/eai/VSFVec2f.java

## 3.577 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

### 3.577.1 Detailed Description

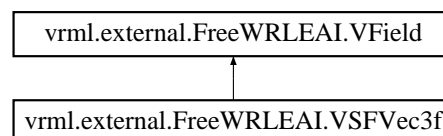
Definition at line 21 of file VSFVec2f.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFVec2f.java

## 3.578 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

### 3.578.1 Detailed Description

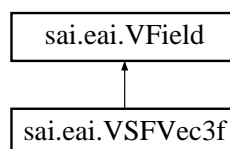
Definition at line 19 of file VSFVec3f.java.

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

- src/java/vrml/external/FreeWRLEAI/VSFVec3f.java

## 3.579 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

### 3.579.1 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

## 3.580 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.580.1 Detailed Description

Definition at line 2016 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.581 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**
- 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 **X3D\_Node** \* **texture**
- struct **X3D\_Node** \* **textureTransform**

### 3.581.1 Detailed Description

Definition at line 2043 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.582 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- float **endAngle**
- float **radius**
- float **startAngle**
- struct **Multi\_Vec2f** **\_\_points**
- int **\_\_numPoints**

### 3.582.1 Detailed Description

Definition at line 2067 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.583 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**
- 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**

### 3.583.1 Detailed Description

Definition at line 2090 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.584 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**
- 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**
- void \* **\_\_localFileName**
- double **\_\_inittime**

### 3.584.1 Detailed Description

Definition at line 2115 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.585 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**
- 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**
- 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**

### 3.585.1 Detailed Description

Definition at line 2151 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.586 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **SFVec3f** **axisOfRotation**
- struct **Multi\_Node** **children**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **X3D\_Node** \* **metadata**
- double **\_rotationAngle**

### 3.586.1 Detailed Description

Definition at line 2195 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.587 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- int **inputFalse**
- int **inputNegate**
- int **inputTrue**
- struct **X3D\_Node** \* **metadata**

### 3.587.1 Detailed Description

Definition at line 2220 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.588 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**
- 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**

### 3.588.1 Detailed Description

Definition at line 2242 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.589 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- int **toggle**
- struct **X3D\_Node** \* **metadata**

### 3.589.1 Detailed Description

Definition at line 2266 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.590 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**
- struct **X3D\_Node** \* **\_executionContext**
- double **set\_triggerTime**
- int **triggerTrue**
- struct **X3D\_Node** \* **metadata**



### 3.590.1 Detailed Description

Definition at line 2286 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.591 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **size**
- int **solid**
- struct **Multi\_Vec3f** **\_\_points**

### 3.591.1 Detailed Description

Definition at line 2306 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.592 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- struct **Multi\_Node** **\_sortedChildren**

#### 3.592.1 Detailed Description

Definition at line 2327 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.593 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **X3D\_Node** \* **shape**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

### 3.593.1 Detailed Description

Definition at line 2352 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.594 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Multi\_Bool** **visible**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**

### 3.594.1 Detailed Description

Definition at line 2374 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.595 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.595.1 Detailed Description

Definition at line 2399 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.596 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- float **radius**
- struct **Multi\_Vec2f** **\_\_points**
- int **\_\_numPoints**

### 3.596.1 Detailed Description

Definition at line 2435 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.597 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **enabled**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec4f** **plane**

### 3.597.1 Detailed Description

Definition at line 2456 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.598 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.598.1 Detailed Description

Definition at line 2476 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.599 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Color** **color**
- struct **X3D\_Node** \* **metadata**

### 3.599.1 Detailed Description

Definition at line 2504 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.600 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Color** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFColor** **value\_changed**

### 3.600.1 Detailed Description

Definition at line 2523 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.601 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_ColorRGBA** **color**
- struct **X3D\_Node** \* **metadata**

### 3.601.1 Detailed Description

Definition at line 2545 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.602 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**
- 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**

### 3.602.1 Detailed Description

Definition at line 2564 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.603 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**
- 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**

### 3.603.1 Detailed Description

Definition at line 2589 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.604 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**
- 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**

### 3.604.1 Detailed Description

Definition at line 2617 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.605 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**

### 3.605.1 Detailed Description

Definition at line 2645 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.606 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2d** **controlPoint**

### 3.606.1 Detailed Description

Definition at line 2666 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.607 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec3f** point
- struct **X3D\_Node** \* **metadata**

### 3.607.1 Detailed Description

Definition at line 2685 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.608 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3d** point

### 3.608.1 Detailed Description

Definition at line 2704 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.609 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**
- 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**

### 3.609.1 Detailed Description

Definition at line 2723 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.610 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec2f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **value\_changed**

#### 3.610.1 Detailed Description

Definition at line 2749 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.611 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**
- 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**

### 3.611.1 Detailed Description

Definition at line 2771 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.612 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**
- 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**

### 3.612.1 Detailed Description

Definition at line 2799 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.613 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**
- 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**

#### 3.613.1 Detailed Description

Definition at line 2886 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.614 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**



- 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**

### 3.614.1 Detailed Description

Definition at line 2835 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.615 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**
- 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**

### 3.615.1 Detailed Description

Definition at line 2860 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.616 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**
- 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**

#### 3.616.1 Detailed Description

Definition at line 2913 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.617 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Vec2f** **easeInEaseOut**
- struct **Multi\_Float** **key**
- struct **X3D\_Node** \* **metadata**
- float **modifiedFraction\_changed**

### 3.617.1 Detailed Description

Definition at line 2938 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.618 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**
- 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**

### 3.618.1 Detailed Description

Definition at line 2960 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.619 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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 **forcelD**
- 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**

### 3.619.1 Detailed Description

Definition at line 2995 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.620 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**
- 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**

### 3.620.1 Detailed Description

Definition at line 3101 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.621 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **filled**
- struct **SFColor** **hatchColor**
- int **hatched**
- int **hatchStyle**
- struct **X3D\_Node** \* **metadata**
- int **\_enabled**
- struct **SFVec2f** **\_hatchScale**

### 3.621.1 Detailed Description

Definition at line 3133 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.622 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Float** **value**
- struct **Uni\_String** \* **name**
- int **numComponents**
- struct **X3D\_Node** \* **metadata**

### 3.622.1 Detailed Description

Definition at line 3157 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.623 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **SFColor** **color**
- struct **Uni\_String** \* **fogType**
- float **visibilityRange**
- double **bindTime**
- int **isBound**
- struct **X3D\_Node** \* **metadata**

### 3.623.1 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



## 3.624 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Float** **depth**
- struct **X3D\_Node** \* **metadata**

### 3.624.1 Detailed Description

Definition at line 3202 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.625 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**
- 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**

### 3.625.1 Detailed Description

Definition at line 3221 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.626 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **update**
- int **size**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**

### 3.626.1 Detailed Description

Definition at line 3248 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.627 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**
- 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**

### 3.627.1 Detailed Description

Definition at line 3270 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.628 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**
- 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**

### 3.628.1 Detailed Description

Definition at line 3293 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.629 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.629.1 Detailed Description

Definition at line 3374 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.630 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**
- 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**

### 3.630.1 Detailed Description

Definition at line 3331 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.631 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **data**
- struct **Multi\_String** **summary**
- struct **Multi\_String** **url**
- struct **X3D\_Node** \* **metadata**

### 3.631.1 Detailed Description

Definition at line 3406 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.632 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**
- 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**

### 3.632.1 Detailed Description

Definition at line 3427 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.633 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**
- 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**

### 3.633.1 Detailed Description

Definition at line 3453 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.634 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**
- 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

### 3.634.1 Detailed Description

Definition at line 3482 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.635 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**
- 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**

### 3.635.1 Detailed Description

Definition at line 3521 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.636 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.636.1 Detailed Description

Definition at line 3555 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.637 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **SFRotation** **set\_orientation**
- struct **SFVec3d** **set\_position**
- struct **Uni\_String** \* **description**
- float **fieldOfView**
- int **headlight**
- int **jump**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **navType**
- double **bindTime**
- int **isBound**
- struct **X3D\_Node** \* **geoOrigin**
- struct **Multi\_String** **geoSystem**
- struct **SFRotation** **orientation**
- struct **SFVec3d** **position**
- 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**

### 3.637.1 Detailed Description

Definition at line 3596 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.638 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **FreeWRL\_\_protoDef**
- struct **Multi\_Node** **FreeWRL\_PROTOInterfaceNodes**
- struct **Multi\_Node** **\_sortedChildren**

### 3.638.1 Detailed Description

Definition at line 3637 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.639 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **coordIndex**
- struct **Multi\_Vec3f** **displacements**
- struct **Uni\_String** \* **name**
- float **weight**
- struct **X3D\_Node** \* **metadata**

### 3.639.1 Detailed Description

Definition at line 3663 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.640 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**
- 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 **SFVec3f** translation
- struct **Uni\_String** \* version
- struct **Multi\_Node** viewpoints
- struct **SFVec3f** bboxCenter
- struct **SFVec3f** bboxSize
- struct **X3D\_Node** \* metadata

### 3.640.1 Detailed Description

Definition at line 3685 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.641 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** addChildren
- struct **Multi\_Node** removeChildren
- 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**

### 3.641.1 Detailed Description

Definition at line 3721 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.642 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.642.1 Detailed Description

Definition at line 3762 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.643 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.643.1 Detailed Description

Definition at line 3791 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h



## 3.644 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**
- struct **Multi\_Node** **\_\_subTextures**
- int **\_\_regenSubTextures**

### 3.644.1 Detailed Description

Definition at line 3825 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.645 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **url**
- int **repeatS**
- int **repeatT**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**

### 3.645.1 Detailed Description

Definition at line 3849 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.646 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**
- 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**

### 3.646.1 Detailed Description

Definition at line 3873 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.647 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**
- 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**

### 3.647.1 Detailed Description

Definition at line 3911 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.648 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**
- 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**

#### 3.648.1 Detailed Description

Definition at line 3944 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.649 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**
- 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**

### 3.649.1 Detailed Description

Definition at line 3975 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.650 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**
- 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**

### 3.650.1 Detailed Description

Definition at line 4006 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.651 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**
- 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**

### 3.651.1 Detailed Description

Definition at line 4037 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.652 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**
- 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**
- 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**

### 3.652.1 Detailed Description

Definition at line 4068 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.653 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**
- 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**

#### 3.653.1 Detailed Description

Definition at line 4116 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.654 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- int **integerKey**
- int **triggerValue**
- struct **X3D\_Node** \* **metadata**



### 3.654.1 Detailed Description

Definition at line 4140 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.655 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**
- 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**

### 3.655.1 Detailed Description

Definition at line 4161 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.656 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **applied**
- int **linetype**
- float **linewidthScaleFactor**
- struct **X3D\_Node** \* **metadata**

### 3.656.1 Detailed Description

Definition at line 4219 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.657 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**
- 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**

### 3.657.1 Detailed Description

Definition at line 4240 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.658 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**
- 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**

### 3.658.1 Detailed Description

Definition at line 4273 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.659 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**
- 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**

### 3.659.1 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

## 3.660 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFColor** **color**
- int **enabled**
- struct **Uni\_String** \* **fogType**
- float **visibilityRange**
- struct **X3D\_Node** \* **metadata**

### 3.660.1 Detailed Description

Definition at line 4328 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.661 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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

### 3.661.1 Detailed Description

Definition at line 4189 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.662 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
- 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

### 3.662.1 Detailed Description

Definition at line 4350 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.663 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix3f** value
- struct **Uni\_String** \* **name**
- struct **X3D\_Node** \* **metadata**

### 3.663.1 Detailed Description

Definition at line 4375 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.664 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Matrix4f** value
- struct **Uni\_String** \* **name**

### 3.664.1 Detailed Description

Definition at line 4395 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.665 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Double** value

### 3.665.1 Detailed Description

Definition at line 4415 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.666 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Float** value



### 3.666.1 Detailed Description

Definition at line 4436 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.667 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Int32** value

### 3.667.1 Detailed Description

Definition at line 4457 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.668 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Bool** value
- struct **Multi\_Bool** valueChanged
- struct **Multi\_Bool** setValue
- double **tickTime**

### 3.668.1 Detailed Description

Definition at line 4478 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.669 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Color** **value**
- struct **Multi\_Color** **valueChanged**
- struct **Multi\_Color** **setValue**
- double **tickTime**

### 3.669.1 Detailed Description

Definition at line 4499 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.670 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_ColorRGBA** **value**
- struct **Multi\_ColorRGBA** **valueChanged**
- struct **Multi\_ColorRGBA** **setValue**
- double **tickTime**

### 3.670.1 Detailed Description

Definition at line 4520 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.671 X3D\_MetadataMFDDouble Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Double** value
- struct **Multi\_Double** valueChanged
- struct **Multi\_Double** setValue
- double **tickTime**

### 3.671.1 Detailed Description

Definition at line 4541 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.672 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Float** value
- struct **Multi\_Float** valueChanged
- struct **Multi\_Float** setValue
- double **tickTime**

### 3.672.1 Detailed Description

Definition at line 4562 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.673 X3D\_MetadataMFlnt32 Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **value**
- struct **Multi\_Int32** **valueChanged**
- struct **Multi\_Int32** **setValue**
- double **tickTime**

### 3.673.1 Detailed Description

Definition at line 4583 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.674 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix3d** **value**
- struct **Multi\_Matrix3d** **valueChanged**
- struct **Multi\_Matrix3d** **setValue**
- double **tickTime**

### 3.674.1 Detailed Description

Definition at line 4604 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.675 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix3f** value
- struct **Multi\_Matrix3f** valueChanged
- struct **Multi\_Matrix3f** setValue
- double **tickTime**

### 3.675.1 Detailed Description

Definition at line 4625 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.676 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix4d** value
- struct **Multi\_Matrix4d** valueChanged
- struct **Multi\_Matrix4d** setValue
- double **tickTime**

### 3.676.1 Detailed Description

Definition at line 4646 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.677 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Matrix4f** value
- struct **Multi\_Matrix4f** valueChanged
- struct **Multi\_Matrix4f** setValue
- double **tickTime**

### 3.677.1 Detailed Description

Definition at line 4667 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.678 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** value
- struct **Multi\_Node** valueChanged
- struct **Multi\_Node** setValue
- double **tickTime**

### 3.678.1 Detailed Description

Definition at line 4688 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.679 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Rotation** value
- struct **Multi\_Rotation** valueChanged
- struct **Multi\_Rotation** setValue
- double **tickTime**

### 3.679.1 Detailed Description

Definition at line 4709 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.680 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** value
- struct **Multi\_String** valueChanged
- struct **Multi\_String** setValue
- double **tickTime**

### 3.680.1 Detailed Description

Definition at line 4730 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.681 X3D\_MetadataMFTTime Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Time** value
- struct **Multi\_Time** valueChanged
- struct **Multi\_Time** setValue
- double **tickTime**

### 3.681.1 Detailed Description

Definition at line 4751 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.682 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec2d** value
- struct **Multi\_Vec2d** valueChanged
- struct **Multi\_Vec2d** setValue
- double **tickTime**



### 3.682.1 Detailed Description

Definition at line 4772 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.683 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec2f** value
- struct **Multi\_Vec2f** valueChanged
- struct **Multi\_Vec2f** setValue
- double **tickTime**

### 3.683.1 Detailed Description

Definition at line 4793 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.684 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec3d** value
- struct **Multi\_Vec3d** valueChanged
- struct **Multi\_Vec3d** setValue
- double **tickTime**

### 3.684.1 Detailed Description

Definition at line 4814 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.685 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec3f** value
- struct **Multi\_Vec3f** valueChanged
- struct **Multi\_Vec3f** setValue
- double **tickTime**

### 3.685.1 Detailed Description

Definition at line 4835 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.686 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec4d** value
- struct **Multi\_Vec4d** valueChanged
- struct **Multi\_Vec4d** setValue
- double **tickTime**

### 3.686.1 Detailed Description

Definition at line 4856 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.687 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Vec4f** **value**
- struct **Multi\_Vec4f** **valueChanged**
- struct **Multi\_Vec4f** **setValue**
- double **tickTime**

### 3.687.1 Detailed Description

Definition at line 4877 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.688 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_Node** **value**

### 3.688.1 Detailed Description

Definition at line 5339 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.689 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **value**
- int **valueChanged**
- int **setValue**
- double **tickTime**

### 3.689.1 Detailed Description

Definition at line 4898 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.690 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFColor** **value**
- struct **SFColor** **valueChanged**
- struct **SFColor** **setValue**
- double **tickTime**

### 3.690.1 Detailed Description

Definition at line 4919 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.691 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFCOLORRGBA** **value**
- struct **SFCOLORRGBA** **valueChanged**
- struct **SFCOLORRGBA** **setValue**
- double **tickTime**

### 3.691.1 Detailed Description

Definition at line 4940 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.692 X3D\_MetadataSFDDOUBLE Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- struct **X3D\_Node** \* **\_executionContext**
- double **value**
- double **valueChanged**
- double **setValue**
- double **tickTime**

### 3.692.1 Detailed Description

Definition at line 4961 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.693 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **value**
- float **valueChanged**
- float **setValue**
- double **tickTime**

### 3.693.1 Detailed Description

Definition at line 4982 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.694 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **value**
- struct **Multi\_Int32** **valueChanged**
- struct **Multi\_Int32** **setValue**
- double **tickTime**

### 3.694.1 Detailed Description

Definition at line 5003 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.695 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **value**
- int **valueChanged**
- int **setValue**
- double **tickTime**

### 3.695.1 Detailed Description

Definition at line 5024 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.696 X3D\_MetadataSFMMatrix3d Struct Reference

### Data Fields

- int **\_nodeType**
- int **\_renderFlags**
- int **\_hit**
- int **\_change**
- int **\_ichange**
- struct **Vector** \* **\_parentVector**
- double **\_dist**
- float **\_extent** [6]
- struct **X3D\_PolyRep** \* **\_intern**
- int **referenceCount**
- int **\_defaultContainer**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFMMatrix3d** **value**
- struct **SFMMatrix3d** **valueChanged**
- struct **SFMMatrix3d** **setValue**
- double **tickTime**

### 3.696.1 Detailed Description

Definition at line 5045 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.697 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFMatrix3f** **value**
- struct **SFMatrix3f** **valueChanged**
- struct **SFMatrix3f** **setValue**
- double **tickTime**

### 3.697.1 Detailed Description

Definition at line 5066 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.698 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFMatrix4d** **value**
- struct **SFMatrix4d** **valueChanged**
- struct **SFMatrix4d** **setValue**
- double **tickTime**



### 3.698.1 Detailed Description

Definition at line 5087 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.699 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFMatrix4f** **value**
- struct **SFMatrix4f** **valueChanged**
- struct **SFMatrix4f** **setValue**
- double **tickTime**

### 3.699.1 Detailed Description

Definition at line 5108 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.700 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **value**
- struct **X3D\_Node** \* **valueChanged**
- struct **X3D\_Node** \* **setValue**
- double **tickTime**

### 3.700.1 Detailed Description

Definition at line 5129 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.701 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFRotation** **value**
- struct **SFRotation** **valueChanged**
- struct **SFRotation** **setValue**
- double **tickTime**

### 3.701.1 Detailed Description

Definition at line 5150 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.702 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **value**
- struct **Uni\_String** \* **valueChanged**
- struct **Uni\_String** \* **setValue**
- double **tickTime**

### 3.702.1 Detailed Description

Definition at line 5171 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.703 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**
- struct **X3D\_Node** \* **\_executionContext**
- double **value**
- double **valueChanged**
- double **setValue**
- double **tickTime**

### 3.703.1 Detailed Description

Definition at line 5192 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.704 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec2d** **value**
- struct **SFVec2d** **valueChanged**
- struct **SFVec2d** **setValue**
- double **tickTime**

### 3.704.1 Detailed Description

Definition at line 5213 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.705 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec2f** **value**
- struct **SFVec2f** **valueChanged**
- struct **SFVec2f** **setValue**
- double **tickTime**

### 3.705.1 Detailed Description

Definition at line 5234 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.706 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3d** **value**
- struct **SFVec3d** **valueChanged**
- struct **SFVec3d** **setValue**
- double **tickTime**

### 3.706.1 Detailed Description

Definition at line 5255 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.707 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec3f** **value**
- struct **SFVec3f** **valueChanged**
- struct **SFVec3f** **setValue**
- double **tickTime**

### 3.707.1 Detailed Description

Definition at line 5276 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.708 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec4d** **value**
- struct **SFVec4d** **valueChanged**
- struct **SFVec4d** **setValue**
- double **tickTime**

### 3.708.1 Detailed Description

Definition at line 5297 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.709 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec4f** **value**
- struct **SFVec4f** **valueChanged**
- struct **SFVec4f** **setValue**
- double **tickTime**

### 3.709.1 Detailed Description

Definition at line 5318 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.710 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **name**
- struct **Uni\_String** \* **reference**
- struct **Multi\_String** **value**

### 3.710.1 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

## 3.711 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Uni\_String** \* **description**
- int **loop**
- struct **X3D\_Node** \* **metadata**
- double **resumeTime**
- double **pauseTime**
- float **speed**
- double **startTime**
- double **stopTime**
- struct **Multi\_String** **url**
- double **duration\_changed**
- double **elapsedTime**
- int **isActive**
- double **isPaused**
- int **repeatS**
- int **repeatT**
- struct **X3D\_Node** \* **textureProperties**
- int **\_\_textureTableIndex**
- void \* **\_parentResource**

### 3.711.1 Detailed Description

Definition at line 5381 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.712 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**
- 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**

### 3.712.1 Detailed Description

Definition at line 5416 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.713 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **texCoord**



### 3.713.1 Detailed Description

Definition at line 5441 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.714 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **textureTransform**

### 3.714.1 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

## 3.715 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **Multi\_Float** **avatarSize**
- int **headlight**
- float **speed**
- struct **Multi\_String** **type**
- float **visibilityLimit**
- int **isBound**
- struct **Multi\_String** **transitionType**
- double **bindTime**
- struct **X3D\_Node** \* **metadata**
- double **transitionTime**
- int **transitionComplete**

### 3.715.1 Detailed Description

Definition at line 5479 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.716 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**
- struct **X3D\_Node** \* **\_executionContext**

### 3.716.1 Detailed Description

Definition at line 1920 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.717 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3f** **vector**

### 3.717.1 Detailed Description

Definition at line 5508 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.718 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec3f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec3f** **value\_changed**

### 3.718.1 Detailed Description

Definition at line 5527 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.719 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **knot**
- int **order**
- int **tessellation**
- struct **Multi\_Vec3f** **\_\_points**
- int **\_\_numPoints**

### 3.719.1 Detailed Description

Definition at line 5549 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.720 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2d** **controlPoint**
- struct **Multi\_Double** **weight**
- struct **Multi\_Double** **knot**
- int **order**
- int **tessellation**

### 3.720.1 Detailed Description

Definition at line 5574 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.721 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**
- 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**

### 3.721.1 Detailed Description

Definition at line 5597 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.722 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**
- 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**

### 3.722.1 Detailed Description

Definition at line 5621 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.723 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**
- 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**

### 3.723.1 Detailed Description

Definition at line 5653 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.724 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**
- 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**

### 3.724.1 Detailed Description

Definition at line 5677 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.725 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**
- 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**

### 3.725.1 Detailed Description

Definition at line 5701 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h



## 3.726 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **crossSectionCurve**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **trajectoryCurve**
- int **ccw**
- int **solid**

### 3.726.1 Detailed Description

Definition at line 5730 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.727 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **X3D\_Node** \* **profileCurve**
- struct **X3D\_Node** \* **trajectoryCurve**
- int **ccw**
- int **solid**

### 3.727.1 Detailed Description

Definition at line 5752 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.728 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**
- 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**

### 3.728.1 Detailed Description

Definition at line 5774 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.729 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**
- 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**

### 3.729.1 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

### 3.730 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Rotation** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **value\_changed**

#### 3.730.1 Detailed Description

Definition at line 5875 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.731 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **SFVec3f** **centerOfRotation**
- struct **Uni\_String** \* **description**
- struct **Multi\_Float** **fieldOfView**
- int **jump**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **orientation**
- struct **SFVec3f** **position**
- int **retainUserOffsets**
- double **bindTime**
- int **isBound**

### 3.731.1 Detailed Description

Definition at line 5897 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.732 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**
- 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**

### 3.732.1 Detailed Description

Definition at line 5835 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.733 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**
- 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**

### 3.733.1 Detailed Description

Definition at line 5925 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.734 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_String** **objectType**
- int **pickable**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **FreeWRL\_\_protoDef**
- struct **Multi\_Node** **FreeWRL\_PROTOInterfaceNodes**

### 3.734.1 Detailed Description

Definition at line 5953 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.735 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Int32** **image**
- struct **X3D\_Node** \* **metadata**
- int **repeatS**
- int **repeatT**
- struct **X3D\_Node** \* **textureProperties**
- void \* **\_parentResource**
- int **\_\_textureTableIndex**

### 3.735.1 Detailed Description

Definition at line 5980 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.736 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**
- 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**

### 3.736.1 Detailed Description

Definition at line 6004 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h



## 3.737 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**
- 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**

### 3.737.1 Detailed Description

Definition at line 6037 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.738 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**
- 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 **Multi\_Vec3f** **pickedPoint**
- struct **Uni\_String** \* **set\_intersectionType**
- struct **Uni\_String** \* **intersectionType**
- struct **Uni\_String** \* **set\_sortOrder**
- struct **Uni\_String** \* **sortOrder**
- int **\_oldIsActive**
- struct **Multi\_Node** **\_oldpickTarget**
- struct **Multi\_Node** **\_oldpickedGeometry**
- struct **Multi\_Vec3f** **\_oldpickedPoint**
- struct **SFVec3f** **\_bboxCenter**
- struct **SFVec3f** **\_bboxSize**

### 3.738.1 Detailed Description

Definition at line 6066 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.739 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**
- 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**

### 3.739.1 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

## 3.740 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **lineSegments**

### 3.740.1 Detailed Description

Definition at line 6127 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.741 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **point**

### 3.741.1 Detailed Description

Definition at line 6146 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.742 X3D\_PolyRep Struct Reference

### Data Fields

- int **irep\_change**
- int **ccw**
- int **ntri**
- int **streamed**
- GLuint \* **cindex**
- GLuint \* **colindex**
- GLuint \* **norindex**
- GLuint \* **tcindex**
- float \* **actualCoord**
- float \* **color**
- float \* **normal**
- float \* **GeneratedTexCoords**
- int **tcoordtype**
- int **texgentype**
- GLfloat **minVals** [3]
- GLfloat **maxVals** [3]
- GLfloat **transparency**
- int **isRGBAcolorNode**
- GLuint **VBO\_buffers** [VBO\_COUNT]

### 3.742.1 Detailed Description

Definition at line 61 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.743 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec3f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **value\_changed**

### 3.743.1 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

## 3.744 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Vec2f** **keyValue**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec2f** **value\_changed**

### 3.744.1 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

## 3.745 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**
- 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**

### 3.745.1 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

## 3.746 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**
- 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**
- 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**

### 3.746.1 Detailed Description

Definition at line 6236 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.747 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**
- 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**

#### 3.747.1 Detailed Description

Definition at line 6284 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.748 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**
- 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**

### 3.748.1 Detailed Description

Definition at line 6315 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.749 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**
- 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 **radiolD**
- float **readInterval**
- float **receivedPower**
- int **receiverState**
- int **rtpHeaderExpected**
- int **sitelD**
- int **transmitterApplicationID**
- int **transmitterEntityID**
- int **transmitterRadiolD**
- int **transmitterSitelD**
- int **whichGeometry**
- float **writelInterval**
- int **isActive**
- int **isNetworkReader**
- int **isNetworkWriter**
- int **isRtpHeaderHeard**
- int **isStandAlone**
- double **timestamp**
- struct **SFVec3f bboxCenter**
- struct **SFVec3f bboxSize**

### 3.749.1 Detailed Description

Definition at line 6344 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.750 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec2f** **size**
- int **solid**
- struct **Multi\_Vec3f** **\_\_points**
- int **\_\_numPoints**

### 3.750.1 Detailed Description

Definition at line 6390 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.751 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Float** **keyValue**
- struct **X3D\_Node** \* **metadata**
- float **value\_changed**

### 3.751.1 Detailed Description

Definition at line 6412 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.752 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** **url**
- int **directOutput**
- int **mustEvaluate**
- struct **X3D\_Node** \* **metadata**
- void \* **\_\_scriptObj**
- void \* **\_parentResource**

#### 3.752.1 Detailed Description

Definition at line 6434 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.753 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**
- 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**

### 3.753.1 Detailed Description

Definition at line 6457 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.754 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**
- 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**

### 3.754.1 Detailed Description

Definition at line 6481 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.755 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **appearance**
- struct **X3D\_Node** \* **geometry**
- struct **X3D\_Node** \* **metadata**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_\_visible**
- int **\_\_occludeCheckCount**
- int **\_\_Samples**
- int **\_shaderTableEntry**

### 3.755.1 Detailed Description

Definition at line 6505 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.756 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**
- 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 **radiolID**
- 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**

### 3.756.1 Detailed Description

Definition at line 6531 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.757 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**
- 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**

### 3.757.1 Detailed Description

Definition at line 6577 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.758 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- float **radius**
- int **solid**
- struct **Multi\_Vec3f** **\_\_points**
- int **\_sideVBO**
- int **\_\_SphereIndxVBO**



### 3.758.1 Detailed Description

Definition at line 6608 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.759 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**
- 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**

### 3.759.1 Detailed Description

Definition at line 6631 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.760 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**
- 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**

#### 3.760.1 Detailed Description

Definition at line 6663 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.761 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**
- 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**

### 3.761.1 Detailed Description

Definition at line 6688 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.762 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**
- 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**

### 3.762.1 Detailed Description

Definition at line 6713 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.763 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**
- 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**

### 3.763.1 Detailed Description

Definition at line 6738 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.764 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**
- struct **X3D\_Node** \* **\_executionContext**
- float **set\_fraction**
- struct **Multi\_Float** **key**
- struct **Multi\_Rotation** **keyValue**
- struct **X3D\_Node** \* **metadata**
- int **normalizeVelocity**
- struct **SFRotation** **value\_changed**

### 3.764.1 Detailed Description

Definition at line 6771 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.765 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Node** **children**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_\_transparency**
- int **\_\_solid**
- struct **Multi\_Node** **\_sortedChildren**

### 3.765.1 Detailed Description

Definition at line 6794 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.766 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**
- 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**

### 3.766.1 Detailed Description

Definition at line 6818 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.767 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- struct **Multi\_Node** **choice**
- struct **Multi\_Node** **children**
- struct **X3D\_Node** \* **metadata**
- int **whichChoice**
- struct **SFVec3f** **bboxCenter**
- struct **SFVec3f** **bboxSize**
- int **\_\_isX3D**

### 3.767.1 Detailed Description

Definition at line 6843 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.768 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**
- 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 **\_\_rendersub**

### 3.768.1 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

## 3.769 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**
- 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**
- 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**



### 3.769.1 Detailed Description

Definition at line 6896 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.770 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **point**

### 3.770.1 Detailed Description

Definition at line 6933 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.771 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Uni\_String** \* **mode**
- struct **Multi\_Float** **parameter**

### 3.771.1 Detailed Description

Definition at line 6952 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.772 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**
- 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**

### 3.772.1 Detailed Description

Definition at line 6972 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.773 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **SFVec2f** **center**
- struct **X3D\_Node** \* **metadata**
- float **rotation**
- struct **SFVec2f** **scale**
- struct **SFVec2f** **translation**

### 3.773.1 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

## 3.774 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**
- 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**

### 3.774.1 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

## 3.775 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_boolean**
- double **triggerTime**
- struct **X3D\_Node** \* **metadata**

### 3.775.1 Detailed Description

Definition at line 7057 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.776 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**
- 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**

### 3.776.1 Detailed Description

Definition at line 7077 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.777 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_Node** **addChildren**
- struct **Multi\_Node** **removeChildren**
- 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**

### 3.777.1 Detailed Description

Definition at line 7107 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.778 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**
- 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 **radiolD**
- 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**

### 3.778.1 Detailed Description

Definition at line 7142 of file Structs.h.

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

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

### 3.779 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**
- 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**

#### 3.779.1 Detailed Description

Definition at line 7204 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.780 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**
- 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**

### 3.780.1 Detailed Description

Definition at line 7234 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.781 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **X3D\_Node** \* **metadata**
- struct **Multi\_Vec2f** **vertices**
- int **solid**
- struct **Multi\_Vec2f** **\_\_texCoords**

### 3.781.1 Detailed Description

Definition at line 7263 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.782 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**
- 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**

### 3.782.1 Detailed Description

Definition at line 7284 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.783 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**
- 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**

### 3.783.1 Detailed Description

Definition at line 7314 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.784 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**
- struct **X3D\_Node** \* **\_executionContext**
- int **set\_bind**
- struct **SFVec3f** **centerOfRotation**
- struct **Uni\_String** \* **description**
- float **fieldOfView**
- int **jump**
- struct **X3D\_Node** \* **metadata**
- struct **SFRotation** **orientation**
- struct **SFVec3f** **position**
- int **retainUserOffsets**
- double **bindTime**
- int **isBound**

### 3.784.1 Detailed Description

Definition at line 7347 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.785 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**
- 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**

### 3.785.1 Detailed Description

Definition at line 7375 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.786 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 \*)

### 3.786.1 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

### 3.787 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**
- 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**

#### 3.787.1 Detailed Description

Definition at line 7400 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

### 3.788 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**
- struct **X3D\_Node** \* **\_executionContext**
- struct **Multi\_String** **info**
- struct **Uni\_String** \* **title**
- struct **X3D\_Node** \* **metadata**

### 3.788.1 Detailed Description

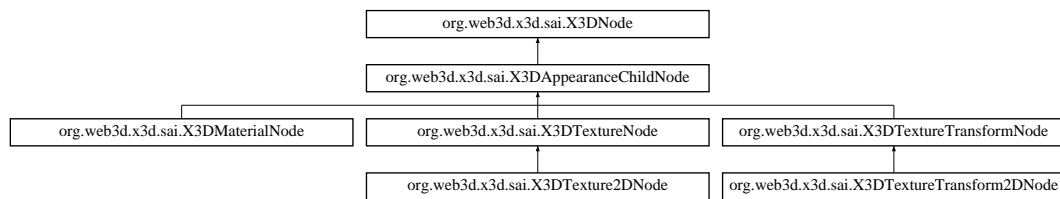
Definition at line 7429 of file Structs.h.

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

- src/lib/vrml\_parser/Structs.h

## 3.789 org.web3d.x3d.sai.X3DAppearanceChildNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DAppearanceChildNode:



### Additional Inherited Members

### 3.789.1 Detailed Description

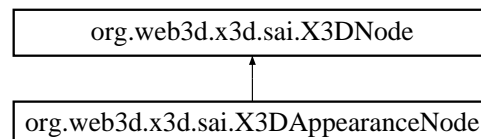
Definition at line 3 of file X3DAppearanceChildNode.java.

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

- src/java/org/web3d/x3d/sai/X3DAppearanceChildNode.java

## 3.790 org.web3d.x3d.sai.X3DAppearanceNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DAppearanceNode:



### Additional Inherited Members

### 3.790.1 Detailed Description

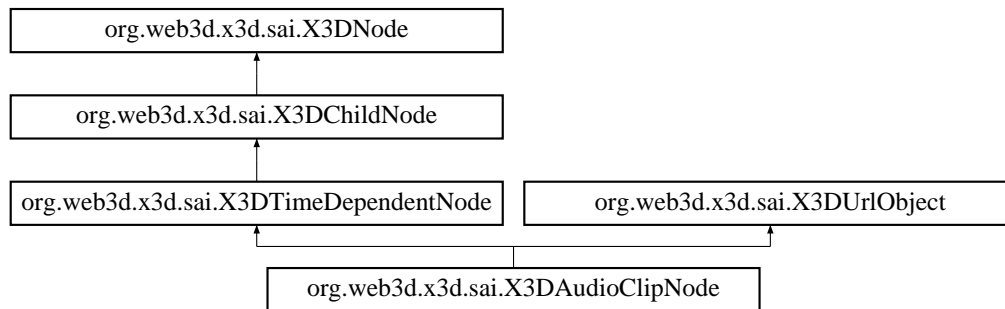
Definition at line 3 of file X3DAppearanceNode.java.

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

- src/java/org/web3d/x3d/sai/X3DAppearanceNode.java

### 3.791 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)

#### 3.791.1 Detailed Description

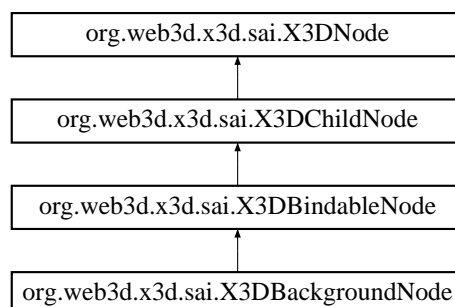
Definition at line 3 of file X3DAudioClipNode.java.

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

- src/java/org/web3d/x3d/sai/X3DAudioClipNode.java

### 3.792 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)

### 3.792.1 Detailed Description

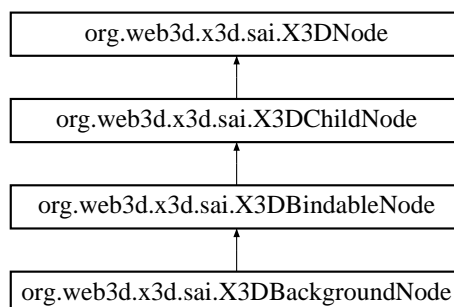
Definition at line 3 of file X3DBackgroundNode.java.

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

- src/java/org/web3d/x3d/sai/X3DBackgroundNode.java

## 3.793 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** ()

### 3.793.1 Detailed Description

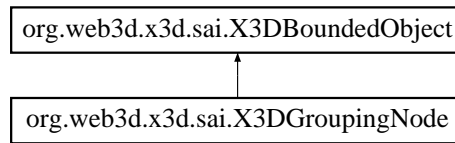
Definition at line 3 of file X3DBindableNode.java.

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

- src/java/org/web3d/x3d/sai/X3DBindableNode.java

### 3.794 org.web3d.x3d.sai.X3DBoundedObject Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DBoundedObject:



#### 3.794.1 Detailed Description

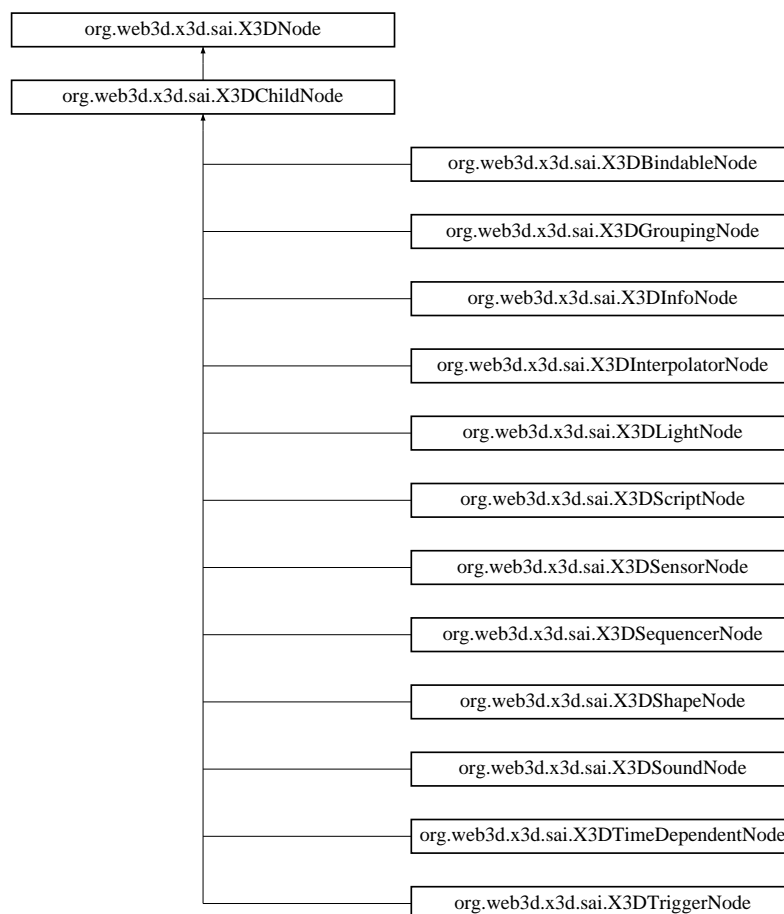
Definition at line 3 of file `X3DBoundedObject.java`.

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

- `src/java/org/web3d/x3d/sai/X3DBoundedObject.java`

### 3.795 org.web3d.x3d.sai.X3DChildNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DChildNode:



## Additional Inherited Members

### 3.795.1 Detailed Description

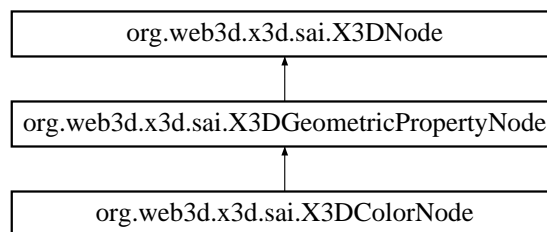
Definition at line 3 of file X3DChildNode.java.

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

- src/java/org/web3d/x3d/sai/X3DChildNode.java

## 3.796 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)

### 3.796.1 Detailed Description

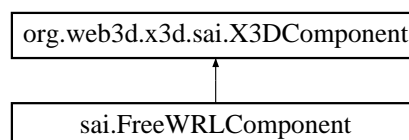
Definition at line 3 of file X3DColorNode.java.

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

- src/java/org/web3d/x3d/sai/X3DColorNode.java

## 3.797 org.web3d.x3d.sai.X3DComponent Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DComponent:



## Public Member Functions

- **ExternalBrowser** **getBrowser** ()
- Object **getImplementation** ()
- void **shutdown** ()

### 3.797.1 Detailed Description

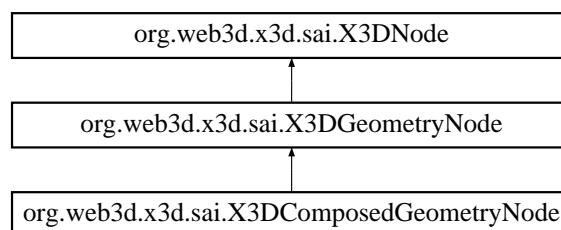
Definition at line 3 of file X3DComponent.java.

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

- src/java/org/web3d/x3d/sai/X3DComponent.java

## 3.798 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** (**X3DProtolInstance** comp)
- **X3DNode** **getCoord** ()
- void **setCoord** (**X3DCoordinateNode** node)
- void **setCoord** (**X3DProtolInstance** node)
- **X3DNode** **getTexCoord** ()
- void **setTexCoord** (**X3DTextureCoordinateNode** node)
- void **setTexCoord** (**X3DProtolInstance** node)
- **X3DNode** **getNormal** ()
- void **setNormal** (**X3DNormalNode** node)
- void **setNormal** (**X3DProtolInstance** 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)

### 3.798.1 Detailed Description

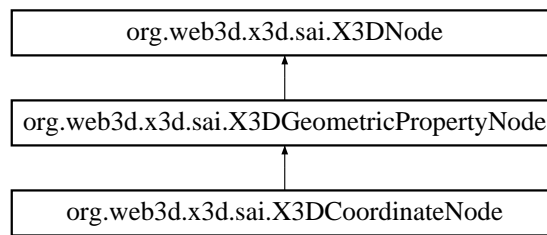
Definition at line 3 of file X3DComposedGeometryNode.java.

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

- src/java/org/web3d/x3d/sai/X3DComposedGeometryNode.java

## 3.799 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)

### 3.799.1 Detailed Description

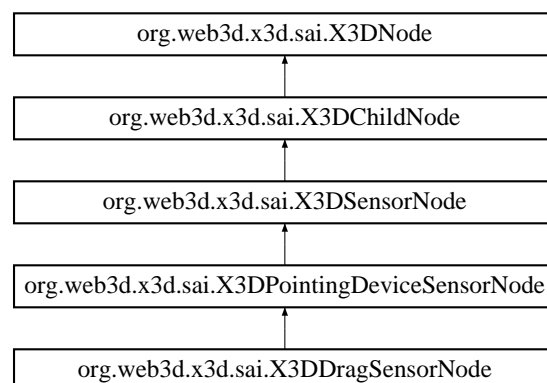
Definition at line 3 of file X3DCoordinateNode.java.

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

- src/java/org/web3d/x3d/sai/X3DCoordinateNode.java

## 3.800 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)

### 3.800.1 Detailed Description

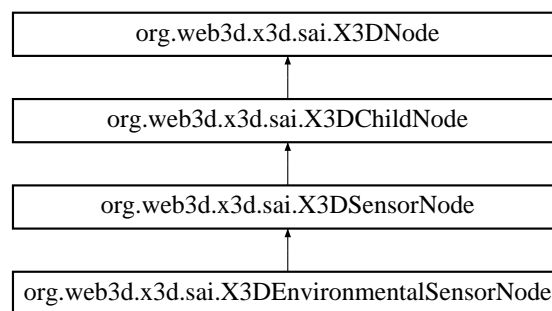
Definition at line 3 of file X3DDragSensorNode.java.

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

- src/java/org/web3d/x3d/sai/X3DDragSensorNode.java

## 3.801 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)

### 3.801.1 Detailed Description

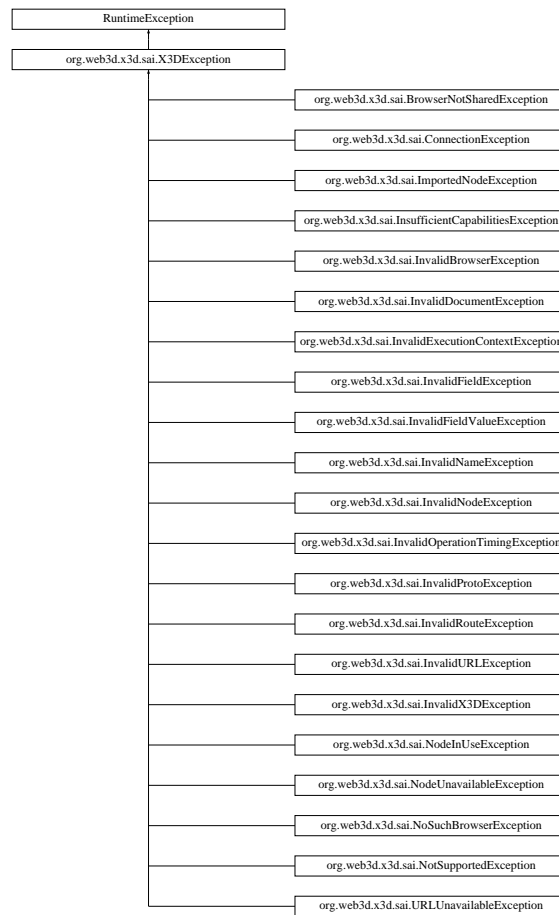
Definition at line 3 of file X3DEnvironmentalSensorNode.java.

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

- src/java/org/web3d/x3d/sai/X3DEnvironmentalSensorNode.java

## 3.802 org.web3d.x3d.sai.X3DException Class Reference

Inheritance diagram for org.web3d.x3d.sai.X3DException:



### Public Member Functions

- **X3DException** (String msg)

#### 3.802.1 Detailed Description

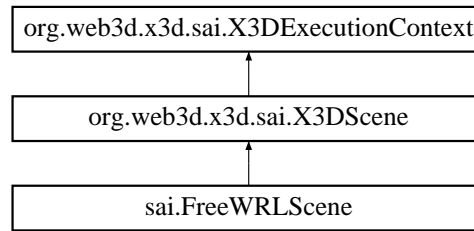
Definition at line 3 of file X3DException.java.

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

- src/java/org/web3d/x3d/sai/X3DException.java

### 3.803 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, InvalidNameException
- **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, InvalidName←Exception
- **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



### 3.803.1 Detailed Description

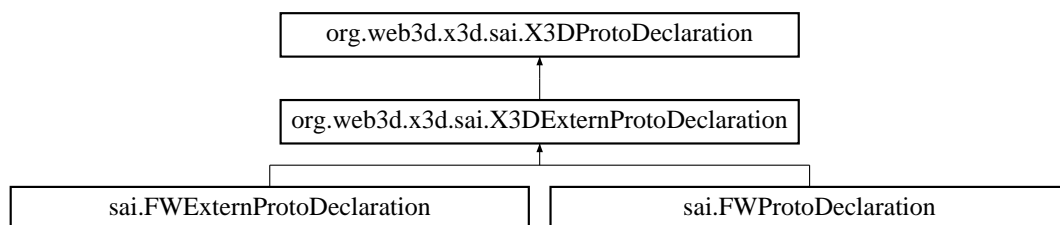
Definition at line 3 of file X3DExecutionContext.java.

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

- src/java/org/web3d/x3d/sai/X3DExecutionContext.java

## 3.804 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`

### 3.804.1 Detailed Description

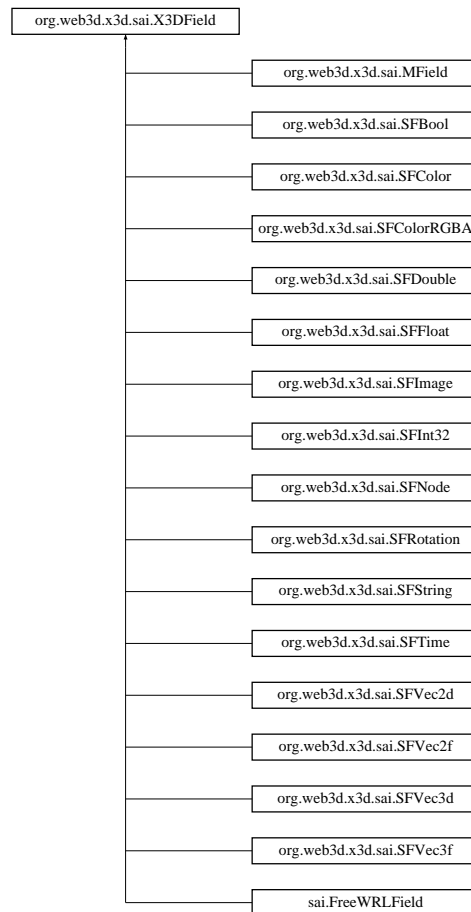
Definition at line 3 of file X3DExternProtoDeclaration.java.

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

- src/java/org/web3d/x3d/sai/X3DExternProtoDeclaration.java

## 3.805 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** ()

### 3.805.1 Detailed Description

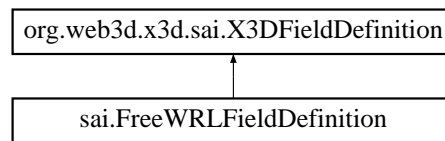
Definition at line 3 of file X3DField.java.

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

- src/java/org/web3d/x3d/sai/X3DField.java

## 3.806 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** ()

#### 3.806.1 Detailed Description

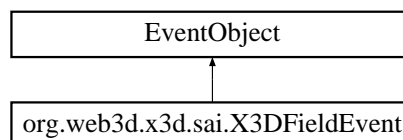
Definition at line 3 of file X3DFieldDefinition.java.

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

- src/java/org/web3d/x3d/sai/X3DFieldDefinition.java

## 3.807 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** ()

#### 3.807.1 Detailed Description

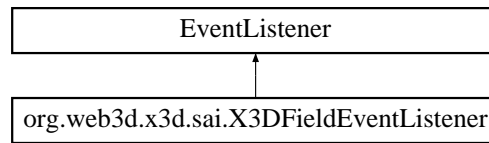
Definition at line 4 of file X3DFieldEvent.java.

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

- src/java/org/web3d/x3d/sai/X3DFieldEvent.java

### 3.808 org.web3d.x3d.sai.X3DFieldEventListener Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DFieldEventListener:



#### Public Member Functions

- void **readableFieldChanged** (**X3DFieldEvent** evt)

#### 3.808.1 Detailed Description

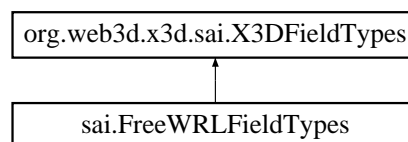
Definition at line 3 of file `X3DFieldEventListener.java`.

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

- `src/java/org/web3d/x3d/sai/X3DFieldEventListener.java`

### 3.809 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 **MFFLOAT** = 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

### 3.809.1 Detailed Description

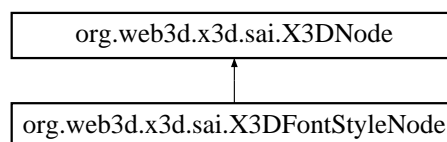
Definition at line 3 of file X3DFieldTypes.java.

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

- src/java/org/web3d/x3d/sai/X3DFieldTypes.java

## 3.810 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

### 3.810.1 Detailed Description

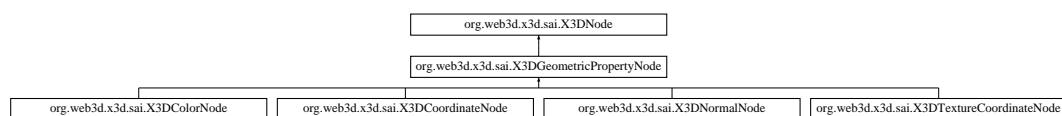
Definition at line 4 of file X3DFontStyleNode.java.

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

- src/java/org/web3d/x3d/sai/X3DFontStyleNode.java

## 3.811 org.web3d.x3d.sai.X3DGeometricPropertyNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DGeometricPropertyNode:



## Additional Inherited Members

### 3.811.1 Detailed Description

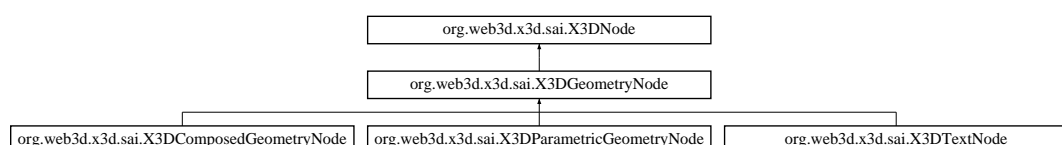
Definition at line 3 of file X3DGeometricPropertyNode.java.

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

- src/java/org/web3d/x3d/sai/X3DGeometricPropertyNode.java

## 3.812 org.web3d.x3d.sai.X3DGeometryNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DGeometryNode:



## Additional Inherited Members

### 3.812.1 Detailed Description

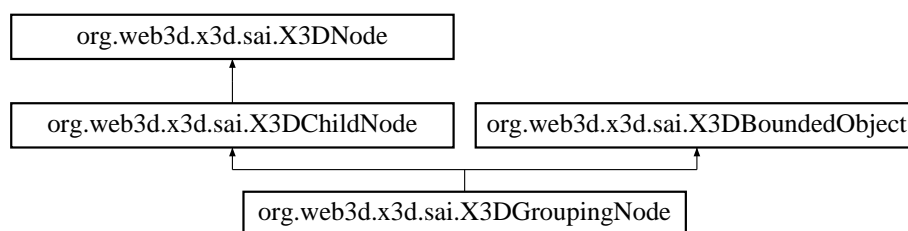
Definition at line 3 of file X3DGeometryNode.java.

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

- src/java/org/web3d/x3d/sai/X3DGeometryNode.java

## 3.813 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** ()

### 3.813.1 Detailed Description

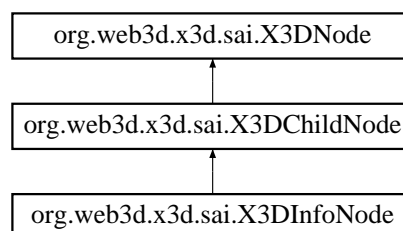
Definition at line 3 of file X3DGroupingNode.java.

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

- src/java/org/web3d/x3d/sai/X3DGroupingNode.java

## 3.814 org.web3d.x3d.sai.X3DInfoNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DInfoNode:



## Additional Inherited Members

### 3.814.1 Detailed Description

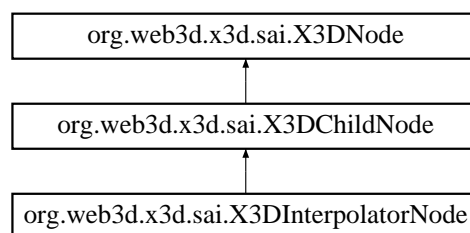
Definition at line 3 of file X3DInfoNode.java.

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

- `src/java/org/web3d/x3d/sai/X3DInfoNode.java`

## 3.815 `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)

### 3.815.1 Detailed Description

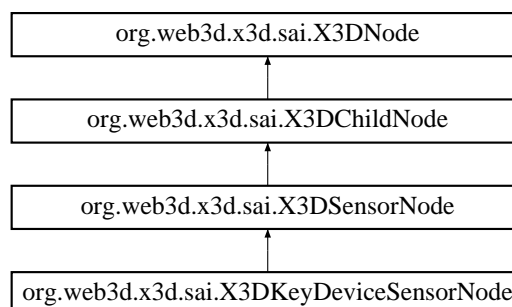
Definition at line 3 of file X3DInterpolatorNode.java.

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

- `src/java/org/web3d/x3d/sai/X3DInterpolatorNode.java`

## 3.816 `org.web3d.x3d.sai.X3DKeyDeviceSensorNode` Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DKeyDeviceSensorNode`:





## Additional Inherited Members

### 3.816.1 Detailed Description

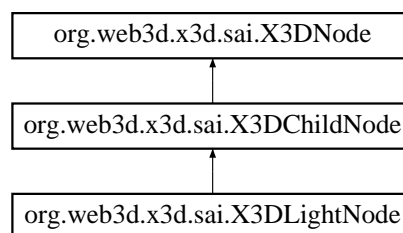
Definition at line 3 of file X3DKeyDeviceSensorNode.java.

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

- src/java/org/web3d/x3d/sai/X3DKeyDeviceSensorNode.java

## 3.817 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

### 3.817.1 Detailed Description

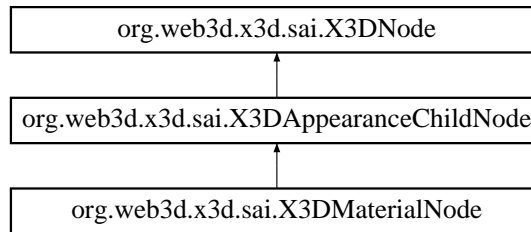
Definition at line 3 of file X3DLightNode.java.

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

- src/java/org/web3d/x3d/sai/X3DLightNode.java

### 3.818 org.web3d.x3d.sai.X3DMaterialNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DMaterialNode:



#### Additional Inherited Members

#### 3.818.1 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

### 3.819 org.web3d.x3d.sai.X3DMetadataObject Interface Reference

#### Public Member Functions

- void **setStandard** (String std)
- String **getStandard** ()
- void **setName** (String name)
- String **getName** ()

#### 3.819.1 Detailed Description

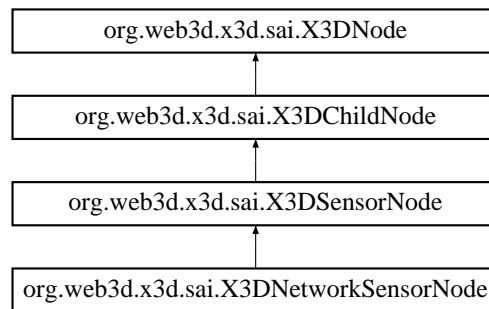
Definition at line 3 of file X3DMetadataObject.java.

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

- src/java/org/web3d/x3d/sai/X3DMetadataObject.java

## 3.820 org.web3d.x3d.sai.X3DNetworkSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DNetworkSensorNode:



### Additional Inherited Members

#### 3.820.1 Detailed Description

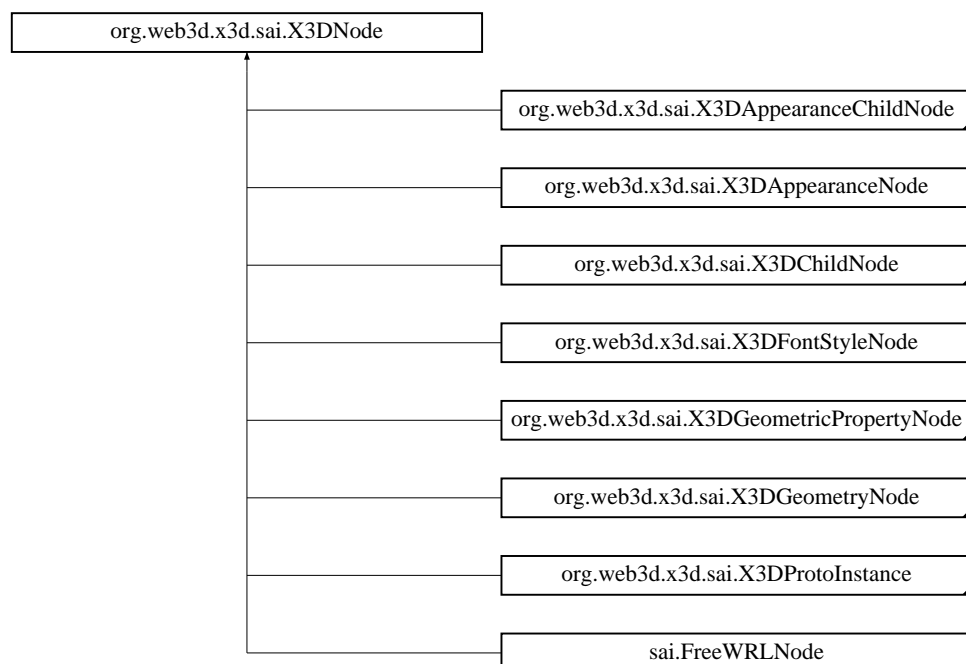
Definition at line 3 of file X3DNetworkSensorNode.java.

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

- src/java/org/web3d/x3d/sai/X3DNetworkSensorNode.java

## 3.821 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** ()

### 3.821.1 Detailed Description

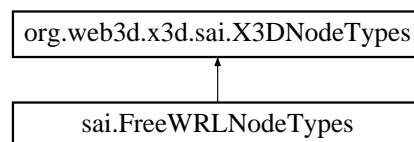
Definition at line 3 of file `X3DNode.java`.

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

- `src/java/org/web3d/x3d/sai/X3DNode.java`

## 3.822 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

### 3.822.1 Detailed Description

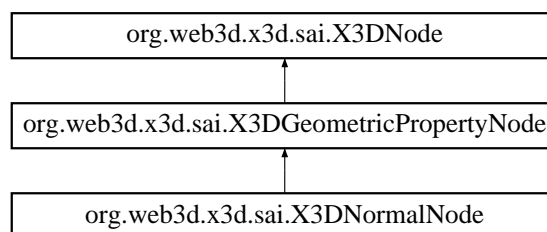
Definition at line 3 of file X3DNodeTypes.java.

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

- src/java/org/web3d/x3d/sai/X3DNodeTypes.java

## 3.823 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)

### 3.823.1 Detailed Description

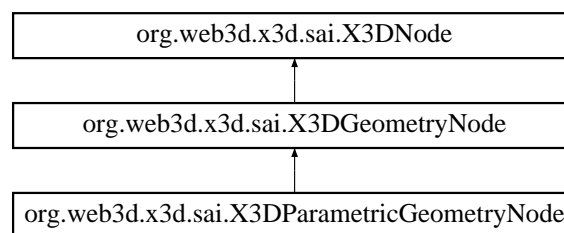
Definition at line 3 of file X3DNormalNode.java.

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

- `src/java/org/web3d/x3d/sai/X3DNormalNode.java`

## 3.824 `org.web3d.x3d.sai.X3DParametricGeometryNode` Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DParametricGeometryNode`:



### Additional Inherited Members

### 3.824.1 Detailed Description

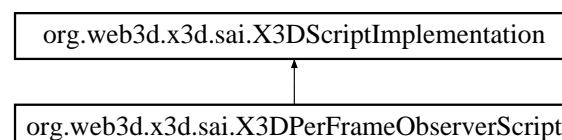
Definition at line 3 of file X3DParametricGeometryNode.java.

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

- `src/java/org/web3d/x3d/sai/X3DParametricGeometryNode.java`

## 3.825 `org.web3d.x3d.sai.X3DPerFrameObserverScript` Interface Reference

Inheritance diagram for `org.web3d.x3d.sai.X3DPerFrameObserverScript`:



### Public Member Functions

- `void prepareEvents ()`

### 3.825.1 Detailed Description

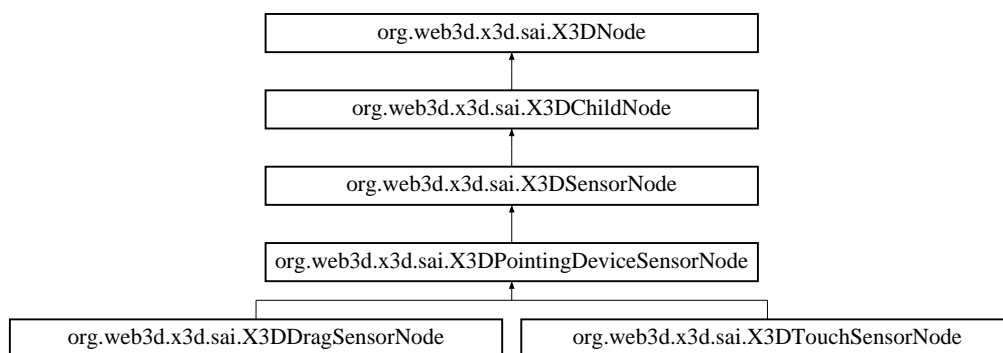
Definition at line 3 of file X3DPerFrameObserverScript.java.

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

- src/java/org/web3d/x3d/sai/X3DPerFrameObserverScript.java

## 3.826 org.web3d.x3d.sai.X3DPointingDeviceSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DPointingDeviceSensorNode:



### Additional Inherited Members

### 3.826.1 Detailed Description

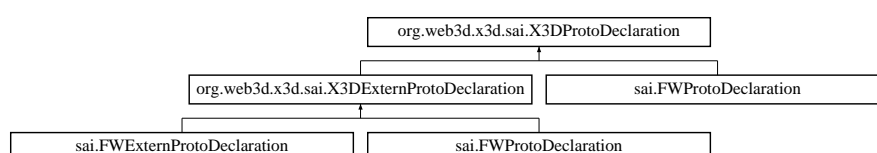
Definition at line 3 of file X3DPointingDeviceSensorNode.java.

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

- src/java/org/web3d/x3d/sai/X3DPointingDeviceSensorNode.java

## 3.827 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** ()

### 3.827.1 Detailed Description

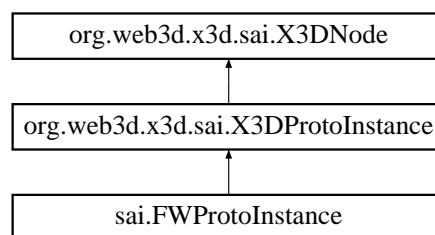
Definition at line 3 of file X3DProtoDeclaration.java.

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

- src/java/org/web3d/x3d/sai/X3DProtoDeclaration.java

## 3.828 org.web3d.x3d.sai.X3DProtoInstance Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DProtoInstance:



## Public Member Functions

- int[] **getImplementationTypes** ()

### 3.828.1 Detailed Description

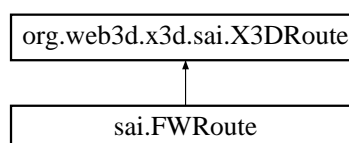
Definition at line 3 of file X3DProtoInstance.java.

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

- src/java/org/web3d/x3d/sai/X3DProtoInstance.java

## 3.829 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

### 3.829.1 Detailed Description

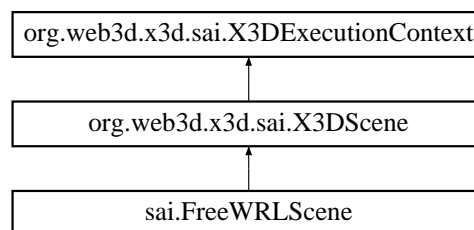
Definition at line 3 of file X3DRoute.java.

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

- src/java/org/web3d/x3d/sai/X3DRoute.java

## 3.830 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** ()

### 3.830.1 Detailed Description

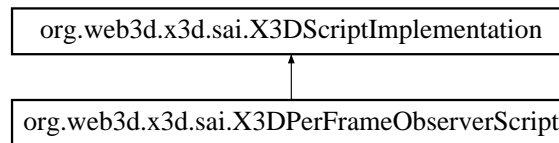
Definition at line 3 of file X3DScene.java.

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

- src/java/org/web3d/x3d/sai/X3DScene.java

### 3.831 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** ()

#### 3.831.1 Detailed Description

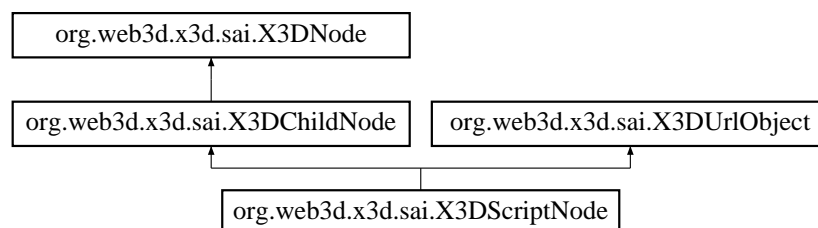
Definition at line 3 of file `X3DScriptImplementation.java`.

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

- `src/java/org/web3d/x3d/sai/X3DScriptImplementation.java`

### 3.832 org.web3d.x3d.sai.X3DScriptNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DScriptNode:



#### Additional Inherited Members

#### 3.832.1 Detailed Description

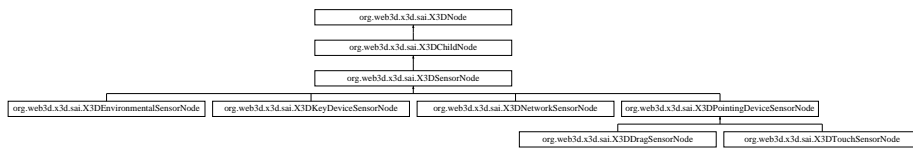
Definition at line 3 of file `X3DScriptNode.java`.

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

- `src/java/org/web3d/x3d/sai/X3DScriptNode.java`

### 3.833 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** ()

#### 3.833.1 Detailed Description

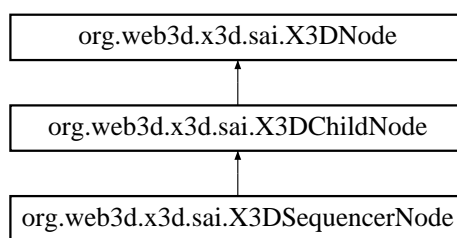
Definition at line 3 of file X3DSensorNode.java.

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

- src/java/org/web3d/x3d/sai/X3DSensorNode.java

### 3.834 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** ()

### 3.834.1 Detailed Description

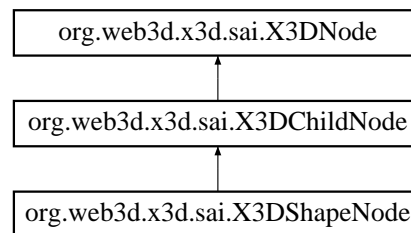
Definition at line 3 of file X3DSequencerNode.java.

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

- src/java/org/web3d/x3d/sai/X3DSequencerNode.java

## 3.835 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)

### 3.835.1 Detailed Description

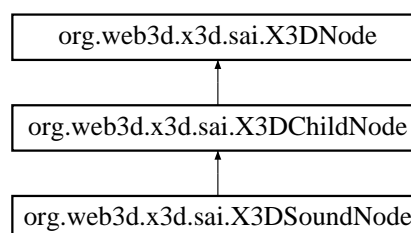
Definition at line 3 of file X3DShapeNode.java.

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

- src/java/org/web3d/x3d/sai/X3DShapeNode.java

## 3.836 org.web3d.x3d.sai.X3DSoundNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DSoundNode:



## Additional Inherited Members

### 3.836.1 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

## 3.837 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)

### 3.837.1 Detailed Description

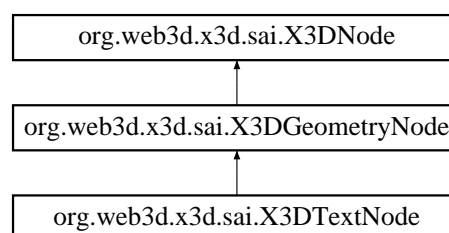
Definition at line 3 of file X3DSoundSourceNode.java.

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

- src/java/org/web3d/x3d/sai/X3DSoundSourceNode.java

## 3.838 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)

### 3.838.1 Detailed Description

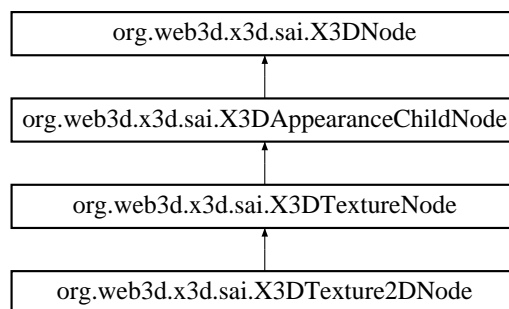
Definition at line 3 of file X3DTextNode.java.

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

- src/java/org/web3d/x3d/sai/X3DTextNode.java

## 3.839 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** ()

### 3.839.1 Detailed Description

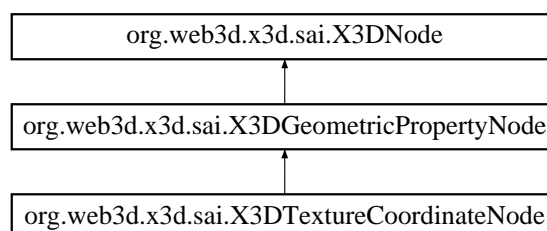
Definition at line 3 of file X3DTexture2DNode.java.

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

- src/java/org/web3d/x3d/sai/X3DTexture2DNode.java

## 3.840 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)

### 3.840.1 Detailed Description

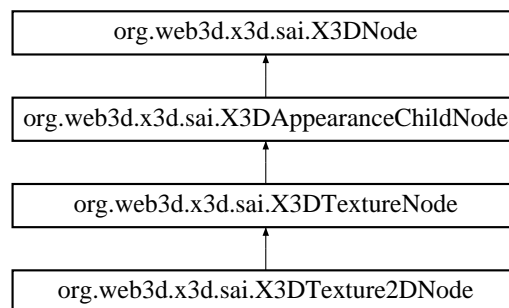
Definition at line 3 of file X3DTextureCoordinateNode.java.

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

- src/java/org/web3d/x3d/sai/X3DTextureCoordinateNode.java

## 3.841 org.web3d.x3d.sai.X3DTextureNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTextureNode:



## Additional Inherited Members

### 3.841.1 Detailed Description

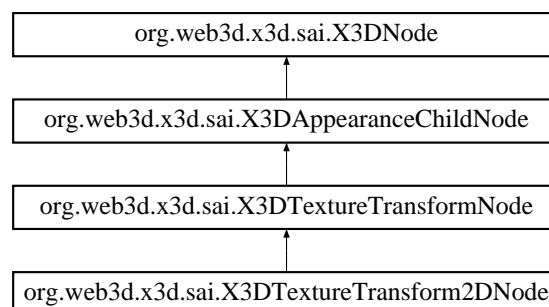
Definition at line 3 of file X3DTextureNode.java.

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

- src/java/org/web3d/x3d/sai/X3DTextureNode.java

## 3.842 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)

### 3.842.1 Detailed Description

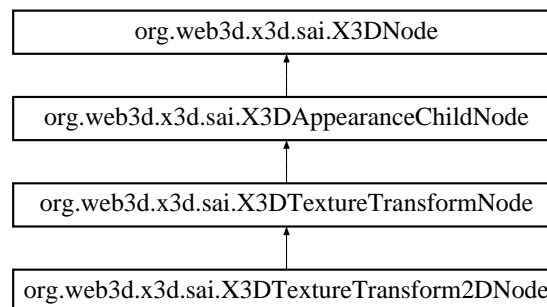
Definition at line 3 of file X3DTextureTransform2DNode.java.

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

- src/java/org/web3d/x3d/sai/X3DTextureTransform2DNode.java

## 3.843 org.web3d.x3d.sai.X3DTextureTransformNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTextureTransformNode:



## Additional Inherited Members

### 3.843.1 Detailed Description

Definition at line 3 of file X3DTextureTransformNode.java.

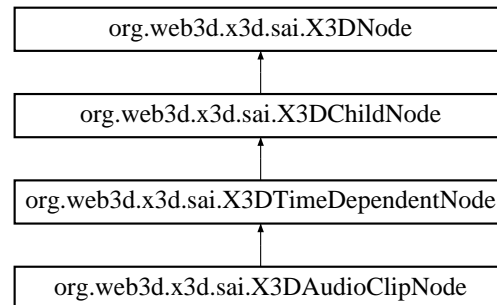
The documentation for this interface was generated from the following file:

- src/java/org/web3d/x3d/sai/X3DTextureTransformNode.java



## 3.844 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** ()

### 3.844.1 Detailed Description

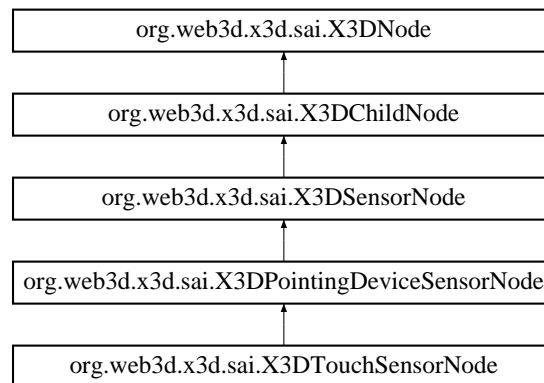
Definition at line 3 of file X3DTimeDependentNode.java.

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

- `src/java/org/web3d/x3d/sai/X3DTimeDependentNode.java`

### 3.845 org.web3d.x3d.sai.X3DTouchSensorNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTouchSensorNode:



#### Public Member Functions

- boolean **getIsOver** ()
- double **getEnterTime** ()
- double **getTouchTime** ()

#### 3.845.1 Detailed Description

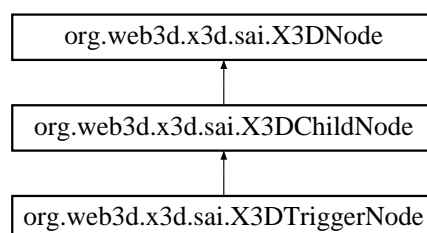
Definition at line 3 of file `X3DTouchSensorNode.java`.

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

- `src/java/org/web3d/x3d/sai/X3DTouchSensorNode.java`

### 3.846 org.web3d.x3d.sai.X3DTriggerNode Interface Reference

Inheritance diagram for org.web3d.x3d.sai.X3DTriggerNode:



## Additional Inherited Members

### 3.846.1 Detailed Description

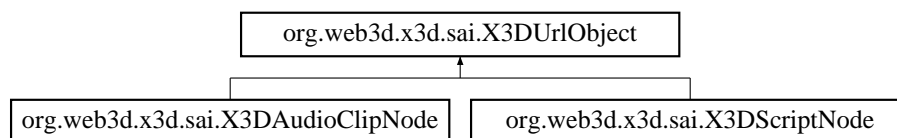
Definition at line 3 of file X3DTriggerNode.java.

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

- src/java/org/web3d/x3d/sai/X3DTriggerNode.java

## 3.847 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)

### 3.847.1 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

## 3.848 xml\_user\_data Struct Reference

## Data Fields

- **Stack \* context**
- **Stack \* nodes**
- **Stack \* atts**
- **Stack \* modes**
- **Stack \* fields**

### 3.848.1 Detailed Description

Definition at line 67 of file X3DParser.c.

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

- src/lib/x3d\_parser/X3DParser.c

## 3.849 XY Struct Reference

### Data Fields

- int **x**
- int **y**

### 3.849.1 Detailed Description

Definition at line 210 of file CursorDraw.c.

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

- src/lib/ui/CursorDraw.c

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