

libxml Reference

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Introduction

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Library Summary

Library Contents

Item	Description
<u>sce::Xml</u>	Namespace of XML processor
<u>sce::Xml::Attr</u>	Attr interface class
<u>sce::Xml::AttributeList</u>	AttributeList interface class
<u>sce::Xml::Dom</u>	Namespace of DOM API
<u>sce::Xml::Dom::Document</u>	DOM interface class
<u>sce::Xml::Dom::DocumentBuilder</u>	DOM creation interface class
<u>sce::Xml::Dom::Node</u>	Node interface class
<u>sce::Xml::Dom::NodeList</u>	NodeList interface class
<u>sce::Xml::Initializer</u>	Object initialization interface class
<u>sce::Xml::InitParameter</u>	Initialization parameter class
<u>sce::Xml::MemAllocator</u>	Memory allocator interface class
<u>sce::Xml::Sax</u>	Namespace of SAX API
<u>sce::Xml::Sax::DocumentHandler</u>	SAX event handler interface class
<u>sce::Xml::Sax::Parser</u>	SAX interface class
<u>sce::Xml::SerializeParameter</u>	XML output parameter class
<u>sce::Xml::SimpleData</u>	Class which holds a pointer to and length of data
<u>sce::Xml::String</u>	Class which holds a pointer to and length of a character string
<u>sce::Xml::Util</u>	Namespace of utility

Defines

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List of Definitions

Macro definitions

Definition

Definition	Value	Description
SCE_XML_ATTR_NAME_SIZE_MAX	(128)	Maximum size of an attribute name in DOM. If user provides attribute name bigger than this, it will be truncated to fit this size.
SCE_XML_ELEMENT_NAME_SIZE_MAX	(1024)	Maximum size of an element name in DOM. If user provides element name bigger than this, it will be truncated to fit this size.
SCE_XML_INVALID_INDEX	((index_t)-1)	Invalid index value
SCE_XML_INVALID_NODE_ID	(0ULL)	Invalid node ID value
SCE_XML_INVALID_SIZE	((size_t)-1)	Invalid size value
SCE_XML_SERIALIZE_OPT_USE_XML_DECLARATION	(1)	Option which outputs XML declaration

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sce::Xml

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Summary

sce::Xml

Namespace of XML processor

Definition

```
namespace Xml { }
```

Description

Namespace of XML processor

Variables

Public Variables

```
const index t invalidIndex  Value which represents invalid index
const size t   invalidSize   Value which represents invalid size
```

Internal classes, Structures, Namespaces

Item	Description
sce::Xml::Attr	Attr interface class
sce::Xml::AttributeList	Attributelist interface class
sce::Xml::Dom	Namespace of DOM API
sce::Xml::Initializer	Object initialization interface class
sce::Xml::InitParameter	Initialization parameter class
sce::Xml::MemAllocator	Memory allocator interface class
sce::Xml::Sax	Namespace of SAX API
sce::Xml::SerializeParameter	XML output parameter class
sce::Xml::SimpleData	Class which holds a pointer to and length of data
sce::Xml::String	Class which holds a pointer to and length of a character string
sce::Xml::Util	Namespace of utility

Enumeration Type

EntityType

Types of entity

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        enum EntityType {
            entityUnknown = 0,
            entityCharReference,
            entityBuiltInAmp,
            entityBuiltInQuot,
            entityBuiltInLt,
            entityBuiltInGt,
            entityBuiltInApos
        };
    }
}
```

Enumeration Values

Macro	Value	Description
entityUnknown	0	Entity type is unknown
entityCharReference	1	Character reference entity
entityBuiltInAmp	2	Predefined entity: &
entityBuiltInQuot	3	Predefined entity: "
entityBuiltInLt	4	Predefined entity: <
entityBuiltInGt	5	Predefined entity: >
entityBuiltInApos	6	Predefined entity: '

Description

These are the types of entity.

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result_t

Result codes

Definition

```
#include <xml/xml_result.h>
namespace sce {
    namespace Xml {
        enum result_t {
            resultSuccess = 0,
            resultGenericError = SCE_XML_PARSER_ERROR_OFFSET,
            resultNoMemory,
            resultNotInitialized,
            resultInvalidArgument,
            resultNotSupported,
            resultInitializeFailed,
            resultInvalidBinXml,
            resultParserBusy,
            resultXmlUnexpepectedEof,
            resultXmlSyntaxError,
            resultXmlEndTagMismatch,
            resultXmlInvalidChar,
            resultXmlInvalidDecValue,
            resultXmlInvalidHexValue,
            resultXmlClosingAngleBracketCharNotFound,
            resultXmlEqualityCharNotFound,
            resultXmlSemiColonCharNotFound,
            resultXmlQuoteCharNotFound,
            resultXmlEndOfCommentNotFound,
            resultXmlEndOfCDsectNotFound,
            resultXmlEndOfDtdNotFound,
            resultXmlUnknownEncoding,
            resultXmlHandlerNotSet,
            resultXmlInvalidPi,
            resultXmlInvalidDocumentElement,
            resultXmlDocumentElementNotFound,
            resultXmlDuplicateAttrName,
            resultDomError = SCE_XML_PARSER_ERROR_OFFSET + 0x200,
            resultDomNodeNotFound,
            resultDomReadOnlyError,
            resultDomMaxUniqueElementError,
            resultDomMaxUniqueAttrError,
            resultDomMaxNumOfAttrError,
            resultDomMaxSizeOfElementNameError,
            resultDomMaxSizeOfAttrNameError,
            resultDomMaxSizeOfAttrValueError,
            resultDomInvalidEnitivity,
            resultDomInvalidNodeType,
            resultGenericMessage = SCE_XML_PARSER_INFO_OFFSET,
            resultXmlParseInProgress,
            resultXmlParseAborted,
            resultMultipleInitialized
        };
    }
}
```

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Enumeration Values

Macro	Value	Description
resultSuccess	0x00000000	Success
resultGenericError	0x80850000	General error
resultNoMemory	0x80850001	Insufficient memory
resultNotInitialized	0x80850002	Not initialized
resultInvalidArgument	0x80850003	Invalid argument
resultNotSupported	0x80850004	Non-supported function
resultInitializeFailed	0x80850005	Initialization error
resultInvalidBinXml	0x80850006	Invalid binary XML data
resultParserBusy	0x80850007	Parser is busy right now
resultXmlUnexpectedEoF	0x80850008	Unexpected end of file of the XML document
resultXmlSyntaxError	0x80850009	Syntax error exists in the XML document
resultXmlEndTagMismatch	0x8085000a	End tag in the XML document is not matched
resultXmlInvalidChar	0x8085000b	Invalid character exists in the XML document
resultXmlInvalidDecValue	0x8085000c	Decimal character in the XML document is invalid
resultXmlInvalidHexValue	0x8085000d	Hexadecimal character in the XML document is invalid
resultXmlClosingAngleBracketCharNotFound	0x8085000e	Closing parenthesis is missing in the XML document
resultXmlEqualityCharNotFound	0x8085000f	No equal character is found in the XML document
resultXmlSemiColonCharNotFound	0x80850010	No semi colon is found in the XML document
resultXmlQuoteCharNotFound	0x80850011	No quote character is found in the XML document
resultXmlEndOfCommentNotFound	0x80850012	End of comment does not exist in the XML document
resultXmlEndOfCDSectNotFound	0x80850013	End of CDATA does not exist in the XML document
resultXmlEndOfDtdNotFound	0x80850014	No end of DTD is found in the XML document
resultXmlUnknownEncoding	0x80850015	Unknown Encoding
resultXmlHandlerNotSet	0x80850016	No handler is set
resultXmlInvalidPi	0x80850017	PI in the XML document is invalid
resultXmlInvalidDocumentElement	0x80850018	Elements in the XML document are invalid
resultXmlDocumentElementNotFound	0x80850019	No elements are found in the XML document
resultXmlDuplicateAttrName	0x8085001a	Duplicate attribute names are found in the XML document
resultDomError	0x80850200	DOM general error
resultDomNodeNotFound	0x80850201	DOM operation target is not found

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Macro	Value	Description
resultDomReadOnlyError	0x80850202	DOM operation target is read only
resultDomMaxUniqueElementError	0x80850203	The number of elements of node exceeds the maximum value in DOM
resultDomMaxUniqueAttrError	0x80850204	The number of attributes of node exceeds the maximum number in DOM
resultDomMaxNumOfAttrError	0x80850205	The number of attributes of 1 node exceeds the maximum number in DOM
resultDomMaxSizeOfElementNameError	0x80850206	The element name of 1 node exceeds the maximum length in DOM
resultDomMaxSizeOfAttrNameError	0x80850207	The attribute name of 1 node exceeds the maximum length in DOM
resultDomMaxSizeOfAttrValueError	0x80850208	The attribute value of 1 node exceeds the maximum length in DOM
resultDomInvalidEntity	0x80850209	Invalid entity in DOM
resultDomInvalidNodeType	0x8085020a	Invalid node type in DOM
resultGenericMessage	0x00850000	General message
resultXmlParseInProgress	0x00850001	Parse processing is being performed
resultXmlParseAborted	0x00850002	Parse processing is aborted by user
resultMultipleInitialized	0x00850003	Initialization processing is called more than once

Description

These are the numeric values which represent the result whose return value type is `int`. Negative values represent the failure, and positive values represent the information.

TokenType

Types of token

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        enum TokenType {
            tokenUnknown = -1,
            tokenDtd = 4,
            tokenDtdEnd = 5,
            tokenPi = 6,
            tokenPiEnd = 7,
            tokenCdata = 8,
            tokenCdataEnd = 9,
            tokenComment = 10,
            tokenCommentEnd = 11,
            tokenUnexpected = 12,
        };
    }
}
```

Enumeration Values

Macro	Value	Description
tokenUnknown	0xffffffff	Type is unknown
tokenDtd	0x00000004	Document Type Definition (DTD)
tokenDtdEnd	0x00000005	End of DTD
tokenPi	0x00000006	XML Processing Instruction (PI)
tokenPiEnd	0x00000007	End of PI
tokenCdata	0x00000008	CDATA section
tokenCdataEnd	0x00000009	End of CDATA section
tokenComment	0x0000000a	Comment
tokenCommentEnd	0x0000000b	End of comment
tokenUnexpected	0x0000000c	Unexpected token

Description

These are the types of token.

SAX event handler `skippedText` returns these values.

Type Definition

index_t

A type which represents index

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        typedef SceUInt32 index_t;
    }
}
```

Description

This is a type which represents an index.

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size_t

A type which represents size

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        typedef SceUInt32 size_t;
    }
}
```

Description

This is a type which represents a size.

XmlText

A type for handling XML document

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        typedef String XmlText;
    }
}
```

Description

This is a type for handling an XML document. This type is the same as `String`.

sce::Xml::Attr

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Summary

sce::Xml::Attr

Attribute interface class

Definition

```
#include <xml/xml_attribute.h>
class Attr {};
```

Description

This represents the attributes.

The attribute list [AttributeList](#) passed from the `startElement` event is valid only during the scope of the event; once the event handler returns control to the parser, the attribute list becomes invalid. At the same time, `Attr` also becomes invalid.

```
int startElement(void *userData, const String *name,
                 const AttributeList* list)
{
    for(size_t k=0; k < list->getLength(); k++) {
        const Attr& att = list->getAttribute(k);

        const String& name = att.getName();
        const String& value = att.getValue();
    }
}
```

(Note that the result of `list->getLength()` will be zero if there are no attributes.)

Method List

Method	Description
Attr	Constructor
~Attr	Destructor
getName	Get the attribute name
getValue	Get the attribute value
initialize	Initialize
isAvailable	Check the availability
setName	Set the attribute name
setValue	Set the attribute value
terminate	Terminate

Constructors and Destructors

Attr

Constructor

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            Attr();

            Attr(const Attr &);

        }
    }
}
```

Return Values

None

Description

Constructor

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~Attr

Destructor

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            ~Attr();
        }
    }
}
```

Return Values

None

Description

Destructor

Public Instance Methods

getName

Get the attribute name

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            String getName() const;
        }
    }
}
```

Return Values

The attribute name associated to this [Attr](#).

Description

This gets the attribute name.

getValue

Get the attribute value

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            String getValue() const;
        }
    }
}
```

Return Values

The attribute value associated to this [Attr](#).

Description

This gets the attribute value.

initialize

Initialize

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            int initialize(
                const Initializer *init
            );
        }
    }
}
```

Arguments

init (in) Pointer to [Initializer](#) object

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This API must be called before another interface of attr interface class is used.

isAvailable

Check the availability

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            bool isAvailable() const;
        }
    }
}
```

Return Values

Value	Description
true	Initialized and ready to use
false	Not initialized

Description

This returns true if this object is available.

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setName

Set the attribute name

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            int setName(const String *);
        }
    }
}
```

Description

This sets the attribute name.

setValue

Set the attribute value

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            int setValue(const String *);
        }
    }
}
```

Description

This sets the attribute value.

terminate

Terminate

Definition

```
#include <xml/xml_attribute.h>
namespace sce {
    namespace Xml {
        class Attr {
            int terminate();
        }
    }
}
```

Return Values

Value	Description
SCE_OK	Success

Description

This terminates and destroys any local objects.

sce::Xml::AttributeList

Summary

sce::Xml::AttributeList

AttributeList interface class

Definition

```
#include <xml/xml_attribute_list.h>
class AttributeList {};
```

Description

This represents attribute list

Method List

Method	Description
addAttribute	Add a new attribute to the list
AttributeList	Constructor
~AttributeList	Destructor
clear	Clear the attribute list
getAttribute	Find and get the Attr object
getLength	Get the number of Attr objects
initialize	Initialize
isAvailable	Check the availability
terminate	Terminate

Constructors and Destructors

AttributeList

Constructor

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            AttributeList();

            AttributeList(const AttributeList &) {
            }
        }
    }
}
```

Return Values

None

Description

Constructor

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~AttributeList

Destructor

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            ~AttributeList();
        }
    }
}
```

Return Values

None

Description

Destructor

Public Instance Methods

addAttribute

Add a new attribute to the list

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            int addAttribute(
                const String *name,
                const String *value
            );
        };
    };
}
```

Arguments

name (in) Name set to [Attr](#)
value (in) Value set to [Attr](#)

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This adds a new attribute to the list with name and value.

Notes

Only whether the attribute name *name* is not NULL is checked; the conformance to the XML specification is not checked. When using with R/W DOM APIs, the attribute name and value can be set with any string; it is user's responsibility to check for the valid XML name as needed. If invalid name or invalid value is specified, resulting XML document after serialization may not be well-formed document.

clear

Clear the attribute list

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            void clear();
        }
    }
}
```

Return Values

None

Description

If the attribute list has to be used very frequently, then using this function clears the attributes from the list logically while possessing the memory. The logically deleted objects can be reused; thus the performance will be improved.

getAttribute

Find and get the [Attr](#) object

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            Attr getAttribute(
                const String *attName
            ) const;

            Attr getAttribute(
                index\_t index
            ) const;
        }
    }
}
```

Arguments

attName (in) [Attr](#) name to be searched
index (in) [Attr](#) index to be searched

Return Values

The [Attr](#) object whose *attName* or *index* is matched, or invalid [Attr](#) if nothing is found.

Description

This gets the [Attr](#) object by specifying the name "attName" or the index "index".

getLength

Get the number of [Attr](#) objects

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            size\_t getLength() const;
        }
    }
}
```

Return Values

The number of attributes in the list.

Description

This gets the number of attributes in the [AttributeList](#).

The return value of `getLength()` is zero when any attributes do not exist.

initialize

Initialize

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            int initialize(
                const Initializer *init
            );
        }
    }
}
```

Arguments

init (in) Pointer to [Initializer](#) object

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This API must be called before another interface is used.

isAvailable

Check the availability

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            bool isAvailable() const;
        }
    }
}
```

Return Values

Value	Description
true	Initialized and ready to use
false	Not initialized

Description

This returns true if this object is available.

terminate

Terminate

Definition

```
#include <xml/xml_attribute_list.h>
namespace sce {
    namespace Xml {
        class AttributeList {
            int terminate();
        }
    }
}
```

Return Values

Value	Description
SCE_OK	Success

Description

This destroys any local objects.

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sce::Xml::Dom

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Summary

sce::Xml::Dom

Namespace of DOM API

Definition

```
namespace Dom {}
```

Description

Namespace of DOM API

Variables

Public Variables

```
const NodeId invalidNodeId Value which represents invalid node ID
```

Internal classes, Structures, Namespaces

Item	Description
sce::Xml::Dom::Document	DOM interface class
sce::Xml::Dom::DocumentBuilder	DOM creation interface class
sce::Xml::Dom::Node	Node interface class
sce::Xml::Dom::NodeList	NodeList interface class

Enumeration Type

NodeType

Node type

Definition

```
#include <xml/xml_node_types.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            enum NodeType {
                nodeUnknown = SCE_XML_TOKEN_DOM_UNKNOWN,
                nodeElement = SCE_XML_TOKEN_DOM_ELEMENT,
                nodeElementRw = SCE_XML_TOKEN_DOM_RW_ELEMENT,
                nodeAttribute = SCE_XML_TOKEN_DOM_ATTR,
                nodeText = SCE_XML_TOKEN_DOM_TEXT,
                nodeTextasChild =
SCE_XML_TOKEN_DOM_HAS_TEXT_CHILD,
                nodeCdataSection =
SCE_XML_TOKEN_DOM_SKIP_TEXT_CDATA,
                nodeEntity = SCE_XML_TOKEN_DOM_ENTITY,
                nodeProcessingInstruction =
SCE_XML_TOKEN_DOM_SKIP_TEXT_PI,
                nodeComment =
SCE_XML_TOKEN_DOM_SKIP_TEXT_COMMENT,
                nodeDocument = SCE_XML_TOKEN_DOM_DOCUMENT
            };
        }
    }
}
```

Enumeration Values

Macro	Value	Description
nodeUnknown	0xffffffff	Node type is unknown
nodeElement	0x00000004	Element node
nodeElementRw	0x00000005	Element node (Read/Write)
nodeAttribute	0x00000001	Attribute node
nodeText	0x00000008	Text node
nodeTextasChild	0x00000028	Text node
nodeCdataSection	0x00000007	CDATA node
nodeEntity	0x00000002	Entity node
nodeProcessingInstruction	0x00000017	PI node
nodeComment	0x0000001f	Comment node
nodeDocument	0x00000000	Document node

Description

These node types are acquired using `Document::getNodeType()`.

Type Definition

MetaNodeId

Metanode ID

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            typedef NodeId MetaNodeId;
        }
    }
}
```

Description

This ID identifies a node acquired with [getXmlMeta\(\)](#), and is a 64-bit integer value like [NodeId](#).

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NodeId

Node ID

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            typedef SceUInt64 NodeId;
        }
    }
}
```

Description

This ID identifies the node and is a 64-bit integer value.

sce::Xml::Dom::Document

Summary

sce::Xml::Dom::Document

DOM interface class

Definition

```
#include <xml/xml.h>
class Document {};
```

Description

DOM interface class

Method List

Method	Description
addElementChild	Create and add an element
createElement	Creates an element
createTextNode	Creates a Text node
Document	Constructor
~Document	Destructor
getAttribute	Get the attribute value
getAttributes	Get attributes
getAttrName	Get the attribute name
getAttrValue	Get the attribute value
getChildNodes	Get child nodes
getDocRoot	Get the document root node
getElementsByTagName	Get a NodeList by the name
getEntity	Get the entity text
getEntityType	Get the entity type
getFirstAttr	Get the first attribute
getFirstChild	Get the child nodes
getLastChild	Get the last child node
getNextAttr	Get the next attribute
getNodeName	Get the node name
getNodeType	Get the node type
getParent	Get the parent node
getRoot	Get the root node
getSibling	Get the sibling node
getSkippedText	Get the skipped text
getStatus	Get the status
getText	Get the text node value
getXmlMeta	Get the MetaNodeId
hasAttributes	Check if attribute(s) exist
hasChildNodes	Check if child node(s) exist
importNode	Import another document
importParent	Import another document
initialize	Initialize
insertNode	Insert the node

Method	Description
isAvailable	Check the availability
isReadOnly	Check if the Document is read only
recurseDelete	Remove nodes recursively
removeAttribute	Remove attributes
removeAttributes	Remove attributes recursively
removeChild	Remove the child node
resetStatus	Reset the status
serialize	Output to XML text
setAttribute	Set the attribute
setAttributeList	Set the attributes
setAttrValue	Set the attribute value
setText	Set the text
setWritable	Set the DOM tree readable and writable mode
terminate	Terminate

Constructors and Destructors

Document

Constructor

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                Document();
            }
        }
    }
}
```

Return Values

None

Description

Constructor

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~Document

Destructor

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                ~Document();
            }
        }
    }
}
```

Return Values

None

Description

Destructor

Public Instance Methods

addElementChild

Create and add an element

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId addElementChild(
                    NodeId parent,
                    const String *name,
                    const Attributelist *list = 0,
                    const String *text = 0
                );
            };
        }
    }
}
```

Arguments

parent (in) Parent node to which the given element is appended.
name (in) The name of the element node to instantiate.
list (in) Attribute list to be added to the element.
text (in) Text to be added to the element as child node.

Return Values

The node added.

Description

The element with attribute list and text is added to the end of the list of children of the specified node.

Notes

The name is not checked for XML canonical naming convention.

createElement

Create an element

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId createElement(
                    const String *name,
                    const AttributeList *list = 0,
                    const String *text = 0
                );
            };
        }
    }
}
```

Arguments

name (in) The name of the element node to instantiate.
list (in) List of attributes which has to be added to the element
text (in) Text of child to be added

Return Values

A new element node

Description

For example, to create a node such as:

```
<test>example</test>
```

the following call will create such an element node:

```
createElement(&String("test"), NULL, &String("example"));
```

Notes

The name is not checked for XML canonical naming convention

Memory Note:

If the created **Node** is inserted to R/W DOM tree using **insertNode()** then, the node will be recovered automatically when document is destroyed. If the node is not inserted as part of the tree, it has to be destroyed explicitly by using **recurseDelete()** API, failed to do so will result in memory leak.

createTextNode

Create a Text node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId createTextNode (
                    const String *text
                );
            };
        }
    }
}
```

Arguments

text (in) The text for the node.

Return Values

The new Text object

Description

This creates a text node given the specified string and length.

Notes

Memory Note:

If the created [Node](#) is inserted to R/W DOM tree using `insertNode` then, the node will be recovered automatically when document is destroyed. If the node is not inserted as part of the tree, it has to be destroyed explicitly by using [recurseDelete\(\)](#) API, failed to do so will result in memory leak.

getAttribute

Get the attribute value

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                String getAttribute(
                    const NodeId node,
                    const String *name
                ) const;
            };
        };
    };
}
```

Arguments

node Target node
name Name of attribute

Return Values

The attribute value

Description

This returns the attribute value for the given attribute.

getAttributes

Get attributes

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int getAttributes(
                    NodeId node,
                    NodeList *nodelist
                ) const;
            };
        };
    };
}
```

Arguments

node (in) Specifying [NodeId](#) for which child node list is returned.
nodelist (out) [NodeList](#) object to get the result containing all the matched nodes

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

Input *node* must be valid node of type element, this check is not done internally, and it must be ensured before specifying the node.

nodelist is not required `NodeList::initialize()` before this API call.

nodelist requires to be deleted after an application finishes using it.

getAttrName

Get the attribute name

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                String getAttrName (
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which attribute name is returned.

Return Values

[String](#) of the attribute name, or empty string if given node is not of attribute type.

Description

This returns the name of the given attribute node.

getAttrValue

Get the attribute value

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                String getAttrValue(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which attribute value is returned

Return Values

[String](#) of the attribute value, or empty string if given node is not of attribute type.

Description

This returns the attribute value for the given attribute node.

getChildNodes

Get child nodes

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int getChildNodes(
                    NodeId node,
                    NodeList *nodelist
                ) const;
            };
        };
    };
}
```

Arguments

node (in) Specifying [Node](#) for which child node list is returned
nodelist (out) [NodeList](#) object to get the result containing all the matched nodes

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

Return the list including all the children if exists.

nodelist is not required to be initialized by `NodeList::initialize()` before this API call.

nodelist requires to be deleted after an application finishes using it.

getDocRoot

Get the document root node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getDocRoot() const;
            }
        }
    }
}
```

Return Values

NodeId to the document root, or Dom::invalidNodeId if document root node does not exist or the document not initialized.

Description

This returns the document root node (first node) of the document.

getElementsByTagName

Get a [NodeList](#) by the name

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int getElementsByTagName (
                    NodeId node,
                    const String *name,
                    NodeList *nodelist
                );
            };
        }
    }
}
```

Arguments

node (in) Root of the search tree
name (in) Name of the elements to match on
nodelist (out) [NodeList](#) object to get the result. The special value "*" matches all names.

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This returns a [NodeList](#) consisting of all the descendant elements with a given node name in the order in which they are encountered in a preorder traversal (depth-first search) of this element tree. It is not necessary to call `NodeList::initialize()` for *nodelist* before calling this API. An application must delete the used *nodelist*.

getEntity

Get the entity text

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                String getEntity(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which entity value is returned

Return Values

[String](#) of the entity text, or empty string if given node is not of user defined entity or character entity reference.

Description

This returns the value of the given entity node, for user defined entity or character entity reference.

getEntityType

Get the entity type

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                EntityType getEntityType(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which entity type is returned.

Return Values

Entity type of the node

Description

This returns the entity type of the given entity node.

getFirstAttr

Get the first attribute

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getFirstAttr(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) Node for which the first attribute is returned

Return Values

NodeId which represents the first valid attribute of the given element node or `Dom::invalidNodeId` if given node does not have any attribute.

Description

This returns the first attribute for a given element node.

getFirstChild

Get the child node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getFirstChild(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which child node is returned

Return Values

Valid [NodeId](#) of the first child node, or `Dom::invalidNodeId` if no child node or the node is leaf node.

Description

This returns the first child for the given node within the current document

getLastChild

Get the last child node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getLastChild(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which child node is returned

Return Values

The last child node of the given node

Description

This gets the last child node of the given node.

getNextAttr

Get the next attribute

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getNextAttr (
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which next attribute is returned

Return Values

NodeId which represents the next attribute of the given element node, or Dom::invalidNodeId if given node does not have any more attributes.

Description

This returns the next attribute for a given element node.

getNodeName

Get the node name

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                String getNodeName (
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which name is returned

Return Values

[String](#) of the node name, or empty string if given node does not support node name.

Description

This returns the name of the given element node.

getNodeType

Get the node type

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeType getNodeType (
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node Target node

Return Values

Type of the node

Description

This returns the type of the given node, as defined in Dom::NodeType.

getParent

Get the parent node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getParent (
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which parent is returned

Return Values

Valid [NodeId](#) of the parent node, or `Dom::invalidNodeId` if given node does not belong to the current [Document](#).

Description

This returns the parent node of a given node.

Notes

Performance note:

`getParent` searches the document from root for parent, and may reduce performance if used many time. Instead it is recommended to keep parent [NodeId](#).

getRoot

Get the root node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getRoot() const;
            }
        }
    }
}
```

Return Values

Valid `NodeId` of the root node, or `Dom::invalidNodeId` if root node does not exist or the document not initialized.

Description

This returns the root node (first element node) of the document.

getSibling

Get the sibling node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId getSibling(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which sibling node is returned

Return Values

Valid [NodeId](#) of the sibling node which exists, or `Dom::invalidNodeId` if no sibling node.

Description

This returns the sibling for the given node within the current document.

getSkippedText

Get the skipped text

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                String getSkippedText(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which value is returned

Return Values

[String](#) of the skipped text, or empty string if given node does not support skipped text

Description

This returns the value of the given skipped text node.

getStatus

Get the status

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int getStatus() const;
            }
        }
    }
}
```

Return Values

Status, resultSuccess or an error.

Description

This returns status of previous operation.

getText

Get the text node value

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                String getText(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node (in) [Node](#) for which the value is returned

Return Values

[String](#) of the text, or empty string if given node does not support text.

Description

This returns the value of the given text node.

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getXmlMeta

Get the MetaNodeId

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                MetaNodeId getXmlMeta() const;
            }
        }
    }
}
```

Return Values

Valid MetaNodeId of the document root node

Description

This returns the meta node for the document root.

hasAttributes

Check if attribute node(s) exist

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                bool hasAttributes(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node Target node

Return Values

Value	Description
true	Attribute(s) exist
false	No attribute

Description

This returns true if the given node has attribute node(s)

000004892117

hasChildNodes

Check if child node(s) exist

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                bool hasChildNodes(
                    NodeId node
                ) const;
            };
        };
    };
}
```

Arguments

node Target node

Return Values

Value	Description
true	Child node(s) exist
false	No child node

Description

This returns true if the given node has child node(s)

000004892117

importNode

Import another document

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId importNode (
                    NodeId nparent,
                    NodeId ref,
                    const Document *doc,
                    NodeId node
                );
            };
        }
    }
}
```

Arguments

<i>nparent</i>	(in) Starting node which has to be imported
<i>ref</i>	(in) The reference node. The new node will be inserted after this node
<i>doc</i>	(in) Source document for importing <i>nparent</i> node
<i>node</i>	(in) Connection destination node of a node to be imported

Description

Import the given node within the given document to the given node of this document. The import operation copies all the data and the nodes to this document.

importParent

Import another document

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int importParent(
                    const Document *parentDoc,
                    NodeId parent
                );
            };
        }
    }
}
```

Arguments

parentDoc (in) Parent document
parent (in) Parent node which will become parent.

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This imports the given document with the node specified by *parentDoc* and *parent* as parent node. The whole tree of its own object before being called will be the child node of the given node. The last node of the given parent tree will be the parent node of the child tree.

Effective execution will be possible compared to `importNode()` when the child tree is larger than the parent tree.

Example:

Parent tree:

```
<test><firstNode><impNode/></firstNode></test>
```

child tree:

```
<bigChild>Big Big Tree</bigChild>
```

If the parent tree is imported as parent of child tree, the `<impNode>` of parent tree becomes the parent node of the tree. The imported parent node must not have attributes.

initialize

Initialize

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int initialize(
                    const Initializer*init
                );
            };
        };
    };
}
```

Arguments

init (in) Pointer to [initialize](#) object

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This API must be called before another interface is used.

insertNode

Insert the node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId insertNode (
                    NodeId parent,
                    NodeId ref,
                    NodeId child
                );
            };
        }
    }
}
```

Arguments

parent (in) Parent of the reference node or to which given child node is inserted
ref (in) The reference node, i.e., the node after which the new node must be inserted
child (in) The node to insert.

Return Values

The node being inserted

Description

Insert the node *child* after the existing child node *ref*. If *ref* is invalid (`Dom::invalidNodeId`), insert *child* as the first node of the element. If the *child* is already in the tree, it is first removed

isAvailable

Check the availability

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                bool isAvailable() const;
            }
        }
    }
}
```

Return Values

Value	Description
true	Initialized and ready to use
false	Not initialized

Description

This returns true if this object is available.

isReadOnly

Check if the [Document](#) is read only.

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                bool isReadOnly() const;
            }
        }
    }
}
```

Return Values

Value	Description
true	Read only DOM
false	Read/Write DOM

Description

This returns if [Document](#) is read only.

recurseDelete

Remove nodes recursively

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int recurseDelete(
                    NodeId node
                );
            };
        };
    };
}
```

Arguments

node Node to start deleting

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This deletes the given node from the memory. If the given node is a tree, it deletes recursively.

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removeAttribute

Remove attributes

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int removeAttribute(
                    NodeId node,
                    const String *name
                );
            };
        }
    }
}
```

Arguments

node (in) Element node, attribute of this node is removed.
name (in) Attribute name to be removed.

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This removes the attributes from the given element node. This API removes the attribute whose name is given from element node of an R/W DOM tree.

removeAttributes

Remove attributes recursively

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int removeAttributes(
                    NodeId node
                );
            };
        };
    };
}
```

Arguments

node (in) Element node

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This removes all the attributes from the given element node. This API removes the attributes of all the children existing in the given element node or below.

removeChild

Remove the child node

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId removeChild(
                    NodeId child,
                    NodeId parent
                );
            };
        }
    }
}
```

Arguments

child (in) The node to be removed
parent (in) The parent node of node being removed

Return Values

The node removed

Description

This removes the child node indicated by *child* and returns it.

Notes

The [NodeId](#) is returned but it is unavailable any longer.

resetStatus

Reset the status

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                void resetStatus();
            }
        }
    }
}
```

Return Values

None

Description

This resets the [Document](#) status to `resultSuccess`. If the previously invoked API results in error such as:

- `resultDomMaxNumOfAttrError`
- `resultDomMaxUniqueElementError`

It is safe to reset, so that the [Document](#) can be reused.

In case of memory error, or other critical errors, in such case resetting may cause unknown behavior. In such case it is better to re-create the document, in order to remove the error.

serialize

Output to XML text

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int serialize(
                    const SerializeParameter *param,
                    XmlText *outputString
                );
            };
        }
    }
}
```

Arguments

param (in) Parameter to control serialization
outputString (out) Output string

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This serializes the Document to XML document.
Document object holds the generated XML document.

setAttribute

Set the attribute

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int setAttribute(
                    NodeId node,
                    const String *name,
                    const String *value
                );
            };
        }
    }
}
```

Arguments

node (in) Element node, attribute of this node is changed
name (in) Name of the attribute whose value to be changed.
value (in) Value which has to be set for the given attribute

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This adds the given attribute name, of the given element node. If the given attribute does not exist, a new attribute is added to the given element node, otherwise, the value is updated.

Notes

This API replaces the old attribute value.

setAttributeList

Set the attributes

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int setAttributeList(
                    NodeId node,
                    const AttributeList *list
                );
            };
        }
    }
}
```

Arguments

- node* (in) The element node to which attribute list to be added
- list* (in) Attribute list to be added to the element

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This adds attribute list to the node. This API removes all the attributes from the given element if they exist.

setAttrValue

Set the attribute value

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int setAttrValue(
                    XmlNode node,
                    const String *name,
                    const String *value
                );
            };
        }
    }
}
```

Arguments

node (in) Element node, attribute of this node is changed.
name (in) Name of the attribute whose value to be changed
value (in) Value which has to be set for the given attribute

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

Set value for the given attribute name of the given element node. If the given attribute does not exist, a new attribute is added to the given element node.

Notes

This API replaces the old attribute value.

setText

Set the text

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int setText(
                    NodeId node,
                    const String *text
                );
            };
        }
    }
}
```

Arguments

node (in) Text node whose value has to be changed
text (in) Value which has to be set.

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This sets text value for text node.

Notes

This API replaces the old attribute value.

setWritable

Set the DOM tree to readable and writable mode

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                NodeId setWritable();
            }
        }
    }
}
```

Return Values

NodeId for DocumentRoot (refer to [getDocRoot\(\)](#)).

Dom::invalidNodeId if failed.

Description

This sets the DOM tree to read/write mode.

terminate

Terminate

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Document {
                int terminate();
            }
        }
    }
}
```

Return Values

Value	Description
SCE_OK	Success

Description

Terminates the [Document](#) and recovers the memory occupied.

000004892117

sce::Xml::Dom::DocumentBuilder

Summary

sce::Xml::Dom::DocumentBuilder

DOM creation interface class

Definition

```
#include <xml/xml.h>
class DocumentBuilder {};
```

Description

DOM creation interface class

Method List

Method	Description
DocumentBuilder	Constructor
~DocumentBuilder	Destructor
getDocument	Get the created Document
initialize	Initialize
parse	Parse an XML document and create the Document tree structure
setResolveEntity	Set entity resolving behavior
setSkipIgnorableText	Set text skip behavior
setSkipIgnorableWhiteSpace	Set white space skip behavior
terminate	Terminate

Constructors and Destructors

DocumentBuilder

Constructor

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                DocumentBuilder();
            }
        }
    }
}
```

Return Values

None

Description

Constructor

SCE CONFIDENTIAL

~DocumentBuilder

Destructor

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                ~DocumentBuilder();
            }
        }
    }
}
```

Return Values

None

Description

Destructor

Document serial number: 000004892117

Public Instance Methods

getDocument

Get the created [Document](#)

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                Document getDocument();
            };
        };
    };
}
```

Return Values

The [Document](#), created by parsing the XML document in the last [parse\(\)](#) call

Description

This gets the [Document](#) created by the last [parse\(\)](#) call. This object has a reference to the [Document](#) held in this [DocumentBuilder](#) instance. The [Document](#) object is kept by the [DocumentBuilder](#) until the next [parse\(\)](#) or the [DocumentBuilder](#) deleted. [DocumentBuilder](#) should be remained while using the [Document](#).

initialize

Initialize

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                int initialize(
                    const Initializer*init
                );
            };
        };
    };
}
```

Arguments

init (in) Pointer to [Initializer](#) object

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This API must be called before another interface is used.

parse

Parse an XML document and create the [Document](#) tree structure

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                int parse(
                    const XmlText *text,
                    bool isFinal = true
                );
            };
        }
    }
}
```

Arguments

text (in) The chunk of XML data to be parsed

isFinal (in) Whether the input chunk is the final chunk to be parsed in the current XML stream.
Default value is true.

Return Values

Value	Description
<0	Error code
SCE_OK	Success in case <i>isFinal</i> is true
resultXmlParseInProgress	In case of chunk parsing, the current parse with the given chunk is successful

Description

Parse the XML document from the buffer and create [Document](#).

If the *isFinal* is true, then the parser will be reset before returning from the function call.

setResolveEntity

Set entity resolving behavior

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                void setResolveEntity(
                    bool isResolved
                );
            };
        }
    }
}
```

Arguments

isResolved (in) true in case the entities have to be resolved while parsing the XML

Return Values

None

Description

Configure if the parser resolves the built in entities and character references.
In case of user defined entities, it will be treated like entity without being resolved.
Default is false.

setSkipIgnorableText

Set text skip behavior

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                void setSkipIgnorableText(
                    bool isSkipped
                );
            };
        }
    }
}
```

Arguments

isSkipped (in) true if it has to be skipped. false otherwise.

Return Values

None

Description

This ignores the skip text (CDATA, Programming Instruction (PI), XML Declaration, Comment and Document Type Definition (DTD)) not to be included in the DOM structure. When the parse is in progress in case of chunked parsing, it cannot be changed.

Default is false.

setSkipIgnorableWhiteSpace

Set white space skip behavior

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                void setSkipIgnorableWhiteSpace(
                    bool isSkipped
                );
            };
        }
    }
}
```

Arguments

isSkipped (in) Set true in case the ignorable white spaces have to be skipped.

Return Values

None

Description

This skips the ignorable white spaces, if the skip flag is set to true.
Default is true.

terminate

Terminate

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class DocumentBuilder {
                int terminate();
            }
        }
    }
}
```

Return Values

Value	Description
SCE_OK	Success

Description

This terminates and destroys any local objects including the generated [Document](#).

000004892117

sce::Xml::Dom::Node

Summary

sce::Xml::Dom::Node

Interface class of [Node](#)

Definition

```
#include <xml/xml_node.h>
class Node {};
```

Description

A Class represents [Node](#) with reference to a [Document](#) object.

Note: Class [Node](#) is implemented as the wrapper to [Document](#) in this library.

Please refer to [Document](#) class.

Method List

Method	Description
appendChild	Insert a node
getAttributes	Get the attribute nodes
getChildNodes	Get the child nodes
getFirstChild	Get the first child node
getLastChild	Get the last child node
getNextSibling	Get the sibling node
getNodeName	Get the node name
getNodeName	Get the node type
getNodeValue	Get the node value
getOwnerDocument	Get the owner document
getParentNode	Get the parent node
hasAttributes	Check if attribute(s) exist
hasChildNodes	Check if child node(s) exist
insertBefore	Insert a node
isAvailable	Check the availability
Node	Constructor
Node	Copy constructor
~Node	Destructor
operator=	Assignment operator
removeChild	Remove the child node

Constructors and Destructors

Node

Constructor

Definition

```
#include <xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                Node(NodeId id
                    );
            };
        }
    }
}
```

Arguments

id Node id to set

Return Values

None

Description

Constructs the object and initializes it with the given node id.

SCE CONFIDENTIAL

Node

Copy constructor

Definition

```
#include <xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                Node(const Node &src
                    );
            };
        }
    }
}
```

Arguments

src Node to be copied

Return Values

None

Description

Copy Constructor.

SCEI CONFIDENTIAL

~Node

Destructor

Definition

```
#include <xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                ~Node ();
            };
        }
    }
}
```

Return Values

None

Description

Destructor.

Operator Methods

operator=

Assignment operator

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                Node &operator=(
                    const Node &src
                );
            };
        }
    }
}
```

Arguments

src (in) [Node](#) to be copied

Return Values

Reference to the copied [Node](#).

Description

Returns the copy of the given node.

Public Instance Methods

appendChild

Insert a child node

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeId appendChild(
                    NodeId newChild
                );
            };
        }
    }
}
```

Arguments

newChild (in) the node to be inserted

Return Values

NodeId of the inserted node.

Description

Inserts a new node to the current owner document.

getAttributes

Get the attribute nodes

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeList *getAttributes() const;
            }
        }
    }
}
```

Return Values

Pointer to the list of the attribute nodes.

Description

Returns list of the attribute nodes.

See Also: [Document](#) : : [getAttributes](#) ()

getChildNodes

Get the child nodes

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeList *getChildNodes() const;
            }
        }
    }
}
```

Return Values

Pointer to the list of the child nodes.

Description

Returns list of the child nodes.

See also: [Document](#): :[getChildNodes](#) ()

getFirstChild

Get the first child node

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeId getFirstChild() const;
            }
        }
    }
}
```

Return Values

NodeId of the first child node.

Description

Returns the first child node.

See also: [Document](#) : [getFirstChild\(\)](#)

getLastChild

Get the last child node

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeId getLastChild() const;
            }
        }
    }
}
```

Return Values

NodeId of the last child node.

Description

Returns the last child node.

See also: [Document](#) : [getLastChild\(\)](#)

getNextSibling

Get the sibling node

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeId getNextSibling() const;
            }
        }
    }
}
```

Return Values

NodeId of the sibling node.

Description

Returns the sibling node.

getNodeName

Get the node name

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                String getNodeName() const;
            }
        }
    }
}
```

Return Values

[String](#) of the node name, or empty string if given node does not support node name.

Description

Returns the name of this node.

See also: [Document](#): :[getNodeName](#) ()

getNodeType

Get the node type

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeType getNodeType() const;
            }
        }
    }
}
```

Return Values

Type of the node.

Description

Returns the type of this node.

See also: [Document](#) : : [getNodeType](#) ()

getNodeValue

Get the node value

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                String getnodeValue() const;
            }
        }
    }
}
```

Return Values

[String](#) of the node value, or empty string if given node does not support node value.

Description

Returns the value of this node.

SCEI CONFIDENTIAL

getOwnerDocument

Get the owner document

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                Document *getOwnerDocument() const;
            }
        }
    }
}
```

Return Values

Pointer to the owner document.

Description

Returns the owner document.

SCEI CONFIDENTIAL

getParentNode

Get the parent node

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeId getParentNode() const;
            }
        }
    }
}
```

Return Values

NodeId of the parent node.

Description

Returns the parent node.

hasAttributes

Check if any attribute(s) exist

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                bool hasAttributes() const;
            }
        }
    }
}
```

Return Values

Value	Description
true	The node has an attribute at least one.
false	The node has no attribute.

Description

Returns true if the node has attribute(s)

See also: [Document](#) : [hasAttributes](#) ()

hasChildNodes

Check if any child node(s) exist

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                bool hasChildNodes();
            };
        };
    };
}
```

Return Values

Value	Description
true	The node has a child at least one.
false	The node has no child.

Description

Returns true if the node has child node(s)
See also: [Document](#) : [hasChildNodes](#) ()

insertBefore

Insert a node

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeId insertBefore (
                    NodeId newChild,
                    NodeId refChild
                );
            };
        }
    }
}
```

Arguments

newChild (in) the node to be inserted
refChild (in) the node of the position of the insertion

Return Values

NodeId of the inserted node.

Description

Inserts a node.

isAvailable

Check the availability

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                bool isAvailable() const;
            }
        }
    }
}
```

Return Values

Value	Description
true	Initialized and ready to use
false	Not initialized

Description

This returns true if this object is available.

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removeChild

Remove the child node

Definition

```
#include <xml/xml_node.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class Node {
                NodeId removeChild(
                    NodeId oldChild
                );
            };
        }
    }
}
```

Arguments

oldChild (in) the node to be removed

Return Values

NodeId of the removed node.

Description

Remove the child node.

See also: [Document](#) : : [removeChild](#) ()

Notes

The NodeId is returned but it is unavailable any longer.

sce::Xml::Dom::NodeList

Summary

sce::Xml::Dom::NodeList

NodeList interface class

Definition

```
#include <xml/xml_node_list.h>
class NodeList {};
```

Description

A class represents a linked list of [Node](#) held in the [Document](#).

Mixing of nodes from different [Document](#) objects are not supported, which may cause unknown behavior.

Method List

Method	Description
clear	Clear the list
findItem	Find a node by the name
getLength	Get the number of nodes
initialize	Initialize the list
insertFirst	Insert a new Node at the beginning of the list
insertLast	Insert a new Node at the end of the list
isAvailable	Check the availability
item	Get a node by the index
NodeList	Constructor
~NodeList	Destructor
operator[]	Get a node by the index
removeItem	Remove the node from the list
terminate	Terminate

Constructors and Destructors

NodeList

Constructor

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                NodeList();

                NodeList(const NodeList &);

            }
        }
    }
}
```

Return Values

None

Description

Constructor

SCE CONFIDENTIAL

~NodeList

Destructor

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                ~NodeList();
            }
        }
    }
}
```

Return Values

None

Description

Destructor

Operator Methods

operator[]

Get a node by the index

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                NodeId operator[] (
                    index t index
                );
            };
        }
    }
}
```

Arguments

index index number that starts with 0

Return Values

A node located at *index*th position in [NodeList](#).

[Dom::invalidNodeId](#): In case [NodeList](#) is not available, or *index* is invalid.

Description

This is same as [item\(\)](#).

Public Instance Methods

clear

Clear the list

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                void clear();
            }
        }
    }
}
```

Return Values

None

Description

This clears the list by removing all the nodes.

findItem

Find a node by the name

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                NodeId findItem(
                    const String *name
                );

                NodeId findItem(
                    NodeId node
                );
            };
        }
    }
}
```

Arguments

name (in) The node name to be searched
node (in) The node to be searched

Return Values

The found node
 Dom::invalidNodeId if not found.

Description

If there are more than one, the first matched node is returned.

getLength

Get the number of nodes

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                size_t getLength();
            }
        }
    }
}
```

Return Values

Length of the list

0 : In case the [NodeList](#) is unavailable or invalid.

Description

This returns the number of nodes in the list. The range of valid child node indices is 0 to (length-1) inclusive.

initialize

Initialize the list

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                int initialize(
                    const Initializer*init
                );
            };
        };
    };
}
```

Arguments

init (in) Pointer to [Initializer](#) object

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This API must be called before another interface of this class is used.

insertFirst

Insert a new Node at the beginning of the list

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                NodeId insertFirst(
                    NodeId newNode
                );
            };
        }
    }
}
```

Arguments

newNode (in) Node to be inserted

Return Values

The inserted node

Dom::invalidNodeId: In case the [NodeList](#) is unavailable or invalid

Description

This inserts a new Node at the beginning of the list.

insertLast

Insert a new Node at the end of the list

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                NodeId insertLast(
                    NodeId newNode
                );
            };
        }
    }
}
```

Arguments

newNode (in) Node to be inserted

Return Values

The inserted node

Dom::invalidNodeId: In case the [NodeList](#) is unavailable or invalid

Description

This inserts a new Node at the end of the list.

isAvailable

Check the availability

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                bool isAvailable() const;
            }
        }
    }
}
```

Return Values

Value	Description
true	Initialized and ready to use
false	Not initialized

Description

This returns true if this object is available.

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item

Get a node by the index

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                NodeId item(
                    index t index
                );
            };
        }
    }
}
```

Arguments

index (in) Index into the collection

Return Values

The node at the *index*th position in the [NodeList](#).

`Dom::invalidNodeId`: In case the [NodeList](#) is unavailable or *index* is invalid.

Description

If *index* is greater than or equal to the number of nodes in the list, this returns `invalidNodeId`.

removeItem

Remove the node from the list

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                NodeId removeItem(
                    NodeId node
                );
            };
        }
    }
}
```

Arguments

node (in) The node to be deleted

Return Values

The removed node

`Dom::invalidNodeId`: In case the [NodeList](#) is unavailable or invalid.

Description

This removes the node from the list.

terminate

Terminate

Definition

```
#include <xml/xml_node_list.h>
namespace sce {
    namespace Xml {
        namespace Dom {
            class NodeList {
                int terminate();
            }
        }
    }
}
```

Return Values

Value	Description
SCE_OK	Success

Description

This performs Termination.

000004892117

sce::Xml::Initializer

000004892117

Summary

sce::Xml::Initializer

Object initialization interface class

Definition

```
#include <xml/xml_types.h>
class Initializer {};
```

Description

The instance of this class must be created before other objects of [sce::Xml](#) are created.

Method List

Method	Description
initialize	Initialize
Initializer	Constructor
~Initializer	Destructor
terminate	Terminate

000004892117

Constructors and Destructors

Initializer

Constructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class Initializer {
            Initializer();
        }
    }
}
```

Return Values

None

Description

Constructor

SCE CONFIDENTIAL

~Initializer

Destructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class Initializer {
            ~Initializer();
        }
    }
}
```

Return Values

None

Description

Destructor

Public Instance Methods

initialize

Initialize

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class Initializer {
            int initialize(
                const InitParameter *initParam
            );
        }
    }
}
```

Arguments

initParam (in) Initialize parameter

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This performs initialization and must be called before the [Initializer](#) object is used.

terminate

Terminate

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class Initializer {
            int terminate();
        }
    }
}
```

Return Values

Value	Description
SCE_OK	Success

Description

This performs termination.

000004892117

sce::Xml::InitParameter

Summary

sce::Xml::InitParameter

Initialization parameter class

Definition

```
#include <xml/xml_types.h>
class InitParameter {};
```

Description

Parameters passed to the Initializer class

Field

Public Instance Field

`MemAllocator *allocator`
`void *userData`

(in) Memory allocator
(in) Arbitrary user data
This field is passed to an argument of an implementation function of the memory allocator.

Method List

Method	Description
InitParameter	Constructor

Constructors and Destructors

InitParameter

Constructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class InitParameter {
            inline InitParameter();
        }
    }
}
```

Return Values

None

Description

This is a default constructor that initializes a member with zero.

sce::Xml::MemAllocator

Summary

sce::Xml::MemAllocator

Memory allocator interface class

Definition

```
#include <xml/xml_types.h>
class MemAllocator {};
```

Description

Memory allocator interface class

Implement each function with a class which inherits this class according to user operation. This class is called when memory allocation/deallocation is required in the library.

Method List

Method	Description
allocate	Memory allocation function
deallocate	Memory deallocation function
MemAllocator	Constructor
~MemAllocator	Destructor

Constructors and Destructors

MemAllocator

Constructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class MemAllocator {
            MemAllocator();
        }
    }
}
```

Return Values

None

Description

Constructor

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~MemAllocator

Destructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class MemAllocator {
            virtual ~MemAllocator();
        }
    }
}
```

Return Values

None

Description

Destructor

Public Instance Methods

allocate

Memory allocation function

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class MemAllocator {
            virtual void *allocate(
                size_t size,
                void *userData
            )=0;
        }
    }
}
```

Arguments

size (in) Size
userData (in) Arbitrary data passed by user
 The returned data is the one passed to [InitParameter::userData](#)

Return Values

Value	Description
Non-NULL	The beginning pointer of allocated memory area
NULL	Failed to memory allocation

Description

Memory allocation function

Allocate memory and return the pointer when this function is called. Return NULL if failed to allocate the memory.

deallocate

Memory deallocation function

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class MemAllocator {
            virtual void deallocate(
                void *ptr,
                void *userData
            )=0;
        }
    }
}
```

Arguments

ptr (in) Pointer to be deallocated
userData (in) Arbitrary data passed by user
The returned data is the one passed to [InitParameter::userData](#)

Return Values

None

Description

Memory deallocation function

sce::Xml::Sax

000004892117

Summary

sce::Xml::Sax

Namespace of SAX API

Definition

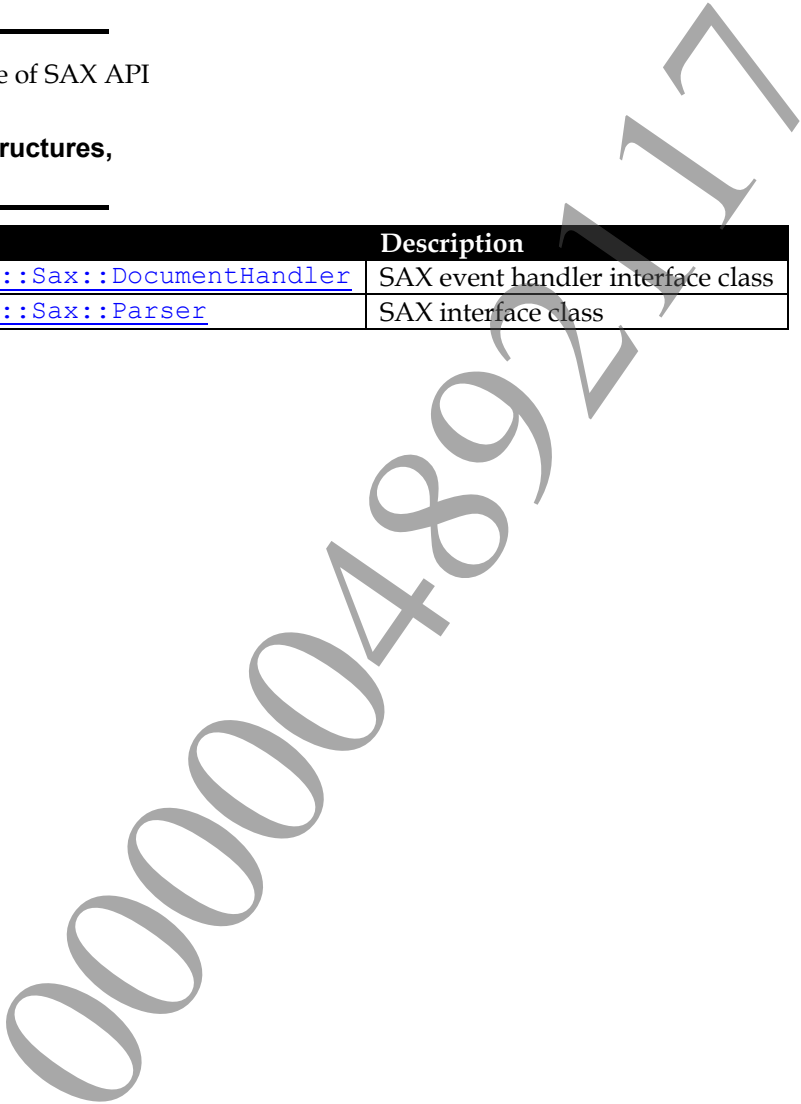
```
namespace Sax {}
```

Description

Namespace of SAX API

Internal classes, Structures, Namespaces

Item	Description
sce::Xml::Sax::DocumentHandler	SAX event handler interface class
sce::Xml::Sax::Parser	SAX interface class



sce::Xml::Sax::DocumentHandler

Summary

sce::Xml::Sax::DocumentHandler

SAX event handler interface class

Definition

```
#include <xml/xml_sax_document_handler.h>
class DocumentHandler {};
```

Description

SAX event handler interface class

Implement each function with a class which inherits this class according to user operation.

Method List

Method	Description
<u>characters</u>	Receive notification of character data
<u>DocumentHandler</u>	Constructor
<u>~DocumentHandler</u>	Destructor
<u>endDocument</u>	Receive notification of the end of a document
<u>endElement</u>	Receive notification of the end of an element
<u>entityData</u>	Receive notification of entity information
<u>fatalError</u>	Receive notification of a non-recoverable error
<u>skippedText</u>	Receive notification of the escaped text
<u>startDocument</u>	Receive notification of the beginning of a document
<u>startElement</u>	Receive notification of the beginning of an element

Constructors and Destructors

DocumentHandler

Constructor

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                inline DocumentHandler();
            }
        }
    }
}
```

Return Values

None

Description

Constructor

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~DocumentHandler

Destructor

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline ~DocumentHandler();
            }
        }
    }
}
```

Return Values

None

Description

Destructor

Document serial number: 000004892117

Public Instance Methods

characters

Receive notification of character data

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline int characters(
                    void *userData,
                    const String *ch
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application
ch (out) Character data

Return Values

Value	Description
Non-zero	Value to abort the parsing

Description

[Parser](#) will call this method to report each chunk of character data. SAX parser may return all continuous character data in a single chunk, or they may split it into several chunks; The application must not read from the outside area of the specified range of array. Character data will not be null terminated.

endDocument

Receive notification of the end of a document

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline int endDocument(
                    void *userData
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application

Return Values

Value	Description
Non-zero	Value to abort the parsing

Description

The SAX parser will invoke this method only once, and it will be the last method invoked during the parse. The parser shall not invoke this method until it has either abandoned parsing (because of an unrecoverable error) or reached the end of input.

endElement

Receive notification of the end of an element

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline int endElement(
                    void *userData,
                    const String *name
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application
name (out) Name of the end element.

Return Values

Value	Description
Non-zero	Value to abort the parsing

Description

The SAX parser will call this method at the end of every element (end tag) in the XML document, even when the element is empty (empty element tag). Each [endElement\(\)](#) event has a corresponding [startElement\(\)](#) event. End element name will be terminated with NULL.

entityData

Receive notification of entity information

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline int entityData(
                    void *userData,
                    EntityType entityType,
                    const String *name
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application
entityType (out) Entity type
name (out) User defined entity name or built in entity name or resolved entity data.

Return Values

Value	Description
Non-zero	Value to abort the parsing

Description

This event is notified only in the case of [Parser](#): :[setResolveEntity](#)(true).

fatalError

Receive notification of a non-recoverable error

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline void fatalError(
                    void *userData,
                    int errCode
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application
errCode (out) Error while scanning the XML document

Return Values

None

Description

This corresponds to the definition of "fatal error" in section 1.2 of the W3C XML 1.0 Recommendation. For example, a parser would use this callback to report the violation of a well-formedness constraint. The application must assume that the document is unusable after the parser has invoked this method and the parsing will be stopped after this callback.

skippedText

Receive notification of the escaped text

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline int skippedText(
                    void *userData,
                    TokenType tokenType,
                    const String *text
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application
tokenType (out) The kind of token that represents the text.
text (out) Escaped text by the parser

Return Values

Value	Description
Non-zero	Value to abort the parsing

Description

The escaped text is part of XML specifications but not supported by the parser. This unsupported data will be sent to escapeText event, so that the application can extend this functionality for support. Escaped text will not be null terminated.

The possible *tokenType* are as follows

- tokenPi
- tokenDtd
- tokenComment
- tokenCdata
- tokenPiEnd
- tokenDtdEnd
- tokenCommentEnd
- tokenCdataEnd

The tokens ends with End are the ends of escaped text. Otherwise there is still some data following the text in the following events.

startDocument

Receive notification of the beginning of a document

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline int startDocument(
                    void *userData
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application

Return Values

Value	Description
Non-zero	Value to abort the parsing

Description

The SAX parser will invoke this method only once, before any other methods in this interface are invoked.

startElement

Receive notification of the beginning of an element

Definition

```
#include <xml/xml_sax_document_handler.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class DocumentHandler {
                virtual inline int startElement(
                    void *userData,
                    const String *name,
                    const AttributeList *attrList
                );
            };
        }
    }
}
```

Arguments

userData (out) User defined data set to the parser from the application
name (out) Name of the start element.
attrList (out) Attribute list of the start element.

Return Values

Value	Description
Non-zero	Value to abort the parsing

Description

The [Parser](#) will invoke this method at the beginning of each element (start tag) in the XML document; there will be a corresponding [endElement\(\)](#) event for every [startElement\(\)](#) event (even when the element is empty). All of the element's content will be reported, in order, before the corresponding [endElement\(\)](#) event. If the element name has a namespace prefix, the prefix will still be attached. Note that the attribute list provided will contain only attributes with explicit values specified.

sce::Xml::Sax::Parser

Summary

sce::Xml::Sax::Parser

SAX interface class

Definition

```
#include <xml/xml.h>
class Parser {};
```

Description

SAX interface class

Method List

Method	Description
initialize	Initialize
parse	Parse the XML document and let SAX event occur
Parser	Constructor
~Parser	Destructor
reset	Reset
setDocumentHandler	Set the SAX event handler
setResolveEntity	Set entity resolving mode
setSkipIgnorableWhiteSpace	Set text skip operation
setUserData	Set user data
terminate	Terminate

Constructors and Destructors

Parser

Constructor

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                Parser();
            }
        }
    }
}
```

Return Values

None

Description

Constructor

SCE CONFIDENTIAL

~Parser

Destructor

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                ~Parser();
            }
        }
    }
}
```

Return Values

None

Description

Destructor

Public Instance Methods

initialize

Initialize

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                int initialize(
                    const Initializer *init
                );
            };
        };
    };
}
```

Arguments

init (in) Pointer to [Initializer](#) object

Return Values

Value	Description
<0	Error code
SCE_OK	Success

Description

This API must be called before another interface of this class is used.

parse

Parse the XML document and let SAX event occur

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
            public:
                int parse(
                    const XmlText *text,
                    bool isFinal = true
                );
            };
        }
    }
}
```

Arguments

text (in) The chunk of XML data to be parsed.
isFinal (in) Is the chunk is the final chunk to be parsed in the current XML stream. Default value is true.

Return Values

Value	Description
<0	Error code
SCE_OK	Success in case <i>isFinal</i> is true
resultXmlParseInProgress	In case of chunk parsing, the current parse with the given chunk is successful

Description

This starts parsing the XML document and notifies a SAX event to a set event handler sequentially. If the *isFinal* is true, then the parser will be reset before returning from the function call.

reset

Reset

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                int reset();
            }
        }
    }
}
```

Return Values

Value	Description
<0	Error code
SCE_OK	Success in case isFinal is true

Description

This reinitializes all the stacks and local variables.

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setDocumentHandler

Set the SAX event handler

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                void setDocumentHandler(
                    DocumentHandler *processor
                );
            };
        }
    }
}
```

Arguments

processor (in) SAX event handler which notifies a SAX event

Return Values

None

Description

This sets an object for which [DocumentHandler](#) is implemented by a user to [Parser](#).

setResolveEntity

Set entity resolving mode

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                void setResolveEntity(
                    bool isResolved
                );
            };
        }
    }
}
```

Arguments

isResolved (in) true in case the entities have to be resolved while parsing the XML document

Return Values

None

Description

This sets resolving mode for embedded entity reference and character reference.

In the case of `true`, the behavior complies with the XML specification, and `entityData()` of SAX event handler is called for entity reference and character reference.

In the case of `false`, `entityData()` is not called since the entity reference and character reference are recognized as a normal character string.

The default value of `libxml` is `false`.

setSkipIgnorableWhiteSpace

Set ignorable white spaces treatment mode

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                void setSkipIgnorableWhiteSpace(
                    bool isSkipped
                );
            };
        }
    }
}
```

Arguments

isSkipped (in) true to skip ignorable white spaces

Return Values

None

Description

This sets the ignorable white spaces handling mode.
The default value of libxml is true.

setUserData

Set user data

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                void setUserData(
                    void *data
                );
            };
        }
    }
}
```

Arguments

data (in) User defined data set by the application to the parser

Return Values

None

Description

This sets a user defined data to be passed to a SAX event handler.
This data is passed to all the SAX event handlers.

terminate

Terminate

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Sax {
            class Parser {
                int terminate();
            }
        }
    }
}
```

Return Values

Value	Description
SCE_OK	Success

Description

This terminates and destroys any local objects.

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sce::Xml::SerializeParameter

Summary

sce::Xml::SerializeParameter

XML output parameter class

Definition

```
#include <xml/xml_types.h>
class SerializeParameter {};
```

Description

This class controls the XML document output.
Give SCE_XML_SERIALIZE_OPT_xxxx to *serializeOption*.

Field

Public Instance Field
`int serializeOption` (in) Output control option

Method List

Method	Description
SerializeParameter	Constructor

Constructors and Destructors

SerializeParameter

Constructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class SerializeParameter {
            SerializeParameter();
        }
    }
}
```

Return Values

None

Description

This is a default constructor that initializes a member with zero.

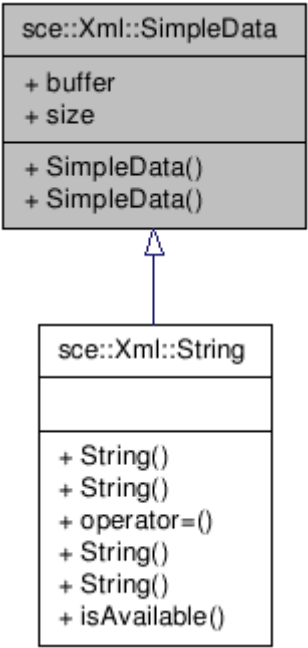
sce::Xml::SimpleData

Summary

sce::Xml::SimpleData

Class which holds a pointer to and length of data

Inheritance graph



Definition

```
#include <xml/xml_types.h>
class SimpleData {};
```

Description

This class holds a pointer to and length of data.
It is possible to directly access members.

Field

Public Instance Field

`const char *buffer` Pointer to data
`size_t size` Length of data

Method List

Method	Description
SimpleData	Constructor

Constructors and Destructors

SimpleData

Constructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class SimpleData {
            SimpleData();

            SimpleData(
                const char *data,
                size_t size
            );
        }
    }
}
```

Arguments

data (in) Pointer to data to be set
size (in) Length of data to be set (Unit: byte)

Return Values

None

Description

This is a default constructor that initializes a member with zero.

This constructor receives the data string, which does not necessarily end with '\0', and the length.

sce::Xml::String

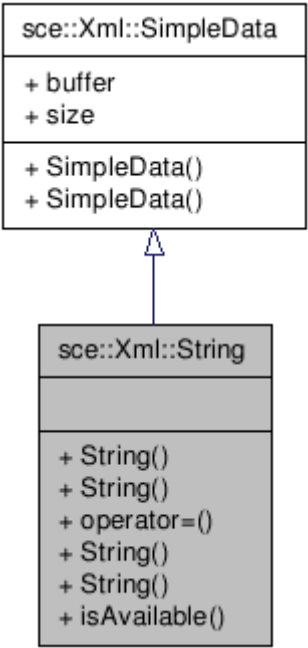
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Summary

sce::Xml::String

Class which holds a pointer to and length of character string

Inheritance graph



Definition

```
#include <xml/xml_types.h>
class String : public sce::Xml::SimpleData {};
```

Description

A copied class will point to the same area of this class (copy constructor or substitution operation is used for copying), but does not relate to the pointed-to buffer.

Method List

Method	Description
isAvailable	Check the availability
operator=	This copies the pointer
String	Constructor

Constructors and Destructors

String

Constructor

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class String {
            String(); // (1)

            String(const String &); // (2)

            String(
                const char *str,
                size_t size
            ); // (3)

            String(
                const char *str
            ); // (4)
        }
    }
}
```

Arguments

str (in) Character string to be set
size (in) Length of character string to be set
str (in) Character string to be set

Return Values

None

Description

The first one (1) is a default constructor that initializes member variables with zero.

The second (2) is a copy constructor.

The third constructor (3) receives the character string (which does not necessarily end with '\0') and the length.

The forth one (4) is also receives the character string (end with '\0') and the size is measured and set internally.

Operator Methods

operator=

Copy the pointed pointer

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class String {
            String &operator=(const String &);
        }
    }
}
```

Description

Both the source of substitution and the destination of substitution will point to the same area. This is not concerned with the pointed-to buffer.

Public Instance Methods

isAvailable

Check the availability

Definition

```
#include <xml/xml_types.h>
namespace sce {
    namespace Xml {
        class String {
            inline bool isAvailable() const;
        }
    }
}
```

Return Values

Value	Description
true	Available
false	Unavailable

Description

This returns true if the holding content is valid.

sce::Xml::Util

000004892117

Summary

sce::Xml::Util

Namespace of utility

Definition

```
namespace Util {}
```

Description

Namespace of utility

List of Functions

Function	Description
strResult	Convert result error number to string

000004892117

Functions

strResult

Convert result error number to string

Definition

```
#include <xml/xml.h>
namespace sce {
    namespace Xml {
        namespace Util {
            const char *strResult(
                int result
            );
        }
    }
}
```

Arguments

result (in) Result number

Return Values

String expression of the given result

Description

This converts result error number to string.