DBMS_XMLDOM

The DBMS_XMLDOM package is used to access XMLType objects, and implements the Document Object Model (DOM), an application programming interface for HTML and XML documents.

This chapter contains the following topics:

- Overview
- Security Model
- Constants
- Types
- Exceptions
- Subprogram Groups
- Subprogram Groups
- Summary of DBMS_XMLDOM Subprograms



Oracle XML Developer's Kit Programmer's Guide

DBMS_XMLDOM Overview

The Document Object Model (DOM) is an application programming interface (API) for HTML and XML documents. It defines the logical structure of documents, and the manner in which they are accessed and manipulated

In the DOM specification, the term "document" is used in the broad sense. XML is being increasingly used to represent many different kinds of information that may be stored in diverse systems. This information has been traditionally be seen as "data"; nevertheless, XML presents this data as documents, and the <code>DBMS_XMLDOM</code> package allows you access to both schema-based and non schema-based documents.



Read-from and write-to files must be on the server file system.

With DOM, anything found in an HTML or XML document can be accessed, changed, deleted, or added using the Document Object Model, with a few exceptions. In particular, the DOM interfaces for the XML internal and external subsets have not yet been specified.

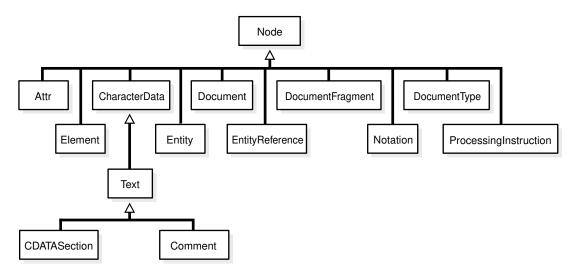
One important objective of the W3C DOM specification is to provide a standard programming interface that can be used in a wide variety of environments, programming languages, and

applications. Because the DOM standard is object-oriented while PL/SQL is essentially a procedural language, some changes had to be made:

- Various DOM interfaces such as Node, Element, and others have equivalent PL/SQL types DOMNode, DOMElement, respectively.
- Various DOMException codes such as WRONG_DOCUMENT_ERR, HIERARCHY_REQUEST_ERR, and
 others, have similarly named PL/SQL exceptions.
- Various DOM Node type codes such as <code>ELEMENT_NODE</code>, <code>ATTRIBUTE_NODE</code>, and others, have similarly named PL/SQL constants.
- Subprograms defined on a DOM type become functions or procedures that accept it as a
 parameter. For example, to perform APPENDCHILD Function on a DOMNode n, the
 APPENDCHILD FunctionPL/SQL function is provided.
- To perform setAttribute on a DOMElement elemSETATTRIBUTE Procedures, use PL/SQL procedure.

DOM defines an inheritance hierarchy. For example, <code>Document</code>, <code>Element</code>, and <code>Attr</code> are defined to be subtypes of <code>Node</code> (see Figure 233-1). Thus, a method defined in the <code>Node</code> interface should be available in these as well. Since such inheritance is not supported in <code>PL/SQL</code>, it is implemented through direct invocation of the <code>MAKENODE</code> function. Calling <code>MAKENODE</code> on various DOM types converts these types into a <code>DOMNode</code>. The appropriate functions or procedures that accept <code>DOMNodes</code> can then be called to operate on these types. If, subsequently, type specific functionality is desired, the <code>DOMNode</code> can be converted back into the original type by the <code>makeXXX</code> functions, where <code>DOMXXX</code> is the desired DOM type.

Figure 233-1 Inheritance Diagram for DOM Types



The implementation of this interface follows the REC-DOM-Level-1-19981001.

DBMS_XMLDOM Security Model

Owned by XDB, the DBMS_XMLDOM package must be created by SYS or XDB. The EXECUTE privilege is granted to PUBLIC.

Subprograms in this package are executed using the privileges of the current user.

DBMS_XMLDOM Constants

The DBMS_XMLDOM package defines several constants that can be used for specifying parameter values.

These constants are listed in the following table.

Table 233-1 Defined Constants for DBMS_XMLDOM

Constant	Туре	Value	Description
ELEMENT_NODE	PLS_INTEGER	1	The Node is an Element.
ATTRIBUTE_NODE	PLS_INTEGER	2	The Node is an Attribute.
TEXT_NODE	PLS_INTEGER	3	The Node is a Text node.
CDATA_SECTION_NODE	PLS_INTEGER	4	The Node is a CDataSection.
ENTITY_REFERENCE_NODE	PLS_INTEGER	5	The Node is an Entity Reference.
ENTITY_NODE	PLS_INTEGER	6	The Node is an Entity.
PROCESSING_INSTRUCTION_NODE	PLS_INTEGER	7	The Node is a Processing Instruction.
COMMENT_NODE	PLS_INTEGER	8	The Node is a Comment.
DOCUMENT_NODE	PLS_INTEGER	9	The Node is a Document.
DOCUMENT_TYPE_NODE	PLS_INTEGER	10	The Node is a Document Type Definition.
DOCUMENT_FRAGMENT_NODE	PLS_INTEGER	11	The Node is a Document fragment.
NOTATION_NODE	PLS_INTEGER	12	The Node is a Notation.

DBMS_XMLDOM Types

This table lists and briefly describes the types for the DBMS XMLDOM.DOMTYPE package.

Table 233-2 XDB_XMLDOM Types

Туре	Description
DOMATTR	Implements the DOM Attribute interface.
DOMCDATASECTION	Implements the DOM CDataSection interface.
DOMCHARACTERDATA	Implements the DOM Character Data interface.
DOMCOMMENT	Implements the DOM Comment interface.
DOMDOCUMENT	Implements the DOM Document interface.
DOMDOCUMENTFRAGMENT	Implements the DOM DocumentFragment interface.
DOMDOCUMENTTYPE	Implements the DOM Document Type interface.
DOMELEMENT	Implements the DOM Element interface.
DOMENTITY	Implements the DOM Entity interface.
DOMENTITYREFERENCE	Implements the DOM EntityReference interface.



Table 233-2 (Cont.) XDB_XMLDOM Types

Туре	Description
DOMIMPLEMENTATION	Implements the DOM Implementation interface.
DOMNAMEDNODEMAP	Implements the DOM Named Node Map interface.
DOMNODE	Implements the DOM Node interface.
DOMNODELIST	Implements the DOM NodeList interface.
DOMNOTATION	Implements the DOM Notation interface.
DOMPROCESSINGINSTRUCTION	Implements the DOM Processing instruction interface.
DOMTEXT	Implements the DOM Text interface.

DBMS_XMLDOM Exceptions

DBMS XMLDOM generates an exception when it encounters an issue.

This table lists the exceptions defined for DBMS XMLDOM:

Table 233-3 Exceptions for DBMS_XMLDOM

Exception	Description
DOMSTRING_SIZE_ERR	If the specified range of text does not fit into a DOMString.
HIERARCHY_REQUEST_ERR	If any node is inserted somewhere it doesn't belong.
INDEX_SIZE_ERR	If index or size is negative, or greater than the allowed value.
INUSE_ATTRIBUTE_ERR	If an attempt is made to add an attribute that is already in use elsewhere.
INVALID_CHARACTER_ERR	If an invalid or illegal character is specified, such as in a name. See production 2 in the XML specification for the definition of a legal character, and production 5 for the definition of a legal name character.
NO_DATA_ALLOWED_ERROR	If data is specified for a node that does not support data.
NOT_FOUND_ERR	If an attempt is made to reference a node in a context where it does not exist.
NO_MODIFICATION_ALLOWED_ERR	If an attempt is made to modify an object where modifications are not allowed.
NOT_SUPPORTED_ERR	If the implementation does not support the requested type of object or operation.
WRONG_DOCUMENT_ERR	If a node is used in a different document than the one that created it (that doesn't support it).

DBMS_XMLDOM Subprogram Groups

 ${\tt DBMS_XMLDOM}\ subprograms\ are\ divided\ into\ groups\ according\ to\ W3C\ Interfaces.$

- DOMNode Subprograms
- DOMAttr Subprograms
- DOMCDataSection Subprograms



- DOMCharacterData Subprograms
- DOMComment Subprograms
- DOMDocument Subprograms
- DOMDocumentFragment Subprograms
- DOMDocumentType Subprograms
- DOMElement Subprograms
- DOMEntity Subprograms
- DOMEntityReference Subprograms
- DOMImplementation Subprograms
- DOMNamedNodeMap Subprograms
- DOMNodeList Subprograms
- DOMNotation Subprograms
- DOMProcessingInstruction Subprograms
- DOMText Subprograms

DBMS_XMLDOM DOMNode Subprograms

This table lists and briefly describes the DOMNode subprograms of DBMS XMLDOM.

Table 233-4 Summary of DOMNode Subprograms; DBMS_XMLDOM

Subprogram	Description
ADOPTNODE Function	Adopts a node from another document
APPENDCHILD Function	Appends a new child to the node
CLONENODE Function	Clones the node
FREENODE Procedure	Frees all resources associated with the node
GETATTRIBUTES Function	Retrieves the attributes of the node
GETCHILDNODES Function	Retrieves the children of the node
GETEXPANDEDNAME Procedure and Functions	Retrieves the expanded name of the node
GETFIRSTCHILD Function	Retrieves the first child of the node
GETLASTCHILD Function	Retrieves the last child of the node
GETLOCALNAME Procedure and Functions	Retrieves the local part of the qualified name
GETNAMESPACE Procedure and Functions	Retrieves the node's namespace URI
GETNEXTSIBLING Function	Retrieves the next sibling of the node
GETNODENAME Function	Retrieves the Name of the Node
GETNODETYPE Function	Retrieves the Type of the node
GETNODEVALUE Function	Retrieves the Value of the Node
GETNODEVALUEASBINARYSTREAM Function & Procedure	Retrieves Node Value as binary stream
GETNODEVALUEASCHARACTERSTREAM Function & Procedure	Retrieves Node Value as character stream
GETOWNERDOCUMENT Function	Retrieves the owner document of the node



Table 233-4 (Cont.) Summary of DOMNode Subprograms; DBMS_XMLDOM

Subprogram	Description
GETPARENTNODE Function	Retrieves the parent of this node
GETPREFIX Function	Retrieves the namespace prefix
GETPREVIOUSSIBLING Function	Retrieves the previous sibling of the node
GETSCHEMANODE Function	Retrieves the associated schema URI
HASATTRIBUTES Function	Tests if the node has attributes
HASCHILDNODES Function	Tests if the node has child nodes
IMPORTNODE Function	Imports a node from another document
INSERTBEFORE Function	Inserts a child before the reference child
SNULL Functions	Tests if the node is NULL
MAKEATTR Function	Casts the node to an Attribute
MAKECDATASECTION Function	Casts the node to a CData Section
MAKECHARACTERDATA Function	Casts the node to Character Data
MAKECOMMENT Function	Casts the node to a Comment
MAKEDOCUMENT Function	Casts the node to a DOM Document
MAKEDOCUMENTFRAGMENT Function	Casts the node to a DOM Document Fragment
MAKEDOCUMENTTYPE Function	Casts the node to a DOM Document Type
MAKEELEMENT Function	Casts the node to a DOM Element
MAKEENTITY Function	Casts the node to a DOM Entity
MAKEENTITYREFERENCE Function	Casts the node to a DOM Entity Reference
MAKENOTATION Function	Casts the node to a DOM Notation
MAKEPROCESSINGINSTRUCTION Function	Casts the node to a DOM Processing Instruction
MAKETEXT Function	Casts the node to a DOM Text
REMOVECHILD Function	Removes a specified child from a node
REPLACECHILD Function	Replaces the old child with a new child
SETNODEVALUE Procedure	Sets the Value of the node
SETNODEVALUEASBINARYSTREAM Function & Procedure	Sets the Node Value as binary stream
SETNODEVALUEASCHARACTERSTREAM Function & Procedure	Sets the Node Value as a character stream
SETPREFIX Procedure	Sets the namespace prefix
USEBINARYSTREAM Function	Establishes that the stream is valid
WRITETOBUFFER Procedures	Writes the contents of the node to a buffer
WRITETOCLOB Procedures	Writes the contents of the node to a CLOB
WRITETOFILE Procedures	Writes the contents of the node to a file

DBMS_XMLDOM DOMAttr Subprograms

This table lists the DOMAttr subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-5 Summary of DOMAttr Subprograms; DBMS_XMLDOM

Method	Description
GETEXPANDEDNAME Procedure and Functions	Retrieves the expanded name of the attribute
GETLOCALNAME Procedure and Functions	Retrieves the local name of the attribute
GETNAME Functions	Retrieves the name of the attribute
GETNAMESPACE Procedure and Functions	Retrieves the NS URI of the attribute
GETOWNERELEMENT Function	Retrieves the Element node, parent of the attribute
GETQUALIFIEDNAME Functions	Retrieves the Qualified Name of the attribute
GETSPECIFIED Function	Tests if attribute was specified in the element
GETVALUE Function	Retrieves the value of the attribute
ISNULL Functions	Tests if the Attribute node is NULL
MAKENODE Functions	Casts the Attribute to a node
SETVALUE Procedure	Sets the value of the attribute

DBMS_XMLDOM DOMCDataSection Subprograms

This table lists the DOMCdata subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-6 Summary of DOMCdata Subprograms; DBMS_XMLDOM

Method	Description
ISNULL Functions	Tests if the CDataSection is NULL
MAKENODE Functions	Casts the CDatasection to a node

DBMS_XMLDOM DOMCharacterData Subprograms

This table lists the DOMCharacterData subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-7 Summary of DOMCharacterData Subprograms; DBMS_XMLDOM

Method	Description
APPENDDATA Procedure	Appends the specified data to the node data
DELETEDATA Procedure	Deletes the data from the specified offSets
GETDATA Functions	Retrieves the data of the node
GETLENGTH Functions	Retrieves the length of the data
INSERTDATA Procedure	Inserts the data in the node at the specified offSets
ISNULL Functions	Tests if the CharacterData is NULL
MAKENODE Functions	Casts the CharacterData to a node
REPLACEDATA Procedure	Changes a range of characters in the node

Table 233-7 (Cont.) Summary of DOMCharacterData Subprograms; DBMS_XMLDOM

Method	Description
SETDATA Procedures	Sets the data to the node
SUBSTRINGDATA Function	Retrieves the substring of the data

DBMS_XMLDOM DOMComment Subprograms

The table lists the DOMComment subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-8 Summary of DOMComment Subprograms; DBMS_XMLDOM

Method	Description
ISNULL Functions	Tests if the comment is NULL
MAKENODE Functions	Casts the Comment to a node

DBMS_XMLDOM DOMDocument Subprograms

This table lists the DOMDocument subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-9 Summary of DOMDocument Subprograms; DBMS_XMLDOM

Method	Description
CREATEATTRIBUTE Functions	Creates an Attribute
CREATECDATASECTION Function	Creates a CDataSection node
CREATECOMMENT Function	Creates a Comment node
CREATEDOCUMENT Function	Creates a new Document
CREATEDOCUMENTFRAGMENT Function	Creates a new Document Fragment
CREATEELEMENT Functions	Creates a new Element
CREATEENTITYREFERENCE Function	Creates an Entity reference
CREATEPROCESSINGINSTRUCTION Function	Creates a Processing Instruction
CREATETEXTNODE Function	Creates a Text node
FREEDOCFRAG Procedure	Frees the document fragment
FREEDOCUMENT Procedure	Frees the document
GETCHARSET Function	Retrieves the characterset of the DOM document
GETDOCTYPE Function	Retrieves the DTD of the document
GETDOCUMENTELEMENT Function	Retrieves the root element of the document
GETELEMENTSBYTAGNAME Functions	Retrieves
	the elements in the DOMNODELIST by tag
	 name elements in the subtree of a DOMNODELIST
	by tagname
GETIMPLEMENTATION Function	Retrieves the DOM implementation

Table 233-9 (Cont.) Summary of DOMDocument Subprograms; DBMS_XMLDOM

Method	Description
GETSTANDALONE Function	Retrieves the standalone property of the document
GETVERSION Function	Retrieves the version of the document
GETXMLTYPE Function	Retrieves the XMLType associated with the DOM Document
ISNULL Functions	Tests if the document is NULL
MAKENODE Functions	Casts the document to a node
NEWDOMDOCUMENT Functions	Creates a new document
SETCHARSET Procedure	Sets the characterset of the DOM document
SETDOCTYPE Procedure	Sets the DTD of the document
SETSTANDALONE Procedure	Sets the standalone property of the document
SETVERSION Procedure	Sets the version of the document
WRITETOBUFFER Procedures	Writes the document to a buffer
WRITETOCLOB Procedures	Writes the document to a CLOB
WRITETOFILE Procedures	Writes the document to a file

DBMS_XMLDOM DOMDocumentFragment Subprograms

This table lists the DOMDocumentFragment subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-10 Summary of DOMDocumentFragment Subprograms; DBMS_XMLDOM

Method	Description
FREEDOCFRAG Procedure	Frees the specified document fragment
ISNULL Functions	Tests if the DocumentFragment is NULL
MAKENODE Functions	Casts the Document Fragment to a node
WRITETOBUFFER Procedures	Writes the contents of a document fragment into a buffer

DBMS_XMLDOM DOMDocumentType Subprograms

This table lists the DOMDocumentType subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-11 Summary of DOMDocumentType Subprograms; DBMS_XMLDOM

Method	Description
FINDENTITY Function	Finds the specified entity in the document type
FINDNOTATION Function	Finds the specified notation in the document type
GETENTITIES Function	Retrieves the nodemap of entities in the Document type
GETNAME Functions	Retrieves the name of the Document type



Table 233-11 (Cont.) Summary of DOMDocumentType Subprograms; DBMS_XMLDOM

Method	Description
GETNOTATIONS Function	Retrieves the nodemap of the notations in the Document type
GETPUBLICID Functions	Retrieves the public ID of the document type
GETSYSTEMID Functions	Retrieves the system ID of the document type
ISNULL Functions	Tests if the Document Type is NULL
MAKENODE Functions	Casts the document type to a node

DBMS_XMLDOM DOMElement Subprograms

This table lists the DOMElement subprograms of DBMS_XMLDOM in alphabetical order and briefly describes them.

Table 233-12 Summary of DOMElement Subprograms; DBMS_XMLDOM

Method	Description
FREEELEMENT Procedure	Frees memory allocated to a DOMElement handle
GETATTRIBUTE Functions	Retrieves the attribute node by name
GETATTRIBUTENODE Functions	Retrieves the attribute node by name
GETCHILDRENBYTAGNAME Functions	Retrieves children of the element by tag name
GETELEMENTSBYTAGNAME Functions	Retrieves
	 the elements in the DOMNODELIST by tag name
	 elements in the subtree of a DOMNODELIST by tagname
GETEXPANDEDNAME Procedure and Functions	Retrieves the expanded name of the element
GETLOCALNAME Procedure and Functions	Retrieves the local name of the element
GETNAMESPACE Procedure and Functions	Retrieves the NS URI of the element
GETQUALIFIEDNAME Functions	Retrieves the qualified name of the element
GETTAGNAME Function	Retrieves the Tag name of the element
HASATTRIBUTE Functions	Tests if an attribute exists
ISNULL Functions	Tests if the Element is NULL
MAKENODE Functions	Casts the Element to a node
NORMALIZE Procedure	Normalizes the text children of the element
REMOVEATTRIBUTE Procedures	Removes the attribute specified by the name
REMOVEATTRIBUTENODE Function	Removes the attribute node in the element
RESOLVENAMESPACEPREFIX Function	Resolve the prefix to a namespace URI
SETATTRIBUTE Procedures	Sets the attribute specified by the name
SETATTRIBUTENODE Functions	Sets the attribute node in the element

DBMS_XMLDOM DOMEntity Subprograms

This table lists and briefly describes the DOMEntity subprograms of DBMS XMLDOM.

Table 233-13 Summary of DOMEntity Subprograms; DBMS_XMLDOM

Method	Description
GETNOTATIONNAME Function	Retrieves the notation name of the entity
GETPUBLICID Functions	Retrieves the public Id of the entity
GETSYSTEMID Functions	Retrieves the system Id of the entity
ISNULL Functions	Tests if the Entity is NULL
MAKENODE Functions	Casts the Entity to a node

DBMS_XMLDOM DOMEntityReference Subprograms

This table lists and briefly describes the DOMEntityReference subprograms of DBMS XMLDOM.

Table 233-14 Summary of DOMEntityReference Subprograms; DBMS_XMLDOM

Method	Description
ISNULL Functions	Tests if the DOMEntityReference is NULL
MAKENODE Functions	Casts the DOMEntityReference to NULL

DBMS_XMLDOM DOMImplementation Subprograms

This table lists and briefly describes the DOMImplementation subprograms of DBMS XMLDOM.

Table 233-15 Summary of DOMImplementation Subprograms; DBMS_XMLDOM

Method	Description
ISNULL Functions	Tests if the DOMImplementation node is NULL
HASFEATURE Function	Tests if the DOMImplementation implements a feature

DBMS_XMLDOM DOMNamedNodeMap Subprograms

This table lists and briefly describes the DOMNamedNodeMap subprograms of DBMS XMLDOM.

Table 233-16 Summary of DOMNamedNodeMap Subprograms; DBMS_XMLDOM

Method	Description
GETLENGTH Functions	Retrieves the number of items in the map
GETNAMEDITEM Function	Retrieves the item specified by the name
ISNULL Functions	Tests if the NamedNodeMap is NULL
ITEM Functions	Retrieves the item given the index in the map
REMOVENAMEDITEM Function	Removes the item specified by name
SETNAMEDITEM Function	Sets the item in the map specified by the name

DBMS_XMLDOM DOMNodeList Subprograms

This table lists and briefly describes the DOMNodeList subprograms of DBMS XMLDOM.

Table 233-17 Summary of DOMNodeList Subprograms; DBMS_XMLDOM

Method	Description
FREENODELIST Procedure	Frees all resources associated with a nodelist
GETLENGTH Functions	Retrieves the number of items in the list
ISNULL Functions	Tests if the NodeList is NULL
ITEM Functions	Retrieves the item given the index in the list

DBMS_XMLDOM DOMNotation Subprograms

This table lists and briefly describes the DOMNotation subprograms of DBMS XMLDOM.

Table 233-18 Summary of DOMNotation Subprograms; DBMS_XMLDOM

Method	Description
GETPUBLICID Functions	Retrieves the public Id of the notation
GETSYSTEMID Functions	Retrieves the system Id of the notation
ISNULL Functions	Tests if the Notation is NULL
MAKENODE Functions	Casts the notation to a node

DBMS_XMLDOM DOMProcessingInstruction Subprograms

This table lists and briefly describes the ${\tt DOMProcessingInstruction}$ subprograms of ${\tt DBMS_XMLDOM}$.

Table 233-19 Summary of DOMProcessingInstruction Subprograms; DBMS_XMLDOM

Method	Description
GETDATA Functions	Retrieves the data of the processing instruction
GETTARGET Function	Retrieves the target of the processing instruction
ISNULL Functions	Tests if the Processing Instruction is NULL
MAKENODE Functions	Casts the Processing Instruction to a node
SETDATA Procedures	Sets the data of the processing instruction

DBMS_XMLDOM DOMText Subprograms

This table lists and briefly describes the DOMText subprograms of DBMS XMLDOM.

Table 233-20 Summary of DOMText Subprograms; DBMS_XMLDOM

Method	Description
ISNULL Functions	Tests if the text is NULL
MAKENODE Functions	Casts the text to a node
SPLITTEXT Function	Splits the contents of the text node into 2 text nodes

Summary of DBMS_XMLDOM Subprograms

This table lists the DBMS_XMLDOM subprograms and briefly describes them.

Table 233-21 Summary of DBMS_XMLDOM Package Subprogram

Subprogram	Description	Group
ADOPTNODE Function	Adopts a node from another document	DOMNode Subprograms
APPENDCHILD Function	Appends a new child to the node	DOMNode Subprograms
APPENDDATA Procedure	Appends the specified data to the node data	DOMCharacterData Subprograms
CLONENODE Function	Clones the node	DOMNode Subprograms
CREATEATTRIBUTE Functions	Creates an Attribute	DOMDocument Subprograms
CREATECDATASECTION Function	Creates a CDataSection node	DOMDocument Subprograms
CREATECOMMENT Function	Creates a Comment node	DOMDocument Subprograms
CREATEDOCUMENT Function	Creates a new Document	DOMDocument Subprograms
CREATEDOCUMENTFRAGMENT Function	Creates a new Document Fragment	DOMDocument Subprograms
CREATEELEMENT Functions	Creates a new Element	DOMDocument Subprograms
CREATEENTITYREFERENCE Function	Creates an Entity reference	DOMDocument Subprograms
CREATEPROCESSINGINSTRUC TION Function	Creates a Processing Instruction	DOMDocument Subprograms
CREATETEXTNODE Function	Creates a Text node	DOMDocument Subprograms
DELETEDATA Procedure	Deletes the data from the specified offSets	DOMCharacterData Subprograms
FINDENTITY Function	Finds the specified entity in the document type	DOMDocumentType Subprograms
FINDNOTATION Function	Finds the specified notation in the document type	DOMDocumentType Subprograms
FREEDOCFRAG Procedure	Frees the document fragment	DOMDocument Subprograms and DOMDocumentFragment Subprograms
FREEDOCUMENT Procedure	Frees the document	DOMDocument Subprograms
FREEELEMENT Procedure	Frees memory allocated to a DOMElement handle	DOMElement Subprograms
FREENODE Procedure	Frees all resources associated with the node	DOMNode Subprograms

Table 233-21 (Cont.) Summary of DBMS_XMLDOM Package Subprogram

Subprogram	Description	Group
FREENODELIST Procedure	Frees all resources associated with a nodelist	DOMNodeList Subprograms
GETATTRIBUTE Functions	Retrieves the attribute node by name	DOMElement Subprograms
GETATTRIBUTENODE Functions	Retrieves the attribute node by name	DOMElement Subprograms
GETATTRIBUTES Function	Retrieves the attributes of the node	DOMNode Subprograms
GETCHARSET Function	Retrieves the characterset of the DOM document	DOMDocument Subprograms
GETCHILDNODES Function	Retrieves the children of the node	DOMNode Subprograms
GETCHILDRENBYTAGNAME Functions	Retrieves children of the element by tag name	DOMCharacterData Subprograms
GETDATA Functions	Retrieves the data of the node the data of the processing instruction	 DOMCharacterData Subprograms DOMProcessingInstructi on Subprograms
GETDOCTYPE Function	Retrieves the DTD of the document	DOMDocument Subprograms
GETDOCUMENTELEMENT Function	Retrieves the root element of the document	DOMDocument Subprograms
GETELEMENTSBYTAGNAME	Retrieves	• DOMDocument
Functions	 the elements in the DOMNODELIST by tag name elements in the subtree of a DOMNODELIST by tagname 	SubprogramsDOMElement Subprograms
GETENTITIES Function	Retrieves the nodemap of entities in the Document type	DOMDocumentType Subprograms
GETEXPANDEDNAME Procedure	Retrieves	DOMNode Subprograms
and Functions	 the expanded name of the node the expanded name of the attribute the expanded name of the 	DOMAttr SubprogramsDOMElement Subprograms
GETFIRSTCHILD Function	element Retrieves the first child of the node	DOMNode Subprograms
GETIMPLEMENTATION Function	Retrieves the DOM implementation	DOMDocument Subprograms
GETLASTCHILD Function	Retrieves the last child of the node	DOMNode Subprograms
GETLENGTH Functions	Retrieves the length of the data the number of items in the map the number of items in the list	 DOMCharacterData Subprograms DOMNamedNodeMap Subprograms DOMNodeList Subprograms
GETLOCALNAME Procedure and	Retrieves	 DOMNode Subprograms
Functions	 the local part of the qualified name the local name of the attribute the local name of the element 	 DOMAttr Subprograms DOMElement Subprograms



Table 233-21 (Cont.) Summary of DBMS_XMLDOM Package Subprogram

Subprogram	Description	Group
GETNAME Functions	Retrieves the name of the attribute the name of the Document type	DOMAttr SubprogramsDOMDocumentType Subprograms
GETNAMEDITEM Function	Retrieves an item specified by name and namespace URI)	 DOMNamedNodeMap Subprograms DOMNamedNodeMap Subprograms
GETNAMESPACE Procedure and Functions	 Retrieves the node's namespace URI the NS URI of the attribute the NS URI of the element 	 DOMNode Subprograms DOMAttr Subprograms DOMElement Subprograms
GETNEXTSIBLING Function	Retrieves the next sibling of the node	DOMNode Subprograms
GETNODENAME Function	Retrieves the Name of the Node	DOMNode Subprograms
GETNODETYPE Function	Retrieves the Type of the node	DOMNode Subprograms
GETNODEVALUE Function	Retrieves the Value of the Node	DOMNode Subprograms
GETNODEVALUEASBINARYSTR EAM Function & Procedure	Retrieves the Node Value as binary stream	DOMNode Subprograms
GETNODEVALUEASCHARACTE RSTREAM Function & Procedure	Retrieves the Node Value as character stream	DOMNode Subprograms
GETNOTATIONNAME Function	Retrieves the notation name of the entity	DOMEntity Subprograms
GETNOTATIONS Function	Retrieves the nodemap of the notations in the Document type	DOMDocumentType Subprograms
GETTARGET Function	Retrieves the target of the processing instruction	DOMProcessingInstruction Subprograms
GETOWNERDOCUMENT Function	Retrieves the owner document of the node	DOMNode Subprograms
GETOWNERELEMENT Function	Retrieves the Element node, parent of the attribute	DOMAttr Subprograms
GETPARENTNODE Function	Retrieves the parent of this node	DOMNode Subprograms
GETPREFIX Function	Retrieves the namespace prefix	DOMNode Subprograms
GETPREVIOUSSIBLING Function	Retrieves the previous sibling of the node	DOMNode Subprograms
GETPUBLICID Functions	 Retrieves the public ID of the document type the public Id of the entity the public Id of the notation 	 DOMDocumentType Subprograms DOMEntity Subprograms DOMNotation Subprograms
GETQUALIFIEDNAME Functions	Retrieves the Qualified Name of the attribute the qualified name of the element	 DOMAttr Subprograms DOMElement Subprograms
GETSCHEMANODE Function	Retrieves the associated schema URI	DOMNode Subprograms

Table 233-21 (Cont.) Summary of DBMS_XMLDOM Package Subprogram

Subprogram	Description	Group
GETSPECIFIED Function	Tests if attribute was specified in the element.	DOMAttr Subprograms
GETSTANDALONE Function	Retrieves the standalone property of the document	DOMDocument Subprograms
GETSYSTEMID Functions	 Retrieves the system ID of the document type the system Id of the entity the system Id of the notation 	 DOMDocumentType Subprograms DOMEntity Subprograms DOMNotation Subprograms
GETTAGNAME Function	Retrieves the Tag name of the element	DOMElement Subprograms
GETVALUE Function	Retrieves the value of the attribute	DOMAttr Subprograms
GETVERSION Function	Retrieves the version of the document	DOMDocument Subprograms)
GETXMLTYPE Function	Retrieves the XMLType associated with the DOM Document	DOMDocument Subprograms
HASATTRIBUTES Function	Tests if the node has attributes	DOMNode Subprograms
HASATTRIBUTE Functions	Tests if an attribute exists	DOMElement Subprograms
HASCHILDNODES Function	Tests if the node has child nodes	DOMNode Subprograms
HASFEATURE Function	Tests if the DOMImplementation implements a feature	DOMImplementation Subprograms
IMPORTNODE Function	Imports a node from another document	DOMNode Subprograms
INSERTBEFORE Function	Inserts a child before the reference child	DOMNode Subprograms
INSERTDATA Procedure	Inserts the data in the node at the specified offSets	DOMCharacterData Subprograms



Table 233-21 (Cont.) Summary of DBMS_XMLDOM Package Subprogram

Subprogram	Description	Group
ISNULL Functions	Tests if the node is NULL if the Attribute node is NULL if the CDataSection is NULL if the CharacterData is NULL if the comment is NULL if the document is NULL if the DocumentFragment is NULL if the Document Type is NULL if the Element is NULL if the Entity is NULL if the DOMEntityReference is NULL if the DOMImplementation node is NULL if the NamedNodeMap is NULL if the NodeList is NULL if the Processing Instruction is NULL if the text is NULL	 DOMNode Subprograms DOMAttr Subprograms DOMCDataSection Subprograms DOMCharacterData Subprograms DOMComment Subprograms DOMDocument Subprograms DOMDocumentFragment Subprograms DOMDocumentType Subprograms DOMElement Subprograms DOMElement Subprograms DOMEntity Subprograms DOMEntityReference Subprograms DOMImplementation Subprograms DOMNamedNodeMap Subprograms DOMNodeList Subprograms DOMNodeList Subprograms DOMNotation Subprograms DOMProcessingInstruction Subprograms DOMProcessingInstruction Subprograms DOMText Subprograms
ITEM Functions	Retrieves • the item given the index in the map • the item given the index in the NodeList	 DOMNamedNodeMap Subprograms DOMNodeList Subprograms
MAKEATTR Function	Casts the node to an Attribute	DOMNode Subprograms
MAKECDATASECTION Function MAKECHARACTERDATA Function	Casts the node to a CData Section Casts the node to Character Data	DOMNode Subprograms DOMNode Subprograms
MAKECOMMENT Function	Casts the node to a Comment	DOMNode Subprograms
MAKEDOCUMENT Function	Casts the node to a DOM Document	DOMNode Subprograms
MAKEDOCUMENTFRAGMENT Function	Casts the node to a DOM Document Fragment	DOMNode Subprograms)
MAKEDOCUMENTTYPE Function	Casts the node to a DOM Document Type	DOMNode Subprograms
MAKEELEMENT Function	Casts the node to a DOM ElemenT	DOMNode Subprograms
MAKEENTITY Function	Casts the node to a DOM Entity	DOMNode Subprograms
MAKEENTITYREFERENCE Function	Casts the node to a DOM Entity Reference	DOMNode Subprograms



Table 233-21 (Cont.) Summary of DBMS_XMLDOM Package Subprogram

Subprogram	Description	Group
MAKENODE Functions	 the Attribute to a node the CDatasection to a node the CharacterData to a node the Comment to a node the document to a node the Document Fragment to a node the document type to a node the Element to a node the Entity to a node the DOMEntityReference to NULL the notation to a node the Processing Instruction to a node the text to a node 	 DOMAttr Subprograms DOMCDataSection Subprograms DOMCharacterData Subprograms DOMComment Subprograms DOMDocument Subprograms DOMDocumentFragment Subprograms DOMDocumentType Subprograms DOMElement Subprograms DOMEntity Subprograms DOMEntityReference Subprograms DOMNotation Subprograms DOMProcessingInstruction Subprograms
MAKENOTATION Function	Casts the node to a DOM Notation	 DOMText Subprograms DOMNode Subprograms
MAKEPROCESSINGINSTRUCTI ON Function	Casts the node to a DOM Processing Instruction	DOMNode Subprograms
MAKETEXT Function	Casts the node to a DOM Text	DOMNode Subprograms
NEWDOMDOCUMENT Functions	Creates a new document	DOMDocument Subprograms
NORMALIZE Procedure	Normalizes the text children of the element	DOMElement Subprograms
REMOVEATTRIBUTE Procedures	Removes the attribute specified by the name	DOMElement Subprograms
REMOVEATTRIBUTENODE Function	Removes the attribute node in the element	DOMElement Subprograms
REMOVECHILD Function	Removes a specified child from a node	DOMNode Subprograms
REMOVENAMEDITEM Function	Removes the item specified by name	DOMNamedNodeMap Subprograms
REPLACECHILD Function	Replaces the old child with a new child	DOMNode Subprograms
REPLACEDATA Procedure	Changes a range of characters in the node	DOMCharacterData Subprograms
RESOLVENAMESPACEPREFIX Function	Resolve the prefix to a namespace URI	DOMElement Subprograms
SETATTRIBUTE Procedures	Sets the attribute specified by the name	DOMElement Subprograms



Table 233-21 (Cont.) Summary of DBMS_XMLDOM Package Subprogram

Subprogram	Description	Group
SETCHARSET Procedure	Sets the characterset of the DOM document	DOMDocument Subprograms
SETDATA Procedures	Setsthe data to the nodethe data of the processing instruction	DOMCharacterData SubprogramsDOMProcessingInstructi on Subprograms
SETDOCTYPE Procedure	Sets the DTD of the document.	DOMDocument Subprograms
SETNAMEDITEM Function	Sets the item in the map specified by the name	DOMNamedNodeMap Subprograms
SETNODEVALUE Procedure	Sets the Value of the node	DOMNode Subprograms
SETNODEVALUEASBINARYSTR EAM Function & Procedure	Sets the Node Value as a binary stream	DOMNode Subprograms
SETNODEVALUEASCHARACTE RSTREAM Function & Procedure	Sets the Node Value as a character stream	DOMNode Subprograms
SETPREFIX Procedure	Sets the namespace prefix	DOMNode Subprograms
SETSTANDALONE Procedure	Sets the standalone property of the document	DOMDocument Subprograms
SETVALUE Procedure	Sets the value of the attribute	DOMAttr Subprograms
SETVERSION Procedure	Sets the version of the document	DOMDocument Subprograms
SPLITTEXT Function	Splits the contents of the text node into 2 text nodes	DOMText Subprograms
SUBSTRINGDATA Function	Retrieves the substring of the data	DOMCharacterData Subprograms
USEBINARYSTREAM Function	Strabismus that the stream is valid for use	DOMNode Subprograms
WRITETOBUFFER Procedures	Writes	• DOMNode Subprograms
	• the contents of the node to a	DOMDocument Subprograms
	bufferthe document to a buffer	SubprogramsDOMDocumentFragment
	the document to a burier the contents of a document fragment into a buffer	Subprograms
WRITETOCLOB Procedures	Writes	DOMNode Subprograms
	the contents of the node to a CLOB	 DOMDocument Subprograms
	• the document to a CLOB	
WRITETOFILE Procedures	Writes	• DOMNode Subprograms
	the contents of the node to a filethe document to a file	 DOMDocument Subprograms



ADOPTNODE Function

This function adopts a node from another document, and returns this new node.



DOMNode Subprograms for other subprograms in this group

Syntax

```
DBMS_XMLDOM.ADOPTNODE(
doc IN DOMDocument,
importedNode IN DOMNode)
RETURN DOMNODE;
```

Parameters

Table 233-22 ADOPTNODE Function Parameters

Parameter	Description
doc	Document that is adopting the node
importedNode	Node to adopt

Usage Notes

Note that the ADOPTNODE Function removes the node from the source document while the IMPORTNODE Function clones the node in the source document.

APPENDCHILD Function

This function adds the node <code>newchild</code> to the end of the list of children of this node, and returns the newly added node. If the <code>newchild</code> is already in the tree, it is first removed.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.APPENDCHILD(
n IN DOMNode,
newchild IN DOMNode)
RETURN DOMNODE;
```



Table 233-23 APPENDCHILD Function Parameters

Parameter	Description
n	DOMNode
newchild	The child to be appended to the list of children of node n

APPENDDATA Procedure

This procedure appends the string to the end of the character data of the node. Upon success, data provides access to the concatenation of data and the specified string argument.



DOMCharacterData Subprograms

Syntax

Parameters

Table 233-24 APPENDDATA Procedure Parameters

Parameter	Description
cd	DOMCHARACTERDATA
arg	The data to append to the existing data

CLONENODE Function

This function returns a duplicate of this node, and serves as a generic copy constructor for nodes. The duplicate node has no parent, its parent node is ${\tt NULL}$.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.CLONENODE(
n IN DOMNODE,
deep IN BOOLEAN)
RETURN DOMNODE;
```



Table 233-25 CLONENODE Function Parameters

Parameter	Description
n	DOMNODE
deep	Determines if children are to be cloned

Usage Notes

- Cloning an Element copies all attributes and their values, including those generated by the XML processor to represent defaulted attributes, but this method does not copy any text it contains unless it is a deep clone, since the text is contained in a child Text node.
- Cloning an Attribute directly, as opposed to be cloned as part of an Element cloning operation, returns a specified attribute (specified is TRUE).
- Cloning any other type of node simply returns a copy of this node.

CREATEATTRIBUTE Functions

This function creates a DOMATTR node.



DOMDocument Subprograms

Syntax

Creates a DOMATTR with the specified name:

```
DBMS_XMLDOM.CREATEATTRIBUTE(
doc IN DOMDOCUMENT,
name IN VARCHAR2)
RETURN DOMATTR;
```

Creates a DOMATTR with the specified name and namespace URI:

```
DBMS_XMLDOM.CREATEATTRIBUTE(
doc IN DOMDOCUMENT,
qname IN VARCHAR2,
ns IN VARCHAR2)
RETURN DOMATTR;
```

Parameters

Table 233-26 CREATEATTRIBUTE Function Parameters

Parameter	Description
doc	DOMDOCUMENT
qname	New attribute qualified name

Table 233-26 (Cont.) CREATEATTRIBUTE Function Parameters

Parameter	Description
ns	Namespace

CREATECDATASECTION Function

This function creates a DOMCDATASECTION node.

See Also:

DOMDocument Subprograms

Syntax

DBMS_XMLDOM.CREATECDATASECTION(
doc IN DOMDOCUMENT,
data IN VARCHAR2)
RETURN DOMCDATASECTION;

Parameters

Table 233-27 CREATECDATASECTION Function Parameters

Parameter	Description
doc	DOMDOCUMENT
data	Content of the DOMCDATASECTION node

CREATECOMMENT Function

This function creates a DOMCOMMENT node.

See Also:

DOMDocument Subprograms

Syntax

DBMS_XMLDOM.CREATECOMMENT(
doc IN DOMDOCUMENT,
data IN VARCHAR2)
RETURN DOMCOMMENT;

Table 233-28 CREATECOMMENT Function Parameters

Parameter	Description
doc	DOMDOCUMENT
data	Content of the DOMComment node

CREATEDOCUMENT Function

This function creates a DOMDOCUMENT with specified namespace URI, root element name, DTD.

See Also:

DOMDocument Subprograms

Syntax

```
DBMS_XMLDOM.CREATEDOCUMENT(
namespaceURI IN VARCHAR2,
qualifiedName IN VARCHAR2,
doctype IN DOMTYPE := NULL)
RETURN DOMDOCUMENT;
```

Parameters

Table 233-29 CREATEDOCUMENT Function Parameters

Parameter	Description
namespaceURI	Namespace URI
qualifiedName	Root element name
doctype	Document type

CREATEDOCUMENTFRAGMENT Function

This function creates a DOMDOCUMENTFRAGMENT.

✓ See Also:

DOMDocument Subprograms

Syntax

Table 233-30 CREATEDOCUMENTFRAGMENT Function Parameters

Parameter	Description
doc	DOMDocument

CREATEELEMENT Functions

This function creates a DOMELEMENT.



DOMDocument Subprograms

Syntax

Creates a DOMElement with specified name:

```
DBMS_XMLDOM.CREATEELEMENT(
doc IN DOMDOCUMENT,
tagName IN VARCHAR2)
RETURN DOMELEMENT;
```

Creates a DOMElement with specified name and namespace URI:

```
DBMS_XMLDOM.CREATEELEMENT(
doc IN DOMDOCUMENT,
tagName IN VARCHAR2,
ns IN VARCHAR2)
RETURN DOMELEMENT;
```

Parameters

Table 233-31 CREATEELEMENT Function Parameters

Parameter	Description
doc	DOMDOCUMENT
tagName	Tagname for new DOMELEMENT
ns	Namespace



CREATEENTITYREFERENCE Function

This function creates a DOMENTITYREFERENCE node.



DOMDocument Subprograms

Syntax

DBMS_XMLDOM.CREATEENTITYREFERENCE(
doc IN DOMDOCUMENT,
name IN VARCHAR2)
RETURN DOMENTITYREFERENCE;

Parameters

Table 233-32 CREATEENTITYREFERENCE Function Parameters

Parameter	Description
doc	DOMDOCUMENT
name	New entity reference name

CREATEPROCESSINGINSTRUCTION Function

This function creates a DOMPROCESSINGINSTRUCTION node.

See Also:

DOMDocument Subprograms

Syntax

DBMS_XMLDOM.CREATEPROCESSINGINSTRUCTION(
doc IN DOMDocument,
target IN VARCHAR2,
data IN VARCHAR2)
RETURN DOMPROCESSINGINSTRUCTION;

Parameters

Table 233-33 CREATEPROCESSINGINSTRUCTION Function Parameters

Parameter	Description
doc	DOMDOCUMENT
target	Target of the new processing instruction



Table 233-33 (Cont.) CREATEPROCESSINGINSTRUCTION Function Parameters

Parameter	Description
data	Content data of the new processing instruction

CREATETEXTNODE Function

This function creates a DOMTEXT node.



DOMDocument Subprograms

Syntax

Parameters

Table 233-34 CREATETEXTNODE Function Parameters

Parameter	Description
doc	DOMDOCUMENT
data	Content of the DOMText node

DELETEDATA Procedure

This procedure removes a range of characters from the node. Upon success, data and length reflect the change.



DOMCharacterData Subprograms

Syntax

```
DBMS_XMLDOM.DELETEDATA(
cd IN DOMCHARACTERDATA,
offset IN NUMBER,
cnt IN NUMBER);
```



Table 233-35 DELETEDATA PROCEDURE Parameters

Parameter	Description
cd	DOMCHARACTERDATA
offset	The offset from which to delete the data
cnt	The number of characters (starting from offset) to delete

FINDENTITY Function

This function finds an entity in the specified DTD, and returns that entity if found.



DOMDocumentType Subprograms

Syntax

```
DBMS_XMLDOM.FINDENTITY(
dt IN DOMDOCUMENTTYPE,
name IN VARCHAR2,
par IN BOOLEAN)
RETURN DOMENTITY;
```

Parameters

Table 233-36 FINDENTITY Function Parameters

Parameter	Description
dt	The DTD
name	Entity to find
par	Flag to indicate type of entity; \mathtt{TRUE} for parameter entity and \mathtt{FALSE} for normal entity

FINDNOTATION Function

This function finds the notation in the specified DTD, and returns it, if found.



DOMDocumentType Subprograms

Syntax

Parameters

Table 233-37 FINDNOTATION Function Parameters

Parameter	Description
dt	The DTD
name	The notation to find

FREEDOCFRAG Procedure

This procedure frees the specified document fragment.

✓ See Also:

DOMDocument Subprograms and DOMDocumentFragment Subprograms

Syntax

Parameters

Table 233-38 FREEDOCFRAG Procedure Parameters

Parameter	Description
df	DOM document fragment

FREEDOCUMENT Procedure

This procedure frees DOMDOCUMENT object.

See Also:

DOMDocument Subprograms

Syntax



Table 233-39 FREEDOCUMENT Procedure Parameters

Parameter	Description
doc	DOMDOCUMENT

FREEELEMENT Procedure

This procedure frees memory allocated to a DOMElement handle.



Syntax

```
DBMS_XMLDOM.FREEELEMENT(
    elem IN DOMELEMENT);
```

Parameters

Table 233-40 FREEELEMENT Procedure Parameters

Parameter	Description
elem	Of type DOMELEMENT

FREENODE Procedure

This procedure frees all resources associated with a DOMNODE.



Syntax

Table 233-41 FREENODE Procedure Parameters

Parameter	Description
n	DOMNODE

FREENODELIST Procedure

This procedure frees all resources associated with a nodelist.



DBMS_XMLDOM DOMNodeList Subprograms

Syntax

```
DBMS_XMLDOM.FREENODELIST(
    nl IN DOMNodeList);
```

Parameters

Table 233-42 FREENODELIST Procedure Parameters

Parameter	Description
nl	Of type DOMNODELIST

GETATTRIBUTE Functions

This function returns the value of an attribute of an DOMELEMENT by name.



DOMElement Subprograms

Syntax

Returns the value of a DOMELEMENT's attribute by name:

```
DBMS_XMLDOM.GETATTRIBUTE(
elem IN DOMELEMENT,
name IN VARCHAR2)
RETURN VARCHAR2;
```

Returns the value of a DOMELEMENT's attribute by name and namespace URI:

```
DBMS_XMLDOM.GETATTRIBUTE(
elem IN DOMELEMENT,
name IN VARCHAR2,
ns IN VARCHAR2)
RETURN VARCHAR2;
```

Table 233-43 GETATTRIBUTE Function Parameters

Parameter	Description
elem	The DOMELEMENT
name	Attribute name
ns	Namespace

GETATTRIBUTENODE Functions

This function returns an attribute node from the DOMELEMENT by name. The function is overloaded. The specific forms of functionality are described along with the syntax declarations.



DOMElement Subprograms

Syntax

Returns an attribute node from the DOMELEMENT by name:

Returns an attribute node from the ${\tt DOMELEMENT}$ by name and namespace URI:

```
DBMS_XMLDOM.GETATTRIBUTENODE(
elem IN DOMElement,
name IN VARCHAR2,
ns IN VARCHAR2)
RETURN DOMATTR;
```

Parameters

Table 233-44 GETATTRIBUTENODE Function Parameters

Parameter	Description
elem	The DOMELEMENT
name	Attribute name; * matches any attribute
ns	Namespace



GETATTRIBUTES Function

This function retrieves a NAMEDNODEMAP containing the attributes of this node (if it is an Element) or NULL otherwise.



DOMNode Subprograms

Syntax

DBMS_XMLDOM.GETATTRIBUTES(
n IN DOMNode)
RETURN DOMNAMEDNODEMAP;

Parameters

Table 233-45 GETATTRIBUTES Function Parameters

Parameter	Description
n	DOMNODE

GETCHARSET Function

This function retrieves the characterset of the DOM document.



DOMDocument Subprograms

Syntax

DBMS_XMLDOM.GETCHARSET(
 doc IN DOMDocument)
RETURN VARCHAR2;

Parameters

Table 233-46 GETCHARSET Function Parameters

Parameter	Description
doc	DOM document

Usage Notes

For a newly parsed document, we return the database characterset. Once the SETCHARSET Procedure is called with a non-NULL value for charset, that charset is returned.

GETCHILDNODES Function

This function retrieves a DOMNODELIST that contains all children of this node. If there are no children, this is a DOMNODELIST containing no nodes.

```
See Also:
```

DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.GETCHILDNODES(
n IN DOMNode)
RETURN DOMNodeList;
```

Parameters

Table 233-47 GETCHILDNODES Function Parameters

Parameter	Description
n	DOMNODE

GETCHILDRENBYTAGNAME Functions

This function returns the children of the DOMELEMENT.



DOMElement Subprograms

Syntax

Returns children of the DOMELEMENT given the tag name:

```
DBMS_XMLDOM.GETCHILDRENBYTAGNAME(
elem IN DOMElement,
name IN VARCHAR2)
RETURN DOMNODELIST;
```

Returns children of the DOMELEMENT given the tag name and namespace:

```
DBMS_XMLDOM.GETCHILDRENBYTAGNAME(
elem IN DOMElement,
name IN VARCHAR2,
ns IN VARCHAR2)
RETURN DOMNODELIST;
```



Table 233-48 GETCHILDRENBYTAGNAME Function Parameters

Parameter	Description
elem	DOMELEMENT
name	Tag name
ns	Namespace

GETDATA Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Gets the character data of the node that implements this interface (See Also: DOMCharacterData Subprograms):

Returns the content data of the DOMProcessingInstruction (See Also: DOMProcessingInstruction Subprograms):

Parameters

Table 233-49 GETDATA Function Parameters

Parameter	Description
cd	DOMCHARACTERDATA
pi	The DOMPROCESSINGINSTRUCTION

GETDOCTYPE Function

This function returns the DTD associated to the DOMDOCUMENT.



DOMDocument Subprograms

Syntax

Parameters

Table 233-50 GETDOCTYPE Function Parameters

Parameter	Description
doc	DOMDOCUMENT

GETDOCUMENTELEMENT Function

This function returns the root element of the DOMDOCUMENT.



DOMDocument Subprograms

Syntax

```
DBMS_XMLDOM.GETDOCUMENTELEMENT(
doc IN DOMDOCUMENT)
RETURN DOMELEMENT;
```

Parameters

Table 233-51 GETDOCUMENTELEMENT Function Parameters

Parameter	Description
doc	DOMDOCUMENT

GETELEMENTSBYTAGNAME Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Returns a DOMNODELIST of all the elements with a specified tagname (See Also: DOMDocument Subprograms):

Returns the element children of the DOMELEMENT given the tag name (See Also: DOMElement Subprograms):

Returns the element children of the DOMELEMENT given the tag name and namespace (See Also: DOMElement Subprograms):

```
DBMS_XMLDOM.GETELEMENTSBYTAGNAME(
elem IN DOMELEMENT,
name IN VARCHAR2,
ns IN VARCHAR2)
RETURN DOMNODELIST;
```

Parameters

Table 233-52 GETELEMENTSBYTAGNAME Function Parameters

Parameter	Description
doc	DOMDOCUMENT
tagname	Name of the tag to match on
elem	The DOMELEMENT
name	Tag name; using a wildcard(*) would match any tag
ns	Namespace

GETENTITIES Function

This function retrieves a DOMNAMEDNODEMAP containing the general entities, both external and internal, declared in the DTD.



DOMDocumentType Subprograms

Syntax

```
DBMS_XMLDOM.GETENTITIES(
dt IN DOMDocumentType)
RETURN DOMNAMEDNODEMAP;
```

Parameters

Table 233-53 GETENTITIES Function Parameters

Parameter	Description
dt	DOMDOCUMENTTYPE

GETEXPANDEDNAME Procedure and Functions

This subprogram is overloaded as a procedure and two functions. The specific forms of functionality are described along with the syntax declarations.

Syntax

Retrieves the expanded name of the Node if is in an Element or Attribute type; otherwise, returns NULL (See Also: DOMNode Subprograms)

Returns the expanded name of the DOMAttr (See Also: DOMAttr Subprograms):

Returns the expanded name of the DOMElement (See Also: DOMElement Subprograms):

Parameters

Table 233-54 GETEXPANDEDNAME Procedure and Function Parameters

Parameter	Description
n	DOMNODE
data	Returned expanded name of the Node
a	DOMATTR
elem	DOMELEMENT

GETFIRSTCHILD Function

This function retrieves the first child of this node. If there is no such node, this returns NULL.

```
See Also:
DOMNode Subprograms
```

Syntax



Table 233-55 GETFIRSTCHILD Function Parameters

Parameter Description	
	Description
n	DOMNODE

GETIMPLEMENTATION Function

This function returns the DOMIMPLEMENTATION object that handles this DOMDOCUMENT.



DOMDocument Subprograms

Syntax

DBMS_XMLDOM.GETIMPLEMENTATION(
doc IN DOMDOCUMENT)
RETURN DOMIMPLEMENTATION;

Parameters

Table 233-56 GETIMPLEMENTATION Function Parameters

Parameter	Description
doc	DOMDOCUMENT

GETLASTCHILD Function

This function retrieves the last child of this node. If there is no such node, this returns NULL.



DOMNode Subprograms

Syntax

Table 233-57 GETLASTCHILD Function Parameters

Parameter	Description
n	DOMNODE

GETLENGTH Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Gets the number of characters in the data. This may have the value zero, because CharacterData nodes may be empty (See Also: DOMCharacterData Subprograms):

Gets the number of nodes in this map. The range of valid child node indexes is 0 to length-1, inclusive (See Also: DOMNamedNodeMap Subprograms):

```
DBMS_XMLDOM.GETLENGTH(
nnm IN DOMNAMEDNODEMAP)
RETURN NUMBER;
```

Gets the number of nodes in the list. The range of valid child node indexes is 0 to length-1, inclusive (See Also: DOMNodeList Subprograms):

```
DBMS_XMLDOM.GETLENGTH(
   n1   IN   DOMNODELIST)
RETURN NUMBER;
```

Parameters

Table 233-58 GETLENGTH Function Parameters

Parameter	Description
cd	DOMCHARACTERDATA
nnm	DOMNAMEDNODEMAP
nl	DOMNODELIST

GETLOCALNAME Procedure and Functions

This function is overloaded as a procedure and two functions. The specific forms of functionality are described alongside the syntax declarations.

Syntax

Retrieves the local part of the node's qualified name (See Also: DOMNode Subprograms):

```
DBMS_XMLDOM.GETLOCALNAME(
n IN DOMNODE,
data OUT VARCHAR2);
```

Returns the local name of the DOMAttr (See Also: DOMAttr Subprograms):

Returns the local name of the DOMElement (See Also: DOMElement Subprograms)

Parameters

Table 233-59 GETLOCALNAME Procedure and Function Parameters

Parameter	Description
n	DOMNode
data	Returned local name.
a	DOMAttr.
elem	DOMElement.

GETNAME Functions

This function is overloaded. The specific forms of functionality are described with the syntax declarations.

Syntax

Returns the name of this attribute (See Also: DOMAttr Subprograms):

Retrieves the name of DTD, or the name immediately following the DOCTYPE keyword (See Also: DOMDocumentType Subprograms):

```
DBMS_XMLDOM.GETNAME(
dt IN DOMDOCUMENTTYPE)
RETURN VARCHAR2;
```

Parameters

Table 233-60 GETNAME Function Parameters

Parameter	Description
a	DOMATTR
dt	DOMDOCUMENTTYPE

GETNAMEDITEM Function

GETNAMEDITEM retrieves a node specified by name.



DOMNamedNodeMap Subprograms

Syntax

Retrieves a node specified by name:

```
DBMS_XMLDOM.GETNAMEDITEM(
nnm IN DOMNAMEDNODEMAP,
name IN VARCHAR2)
RETURN DOMNODE;
```

Retrieves a node specified by name and namespace URI:

```
DBMS_XMLDOM.GETNAMEDITEM(
nnm IN DOMNAMEDNODEMAP,
name IN VARCHAR2,
ns IN VARCHAR2)
RETURN DOMNODE;
```

Parameters

Table 233-61 GETNAMEDITEM Function Parameters

Parameter	Description
nnm	DOMNAMEDNODEMAP
name	Name of the item to be retrieved
ns	Namespace

GETNAMESPACE Procedure and Functions

This subprogram is overloaded as a procedure and two functions. The specific forms of functionality are described alongside the syntax declarations.

Syntax

Retrieves the namespace URI associated with the node (See Also: DOMNode Subprograms):

```
DBMS_XMLDOM.GETNAMESPACE(
    n     IN     DOMNODE,
    data    OUT     VARCHAR2);
```

Retrieves the namespace of the DOMATTR (See Also: DOMAttr Subprograms):

Retrieves the namespace of the DOMELEMENT (See Also: DOMElement Subprograms):

Parameters

Table 233-62 GETNAMESPACE Procedure and Function Parameters

Parameter	Description
n	DOMNODE
data	Returned namespace URI
a	DOMATTR
elem	DOMELEMENT

GETNEXTSIBLING Function

This function retrieves the node immediately following this node. If there is no such node, this returns \mathtt{NULL} .



DOMNode Subprograms

Syntax

Parameters

Table 233-63 GETNEXTSIBLING Function Parameters

Parameter	Description
n	DOMNODE

GETNODETYPE Function

This function retrieves a code representing the type of the underlying object.



DOMNode Subprograms

Syntax

Parameters

Table 233-64 GETNODETYPE Function Parameters

Parameter	Description
n	DOMNODE

GETNODENAME Function

This function gets the name of the node depending on its type.



DOMNode Subprograms

Syntax

Parameters

Table 233-65 GETNODENAME Function Parameters

Parameter	Description
n	DOMNODE

GETNODEVALUE Function

This function gets the value of this node, depending on its type.



DOMNode Subprograms

Syntax

Table 233-66 GETNODEVALUE Function Parameters

Parameter	Description
n	DOMNODE

GETNODEVALUEASBINARYSTREAM Function & Procedure

The operation of these subprograms is described with each syntax implementation.



DOMNode Subprograms

Syntax

This function returns an instance of the PL/SQL XMLBinaryInputStream. The node datatype must be RAW or BLOB — if not an exception is raised.

```
DBMS_XMLDOM.GETNODEVALUEASBINARYSTREAM (
n IN DOMNODE)
RETURN SYS.UTL_BINARYINPUTSTREAM;
```

Using this procedure, the application passes an implementation of

SYS.UTL_BINARYOUTPUTSTREAM into which XDB writes the contents of the node. The datatype of the node must be RAW or CLOB - if not an exception is raised.

```
DBMS_XMLDOM.GETNODEVALUEASBINARYSTREAM (
    n     in     DOMNODE,
    value    in     SYS.UTL_BINARYOUTPUTSTREAM);
```

Parameters

Table 233-67 GETNODEVALUEASBINARYSTREAM Function & Procedure Parameters

Parameter	Description
n	DOMNODE
value	BINARYOUTPUTSTREAM

GETNODEVALUEASCHARACTERSTREAM Function & Procedure

The operation of these subprograms is described with each syntax implementation.



DOMNode Subprograms

Syntax

This function returns an instance of the PL/SQL XMLCharacterInputStream. If the node data is character it is converted to the current session character set. If the node data is not character data, it is first converted to character data.

```
DBMS_XMLDOM.GETNODEVALUEASCHARACTERSTREAM (
n IN DOMNODE)
RETURN SYS.UTL_CHARACTERINPUTSTREAM;
```

Using this procedure, the node data is converted, as necessary, to the session character set and then "pushed" into the SYS.UTL CHARACTEROUTPUTSTREAM.

```
DBMS_XMLDOM.GETNODEVALUEASCHARACTERSTREAM (
n IN DOMNODE,
value IN SYS.UTL_CHARACTEROUTPUTSTREAM);
```

Parameters

Table 233-68 GETNODEVALUEASCHARACTERSTREAM Function & Procedure Parameters

Parameter	Description
n	DOMNODE
value	CHARACTEROUTPUTSTREAM

GETNOTATIONNAME Function

This function returns the notation name of the DOMENTITY.



DOMEntity Subprograms

Syntax

Parameters

Table 233-69 GETNOTATIONNAME Function Parameters

Parameter	Description
ent	DOMENTITY



GETNOTATIONS Function

This function retrieves a DOMNAMEDNODEMAP containing the notations declared in the DTD.



DOMDocumentType Subprograms

Syntax

```
DBMS_XMLDOM.GETNOTATIONS(
dt IN DOMDOCUMENTTYPE)
RETURN DOMNAMEDNODEMAP;
```

Parameters

Table 233-70 GETNOTATIONS Function Parameters

Parameter	Description
dt	DOMDOCUMENTTYPE

GETTARGET Function

This function returns the target of the DOMPROCESSINGINSTRUCTION.



DOMProcessingInstruction Subprograms

Syntax

Parameters

Table 233-71 GETTARGET Function Parameters

Parameter	Description
pi	DOMPROCESSINGINSTRUCTION



GETOWNERDOCUMENT Function

This function retrieves the Document object associated with this node. This is also the Document object used to create new nodes. When this node is a Document or a Document Type that is not used with any Document yet, this is NULL.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.GETOWNERDOCUMENT(
n IN DOMNODE)
RETURN DOMDOCUMENT;
```

Parameters

Table 233-72 GETOWNERDOCUMENT Function Parameters

Parameter	Description
n	DOMNODE

GETOWNERELEMENT Function

This function retrieves the Element node to which the specified Attribute is attached.



DOMAttr Subprograms

Syntax

Parameters

Table 233-73 GETOWNERELEMENT Function Parameters

Parameter	Description
a	Attribute



GETPARENTNODE Function

This function retrieves the parent of this node. All nodes, except Attr, Document, DocumentFragment, Entity, and Notation may have a parent. However, if a node has just been created and not yet added to the tree, or if it has been removed from the tree, this is NULL.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.GETPARENTNODE(
n IN DOMNODE)
RETURN DOMNODE;
```

Parameters

Table 233-74 GETPARENTNODE Function Parameters

Parameter	Description
n	DOMNODE

GETPREFIX Function

This function retrieves the namespace prefix of the node.



DOMNode Subprograms

Syntax

Parameters

Table 233-75 GETPREFIX Function Parameters

Parameter	Description
n	DOMNODE



GETPREVIOUSSIBLING Function

This function retrieves the node immediately preceding this node. If there is no such node, this returns \mathtt{NULL} .



DOMNode Subprograms

Syntax

Parameters

Table 233-76 GETPREVIOUSSIBLING Function Parameters

Parameter	Description
n	DOMNODE

GETPUBLICID Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Returns the public identifier of the specified DTD (See Also: DOMDocumentType Subprograms):

Returns the public identifier of the DOMENTITY (See Also: DOMEntity Subprograms):

```
DBMS_XMLDOM.GETPUBLICID(
   ent      IN      DOMENTITY)
RETURN VARCHAR2;
```

Returns the public identifier of the DOMNOTATION (See Also: DOMNOtation Subprograms):

Table 233-77 GETPUBLICID Function Parameters

Parameter	Description
dt	The DTD
ent	DOMENTITY
n	DOMNOTATION

GETQUALIFIEDNAME Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Returns the qualified name of the DOMATTR (See Also: DOMAttr Subprograms):

Returns the qualified name of the DOMElement (See Also: DOMElement Subprograms):

Parameters

Table 233-78 GETQUALIFIEDNAME Functions Parameters

Parameter	Description
a	DOMATTR
elem	DOMELEMENT

GETSCHEMANODE Function

This function retrieves the schema URI associated with the node.



DOMNode Subprograms

Syntax

Table 233-79 GETSCHEMANODE Function Parameters

Parameter	Description
n	DOMNODE

GETSPECIFIED Function

If this attribute was explicitly specified, a value in the original document, this is true; otherwise, it is false.



DOMAttr Subprograms

Syntax

```
DBMS_XMLDOM.GETSPECIFIED(
a IN DOMATTR)
RETURN BOOLEAN;
```

Parameters

Table 233-80 GETSPECIFIED Function Parameters

Parameter	Description
a	DOMATTR

GETSTANDALONE Function

This function returns the standalone property associated with the DOMDOCUMENT.



DOMDocument Subprograms

Syntax



Table 233-81 GETSTANDALONE Function Parameters

Parameter	Description
doc	DOMDOCUMENT.

GETSYSTEMID Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Returns the system id of the specified DTD (See Also: DOMDocumentType Subprograms):

Returns the system identifier of the DOMENTITY (See Also: DOMEntity Subprograms):

Returns the system identifier of the DOMNOTATION (See Also: DOMNotation Subprograms):

```
DBMS_XMLDOM.GETSYSTEMID(
n IN DOMNOTATION)
RETURN VARCHAR2;
```

Parameters

Table 233-82 GETSYSTEMID Function Parameters

Parameter	Description
dt	The DTD.
ent	DOMEntity.
n	DOMNotation.

GETTAGNAME Function

This function returns the name of the DOMELEMENT.



DOMElement Subprograms

Syntax

Parameters

Table 233-83 GETTAGNAME Function Parameters

Parameter	Description
elem	The DOMELEMENT

GETVALUE Function

This function retrieves the value of the attribute.



DOMAttr Subprograms

Syntax

Parameters

Table 233-84 GETVALUE Function Parameters

Parameter	Description
a	DOMATTR

GETVERSION Function

This function returns the version of the DOMDOCUMENT.



DOMDocument Subprograms

Syntax

Table 233-85 GETVERSION Function Parameters

Parameter	Description
doc	DOMDOCUMENT

GETXMLTYPE Function

This function returns the XMLType associated with the DOMDOCUMENT.



DOMDocument Subprograms

Syntax

Parameters

Table 233-86 GETXMLTYPE Function Parameters

Parameter	Description
doc	DOMDOCUMENT

HASATTRIBUTE Functions

Verifies whether an attribute has been defined for DOMELEMENT, or has a default value.



DOMElement Subprograms

Syntax

Verifies whether an attribute with the specified name has been defined for DOMElement:

```
DBMS_XMLDOM.HASATTRIBUTE(
elem IN DOMELEMENT,
name IN VARCHAR2)
RETURN VARCHAR2;
```

Verifies whether an attribute with specified name and namespace URI has been defined for <code>DOMELEMENT</code>; namespace enabled:

```
DBMS_XMLDOM.HASATTRIBUTE(
elem IN DOMELEMENT,
name IN VARCHAR2,
ns IN VARCHAR2)
RETURN VARCHAR2;
```

Table 233-87 HASATTRIBUTE Function Parameters

Parameter	Description
elem	The DOMELEMENT
name	Attribute name; * matches any attribute
ns	Namespace

HASATTRIBUTES Function

This function returns whether this node has any attributes.



DOMNode Subprograms

Syntax

Parameters

Table 233-88 HASATTRIBUTES Function Parameters

Parameter	Description
n	DOMNODE

HASCHILDNODES Function

This function determines whether this node has any children.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.HASCHILDNODES(
n IN DOMNODE)
RETURN BOOLEAN;
```

Parameters

Table 233-89 HASCHILDNODES Function Parameters

Parameter	Description
n	DOMNODE

HASFEATURE Function

This function tests if the DOMIMPLEMENTATION implements a specific feature.



DOMImplementation Subprograms

Syntax

```
DBMS_XMLDOM.HASFEATURE(
di IN DOMIMPLEMENTATION,
feature IN VARCHAR2,
version IN VARCHAR2)
RETURN BOOLEAN;
```

Parameters

Table 233-90 HASFEATURE Function Parameters

Parameter	Description
di	DOMIMPLEMENTATION
feature	The feature to check for
version	The version of the DOM to check in

IMPORTNODE Function

This function imports a node from an external document and returns this new node.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.IMPORTNODE(
doc IN DOMDOCUMENT,
importedNode IN DOMNODE,
deep IN BOOLEAN)
RETURN DOMNODE;
```

Parameters

Table 233-91 IMPORTNODE Function Parameters

Parameter	Description	
doc	Document from which the node is imported	
importedNode	Node to import	
deep	Setting for recursive import.	
	 If this value is TRUE, the entire subtree of the node will be imported with the node. 	
	If this value is FALSE, only the node itself will be imported.	

Usage Notes

Note that the ADOPTNODE Function removes the node from the source document while the IMPORTNODE Function clones the node in the source document.

INSERTBEFORE Function

This function inserts the node newchild before the existing child node refchild. If refchild is NULL, insert newchild at the end of the list of children.

If newchild is a DOCUMENTFRAGMENT object, all of its children are inserted, in the same order, before refchild. If the newchild is already in the tree, it is first removed.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.INSERTBEFORE(
n IN DOMNODE,
newchild IN DOMNODE,
refchild IN DOMNODE)
RETURN DOMNOde;
```

Parameters

Table 233-92 INSERTBEFORE Function Parameters

Parameter	Description
n	DOMNODE

Table 233-92 (Cont.) INSERTBEFORE Function Parameters

Parameter	Description
newChild	The child to be inserted in the DOMNODE
refChild	The reference node before which the newchild is to be inserted

INSERTDATA Procedure

This procedure inserts a string at the specified character offset.



DOMCharacterData Subprograms

Syntax

Parameters

Table 233-93 INSERTDATA Procedure Parameters

Parameter	Description
cd	DOMCHARACTERDATA
offset	The offset at which to insert the data
arg	The value to be inserted

ISNULL Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Checks if the specified DOMNODE is NULL. Returns TRUE if it is NULL, FALSE otherwise (See Also: DOMNode Subprograms):

Checks that the specified DOMATTR is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMAttr Subprograms):

```
DBMS_XMLDOM.ISNULL(
a IN DOMATTR)
RETURN BOOLEAN;
```

Checks that the specified DOMCDATASECTION is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMCDataSection Subprograms):

```
DBMS_XMLDOM.ISNULL(
    cds    IN    DOMCDATASECTION)
    RETURN BOOLEAN;
```

Checks that the specified DOMCHARACTERDATA is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMCharacterData Subprograms):

Checks that the specified DOMCOMMENT is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMComment Subprograms):

```
DBMS_XMLDOM.ISNULL(
com IN DOMCOMMENT)
RETURN BOOLEAN;
```

Checks that the specified DOMDOCUMENT is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMDocument Subprograms):

```
DBMS_XMLDOM.ISNULL(
doc IN DOMDOCUMENT)
RETURN BOOLEAN;
```

Checks that the specified DOMDOCUMENTFRAGMENT is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMDocumentFragment Subprograms):

```
DBMS_XMLDOM.ISNULL(
df IN DOMDOCUMENTFRAGMENT)
RETURN BOOLEAN;
```

Checks that the specified DOMDOCUMENTTYPE is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMDocumentType Subprograms):

```
DBMS_XMLDOM.ISNULL(
dt IN DOMDOCUMENTTYPE)
RETURN BOOLEAN;
```

Checks that the specified DOMELEMENT is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMElement Subprograms):

```
DBMS_XMLDOM.ISNULL(
elem IN DOMELEMENT)
RETURN BOOLEAN;
```

Checks that the specified DOMENTITY is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMEntity Subprograms):

Checks that the specified DOMENTITYREFERENCE is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMEntityReference Subprograms):

```
DBMS_XMLDOM.ISNULL(
    EREF IN DOMENTITYREFERENCE)
    RETURN BOOLEAN;
```



Checks that the specified DOMIMPLEMENTATION is NULL; returns TRUE if it is NULL (See Also: DOMImplementation Subprograms):

```
DBMS_XMLDOM.ISNULL(
di IN DOMIMPLEMENTATION)
RETURN BOOLEAN;
```

Checks that the specified DOMNAMEDNODEMAP is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMNamedNodeMap Subprograms):

Checks that the specified DOMNODELIST is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMNodeList Subprograms):

```
DBMS_XMLDOM.ISNULL(
   n1      IN      DOMNODELIST)
RETURN BOOLEAN;
```

Checks that the specified DOMNOTATION is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMNotation Subprograms):

```
DBMS_XMLDOM.ISNULL(
n IN DOMNOTATION)
RETURN BOOLEAN;
```

Checks that the specified DOMPROCESSINGINSTRUCTION is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMProcessingInstruction Subprograms):

Checks that the specified DOMTEXT is NULL; returns TRUE if it is NULL, FALSE otherwise (See Also: DOMText Subprograms):

```
DBMS_XMLDOM.ISNULL(
t IN DOMTEXT)
RETURN BOOLEAN;
```

Parameters

Table 233-94 ISNULL Function Parameters

Parameter	Description
n	DOMNODE to check
a	DOMATTR to check
cds	DOMCDATASECTION to check
cd	DOMCHARACTERDATA to check
com	DOMCOMMENT to check
doc	DOMDOCUMENT to check
dF	DOMDOCUMENTFRAGMENT to check
dt	DOMDOCUMENTTYPE to check
elem	DOMELEMENT to check

Table 233-94 (Cont.) ISNULL Function Parameters

Parameter	Description
ent	DOMENTITY to check
eref	DOMENTITYREFERENCE to check
di	DOMIMPLEMENTATION to check
nnm	DOMNAMENODEMAP to check
nl	DOMNODELIST to check
n	DOMNOTATION to check
pi	DOMPROCESSINGINSTRUCTION to check
t	DOMTEXT to check

ITEM Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Returns the item in the map which corresponds to the INDEX parameter. If INDEX is greater than or equal to the number of nodes in this map, this returns NULL (See Also: DOMNamedNodeMap Subprograms):

Returns the item in the collection which corresponds to the INDEX parameter. If index is greater than or equal to the number of nodes in the list, this returns NULL (See Also: DOMNodeList Subprograms):

```
DBMS_XMLDOM.ITEM(
nl IN DOMNODELIST,
index IN NUMBER)
RETURN DOMNODE;
```

Parameters

Table 233-95 ITEM Function Parameters

Parameter	Description
nnm	DOMNAMEDNODEMAP
index	The index in the node map at which the item is to be retrieved
nl	DOMNODELIST
index	The index in the NodeList used to retrieve the item

MAKEATTR Function

This function casts a specified DOMNODE to a DOMATTR, and returns the DOMATTR.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.MAKEATTR(
n IN DOMNODE)
RETURN DOMATTR;
```

Parameters

Table 233-96 MAKEATTR Function Parameters

Parameter	Description
n	DOMNODE to cast

MAKECDATASECTION Function

This function casts a specified DOMNODE to a DOMCDATASECTION.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.MAKECDATASECTION(
n IN DOMNODE)
RETURN DOMCDATASECTION;
```

Parameters

Table 233-97 MAKECDATASECTION Function Parameters

Parameter	Description	
n	DOMNODE to cast	



MAKECHARACTERDATA Function

This function casts a specified DOMNODE to a DOMCHARACTERDATA, and returns the DOMCHARACTERDATA.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.MAKECHARACTERDATA(
n IN DOMNode)
RETURN DOMCharacterData;
```

Parameters

Table 233-98 MAKECHARACTERDATA Function Parameters

Parameter	Description
n	DOMNODE to cast

MAKECOMMENT Function

This function casts a specified DOMNODE to a DOMCOMMENT, and returns the DOMCOMMENT.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.MAKECOMMENT(
n IN DOMNODE)
RETURN DOMCOMMENT;
```

Parameters

Table 233-99 MAKECOMMENT Function Parameters

Parameter	Description
n	DOMNODE to cast



MAKEDOCUMENT Function

This function casts a specified DOMNODE to a DOMDOCUMENT, and returns the DOMDOCUMENT.



DOMNode Subprograms

Syntax

Parameters

Table 233-100 MAKEDOCUMENT Function Parameters

Parameter	Description
n	DOMNODE to cast

MAKEDOCUMENTFRAGMENT Function

This function casts a specified DOMNODE to a DOMDOCUMENTFRAGMENT, and returns the DOMDOCUMENTFRAGMENT.



DOMNode Subprograms

Syntax

Parameters

Table 233-101 MAKEDOCUMENTFRAGMENT Function Parameters

Parameter	Description
n	DOMNODE to cast



MAKEDOCUMENTTYPE Function

This function casts a specified DOMNODE to a DOMDOCUMENTTYPE and returns the DOMDOCUMENTTYPE.



DOMNode Subprograms

Syntax

Parameters

Table 233-102 MAKEDOCUMENTTYPE Function Parameters

Parameter	Description
n	DOMNODE to cast.

MAKEELEMENT Function

This function casts a specified DOMNODE to a DOMELEMENT, and returns the DOMELEMENT.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.MAKEELEMENT(
n IN DOMNODE)
RETURN DOMELEMENT;
```

Parameters

Table 233-103 MAKEELEMENT Function Parameters

Parameter	Description
n	DOMNODE to cast



MAKEENTITY Function

This function casts a specified DOMNODE to a DOMENTITY, and returns the DOMENTITY.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.MAKEENTITY(
n IN DOMNODE)
RETURN DOMENTITY;
```

Parameters

Table 233-104 MAKEENTITY Function Parameters

Parameter	Description
n	DOMNODE to cast

MAKEENTITYREFERENCE Function

This function casts a specified DOMNODE to a DOMENTITYREFERENCE, and returns the DOMENTITYREFERENCE.



DOMNode Subprograms

Syntax

Parameters

Table 233-105 MAKEENTITYREFERENCE Function Parameters

Parameter	Description
n	DOMNODE to cast



MAKENODE Functions

This function is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Casts specified DOMATTR to a DOMNODE, and returns the DOMNODE (See Also: DOMAttr Subprograms):

```
DBMS_XMLDOM.MAKENODE(
    a IN DOMATTR)
    RETURN DOMNODE;
```

Casts the DOMCDATASECTION to a DOMNODE, and returns that DOMNODE (See Also: DOMCDataSection Subprograms):

Casts the specified DOMCHARACTERDATA as a DOMNODE, and returns that DOMNODE (See Also: DOMCharacterData Subprograms):

Casts the specified DOMCOMMENT to a DOMNODE, and returns that DOMNODE (See Also: DOMComment Subprograms):

Casts the DOMDOCUMENT to a DOMNODE, and returns that DOMNODE (See Also: DOMDocument Subprograms):

```
DBMS_XMLDOM.MAKENODE(
doc IN DOMDOCUMENT)
RETURN DOMNODE;
```

Casts the specified DOMDOCUMENTFRAGMENT to a DOMNODE, and returns that DOMNODE (See Also: DOMDOcumentFragment Subprograms):

```
DBMS_XMLDOM.MAKENODE (
df IN DOMDOCUMENTFRAGMENT)
RETURN DOMNode;
```

Casts the specified DOMDOCUMENTTYPE to a DOMNODE, and returns that DOMNODE (See Also: DOMDocumentType Subprograms):

```
DBMS_XMLDOM.MAKENODE(
dt IN DOMDOCUMENTTYPE)
RETURN DOMNODE;
```

Casts the specified DOMELEMENT to a DOMNODE, and returns that DOMNODE (See Also: DOMElement Subprograms):

Casts specified DOMENTITY to a DOMNODE, and returns that DOMNODE (See Also: DOMEntity Subprograms):

Casts the DOMENTITYREFERENCE to a DOMNODE, and returns that DOMNODE (See Also: DOMEntityReference Subprograms):

Casts the DOMNOTATION to a DOMNODE, and returns that DOMNODE (See Also: DOMNotation Subprograms):

Casts the DOMPROCESSINGINSTRUCTION to a DOMNODE, and returns the DOMNODE (See Also: DOMProcessingInstruction Subprograms):

```
DBMS_XMLDOM.MAKENODE (
pi IN DOMPROCESSINGINSTRUCTION)
RETURN DOMNODE;
```

Casts the DOMTEXT to a DOMNODE, and returns that DOMNODE (See Also: DOMTEXT Subprograms):

```
DBMS_XMLDOM.MAKENODE(
t IN DOMTEXT)
RETURN DOMNODE;
```

Parameters

Table 233-106 MAKENODE Function Parameters

Parameter	Description
a	DOMATTR to cast
cds	DOMCDATASECTION to cast
cd	DOMCHARACTERDATA to cast
com	DOMCOMMENT to cast
doc	DOMDOCUMENT to cast
df	DOMDOCUMENTFRAGMENT to cast
dt	DOMDOCUMENTTYPE to cast
elem	DOMELEMENT to cast
ent	DOMENTITY to cast
eref	DOMENTITYREFERENCE to cast
n	DOMNOTATION to cast

Table 233-106 (Cont.) MAKENODE Function Parameters

Parameter	Description
pi	DOMPROCESSINGINSTRUCTION to cast
t	DOMTEXT to cast

MAKENOTATION Function

This function casts a specified DOMNODE to a DOMNOTATION, and returns the DOMNOTATION.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.MAKENOTATION(
n IN DOMNODE)
RETURN DOMNOTATION;
```

Parameters

Table 233-107 MAKENOTATION Function Parameters

Parameter	Description
n	DOMNODE to cast

MAKEPROCESSINGINSTRUCTION Function

This function casts a specified DOMNODE to a DOMPROCESSINGINSTRUCTION, and returns the Domprocessinginstruction.



DOMNode Subprograms

Syntax

DBMS_XMLDOM.MAKEPROCESSINGINSTRUCTION(
n IN DOMNODE)
RETURN DOMPROCESSINGINSTRUCTION;



Table 233-108 MAKEPROCESSINGINSTRUCTION Function Parameters

Parameter	Description
n	DOMNODE to cast

MAKETEXT Function

This function casts a specified DOMNODE to a DOMTEXT, and returns the DOMTEXT.



DOMNode Subprograms

Syntax

Parameters

Table 233-109 MAKETEXT Function Parameters

Description Description	
Parameter	Description
n	DOMNODE to cast

NEWDOMDOCUMENT Functions

This function returns a new DOMDOCUMENT instance.



DOMDocument Subprograms

Syntax

Returns a new DOMDOCUMENT instance:

DBMS_XMLDOM.NEWDOMDOCUMENT
 RETURN DOMDOCUMENT;

Returns a new DOMDOCUMENT instance created from the specified XMLType object:

```
DBMS_XMLDOM.NEWDOMDOCUMENT(
xmldoc IN SYS.XMLTYPE)
RETURN DOMDOCUMENT;
```



Returns a new DOMDOCUMENT instance created from the specified CLOB:

```
DBMS_XMLDOM.NEWDOMDOCUMENT(
cl IN CLOB)
RETURN DOMDOCUMENT;
```

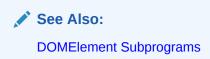
Parameters

Table 233-110 NEWDOMDOCUMENT Function Parameters

Parameter	Description
xmldoc	XMLType source for the DOMDOCUMENT
cl	CLOB source for the DOMDOCUMENT

NORMALIZE Procedure

This procedure normalizes the text children of the DOMELEMENT.



Syntax

Parameters

Table 233-111 NORMALIZE Procedure Parameters

Parameter	Description
elem	The DOMELEMENT

REMOVEATTRIBUTE Procedures

This procedure removes an attribute from the DOMELEMENT by name.

```
See Also:

DOMElement Subprograms
```

Syntax

Removes the value of a DOMELEMENT's attribute by name:

```
DBMS_XMLDOM.REMOVEATTRIBUTE(
   elem     IN      DOMELEMENT,
   name     IN      VARCHAR2);
```

Removes the value of a DOMELEMENT's attribute by name and namespace URI.

```
DBMS_XMLDOM.REMOVEATTRIBUTE(
elem IN DOMELEMENT,
name IN VARCHAR2,
ns IN VARCHAR2);
```

Parameters

Table 233-112 REMOVEATTRIBUTE Procedure Parameters

Parameter	Description
elem	The DOMELEMENT
name	Attribute name
ns	Namespace

REMOVEATTRIBUTENODE Function

This function removes the specified attribute node from the <code>DOMELEMENT</code>. The method returns the removed node.



DOMElement Subprograms

Syntax

Parameters

Table 233-113 REMOVEATTRIBUTENODE Function Parameters

Parameter	Description
elem	The DOMELEMENT.
oldAttr	The old DOMATTR.



REMOVECHILD Function

This function removes the child node indicated by oldchild from the list of children, and returns it.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.REMOVECHILD(
n IN DOMNode,
oldchild IN DOMNode)
RETURN DOMNODE;
```

Parameters

Table 233-114 REMOVECHILD Function Parameters

Parameter	Description
n	DOMNODE
oldCHild	The child of the node n to be removed

REMOVENAMEDITEM Function

This function removes a node, specified by name, from the map and returns this node.

When this map contains the attributes attached to an element, if the removed attribute is known to have a default value, an attribute immediately appears containing the default value as well as the corresponding namespace URI, local name, and prefix when applicable.



DOMNamedNodeMap Subprograms

Syntax

Removes a node specified by name:

Removes a node specified by name and namespace URI:

```
DBMS_XMLDOM.REMOVENAMEDITEM(
nnm IN DOMNamedNodeMap,
name IN VARCHAR2,
```

ns IN VARCHAR2) RETURN DOMNode;

Parameters

Table 233-115 REMOVENAMEDITEM Function Parameters

Parameter	Description
nnm	DOMNamedNodeMap
name	The name of the item to be removed from the map
ns	Namespace

REPLACECHILD Function

This function replaces the child node oldchild with newchild in the list of children, and returns the oldchild node.

If newchild is a DocumentFragment object, oldchild is replaced by all of the DocumentFragment children, which are inserted in the same order. If the newchild is already in the tree, it is first removed.



DOMNode Subprograms

Syntax

DBMS_XMLDOM.REPLACECHILD(
n IN DOMNode,
newchild IN DOMNode,
oldchild IN DOMNode)
RETURN DOMNode;

Parameters

Table 233-116 REPLACECHILD Function Parameters

Parameter	Description
n	DOMNode
newchild	The new child which is to replace the old child
oldchild	The child of the node n which is to be replaced



REPLACEDATA Procedure

This procedure changes a range of characters in the node. Upon success, data and length reflect the change.



DOMCharacterData Subprograms

Syntax

Parameters

Table 233-117 REPLACEDATA Procedure Parameters

Parameter	Description
cd	DOMCHARACTERDATA
offset	The offset at which to replace
cnt	The number of characters to replace
arg	The value to replace with

RESOLVENAMESPACEPREFIX Function

This function resolves the specified namespace prefix, and returns the resolved namespace.



DOMElement Subprograms

```
DBMS_XMLDOM.RESOLVENAMESPACEPREFIX(
elem IN DOMELEMENT,
prefix IN VARCHAR2)
RETURN VARCHAR2;
```



Table 233-118 RESOLVENAMESPACEPREFIX Function Parameters

Parameter	Description
elem	The DOMELEMENT
prefix	Namespace prefix

SETATTRIBUTE Procedures

This procedure sets the value of a DOMELEMENT's attribute by name.



DOMElement Subprograms

Syntax

Sets the value of a DOMELEMENT's attribute by name:

```
DBMS_XMLDOM.SETATTRIBUTE(
elem IN DOMELEMENT,
name IN VARCHAR2,
newvalue IN VARCHAR2);
```

Sets the value of a DOMElement's attribute by name and namespace URI:

```
DBMS_XMLDOM.SETATTRIBUTE(
elem IN DOMELEMENT,
name IN VARCHAR2,
newvalue IN VARCHAR2,
ns IN VARCHAR2);
```

Parameters

Table 233-119 SETATTRIBUTE Procedure Parameters

Parameter	Description
elem	The DOMELEMENT
name	Attribute name
newvalue	Attribute value
ns	Namespace

SETATTRIBUTENODE Functions

This function adds a new attribute node to the DOMELEMENT.



DOMElement Subprograms

Syntax

Adds a new attribute node to the DOMELEMENT:

```
DBMS_XMLDOM.SETATTRIBUTENODE(
elem IN DOMELEMENT,
newAttr IN DOMATTR)
RETURN DOMATTR;
```

Adds a new attribute node to the DOMElement; namespace enabled:

```
DBMS_XMLDOM.SETATTRIBUTENODE(
elem IN DOMELEMENT,
newAttr IN DOMATTR,
ns IN VARCHAR2)
RETURN DOMATTR;
```

Parameters

Table 233-120 SETATTRIBUTENODE Function Parameters

Parameter	Description
elem	The DOMELEMENT
newAttr	The new DOMATTR
ns	The namespace

SETCHARSET Procedure

This function sets the characterset of the DOM document.

```
See Also:
```

DOMDocument Subprograms

```
DBMS_XMLDOM.SETCHARSET(
   doc      IN      DOMDocument,
   charset      IN      VARCHAR2);
```



Table 233-121 SETCHARSET Procedure Parameters

Parameter	Description
doc	DOM document
charset	Characterset

Usage Notes

This is used for WRITETOFILE Procedures if not explicitly specified at that time.

SETDATA Procedures

This overloaded procedure sets character data or DOMPROCESSINGINSTRUCTION content data. The specific functionality is described in the syntax declarations.

Syntax

Sets the character data of the node that implements this interface (See Also: DOMCharacterData Subprograms):

Sets the content data of the DOMPROCESSINGINSTRUCTION (See Also: DOMProcessingInstruction Subprograms):

Parameters

Table 233-122 SETDATA Procedure Parameters

Parameter	Description
cd	DOMCHARACTERDATA
data	The data to which the node is set
pi	DOMPROCESSINGINSTRUCTION
data	New processing instruction content data

SETDOCTYPE Procedure

Given a DOM document, this procedure creates a new DTD with the specified name, system id and public id and sets it in the document.

This DTD can later be retrieved using the GETDOCTYPE Function.

Syntax

```
DBMS_XMLDOM.SETDOCTYPE(
doc IN DOMDocument,
name IN VARCHAR2,
sysid IN VARCHAR2,
pubid IN VARCHAR2);
```

Parameters

Table 233-123 SETDOCTYPE Procedure Parameters

Parameter	Description
doc	The document whose DTD has to be set
name	The name that the doctype needs to be initialized with
sysid	The system ID that the doctype needs to be initialized with
pubid	The public ID that the doctype needs to be initialized with

SETNAMEDITEM Function

This function adds a node using its NodeName attribute.

If a node with that name is already present in this map, it is replaced by the new one. The old node is returned on replacement; if no replacement is made, NULL is returned.

As the NodeName attribute is used to derive the name under which the node must be stored, multiple nodes of certain types, those that have a "special" string value, cannot be stored because the names would clash. This is seen as preferable to allowing nodes to be aliased.



DOMNamedNodeMap Subprograms

Syntax

Adds a node using its NodeName attribute:

```
DBMS_XMLDOM.SETNAMEDITEM(
nnm IN DOMNAMEDNODEMAP,
arg IN DOMNODE)
RETURN DOMNOde;
```

Adds a node using its NodeName attribute and namespace URI:

```
DBMS_XMLDOM.SETNAMEDITEM(
nnm IN DOMNAMEDNODEMAP,
arg IN DOMNODE,
ns IN VARCHAR2)
RETURN DOMNOde;
```



Table 233-124 SETNAMEDITEM Function Parameters

Parameter	Description
nnm	DOMNAMEDNODEMAP
arg	The Node to be added using its NodeName attribute
ns	Namespace

SETNODEVALUE Procedure

This procedure sets the value of this node, depending on its type. When it is defined to be NULL, setting it has no effect.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.SETNODEVALUE(
n IN DOMNODE,
nodeValue IN VARCHAR2);
```

Parameters

Table 233-125 SETNODEVALUE Procedure Parameters

Parameter	Description
n	DOMNode
nodeValue	The value to which node is set

SETNODEVALUEASBINARYSTREAM Function & Procedure

The operation of these subprograms is described in the syntax section.



DOMNode Subprograms

Syntax

This function returns an instance of the PL/SQL XMLBINARYOUTPUTSTREAM into which the caller can write the node value. The datatype of the node must be RAW or BLOB — if not, an exception is raised.

```
DBMS_XMLDOM.SETNODEVALUEASBINARYSTREAM (
n IN DOMNODE)
RETURN SYS.UTL_BINARYOUTPUTSTREAM;
```

Using this procedure, the application passes in an implementation of sys.utl_BinaryInputStream from which XDB reads data to populate the node. The datatype of the node must be RAW or BLOB — if not an exception is raised.

```
DBMS_XMLDOM.SETNODEVALUEASBINARYSTREAM (
n in DOMNODE,
value in SYS.UTL BINARYINPUTSTREAM);
```

Parameters

Table 233-126 SETNODEVALUEASBINARYSTREAM Function & Procedure Parameters

Parameter	Description
n	DOMNODE
value	BINARYINPUTSTREAM

SETNODEVALUEASCHARACTERSTREAM Function & Procedure

The operation of these subprograms is described in the syntax section.

```
See Also:

DOMNode Subprograms
```

Syntax

This function returns an instance of the PL/SQL XMLCHARACTEROUTPUTSTREAM type into which the caller can write the node value. The datatype of the node can be any valid XDB datatype. If the type is not character or CLOB, the character data written to the stream is converted to the node datatype. If the datatype of the node is character or CLOB, then the character data written to the stream is converted from PL/SQL session character set to the character set of the node.

```
DBMS_XMLDOM.SETNODEVALUEASCHARACTERSTREAM (
n IN DOMNODE)
RETURN SYS.UTL CHARACTEROUTPUTSTREAM;
```

Using this procedure, the application passes in an implementation of

SYS.UTL_CHARACTERINPUTSTREAM from which XDB reads to populate the node. The datatype of the node may be any valid type supported by XDB. If a non-character datatype, the character data read from the stream is converted to the datatype of the node. If the datatype of the node is either character or CLOB, then no conversion occurs and the character set of the node becomes the character set of the PL/SQL session.

```
DBMS_XMLDOM.SETNODEVALUEASCHARACTERSTREAM (
n IN DOMNODE,
value IN SYS.UTL_CHARACTERINPUTSTREAM);
```

Table 233-127 SETNODEVALUEASCHARACTERSTREAM Function & Procedure Parameters

Parameter	Description
n	DOMNODE
value	CHARACTERINPUTSTREAM

SETPREFIX Procedure

This procedure sets the namespace prefix for this node to the specified value.



DOMNode Subprograms

Syntax

Parameters

Table 233-128 SETPREFIX Procedure Parameters

Parameter	Description
n	DOMNODE
prefix	The value for the namespace prefix of the node

SETSTANDALONE Procedure

This procedure sets the standalone property of the DOMDOCUMENT.



DOMDocument Subprograms



Table 233-129 SETSTANDALONE Procedure Parameters

Parameter	Description
doc	DOMDOCUMENT
newvalue	Value of the standalone property of the document

SETVALUE Procedure

This procedure sets the value of the attribute.



DOMAttr Subprograms

Syntax

```
DBMS_XMLDOM.SETVALUE(
    a     IN     DOMATTR,
    value    IN     VARCHAR2);
```

Parameters

Table 233-130 SETVALUE Procedure Parameters

Parameter	Description
a	DOMATTR
value	The value to which to set the attribute

SETVERSION Procedure

This procedure sets the version of the DOMDOCUMENT.



DOMDocument Subprograms



Table 233-131 SETVERSION Procedure Parameters

Parameter	Description
doc	DOMDOCUMENT
version	The version of the document

SPLITTEXT Function

This function breaks this DOMTEXT node into two DOMTEXT nodes at the specified offset.

See Also:

DBMS_XMLDOM DOMText Subprograms

Syntax

```
DBMS_XMLDOM.SPLITTEXT(
t IN DOMTEXT,
offset IN NUMBER)
RETURN DOMTEXT;
```

Parameters

Table 233-132 SPLITTEXT Function Parameters

Parameter	Description
t	DOMTEXT
offset	Offset at which to split

SUBSTRINGDATA Function

This function extracts a range of data from the node.

✓ See Also:

DOMCharacterData Subprograms

Syntax

```
cnt IN NUMBER)
RETURN VARCHAR2;
```

Table 233-133 SUBSTRINGDATA Function Parameters

Parameter	Description
cd	DOMCHARACTERDATA
offset	The starting offset of the data from which to get the data
cnt	The number of characters (from the offset) of the data to get

USEBINARYSTREAM Function

This function returns TRUE if the datatype of the node is RAW or BLOB, so that the node value may be read or written using an UTL BINARYINPUTSTREAM or UTL BINARYOUTPUTSTREAM.

If a value of False is returned, the node value may only be accessed through an utl characterinputstream or utl characteroutputstream.



DOMNode Subprograms

Syntax

```
DBMS_XMLDOM.USEBINARYSTREAM
n IN DOMNODE)
RETURN BOOLEAN;
```

Parameters

Table 233-134 USEBINARYSTREAM Function Parameters

Parameter	Description
n	DOMNODE

WRITETOBUFFER Procedures

WRITETOBUFFER is an overloaded procedure that writes an XML node, XML document, or a document fragment to a specified buffer.

This procedure is overloaded. The specific forms of functionality are described along with the syntax declarations.

Syntax

Writes XML node to specified buffer using the database character set (See Also: DOMNode Subprograms):

```
DBMS_XMLDOM.WRITETOBUFFER(
n IN DOMNODE,
buffer IN OUT VARCHAR2);
```

Writes XML document to a specified buffer using database character set (See Also: DOMDocument Subprograms):

```
DBMS_XMLDOM.WRITETOBUFFER(
doc IN DOMDOCUMENT,
buffer IN OUT VARCHAR2);
```

Writes the contents of the specified document fragment into a buffer using the database character set (See Also: DOMDocumentFragment Subprograms):

Parameters

Table 233-135 WRITETOBUFFER Procedure Parameters

Parameter	Description
n	DOMNODE
buffer	Buffer to which to write
doc	DOMDOCUMENT
df	DOM document fragment

WRITETOCLOB Procedures

WRITETOCLOB is an overloaded procedure that writes an XML node or document to a specified CLOB.

The specific forms of functionality are described along with the syntax declarations.

Syntax

Writes XML node to specified CLOB using the database character set (See Also: DOMNode Subprograms):

```
DBMS_XMLDOM.WRITETOCLOB(
n IN DOMNODE,
cl IN OUT CLOB);
```

Writes XML document to a specified CLOB using database character set (See Also: DOMDocument Subprograms):

Table 233-136 WRITETOCLOB Procedure Parameters

Parameter	Description
n	DOMNODE
cl	CLOB to which to write
doc	DOMDOCUMENT

WRITETOFILE Procedures

This overloaded procedure writes an XML node or XML document to a specified node.

The specific forms of functionality are described along with the syntax declarations.

Syntax

Writes XML node to specified file using the database character set (See Also: DOMNode Subprograms):

Writes XML node to specified file using the specified character set, which is passed in as a separate parameter (See Also: DOMNode Subprograms):

Writes an XML document to a specified file using database character set (See Also: DOMDocument Subprograms):

Writes an XML document to a specified file using specified character set (See Also: DOMDocument Subprograms):

```
DBMS_XMLDOM.WRITETOFILE(
doc IN DOMDOCUMENT,
fileName IN VARCHAR2,
charset IN VARCHAR2);
```

Parameters

Table 233-137 WRITETOFILE Procedure Parameters

Parameter	Description
n	DOMNODE



Table 233-137 (Cont.) WRITETOFILE Procedure Parameters

Parameter	Description
fileName	File to which to write. The filename should be in the format of database_directory_object_name/filename, for example mydir/filename (on windows, use \ instead of /).
charset	specified character set
doc	DOMDOCUMENT
charset	Character set

