# :mod:`xml.dom` --- The Document Object Model API

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 1); backlink

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 4)

Unknown directive type "module".

.. module:: xml.dom :synopsis: Document Object Model API for Python.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 7)

Unknown directive type "sectionauthor".

.. sectionauthor:: Paul Prescod <paul@prescod.net>

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 8)

Unknown directive type "sectionauthor".

.. sectionauthor:: Martin v. Löwis <martin@v.loewis.de>

Source code: :source: Lib/xml/dom/\_\_init\_\_.py`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 10); backlink

Unknown interpreted text role "source".

The Document Object Model, or "DOM," is a cross-language API from the World Wide Web Consortium (W3C) for accessing and modifying XML documents. A DOM implementation presents an XML document as a tree structure, or allows client code to build such a structure from scratch. It then gives access to the structure through a set of objects which provided well-known interfaces.

The DOM is extremely useful for random-access applications. SAX only allows you a view of one bit of the document at a time. If you are looking at one SAX element, you have no access to another. If you are looking at a text node, you have no access to a containing element. When you write a SAX application, you need to keep track of your program's position in the document somewhere in your own code. SAX does not do it for you. Also, if you need to look ahead in the XML document, you are just out of luck.

Some applications are simply impossible in an event driven model with no access to a tree. Of course you could build some sort of tree yourself in SAX events, but the DOM allows you to avoid writing that code. The DOM is a standard tree representation for XML data.

The Document Object Model is being defined by the W3C in stages, or "levels" in their terminology. The Python mapping of the API is substantially based on the DOM Level 2 recommendation.

DOM applications typically start by parsing some XML into a DOM. How this is accomplished is not covered at all by DOM Level 1, and Level 2 provides only limited improvements: There is a "class:" DOMImplementation" object class which provides access to "class:" Document" creation methods, but no way to access an XML reader/parser/Document builder in an implementation-independent way. There is also no well-defined way to access these methods without an existing "class:" Document" object. In Python, each DOM implementation will provide a function "func:" getDOMImplementation". DOM Level 3 adds a Load/Store specification, which defines an interface to the reader, but this is not yet available in the Python standard library.

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 45); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 45); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 45); backlink

Unknown interpreted text role "func".

Once you have a DOM document object, you can access the parts of your XML document through its properties and methods. These properties are defined in the DOM specification; this portion of the reference manual describes the interpretation of the specification in Python.

The specification provided by the W3C defines the DOM API for Java, ECMAScript, and OMG IDL. The Python mapping defined here is based in large part on the IDL version of the specification, but strict compliance is not required (though implementations are free to support the strict mapping from IDL). See section ref. dom-conformance for a detailed discussion of mapping requirements.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 61); backlink

Unknown interpreted text role 'ref'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 68)

Unknown directive type "seealso".

- .. seealso::
  - `Document Object Model (DOM) Level 2 Specification <a href="https://www.w3.org/TR/2000/REC-DOM-Level-2-Core-200">https://www.w3.org/TR/2000/REC-DOM-Level-2-Core-200</a> The W3C recommendation upon which the Python DOM API is based.
  - `Document Object Model (DOM) Level 1 Specification <a href="https://www.w3.org/TR/REC-DOM-Level-1/">https://www.w3.org/TR/REC-DOM-Level-1/>
    The W3C recommendation for the DOM supported by :mod:`xml.dom.minidom`.
  - `Python Language Mapping Specification <a href="https://www.omg.org/spec/PYTH/1.2/PDF">> This specifies the mapping from OMG IDL to Python.

# **Module Contents**

The mod:`xml.dom` contains the following functions:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 83); backlink

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 86)

Unknown directive type "function".

.. function:: registerDOMImplementation(name, factory)

Register the \*factory\* function with the name \*name\*. The factory function should return an object which implements the :class:`DOMImplementation` interface. The factory function can return the same object every time, or a new one for each call, as appropriate for the specific implementation (e.g. if that implementation supports some customization).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 95)

Unknown directive type "function".

.. function:: getDOMImplementation(name=None, features=())

Return a suitable DOM implementation. The \*name\* is either well-known, the module name of a DOM implementation, or ``None``. If it is not ``None``, imports the corresponding module and returns a :class:`DOMImplementation` object if the import succeeds. If no name is given, and if the environment variable :envvar:`PYTHON\_DOM` is set, this variable is used to find the implementation.

If name is not given, this examines the available implementations to find one with the required feature set. If no implementation can be found, raise an :exc:`ImportError`. The features list must be a sequence of ``(feature, version)`` pairs which are passed to the :meth:`hasFeature` method on available :class:`DOMImplementation` objects.

Some convenience constants are also provided:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 112)

#### Unknown directive type "data".

.. data:: EMPTY\_NAMESPACE

The value used to indicate that no namespace is associated with a node in the DOM. This is typically found as the :attr:`namespaceURI` of a node, or used as the \*namespaceURI\* parameter to a namespaces-specific method.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 119)

Unknown directive type "data".

.. data:: XML NAMESPACE

The namespace URI associated with the reserved prefix ``xml``, as defined by `Namespaces in XML <a href="https://www.w3.org/TR/REC-xml-names/">\\_ (section 4).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 125)

Unknown directive type "data".

.. data:: XMLNS NAMESPACE

The namespace URI for namespace declarations, as defined by `Document Object Model (DOM) Level 2 Core Specification  $\frac{1.1.8}{\text{Model (DOM) Level-2-Core/core.html}}$  (section 1.1.8).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 132)

Unknown directive type "data".

.. data:: XHTML\_NAMESPACE

The URI of the XHTML namespace as defined by `XHTML 1.0: The Extensible HyperText Markup Language  $\frac{https://www.w3.org/TR/xhtml1/>`_ (section 3.1.1)$ .

In addition, mod: xml.dom' contains a base :class: Node' class and the DOM exception classes. The :class: Node' class provided by this module does not implement any of the methods or attributes defined by the DOM specification; concrete DOM implementations must provide those. The :class: Node' class provided as part of this module does provide the constants used for the :attr: nodeType' attribute on concrete :class: Node' objects; they are located within the class rather than at the module level to conform with the DOM specifications.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 138); backlink

Unknown interpreted text role 'mod'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 138); backlink

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 138); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 138); backlink

Unknown interpreted text role "attr".

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Unknown interpreted text role "class".

# Objects in the DOM

The definitive documentation for the DOM is the DOM specification from the W3C.

Note that DOM attributes may also be manipulated as nodes instead of as simple strings. It is fairly rare that you must do this, however, so this usage is not yet documented.

Interface	Section	Purpose
:class:`DOMImplementation`	:ref.`dom-implementation-objects`	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 165); backlink Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 165); backlink  Unknown interpreted text role "ref".	Interface to the underlying implementation.
class:'Node'	ref.`dom-node-objects`	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 168); backlink Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 168); backlink Unknown interpreted text role "ref".	Base interface for most objects in a document.
class: 'NodeList'	:ref.`dom-nodelist-objects`	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 171); backlink  Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 171); backlink  Unknown interpreted text role "ref".	Interface for a sequence of nodes.
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 174); backlink Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 174); backlink Unknown interpreted text role "ref".	Information about the declarations needed to process a document.

Interface	Section	Purpose
:class:`Document`	:ref:`dom-document-objects`	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 178); backlink  Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 178); backlink Unknown interpreted text role "ref".	Object which represents an entire document.
:class:`Element`	ref:'dom-element-objects'	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 181); backlink  Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 181); backlink Unknown interpreted text role "ref".	Element nodes in the document hierarchy.
:class:`Attr`	ref. dom-attr-objects	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 184); backlink  Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 184); backlink  Unknown interpreted text role "ref".	Attribute value nodes on element nodes
:class: 'Comment'	:ref.`dom-comment-objects`	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 187); backlink  Unknown interpreted text role "class".	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 187); backlink  Unknown interpreted text role "ref".	Representation of comments in the source document.

terface	Section	Purpose
lass:'Text'	:ref:`dom-text-objects`	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\	System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\	Nodes containing textual content from the document.
(cpython-main) (Doc) (library) xml.dom.rst, line 190); backlink  Unknown interpreted text role "class".	(cpython-main) (Doc) (library) xml. dom.rst, line 190); backlink  Unknown interpreted text role "ref".	uk document.
lass: 'ProcessingInstruction'	ref. dom-pi-objects	
System Message: ERROR/3 (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 193); backlink Unknown interpreted text	System Message: ERROR/3  (D:\onboarding- resources\sample- onboarding- resources\cpython- main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 193); backlink  Unknown interpreted text role "ref"	Processing instruction representation.

An additional section describes the exceptions defined for working with the DOM in Python.

# **DOMImplementation Objects**

The class: DOMImplementation' interface provides a way for applications to determine the availability of particular features in the DOM they are using DOM Level 2 added the ability to create new class: Document' and class: DocumentType' objects using the class: DOMImplementation' as well.

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Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 205); backlink

Unknown interpreted text role "class".

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Unknown interpreted text role "class".

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Unknown interpreted text role "class".

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Unknown directive type "method".

.. method:: DOMImplementation.hasFeature(feature, version)
Return ``True`` if the feature identified by the pair of strings \*feature\* and
\*version\* is implemented.

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Unknown directive type "method".

.. method:: DOMImplementation.createDocument(namespaceUri, qualifiedName, doctype)

Return a new :class:`Document` object (the root of the DOM), with a child :class:`Element` object having the given \*namespaceUri\* and \*qualifiedName\*. The \*doctype\* must be a :class:`DocumentType` object created by :meth:`createDocumentType`, or ``None``. In the Python DOM API, the first two arguments can also be ``None`` in order to indicate that no :class:`Element` child is to be created.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 227)

Unknown directive type "method".

.. method:: DOMImplementation.createDocumentType(qualifiedName, publicId, systemId)

Return a new :class:`DocumentType` object that encapsulates the given \*qualifiedName\*, \*publicId\*, and \*systemId\* strings, representing the information contained in an XML document type declaration.

# **Node Objects**

All of the components of an XML document are subclasses of :class:'Node'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 239); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 242)

Unknown directive type "attribute".

.. attribute:: Node.nodeType

An integer representing the node type. Symbolic constants for the types are on the :class: Node object: :const: `ELEMENT\_NODE `, :const: `ATTRIBUTE\_NODE `, :const: `TEXT\_NODE `, :const: `CODATA\_SECTION\_NODE `, :const: `ENTITY\_NODE `, :const: `PROCESSING\_INSTRUCTION\_NODE `, :const: `COMMENT\_NODE `, :const: `DOCUMENT\_NODE `, :const: `NOTATION\_NODE `. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 252)

Unknown directive type "attribute".

.. attribute:: Node.parentNode

The parent of the current node, or ``None`` for the document node. The value is always a :class:`Node` object or ``None``. For :class:`Element` nodes, this will be the parent element, except for the root element, in which case it will be the :class:`Document` object. For :class:`Attr` nodes, this is always ``None``. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 261)

Unknown directive type "attribute".

 $\dots$  attribute:: Node.attributes

A :class:`NamedNodeMap` of attribute objects. Only elements have actual values for this; others provide ``None`` for this attribute. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 268)

Unknown directive type "attribute".

 $\dots$  attribute:: Node.previousSibling

The node that immediately precedes this one with the same parent. For instance the element with an end-tag that comes just before the \*self\* element's start-tag. Of course, XML documents are made up of more than just elements so the previous sibling could be text, a comment, or something else.

If this node is the first child of the parent, this attribute will be ``None``. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 278)

Unknown directive type "attribute".

.. attribute:: Node.nextSibling

The node that immediately follows this one with the same parent. See also :attr:`previousSibling`. If this is the last child of the parent, this attribute will be ``None``. This is a read-only attribute.

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Unknown directive type "attribute".

.. attribute:: Node.childNodes

A list of nodes contained within this node. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 290)

Unknown directive type "attribute".

.. attribute:: Node.firstChild

The first child of the node, if there are any, or ``None``. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 296)

Unknown directive type "attribute".

.. attribute:: Node.lastChild

The last child of the node, if there are any, or ``None``. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) xml.dom.rst, line 302)

Unknown directive type "attribute".

.. attribute:: Node.localName

The part of the :attr:`tagName` following the colon if there is one, else the entire :attr:`tagName`. The value is a string.

 $System\ Message: ERROR/3\ (\texttt{D:\onboarding-resources}\ sample-onboarding-resources \ cpython-main\ (\texttt{Doc}\ (\texttt{library}\ xml.dom.rst, line\ 308)$ 

Unknown directive type "attribute".

.. attribute:: Node.prefix

The part of the :attr:`tagName` preceding the colon if there is one, else the empty string. The value is a string, or ``None``.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 314)

Unknown directive type "attribute".

.. attribute:: Node.namespaceURI

The namespace associated with the element name. This will be a string or ``None``. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 320)

Unknown directive type "attribute".

.. attribute:: Node.nodeName

This has a different meaning for each node type; see the DOM specification for details. You can always get the information you would get here from another property such as the :attr:`tagName` property for elements or the :attr:`name` property for attributes. For all node types, the value of this attribute will be either a string or ``None``. This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 329)

Unknown directive type "attribute".

.. attribute:: Node.nodeValue

This has a different meaning for each node type; see the DOM specification for details. The situation is similar to that with :attr:`nodeName`. The value is a string or ``None``.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 336)

Unknown directive type "method".

.. method:: Node.hasAttributes()

Return ``True`` if the node has any attributes.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 341)

Unknown directive type "method".

.. method:: Node.hasChildNodes()

Return ``True`` if the node has any child nodes.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 346)

Unknown directive type "method".

.. method:: Node.isSameNode(other)

Return ``True`` if \*other\* refers to the same node as this node. This is especially useful for DOM implementations which use any sort of proxy architecture (because more than one object can refer to the same node).

.. note::

This is based on a proposed DOM Level 3 API which is still in the "working draft" stage, but this particular interface appears uncontroversial. Changes from the W3C will not necessarily affect this method in the Python DOM interface (though any new W3C API for this would also be supported).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 360)

Unknown directive type "method".

.. method:: Node.appendChild(newChild)

Add a new child node to this node at the end of the list of children, returning \*newChild\*. If the node was already in the tree, it is removed first.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 367)

Unknown directive type "method".

.. method:: Node.insertBefore(newChild, refChild)

Insert a new child node before an existing child. It must be the case that \*refChild\* is a child of this node; if not, :exc:`ValueError` is raised. \*newChild\* is returned. If \*refChild\* is ``None``, it inserts \*newChild\* at the end of the children's list.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 375)

Unknown directive type "method".

.. method:: Node.removeChild(oldChild)

Remove a child node. \*oldChild\* must be a child of this node; if not, :exc:`ValueError` is raised. \*oldChild\* is returned on success. If \*oldChild\* will not be used further, its :meth:`unlink` method should be called.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 382)

Unknown directive type "method".

.. method:: Node.replaceChild(newChild, oldChild)

Replace an existing node with a new node. It must be the case that \*oldChild\* is a child of this node; if not, :exc:`ValueError` is raised.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 388)

Unknown directive type "method".

.. method:: Node.normalize()

Join adjacent text nodes so that all stretches of text are stored as single :class:`Text` instances. This simplifies processing text from a DOM tree for many applications.

 $System\,Message: ERROR/3\, (\mboarding-resources \ample-onboarding-resources \cpython-main)\coc\library\cpython-main)\, (\mboc\c)\, (\mboarding-resources, line\,395)$ 

Unknown directive type "method".

.. method:: Node.cloneNode(deep)

Clone this node. Setting \*deep\* means to clone all child nodes as well. This returns the clone.

# **NodeList Objects**

A :class: NodeList` represents a sequence of nodes. These objects are used in two ways in the DOM Core recommendation: an :class: Element` object provides one as its list of child nodes, and the :meth: 'getElementsByTagName' and :meth: 'getElementsByTagNameNS' methods of :class: Node' return objects with this interface to represent query results.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 406); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 406); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 406); backlink

Unknown interpreted text role 'meth''.

 $System\ Message: ERROR/3\ (D:\onboarding-resources\sample-onboarding-resources\cpython-main\coc\library\cpython-main)\ (Doc)\ (library)\ xml.\ dom.\ rst,\ line\ 406); \ backlink$ 

Unknown interpreted text role "meth".

 $System\,Message:\,ERROR/3\, (\mboarding-resources \sample-onboarding-resources \cpython-main)\coc\library\cpython-main)\, (\mboc)\, (\mboarding-resources, line\,406); \backlink$ 

Unknown interpreted text role "class".

The DOM Level 2 recommendation defines one method and one attribute for these objects:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 416)

Unknown directive type "method".

.. method:: NodeList.item(i)

Return the \*i\*'th item from the sequence, if there is one, or ``None``. The index \*i\* is not allowed to be less than zero or greater than or equal to the length of the sequence.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 423)

Unknown directive type "attribute".

.. attribute:: NodeList.length

The number of nodes in the sequence.

In addition, the Python DOM interface requires that some additional support is provided to allow <code>:class:'NodeList'</code> objects to be used as Python sequences. All <code>:class:'NodeList'</code> implementations must include support for <code>:meth:'~object.\_\_len\_\_'</code> and <code>:meth:'~object.\_\_getitem\_\_'</code>; this allows iteration over the <code>:class:'NodeList'</code> in <code>:keyword:'for'</code> statements and proper support for the <code>:fiunc:'len'</code> built-in function.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 427); backlink

Unknown interpreted text role "class".

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Unknown interpreted text role "class".

 $System\,Message: ERROR/3~(\texttt{D:\onboarding-resources}\sample-onboarding-resources\cpython-main\coc\library\cpython-main)~(Doc)~(library)~xml.dom.rst, line~427); \\ \textit{backlink}$ 

Unknown interpreted text role "meth".

 $System\,Message: ERROR/3~(\mbox{$D:\noboarding-resources}\scample-onboarding-resources\cpython-main\coc\library\cpython-main)~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-main})~(\mbox{$Doc\library\cpython-m$ 

Unknown interpreted text role "meth".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 427); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 427); backlink

Unknown interpreted text role "keyword".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 427); backlink

Unknown interpreted text role "func".

If a DOM implementation supports modification of the document, the :class: NodeList` implementation must also support the :meth: `~object.\_\_setitem\_\_` and :meth: `~object.\_\_delitem\_\_` methods.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 435); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 435); backlink

Unknown interpreted text role "meth".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 435); backlink

Unknown interpreted text role "meth".

# **DocumentType Objects**

Information about the notations and entities declared by a document (including the external subset if the parser uses it and can provide the information) is available from a 'class: 'DocumentType' object. The 'class: 'DocumentType' for a document is available from the 'class:'Document' object's 'attr:'doctype' attribute; if there is no DOCTYPE declaration for the document, the document's 'attr:'doctype' attribute will be set to None instead of an instance of this interface.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 445); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 445); backlink

Unknown interpreted text role "class".

 $System\,Message: ERROR/3\, (\texttt{D:}\onboarding-resources}\sample-onboarding-resources\\\cpython-main\) (\texttt{Doc}\) (\texttt{library}\) xml.dom.rst, line 445); \textit{backlink}$ 

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 445); backlink

Unknown interpreted text role "attr".

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Unknown interpreted text role "attr".

:class:'DocumentType' is a specialization of :class:'Node', and adds the following attributes:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 453); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 453); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 457)

Unknown directive type "attribute".

.. attribute:: DocumentType.publicId

The public identifier for the external subset of the document type definition. This will be a string or ``None``.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 463)

Unknown directive type "attribute".

```
.. attribute:: DocumentType.systemId
```

The system identifier for the external subset of the document type definition. This will be a URI as a string, or ``None``.

 $System\ Message: ERROR/3\ (\texttt{D:\onboarding-resources}\ sample-onboarding-resources\ cpython-main\ (\texttt{Doc\}\ (\texttt{Dibrary}\ kml.dom.rst, line\ 469)$ 

Unknown directive type "attribute".

.. attribute:: DocumentType.internalSubset

A string giving the complete internal subset from the document. This does not include the brackets which enclose the subset. If the document has no internal subset, this should be ``None``.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 476)

Unknown directive type "attribute".

.. attribute:: DocumentType.name

The name of the root element as given in the ``DOCTYPE`` declaration, if present.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 482)

Unknown directive type "attribute".

.. attribute:: DocumentType.entities

This is a :class: `NamedNodeMap` giving the definitions of external entities. For entity names defined more than once, only the first definition is provided (others are ignored as required by the XML recommendation). This may be ``None`` if the information is not provided by the parser, or if no entities are defined.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 491)

Unknown directive type "attribute".

.. attribute:: DocumentType.notations

This is a :class: `NamedNodeMap` giving the definitions of notations. For notation names defined more than once, only the first definition is provided (others are ignored as required by the XML recommendation). This may be ``None`` if the information is not provided by the parser, or if no notations are defined.

# **Document Objects**

A :class: Document' represents an entire XML document, including its constituent elements, attributes, processing instructions, comments etc. Remember that it inherits properties from :class: Node'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 505); backlink

Unknown interpreted text role "class".

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Unknown interpreted text role "class".

 $System\,Message: ERROR/3\, (\mboarding-resources \scample-onboarding-resources \cpython-main)\coc\library\cpython-main)\, (\mboc)\, (\mboarding-resources, line\,510)$ 

Unknown directive type "attribute".

.. attribute:: Document.documentElement

The one and only root element of the document.

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Unknown directive type "method".

.. method:: Document.createElement(tagName)

Create and return a new element node. The element is not inserted into the document when it is created. You need to explicitly insert it with one of the other methods such as :meth:`insertBefore` or :meth:`appendChild`.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\Doc\library\sine 522)

Unknown directive type "method".

.. method:: Document.createElementNS(namespaceURI, tagName)

Create and return a new element with a namespace. The \*tagName\* may have a prefix. The element is not inserted into the document when it is created. You need to explicitly insert it with one of the other methods such as :meth:`insertBefore` or :meth:`appendChild`.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 530)

Unknown directive type "method".

.. method:: Document.createTextNode(data)

Create and return a text node containing the data passed as a parameter. As with the other creation methods, this one does not insert the node into the tree.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 537)

Unknown directive type "method".

.. method:: Document.createComment(data)

Create and return a comment node containing the data passed as a parameter. As with the other creation methods, this one does not insert the node into the tree.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 544)

Unknown directive type "method".

 $\dots \verb| method:: Document.createProcessingInstruction(target, data)|\\$ 

Create and return a processing instruction node containing the \*target\* and \*data\* passed as parameters. As with the other creation methods, this one does not insert the node into the tree.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 551)

Unknown directive type "method".

.. method:: Document.createAttribute(name)

Create and return an attribute node. This method does not associate the attribute node with any particular element. You must use :meth:`setAttributeNode` on the appropriate :class:`Element` object to use the newly created attribute instance.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 559)

Unknown directive type "method".

.. method:: Document.createAttributeNS(namespaceURI, qualifiedName)

Create and return an attribute node with a namespace. The \*tagName\* may have a prefix. This method does not associate the attribute node with any particular element. You must use :meth:`setAttributeNode` on the appropriate :class:`Element` object to use the newly created attribute instance.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 567)

Unknown directive type "method".

.. method:: Document.getElementsByTagName(tagName)

Search for all descendants (direct children, children's children, etc.) with a particular element type name.

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Unknown directive type "method".

.. method:: Document.getElementsByTagNameNS(namespaceURI, localName)

Search for all descendants (direct children, children's children, etc.) with a particular namespace URI and localname. The localname is the part of the namespace after the prefix.

# **Element Objects**

:class:'Element' is a subclass of :class:'Node', so inherits all the attributes of that class.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 585); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 585); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 589)

Unknown directive type "attribute".

.. attribute:: Element.tagName

The element type name. In a namespace-using document it may have colons in it. The value is a string.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 595)

Unknown directive type "method".

.. method:: Element.getElementsByTagName(tagName)

Same as equivalent method in the :class:`Document` class.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 600)

Unknown directive type "method".

 $\begin{tabular}{ll} ... & method:: {\tt Element.getElementsByTagNameNS (namespaceURI, localName)} \\ \end{tabular}$ 

Same as equivalent method in the :class:`Document` class.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 605)

Unknown directive type "method".

.. method:: Element.hasAttribute(name)

Return ``True`` if the element has an attribute named by \*name\*.

#### main\Doc\library\(cpython-main)(Doc)(library)xml.dom.rst, line 610)

Unknown directive type "method".

.. method:: Element.hasAttributeNS(namespaceURI, localName)

Return ``True`` if the element has an attribute named by \*namespaceURI\* and \*localName\*.

Unknown directive type "method".

.. method:: Element.getAttribute(name)

Return the value of the attribute named by \*name\* as a string. If no such attribute exists, an empty string is returned, as if the attribute had no value.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 622)

Unknown directive type "method".

.. method:: Element.getAttributeNode(attrname)

Return the :class:`Attr` node for the attribute named by \*attrname\*.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 627)

Unknown directive type "method".

.. method:: Element.getAttributeNS(namespaceURI, localName)

Return the value of the attribute named by \*namespaceURI\* and \*localName\* as a string. If no such attribute exists, an empty string is returned, as if the attribute had no value.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 634)

Unknown directive type "method".

.. method:: Element.getAttributeNodeNS(namespaceURI, localName)

Return an attribute value as a node, given a \*namespaceURI\* and \*localName\*.

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Unknown directive type "method".

.. method:: Element.removeAttribute(name)

Remove an attribute by name. If there is no matching attribute, a :exc:`NotFoundErr` is raised.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 645)

Unknown directive type "method".

.. method:: Element.removeAttributeNode(oldAttr)

Remove and return \*oldAttr\* from the attribute list, if present. If \*oldAttr\* is not present, :exc:`NotFoundErr` is raised.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 651)

Unknown directive type "method".

.. method:: Element.removeAttributeNS(namespaceURI, localName)

Remove an attribute by name. Note that it uses a localName, not a qname. No exception is raised if there is no matching attribute.

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Unknown directive type "method".

.. method:: Element.setAttribute(name, value)
Set an attribute value from a string.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 662)

Unknown directive type "method".

.. method:: Element.setAttributeNode(newAttr)

Add a new attribute node to the element, replacing an existing attribute if necessary if the :attr:`name` attribute matches. If a replacement occurs, the old attribute node will be returned. If \*newAttr\* is already in use, :exc:`InuseAttributeErr` will be raised.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 670)

Unknown directive type "method".

.. method:: Element.setAttributeNodeNS(newAttr)

Add a new attribute node to the element, replacing an existing attribute if necessary if the :attr:`namespaceURI` and :attr:`localName` attributes match. If a replacement occurs, the old attribute node will be returned. If \*newAttr\* is already in use, :exc:`InuseAttributeErr` will be raised.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 678)

Unknown directive type "method".

.. method:: Element.setAttributeNS(namespaceURI, qname, value)

Set an attribute value from a string, given a \*namespaceURI\* and a \*qname\*. Note that a qname is the whole attribute name. This is different than above.

# **Attr Objects**

class: 'Attr' inherits from class: 'Node', so inherits all its attributes.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) xml.dom.rst, line 689); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 689); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 692)

Unknown directive type "attribute".

.. attribute:: Attr.name

The attribute name. In a namespace-using document it may include a colon.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 698)

Unknown directive type "attribute".

.. attribute:: Attr.localName

The part of the name following the colon if there is one, else the entire name.

This is a read-only attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 705)

Unknown directive type "attribute".

.. attribute:: Attr.prefix

The part of the name preceding the colon if there is one, else the empty string.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 711)

Unknown directive type "attribute".

.. attribute:: Attr.value

The text value of the attribute. This is a synonym for the :attr:`nodeValue` attribute.

# NamedNodeMap Objects

:class:'NamedNodeMap' does not inherit from :class:'Node'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 722); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 722); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 725)

Unknown directive type "attribute".

.. attribute:: NamedNodeMap.length

The length of the attribute list.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 730)

Unknown directive type "method".

.. method:: NamedNodeMap.item(index)

Return an attribute with a particular index. The order you get the attributes in is arbitrary but will be consistent for the life of a DOM. Each item is an attribute node. Get its value with the :attr:`value` attribute.

There are also experimental methods that give this class more mapping behavior. You can use them or you can use the standardized meth.' getAttribute\\*' family of methods on the 'class' Element' objects.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 736); backlink

Unknown interpreted text role "meth".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 736); backlink

Unknown interpreted text role "class".

# **Comment Objects**

:class: Comment represents a comment in the XML document. It is a subclass of :class: Node, but cannot have child nodes.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) xml.dom.rst, line 746); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 746); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 750)

Unknown directive type "attribute".

```
.. attribute:: Comment.data
```

The content of the comment as a string. The attribute contains all characters between the leading ``<!-``\ ``->``, but does not include them.

# **Text and CDATASection Objects**

The class: Text' interface represents text in the XML document. If the parser and DOM implementation support the DOM's XML extension, portions of the text enclosed in CDATA marked sections are stored in class: CDATASection' objects. These two interfaces are identical, but provide different values for the attr: nodeType' attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 762); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 762); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 762); backlink

Unknown interpreted text role "attr".

These interfaces extend the :class:'Node' interface. They cannot have child nodes.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 768); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 772)

Unknown directive type "attribute".

```
.. attribute:: Text.data
```

The content of the text node as a string.

#### Note

The use of a <a href="class">cclass</a>: CDATASection</a> node does not indicate that the node represents a complete CDATA marked section, only that the content of the node was part of a CDATA section. A single CDATA section may be represented by more than one node in the document tree. There is no way to determine whether two adjacent <a href="class">cclass</a>: CDATASection</a> nodes represent different CDATA marked sections.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) xml.dom.rst, line 778); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-

resources\cpython-main\Doc\library\(cpython-main) (Doc) (library)xml.dom.rst, line 778); backlink

Unknown interpreted text role "class".

# **ProcessingInstruction Objects**

Represents a processing instruction in the XML document; this inherits from the class: Node interface and cannot have child nodes.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 790); backlink

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 794)

Unknown directive type "attribute".

.. attribute:: ProcessingInstruction.target

The content of the processing instruction up to the first whitespace character. This is a read-only attribute.

 $System\,Message: ERROR/3~(\mbox{D:\onboarding-resources}\scample-onboarding-resources\cpython-main\coc\library\cpython-main)~(\mbox{Doc\ol})~(\mbox{clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{Clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{Clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{Clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{Clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{Clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Clibrary}\cpython-main)~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Doc\ol})~(\mbox{Do$ 

Unknown directive type "attribute".

.. attribute:: ProcessingInstruction.data

The content of the processing instruction following the first whitespace character.

# **Exceptions**

The DOM Level 2 recommendation defines a single exception, <code>:exc:'DOMException'</code>, and a number of constants that allow applications to determine what sort of error occurred. <code>:exc:'DOMException'</code> instances carry a <code>:attr:'code'</code> attribute that provides the appropriate value for the specific exception.

Unknown interpreted text role "exc".

 $System\ Message: ERROR/3\ (\ D:\ \ c) \ (Doc)\ (Doc)\ (Library)\ xml.dom.rst, \ line\ 811); \ backlink$ 

Unknown interpreted text role "exc".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) xml.dom.rst, line 811); backlink

Unknown interpreted text role "attr".

The Python DOM interface provides the constants, but also expands the set of exceptions so that a specific exception exists for each of the exception codes defined by the DOM. The implementations must raise the appropriate specific exception, each of which carries the appropriate value for the <a href="https://attribute.">attr:</a>'code' attribute.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 816); backlink

Unknown interpreted text role "attr".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 823)

Unknown directive type "exception".

.. exception:: DOMException

Base exception class used for all specific DOM exceptions. This exception class cannot be directly instantiated.

 $System\ Message: ERROR/3\ (\texttt{D:\onboarding-resources}\ sample-onboarding-resources\ cpython-main\ (\texttt{Doc\} (\texttt{Dibrary}\ kml.dom.rst, line\ 829)$ 

Unknown directive type "exception".

.. exception:: DomstringSizeErr

Raised when a specified range of text does not fit into a string. This is not known to be used in the Python DOM implementations, but may be received from DOM implementations not written in Python.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 836)

Unknown directive type "exception".

.. exception:: HierarchyRequestErr

Raised when an attempt is made to insert a node where the node type is not allowed.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 842)

Unknown directive type "exception".

.. exception:: IndexSizeErr

Raised when an index or size parameter to a method is negative or exceeds the allowed values.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\Doc\library\) (mil.dom.rst, line 848)

Unknown directive type "exception".

.. exception:: InuseAttributeErr

Raised when an attempt is made to insert an :class: Attr` node that is already present elsewhere in the document.

 $System\,Message:\,ERROR/3\, (\mboarding-resources\spaces) ample-onboarding-resources\spaces(cpython-main)\coc)\, (\mboarding-resources) xml.\,dom.\,rst,\,line\,\,854)$ 

Unknown directive type "exception".

.. exception:: InvalidAccessErr

Raised if a parameter or an operation is not supported on the underlying object.

 $System\ Message: ERROR/3\ (\texttt{D:\onboarding-resources}\ sample-onboarding-resources\ cpython-main\ (\texttt{Doc}\ (\texttt{Library}\ xml.dom.rst, line\ 859)$ 

Unknown directive type "exception".

.. exception:: InvalidCharacterErr

This exception is raised when a string parameter contains a character that is not permitted in the context it's being used in by the XML 1.0 recommendation. For example, attempting to create an :class:`Element` node with a space in the element type name will cause this error to be raised.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 867)

Unknown directive type "exception".

 $\dots$  exception:: InvalidModificationErr

Raised when an attempt is made to modify the type of a node.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 872)

#### Unknown directive type "exception".

.. exception:: InvalidStateErr

Raised when an attempt is made to use an object that is not defined or is no longer usable.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 878)

#### Unknown directive type "exception".

.. exception:: NamespaceErr

If an attempt is made to change any object in a way that is not permitted with regard to the `Namespaces in XML <a href="https://www.w3.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.wa.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.w3.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.w3.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.w3.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.w3.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.w3.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.w3.org/TR/REC-xml-names/">https://www.w3.org/TR/REC-xml-names/<a href="https://www.wa.org/TR/REC-xml-names/">https://wwww.w3.org/TR/REC-xml-names/<a href="https://www.wa

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 885)

#### Unknown directive type "exception".

.. exception:: NotFoundErr

Exception when a node does not exist in the referenced context. For example, :meth:`NamedNodeMap.removeNamedItem` will raise this if the node passed in does not exist in the map.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 892)

#### Unknown directive type "exception".

.. exception:: NotSupportedErr

Raised when the implementation does not support the requested type of object or operation.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 898)

# Unknown directive type "exception".

.. exception:: NoDataAllowedErr

This is raised if data is specified for a node which does not support data.

 $\ldots$  XXX  $\,$  a better explanation is needed!

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 905)

# Unknown directive type "exception".

 $\begin{tabular}{ll} .. & exception:: NoModification \verb|AllowedErr| \\ \hline \end{tabular}$ 

Raised on attempts to modify an object where modifications are not allowed (such as for read-only nodes).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) xml.dom.rst, line 911)

#### Unknown directive type "exception".

.. exception:: SyntaxErr

Raised when an invalid or illegal string is specified.

.. XXX how is this different from InvalidCharacterErr?

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 918)

#### Unknown directive type "exception".

.. exception:: WrongDocumentErr

Raised when a node is inserted in a different document than it currently belongs to, and the implementation does not support migrating the node from one document to the other.

The exception codes defined in the DOM recommendation map to the exceptions described above according to this table:

#### Constant

#### :const:`DOMSTRING SIZE ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 931); backlink

Unknown interpreted text role "const".

#### Exception

#### :exc:`DomstringSizeErr`

System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line
931); backlink

Unknown interpreted text role "exc".

#### :const:`HIERARCHY\_REQUEST\_ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 933); backlink

Unknown interpreted text role "const".

# :exc:`HierarchyRequestErr`

#### System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line 933); backlink

Unknown interpreted text role "exc".

#### :const:'INDEX SIZE ERR'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 935); backlink

Unknown interpreted text role "const".

#### :exc:\IndexSizeErr\

# System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main)\)
(Doc) (library) xml.dom.rst, line 935); backlink

Unknown interpreted text role "exc".

# :const:`INUSE ATTRIBUTE ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 937); backlink

Unknown interpreted text role "const".

#### :exc:`InuseAttributeErr`

#### System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line 937); backlink

Unknown interpreted text role "exc".

# :const:'INVALID\_ACCESS\_ERR'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 939); backlink

Unknown interpreted text role "const".

## :exc:`InvalidAccessErr`

# System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line 939); backlink

Unknown interpreted text role "exc".

# Constant

**Exception** 

:const:`INVALID CHARACTER ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 941); backlink

Unknown interpreted text role "const".

:exc:`InvalidCharacterErr`

System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line
941); backlink

Unknown interpreted text role "exc".

:const:'INVALID MODIFICATION ERR'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 943); backlink

Unknown interpreted text role "const".

:exc:`InvalidModificationErr`

System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line
943); backlink

Unknown interpreted text role "exc".

:const:`INVALID\_STATE\_ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 945): hacklink

Unknown interpreted text role "const".

:exc:\InvalidStateErr\

System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line
945); backlink

Unknown interpreted text role "exc".

:const:`NAMESPACE\_ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 947): hacklink

Unknown interpreted text role "const".

:exc:\NamespaceErr\

System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line 947); backlink

Unknown interpreted text role "exc".

:const:`NOT\_FOUND\_ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 949); backlink

Unknown interpreted text role "const".

:exc:`NotFoundErr`

System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line 949); backlink

Unknown interpreted text role "exc".

:const:`NOT\_SUPPORTED\_ERR`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) xml.dom.rst, line 951); backlink

Unknown interpreted text role "const".

:exc:`NotSupportedErr`

System Message: ERROR/3

(D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\)
(Doc) (library) xml.dom.rst, line 951); backlink

Unknown interpreted text role "exc".

#### Constant **Exception** :exc:`NoDataAllowedErr' :const:'NO DATA ALLOWED ERR' System Message: ERROR/3 System Message: ERROR/3 (D:\onboarding-(D:\onboarding-resources\sar resources\sample-onboardingonboarding-resources\cpythonresources\cpython-main\Doc\library\ main\Doc\library\(cpython-main) (cpython-main) (Doc) (library) xml.dom.rst, (Doc) (library) xml.dom.rst, line line 953); backlink 953); backlink Unknown interpreted text role "const". Unknown interpreted text role "exc". :exc:`NoModificationAllowedErr` :const:'NO MODIFICATION ALLOWED ERR' System Message: ERROR/3 System Message: ERROR/3 (D:\onboarding-(D:\onboarding-resources\sampleresources\sample-onboardingonboarding-resources\cpythonresources\cpython-main\Doc\library\ main\Doc\library\(cpython-main) (cpython-main) (Doc) (library) xml.dom.rst, (Doc) (library) xml.dom.rst, line line 955); backlink 955); backlink Unknown interpreted text role "const". Unknown interpreted text role "exc". :exc:`SyntaxErr` :const:`SYNTAX ERR` System Message: ERROR/3 System Message: ERROR/3 (D:\onboarding-(D:\onboarding-resources\sampleresources\sample-onboardingonboarding-resources\cpythonresources\cpython-main\Doc\library\ main\Doc\library\(cpython-main) (cpython-main) (Doc) (library) xml.dom.rst, (Doc) (library) xml.dom.rst, line line 957); backlink 957); backlink Unknown interpreted text role "const". Unknown interpreted text role "exc". :exc:`WrongDocumentErr :const:`WRONG\_DOCUMENT\_ERR` System Message: ERROR/3 System Message: ERROR/3 (D:\onboarding-(D:\onboarding-resources\sampleresources\sample-onboardingonboarding-resources\cpythonresources\cpython-main\Doc\library\ main\Doc\library\(cpython-main) (cpython-main) (Doc) (library) xml.dom.rst, (Doc) (library) xml.dom.rst, line line 959); backlink 959); backlink Unknown interpreted text role "const". Unknown interpreted text role "exc".

# Conformance

This section describes the conformance requirements and relationships between the Python DOM API, the W3C DOM recommendations, and the OMG IDL mapping for Python.

# **Type Mapping**

The IDL types used in the DOM specification are mapped to Python types according to the following table.

IDL Type	Python Type
boolean	bool or int
int	int
long int	int
unsigned int	int
DOMString	str <b>or</b> bytes
null	None

# **Accessor Methods**

The mapping from OMG IDL to Python defines accessor functions for IDL attribute declarations in much the way the Java mapping does. Mapping the IDL declarations

```
readonly attribute string someValue; attribute string anotherValue;
```

yields three accessor functions: a "get" method for :attr:`someValue` (:meth:`\_get\_someValue`), and "get" and "set" methods for :attr:`anotherValue` (:meth:`\_get\_anotherValue` and :meth:`\_set\_anotherValue`). The mapping, in particular, does not require that the IDL attributes are accessible as normal Python attributes: object.someValue is not required to work, and may raise an :exc:`AttributeError`.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 1008); backlink

Unknown interpreted text role "attr".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 1008); backlink

Unknown interpreted text role "meth".

Unknown interpreted text role "attr".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 1008); backlink

Unknown interpreted text role "meth".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 1008); backlink

Unknown interpreted text role "meth".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 1008); backlink

Unknown interpreted text role "exc".

The Python DOM API, however, *does* require that normal attribute access work. This means that the typical surrogates generated by Python IDL compilers are not likely to work, and wrapper objects may be needed on the client if the DOM objects are accessed via CORBA. While this does require some additional consideration for CORBA DOM clients, the implementers with experience using DOM over CORBA from Python do not consider this a problem. Attributes that are declared <code>readonly</code> may not restrict write access in all DOM implementations.

In the Python DOM API, accessor functions are not required. If provided, they should take the form defined by the Python IDL mapping, but these methods are considered unnecessary since the attributes are accessible directly from Python. "Set" accessors should never be provided for readonly attributes.

The IDL definitions do not fully embody the requirements of the W3C DOM API, such as the notion of certain objects, such as the return value of <a href="mailto:meth:getElementsByTagName">meth:getElementsByTagName</a>, being "live". The Python DOM API does not require implementations to enforce such requirements.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) xml.dom.rst, line 1029); backlink

Unknown interpreted text role "meth".