Document Object Model (DOM) 
Level 3 Validation Specification
1.0

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Abstract

This specification defines the Document Object Model Validation Level 3, a platform- and language-neutral interface. This module provides the guidance to programs and scripts to dynamically update the content and the structure of documents while ensuring that the document remains valid, or to ensure that the document becomes valid.
**Status of this document**

*This section describes the status of this document at the time of its publication. Other documents may supersede this document. A list of current W3C publications and the latest revision of this technical report can be found in the [W3C technical reports index](http://www.w3.org/TR/).*

This is the **Recommendation** of "DOM Level 3 Validation". No changes were done to this specification since the Proposed Recommendation version.

Comments on this document should be sent to the public mailing list [www-dom@w3.org](mailto:www-dom@w3.org). An [archive](http://lists.w3.org/Archives/Public/www-dom/) is available at [http://lists.w3.org/Archives/Public/www-dom/](http://lists.w3.org/Archives/Public/www-dom/).

An [implementation report](http://www.w3.org/2004/01/DOM-Level-3-impl), along with the test suite, is also available.

This is a stable document and has been endorsed by the W3C Membership and the participants of the DOM working group. The English version of this specification is the only normative version. Information about [translations](http://www.w3.org/2004/01/DOM-Level-3-translations) of this document is available at [http://www.w3.org/2004/01/DOM-Level-3-translations](http://www.w3.org/2004/01/DOM-Level-3-translations).

The [list of known errors](http://www.w3.org/2004/01/DOM-Level-3-errata) in this document is available at [http://www.w3.org/2004/01/DOM-Level-3-errata](http://www.w3.org/2004/01/DOM-Level-3-errata).

This document has been produced as part of the [W3C DOM Activity](http://www.w3.org/dom). The authors of this document are the DOM Working Group participants.

Patent disclosures relevant to this specification may be found on the Working Group's [patent disclosure page](http://www.w3.org/2004/01/DOM-Level-3-patents).

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**Document Object Model (DOM) Level 3 Validation Specification**
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1. Validation

Ben Chang, Oracle; Joe Kesselman, IBM (until September 2001); Rezaur Rahman, Intel Corporation (until July 2001)

1.1. Overview

This chapter describes the optional DOM Level 3 Validation feature. This module provides Application Programming Interfaces (APIs) to guide construction and editing of XML documents. Examples of such guided editing are queries like those that combine questions like "what does the schema allow me to insert/delete here" and "if I insert/delete here, will the document still be valid."

To aid users in the editing and creation of XML documents, other queries may expose different levels of details, e.g., all the possible children, those which would be valid given what precedes this point, lists of defined symbols of a given kind. Some of these queries would prompt checks and warn users if they're about to conflict with or overwrite such data.

Finally, users would like to validate an edited or newly constructed document before serializing it or passing it to other users. They may edit, come up with an invalid document, then edit again to result in a valid document. During this process, these APIs can allow the user to check the validity of the document or subtree on demand. If necessary, these APIs can also require that the document or subtree remain valid during this editing process via the DocumentEditVal.continuousValidityChecking flag.

A DOM application can use the hasFeature(feature, version) method of the DOMImplementation interface to determine with parameter values "Validation" and "3.0", respectively, whether or not these interfaces are supported by the implementation. This implementation is dependent on [DOM Level 2 Core] and the [DOM Level 3 Core] DOMConfiguration interface.
This chapter focuses on the editing aspects used in the XML document editing world and usage of such information. The appendix describes in detail all the possible outcomes of the validation operations on the different node types.

1.2. Exceptions

This section describes the "VAL-DOC-EDIT" exceptions.

1.3. Document Editing Interfaces

This section contains "Document Editing" methods as described in the DocumentEditVAL, NodeEditVAL, ElementEditVAL, and CharacterDataEditVAL interfaces. References to new [DOM Level 3 Core] interfaces such as DOMStringList and NameList also exist. With the latter interface, if the schema is a DTD, the element information item names are simply local names; if the schema is a W3C XML schema, the names are qualified names, which may contain namespace prefixes.

Appendix A. Validation Outcomes

Ben Chang, Oracle

A.1. The nodeValidity and validateDocument methods

The following table describes all possible validation outcomes of the NodeEditVAL.nodeValidity(valType) method.

<table>
<thead>
<tr>
<th>Validation Type</th>
<th>Validation outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAL_TRUE</td>
<td>The node is well-formed.</td>
</tr>
<tr>
<td>VAL_FALSE</td>
<td>The node is not well-formed.</td>
</tr>
<tr>
<td>VAL_UNKNOWN</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

| VAL_WF          | The node is well-formed. Processor must take into account all the in-scope namespace declarations. |
| VAL_NS_WF       | The node is not namespace well-formed. Processor must take into account all the in-scope namespace declarations. |
| VAL_INCOMPLETE  | If the schema is an XML Schema, PSVI [validity] property value is unknown. |

The following table describes the outcome of the DocumentEditVAL.validateDocument() and NodeEditVAL.nodeValidity(valType) methods, with the latter called on the DocumentEditVAL node with validationType NodeEditVAL.VAL_SCHEMA.

<table>
<thead>
<tr>
<th>Validation Type</th>
<th>Validation outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAL_TRUE</td>
<td>The node is well-formed. Processor must take into account all the in-scope namespace declarations.</td>
</tr>
<tr>
<td>VAL_FALSE</td>
<td>The node is not well-formed. Processor must take into account all the in-scope namespace declarations.</td>
</tr>
<tr>
<td>VAL_UNKNOWN</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

| VAL_WF          | The node is well-formed. Processor must take into account all the in-scope namespace declarations. |
| VAL_NS_WF       | The node is not namespace well-formed. Processor must take into account all the in-scope namespace declarations. |
| VAL_INCOMPLETE  | If the schema is an XML Schema, PSVI [validity] property value is unknown. |

The node fails to comply to all the constraints expressed in the schema. If the schema is an XML Schema, PSVI [validity] property value is unknown. If the schema is an XML Schema, PSVI [validity] property value is unknown.

If the schema is an XML Schema, PSVI [validity] property value is unknown.
### Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Validity outcome</th>
</tr>
</thead>
</table>
| validdocument and nodevalidity, called on the Document node with validationType VAL_SCHEMA. | **VAL_TRUE**  
If the schema is a DTD, then the document valid constraint is satisfied. If the schema is an XML Schema, then the document validity is the same as the validity of the validation root, i.e., documentElement: PSVI [validity] valid.  
**VAL_FALSE**  
Fails to satisfy the constraints defined.  
**VAL_UNKNOWN**  
If the schema is an XML Schema, then schema is not found or the declaration for the validation root is not found: PSVI [validity] unknown. |

The following table describes outcomes for the NodeEditVAL.nodeValidity(valType) method called with the validationType NodeEditVAL.VAL_SCHEMA:

<table>
<thead>
<tr>
<th>Node types</th>
<th><strong>VAL_TRUE</strong></th>
<th><strong>VAL_FALSE</strong></th>
<th><strong>VAL_UNKNOWN</strong></th>
</tr>
</thead>
</table>
| Element    | If the schema is a DTD, then element and attribute validity constraints, including attribute validity constraint defined below are satisfied. If the schema is an XML Schema, then PSVI [validity] valid.  
**VAL_FALSE**  
Fails to satisfy the constraints defined.  
**VAL_UNKNOWN**  
If the schema is an XML Schema, then PSVI [validity] unknown. |
| Attr       | If the schema is a DTD, then all validity constraints defined in section 3.3.1, "Attribute Type", required and fixed attribute are satisfied. If the schema is an XML Schema, then PSVI [validity] valid.  
**VAL_FALSE**  
Fails to satisfy the constraints defined.  
**VAL_UNKNOWN**  
If the schema is an XML Schema, then PSVI [validity] unknown. |
| Text       | The node is well-formed.  
**VAL_FALSE**  
The node is not well-formed.  
**VAL_UNKNOWN**  
If no parent node is found. |
| CDATASection | The node is well-formed.  
**VAL_FALSE**  
The node is not well-formed.  
**VAL_UNKNOWN**  
If no parent node is found. |
| ProcessingInstruction | The node is well-formed.  
**VAL_FALSE**  
The node is not well-formed.  
**VAL_UNKNOWN**  
If no parent node is found. |
| Comment    | The node is well-formed.  
**VAL_FALSE**  
The node is not well-formed.  
**VAL_UNKNOWN**  
If no parent node is found. |
| EntityReference | Entity is declared.  
**VAL_FALSE**  
Entity is not declared.  
**VAL_UNKNOWN**  
Not applicable. |
| Entity     | Implementation-specific.  
**VAL_FALSE**  
Implementation-specific.  
**VAL_UNKNOWN**  
Implementation-specific. |
| Notation   | Implementation-specific.  
**VAL_FALSE**  
Implementation-specific.  
**VAL_UNKNOWN**  
Implementation-specific. |
| DocumentType | Implementation-specific.  
**VAL_FALSE**  
Implementation-specific.  
**VAL_UNKNOWN**  
Implementation-specific. |
| DocumentFragment | Not applicable.  
**VAL_FALSE**  
Not applicable.  
**VAL_UNKNOWN**  
Not applicable. |

### A.2. Other validation operations

The table below describes validation outcomes from can* validation operations, such as NodeEditVAL.canRemoveChild(), or ElementEditVAL.canSetAttributeNS, CharacterDataEditVAL.canAppendData(). All these operations attempt to validate with validityType NodeEditVAL.VAL_INCOMPLETE:

<table>
<thead>
<tr>
<th><strong>VAL_TRUE</strong></th>
<th><strong>VAL_FALSE</strong></th>
<th><strong>VAL_UNKNOWN</strong></th>
</tr>
</thead>
</table>
| If the associated operation is performed, then the node would be valid with regards to the VAL_INCOMPLETE definition or if there is no schema found.  
**VAL_FALSE**  
If the associated operation is performed, then the node would be invalid with regards to the VAL_INCOMPLETE definition.  
**VAL_UNKNOWN**  
Not applicable. |
Note: If the document includes more than one type of, e.g., DTD and XML Schema, and the DOMConfiguration "schema-type" parameter is not specified, the validation outcome for NodeEditVAL.VAL_INCOMPLETE and NodeEditVAL.VAL_SCHEMA is implementation-specific.

Appendix B. IDL Definitions

This appendix contains the complete OMG IDL [OMG IDL] for the Level 3 Document Object Model Validation definitions.

The IDL files are also available as: http://www.w3.org/TR/2004/REC-DOM-Level-3-Val-20040127/idl.zip

Appendix C. Java Language Binding

This appendix contains the complete Java [Java] bindings for the Level 3 Document Object Model Validation.

The Java files are also available as http://www.w3.org/TR/2004/REC-DOM-Level-3-Val-20040127/java-binding.zip

Appendix D. ECMAScript Language Binding

This appendix contains the complete ECMAScript [ECMAScript] binding for the Level 3 Document Object Model Validation definitions.

Appendix E. Acknowledgements

Many people contributed to the DOM specifications (Level 1, 2 or 3), including participants of the DOM Working Group and the DOM Interest Group. We especially thank the following:

Andrew Clover, Andrew Watson (Object Management Group), Andy Heninger (IBM), Angel Diaz (IBM), Arnaud Le Hors (W3C and IBM), Ashok Malhotra (IBM and Microsoft), Ben Chang (Oracle), Bill Smith (Sun), Bill Shea (Merrill Lynch), Bob Sutor (IBM), Chris Lovett (Microsoft), Chris Wilson (Microsoft), David Brownell (Sun), David Ezell (Hewlett-Packard Company), David Singer (IBM), Dimitris Dimitriadis (Improve AB and invited expert), Don Park (invited), Elena Litani (IBM), Eric Vasilik (Microsoft), Gavin Nicol (INSO), Ian Jacobs (W3C), James Clark (invited), James Davidson (Sun), Jared Sorensen (Novell), Jeroen van Rotterdam (X-Hive Corporation), Joe Kesselman (IBM), Joe Lapp (webMethods), Joe Marini (Macromedia), Johnny Stenback (Netscape/AOL), Jon Ferraiolo (Adobe), Jonathan Marsh (Microsoft), Jonathan Robie (Texcel Research and Software AG), Kim Adamson-Sharpe (SoftQuad Software Inc.), Lauren Wood (SoftQuad Software Inc., former Chair), Laurence Cable (Sun), Mark Davis (IBM), Mark Scardina (Oracle), Martin Dürrst (W3C), Mary Brady (NIST), Mick Goulsh (Software AG), Mike Champion (Arbortext and Software AG), Miles Sabin (Cromwell Media), Patti Lutsky (Arbortext), Paul Grosso (Arbortext), Peter Sharpe (SoftQuad Software Inc.), Phil Karlton (Netscape), Philippe Le Hégarét (W3C, W3C Team Contact and former Chair), Ramesh Lekshmyarayanan (Merrill Lynch), Ray Whitmer (iMall, Excite@Home, and Netscape/AOL, Chair), Rezaur Rahman (Intel), Rich Rollman (Microsoft), Rick Gessner (Netscape), Rick Jelliffe (invited), Rob Relyea (Microsoft), Scott Isaacs (Microsoft), Sharon Adler (INSO), Steve Byrne (JavaSoft), Tim Bray (invited), Tim Yu (Oracle), Tom Pixley (Netscape/AOL), Vidur Apparao (Netscape), Vinod Anupam (Lucent).
Thanks to all those who have helped to improve this specification by sending suggestions and corrections
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Special thanks to the DOM Conformance Test Suites contributors: Curt Arnold, Fred Drake, Mary Brady
(NIST), Rick Rivello (NIST), Robert Clary (Netscape).

E.1. Production Systems

This specification was written in XML. The HTML, OMG IDL, Java and ECMAScript bindings were all
produced automatically.

Thanks to Joe English, author of cost, which was used as the basis for producing DOM Level 1. Thanks
also to Gavin Nicol, who wrote the scripts which run on top of cost. Arnaud Le Hors and Philippe Le
Hégaret maintained the scripts.

After DOM Level 1, we used Xerces as the basis DOM implementation and wish to thank the authors.
Philippe Le Hégaret and Arnaud Le Hors wrote the Java programs which are the DOM application.

Thanks also to Jan Kärrman, author of html2ps, which we use in creating the PostScript version of the
specification.

Appendix F. Glossary

Arnaud Le Hors, W3C; Robert S. Sutor, IBM Research (for DOM Level 1)
Some of the following term definitions have been borrowed or modified from similar definitions in other
W3C or standards documents. See the links within the definitions for more information.

16-bit unit

The base unit of a DOMString. This indicates that indexing on a DOMString occurs in units of
16 bits. This must not be misunderstood to mean that a DOMString can store arbitrary 16-bit
units. A DOMString is a character string encoded in UTF-16; this means that the restrictions of
UTF-16 as well as the other relevant restrictions on character strings must be maintained. A single
character, for example in the form of a numeric character reference, may correspond to one or two
16-bit units.

ancestor

An ancestor node of any node A is any node above A in a tree model, where "above" means
"toward the root."

API

An API is an Application Programming Interface, a set of functions or methods used to access
some functionality.

anonymous type name

An anonymous type name is an implementation-defined, globally unique qualified name provided
by the processor for every anonymous type declared in a .

bubbling phase

The process by which an can be handled by one of the target ancestors after being handled by the

**capture phase**
The process by which an can be handled by one of the target ancestors before being handled by the .

**child**
A child is an immediate descendant node of a node.

**client application**
A [client] application is any software that uses the Document Object Model programming interfaces provided by the hosting implementation to accomplish useful work. Some examples of client applications are scripts within an HTML or XML document.

**COM**
COM is Microsoft's Component Object Model [COM], a technology for building applications from binary software components.

**content model**
The content model is a simple grammar governing the allowed types of the child elements and the order in which they appear. See Element Content in XML [XML 1.0].

**convenience**
A convenience method is an operation on an object that could be accomplished by a program consisting of more basic operations on the object. Convenience methods are usually provided to make the API easier and simpler to use or to allow specific programs to create more optimized implementations for common operations. A similar definition holds for a convenience property.

**cooked model**
A model for a document that represents the document after it has been manipulated in some way. For example, any combination of any of the following transformations would create a cooked model:

1. Expansion of internal text entities.
2. Expansion of external entities.
3. Model augmentation with style-specified generated text.
4. Execution of style-specified reordering.
5. Execution of scripts.

A browser might only be able to provide access to a cooked model, while an editor might provide access to a cooked or the initial structure model (also known as the uncooked model) for a document.

**CORBA**
CORBA is the Common Object Request Broker Architecture from the OMG [CORBA]. This architecture is a collection of objects and libraries that allow the creation of applications containing objects that make and receive requests and responses in a distributed environment.

**cursor**
A cursor is an object representation of a node. It may possess information about context and the path traversed to reach the node.
data model
A data model is a collection of descriptions of data structures and their contained fields, together with the operations or functions that manipulate them.

deprecation
When new releases of specifications are released, some older features may be marked as being deprecated. This means that new work should not use the features and that although they are supported in the current release, they may not be supported or available in future releases.

descendant
A descendant node of any node A is any node below A in a tree model, where "below" means "away from the root."

document element
There is only one document element in a Document. This element node is a child of the Document node. See Well-Formed XML Documents in XML [XML 1.0].

document order
There is an ordering, document order, defined on all the nodes in the document corresponding to the order in which the first character of the XML representation of each node occurs in the XML representation of the document after expansion of general entities. Thus, the node will be the first node. Element nodes occur before their children. Thus, document order orders element nodes in order of the occurrence of their start-tag in the XML (after expansion of entities). The attribute nodes of an element occur after the element and before its children. The relative order of attribute nodes is implementation-dependent.

DOM Level 0
The term "DOM Level 0" refers to a mix (not formally specified) of HTML document functionalities offered by Netscape Navigator version 3.0 and Microsoft Internet Explorer version 3.0. In some cases, attributes or methods have been included for reasons of backward compatibility with "DOM Level 0".

ECMAScript
The programming language defined by the ECMA-262 standard [ECMAScript]. As stated in the standard, the originating technology for ECMAScript was JavaScript [JavaScript]. Note that in the ECMAScript binding, the word "property" is used in the same sense as the IDL term "attribute."

element
Each document contains one or more elements, the boundaries of which are either delimited by start-tags and end-tags, or, for empty elements by an empty-element tag. Each element has a type, identified by name, and may have a set of attributes. Each attribute has a name and a value. See Logical Structures in XML [XML 1.0].

event
An event is the representation of some asynchronous occurrence (such as a mouse click on the presentation of the element, or the removal of child node from an element, or any of unthinkably many other possibilities) that gets associated with an.

event target
The object to which an is targeted.
equivalence

Two nodes are *equivalent* if they have the same node type and same node name. Also, if the nodes contain data, that must be the same. Finally, if the nodes have attributes then collection of attribute names must be the same and the attributes corresponding by name must be equivalent as nodes.

Two nodes are *deeply equivalent* if they are *equivalent*, the child node lists are equivalent as `NodeList` objects, and the pairs of equivalent attributes must in fact be deeply equivalent.

Two `NodeList` objects are *equivalent* if they have the same length, and the nodes corresponding by index are deeply equivalent.

Two `NamedNodeMap` objects are *equivalent* if they have the same length, they have same collection of names, and the nodes corresponding by name in the maps are deeply equivalent.

Two `DocumentType` nodes are *equivalent* if they are equivalent as nodes, have the same names, and have equivalent entities and attributes `NamedNodeMap` objects.

information item

An information item is an abstract representation of some component of an XML document. See the [XML Information Set] for details.

logically-adjacent text nodes

Logically-adjacent text nodes are `Text` or `CDATASection` nodes that can be visited sequentially in or in reversed document order without entering, exiting, or passing over `Element`, `Comment`, or `ProcessingInstruction` nodes.

global declaration

A global declaration is a schema declaration, usually for an element or an attribute, that is available for use in content models throughout the , i.e. a declaration that is not bound to a particular context.

hosting implementation

A [hosting] implementation is a software module that provides an implementation of the DOM interfaces so that a client application can use them. Some examples of hosting implementations are browsers, editors and document repositories.

HTML

The HyperText Markup Language (HTML) is a simple markup language used to create hypertext documents that are portable from one platform to another. HTML documents are SGML documents with generic semantics that are appropriate for representing information from a wide range of applications. [HTML 4.01]

IDL

An Interface Definition Language (IDL) is used to define the interfaces for accessing and operating upon objects. Examples of IDLs are the Object Management Group's IDL [CORBA], Microsoft's IDL [MIDL], and Sun's Java IDL [Java IDL].

implementor

Companies, organizations, and individuals that claim to support the Document Object Model as an API for their products.
**inheritance**

In object-oriented programming, the ability to create new classes (or interfaces) that contain all the methods and properties of another class (or interface), plus additional methods and properties. If class (or interface) D inherits from class (or interface) B, then D is said to be derived from B. B is said to be a base class (or interface) for D. Some programming languages allow for multiple inheritance, that is, inheritance from more than one class or interface.

**initial structure model**

Also known as the raw structure model or the uncooked model, this represents the document before it has been modified by entity expansions, generated text, style-specified reordering, or the execution of scripts. In some implementations, this might correspond to the "initial parse tree" for the document, if it ever exists. Note that a given implementation might not be able to provide access to the initial structure model for a document, though an editor probably would.

**interface**

An interface is a declaration of a set of methods with no information given about their implementation. In object systems that support interfaces and inheritance, interfaces can usually inherit from one another.

**language binding**

A programming language binding for an IDL specification is an implementation of the interfaces in the specification for the given language. For example, a Java language binding for the Document Object Model IDL specification would implement the concrete Java classes that provide the functionality exposed by the interfaces.

**live**

An object is live if any change to the underlying document structure is reflected in the object.

**local name**

A local name is the local part of a qualified name. This is called the local part in Namespaces in XML [XML Namespaces].

**method**

A method is an operation or function that is associated with an object and is allowed to manipulate the object's data.

**model**

A model is the actual data representation for the information at hand. Examples are the structural model and the style model representing the parse structure and the style information associated with a document. The model might be a tree, or a directed graph, or something else.

**namespace prefix**

A namespace prefix is a string that associates an element or attribute name with a namespace URI in XML. See namespace prefix in Namespaces in XML [XML Namespaces].

**namespace URI**

A namespace URI is a URI that identifies an XML namespace. This is called the namespace name in Namespaces in XML [XML Namespaces]. See also sections 1.3.2 "DOM URIs" and 1.3.3 "XML Namespaces" regarding URIs and namespace URIs handling and comparison in the DOM APIs.
**namespace well-formed**

A node is a namespace well-formed XML node if it is a node, and follows the productions and namespace constraints. If [XML 1.0] is used, the constraints are defined in [XML Namespaces]. If [XML 1.1] is used, the constraints are defined in [XML Namespaces 1.1].

**object model**

An object model is a collection of descriptions of classes or interfaces, together with their member data, member functions, and class-static operations.

**parent**

A parent is an immediate ancestor node of a node.

**partially valid**

A node in a DOM tree is partially valid if it is (this part is for comments and processing instructions) and its immediate children are those expected by the content model. The node may be missing trailing required children yet still be considered partially valid.

**qualified name**

A qualified name is the name of an element or attribute defined as the concatenation of a local name (as defined in this specification), optionally preceded by a namespace prefix and colon character. See Qualified Names in Namespaces in XML [XML Namespaces].

**read only node**

A read only node is a node that is immutable. This means its list of children, its content, and its attributes, when it is an element, cannot be changed in any way. However, a read only node can possibly be moved, when it is not itself contained in a read only node.

**root node**

The root node is a node that is not a child of any other node. All other nodes are children or other descendants of the root node.

**schema**

A schema defines a set of structural and value constraints applicable to XML documents. Schemas can be expressed in schema languages, such as DTD, XML Schema, etc.

**sibling**

Two nodes are siblings if they have the same parent node.

**string comparison**

When string matching is required, it is to occur as though the comparison was between 2 sequences of code points from [Unicode].

**tag valid document**

A document is tag valid if all begin and end tags are properly balanced and nested.

**target node**

The target node is the node representing the to which an is targeted using the DOM event flow.

**target phase**

The process by which an can be handled by the .

**token**

An information item such as an XML Name which has been .
tokenized
The description given to various information items (for example, attribute values of various types, but not including the String Type CDATA) after having been processed by the XML processor. The process includes stripping leading and trailing white space, and replacing multiple space characters by one. See the definition of tokenized type.

type valid document
A document is type valid if it conforms to an explicit DTD.

uncooked model
See initial structure model.

well-formed
A node is a well-formed XML node if its serialized form, without doing any transformation during its serialization, matches its respective production in [XML 1.0] or [XML 1.1] (depending on the XML version in use) with all well-formedness constraints related to that production, and if the entities which are referenced within the node are also well-formed. If namespaces for XML are in use, the node must also be.

XML
Extensible Markup Language (XML) is an extremely simple dialect of SGML which is completely described in this document. The goal is to enable generic SGML to be served, received, and processed on the Web in the way that is now possible with HTML. XML has been designed for ease of implementation and for interoperability with both SGML and HTML. [XML 1.0]

XML name
See XML name in the XML specification ([XML 1.0]).

XML namespace
An XML namespace is a collection of names, identified by a URI reference [IETF RFC 2396], which are used in XML documents as element types and attribute names. [XML Namespaces]

Appendix G. References

For the latest version of any W3C specification please consult the list of W3C Technical Reports available at http://www.w3.org/TR.

Canonical XML

CharModel
COM


CORBA


CSS2


DOM Level 1


DOM Level 2 Core


DOM Level 3 Core


DOM Level 2 Events

**DOM Level 3 Events**


**DOM Level 3 Load and Save**


**DOM Level 2 HTML**


**DOM Level 3 Requirements**


**DOM Level 2 Style Sheets and CSS**


**DOM Level 2 Traversal and Range**

DOM Level 3 Validation


DOM Level 2 Views


DOM Level 3 XPath


DWW95


ECMAScript


HTML 4.01


IANA-CHARSETS


ISO/IEC 10646

Java


Java IDL


JavaScript


JAXP


JScript


KeyEvent for Java


Keys enumeration for .Net


MathML 2.0

**MIDL**


**OMG IDL**


**IETF IRIIs**


**IETF RFC 2396**


**IETF RFC 2616**


**IETF RFC 3023**


**SAX**


**SVG 1.1**

Unicode

*The Unicode Standard, Version 4*, ISBN 0-321-18578-1, as updated from time to time by the publication of new versions. The Unicode Consortium, 2000. See also [Versions of the Unicode Standard](http://www.unicode.org/unicode/standard/versions), for latest version and additional information on versions of the standard and of the Unicode Character Database.

**UTR #15**


**VoiceXML 2.0**


**XForms 1.0**


**XHTML 1.0**


**XQuery 1.0 and XPath 2.0 Data Model**


**XML 1.0**


**XML 1.1**

XML Base


XML Information Set


XML Events


XML Namespaces


XML Namespaces 1.1


XML Schema Part 0


XML Schema Part 1

XML Schema Part 2


XML StyleSheet


XPath 1.0


XPointer


Appendix H. Index
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