

**[MS-XMLH]:**

## **Internet Explorer XML 1.0 (Fifth Edition) Standards Support Document**

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## Revision Summary

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10/13/2010	0.2	Minor	Clarified the meaning of the technical content.
2/10/2011	1.0	None	Introduced no new technical or language changes.
2/22/2012	2.0	Major	Significantly changed the technical content.
7/25/2012	2.1	Minor	Clarified the meaning of the technical content.
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# 1 Introduction

This document describes the level of support provided by Microsoft web browsers for the *Extensible Markup Language (XML) 1.0 (Fifth Edition)* [W3C-XMLH], W3C Recommendation 26 November 2008, edited in place 7 February 2013.

The [W3C-XMLH] specification may contain guidance for authors of webpages and browser users, in addition to user agents (browser applications). Statements found in this document apply only to normative requirements in the specification targeted to user agents, not those targeted to authors.

## 1.1 Glossary

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as defined in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 1.2 References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the [Errata](#).

### 1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information.

[NamespacesXML1.1] Bray, T., Hollander, D., Layman, A., and Tobin, R., Eds., "Namespaces in XML 1.1 (Second Edition)", W3C Recommendation 16 August 2006, <http://www.w3.org/TR/xml-names11/>

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.rfc-editor.org/rfc/rfc2119.txt>

[W3C-XMLH] World Wide Web Consortium, "Extensible Markup Language (XML) 1.0 (Fifth Edition)", <http://go.microsoft.com/fwlink/p/?LinkId=221669>

### 1.2.2 Informative References

None.

## 1.3 Microsoft Implementations

The following Microsoft web browser versions implement some portion of the [W3C-XMLH] specification:

- Windows Internet Explorer 9
- Windows Internet Explorer 10
- Internet Explorer 11
- Internet Explorer 11 for Windows 10
- Microsoft Edge

Each browser version may implement multiple document rendering modes. The modes vary from one another in support of the standard. The following table lists the document modes in each browser version that support the [W3C-XMLH] specification.

Browser Version	Documents Modes Supported
Internet Explorer 9	IE9 Mode
Internet Explorer 10	IE9 Mode IE10 Mode
Internet Explorer 11	IE9 Mode IE10 Mode IE11 Mode
Internet Explorer 11 for Windows 10	IE9 Mode IE10 Mode IE11 Mode
Microsoft Edge	EdgeHTML Mode

For each variation presented in this document there is a list of the document modes and browser versions that exhibit the behavior described by the variation. All combinations of modes and versions that are not listed conform to the specification. For example, the following list for a variation indicates that the variation exists in three document modes in all browser versions that support these modes:

*IE9 Mode, IE10 Mode, and IE11 Mode (All Versions)*

## 1.4 Standards Support Requirements

To conform to [\[W3C-XMLH\]](#), a user agent must implement all required portions of the specification. Any optional portions that have been implemented must also be implemented as described by the specification. Normative language is usually used to define both required and optional portions. (For more information, see [\[RFC2119\]](#).)

The following table lists the sections of [W3C-XMLH] and whether they are considered normative or informative.

Chapters	Normative/Informative
1-2	Normative
Appendices A-E	Informative

## 1.5 Notation

The following notations are used in this document to differentiate between notes of clarification, variation from the specification, and extension points.

Notation	Explanation
C####	Identifies a clarification of ambiguity in the target specification. This includes imprecise statements, omitted information, discrepancies, and errata. This does not include data formatting clarifications.
V####	Identifies an intended point of variability in the target specification such as the use of MAY, SHOULD,

Notation	Explanation
	or RECOMMENDED. (See <a href="#">RFC2119</a> .) This does not include extensibility points.
E####	Identifies extensibility points (such as optional implementation-specific data) in the target specification, which can impair interoperability.

For document mode and browser version notation, see section [1.3](#).

## 2 Standards Support Statements

This section contains a full list of clarifications in the Microsoft implementation of [\[W3C-XMLH\]](#).

- Section [2.1](#) includes only those variations that violate a MUST requirement in the target specification.
- Section [2.2](#) describes further variations from MAY and SHOULD requirements.
- Section [2.3](#) identifies variations in error handling.
- Section [2.4](#) identifies variations that impact security.

### 2.1 Normative Variations

The following subsections detail the normative variations from MUST requirements in [\[W3C-XMLH\]](#).

#### 2.1.1 [XML] Section 2.1, White Space Handling

V0005:

The specification states:

An XML processor MUST always pass all characters in a document that are not markup through to the application. A validating XML processor MUST also inform the application which of these characters constitute white space appearing in element content.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Applications are not informed about which characters constitute white space in element content.

#### 2.1.2 [XML] Section 2.3, Common Syntactic Constructs

V0002:

The specification states:

The Namespaces in XML Recommendation [XML Names] assigns a meaning to names containing colon characters. Therefore, authors should not use the colon in XML names except for namespace purposes, but XML processors must accept the colon as a name character.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Colons are accepted in names only when they are used in accordance with [\[NamespacesXML1.1\]](#).

#### 2.1.3 [XML] Section 2.8, Prolog and Document Type Declaration

V0003:

The specification states:

Validity constraint: Root Element Type  
The Name in the document type declaration MUST match the element type of

the root element.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

The **Name** attribute in the document type declaration can differ from the element type of the root element.

### **2.1.4 [XML] Section 2.9, Standalone Document Declaration**

V0004:

The specification states:

Validity constraint: Standalone Document Declaration

The standalone document declaration **MUST** have the value "no" if any external markup declarations contain declarations of:

attributes with default values, if elements to which these attributes apply appear in the document without specifications of values for these attributes, or

entities (other than amp, lt, gt, apos, quot), if references to those entities appear in the document, or

attributes with tokenized types, where the attribute appears in the document with a value such that normalization will produce a different value from that which would be produced in the absence of the declaration, or

element types with element content, if white space occurs directly within any instance of those types.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

A standalone document declaration is not required to have a value of no based on the following external markup declarations:

- Attributes with default values, if elements to which these attributes apply appear in the document without specifications of values for these attributes.
- Entities, other than **amp**, **lt**, **gt**, **apos**, and **quot**, if references to those entities appear in the document.
- Attributes with tokenized types, where the attribute appears in the document with a value such that normalization produces a different value from what is produced in the absence of the declaration.
- Element types with element content, if white space occurs directly within any instance of those types.

### **2.1.5 [XML] Section 3, Logical Structures**

V0006:

The specification states:

Validity constraint: Element Valid

An element is valid if there is a declaration matching elementdecl where the Name matches the element type, and one of the following holds: . . .



*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Elements are not checked for validity.

### **2.1.6 [XML] Section 3.1, Start-Tags, End-Tags, and Empty-Element Tags**

V0007:

The specification states:

```
Validity constraint: Attribute Value Type
The attribute MUST have been declared; the value MUST be of the type declared
for it.
```

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Attribute value types are not checked for validity.

### **2.1.7 [XML] Section 3.2, Element Type Declarations**

V0008:

The specification states:

```
Validity constraint: Unique Element Type Declaration
An element type MUST NOT be declared more than once.
```

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Elements can be declared more than once.

### **2.1.8 [XML] Section 3.2.1, Element Content**

V0009:

The specification states:

```
Validity constraint: Proper Group/PE Nesting

Parameter-entity replacement text MUST be properly nested with parenthesized
groups. That is to say, if either of the opening or closing parentheses in a
choice, seq, or Mixed construct is contained in the replacement text for a
parameter entity, both MUST be contained in the same replacement text.

For interoperability, if a parameter-entity reference appears in a choice, seq,
or Mixed construct, its replacement text SHOULD contain at least one non-blank
character, and neither the first nor last non-blank character of the replacement
text SHOULD be a connector (| or ,).
```

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Parameter-entity replacement text does not have to be properly nested in parenthesized groups.

### **2.1.9 [XML] Section 3.2.2, Mixed Content**

V0010:

The specification states:

Validity constraint: No Duplicate Types

The same name MUST NOT appear more than once in a single mixed-content declaration.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

More than one instance of an element type may appear in a single mixed-content declaration.

### **2.1.10 [XML] Section 3.3.1, Attribute Types**

V0011:

The specification states:

Validity constraint: ID

Values of type ID MUST match the Name production. A name MUST NOT appear more than once in an XML document as a value of this type; i.e., ID values MUST uniquely identify the elements which bear them.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An **ID** value is not required to uniquely identify the element that is associated with it

V0012:

The specification states:

Validity constraint: One ID per Element Type

An element type MUST NOT have more than one ID attribute specified.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An element type may have more than one **ID** attribute specified.

V0013:

The specification states:

Validity constraint: ID Attribute Default

An ID attribute MUST have a declared default of #IMPLIED or #REQUIRED.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An **ID** attribute is not required to have a declared default of #IMPLIED or #REQUIRED.

V0014:

The specification states:

Validity constraint: IDREF

Values of type IDREF MUST match the Name production, and values of type IDREFS MUST match Names; each Name MUST match the value of an ID attribute on some element in the XML document; i.e. IDREF values MUST match the value of some ID attribute.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An **IDREF** entity attribute is not required to match the value of an **ID** attribute on an element in the XML document.

V0015:

The specification states:

Validity constraint: Entity Name

Values of type ENTITY MUST match the Name production, values of type ENTITIES MUST match Names; each Name MUST match the name of an unparsed entity declared in the DTD.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Entity attribute types and the **ENTITIES** set of entities are not checked for validity. Entity attribute types are not required to match the name of an unparsed entity that is declared in the DTD.

V0016:

The specification states:

Validity constraint: Name Token

Values of type NMTOKEN MUST match the Nmtoken production; values of type NMTOKENS MUST match Nmtokens.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Name token attribute types and the **NMTOKENS** set of name tokens are not checked for validity.

V0017:

The specification states:

Validity constraint: Notation Attributes

Values of this type MUST match one of the notation names included in the declaration; all notation names in the declaration MUST be declared.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

A **notation** attribute is not required to match a notation that is specified in the notation declarations, and all of the notations that are declared in the notation declarations are not required to be declared.

V0018:

The specification states:

Validity constraint: No Notation on Empty Element

For compatibility, an attribute of type NOTATION MUST NOT be declared on an element declared EMPTY.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

A **NOTATION** attribute may be declared on an element that is declared by using the **EMPTY** keyword.

V0019:

The specification states:

Validity constraint: No Duplicate Tokens

The notation names in a single NotationType attribute declaration, as well as the NmTokens in a single Enumeration attribute declaration, MUST all be distinct.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Both **NotationalType** attribute types and **Enumeration** attribute types may contain identical elements.

V0020:

The specification states:

Validity constraint: Enumeration

Values of this type MUST match one of the NmToken tokens in the declaration. For interoperability, the same NmToken SHOULD NOT occur more than once in the enumerated attribute types of a single element type.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Enumeration values are not required to be declared. The same token may occur more than once in an enumerated attribute type.

### **2.1.11 [XML] Section 3.3.2, Attribute Defaults**

V0021:

The specification states:

In an attribute declaration, #REQUIRED means that the attribute MUST always be provided, #IMPLIED that no default value is provided.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Attributes are not checked to determine if they are required or if they have default values.

V0022:

The specification states:

Definition: If the declaration is neither #REQUIRED nor #IMPLIED, then the AttValue value contains the declared default value; the #FIXED keyword states

that the attribute MUST always have the default value. When an XML processor encounters an element without a specification for an attribute for which it has read a default value declaration, it MUST report the attribute with the declared default value to the application

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

For an element that is not specified and that includes an attribute that has a declared default value, the attribute is not reported to the application.

V0023:

The specification states:

Validity constraint: Required Attribute

If the default declaration is the keyword #REQUIRED, then the attribute MUST be specified for all elements of the type in the attribute-list declaration.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An attribute is not required to be specified for all element types in the attribute-list declaration.

V0024:

The specification states:

Validity constraint: Attribute Default Value Syntactically Correct

The declared default value MUST meet the syntactic constraints of the declared attribute type. That is, the default value of an attribute: . . .

Note that only the syntactic constraints of the type are required here; other constraints (e.g. that the value be the name of a declared unparsed entity, for an attribute of type ENTITY) will be reported by a validating parser only if an element without a specification for this attribute actually occurs.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

The default value for an attribute is not checked against the syntactic constraints of the attribute type.

V0025:

The specification states:

Validity constraint: Fixed Attribute Default

If an attribute has a default value declared with the #FIXED keyword, instances of that attribute MUST match the default value.

#### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

The value of an attribute is not checked against a fixed default value of the attribute type.

### **2.1.12 [XML] Section 3.4, Conditional Sections**

V0026:

The specification states:

Validity constraint: Proper Conditional Section/PE Nesting

If any of the "<![", "[", or "]">" of a conditional section is contained in the replacement text for a parameter-entity reference, all of them MUST be contained in the same replacement text.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

All the syntactic elements that are referred to in a conditional section (<![, [, and ]]>) are not checked to be present in the same replacement text.

### **2.1.13 [XML] Section 4.1, Character and Entity References**

V0027:

The specification states:

Validity constraint: Entity Declared

In a document with an external subset or parameter entity references with "standalone='no'", the Name given in the entity reference MUST match that in an entity declaration. For interoperability, valid documents SHOULD declare the entities amp, lt, gt, apos, quot, in the form specified in 4.6 Predefined Entities. The declaration of a parameter entity MUST precede any reference to it. Similarly, the declaration of a general entity MUST precede any attribute-list declaration containing a default value with a direct or indirect reference to that general entity.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An entity reference is not required to match an entity in the entity declaration.

### **2.1.14 [XML] Section 4.2.2, External Entities**

V0028:

The specification states:

External Entity Declaration

```
[75] ExternalID ::= 'SYSTEM' S SystemLiteral
                | 'PUBLIC' S PubidLiteral S SystemLiteral
[76] NDataDecl ::= S 'NDATA' S Name [VC: Notation Declared]
```

If the NDataDecl is present, this is a general unparsed entity; otherwise it is a parsed entity.

Validity constraint: Notation Declared

The Name MUST match the declared name of a notation.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An external entity notation is not required to match a declared notation.

## 2.1.15 [XML] Section 4.7, Notation Declarations

V0001:

The specification states:

XML processors MUST provide applications with the name and external identifier(s) of any notation declared and referred to in an attribute value, attribute definition, or entity declaration. They MAY additionally resolve the external identifier into the system identifier, file name, or other information needed to allow the application to call a processor for data in the notation described. (It is not an error, however, for XML documents to declare and refer to notations for which notation-specific applications are not available on the system where the XML processor or application is running.)

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Names and external identifiers of declared notations are not provided to applications.

V0029:

The specification states:

Validity constraint: Unique Notation Name

A given Name MUST NOT be declared in more than one notation declaration.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

A notation is not checked if it is unique.

## 2.2 Clarifications

The following subsections identify clarifications to recommendations made by [\[W3C-XMLH\]](#).

### 2.2.1 [XML] Section 2.1, White Space Handling

C0005:

The specification states:

The value "default" signals that applications' default white-space processing modes are acceptable for this element; the value "preserve" indicates the intent that applications preserve all the white space. This declared intent is considered to apply to all elements within the content of the element where it is specified, unless overridden with another instance of the `xml:space` attribute. This specification does not give meaning to any value of `xml:space` other than "default" and "preserve". It is an error for other values to be specified; the XML processor MAY report the error or MAY recover by ignoring the attribute specification or by reporting the (erroneous) value to the application. Applications may ignore or reject erroneous values.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An error is reported if the **xml:space** attribute is used with a value other than `default` or `preserve`.

## 2.2.2 [XML] Section 3.1, Start-Tags, End-Tags, and Empty-Element Tags

C0008:

The specification states:

```
[Definition: An empty-element tag takes a special form:]
Tags for Empty Elements[44]
EmptyElemTag ::= '<' Name (S Attribute)* S? '/>'[WFC: Unique Att Spec]
Empty-element tags may be used for any element which has no content, whether
or not it is declared using the keyword EMPTY.
For interoperability, the empty-element tag SHOULD be used, and SHOULD only
be used, for elements which are declared EMPTY.
```

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

Empty element tags can be used for any element that has no content, including elements that are not declared by using the **EMPTY** keyword.

## 2.2.3 [XML] Section 3.2, Element Type Declarations

C0009:

The specification states:

```
The element structure of an XML document may, for validation purposes, be
constrained using element type and attribute-list declarations. An element
type declaration constrains the element's content.
```

```
Element type declarations often constrain which element types can appear as
children of the element. At user option, an XML processor MAY issue a warning
when a declaration mentions an element type for which no declaration is
provided, but this is not an error.
```

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

The element structure of an XML document is not constrained for validation purposes.

## 2.2.4 [XML] Section 3.2.2, Mixed Content

C0013:

The specification states:

```
Validity constraint: No Duplicate Types
```

```
The same name MUST NOT appear more than once in a single mixed-content declaration.
```

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

More than one instance of an element type may appear in a single mixed-content declaration.

## 2.2.5 [XML] Section 3.3, Attribute-List Declarations

C0014:

The specification states:



Definition: Attribute-list declarations specify the name, data type, and default value (if any) of each attribute associated with a given element type:]

Attribute-list Declaration

```
[52] AttlistDecl ::= '<!ATTLIST' S Name AttDef* S? '>'
[53] AttDef ::= S Name S AttType S DefaultDecl
```

The Name in the AttlistDecl rule is the type of an element. At user option, an XML processor MAY issue a warning if attributes are declared for an element type not itself declared, but this is not an error. The Name in the AttDef rule is the name of the attribute.

### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

No warning is issued when an attribute is declared for an element type that has not been declared.

C0015:

The specification states:

When more than one AttlistDecl is provided for a given element type, the contents of all those provided are merged. When more than one definition is provided for the same attribute of a given element type, the first declaration is binding and later declarations are ignored. For interoperability, writers of DTDs may choose to provide at most one attribute-list declaration for a given element type, at most one attribute definition for a given attribute name in an attribute-list declaration, and at least one attribute definition in each attribute-list declaration. For interoperability, an XML processor MAY at user option issue a warning when more than one attribute-list declaration is provided for a given element type, or more than one attribute definition is provided for a given attribute, but this is not an error.

### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

No warning is issued when more than one attribute-list declaration is provided for an element type or more than one attribute definition is provided for a given attribute.

## **2.2.6 [XML] Section 3.3.1, Attribute Types**

C0023:

The specification states:

Validity constraint: One Notation Per Element Type

An element type MUST NOT have more than one NOTATION attribute specified.

### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

An element type may have more than one **NOTATION** attribute.

## **2.2.7 [XML] Section 4.2, Entity Declarations**

C0034:

The specification states:

The Name identifies the entity in an entity reference or, in the case of an unparsed entity, in the value of an ENTITY or ENTITIES attribute. If the same

entity is declared more than once, the first declaration encountered is binding; at user option, an XML processor MAY issue a warning if entities are declared multiple times.

### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

No warning is issued if entities are declared multiple times.

## **2.2.8 [XML] Section 4.2.2, External Entities**

C0036:

The specification states:

An XML processor attempting to retrieve the entity's content may use any combination of the public and system identifiers as well as additional information outside the scope of this specification to try to generate an alternative URI reference. If the processor is unable to do so, it MUST use the URI reference specified in the system literal. Before a match is attempted, all strings of white space in the public identifier MUST be normalized to single space characters (#x20), and leading and trailing white space MUST be removed.

### *IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

External entities are not resolved.

If one of the following public identifiers is used, the entities that are defined by XHTML are resolved:

- //W3C//DTD XHTML 1.0 Transitional//EN
- //W3C//DTD XHTML 1.1//EN
- //W3C//DTD XHTML 1.0 Strict//EN
- //W3C//DTD XHTML 1.0 Frameset//EN
- //W3C//DTD XHTML Basic 1.0//EN
- //W3C//DTD XHTML 1.1 plus MathML 2.0//EN
- //W3C//DTD XHTML 1.1 plus MathML 2.0 plus SVG 1.1//EN
- //W3C//DTD MathML 2.0//EN
- //WAPFORUM//DTD XHTML Mobile 1.0//EN

## **2.2.9 [XML] Section 5.1, Validating and Non-Validating Processors**

C0038:

The specification states:

Conforming XML processors fall into two classes: validating and non-validating.

Validating and non-validating processors alike MUST report violations of this specification's well-formedness constraints in the content of the document entity and any other parsed entities that they read.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

A non-validating XML parser is used.

C0039:

The specification states:

[Definition: Validating processors MUST, at user option, report violations of the constraints expressed by the declarations in the DTD, and failures to fulfill the validity constraints given in this specification.] To accomplish this, validating XML processors MUST read and process the entire DTD and all external parsed entities referenced in the document.

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

A non-validating XML parser is used.

### **2.2.10 [XML] Section 5.2, Using XML Processors**

C0040:

The specification states:

The behavior of a validating XML processor is highly predictable; it must read every piece of a document and report all well-formedness and validity violations. Less is required of a non-validating processor; it need not read any part of the document other than the document entity. ...

*IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*

A non-validating XML parser is used.

## **2.3 Error Handling**

There are no additional considerations for error handling.

## **2.4 Security**

There are no additional security considerations.

### **3 Change Tracking**

No table of changes is available. The document is either new or has had no changes since its last release.

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