**[MS-XMLNSH]:**

**Internet Explorer XML Namespaces 1.0 Standards Support Document**

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**Revision Summary**

| Date | Revision History | Revision Class | Comments |
| --- | --- | --- | --- |
| 9/8/2010 | 0.1 | New | Released new document. |
| 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. |
| 6/26/2013 | 3.0 | Major | Significantly changed the technical content. |
| 3/31/2014 | 3.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 1/22/2015 | 4.0 | Major | Updated for new product version. |
| 7/7/2015 | 4.1 | Minor | Clarified the meaning of the technical content. |
| 3/22/2016 | 4.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 11/2/2016 | 4.1 | None | No changes to the meaning, language, or formatting of the technical content. |

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# Introduction

This document describes the level of support provided by Microsoft web browsers for the Windows Internet Explorer 9, Windows Internet Explorer 10, Internet Explorer 11 and Internet Explorer 11 for Windows 10 for the *Namespaces in XML 1.0 (Third Edition)* [[XMLNS]](http://go.microsoft.com/fwlink/?LinkId=191840), W3C Recommendation 8 December 2009.

Microsoft web browsers support Namespaces in XML using the *Extensible Markup Language (XML) 1.0 (Fourth Edition)* [[XML]](http://go.microsoft.com/fwlink/?LinkId=90598), W3C Recommendation 16 August 2006, edited in place 29 September 2006.

The [XMLNS] 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.

## Glossary

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as defined in [[RFC2119]](http://go.microsoft.com/fwlink/?LinkId=90317). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 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](http://msdn.microsoft.com/en-us/library/dn781092.aspx).

### 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.

[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](http://go.microsoft.com/fwlink/?LinkId=90317)

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, [http://www.w3.org/TR/2009/REC-xml-names-20091208/](http://go.microsoft.com/fwlink/?LinkId=191840)

[XML] World Wide Web Consortium, "Extensible Markup Language (XML) 1.0 (Fourth Edition)", W3C Recommendation 16 August 2006, edited in place 29 September 2006, [http://www.w3.org/TR/2006/REC-xml-20060816/](http://go.microsoft.com/fwlink/?LinkId=90598)

### Informative References

None.

## Microsoft Implementations

The following Microsoft web browser versions implement some portion of the [[XMLNS]](http://go.microsoft.com/fwlink/?LinkId=191840) specification:

* Internet Explorer 9
* 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 [XMLNS] specification.

| Browser Version | Document 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)*

## Standards Support Requirements

To conform to [[XMLNS]](http://go.microsoft.com/fwlink/?LinkId=191840), 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]](http://go.microsoft.com/fwlink/?LinkId=90317).)

## 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, or RECOMMENDED. (See [[RFC2119]](http://go.microsoft.com/fwlink/?LinkId=90317).) This does not include extensibility points. |
| E#### | Identifies extensibility points (such as optional implementation-specific data) in the target specification, which can impair interoperability. |

# Standards Support Statements

This section contains a full list of variations, clarifications, and extension points in the Microsoft implementation of [[XMLNS]](http://go.microsoft.com/fwlink/?LinkId=191840).

* Section [2.1](#Section_c8ef0b20fbf74340bb5d759ecdb8dd23) includes only those variations that violate a MUST requirement in the target specification.
* Section [2.2](#Section_0a52452505fc4bfaa00ba3c2d070e213) describes further variations from MAY and SHOULD requirements.
* Section [2.3](#Section_13063bbee90543ffaab77c794342a6f1) identifies variations in error handling.
* Section [2.4](#Section_b8e4e9ed317c4262b8f43d2a6970d4d0) identifies variations that impact security.

## Normative Variations

There are no variations from [[XMLNS]](http://go.microsoft.com/fwlink/?LinkId=191840).

## Clarifications

The following subsections identify clarifications to recommendations made by [[XMLNS]](http://go.microsoft.com/fwlink/?LinkId=191840).

### [NamespacesXML1.1] Section 3, Declaring Namespaces

C0001:

The specification states:

1. Definition: A namespace (or more precisely, a namespace binding) is declared
2. using a family of reserved attributes. Such an attribute's name must either be
3. xmlns or begin xmlns:. These attributes, like any other XML attributes, may be
4. provided directly or by default.

*IE9 Mode (All Versions)*

Attributes that are used to declare a namespace binding must be provided directly.

C0002:

The specification states:

1. The attribute's normalized value MUST be either a URI reference — the namespace
2. name identifying the namespace — or an empty string. The namespace name, to serve
3. its intended purpose, SHOULD have the characteristics of uniqueness and
4. persistence. It is not a goal that it be directly usable for retrieval of a
5. schema (if any exists). Uniform Resource Names [RFC2141] is an example of a
6. syntax that is designed with these goals in mind. However, it should be noted
7. that ordinary URLs can be managed in such a way as to achieve these same goals.

*IE9 Mode (All Versions)*

An empty string can be used as the value of the default namespace, but not any other specific namespace.

### [NamespacesXML1.1] Section 5, Using Qualified Names

C0003:

The specification states:

1. Note that DTD-based validation is not namespace-aware in the following sense:
2. a DTD constrains the elements and attributes that may appear in a document
3. by their uninterpreted names, not by (namespace name, local name) pairs.

*IE9 Mode (All Versions)*

Validation by using DTDs is not performed.

### [NamespacesXML1.1] Section 8, Conformance of Processors

C0004:

The specification states:

1. To conform to this specification, a processor MUST report violations of
2. namespace well-formedness, with the exception that it is not REQUIRED to check
3. that namespace names are URI references [RFC3986].

*IE9 Mode (All Versions)*

Namespace names are not checked to be URI references.

## Error Handling

There are no additional considerations for error handling.

## Security

There are no additional security considerations.

# 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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