[MS-XHTML]:
Internet Explorer Extensible HyperText Markup Language (XHTML) Standards Support Document

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Revision Summary

Date	Revision History	Revision Class	Comments
09/08/2010	0.1	New	Released new document.
10/13/2010	0.2	Minor	Clarified the meaning of the technical content.
02/10/2011	1.0	No change	Introduced no new technical or language changes.
02/22/2012	2.0	Major	Significantly changed the technical content.
07/25/2012	2.1	Minor	Clarified the meaning of the technical content.

Table of Contents

1 Introduction

This document describes the level of support provided by Windows® Internet Explorer® 9 and Windows® Internet Explorer® 10 for the *XHTML™ 1.0 The Extensible HyperText Markup Language (Second Edition)* [W3C-XHTML1.0], published January 26, 2000, and revised August 1, 2002.

The [W3C-XHTML1.0] specifications 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 described in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the technical documents, which are updated frequently. References to other documents include a publishing year when one is available.

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. We will assist you in finding the relevant information. Please check the archive site, http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624, as an additional source.

[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-XHTML1.0] W3C HTML Working Group, "XHTML™ 1.0 The Extensible HyperText Markup Language (Second Edition)", A Reformulation of HTML 4 in XML 1.0 W3C Recommendation 26 January 2000, revised 1 August 2002, http://www.w3.org/TR/xhtml1/

1.2.2 Informative References

None.

1.3 Microsoft Implementations

The following Microsoft products implement some portion of the XHTML specification:

- Windows® Internet Explorer® 9
- Windows® Internet Explorer® 10

In addition, each version of Internet Explorer implements multiple document modes, which can vary individually in their support of the standard. The following table lists the document modes available in each version of Internet Explorer.

Browser Version	Document Modes Supported
Internet Explorer 9	IE9 mode
Internet Explorer 10	IE9 mode IE10 Mode

Throughout this document, the document mode appears first followed by the browser version in parentheses. Only those document modes and versions of Internet Explorer for which there is a variation note will be listed. If the document mode is not listed, conformance to the specification can be assumed.

1.4 Standards Support Requirements

To conform to [W3C-XHTML1.0], 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-XHTML1.0] and whether they are considered normative or informative.

Sections	Normative/Informative
1	Informative
2 - 3	Normative
4	Informative
5	Normative
Appendices A - B	Normative
Appendices C - 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, or RECOMMENDED. (See [RFC2119].) 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 variations, clarifications, and extension points in the Microsoft implementation of [W3C-XHTML1.0].

- 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 of [W3C-XHTML1.0].

2.1.1 [W3C-XHTML1.0] Section 3.2, User Agent Conformance

V0001:

The specification states:

```
When a user agent processes an XHTML document as generic XML, it shall only
recognize attributes of type ID (i.e. the id attribute on most XHTML elements)
as fragment identifiers.
```

IE9 Mode and IE10 Mode (All Versions)

In documents that are processed as generic XML, **name** attributes are also recognized as fragment identifiers.

V0002:

The specification states:

```
If a user agent encounters an attribute it does not recognize, it must ignore
the entire attribute specification (i.e., the attribute and its value).
```

IE9 Mode and IE10 Mode (All Versions)

Unrecognized attributes are preserved in the DOM.

V0003:

The specification states:

```
If it encounters an entity reference (other than one of the entities defined in
this recommendation or in the XML recommendation) for which the user agent has
processed no declaration (which could happen if the declaration is in the
external subset which the user agent hasn't read), the entity reference should
be processed as the characters (starting with the ampersand and ending with the
```

```
semi-colon) that make up the entity reference.
```

IE9 Mode and IE10 Mode (All Versions)

An undeclared entity reference causes a parse error to be reported.

2.2 Clarifications

The following subsections identify clarifications to recommendations made by [W3C-XHTML1.0].

2.2.1 [W3C-XHTML1.0] Section 3.2, User Agent Conformance

C0001:

The specification states:

```
A conforming user agent must meet all of the following criteria:

1.In order to be consistent with the XML 1.0 Recommendation [XML], the user agent
 must parse and evaluate an XHTML document for well-formedness. If the user agent
claims to be a validating user agent, it must also validate documents against their
referenced DTDs according to [XML].
```

IE9 Mode and IE10 Mode (All Versions)

Validation is not performed on documents.

C0002:

The specification states:

```
When processing content, user agents that encounter characters or character entity
references that are recognized but not renderable may substitute another rendering
that gives the same meaning, or must display the document in such a way that it is
obvious to the user that normal rendering has not taken place.
```

IE9 Mode and IE10 Mode (All Versions)

Another rendering that gives the same meaning is substituted when characters or character entity references are encountered that are recognized but not renderable. If no such rendering is available, the rendering for the replacement character is substituted.

C0003:

The specification states:

```
Note that in order to produce a Canonical XHTML document, the rules above must
be applied and the rules in [XMLC14N] must also be applied to the document.
```

IE9 Mode and IE10 Mode (All Versions)

Canonical XHTML documents are not necessarily created.

2.2.2 [W3C-XHTML1.0] Section a.1, Document Type Definitions

C0004:

The specification states:

```
These DTDs approximate the HTML 4 DTDs. The W3C recommends that you use the
authoritative versions of these DTDs at their defined SYSTEM identifiers when
validating content. If you need to use these DTDs locally you should download
one of the archives of this version.
```

IE9 Mode and IE10 Mode (All Versions)

External DTDs are not loaded. XHTML entities are loaded when one of the public identifiers for the specified DTDs 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

This section identifies changes that were made to the [MS-XHTML] protocol document between the February 2012 and July 2012 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.
- An extensive rewrite, addition, or deletion of major portions of content.
- The removal of a document from the documentation set.
- Changes made for template compliance.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **Editorial** means that the language and formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

Major and minor changes can be described further using the following change types:

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- New content added for template compliance.
- Content updated for template compliance.
- Content removed for template compliance.
- Obsolete document removed.

Editorial changes are always classified with the change type **Editorially updated.**

Some important terms used in the change type descriptions are defined as follows:

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

The changes made to this document are listed in the following table. For more information, please contact protocol@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
1 Introduction	Updated the document to remove beta tagging.	N	Content updated.

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