**[MS-XPATH]:**

**Microsoft XML XPath Standards Support Document**



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**Revision Summary**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Date** |  |  | **Revision History** |  |  | **Revision Class** |  |  | **Comments** |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03/17/2010 | |  | 0.1 | |  |  | New |  |  | Released new document. | |  |
|  | |  |  | |  |  |  |  |  |  | |  |
| 03/26/2010 | |  | 1.0 | |  |  | None |  |  | Introduced no new technical or language changes. | |  |
|  | |  |  | |  |  |  |  |  |  | |  |
| 05/26/2010 | |  | 1.2 | |  |  | None |  |  | Introduced no new technical or language changes. | |  |
|  | |  |  | |  |  |  |  |  |  | |  |
| 09/08/2010 | |  | 1.3 | |  |  | Major |  |  | Significantly changed the technical content. | |  |
|  | |  |  | |  |  |  |  |  |  | |  |
| 02/10/2011 | |  | 2.0 | |  |  | No change |  |  | Introduced no new technical or language changes. | |  |
|  | |  |  | |  |  |  |  |  |  | |  |
| 02/22/2012 | |  | 3.0 | |  |  | Major |  |  | Significantly changed the technical content. | |  |
|  | |  |  | |  |  |  |  |  |  | |  |
| 07/25/2012 | |  | 3.1 | |  |  | Minor |  |  | Clarified the meaning of the technical content. | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |



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**1 Introduction**

This document describes the level of support provided by the Microsoft XML Core Services (MSXML) 3.0 and 6.0 for the *XML Path Language (XPath), Version 1.0*  [[XPATH](http://go.microsoft.com/fwlink/?LinkId=90611)], W3C Recommendation 16 November 1999.

The  [[XPATH]](http://go.microsoft.com/fwlink/?LinkId=90611) 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. **Glossary**

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

1. **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. **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.co](mailto:dochelp@microsoft.com)m. We will assist you in finding the relevant information. Please check the archive site,  [http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C962](http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624)4, 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.tx](http://go.microsoft.com/fwlink/?LinkId=90317)t

[RFC2396] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifiers (URI): Generic Syntax", RFC 2396, August 1998,  [http://www.ietf.org/rfc/rfc2396.tx](http://go.microsoft.com/fwlink/?LinkId=90339)t

[XPATH] Clark, J. and DeRose, S., "XML Path Language (XPath), Version 1.0", W3C Recommendation, November 1999,  [http://www.w3.org/TR/xpat](http://go.microsoft.com/fwlink/?LinkId=90611)h

1. **Informative References**

None.

1. **Microsoft Implementations**

Throughout this document, Microsoft XML Core Services (MSXML) 3.0 is referred to as *MSXML3* and Microsoft XML Core Services (MSXML) 6.0 is referred to as *MSXML6*.

MSXML3 is the only version of MSXML that is implemented in Windows® Internet Explorer® 7 and Windows® Internet Explorer® 8. Both MSXML3 and MSXML6 are implemented in Windows® Internet Explorer® 9 and Windows® Internet Explorer® 10.



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1. **Standards Support Requirements**

To conform to  [[XPATH](http://go.microsoft.com/fwlink/?LinkId=90611)], 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)].)

The following table lists the sections of  [[XPATH]](http://go.microsoft.com/fwlink/?LinkId=90611) and whether they are considered normative or informative.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
|  | **Sections** |  |  |  | **Normative/Informative** |  |  |
|  |  |  |  |  |  |  |  |
| 1 | |  |  |  | Informative | |  |
|  | |  |  |  |  | |  |
| 2-5 | |  |  |  | Normative | |  |
|  | |  |  |  |  | |  |
| 6 | |  |  |  | Informative | |  |
|  | |  |  |  |  | |  |
| Appendices A-B | |  |  |  | Informative | |  |
|  |  |  |  |  |  |  |  |

1. **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. |  |  |
|  |  |  |  |  |  |  |

For document mode and browser version notation, see section  [1.3](#page4).



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**2 Standards Support Statements**

This section contains a full list of variations, clarifications, and extension points in the Microsoft implementation of  [[XPATH]](http://go.microsoft.com/fwlink/?LinkId=90611).

Section  [2.1](#page6) includes only those variations that violate a MUST requirement in the target specification.

Section  [2.2](#page6) describes further variations from MAY and SHOULD requirements.

Section  [2.3](#page6) identifies variations in error handling.

Section  [2.4](#page6) identifies variations that impact security.

1. **Normative Variations**

The following subsections detail the normative variations from MUST requirements in  [[XPATH]](http://go.microsoft.com/fwlink/?LinkId=90611).

1. **[XPATH] Section 5, Data Model**

V0001:

The specification states:

The namespace URI specified in the XML document can be a URI reference as defined in [RFC2396]; this means it can have a fragment identifier and can be relative. A relative URI should be resolved into an absolute URI during namespace processing: the namespace URIs of expanded-names of nodes in the data model should be absolute. Two expanded-names are equal if they have the same local part, and either both have a null namespace URI or both have non-null namespace URIs that are equal.

*MSXML3 and MSXML6*

A relative **namespace** URI is not resolved into an absolute URI during **namespace** processing.

1. **Clarifications**

There are no additional clarifications to  [[XPATH]](http://go.microsoft.com/fwlink/?LinkId=90611).

1. **Error Handling**

There are no additional considerations for error handling.

1. **Security**

There are no additional security considerations.



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**3 Change Tracking**

This section identifies changes that were made to the [MS-XPATH] 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.



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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, andmethods) as well as interfaces.

**Protocol revision** refers to changes made to a protocol that affect the bits that are sent overthe wire.

The changes made to this document are listed in the following table. For more information, please contact  [protocol@microsoft.com](mailto:protocol@microsoft.com).

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



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