**[MS-XPATH]:**

**Microsoft XML XPath Standards Support Document**

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**Revision Summary**

| Date | Revision History | Revision Class | Comments |
| --- | --- | --- | --- |
| 3/17/2010 | 0.1 | New | Released new document. |
| 3/26/2010 | 1.0 | None | Introduced no new technical or language changes. |
| 5/26/2010 | 1.2 | None | Introduced no new technical or language changes. |
| 9/8/2010 | 1.3 | Major | Significantly changed the technical content. |
| 2/10/2011 | 2.0 | None | Introduced no new technical or language changes. |
| 2/22/2012 | 3.0 | Major | Significantly changed the technical content. |
| 7/25/2012 | 3.1 | Minor | Clarified the meaning of the technical content. |
| 6/26/2013 | 4.0 | Major | Significantly changed the technical content. |
| 3/31/2014 | 4.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 1/22/2015 | 5.0 | Major | Updated for new product version. |
| 7/7/2015 | 5.1 | Minor | Clarified the meaning of the technical content. |
| 11/2/2015 | 5.2 | Minor | Clarified the meaning of the technical content. |
| 3/22/2016 | 5.2 | None | No changes to the meaning, language, or formatting of the technical content. |
| 11/2/2016 | 5.2 | None | No changes to the meaning, language, or formatting of the technical content. |
| 3/14/2017 | 5.2 | None | No changes to the meaning, language, or formatting of the technical content. |
| 10/3/2017 | 5.2 | None | No changes to the meaning, language, or formatting of the technical content. |
| 2/22/2018 | 5.2 | None | No changes to the meaning, language, or formatting of the technical content. |
| 3/23/2018 | 5.2 | 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 the Microsoft XML Core Services (MSXML) 3.0 and 6.0 for the *XML Path Language (XPath), Version 1.0* [[XPATH]](https://go.microsoft.com/fwlink/?LinkId=90611), W3C Recommendation 16 November 1999.

The [XPATH] 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]](https://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](https://go.microsoft.com/fwlink/?linkid=850906).

### 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](https://go.microsoft.com/fwlink/?LinkId=90317)

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

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

### Informative References

[MS-XPATH] Microsoft Corporation, "[Microsoft XML XPath Standards Support Document](%5bMS-XPATH%5d.pdf#Section_7838bfe8f1184be89e35a98ac4ae04a2)".

[W3C-XSLT] World Wide Web Consortium, "XSL Transformations (XSLT) Version 1.0", W3C Recommendation 16 November 1999, [http://www.w3.org/TR/1999/REC-xslt-19991116](https://go.microsoft.com/fwlink/?LinkId=113915)

## 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, Windows Internet Explorer 10, Internet Explorer 11, and Internet Explorer 11 for Windows 10: MSXML3 is used in IE7 Mode and IE8 Mode, and MSXML6 is used in all other modes. MSXML6 is the only version of MSXML implemented in Microsoft Edge, which uses it only to implement XSLT [[W3C-XSLT]](https://go.microsoft.com/fwlink/?LinkId=113915). Microsoft Edge provides [[XPATH]](https://go.microsoft.com/fwlink/?LinkId=90611) functionality natively; see [[MS-XPATH]](%5bMS-XPATH%5d.pdf#Section_7838bfe8f1184be89e35a98ac4ae04a2) for more information.

## Standards Support Requirements

To conform to [[XPATH]](https://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]](https://go.microsoft.com/fwlink/?LinkId=90317).)

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

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

## 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]](https://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](#Section_a3f6de9e2d3e4dc6a41bb17c635b3ba8).

# Standards Support Statements

This section contains all variations and clarifications for the Microsoft implementation of [[XPATH]](https://go.microsoft.com/fwlink/?LinkId=90611).

* Section [2.1](#Section_8dcfe6a71b3446728c5e1cf9601775b0) describes normative variations from the MUST requirements of the specification.
* Section [2.2](#Section_e4ea44b32c044f9c8a30cfa335937158) describes clarifications of the MAY and SHOULD requirements.
* Section [2.3](#Section_5d8132ecacbc471e801be35fcbc12269) considers error handling aspects of the implementation.
* Section [2.4](#Section_77fef146b28849ebad8fc0498018bb90) considers security aspects of the implementation.

## Normative Variations

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

### [XPATH] Section 5, Data Model

V0001:

The specification states:

1. The namespace URI specified in the XML document can be a URI reference as defined
2. in [[RFC2396]](https://go.microsoft.com/fwlink/?LinkId=90339); this means it can have a fragment identifier and can be relative. A
3. relative URI should be resolved into an absolute URI during namespace processing:
4. the namespace URIs of expanded-names of nodes in the data model should be absolute.
5. Two expanded-names are equal if they have the same local part, and either both
6. 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.

## Clarifications

There are no clarifications of the MAY and SHOULD requirements of [[XPATH]](https://go.microsoft.com/fwlink/?LinkId=90611).

## Error Handling

There are no additional error handling considerations.

## 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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