

[MS-XMLSTYL]:

## Microsoft XML Associating Style Sheets with XML Standards Support Document

---

Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation (“this documentation”) for protocols, file formats, data portability, computer languages, and standards support. Additionally, overview documents cover inter-protocol relationships and interactions.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you can make copies of it in order to develop implementations of the technologies that are described in this documentation and can distribute portions of it in your implementations that use these technologies or in your documentation as necessary to properly document the implementation. You can also distribute in your implementation, with or without modification, any schemas, IDLs, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications documentation.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that might cover your implementations of the technologies described in the Open Specifications documentation. Neither this notice nor Microsoft's delivery of this documentation grants any licenses under those patents or any other Microsoft patents. However, a given Open Specifications document might be covered by the Microsoft [Open Specifications Promise](#) or the [Microsoft Community Promise](#). If you would prefer a written license, or if the technologies described in this documentation are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting [iplg@microsoft.com](mailto:iplg@microsoft.com).
- **License Programs.** To see all of the protocols in scope under a specific license program and the associated patents, visit the [Patent Map](#).
- **Trademarks.** The names of companies and products contained in this documentation might be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights. For a list of Microsoft trademarks, visit [www.microsoft.com/trademarks](http://www.microsoft.com/trademarks).
- **Fictitious Names.** The example companies, organizations, products, domain names, email addresses, logos, people, places, and events that are depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

**Reservation of Rights.** All other rights are reserved, and this notice does not grant any rights other than as specifically described above, whether by implication, estoppel, or otherwise.

**Tools.** The Open Specifications documentation does not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments, you are free to take advantage of them. Certain Open Specifications documents are intended for use in conjunction with publicly available standards specifications and network programming art and, as such, assume that the reader either is familiar with the aforementioned material or has immediate access to it.

**Support.** For questions and support, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com).

## Revision Summary

Date	Revision History	Revision Class	Comments
3/26/2010	1.0	New	Released new document.
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.
2/16/2013	3.2	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.
7/7/2015	5.0	Major	Updated for new product version.
11/2/2015	5.0	None	No changes to the meaning, language, or formatting of the technical content.
3/22/2016	5.0	None	No changes to the meaning, language, or formatting of the technical content.
11/2/2016	5.0	None	No changes to the meaning, language, or formatting of the technical content.
3/14/2017	5.0	None	No changes to the meaning, language, or formatting of the technical content.
10/3/2017	5.0	None	No changes to the meaning, language, or formatting of the technical content.
2/22/2018	5.0	None	No changes to the meaning, language, or formatting of the technical content.
3/23/2018	5.0	None	No changes to the meaning, language, or formatting of the technical content.
8/28/2018	5.0	None	No changes to the meaning, language, or formatting of the technical content.

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>4</b>
1.1	Glossary .....	4
1.2	References .....	4
1.2.1	Normative References .....	4
1.2.2	Informative References .....	4
1.3	Microsoft Implementations .....	4
1.4	Standards Support Requirements .....	5
1.5	Notation.....	5
<b>2</b>	<b>Standards Support Statements.....</b>	<b>6</b>
2.1	Normative Variations .....	6
2.2	Clarifications .....	6
2.2.1	[W3C-XML-StyleSheets] Section 1, The xml-stylesheet processing instruction .....	6
2.3	Error Handling .....	7
2.4	Security .....	7
<b>3</b>	<b>Change Tracking.....</b>	<b>8</b>
<b>4</b>	<b>Index.....</b>	<b>9</b>

# 1 Introduction

This document describes the level of support provided by the Microsoft XML Core Services (MSXML) and Windows Internet Explorer for the *Associating Style Sheets with XML documents, Version 1.0* [[W3C-XML-StyleSheets](#)], W3C Recommendation 29 June 1999.

The [[W3C-XML-StyleSheets](#)] 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.

[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-XML-StyleSheets](#)] World Wide Web Consortium, "Associating Style Sheets with XML documents 1.0 (Second Edition)", W3C Recommendation 28 October 2010, <http://www.w3.org/TR/xml-stylesheet/>

[XML10] World Wide Web Consortium, "Extensible Markup Language (XML) 1.0 (Third Edition)", February 2004, <http://www.w3.org/TR/2004/REC-xml-20040204/>

### 1.2.2 Informative References

None.

## 1.3 Microsoft Implementations

The [[W3C-XML-StyleSheets](#)] specification is implemented by Microsoft XML Core Services (MSXML) 3.0 (*MSXML3*) through Windows Internet Explorer 9, Windows Internet Explorer 10, Internet Explorer 11 and Internet Explorer 11 for Windows 10.

MSXML3 is used by Windows Internet Explorer 7, Windows Internet Explorer 8, Internet Explorer 9, Internet Explorer 10, Internet Explorer 11 and Internet Explorer 11 for Windows 10.

Internet Explorer implements multiple document modes, which vary from one another in their support of the standard. Internet Explorer 9, Internet Explorer 10, Internet Explorer 11 and Internet Explorer 11 for Windows 10 use MSXML3 for Quirks Mode, IE7 Mode, and IE8 Mode. For IE9 Mode, IE10 Mode, and IE11 Mode, Internet Explorer provides built-in support for the [[W3C-XML-StyleSheets](#)] specification.

Throughout this document, variations and clarifications note whether they apply to MSXML3, IE9 Mode, or later modes. The document mode appears first followed by the browser version in parentheses. Only those document modes and browser versions 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 [\[W3C-XML-StyleSheets\]](#), 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 [\[W3C-XML-StyleSheets\]](#) and whether they are considered normative or informative.

Sections	Normative/Informative
1	Normative
Appendices A-B	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 <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 all variations and clarifications for the Microsoft implementation of [\[W3C-XML-StyleSheets\]](#).

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

### 2.1 Normative Variations

There are no normative variations from the MUST requirements of [\[W3C-XML-StyleSheets\]](#).

### 2.2 Clarifications

The following subsections describe clarifications of the MAY and SHOULD requirements of [\[W3C-XML-StyleSheets\]](#).

#### 2.2.1 [W3C-XML-StyleSheets] Section 1, The xml-stylesheet processing instruction

C0001:

The specification states:

Style Sheets can be associated with an XML[XML10] document by using a processing instruction whose target is xml-stylesheet.

*All Modes (Internet Explorer 9)*

The XSLT will correctly be transformed to either HTML or XML based on the <xsl:output> method specified in the XSLT file. However, the result of that output will be parsed as HTML if no <xsl:output> is present in the primary XSLT file. If an <xsl:output> is present in the primary XSLT file, the appropriate parser (HTML or XML) will be selected based on the value of its method attribute.

C0004:

The specification states:

In some cases, style sheets may be linked with an XML document by means external to the document.

*MSXML3, IE9 Mode, IE10 Mode, and IE11 Mode (All Versions)*

Style sheets that are linked with an XML document by means external to the document are ignored.

C0002:

The specification states:

NOTE: If the xml-stylesheet processing instruction occurs in the external DTD subset or in a parameter entity, it is possible that it may not be processed

by a non-validating XML processor (see [\[XML10\]](#)).

### *MSXML3, IE9 Mode, IE10 Mode, and IE11 Mode (All Versions)*

The xml-stylesheet processing instruction is not processed when it occurs in an external DTD subset or in a parameter entity.

C0003:

The specification states:

In some cases, style sheets may be linked with an XML document by means external to the document. For example, earlier versions of HTTP [RFC2068] (section 19.6.2.4) allowed style sheets to be associated with XML documents by means of the Link header. Any links to style sheets that are specified externally to the document are considered to occur before the links specified by the xml-stylesheet processing instructions. This is the same as in HTML 4.0 (see section 14.6).

### *MSXML3, IE9 Mode, IE10 Mode, and IE11 Mode (All Versions)*

Style sheets that are linked with an XML document by means external to the document are ignored.

## **2.3 Error Handling**

There are no additional error handling considerations.

## **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.

## 4 Index

### C

[Change tracking](#) 8

### G

[Glossary](#) 4

### I

[Informative references](#) 4

[Introduction](#) 4

### N

[Normative references](#) 4

### R

References

[informative](#) 4

[normative](#) 4

### T

[The xml-stylesheet processing instruction](#) 6

[Tracking changes](#) 8