**[MS-PICSRS]:**

**Internet Explorer PICS Rating Services and Systems 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 | 5.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 3/22/2016 | 5.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 11/2/2016 | 5.1 | None | No changes to the meaning, language, or formatting of the technical content. |

Table of Contents

[1 Introduction 4](#_Toc465841584)

[1.1 Glossary 4](#_Toc465841585)

[1.2 References 4](#_Toc465841586)

[1.2.1 Normative References 4](#_Toc465841587)

[1.2.2 Informative References 4](#_Toc465841588)

[1.3 Microsoft Implementations 4](#_Toc465841589)

[1.4 Standards Support Requirements 5](#_Toc465841590)

[1.5 Notation 6](#_Toc465841591)

[2 Standards Support Statements 7](#_Toc465841592)

[2.1 Normative Variations 7](#_Toc465841593)

[2.1.1 [W3C-PICS-Services] Detailed syntax of application/pics-service 7](#_Toc465841594)

[2.2 Clarifications 8](#_Toc465841595)

[2.2.1 [W3C-PICS-Services] Semantics of the application/pics-service Description 8](#_Toc465841596)

[2.3 Error Handling 8](#_Toc465841597)

[2.4 Security 9](#_Toc465841598)

[3 Change Tracking 10](#_Toc465841599)

[4 Index 11](#_Toc465841600)

# Introduction

This document describes the level of support provided by Microsoft web browsers for the Rating Services and Rating Systems (and Their Machine Readable Descriptions) Version 1.1 [[W3C-PICS-Services]](http://go.microsoft.com/fwlink/?LinkId=182735), W3C Recommendation 31 October 1996, revised 24 November 2009. Internet Explorer displays webpages written in HTML.

The [W3C-PICS-Services] 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.

[IEEE754-2008] IEEE, "IEEE Standard for Binary Floating-Point Arithmetic", IEEE 754-2008, August 2008, [http://standards.ieee.org/findstds/standard/754-2008.html](http://go.microsoft.com/fwlink/?LinkId=154130)

**Note** There is a charge to download the specification.

[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)

[W3C-PICS-Services] Miller, J., Resnick, P., and Singer, D., "Rating Services and Rating Systems (and Their Machine Readable Descriptions) Version 1.1", W3C Recommendation 31-October-96, [http://www.w3.org/TR/REC-PICS-services-961031](http://go.microsoft.com/fwlink/?LinkId=182735)

### Informative References

None.

## Microsoft Implementations

The following Microsoft web browser versions implement some portion of [[W3C-PICS-Services]](http://go.microsoft.com/fwlink/?LinkId=182735):

* Windows Internet Explorer 7
* Windows Internet Explorer 8
* Windows Internet Explorer 9
* Windows Internet Explorer 10
* Internet Explorer 11
* Internet Explorer 11 for Windows 10

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 supported by each browser version.

| Browser Version | Document Modes Supported |
| --- | --- |
| Internet Explorer 8 | Quirks Mode  IE7 Mode  IE8 Mode |
| Internet Explorer 9 | Quirks Mode  IE7 Mode  IE8 Mode  IE9 Mode |
| Internet Explorer 10 | Quirks Mode  IE7 Mode  IE8 Mode  IE9 Mode  IE10 Mode |
| Internet Explorer 11 | Quirks Mode  IE7 Mode  IE8 Mode  IE9 Mode  IE10 Mode  IE11 Mode |
| Internet Explorer 11 for Windows 10 | Quirks Mode  IE7 Mode  IE8 Mode  IE9 Mode  IE10 Mode  IE11 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:

*Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)*

**Note:** "Standards Mode" in Internet Explorer 7 and "IE7 Mode" in Internet Explorer 8 refer to the same document mode. "IE7 Mode" is the preferred way of referring to this document mode across all versions of the browser.

## Standards Support Requirements

To conform to [[W3C-PICS-Services]](http://go.microsoft.com/fwlink/?LinkId=182735) 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 [W3C-PICS-Services] and whether they are considered normative or informative.

| Sections | Normative/Informative |
| --- | --- |
| Introduction | Informative |
| What is a "rating service"? | Informative |
| What is a "rating system"? | Informative |
| What is a "content label"? | Informative |
| The application/pics-service document | Informative |
| Explanation of Sample Rating Service | Normative |
| Detailed syntax of application/pics-service | Normative |
| Appendix A-C | 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#### | This 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#### | This 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#### | Because the use of extensibility points (such as optional implementation-specific data) can impair interoperability, this profile identifies such points in the target specification. |

For document mode and browser version notation, see also section [1.3](#Section_e3630ca6491d497288e6d8d627f21f5e).

# Standards Support Statements

This section contains a full list of variations, clarifications, and extension points in the Microsoft implementation of [[W3C-PICS-Services]](http://go.microsoft.com/fwlink/?LinkId=182735).

* Section [2.1](#Section_470b2f4e33c243c58d2231fc9154ed26) includes only those variations that violate a MUST requirement in the target specification.
* Section [2.2](#Section_d9dc17112edf454f9294e54b52913327) describes further variations from MAY and SHOULD requirements.
* Section [2.3](#Section_d7a67d45835b4a87873bb816c999519b) identifies variations in error handling.
* Section [2.4](#Section_8dcb34708ea745bcbfb0743f4d6fe9d1) identifies variations that impact security.

## Normative Variations

The following subsections detail the normative variations from MUST requirements in [[W3C-PICS-Services]](http://go.microsoft.com/fwlink/?LinkId=182735).

### [W3C-PICS-Services] Detailed syntax of application/pics-service

V0001:

The specification states:

1. Transmit-names and quoted strings are case sensitive. Option names and other tokens
2. in the BNF grammar are case insensitive.

*All Document Modes (All Versions)*

Quoted strings are treated as case-insensitive.

V0002:

The specification states:

1. The only service-option that may occur more than once in a single service
2. description is the extension option. Likewise, the only option that may occur more
3. than once as a default or as a category-option is extension. In each case, if the
4. extension option is supplied more than once, the quoted-URLs defining the
5. extensions must be distinct.

*All Document Modes (All Versions)*

Distinct quoted-URLs for multiple extensions are not enforced.

V0003:

The specification states:

1. This specification requires the use of UTF-7 encoding to allow for the inclusion of
2. non-English description strings. For those rating systems and services that use
3. only the US-ASCII character set in their descriptive strings, UTF-7 allows direct
4. encoding of the following (printable) characters: a-z, A-Z, 0-9, '(),-
5. ./:?!#$%&\*;<=>@[]^\_`{|} Notice that "+" is not included in this set, since it is
6. used by the UTF-7 encoding system.

*All Document Modes (All Versions)*

Only ratings (.rat) files that have been encoded in ANSI format are recognized.

## Clarifications

The following subsections identify clarifications to recommendations made by [[W3C-PICS-Services]](http://go.microsoft.com/fwlink/?LinkId=182735).

### [W3C-PICS-Services] Semantics of the application/pics-service Description

V0004:

The specification states:

1. Values in PICS labels may be integers or fractions with no greater range or
2. precision than that provided by IEEE single-precision floating point numbers.
3. Values may be given names by using the label attribute. When a value is given a
4. name, it may optionally have attached an icon and a human-readable description. The
5. description for each category can specify restrictions on the range of permissible
6. values for certain named attributes. Values may be restricted in a variety of ways:
8. 1. minimum (min attribute, defaults to -INF) value;
9. 2. maximum (max attribute, defaults to +INF) value;
10. 3. integer values only (integer attribute, defaults to false if the attribute is
11. omitted, but true if it is present with no value specified);
12. 4. named values only (label-only attribute, defaults to false if the attribute is
13. omitted, but true if it is present with no value specified).
14. 5. more than a single rating allowed for a given document (consider the dimension
15. "sizes available"). This is indicated by setting the attribute multivalue to true
16. (default is false if the attribute is omitted, but true if it is present with no
17. value specified).
18. 6. unordered values (unordered attribute, defaults to false if the attribute is
19. omitted, but true if its is present with no value specified.)

*All Document Modes (Internet Explorer 7)*

Large integers or fractions as defined by IEEE single-precision floating-point numbers reference [[IEEE754-2008]](http://go.microsoft.com/fwlink/?LinkId=154130) are not recognized or compared.

V0005:

The specification states:

1. In particular, the defaultable-options of a category (extension, integer, label-
2. only, max, min, multivalue, and unordered) are inherited by each category from its
3. enclosing (parent) category.

*All Document Modes (Internet Explorer 7)*

A ratings file that is incorrectly constructed functions in the same manner as a correct ratings file.

## 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.

# Index

C

[Change tracking](#section_5ab796438f0648829aedf9b2230bc33f) 10

G

[Glossary](#section_8001987cc1eb4fdf9370bb3afb135008) 4

I

[Informative references](#section_758ff1db63a040e598914bc26f1aee5b) 4

[Introduction](#section_2282985fa45848e89c1ee7e00327fbb8) 4

N

[Normative references](#section_1feb7490e98847688ea1a483cb0b6ac1) 4

R

References

[informative](#section_758ff1db63a040e598914bc26f1aee5b) 4

[normative](#section_1feb7490e98847688ea1a483cb0b6ac1) 4

T

[Tracking changes](#section_5ab796438f0648829aedf9b2230bc33f) 10