

## [MS-USERTIM]:

# Internet Explorer User Timing Standards Support Document

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## Revision Summary

Date	Revision History	Revision Class	Comments
3/31/2014	1.0	New	Released new document.
1/22/2015	2.0	Major	Updated for new product version.
7/7/2015	2.1	Minor	Clarified the meaning of the technical content.
11/2/2015	2.1	None	No changes to the meaning, language, or formatting of the technical content.
3/22/2016	2.1	None	No changes to the meaning, language, or formatting of the technical content.
7/19/2016	2.2	Minor	Clarified the meaning of the technical content.
11/2/2016	2.2	None	No changes to the meaning, language, or formatting of the technical content.
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# 1 Introduction

This document provides a statement of standards support. It is intended for use in conjunction with the Microsoft technical specifications, publicly available standards specifications, network programming art, and Microsoft distributed systems concepts. It assumes that the reader is either familiar with the aforementioned material or has immediate access to it.

A Standards Support document does not require the use of Microsoft programming tools or programming environments in order to implement the standard. Developers who have access to Microsoft programming tools and environments are free to take advantage of them.

This document describes the level of support provided by Microsoft web browsers for the User Timing [\[W3C-USERTIM\]](#) specification, published 12 December 2013.

## 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-USERTIM] World Wide Web Consortium, "User Timing", W3C Recommendation 12 December 2013, <http://www.w3.org/TR/user-timing/>

### 1.2.2 Informative References

None.

## 1.3 Microsoft Implementations

The following Microsoft web browser versions implement some portion of the User Timing specification:

- Windows Internet Explorer 10
- Internet Explorer 11
- Internet Explorer 11 for Windows 10
- Microsoft Edge

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 in each browser version that support the User Timing specification.

Browser Version	Document Modes Supported
Internet Explorer 10	IE9 Mode IE10 Mode
Internet Explorer 11	IE9 Mode IE10 Mode IE11 Mode
Internet Explorer 11 for Windows 10	IE9 Mode IE10 Mode IE11 Mode
Microsoft Edge	EdgeHTML 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:

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

## 1.4 Standards Support Requirements

To conform to [\[W3C-USERTIM\]](#) a user agent must implement all required portions of the specification. Any extensions that have been implemented must be implemented as described in section [2.1](#). Normative language is usually used to define both required portions and extensions. (For more information, see [\[RFC2119\]](#).)

Sections	Normative/Informative
1-2	Normative
3-4	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, clarifications, and extensions for the Microsoft implementation of [\[W3C-USERTIM\]](#).

- 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](#) describes extensions to the requirements.
- Section [2.4](#) considers error handling aspects of the implementation.
- Section [2.5](#) considers security aspects of the implementation.

### 2.1 Normative Variations

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

### 2.2 Clarifications

There are no clarifications of the MAY and SHOULD requirements of [\[W3C-USERTIM\]](#).

### 2.3 Extensions

The following subsections describe extensions to the requirements of [\[W3C-USERTIM\]](#).

#### 2.3.1 [W3C\_USERTIM] Section 4.2, Extensions to the Performance Interface

E0001:

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

The **getMarks** method, which is not in [\[W3C-USERTIM\]](#), is supported.

E0002:

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

The **getMeasures** method, which is not in [\[W3C-USERTIM\]](#), is supported.

### 2.4 Error Handling

There are no additional error handling considerations.

### 2.5 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.



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