[MS-WEBDRIVER]:

Microsoft Edge WebDriver Standards Support Document

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Revision Summary

Date	Revision History	Revision Class	Comments
11/27/2018	1.0	New	Released new document.

Table of Contents

1   Introduction

This document describes the level of support provided by Microsoft web browsers for the *WebDriver* specification [Webdriver:2018], published June 2018. The [Webdriver:2018] specification defines a remote control interface that enables provides and control of user agents.

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. 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

[Webdriver:2018] Stewart, S. and Burns, D., Eds., "WebDriver", W3C Recommendation, June 2018, https://www.w3.org/TR/2018/REC-webdriver1-20180605/

1.2.2   Informative References

None.

1.3   Microsoft Implementations

The following Microsoft web browser versions implement some portion of the [Webdriver:2018] specification:

▪ Microsoft Edge

Each browser version may implement multiple document rendering modes. The modes vary from one to another in support of the standard. The following table lists the document modes supported by each browser version.

Browser Version	Document Modes Supported
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:

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

1.4   Standards Support Requirements

To conform to [Webdriver:2018], 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 [Webdriver:2018] and whether they are considered normative or informative.

Sections	Normative/Informative
1-2	Informative
3-19, A-C	Normative
D-E	Informative

1.5   Notation

The following notations are used in this document to differentiate between notes of clarification, variation from the specification, and points of extensibility.

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].) 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.

2 Standards Support Statements

This section contains all variations, clarifications, and extensions for the Microsoft implementation of [Webdriver:2018].

- 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

The following subsections describe normative variations from the MUST requirements of [Webdriver:2018].

2.1.1 [Webdriver:2018] Section 6.5 List of Endpoints

V0003: Endpoints Minimize Window and Fullscreen Window are not supported

The specification states:

```
6.5 List of Endpoints

    The following table of endpoints lists the method and URI template for each endpoint
    node command. Extension commands are implicitly appended to this table.

    Method | URI Template                          | Command
    -------------------------------------------------------------------
    ...    |                                       |
    -------------------------------------------------------------------
    POST   | /session/{session id}/window/minimize   | Minimize Window
    -------------------------------------------------------------------
    POST   | /session/{session id}/window/fullscreen | Fullscreen Window
    -------------------------------------------------------------------
    ...    |                                       |

10.7 Resizing and Positioning Windows

    WebDriver provides commands for interacting with the operating system window
    containing the current top-level browsing context. Because different operating
    systems' window managers provide different abilities, not all of the commands in this
    section can be supported by all remote ends. Support for these commands is determined
    by the window dimensioning/positioning capability. Where a command is not supported,
    an unsupported operation error is returned.
```

EdgeHTML Mode

Endpoints **Minimize Window** and **Fullscreen Window** are not supported.

2.1.2 [Webdriver:2018] Section 7. Capabilities

V0001: The Accept insecure TLS certificate, Proxy configuration, and Unhandled prompt behavior capabilities are not supported.

The specification states:

```
7. Capabilities

    WebDriver capabilities are used to communicate the features supported by a given
    implementation. The local end may use capabilities to define which features it
    requires the remote end to satisfy when creating a new session. Likewise, the remote
    end uses capabilities to describe the full feature set for a session.

    The following table of standard capabilities enumerates the capabilities each
    implementation MUST support. An implementation MAY define additional extension
    capabilities.

                        |     | Value |
    Capability          | Key | Type  | Description
    ------------------------------------------------------------------------
    ...                 |     |       |
    ------------------------------------------------------------------------
                        | ... |  ...  | Indicates whether untrusted and
    Accept insecure TLS | ... |  ...  | self-signed TLS certificates are
    certificates        | ... |  ...  | implicitly trusted on navigation
                        | ... |  ...  | for the duration of the session
    ------------------------------------------------------------------------
    ...                 |     |       |
    ------------------------------------------------------------------------
    Proxy configuration | ... |  ...  | Defines the current session's
                        | ... |  ...  | proxy configuration.
    ------------------------------------------------------------------------
    ...                 |     |       |
    ------------------------------------------------------------------------
    Unhandled prompt    | ... |  ...  | Describes the current session's
    behavior            | ... |  ...  | user prompt handler.
    ------------------------------------------------------------------------
    ...                 |     |       |
    ------------------------------------------------------------------------

7.2 Processing Capabilities

    To process capabilities with argument parameters, the endpoint node must take the
    following steps:
```

EdgeHTML Mode

The **Accept insecure TLS certificate**, **Proxy configuration**, and **Unhandled prompt behavior** capabilities are not supported.

2.1.3 [Webdriver:2018] Section 7.1 Proxy

V0002: The proxy configuration capability is not supported

The specification states:

```
7.1 Proxy

    The proxy configuration capability is a JSON Object nested within the primary
    capabilities. Implementations may define additional proxy configuration options, but
    they must not alter the semantics of those listed below.
```

EdgeHTML Mode

The **proxy configuration** capability is not supported.

2.1.4 [Webdriver:2018] Section 7.2 Processing Capabilities

V0001: The Accept insecure TLS certificate, Proxy configuration, and Unhandled prompt behavior capabilities are not supported.

The specification states:

```
7. Capabilities

    WebDriver capabilities are used to communicate the features supported by a given
    implementation. The local end may use capabilities to define which features it
    requires the remote end to satisfy when creating a new session. Likewise, the remote
    end uses capabilities to describe the full feature set for a session.

    The following table of standard capabilities enumerates the capabilities each
    implementation MUST support. An implementation MAY define additional extension
    capabilities.

                        |     | Value |
    Capability          | Key | Type  | Description
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    ...                 |     |       |
    ------------------------------------------------------------------------
                        | ... |  ...  | Indicates whether untrusted and
    Accept insecure TLS | ... |  ...  | self-signed TLS certificates are
    certificates        | ... |  ...  | implicitly trusted on navigation
                        | ... |  ...  | for the duration of the session
    ------------------------------------------------------------------------
    ...                 |     |       |
    ------------------------------------------------------------------------
    Proxy configuration | ... |  ...  | Defines the current session's
                        | ... |  ...  | proxy configuration.
    ------------------------------------------------------------------------
    ...                 |     |       |
    ------------------------------------------------------------------------
    Unhandled prompt    | ... |  ...  | Describes the current session's
    behavior            | ... |  ...  | user prompt handler.
    ------------------------------------------------------------------------
    ...                 |     |       |
    ------------------------------------------------------------------------

7.2 Processing Capabilities

    To process capabilities with argument parameters, the endpoint node must take the
    following steps:
```

EdgeHTML Mode

The **Accept insecure TLS certificate**, **Proxy configuration**, and **Unhandled prompt behavior** capabilities are not supported.

2.1.5 [Webdriver:2018] Section 10.7 Resizing and Positioning Windows

V0003: Endpoints Minimize Window and Fullscreen Window are not supported

The specification states:

```
6.5 List of Endpoints
```

```
The following table of endpoints lists the method and URI template for each endpoint
node command. Extension commands are implicitly appended to this table.

Method | URI Template                          | Command
-------------------------------------------------------------------
...    |                                       |
-------------------------------------------------------------------
POST   | /session/{session id}/window/minimize   | Minimize Window
-------------------------------------------------------------------
POST   | /session/{session id}/window/fullscreen | Fullscreen Window
-------------------------------------------------------------------
...    |                                       |

10.7 Resizing and Positioning Windows

    WebDriver provides commands for interacting with the operating system window
    containing the current top-level browsing context. Because different operating
    systems' window managers provide different abilities, not all of the commands in this
    section can be supported by all remote ends. Support for these commands is determined
    by the window dimensioning/positioning capability. Where a command is not supported,
    an unsupported operation error is returned.
```

EdgeHTML Mode

Endpoints **Minimize Window** and **Fullscreen Window** are not supported.

2.2   Clarifications

There are no clarifications of the MAY and SHOULD requirements of [Webdriver:2018].

2.3   Extensions

There are no extensions to the requirements of [Webdriver:2018].

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.

4   Index

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