**[MS-CORE-AAM]:**

**Microsoft Edge Core Accessibility API Mappings 1.1 Standards Support Document**

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**Revision Summary**

| Date | Revision History | Revision Class | Comments |
| --- | --- | --- | --- |
| 6/5/2018 | 1.0 | New | Released new document. |

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# Introduction

This document describes the level of support provided by Microsoft Edge for the *Core Accessibility API Mappings 1.1* specification [[W3C-CORE-AAM]](https://go.microsoft.com/fwlink/?linkid=873416), published 14 December 2017.

The specification describes how user agents should expose semantics of web content languages to accessibility APIs. This helps users with disabilities to obtain and interact with information using assistive technologies.

## 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)

[W3C-CORE-AAM] World Wide Web Consortium, "Core Accessibility API Mappings 1.1", W3C Recommendation 14 December 2017, [https://www.w3.org/TR/2017/REC-core-aam-1.1-20171214/](https://go.microsoft.com/fwlink/?linkid=873416)

### Informative References

None.

## Microsoft Implementations

The following Microsoft web browsers implement some portion of the [[W3C-CORE-AAM]](https://go.microsoft.com/fwlink/?linkid=873416) 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)*

## Standards Support Requirements

To conform to [[W3C-CORE-AAM]](https://go.microsoft.com/fwlink/?linkid=873416), 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 [W3C-CORE-AAM] and whether they are considered normative or informative.

| Sections | Normative/Informative |
| --- | --- |
| 1 | Informative |
| 2-6 | Normative |
| Appendix A, Appendix B | Informative |

## 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]](https://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_0be52240e55c44a1883e9bac2939b53d).

# Standards Support Statements

This section contains all variations, clarifications, and extensions for the Microsoft implementation of [[W3C-CORE-AAM]](https://go.microsoft.com/fwlink/?linkid=873416).

* Section [2.1](#Section_dc4ead4e4f4746d794045f04fd1919c3) describes normative variations from the MUST requirements of the specification.
* Section [2.2](#Section_9cbdcb7bf7394188b6ae8b8be002f1ad) describes clarifications of the MAY and SHOULD requirements.
* Section [2.3](#Section_000715d9918a44f29a43b9c440718298) describes extensions to the requirements.
* Section [2.4](#Section_02f0b9fc8dd84b40a2d95fe61a14a789) considers error handling aspects of the implementation.
* Section [2.5](#Section_f7964ee8e41944db9c99e8368a8bc9b3) considers security aspects of the implementation.

## Normative Variations

The following subsections describe normative variations from the MUST requirements of [[W3C-CORE-AAM]](https://go.microsoft.com/fwlink/?linkid=873416).

### [W3C-CORE-AAM] Section 5.4.2. Role Mapping Table

V0001: Control Pattern is not set for the listitem WAI-ARIA role

The specification states:

1. 5.4.2 Role Mapping Table
2. ...
3. Table describing mapping of WAI-ARIA roles to accessibility APIs.
4. ---------------------------------------------------------------------------------------
5. WAI-ARIA Role | ... | UIA
6. ---------------------------------------------------------------------------------------
7. ...
8. ---------------------------------------------------------------------------------------
9. listitem | ... | Control Type: ListItem
10. | ... | Control Pattern: SelectionItem
11. | ... | SelectionItem.SelectionContainer: the containing list

***EdgeHTML Mode***

Control Pattern is not set for the listitem WAI-ARIA role; it should be set to SelectionItem.

V0002: Control Pattern is not set for the separator WAI-ARIA role

The specification states:

1. 5.4.2 Role Mapping Table
2. ...
3. Table describing mapping of WAI-ARIA roles to accessibility APIs.
4. ---------------------------------------------------------------------------------------
5. WAI-ARIA Role | ... | UIA
6. ---------------------------------------------------------------------------------------
7. ...
8. ---------------------------------------------------------------------------------------
9. separator | ... | Control Type: Thumb
10. | ... | Control Pattern: RangeValue

***EdgeHTML Mode***

Control Pattern is not set for the separator WAI-ARIA role ; it should be set to RangeValue.

V0003: Control Pattern is not set for the cell WAI-ARIA role

The specification states:

1. 5.4.2 Role Mapping Table
2. ...
3. Table describing mapping of WAI-ARIA roles to accessibility APIs.
4. ---------------------------------------------------------------------------------------
5. WAI-ARIA Role | ... | UIA
6. ---------------------------------------------------------------------------------------
7. ...
8. ---------------------------------------------------------------------------------------
9. role | ... | Control Type: DataItem
10. | ... | Localized Control Type: cell
11. | ... | Control Pattern: TableItem

***EdgeHTML Mode***

Control Pattern is not set for the cell WAI-ARIA role; it should be set to TableItem.

V0004: Control Pattern is not set for the link WAI-ARIA role

The specification states:

1. 5.4.2 Role Mapping Table
2. ...
3. Table describing mapping of WAI-ARIA roles to accessibility APIs.
4. ---------------------------------------------------------------------------------------
5. WAI-ARIA Role | ... | UIA
6. ---------------------------------------------------------------------------------------
7. ...
8. ---------------------------------------------------------------------------------------
9. link | ... | Control Type: HyperLink
10. | ... | Control Pattern: Value

***EdgeHTML Mode***

Control Pattern is not set for the link WAI-ARIA role; it should be set to Value.

V0005: Control Pattern is not set for the radio role

The specification states:

1. 5.4.2 Role Mapping Table
2. Table describing mapping of WAI-ARIA roles to accessibility APIs.
3. WAI-ARIA Role ... UIA
4. -----------------------
5. ...
6. radio Control Type: RadioButton
7. Control Pattern: Toggle
8. Control Pattern: SelectionItem

***EdgeHTML Mode***

Control Pattern is not set for the radio role.

### [W3C-CORE-AAM] Section 5.5.2.1. Not Mapped

V0006: ControllerFor is not set for the aia-errormessage state

The specification states:

1. 5.5.2.1 Not Mapped
2. There are a number of occurrences in the table where a given state or property is
3. declared "Not mapped". ...
4. ...
5. WAI-ARIA state and property mapping rule table
6. ---------------------------------------------------------------------------------------
7. WAI-ARIA State or Property | ... | UIA ...
8. ---------------------------------------------------------------------------------------
9. ...
10. ---------------------------------------------------------------------------------------
11. aria-errormessage | ... | Property: ControllerFor: pointer to the target
12. | | accessible object

***EdgeHTML Mode***

ControllerFor is not set for the aia-errormessage state.

V0007: DescribedBy is not set for the aria-details state

The specification states:

1. 5.5.2.1 Not Mapped
2. There are a number of occurrences in the table where a given state or property is
3. declared "Not mapped". ...
4. ...
5. WAI-ARIA state and property mapping rule table
6. ---------------------------------------------------------------------------------------
7. WAI-ARIA State or Property | ... | UIA ...
8. ---------------------------------------------------------------------------------------
9. ...
10. ---------------------------------------------------------------------------------------
11. aria-details | ... | Property: DescribedBy: points to accessible nodes
12. | | matching IDREFs, if the referenced objects are in
13. | | in the accessibility tree

***EdgeHTML Mode***

DescribedBy is not set for the aria-details state.

V0008: Parent-child relationships are not created for state aria-owns

The specification states:

1. 5.5.2.1 Not Mapped
2. There are a number of occurrences in the table where a given state or property is
3. declared "Not mapped". ...
4. ...
5. WAI-ARIA state and property mapping rule table
6. ---------------------------------------------------------------------------------------
7. WAI-ARIA State or Property | ... | UIA ...
8. ---------------------------------------------------------------------------------------
9. ...
10. ---------------------------------------------------------------------------------------
11. aria-owns | ... | Expose the elements that are referenced by this
12. | ... | property as children of the current element. If
13. | ... | multiple aria-owns relationships are found, use only
14. | ... | the first one.

***EdgeHTML Mode***

Parent-child relationships are not created for state aria-owns.

V0009: The aria-labelledby state does not take multiple values

The specification states:

1. 5.5.2.1 Not Mapped
2. There are a number of occurrences in the table where a given state or property is
3. declared "Not mapped". ...
4. ...
5. WAI-ARIA state and property mapping rule table
6. ---------------------------------------------------------------------------------------
7. WAI-ARIA State or Property | ... | UIA ...
8. ---------------------------------------------------------------------------------------
9. ...
10. ---------------------------------------------------------------------------------------
11. aria-labelledby | ... | Property: Name: <value>
12. | ... | Property: LabeledBy: points to accessible nodes
13. | ... | matching IDREFs, if the referenced objects are in
14. | ... | the accessibility tree ...

***EdgeHTML Mode***

The aria-labeledby state takes only a single value and does not take multiple values.

V0010: ItemStatus is not set to other when the aria-sort state is set to other

The specification states:

1. 5.5.2.1 Not Mapped
2. There are a number of occurrences in the table where a given state or property is
3. declared "Not mapped". ...
4. ...
5. WAI-ARIA state and property mapping rule table
6. ---------------------------------------------------------------------------------------
7. WAI-ARIA State or Property | ... | UIA ...
8. ---------------------------------------------------------------------------------------
9. ...
10. ---------------------------------------------------------------------------------------
11. aria-sort=other | ... | Property: AriaProperties.sort: other
12. | ... | Property: ItemStatus: other if the element maps to
13. | ... | HeaderItem Control Type

***EdgeHTML Mode***

ItemStatus is not set to other when the aria-sort state is set to other.

V0011: StyleId is not set for the aria-level state on a heading

The specification states:

1. 5.5.2.1 Not Mapped
2. There are a number of occurrences in the table where a given state or property is
3. declared "Not mapped". ...
4. ...
5. WAI-ARIA state and property mapping rule table
6. ---------------------------------------------------------------------------------------
7. WAI-ARIA State or Property | ... | UIA ...
8. ---------------------------------------------------------------------------------------
9. ...
10. ---------------------------------------------------------------------------------------
11. aria-level on heading | ... | Property: AriaProperties.level: <value>
12. | ... | Property: StyleId\_Heading: <value>

***EdgeHTML Mode***

StyleId is not set for the aria-level state on a heading.

## Clarifications

There are no clarifications of the MAY and SHOULD requirements of [[W3C-CORE-AAM]](https://go.microsoft.com/fwlink/?linkid=873416).

## Extensions

There are no extensions to the requirements of [[W3C-CORE-AAM]](https://go.microsoft.com/fwlink/?linkid=873416).

## 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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