

[MS-HTML5E]:

Microsoft Edge / Internet Explorer Extensions to the HTML5 Specification

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1 Introduction

This document describes extensions provided by Microsoft web browsers for the *HTML5* specification [\[HTML5\]](#) W3C Recommendation of 28 October 2014.

Section 2 of this specification is normative. All other sections and examples in this specification are informative.

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.

[HTML5] Berjon, R., Faulkner, S., Leithead, T., Navara, E., et al., Eds., "HTML5 -- A vocabulary and associated APIs for HTML and XHTML", <http://www.w3.org/TR/html5/>

[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>

1.2.2 Informative References

[CSS-Level2-2009] Bos, B., Celik, T., Hickson, I., and Wium Lie, H., Eds., "Cascading Style Sheets Level 2 Revision 1 (CSS 2.1) Specification", W3C Candidate Recommendation 08 September 2009, <http://www.w3.org/TR/2009/CR-CSS2-20090908/>

[DOM Level 2 - Core] W3C, "Document Object Model (DOM) Level 2 Core Specification Version 1.0", W3C Recommendation 13 November, 2000, <http://www.w3.org/TR/DOM-Level-2-Core/>

[DOM Level 2 - HTML] W3C, "Document Object Model (DOM) Level 2 HTML Specification Version 1.0", W3C Recommendation, January 2003, <http://www.w3.org/TR/2003/REC-DOM-Level-2-HTML-20030109/>

[DOM Level 2 - Style] W3C, "Document Object Model (DOM) Level 2 Style Specification Version 1.0", W3C Recommendation, November 2000, <http://www.w3.org/TR/2000/REC-DOM-Level-2-Style-20001113/>

[ECMA-262-1999] ECMA International, "Standard ECMA-262 ECMAScript Language Specification", 3rd edition (December 1999), <http://www.ecma-international.org/publications/files/ECMA-ST-ARCH/ECMA-262,%203rd%20edition,%20December%201999.pdf>

[ECMA-262/5] ECMA International, "Standard ECMA-262 ECMAScript Language Specification", 5th Edition (December 2009), <http://www.ecma-international.org/publications/files/ECMA-ST-ARCH/ECMA-262%205th%20edition%20December%202009.pdf>

[HTML] World Wide Web Consortium, "HTML 4.01 Specification", December 1999, <http://www.w3.org/TR/html4/>

[MS-CSS21E] Microsoft Corporation, "[Internet Explorer Extensions to Cascading Style Sheets \(CSS\) 2.1 and DOM Level 2 Style Specifications](#)".

[MS-DOM2CEX] Microsoft Corporation, "[Microsoft XML Extensions to the Document Object Model \(DOM\) Level 2 Core Specification](#)".

[MS-DOM2CE] Microsoft Corporation, "[Internet Explorer Extensions to the Document Object Model \(DOM\) Level 2 Core Specification](#)".

[MS-DOM2EE] Microsoft Corporation, "[Internet Explorer Extensions to the Document Object Model \(DOM\) Level 2 Events Specification](#)".

[MS-DOM2E] Microsoft Corporation, "[Internet Explorer Document Object Model \(DOM\) Level 2 Events Standards Support Document](#)".

[MS-ES3EX] Microsoft Corporation, "[Microsoft JScript Extensions to the ECMAScript Language Specification Third Edition](#)".

[MS-ES5EX] Microsoft Corporation, "[Internet Explorer Extensions to the ECMA-262 ECMAScript Language Specification \(Fifth Edition\)](#)".

[MS-HTML401E] Microsoft Corporation, "[Internet Explorer Extensions to HTML 4.01 and DOM Level 2 HTML Specifications](#)".

1.3 Extensions Overview

This document is organized as follows:

- **Interfaces:** All DOM interfaces with extensions defined in this document.
- **Attributes:** All markup and DOM properties extending [\[HTML5\]](#) interface functionality.
 - **DOM and Content Attributes:** Attributes that are exposed through both DOM scripting and markup.
 - **DOM Attributes Only:** Attributes only supported through DOM scripting.
 - **Event Attributes:** Attributes that bind events to event handlers.
- **Methods:** All methods extending [\[HTML5\]](#) interface functionality.

1.4 Relationship to Standards and Other Extensions

The following documents provide additional extensions.

- [\[MS-CSS21E\]](#): Extensions to the [\[CSS-Level2-2009\]](#) and [\[DOM Level 2 - Style\]](#) specifications.
- [\[MS-DOM2CE\]](#) and [\[MS-DOM2CEX\]](#): Extensions to the [\[DOM Level 2 - Core\]](#) specification.
- [\[MS-DOM2EE\]](#): Extensions to the [\[MS-DOM2E\]](#) specification.
- [\[MS-ES3EX\]](#): Extensions to the ECMAScript [\[ECMA-262-1999\]](#) specification.
- [\[MS-ES5EX\]](#): Extensions to the ECMAScript [\[ECMA-262/5\]](#) specification.
- [\[MS-HTML401E\]](#): Extensions to the HTML 4.01 [\[HTML\]](#) and [\[DOM Level 2 - HTML\]](#) specifications.

1.5 Applicability Statement

This document specifies a set of extensions to the [HTML5](#) specification that are unique to Windows Internet Explorer 9, Windows Internet Explorer 10, Internet Explorer 11, Internet Explorer 11 for Windows 10, and 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 supported by each browser version.

Browser Version	Document Modes Supported
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
Microsoft Edge	EdgeHTML Mode

Many of the extensions listed in this document are accompanied by a statement that indicates what modes and versions have the extension. The statement has a list of document modes followed by a list of browser versions in parentheses. For any listed version the extension is in all listed modes that the version provides. Here is an example of an availability statement:

Available only in IE11 Mode and EdgeHTML Mode (All Versions).

This means that the extension is in IE11 Mode for all versions in the table above that provide that mode, and in EdgeHTML Mode for all versions that provide that mode.

If an extension does not have an availability statement, all modes of all versions shown in the table above have the extension.

2 Extensions

This section describes extensions to [\[HTML5\]](#) that are available in Microsoft web browsers.

2.1 Interfaces

The following interfaces are defined in [\[HTML5\]](#) and extended by Microsoft web browsers.

2.1.1 AudioTrackList

The **AudioTrackList** interface represents a list of `AudioTrack` objects.

AudioTrackList has been extended with the following method:

- `item`

```
// Microsoft extensions
interface AudioTrackList : EventTarget
{
    getter AudioTrack item(unsigned long index);
};
```

2.1.2 Document

The **Document** interface represents the HTML document in a specific window.

Document has been extended with the following attributes:

- `URLUnencoded`
- `defaultCharset`
- `webkitCurrentFullScreenElement`
- `webkitFullscreenElement`
- `webkitFullscreenEnabled`
- `webkitIsFullScreen`

Document has been extended with the following methods:

- `execCommandShowHelp`
- `focus`
- `queryCommandText`
- `updateSettings`
- `webkitCancelFullScreen`
- `webkitExitFullscreen`

Available only in *EdgeHTML Mode (All Versions)*.

- `caretRangeFromPoint`

```
// Microsoft extensions
```



```

interface Document : Node
{
    readonly attribute DOMString URLUnencoded;
    readonly attribute DOMString defaultCharset;
    readonly attribute Element? webkitCurrentFullscreenElement;
    readonly attribute Element? webkitFullscreenElement;
    readonly attribute boolean webkitFullscreenEnabled;
    readonly attribute boolean webkitIsFullscreen;
    boolean execCommandShowHelp(DOMString commandId);
    void focus();
    DOMString queryCommandText(DOMString commandId);
    void updateSettings();
    void webkitCancelFullscreen();
    void webkitExitFullscreen();
    Range caretRangeFromPoint(float x, float y);
};

```

2.1.3 ErrorEvent

The **ErrorEvent** interface represents the dispatched object of an error event.

ErrorEvent has been extended with the following method:

- `initErrorEvent`

```

// Microsoft extensions
interface ErrorEvent : Event
{
    void initErrorEvent(DOMString typeArg, boolean canBubbleArg, boolean cancelableArg,
DOMString messageArg, DOMString filenameArg, unsigned long linenoArg);
};

```

2.1.4 HTMLEmbedElement

The **HTMLEmbedElement** interface allows documents of any type to be embedded.

HTMLEmbedElement has been extended with the following attributes:

- `msPlayToDisabled`
- `msPlayToPrimary`
- `msPlayToPreferredSourceUri`

```

// Microsoft extensions
interface HTMLEmbedElement : HTMLElement
{
    attribute boolean msPlayToDisabled;
    attribute boolean msPlayToPrimary;
    attribute DOMString msPlayToPreferredSourceUri;
};

```

2.1.5 HTMLImageElement

The **HTMLImageElement** interface embeds an image or a video clip in the document.

HTMLImageElement has been extended with the following attributes:

- msPlayToDisabled
- msPlayToPrimary
- msPlayToPreferredSourceUri

```
// Microsoft extensions
interface HTMLImageElement : HTMLElement
{
    attribute boolean msPlayToDisabled;
    attribute boolean msPlayToPrimary;
    attribute DOMString msPlayToPreferredSourceUri;
};
```

2.1.6 HTMLMediaElement

The **HTMLMediaElement** interface represents an audio or video object in the document.

HTMLMediaElement has been extended with the following attributes:

- msPlayToDisabled
- msPlayToPrimary
- msPlayToPreferredSourceUri

```
// Microsoft extensions
interface HTMLMediaElement : HTMLElement
{
    attribute boolean msPlayToDisabled;

    attribute boolean msPlayToPrimary;
    attribute DOMString msPlayToPreferredSourceUri;
};
```

2.1.7 HTMLObjectElement

The **HTMLObjectElement** interface represents an external resource.

HTMLObjectElement has been extended with the following attributes:

- msPlayToDisabled
- msPlayToPrimary
- msPlayToPreferredSourceUri

```
// Microsoft extensions
interface HTMLObjectElement : HTMLElement
{
    attribute boolean msPlayToDisabled;
    attribute boolean msPlayToPrimary;
    attribute DOMString msPlayToPreferredSourceUri;
};
```

2.1.8 HTMLVideoElement

The **HTMLVideoElement** interface represents video content to be played in a document.

HTMLVideoElement has been extended with the following attribute:

- msZoom

```
// Microsoft extensions
interface HTMLVideoElement : HTMLMediaElement
{
    attribute boolean msZoom;
};
```

2.1.9 MediaError

The **MediaError** interface represents an error in media object playback.

MediaError has been extended with the following attribute:

- msExtendedCode

```
// Microsoft extensions
interface MediaError
{
    readonly attribute long msExtendedCode;
};
```

2.1.10 Navigator

The **Navigator** interface represents the identity and state of the browser.

Navigator has been extended with the following attributes:

- appMinorVersion
- browserLanguage
- userLanguage
- systemLanguage
- cpuClass

Navigator has been extended with the following method:

- msLaunchUri

```
// Microsoft extensions
interface Navigator
{
    readonly attribute DOMString appMinorVersion;
    readonly attribute DOMString browserLanguage;
    readonly attribute DOMString userLanguage;
    readonly attribute DOMString systemLanguage;
    readonly attribute DOMString cpuClass;
    void msLaunchUri(DOMString uri, optional MSLaunchUriCallback successCallback = 0,
optional MSLaunchUriCallback noHandlerCallback = 0);
};
```

2.1.11 PopStateEvent

The **PopStateEvent** interface represents the object that is dispatched when navigating to a session history entry.

PopStateEvent has been extended with the following method:

- `initPopStateEvent`

```
// Microsoft extensions
interface PopStateEvent : Event
{
    void initPopStateEvent(DOMString typeArg, boolean canBubbleArg, boolean
cancelableArg, any stateArg);
};
```

2.1.12 TextTrack

The **TextTrack** interface represents timed text track content.

TextTrack has been extended with the following attribute:

- `readyState`

```
// Microsoft extensions
interface TextTrack : EventTarget
{
    readonly attribute unsigned short readyState;
};
```

2.1.13 TextTrackCue

The **TextTrackCue** interface represents the content and timing of text to be displayed concurrently with associated media during playback.

TextTrackCue has been extended with the following attribute:

- `text`

TextTrackCue has been extended with the following method:

- `getCueAsHTML`

```
// Microsoft extensions
interface TextTrackCue : EventTarget
{
    attribute DOMString text;
    DocumentFragment getCueAsHTML();
};
```

2.1.14 TextTrackCueList

The **TextTrackCueList** interface represents a dynamically updated list of text track cues.

TextTrackCueList has been extended with the following method:

- `item`

```
// Microsoft extensions
interface TextTrackCueList
{
    getter TextTrackCue item(unsigned long index);
};
```

2.1.15 TextTrackList

The **TextTrackList** interface represents a list of text tracks.

TextTrackList has been extended with the following method:

- item

```
// Microsoft extensions
interface TextTrackList : EventTarget
{
    getter TextTrack item(unsigned long index);
};
```

2.1.16 VideoTrackList

The **VideoTrackList** interface represents a list of VideoTrack objects.

VideoTrackList has been extended with the following method:

- item

```
// Microsoft extensions
interface VideoTrackList : EventTarget
{
    getter VideoTrack item(unsigned long index);
};
```

2.1.17 Window

The **Window** interface represents a window containing a web document.

Window has been extended with the following attributes:

- defaultStatus
- clientInformation
- screenLeft
- screenTop

Window has been extended with the following methods:

Available only in *EdgeHTML Mode (All Versions)*.

- webkitConvertPointFromPageToNode
- webkitConvertPointFromNodeToPage

```
// Microsoft extensions
interface Window : EventTarget
```

```

{
    attribute DOMString defaultStatus;
    readonly attribute Navigator clientInformation;
    readonly attribute long screenLeft;
    readonly attribute long screenTop;

    WebKitPoint webkitConvertPointFromPageToNode(Node node, WebKitPoint pt);
    WebKitPoint webkitConvertPointFromNodeToPage(Node node, WebKitPoint pt);
};

```

2.2 Attributes

The following attributes introduced by Microsoft web browsers are members of interfaces defined in [\[HTML5\]](#).

2.2.1 DOM and Content Attributes

The following attributes are supported in both DOM scripting and markup.

2.2.1.1 msPlayToDisabled

`msPlayToDisabled` of type `boolean`

Gets and sets if the *PlayTo* device is enabled or disabled.

Available only in *IE10 Mode*, *IE11 Mode*, and *EdgeHTML Mode (All Versions)*.

The **`msPlayToDisabled`** attribute extends the **`HTMLEmbedElement`**, **`HTMLImageElement`**, **`HTMLMediaElement`**, and **`HTMLObject`** interfaces.

2.2.1.2 msPlayToPrimary

`msPlayToPrimary` of type `boolean`

Gets and sets if the device is the primary *PlayTo* device.

Available only in *IE10 Mode*, *IE11 Mode*, and *EdgeHTML Mode (All Versions)*.

The **`msPlayToPrimary`** attribute extends the **`HTMLEmbedElement`**, **`HTMLImageElement`**, **`HTMLMediaElement`**, and **`HTMLObject`** interfaces.

2.2.1.3 msPlayToPreferredSourceUri

`msPlayToPreferredSourceUri` of type `DOMString`

Gets and sets the path to the preferred media source. This enables the *PlayTo* target device to stream the media content, which might be DRM protected, from a different location (such as a cloud media server).

Available only in *IE11 Mode* and *EdgeHTML Mode (All Versions)*.

The **`msPlayToPreferredSourceUri`** attribute extends the **`HTMLEmbedElement`**, **`HTMLImageElement`**, **`HTMLMediaElement`**, and **`HTMLObject`** interfaces.

2.2.2 DOM Attributes Only

The following attributes are supported only in DOM scripting.

2.2.2.1 appMinorVersion

`appMinorVersion` of type `DOMString`

Retrieves the application's minor version value.

The **appMinorVersion** attribute extends the **Navigator** interface.

Available only in *IE7 Mode*, *IE8 Mode*, *IE9 Mode*, and *IE10 Mode (All Versions)*.

2.2.2.2 browserLanguage

`browserLanguage` of type `DOMString`

Retrieves the current operating system language.

This property does not indicate the language or languages set by the user in the *Internet Options* menu.

The **browserLanguage** attribute extends the **Navigator** interface.

Available only in *IE7 Mode*, *IE8 Mode*, *IE9 Mode*, and *IE10 Mode (All Versions)*.

2.2.2.3 msCapsLockWarningOff

`msCapsLockWarningOff` of type `boolean`

Toggles the automatic caps lock warning on or off for validated password input fields.

Starting with Windows Internet Explorer 10, `input type=password` fields will automatically display a warning if the caps lock is on. This property is provided to disable this warning.

Available only in *IE10 Mode*, *IE11 Mode*, and *EdgeHTML Mode (All Versions)*.

The **msCapsLockWarningOff** attribute extends the **Document** interface.

2.2.2.4 clientInformation

`clientInformation` of type `Navigator`

Retrieves a `Navigator` object representing information about the browser.

The **clientInformation** attribute extends the **Window** interface.

2.2.2.5 cpuClass

`cpuClass` of type `DOMString`

Retrieves a string denoting the type of CPU on the host machine.

Possible return values include: `x86`, `68K`, `Alpha`, `PPC`, and `Other`.

The **cpuClass** attribute extends the **Navigator** interface.

Available only in *IE7 Mode, IE8 Mode, IE9 Mode, and IE10 Mode (All Versions)*.

2.2.2.6 defaultCharset

`defaultCharset` of type `DOMString`

Gets the default character set from the current regional language settings.

For typical settings in North America, the value is `windows-1252`.

The **defaultCharset** attribute extends the **Document** interface.

2.2.2.7 defaultStatus

`defaultStatus` of type `DOMString`

Sets or retrieves the default message displayed in the status bar at the bottom of the window.

The **defaultStatus** attribute extends the **Window** interface.

2.2.2.8 msExtendedCode

`msExtendedCode` of type `long`

Gets additional platform specific error information.

Available only in *IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*.

The **msExtendedCode** attribute extends the **MediaError** interface.

2.2.2.9 offscreenBuffering

`offscreenBuffering` of type `DOMString` or `boolean`

Sets or retrieves whether objects are drawn offscreen before being made visible to the user.

The value of the `offscreenBuffering` property determines how the current document is drawn. When the property is set to `true`, objects are added to an offscreen buffer. After all objects are drawn, the contents of the offscreen buffer are made visible to the user. When the property is set to `false`, objects are rendered directly to the screen. By default, the property is set to **auto**, meaning that Windows Internet Explorer automatically enables offscreen buffering when Microsoft DirectX components are used in the document.

The **offscreenBuffering** attribute extends the **Window** interface.

2.2.2.10 readyState

`readyState` of type `unsigned short`

Returns the status of the text track.

Possible values include:

- `NONE (0)`: The `TextTrack` has been declared (with corresponding markup element) but is not yet loaded
- `LOADING (1)`: The `TextTrack` is currently loading

- `LOADED (2)`: The `TextTrack` has been loaded
- `ERROR (3)`: The `TextTrack` failed to load. Possible causes are a bad URL or unknown text format.

Available only in *IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*.

The **readyState** attribute extends the **TextTrack** interface.

2.2.2.11 **systemLanguage**

`systemLanguage` of type `DOMString`

Retrieves the default language used by the operating system.

The **systemLanguage** attribute extends the **Navigator** interface.

Available only in *IE7 Mode, IE8 Mode, IE9 Mode, and IE10 Mode (All Versions)*.

2.2.2.12 **text**

`text` of type `DOMString`

Retrieves the raw text portion of the `TextTrackCue`.

The **text** property can be used to put cue text into a `div` element for custom displays.

Available only in *IE10, IE11, and EdgeHTML Mode (All Versions)*.

The **text** attribute extends the **TextTrackCue** interface.

2.2.2.13 **URLUnencoded**

`URLUnencoded` of type `DOMString`

Gets the URL for the document, stripped of any character encoding.

The **URLUnencoded** attribute extends the **Document** interface.

2.2.2.14 **userLanguage**

`userLanguage` of type `DOMString`

Retrieves the operating system's natural language setting.

The **userLanguage** attribute extends the **Navigator** interface.

Available only in *IE7 Mode, IE8 Mode, IE9 Mode, and IE10 Mode (All Versions)*.

2.2.2.15 **msZoom**

`msZoom` of type `boolean`

Gets or sets whether the video frame is trimmed to fit the video display.

When `true`, trims the video frame to the display space. When `false`, the video frame uses letterbox or pillarbox to display video as needed.

Available only in *IE10*, *IE11*, and *EdgeHTML Mode (All Versions)*.

The **msZoom** attribute extends the **HTMLVideoElement** interface.

2.2.3 Event Attributes

The following are attributes that bind events to event handlers.

2.2.3.1 onmssitemodejumplistitemremoved

`onmssitemodejumplistitemremoved` of type `Function`

Occurs when `msSiteModeShowJumpList` is called, and an item has been removed from a Jump List by the user. Dispatches a `MSSiteModeEvent` object.

- Bubbles: No
- Cancelable: No
- Synchronous: No

Available only in *IE9 Mode*, *IE10 Mode*, *IE11 Mode*, and *EdgeHTML Mode (All Versions)*.

The **onmssitemodejumplistitemremoved** attribute extends the **Document** interface.

2.2.3.2 onmsthumbnailclick

`onmsthumbnailclick` of type `Function`

Occurs when a user clicks a button in a Thumbnail Toolbar. Dispatches a `MSSiteModeEvent` object.

- Bubbles: No
- Cancelable: No
- Synchronous: No

Available only in *IE9 Mode*, *IE10 Mode*, *IE11 Mode*, and *EdgeHTML Mode (All Versions)*.

The **onmsthumbnailclick** attribute extends the **Document** interface.

2.3 Methods

The following methods introduced by Internet Explorer and Microsoft Edge are members of interfaces defined in [\[HTML5\]](#).

2.3.1 getCueAsHTML

Returns the `TextTrackCue` `text` (caption) as HTML document fragment.

Available only in *IE10*, *IE11*, and *EdgeHTML Mode (All Versions)*.

The **getCueAsHTML** method extends the **TextTrackCue** interface.

Parameters

None

Return Value

DOMString representing the text track cue text

2.3.2 initErrorEvent

Initializes the properties of an **ErrorEvent** object.

As of Microsoft Edge, the `createEvent / initEvent` constructor pattern for synthetic events has been deprecated in favor of the DOM4 event constructor pattern.

Available only in *IE10, IE11, and EdgeHTML Mode (All Versions)*.

The **initErrorEvent** method extends the **ErrorEvent** interface.

Parameters

DOMString **typeArg** *The type of event being created*

boolean **canBubbleArg** *Indicates whether the event can bubble*

boolean **cancelableArg** *Indicates whether the default action of the event can be prevented*

DOMString **messageArg** *The error message string*

DOMString **filenameArg** *The absolute URL of the script in which the error originally occurred*

Unsigned long **linenoArg** *The line number where the error occurred in the script*

Return Value

None

2.3.3 initPopStateEvent

Initializes the properties of a `PopStateEvent` object.

As of Microsoft Edge, the `createEvent() / initEvent()` constructor pattern for synthetic events has been deprecated in favor of the DOM4 event constructor pattern.

Available only in *IE10, IE11, and EdgeHTML Mode (All Versions)*.

The **initPopStateEvent** method extends the **PopStateEvent** interface.

Parameters

DOMString **typeArg** *The type of event being created*

boolean **canBubbleArg** *Indicates whether the event can bubble*

boolean **cancelableArg** *Indicates whether the default action of the event can be prevented*

any **stateArg** *The object to be applied to the state property*

Return Value

None

2.3.4 item

Returns the item at the specified index from the list object.

Available only in *IE10, IE11, and EdgeHTML Mode (All Versions)*.

The **item** method extends the **AudioTrackList**, **TextTrackList**, **TextTrackCueList**, and **VideoCueList** interfaces.

Parameters

unsigned long **index** *The index of the desired item in the list*

Return Value

AudioTrack (in the case of AudioTrackList)

TextTrack (in the case of TextTrackList)

TextTrackCue (in the case of TextTrackCueList)

VideoTrack (in the case of VideoTrackList)

2.3.5 msLaunchUri

Starts a service or app, such as an email client, that handles a given protocol.

Available only in *IE7 Mode, IE8 Mode, IE9 Mode, IE10 Mode, IE11 Mode, and EdgeHTML Mode (All Versions)*.

The **msLaunchUri** method extends the **Navigator** interface.

Parameters

DOMString **uri** *URL containing protocol of the document or resource to be displayed*

optional callback **successCallback** *Function to be executed if the protocol handler is present*

optional callback **noHandlerCallback** *Function to be executed if the protocol handler isn't present*

Return Value

None

2.3.6 queryCommandText

Retrieves the string associated with a command.

The **queryCommandText** method extends the **Document** interface.

Parameters

DOMString **commandId** *String containing the identifier of a command*

Return Value

None

2.3.7 updateSettings

Updates the print settings for the document.

The **updateSettings** method extends the **Document** interface.

Parameters

None

Return Value

None

3 Security

There are no additional security concerns.

4 Appendix A: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs.

- 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
- Microsoft Edge

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms "SHOULD" or "SHOULD NOT" implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term "MAY" implies that the product does not follow the prescription.

5 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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