Page Domain

Actions and events related to the inspected page belong to the page domain.

Methods

Page.addScriptToEvaluateOnNewDocument

Page.bringToFront

Page.captureScreenshot

Page.createIsolatedWorld

Page.disable

Page.enable

Page.getAppManifest

Page.getFrameTree

Page.getLayoutMetrics

Page.getNavigationHistory

Page.handleJavaScriptDialog

Page.navigate

<u>Page.navigateToHistoryEntry</u>

Page.printToPDF

Page.reload

<u>Page.removeScriptToEvaluateOnNewDocument</u>

Page.resetNavigationHistory

Page.setDocumentContent

Page.stopLoading

Page.clearGeolocationOverride Deprecated

Page.setGeolocationOverride Deprecated

Page.addCompilationCache Experimental

Page.captureSnapshot Experimental

Page.clearCompilationCache Experimental

Page.close Experimental

Page.crash Experimental

Page.generateTestReport Experimental

Page.getAdScriptId Experimental

Page.getAppId Experimental

Page.getInstallabilityErrors Experimental

Page.getOriginTrials Experimental

Page.getPermissionsPolicyState Experimental

Page.getResourceContent Experimental

Page.getResourceTree Experimental

Page.produceCompilationCache Experimental

Page.screencastFrameAck Experimental

Page.searchInResource Experimental

Page.setAdBlockingEnabled Experimental

Page.setBypassCSP Experimental

Page.setFontFamilies Experimental

Page.setFontSizes Experimental

Page.setInterceptFileChooserDialog Experimental

Page.setLifecycleEventsEnabled Experimental

Page.setPrerenderingAllowed Experimental

Page.setRPHRegistrationMode Experimental

Page.setSPCTransactionMode Experimental

Page.setWebLifecycleState Experimental

Page.startScreencast Experimental

Page.stopScreencast Experimental

Page.waitForDebugger Experimental

Page.addScriptToEvaluateOnLoad ExperimentalDeprecated

Page.clearDeviceMetricsOverride ExperimentalDeprecated

<u>Page.clearDeviceOrientationOverride</u> ExperimentalDeprecated

Page.deleteCookie ExperimentalDeprecated

Page.getCookies ExperimentalDeprecated

Page.getManifestIcons ExperimentalDeprecated

Page.removeScriptToEvaluateOnLoad ExperimentalDeprecated

Page.setDeviceMetricsOverride ExperimentalDeprecated

Page.setDeviceOrientationOverride ExperimentalDeprecated

Page.setDownloadBehavior ExperimentalDeprecated

Page.setTouchEmulationEnabled ExperimentalDeprecated

Events

Page.domContentEventFired

Page.fileChooserOpened

Page.frameAttached

Page.frameDetached

Page.frameNavigated

Page.interstitialHidden

Page.interstitialShown

Page.javascriptDialogClosed

Page.javascriptDialogOpening

Page.lifecycleEvent

Page.loadEventFired

Page.windowOpen

Page.frameClearedScheduledNavigation Deprecated

Page.frameScheduledNavigation Deprecated

Page.backForwardCacheNotUsed Experimental

Page.compilationCacheProduced Experimental

Page.documentOpened Experimental

Page.frameRequestedNavigation Experimental

Page.frameResized Experimental

Page.frameStartedLoading Experimental

Page.frameStoppedLoading Experimental

Page.navigatedWithinDocument Experimental

Page.screencastFrame Experimental

Page.screencastVisibilityChanged Experimental

Page.downloadProgress ExperimentalDeprecated

Page.downloadWillBegin ExperimentalDeprecated

Types

Page.AppManifestError

Page.DialogType

Page.Frame

Page.FrameId

Page.FrameTree

Page.LayoutViewport

Page.NavigationEntry

Page.ScriptIdentifier

Page.TransitionType

Page.Viewport

Page. Visual Viewport

Page.AdFrameExplanation Experimental

Page.AdFrameStatus Experimental

Page.AdFrameType Experimental

Page.AdScriptId Experimental

Page.AppManifestParsedProperties Experimental

Page.AutoResponseMode Experimental

Page.BackForwardCacheNotRestoredExplanation Experimental

Page.BackForwardCacheNotRestoredExplanationTree Experimental

Page.BackForwardCacheNotRestoredReason Experimental

Page.BackForwardCacheNotRestoredReasonType Experimental

Page.ClientNavigationDisposition Experimental

Page.ClientNavigationReason Experimental

Page.CompilationCacheParams Experimental

Page.CrossOriginIsolatedContextType Experimental

Page.FontFamilies Experimental

Page.FontSizes Experimental

Page.FrameResource Experimental

Page.FrameResourceTree Experimental

Page.GatedAPIFeatures Experimental

Page.InstallabilityError Experimental

Page.InstallabilityErrorArgument Experimental

Page.NavigationType Experimental

Page.OriginTrial Experimental

Page.OriginTrialStatus Experimental

Page.OriginTrialToken Experimental

Page.OriginTrialTokenStatus Experimental

Page. Origin Trial Token With Status Experimental

Page.OriginTrialUsageRestriction Experimental

Page.PermissionsPolicyBlockLocator Experimental

Page.PermissionsPolicyBlockReason Experimental

Page.PermissionsPolicyFeature Experimental

Page.PermissionsPolicyFeatureState Experimental

Page.ReferrerPolicy Experimental

Page.ScreencastFrameMetadata Experimental

Page.ScriptFontFamilies Experimental

Page.SecureContextType Experimental

Methods

Page.addScriptToEvaluateOnNewDocument

Evaluates given script in every frame upon creation (before loading frame's scripts).

parameters

source

string

worldName

string

If specified, creates an isolated world with the given name and evaluates given script in it. This world name will be used as the ExecutionContextDescription::name when the corresponding event is emitted.

Experimental includeCommandLineAPI boolean

Specifies whether command line API should be available to the script, defaults to false.

Experimental runImmediately

boolean

If true, runs the script immediately on existing execution contexts or worlds. Default: false.

Experimental

Return Object

identifier

ScriptIdentifier

Identifier of the added script.

Page.bringToFront

Brings page to front (activates tab).

Page.captureScreenshot

Capture page screenshot.

parameters

format

string

Image compression format (defaults to png).

Allowed Values: jpeg, png, webp

quality

integer

Compression quality from range [0..100] (jpeg only).

clip

Viewport

Capture the screenshot of a given region only.

fromSurface

boolean

Capture the screenshot from the surface, rather than the view. Defaults to true.

```
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```

Experimental captureBeyondViewport boolean

Capture the screenshot beyond the viewport. Defaults to false.

Experimental optimizeForSpeed boolean

Optimize image encoding for speed, not for resulting size (defaults to false)

Experimental

Return Object

data

string

Base64-encoded image data. (Encoded as a base64 string when passed over JSON)

Page.createIsolatedWorld

Creates an isolated world for the given frame.

parameters

frameId

FrameId

Id of the frame in which the isolated world should be created.

worldName

string

An optional name which is reported in the Execution Context.

grantUniveralAccess

boolean

Whether or not universal access should be granted to the isolated world. This is a powerful option, use with caution.

Return Object

executionContextId

Runtime.ExecutionContextId

Execution context of the isolated world.

Page.disable

Disables page domain notifications.

Page.enable

Enables page domain notifications.

Page.getAppManifest

Return Object

```
url
```

string

Manifest location.

errors

array[AppManifestError]

data

string

Manifest content.

parsed

<u>AppManifestParsedProperties</u>

Parsed manifest properties

Experimental

Page.getFrameTree

Returns present frame tree structure.

Return Object

frameTree

FrameTree

Present frame tree structure.

Page.getLayoutMetrics

Returns metrics relating to the layouting of the page, such as viewport bounds/scale.

Return Object

layoutViewport

LayoutViewport

Deprecated metrics relating to the layout viewport. Is in device pixels. Use csslayoutViewport instead.

Deprecated

visualViewport

<u>VisualViewport</u>

Deprecated metrics relating to the visual viewport. Is in device pixels. Use cssVisualViewport instead.

Deprecated

contentSize

DOM.Rect

Deprecated size of scrollable area. Is in DP. Use cssContentSize instead.

Deprecated cssLayoutViewport

LayoutViewport

Metrics relating to the layout viewport in CSS pixels.

cssVisualViewport

<u>VisualViewport</u>

Metrics relating to the visual viewport in CSS pixels.

cssContentSize

DOM.Rect

Size of scrollable area in CSS pixels.

Page.getNavigationHistory

Returns navigation history for the current page.

Return Object

currentIndex

integer

Index of the current navigation history entry.

entries

array[NavigationEntry]

Array of navigation history entries.

Page.handleJavaScriptDialog

Accepts or dismisses a JavaScript initiated dialog (alert, confirm, prompt, or onbeforeunload).

parameters

accept

boolean

Whether to accept or dismiss the dialog.

promptText

string

The text to enter into the dialog prompt before accepting. Used only if this is a prompt dialog.

Page.navigate

Navigates current page to the given URL.

parameters

url

string

URL to navigate the page to.

referrer

string

Referrer URL.

transitionType

TransitionType

Intended transition type.

frameId

FrameId

Frame id to navigate, if not specified navigates the top frame.

referrerPolicy

ReferrerPolicy

Referrer-policy used for the navigation.

Experimental

Return Object

frameId

FrameId

Frame id that has navigated (or failed to navigate)

loaderId

Network.LoaderId

Loader identifier. This is omitted in case of same-document navigation, as the previously committed loaderId would not change.

errorText

string

User friendly error message, present if and only if navigation has failed.

Page.navigateToHistoryEntry

Navigates current page to the given history entry.

```
parameters
```

entryId

integer

Unique id of the entry to navigate to.

Page.printToPDF

Print page as PDF.

parameters

landscape

boolean

Paper orientation. Defaults to false.

displayHeaderFooter

boolean

Display header and footer. Defaults to false.

printBackground

boolean

Print background graphics. Defaults to false.

scale

number

Scale of the webpage rendering. Defaults to 1.

paperWidth

number

Paper width in inches. Defaults to 8.5 inches.

paperHeight

number

Paper height in inches. Defaults to 11 inches.

marginTop

number

Top margin in inches. Defaults to 1cm (~0.4 inches).

marginBottom

number

Bottom margin in inches. Defaults to 1cm (~0.4 inches).

```
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marginLeft
number
```

Left margin in inches. Defaults to 1cm (~0.4 inches).

margin Right

number

Right margin in inches. Defaults to 1cm (~0.4 inches).

pageRanges

string

Paper ranges to print, one based, e.g., '1-5, 8, 11-13'. Pages are printed in the document order, not in the order specified, and no more than once. Defaults to empty string, which implies the entire document is printed. The page numbers are quietly capped to actual page count of the document, and ranges beyond the end of the document are ignored. If this results in no pages to print, an error is reported. It is an error to specify a range with start greater than end.

headerTemplate

string

HTML template for the print header. Should be valid HTML markup with following classes used to inject printing values into them:

- date: formatted print date
- title: document title
- url: document location
- pageNumber: current page number
- totalPages: total pages in the document

For example, would generate span containing the title.

footerTemplate

string

HTML template for the print footer. Should use the same format as the headerTemplate.

preferCSSPageSize

boolean

Whether or not to prefer page size as defined by css. Defaults to false, in which case the content will be scaled to fit the paper size.

transferMode

string

return as stream

Allowed Values: ReturnAsBase64, ReturnAsStream

Experimental

generateTaggedPDF

boolean

Whether or not to generate tagged (accessible) PDF. Defaults to embedder choice.

Experimental

Return Object

data

string

Base64-encoded pdf data. Empty if |returnAsStream| is specified. (Encoded as a base64 string when passed over JSON)

stream

IO.StreamHandle

A handle of the stream that holds resulting PDF data.

Experimental

Page.reload

Reloads given page optionally ignoring the cache.

parameters

ignoreCache

boolean

If true, browser cache is ignored (as if the user pressed Shift+refresh).

${\it script} To Evaluate On Load$

string

If set, the script will be injected into all frames of the inspected page after reload. Argument will be ignored if reloading dataURL origin.

Page.removeScriptToEvaluateOnNewDocument

Removes given script from the list.

parameters

identifier

ScriptIdentifier

Page.resetNavigationHistory

Resets navigation history for the current page.

Page.setDocumentContent

Sets given markup as the document's HTML.

parameters

```
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 frameId
       FrameId
       Frame id to set HTML for.
 html
       string
       HTML content to set.
 Page.stopLoading #
 Force the page stop all navigations and pending resource fetches.
 Page.clearGeolocationOverride Deprecated #
 Clears the overridden Geolocation Position and Error.
 Page.setGeolocationOverride Deprecated #
 Overrides the Geolocation Position or Error. Omitting any of the parameters emulates position unavailable.
 parameters
 latitude
       number
       Mock latitude
 longitude
       number
       Mock longitude
 accuracy
       number
       Mock accuracy
 Page.addCompilationCache Experimental #
 Seeds compilation cache for given url. Compilation cache does not survive cross-process navigation.
 parameters
 url
       string
```

Base64-encoded data (Encoded as a base64 string when passed over JSON)

Page.captureSnapshot Experimental #

data

string

Returns a snapshot of the page as a string. For MHTML format, the serialization includes iframes, shadow DOM, external resources, and element-inline styles.

parameters

format

string

Format (defaults to mhtml).

Allowed Values: mhtml

Return Object

data

string

Serialized page data.

Page.clearCompilationCache Experimental

Clears seeded compilation cache.

Page.close Experimental

Tries to close page, running its beforeunload hooks, if any.

Page.crash Experimental

Crashes renderer on the IO thread, generates minidumps.

Page.generateTestReport Experimental

Generates a report for testing.

parameters

message

string

Message to be displayed in the report.

group

string

Specifies the endpoint group to deliver the report to.

Page.getAdScriptId Experimental

parameters

frameId

FrameId

Return Object

```
adScriptId
```

AdScriptId

Identifies the bottom-most script which caused the frame to be labelled as an ad. Only sent if frame is labelled as an ad and id is available.

Page.getAppId Experimental

Returns the unique (PWA) app id. Only returns values if the feature flag 'WebAppEnableManifestId' is enabled

Return Object

```
appId
```

string

App id, either from manifest's id attribute or computed from start url

recommendedId

string

Recommendation for manifest's id attribute to match current id computed from start url

Page.getInstallabilityErrors Experimental

Return Object

```
installabilityErrors
array[InstallabilityError]
```

Page.getOriginTrials Experimental

Get Origin Trials on given frame.

parameters

frameId

FrameId

Return Object

```
originTrials
array[ OriginTrial ]
```

Page.getPermissionsPolicyState Experimental

Get Permissions Policy state on given frame.

Return Object

frameTree

<u>FrameResourceTree</u>

Present frame / resource tree structure.

Page.produceCompilationCache Experimental

Requests backend to produce compilation cache for the specified scripts. scripts are appeneded to the list of scripts for which the cache would be produced. The list may be reset during page navigation. When script with a matching URL is encountered, the cache is optionally produced upon backend discretion, based on internal heuristics. See also: Page.compilationCacheProduced.

parameters

scripts

array[CompilationCacheParams]

Page.screencastFrameAck Experimental

Acknowledges that a screencast frame has been received by the frontend.

parameters

sessionId

integer

Frame number.

Page.searchInResource Experimental

Searches for given string in resource content.

parameters

frameId

FrameId

Frame id for resource to search in.

url

string

URL of the resource to search in.

query

string

String to search for.

caseSensitive

boolean

If true, search is case sensitive.

isRegex

boolean

If true, treats string parameter as regex.

Return Object

```
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 result
        array[ <a href="Debugger.SearchMatch">Debugger.SearchMatch</a> ]
        List of search matches.
 Page.setAdBlockingEnabled Experimental #
 Enable Chrome's experimental ad filter on all sites.
 parameters
 enabled
       boolean
        Whether to block ads.
 Page.setBypassCSP Experimental #
 Enable page Content Security Policy by-passing.
 parameters
 enabled
        boolean
        Whether to bypass page CSP.
 Page.setFontFamilies Experimental #
 Set generic font families.
 parameters
 fontFamilies
        FontFamilies
        Specifies font families to set. If a font family is not specified, it won't be changed.
 forScripts
        array[ ScriptFontFamilies ]
        Specifies font families to set for individual scripts.
 Page.setFontSizes Experimental #
 Set default font sizes.
 parameters
 fontSizes
```

FontSizes

Specifies font sizes to set. If a font size is not specified, it won't be changed.

Page.setInterceptFileChooserDialog Experimental

Intercept file chooser requests and transfer control to protocol clients. When file chooser interception is enabled, native file chooser dialog is not shown. Instead, a protocol event Page.fileChooserOpened is emitted.

parameters

enabled

boolean

Page.setLifecycleEventsEnabled Experimental

Controls whether page will emit lifecycle events.

parameters

enabled

boolean

If true, starts emitting lifecycle events.

Page.setPrerenderingAllowed Experimental

Enable/disable prerendering manually.

This command is a short-term solution for https://crbug.com/1440085. See https://docs.google.com/document/d/12HVmFxYj5Jc-eJr5OmWsa2bqTJsbgGLKI6ZIyx0 wpA for more details.

TODO(<u>https://crbug.com/1440085</u>): Remove this once Puppeteer supports tab targets.

parameters

isAllowed

boolean

Page.setRPHRegistrationMode Experimental

Extensions for Custom Handlers API: https://html.spec.whatwg.org/multipage/system-state.html#rph-automation

parameters

mode

<u>AutoResponseMode</u>

Page.setSPCTransactionMode Experimental

Sets the Secure Payment Confirmation transaction mode. https://w3c.github.io/secure-payment-confirmation/#sctn-automation-set-spc-transaction-mode

parameters

mode

<u>AutoResponseMode</u>

Page.setWebLifecycleState Experimental

Tries to update the web lifecycle state of the page. It will transition the page to the given state according to: https://github.com/WICG/web-lifecycle/

parameters

state

string

Target lifecycle state

Allowed Values: frozen, active

Page.startScreencast Experimental

Starts sending each frame using the screencastFrame event.

parameters

```
format
```

string

Image compression format.

Allowed Values: jpeg, png

quality

integer

Compression quality from range [0..100].

maxWidth

integer

Maximum screenshot width.

maxHeight

integer

Maximum screenshot height.

everyNthFrame

integer

Send every n-th frame.

Page.stopScreencast Experimental

Stops sending each frame in the screencastFrame.

Page.waitForDebugger Experimental

Pauses page execution. Can be resumed using generic Runtime.runIfWaitingForDebugger.

Page.addScriptToEvaluateOnLoad ExperimentalDeprecated

Deprecated, please use addScriptToEvaluateOnNewDocument instead.

parameters

scriptSource string

Return Object

identifier

ScriptIdentifier

Identifier of the added script.

Page.clearDeviceMetricsOverride ExperimentalDeprecated

Clears the overridden device metrics.

Page.clearDeviceOrientationOverride ExperimentalDeprecated

Clears the overridden Device Orientation.

Page.deleteCookie ExperimentalDeprecated

Deletes browser cookie with given name, domain and path.

parameters

cookieName

string

Name of the cookie to remove.

url

string

URL to match cooke domain and path.

Page.getCookies ExperimentalDeprecated

Returns all browser cookies for the page and all of its subframes. Depending on the backend support, will return detailed cookie information in the cookies field.

Return Object

```
cookies
```

array[Network.Cookie]

Array of cookie objects.

Page.getManifestIcons ExperimentalDeprecated

Deprecated because it's not guaranteed that the returned icon is in fact the one used for PWA installation.

Return Object

primaryIcon string

Page.removeScriptToEvaluateOnLoad ExperimentalDeprecated

Deprecated, please use removeScriptToEvaluateOnNewDocument instead.

parameters

identifier

ScriptIdentifier

Page.setDeviceMetricsOverride ExperimentalDeprecated

Overrides the values of device screen dimensions (window.screen.width, window.screen.height, window.innerWidth, window.innerHeight, and "device-width"/"device-height"-related CSS media query results).

parameters

width

integer

Overriding width value in pixels (minimum 0, maximum 10000000). 0 disables the override.

height

integer

Overriding height value in pixels (minimum 0, maximum 10000000). 0 disables the override.

deviceScaleFactor

number

Overriding device scale factor value. 0 disables the override.

mobile

boolean

Whether to emulate mobile device. This includes viewport meta tag, overlay scrollbars, text autosizing and more.

```
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 scale
       number
       Scale to apply to resulting view image.
 screenWidth
       integer
       Overriding screen width value in pixels (minimum 0, maximum 10000000).
 screenHeight
       integer
       Overriding screen height value in pixels (minimum 0, maximum 10000000).
 positionX
       integer
       Overriding view X position on screen in pixels (minimum 0, maximum 10000000).
 positionY
       integer
       Overriding view Y position on screen in pixels (minimum 0, maximum 10000000).
 dontSetVisibleSize
       boolean
       Do not set visible view size, rely upon explicit setVisibleSize call.
 screenOrientation
       Emulation.ScreenOrientation
       Screen orientation override.
 viewport
       Viewport
       The viewport dimensions and scale. If not set, the override is cleared.
 Page.setDeviceOrientationOverride ExperimentalDeprecated #
 Overrides the Device Orientation.
 parameters
 alpha
       number
       Mock alpha
 beta
       number
       Mock beta
```

Page.setDownloadBehavior ExperimentalDeprecated

Set the behavior when downloading a file.

parameters

behavior

string

Whether to allow all or deny all download requests, or use default Chrome behavior if available (otherwise deny).

Allowed Values: deny, allow, default downloadPath string

The default path to save downloaded files to. This is required if behavior is set to 'allow'

Page.setTouchEmulationEnabled ExperimentalDeprecated

Toggles mouse event-based touch event emulation.

parameters

enabled

boolean

Whether the touch event emulation should be enabled.

configuration

string

Touch/gesture events configuration. Default: current platform.

Allowed Values: mobile, desktop

Events

Page.domContentEventFired

parameters

timestamp

Network.MonotonicTime

Page.fileChooserOpened

Emitted only when page.interceptFileChooser is enabled.

parameters

frameId

FrameId

Id of the frame containing input node.

Experimental

mode

string

Input mode.

Allowed Values: selectSingle, selectMultiple

backendNodeId

DOM.BackendNodeId

Input node id. Only present for file choosers opened via an <input type="file"> element.

Experimental

Page.frameAttached

Fired when frame has been attached to its parent.

parameters

frameId

FrameId

Id of the frame that has been attached.

parentFrameId

FrameId

Parent frame identifier.

stack

Runtime.StackTrace

JavaScript stack trace of when frame was attached, only set if frame initiated from script.

Page.frameDetached

Fired when frame has been detached from its parent.

parameters

frameId

FrameId

Id of the frame that has been detached.

```
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 reason
       string
       Allowed Values: remove, swap
       Experimental
 Page.frameNavigated #
 Fired once navigation of the frame has completed. Frame is now associated with the new loader.
 parameters
 frame
       Frame
       Frame object.
 type
       NavigationType
       Experimental
 Page.interstitialHidden #
 Fired when interstitial page was hidden
 Page.interstitialShown #
 Fired when interstitial page was shown
 Page.javascriptDialogClosed #
 Fired when a JavaScript initiated dialog (alert, confirm, prompt, or onbeforeunload) has been closed.
 parameters
 result
       boolean
       Whether dialog was confirmed.
 userInput
       string
       User input in case of prompt.
 Page.javascriptDialogOpening #
 Fired when a JavaScript initiated dialog (alert, confirm, prompt, or onbeforeunload) is about to open.
 parameters
```

url

string

```
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       Frame url.
 message
       string
       Message that will be displayed by the dialog.
 type
       DialogType
       Dialog type.
 hasBrowserHandler
       boolean
       True iff browser is capable showing or acting on the given dialog. When browser has no dialog handler for
       given target, calling alert while Page domain is engaged will stall the page execution. Execution can be
       resumed via calling Page.handleJavaScriptDialog.
 defaultPrompt
       string
       Default dialog prompt.
 Page.lifecycleEvent #
 Fired for top level page lifecycle events such as navigation, load, paint, etc.
 parameters
 frameId
       FrameId
       Id of the frame.
 loaderId
       Network.LoaderId
       Loader identifier. Empty string if the request is fetched from worker.
 name
       string
 timestamp
       Network.MonotonicTime
 Page.loadEventFired #
 parameters
 timestamp
```

Netwo

Network.MonotonicTime

Page.windowOpen

Fired when a new window is going to be opened, via window.open(), link click, form submission, etc.

ClientNavigationReason

The reason for the navigation.

```
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url
string
```

The destination URL for the scheduled navigation.

Page.backForwardCacheNotUsed Experimental

Fired for failed bfcache history navigations if BackForwardCache feature is enabled. Do not assume any ordering with the Page.frameNavigated event. This event is fired only for main-frame history navigation where the document changes (non-same-document navigations), when bfcache navigation fails.

parameters

loaderId

Network.LoaderId

The loader id for the associated navgation.

frameId

FrameId

The frame id of the associated frame.

not Restored Explanations

array[BackForwardCacheNotRestoredExplanation]

Array of reasons why the page could not be cached. This must not be empty.

not Restored Explanations Tree

<u>BackForwardCacheNotRestoredExplanationTree</u>

Tree structure of reasons why the page could not be cached for each frame.

Page.compilationCacheProduced Experimental

Issued for every compilation cache generated. Is only available if Page.setGenerateCompilationCache is enabled.

parameters

```
url string data string
```

Base64-encoded data (Encoded as a base64 string when passed over JSON)

Page.documentOpened Experimental

Fired when opening document to write to.

parameters

frame

Frame

Frame object.

Page.frameRequestedNavigation Experimental

Fired when a renderer-initiated navigation is requested. Navigation may still be cancelled after the event is issued.

parameters

frameId

FrameId

Id of the frame that is being navigated.

reason

ClientNavigationReason

The reason for the navigation.

url

string

The destination URL for the requested navigation.

disposition

ClientNavigationDisposition

The disposition for the navigation.

Page.frameResized Experimental

Page.frameStartedLoading Experimental

Fired when frame has started loading.

parameters

frameId

FrameId

Id of the frame that has started loading.

Page.frameStoppedLoading Experimental

Fired when frame has stopped loading.

parameters

frameId

FrameId

Id of the frame that has stopped loading.

Page.navigatedWithinDocument Experimental

Fired when same-document navigation happens, e.g. due to history API usage or anchor navigation.

parameters

frameId

FrameId

Id of the frame.

url

string

Frame's new url.

Page.screencastFrame Experimental

Compressed image data requested by the startScreencast.

parameters

data

string

Base64-encoded compressed image. (Encoded as a base64 string when passed over JSON)

metadata

ScreencastFrameMetadata

Screencast frame metadata.

sessionId

integer

Frame number.

Page.screencastVisibilityChanged Experimental

Fired when the page with currently enabled screencast was shown or hidden `.

parameters

visible

boolean

True if the page is visible.

Page.downloadProgress ExperimentalDeprecated

Fired when download makes progress. Last call has |done| == true. Deprecated. Use Browser.downloadProgress instead.

parameters

guid

string

Global unique identifier of the download.

totalBytes

number

Total expected bytes to download.

receivedBytes

number

Total bytes received.

state

string

Download status.

Allowed Values: inProgress, completed, canceled

Page.downloadWillBegin ExperimentalDeprecated

Fired when page is about to start a download. Deprecated. Use Browser.downloadWillBegin instead.

parameters

frameId

FrameId

Id of the frame that caused download to begin.

guid

string

Global unique identifier of the download.

url

string

URL of the resource being downloaded.

suggestedFilename

string

Suggested file name of the resource (the actual name of the file saved on disk may differ).

Types

9/13/23, 7:46 PM Page.AppManifestError # Error while paring app manifest. Type: **object** properties message string Error message. critical integer If criticial, this is a non-recoverable parse error. line integer Error line. column integer Error column. Page.DialogType # Javascript dialog type. Allowed Values: alert, confirm, prompt, beforeunload Type: string Page.Frame # Information about the Frame on the page. Type: object properties id **FrameId** Frame unique identifier. parentId FrameId

Parent frame identifier.

```
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 loaderId
        Network.LoaderId
        Identifier of the loader associated with this frame.
 name
        string
        Frame's name as specified in the tag.
 url
        string
        Frame document's URL without fragment.
 urlFragment
        string
        Frame document's URL fragment including the '#'.
        Experimental
 domainAndRegistry
        string
        Frame document's registered domain, taking the public suffixes list into account. Extracted from the
        Frame's url. Example URLs: <a href="http://www.google.com/file.html">http://a.b.co.uk/file.html</a> "google.com" <a href="http://a.b.co.uk/file.html">http://a.b.co.uk/file.html</a> ->
        "b.co.uk"
        Experimental
 securityOrigin
        string
        Frame document's security origin.
 mimeType
        string
        Frame document's mimeType as determined by the browser.
 unreachableUrl
        string
        If the frame failed to load, this contains the URL that could not be loaded. Note that unlike url above, this
        URL may contain a fragment.
        Experimental
 adFrameStatus
        AdFrameStatus
        Indicates whether this frame was tagged as an ad and why.
        Experimental
 secureContextType
        <u>SecureContextType</u>
```

file:///C:/Users/brian/Desktop/School/Fall_2023/COMP_482_NLP/week_2/python/Scraping/temp.html

Indicates whether the main document is a secure context and explains why that is the case.

```
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       Experimental
 crossOrigin Isolated Context Type\\
       <u>CrossOriginIsolatedContextType</u>
       Indicates whether this is a cross origin isolated context.
       Experimental
 gatedAPIFeatures
       array[ GatedAPIFeatures ]
       Indicated which gated APIs / features are available.
       Experimental
 Page.FrameId #
 Unique frame identifier.
 Type: string
 Page.FrameTree #
 Information about the Frame hierarchy.
 Type: object
 properties
 frame
       Frame
       Frame information for this tree item.
 childFrames
       array[ FrameTree ]
       Child frames.
 Page.LayoutViewport #
 Layout viewport position and dimensions.
 Type: object
 properties
 pageX
       integer
       Horizontal offset relative to the document (CSS pixels).
 pageY
       integer
```

```
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       Vertical offset relative to the document (CSS pixels).
 clientWidth
       integer
       Width (CSS pixels), excludes scrollbar if present.
 clientHeight
       integer
       Height (CSS pixels), excludes scrollbar if present.
 Page.NavigationEntry #
 Navigation history entry.
 Type: object
 properties
 id
       integer
       Unique id of the navigation history entry.
 url
       string
       URL of the navigation history entry.
 userTypedURL
       string
       URL that the user typed in the url bar.
 title
       string
       Title of the navigation history entry.
 transitionType
       TransitionType
       Transition type.
 Page.ScriptIdentifier #
 Unique script identifier.
 Type: string
 Page.TransitionType #
```

Transition type.

```
Allowed Values: link, typed, address_bar, auto_bookmark, auto_subframe, manual_subframe, generated,
auto toplevel, form submit, reload, keyword, keyword generated, other
Type: string
Page.Viewport #
Viewport for capturing screenshot.
Type: object
properties
\mathbf{X}
      number
      X offset in device independent pixels (dip).
y
      number
      Y offset in device independent pixels (dip).
width
      number
      Rectangle width in device independent pixels (dip).
height
      number
      Rectangle height in device independent pixels (dip).
scale
      number
      Page scale factor.
Page.VisualViewport #
Visual viewport position, dimensions, and scale.
Type: object
properties
offsetX
      number
      Horizontal offset relative to the layout viewport (CSS pixels).
offsetY
      number
```

```
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       Vertical offset relative to the layout viewport (CSS pixels).
 pageX
       number
       Horizontal offset relative to the document (CSS pixels).
 pageY
       number
       Vertical offset relative to the document (CSS pixels).
 clientWidth
       number
       Width (CSS pixels), excludes scrollbar if present.
 clientHeight
       number
       Height (CSS pixels), excludes scrollbar if present.
 scale
       number
       Scale relative to the ideal viewport (size at width=device-width).
 zoom
       number
       Page zoom factor (CSS to device independent pixels ratio).
 Page.AdFrameExplanation Experimental #
 Allowed Values: ParentIsAd, CreatedByAdScript, MatchedBlockingRule
 Type: string
 Page.AdFrameStatus Experimental #
 Indicates whether a frame has been identified as an ad and why.
 Type: object
 properties
 adFrameType
       AdFrameType
 explanations
       array[ AdFrameExplanation ]
```

Page.AdFrameType Experimental

Indicates whether a frame has been identified as an ad.

Allowed Values: none, child, root

Type: string

Page.AdScriptId Experimental

Identifies the bottom-most script which caused the frame to be labelled as an ad.

Type: object

properties

scriptId

Runtime.ScriptId

Script Id of the bottom-most script which caused the frame to be labelled as an ad.

debuggerId

Runtime.UniqueDebuggerId

Id of adScriptId's debugger.

Page.AppManifestParsedProperties Experimental

Parsed app manifest properties.

Type: object

properties

scope

string

Computed scope value

Page.AutoResponseMode Experimental

Enum of possible auto-reponse for permisison / prompt dialogs.

Allowed Values: none, autoAccept, autoReject, autoOptOut

Type: string

Page.BackForwardCacheNotRestoredExplanation Experimental

Type: object

properties

type

<u>BackForwardCacheNotRestoredReasonType</u>

Type of the reason

reason

BackForwardCacheNotRestoredReason

Not restored reason

context

string

Context associated with the reason. The meaning of this context is dependent on the reason:

• EmbedderExtensionSentMessageToCachedFrame: the extension ID.

Page.BackForwardCacheNotRestoredExplanationTree Experimental

```
Type: object

properties

url
string
URL of each frame

explanations
array[ BackForwardCacheNotRestoredExplanation ]
Not restored reasons of each frame

children
array[ BackForwardCacheNotRestoredExplanationTree ]
Array of children frame
```

Page.BackForwardCacheNotRestoredReason Experimental

List of not restored reasons for back-forward cache.

Allowed Values: NotPrimaryMainFrame, BackForwardCacheDisabled, RelatedActiveContentsExist, HTTPStatusNotOK, SchemeNotHTTPOrHTTPS, Loading, WasGrantedMediaAccess, DisableForRenderFrameHostCalled, DomainNotAllowed, HTTPMethodNotGET, SubframeIsNavigating, Timeout, CacheLimit, JavaScriptExecution, RendererProcessKilled, RendererProcessCrashed, SchedulerTrackedFeatureUsed, ConflictingBrowsingInstance, CacheFlushed, ServiceWorkerVersionActivation, SessionRestored, ServiceWorkerPostMessage, EnteredBackForwardCacheBeforeServiceWorkerHostAdded, RenderFrameHostReused SameSite, RenderFrameHostReused CrossSite, ServiceWorkerClaim, IgnoreEventAndEvict, HaveInnerContents, TimeoutPuttingInCache, BackForwardCacheDisabledByLowMemory, BackForwardCacheDisabledByCommandLine, NetworkRequestDatapipeDrainedAsBytesConsumer, NetworkRequestRedirected, NetworkRequestTimeout, NetworkExceedsBufferLimit, NavigationCancelledWhileRestoring, NotMostRecentNavigationEntry, BackForwardCacheDisabledForPrerender, UserAgentOverrideDiffers, ForegroundCacheLimit, BrowsingInstanceNotSwapped, BackForwardCacheDisabledForDelegate, UnloadHandlerExistsInMainFrame, UnloadHandlerExistsInSubFrame, ServiceWorkerUnregistration, CacheControlNoStore, CacheControlNoStoreCookieModified, CacheControlNoStoreHTTPOnlyCookieModified, NoResponseHead, Unknown,

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ActivationNavigationsDisallowedForBug1234857, ErrorDocument, FencedFramesEmbedder, CookieDisabled, HTTPAuthRequired, CookieFlushed, WebSocket, WebTransport, WebRTC, MainResourceHasCacheControlNoStore, MainResourceHasCacheControlNoCache, SubresourceHasCacheControlNoStore, SubresourceHasCacheControlNoCache, ContainsPlugins, DocumentLoaded, DedicatedWorkerOrWorklet, OutstandingNetworkRequestOthers, RequestedMIDIPermission, RequestedAudioCapturePermission, RequestedVideoCapturePermission, RequestedBackForwardCacheBlockedSensors, RequestedBackgroundWorkPermission, BroadcastChannel, WebXR, SharedWorker, WebLocks, WebHID, WebShare, RequestedStorageAccessGrant, WebNfc, OutstandingNetworkRequestFetch, OutstandingNetworkRequestXHR, AppBanner, Printing, WebDatabase, PictureInPicture, Portal, SpeechRecognizer, IdleManager, PaymentManager, SpeechSynthesis, KeyboardLock, WebOTPService, OutstandingNetworkRequestDirectSocket, InjectedJavascript, InjectedStyleSheet, KeepaliveRequest, IndexedDBEvent, Dummy, JsNetworkRequestReceivedCacheControlNoStoreResource, WebRTCSticky, WebTransportSticky, WebSocketSticky, ContentSecurityHandler, ContentWebAuthenticationAPI, ContentFileChooser, ContentSerial, ContentFileSystemAccess, ContentMediaDevicesDispatcherHost, ContentWebBluetooth, ContentWebUSB, ContentMediaSessionService, ContentScreenReader, EmbedderPopupBlockerTabHelper, EmbedderSafeBrowsingTriggeredPopupBlocker, EmbedderSafeBrowsingThreatDetails, EmbedderAppBannerManager, EmbedderDomDistillerViewerSource, EmbedderDomDistillerSelfDeletingRequestDelegate, EmbedderOomInterventionTabHelper, EmbedderOfflinePage, EmbedderChromePasswordManagerClientBindCredentialManager, EmbedderPermissionRequestManager, EmbedderModalDialog, EmbedderExtensions, EmbedderExtensionMessaging, EmbedderExtensionMessagingForOpenPort, EmbedderExtensionSentMessageToCachedFrame

Type: string

Page.BackForwardCacheNotRestoredReasonType Experimental

Types of not restored reasons for back-forward cache.

Allowed Values: SupportPending, PageSupportNeeded, Circumstantial

Type: string

Page.ClientNavigationDisposition Experimental

Allowed Values: currentTab, newTab, newWindow, download

Type: string

Page.ClientNavigationReason Experimental

Allowed Values: formSubmissionGet, formSubmissionPost, httpHeaderRefresh, scriptInitiated, metaTagRefresh, pageBlockInterstitial, reload, anchorClick

Type: string

Page.CompilationCacheParams Experimental

Per-script compilation cache parameters for Page.produceCompilationCache

Type: object

properties

url

string

The URL of the script to produce a compilation cache entry for.

eager

boolean

A hint to the backend whether eager compilation is recommended. (the actual compilation mode used is upon backend discretion).

Page.CrossOriginIsolatedContextType Experimental

Indicates whether the frame is cross-origin isolated and why it is the case.

Allowed Values: Isolated, NotIsolated, NotIsolatedFeatureDisabled

Type: string

Page.FontFamilies Experimental

Generic font families collection.

Type: object

properties

standard

string

The standard font-family.

fixed

string

The fixed font-family.

serif

string

The serif font-family.

sansSerif

string

The sansSerif font-family.

cursive

string

The cursive font-family.

fantasy

```
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       string
       The fantasy font-family.
 math
       string
       The math font-family.
 Page.FontSizes Experimental #
 Default font sizes.
 Type: object
 properties
 standard
       integer
       Default standard font size.
 fixed
       integer
       Default fixed font size.
 Page.FrameResource Experimental #
 Information about the Resource on the page.
 Type: object
 properties
 url
       string
       Resource URL.
 type
       Network.ResourceType
       Type of this resource.
 mimeType
       string
       Resource mimeType as determined by the browser.
 lastModified
       Network.TimeSinceEpoch
       last-modified timestamp as reported by server.
```

```
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 contentSize
       number
       Resource content size.
 failed
       boolean
       True if the resource failed to load.
 canceled
       boolean
       True if the resource was canceled during loading.
 Page.FrameResourceTree Experimental #
 Information about the Frame hierarchy along with their cached resources.
 Type: object
 properties
 frame
       Frame
       Frame information for this tree item.
 childFrames
       array[ FrameResourceTree ]
       Child frames.
 resources
       array[ FrameResource ]
       Information about frame resources.
 Page.GatedAPIFeatures Experimental #
 Allowed Values: SharedArrayBuffers, SharedArrayBuffersTransferAllowed, PerformanceMeasureMemory,
 PerformanceProfile
 Type: string
 Page.InstallabilityError Experimental #
 The installability error
 Type: object
 properties
```

errorId

```
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       string
       The error id (e.g. 'manifest-missing-suitable-icon').
 errorArguments
       array[ InstallabilityErrorArgument ]
       The list of error arguments (e.g. {name:'minimum-icon-size-in-pixels', value:'64'}).
 Page.InstallabilityErrorArgument Experimental #
 Type: object
 properties
 name
       string
       Argument name (e.g. name: 'minimum-icon-size-in-pixels').
 value
       string
       Argument value (e.g. value:'64').
 Page.NavigationType Experimental #
 The type of a frameNavigated event.
 Allowed Values: Navigation, BackForwardCacheRestore
 Type: string
 Page.OriginTrial Experimental #
 Type: object
 properties
 trialName
       string
 status
       OriginTrialStatus
 tokensWithStatus
       array[ OriginTrialTokenWithStatus ]
 Page.OriginTrialStatus Experimental #
 Status for an Origin Trial.
 Allowed Values: Enabled, ValidTokenNotProvided, OSNotSupported, TrialNotAllowed
 Type: string
```

Page.OriginTrialToken Experimental

Type: object

properties

origin string

matchSubDomains

boolean

trialName

string

expiryTime

Network.TimeSinceEpoch

is Third Party

boolean

usageRestriction

OriginTrialUsageRestriction

Page.OriginTrialTokenStatus Experimental

Origin Trial(https://www.chromium.org/blink/origin-trials) support. Status for an Origin Trial token.

Allowed Values: Success, NotSupported, Insecure, Expired, WrongOrigin, InvalidSignature, Malformed, WrongVersion, FeatureDisabled, TokenDisabled, FeatureDisabledForUser, UnknownTrial

Type: string

Page.OriginTrialTokenWithStatus Experimental

Type: object

properties

rawTokenText string parsedToken

OriginTrialToken

parsedToken is present only when the token is extractable and parsable.

status

<u>OriginTrialTokenStatus</u>

Page.OriginTrialUsageRestriction Experimental

Allowed Values: None, Subset

Type: string

Page.PermissionsPolicyBlockLocator Experimental

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Type: object

properties

frameId

FrameId

blockReason

<u>PermissionsPolicyBlockReason</u>

Page.PermissionsPolicyBlockReason Experimental

Reason for a permissions policy feature to be disabled.

Allowed Values: Header, IframeAttribute, InFencedFrameTree, InIsolatedApp

Type: string

Page.PermissionsPolicyFeature Experimental

All Permissions Policy features. This enum should match the one defined in third party/blink/renderer/core/permissions policy/permissions policy features.json5.

Allowed Values: accelerometer, ambient-light-sensor, attribution-reporting, autoplay, bluetooth, browsing-topics, camera, ch-dpr, ch-device-memory, ch-downlink, ch-ect, ch-prefers-color-scheme, ch-prefers-reduced-motion, ch-prefers-reduced-transparency, ch-rtt, ch-save-data, ch-ua, ch-ua-arch, ch-ua-bitness, ch-ua-platform, ch-ua-model, ch-ua-mobile, ch-ua-form-factor, ch-ua-full-version, ch-ua-full-version-list, ch-ua-platform-version, ch-ua-wow64, ch-viewport-height, ch-viewport-width, ch-width, clipboard-read, clipboard-write, compute-pressure, cross-origin-isolated, direct-sockets, display-capture, document-domain, encrypted-media, execution-while-out-of-viewport, execution-while-not-rendered, focus-without-user-activation, fullscreen, frobulate, gamepad, geolocation, gyroscope, hid, identity-credentials-get, idle-detection, interest-cohort, join-ad-interest-group, keyboard-map, local-fonts, magnetometer, microphone, midi, otp-credentials, payment, picture-in-picture, private-aggregation, private-state-token-issuance, private-state-token-redemption, publickey-credentials-get, run-ad-auction, screen-wake-lock, serial, shared-autofill, shared-storage, shared-storage-select-url, smart-card, storage-access, sync-xhr, unload, usb, vertical-scroll, web-share, window-management, window-placement, xr-spatial-tracking

Type: string

Page.PermissionsPolicyFeatureState Experimental

Type: object

properties

feature

<u>PermissionsPolicyFeature</u>

allowed

boolean

locator

<u>PermissionsPolicyBlockLocator</u>

Page.ReferrerPolicy Experimental

The referring-policy used for the navigation.

Allowed Values: noReferrer, noReferrerWhenDowngrade, origin, originWhenCrossOrigin, sameOrigin, strictOrigin, strictOriginWhenCrossOrigin, unsafeUrl

Type: string

Page.ScreencastFrameMetadata Experimental

Screencast frame metadata.

Type: **object**

properties

offsetTop

number

Top offset in DIP.

page Scale Factor

number

Page scale factor.

deviceWidth

number

Device screen width in DIP.

deviceHeight

number

Device screen height in DIP.

scrollOffsetX

number

Position of horizontal scroll in CSS pixels.

scrollOffsetY

number

Position of vertical scroll in CSS pixels.

timestamp

Network.TimeSinceEpoch

Frame swap timestamp.

Page.ScriptFontFamilies Experimental

Font families collection for a script.

Type: object

properties

script

string

Name of the script which these font families are defined for.

fontFamilies

FontFamilies

Generic font families collection for the script.

Page.SecureContextType Experimental

Indicates whether the frame is a secure context and why it is the case.

Allowed Values: Secure, SecureLocalhost, InsecureScheme, InsecureAncestor

Type: string