This is the ExBrowser Command and Function Reference Guide

You will find additional informations in the helpdesk:

http://botfactory.helpdocs.com/

As well as the Youtube Channel:

https://www.youtube.com/channel/UC9loKUazlbSbGEVUqd3SCfQ

1. General Informations

1.1 Changelog

V1.1.9.1 (V1.1.9.0 Was the Version Number for the Beta Releases)

This release is a usability release. I added a lot of checks to detect if someone changed something manually in the browser.

The number 1 reason why people have problems with ExBrowser is because they manually do something in the browser that is automated.

Opening or closing tabs or hitting the Stop button in the browser. Please don't do that! Also tell you customers to NOT do that if you sell your bots!

You can read more abou all the different changes here:

http://www.bot-factory.com/exbrowser-v1-1-9-0-whats-new/

1.2 Supported Browser with ExBrowser Plugin V1.1.9.1

https://botfactory.helpdocs.com/exbrowser-plugin/currently-supported-browser-versions

Firefox 47.0.1 32bit Chrome 52.0.2743.116 m 32 bit

Firefox 48x is NOT supported at the moment. This will take a while (please don't ask. It's not in my hand)

1.3 **FAQ**

Q: What Operating Systems are supported

A: I test with Windows 8.1 and Windows 10. No support for Windows 7 or any other older operating system

Q: Do you support 64bit or 32bit versions of Chrome and Firefox

A: We highly recommend that you use the 32bit versions. There are known issues with some of the 64bit Versions and we don't support them.

Q: Where can I download the latest Version of ExBrowser Plugin?

A: You can download it from the License Server, or from Zaxaa where you purchased the plugin

Q: I get a license error when I launch the Plugin

A: Check that your Login is correct. Try to login to the license server. Check that you have free registration spots left. If not, try to reset one.

Q: I get a MD5 error when I launch the plugin

A: Download the latest version and try again

Q: I updated the plugin and still get the md5 / version error

A: Very likely that the plugin is not in the correct directory. It has to be in your %appdata%\Ubot Studio\Plugins Folder

Q: I have no free License Slots but want to start Ubot Studio

A: You have to delete the plugin from the Plugin Folder completely

Q: My Xpath Expression is correct but I can't click an Element

A: Depending on the website, some elements get activated when the mouse hovers over them. Play around with the Move Mouse Commands.

Another common error is, that the Xpath Expression is not unique. If it returns more than 1 match, the plugin might get confused.

Q: When I close my bot, there are still browser windows open

A: You have to use the Close Browser Command at the end of each Thread when you're done to unload and close the Browser.

Q: Can the Plugin do XYZ?

A: Is the browser able to do it? ExBrowser is a remote control. We can't add features to the browser. If the browser can't do it, we can't automate it.

Q: Can I run multiple Bots on the same PC.

A: Please take a look at the new Cleanup Light Command.

Q: What are those files in the %appdata% folder

A: Chromedriver, phantomjs.exe, WebDriver.FirefoxExt, disable_webrtc, Updater.exe and AutoItX3.dll are all components of ExBrowser Plugin and should be left alone. They are required for the plugin to work correctly.

1.4 How To Install the Plugin

All UBot Studio Plugins belong in the Plugin Folder in your User Profile.

It's in your %appdata% directory.

On my PC this is:

C:\Users\dan\AppData\Roaming\UBot Studio\Plugins

And dan is my login username.

If you do NOT see this folder, there is the possibility that it is hidden. So you have to check your Windows Explorer settings.

But if you enter %appdata% into your Explorer. Then you should always land in that folder. No matter if it's visible or not.

But if you try to manually navigate there, you might not see it. Depending on your settings!

Plugin do NOT belong in the Ubot Install Directory.

The do NOT belong in the C:\Program Files (x86)\UBot Studio 5\Plugins directory.

Or Windows or System32 or System directory.

They will ONLY work if they are in the plugin directory in your User Profile.

C:\Users\YourUsername\AppData\Roaming\UBot Studio\Plugins

On a non-English system the path might be different because Users might be spelled in your local language.

1.5 Important Links

Helpdesk:

https://botfactory.helpdocs.com/exbrowser-plugin

Support: support@bot-factory.com

License Server (You can login there to manage licenses and download latest versions): http://licensing.bot-factory.com/

All downloads and purchases are managed by (You can login there to access your videos and download files.):

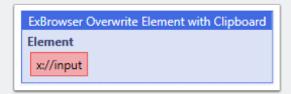
http://zaxaa.com/

1.6 Common Errors

Everyone should watch the common error video please: https://exbrowser.s3.amazonaws.com/common-errors.mp4

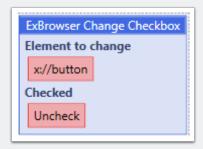
2. ExBrowser Page Commands

2.1 ExBrowser Overwrite Element with Clipboard



This commands pastes the content from the clipboard into the specified element.

2.2 ExBrowser Change Checkbox



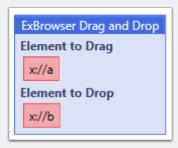
This command can select or deselect a checkbox.

Please ensure that your Xpath Expression is unique. It can only change one element at a time. Even if there are multiple checkboxes. the Xpath Expression will always select the first one it finds in the html code.

Unchecked means the Checkbox will be unselected Checked means the Checkbos will be selected.

In the background this is executing a regular Click command. But it can validate the status of the checkbox before the command is executed.

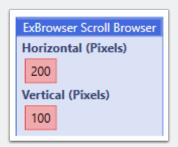
2.3 ExBrowser Drag and Drop



This command will use Drag and Drop to pull an element on top of another one on a website.

The website of course has to support that action. So this is of no use on regular sites. But there are sites where you have to drag an option into another element for example. And that's when you can use this command.

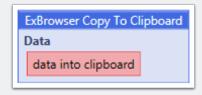
2.4 ExBrowser Scroll Browser



This command executes a javascript (window.scrollBy).

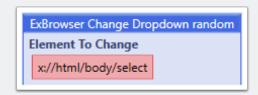
To scroll vertical and/or horizontal on the currently active page/tab

2.5 ExBrowser Copy to Clipboard



This command copies the text you put into the command into the clipboard.

2.6 ExBrowser Change Dropdown random



This command will change a dropdown element to a random position.

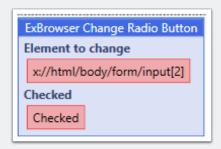
```
plugin command("ExBrowser.dll", "ExBrowser CleanUp")
plugin command("ExBrowser.dll", "ExBrowser Launcher", "Chrome", "", "")
plugin command("ExBrowser.dll", "ExBrowser Navigate", "http://www.w3schools.com/
tags/tryit.asp?filename=tryhtml_select")
loop(10) {
    plugin command("ExBrowser.dll", "ExBrowser Change Dropdown random", "x://html/
body/select")
    wait(0.5)
}
```

2.7 ExBrowser Scroll To Element



This will scroll the browser page until the chosen element becomes visible on the page.

2.8 ExBrowser Change Radio Button



This is an old command and shouldn't be used. Because it's basically just executing a click command in the background.

A radio button cannot be unchecked. To do that, you would have to click another one.

So the command will always just click the element you specify here.

This is a command from the old communication plugin and it's just still in ExBrowser to not break existing code when people update their plugin.

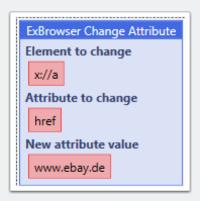
But you should use click instead.

2.9 ExBrowser ReloadPage



This will reload the currently active page / tab of the browser.

2.10 ExBrowser Change Attribute



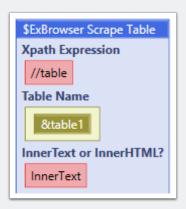
This command is using JavaScript to change an element in the html code of the currently loaded page.

This will NOT reload the page with the changes. So you will not see the changes on the site.

You can use this, to change a text field for example. But I would recommend to use Type Text instead.

I normally don't use that command. I use type text, click and change dropdown most of the time.

2.11 ExBrowser Scrape Table



This command can automatically scrape a html tabel into a UBot Table. It is not possible to navigate into frames and iframes automatically with this command.

If the table you want to extract is within a frame / iframe you need to select that frame / iframe first.

Here's an example how that works:

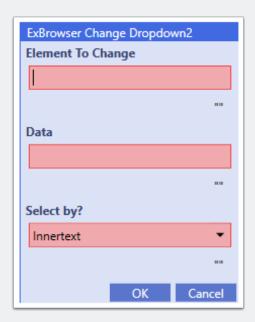
```
plugin command("ExBrowser.dll", "ExBrowser CleanUp")
plugin command("ExBrowser.dll", "ExBrowser Launcher", "Chrome", "", "")
plugin command("ExBrowser.dll", "ExBrowser Navigate", "http://www.w3schools.com/
html/tryit.asp?filename=tryhtml_table")
plugin command("ExBrowser.dll", "ExBrowser Switch to Frame / iFrame",
"x://iframe[@id=\"iframeResult\"]")
plugin command("ExBrowser.dll", "$ExBrowser ", "//table", &table1, "InnerText")
```

2.12 ExBrowser Right Click



This Command will execute a right click on the given element.

2.13 ExBrowser Change Dropdown2



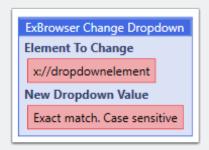
Change Dropdown2 now has the option to choose the dropdown value by:

Innertext

Value

Index

2.14 Change Dropdown

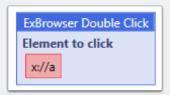


This command will change the value of a Dropdown Element.

The Dropdown value has to be the innertext!
<option value="AK" class="optionSelect">Alaska/option>

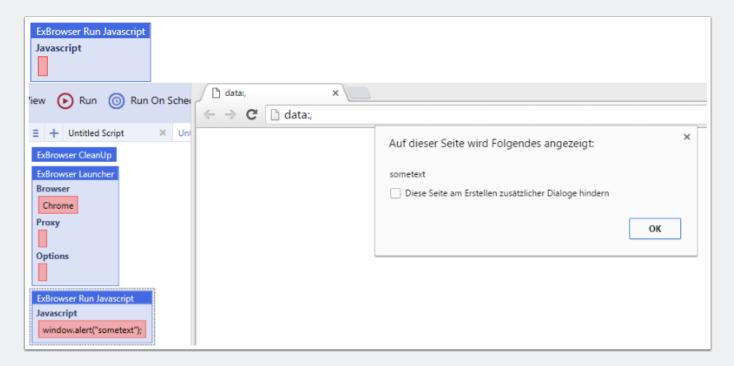
So here you have to use Alaska and not AK!

2.15 ExBrowser Double Click



This will execute a mouse double click on the given element.

2.16 ExBrowser Run Javascript



This can be used to execute javascript commands.

2.17 ExBrowser ClearTextBox



This command can clear an entry field.

This feature is integrated into the new type text2 command as well.

2.18 ExBrowser Move Mouse



This will move the mouse within the browser to the element. It will not move the mouse of the computer. It's more like simulating the mouse movement for the browser.

Google for example requires to move the mouse to the search entry field before you can type text into it. On some other websites it's the same. So if something doesn't work on some sites, try this command before you use Type or click

2.19 ExBrowser Click



This command will click whatever element you have specified here.

Xpath Expression should be unique. If there are multiple matches the Plugin will pick the first one.

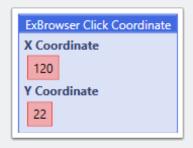
3. ExBrowser Experimental Commands

3.1 ExBrowser Change Browser Title



This will change the Title of the currently active Browser Window or Tab. It's doing that by changing the Title Attribute in the HTML Code of the site!

3.2 ExBrowser Click Coordinate



Only supported with CHROME Browser

This command will click on the given coordinates within the currently active window or Tab of the Chrome Browser

3.3 ExBrowser Bring Browser To Focus

ExBrowser Bring Browser To Focus

This command will bring the browser with the active Tab / Window into the focus. It's very important, that the TAB that is visible(Chrome). Is actually the Tab that has the focus of the driver as well.

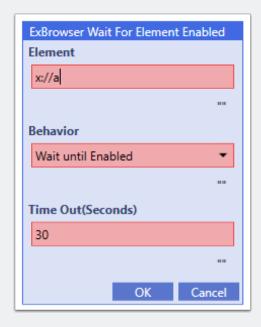
So do NOT manually switch Tabs. Or use the Next Browser Tab / Previous Browser Tab Command, without also switching the focus of the driver afterwards.

If you don't know how Windows and Tabs are managed by ExBrowser Plugin, please watch the following Video:

https://botfactory.helpdocs.com/exbrowser-plugin/manage-windows-tabs-and-popups

The command is doing that by temporarely renaming the title of the browser / tab. So that it's unique and can be identified.

3.4 ExBrowser Wait For Element Enabled



This command will wait until the specified element is Enabled or Disabled (Depending on the configuration).

Enabled / Disabled is a special parameter of html elements. An element could be visible on a site, but you can't click it because it's not "Enabled". Because a site is maybe processing something and it takes a while until the "Purchase". "Continue" Button is Activated.

But you can't use the regular "Wait for Element" in that case, because the element is already there, but not Active / Enabled. In that case you can use this command

3.5 ExBrowser Minimize Browser Window

ExBrowser Minimize Browser Window

This command will minimize the browser with the active Tab / Window into the focus. It's very important, that the TAB that is visible(Chrome). Is actually the Tab that has the focus of the driver as well.

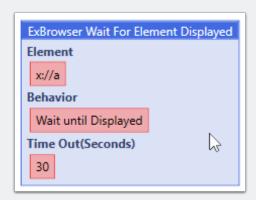
So do NOT manually switch Tabs. Or use the Next Browser Tab / Previous Browser Tab Command, without also switching the focus of the driver afterwards.

If you don't know how Windows and Tabs are managed by ExBrowser Plugin, please watch the following Video:

https://botfactory.helpdocs.com/exbrowser-plugin/manage-windows-tabs-and-popups

The command is doing that by temporarely renaming the title of the browser / tab. So that it's unique and can be identified.

3.6 ExBrowser Wait For Element Displayed



This command will wait until the specified element is Displayed or Not Displayed (Depending on the configuration).

Displayed or Not Displayed is a special parameter of html elements. An element could be already be present in the html code, but it's set to "Not Displayed", so that it's not visible. You can use this command for those special usecases.

4. ExBrowser Main Commands

4.1 ExBrowser Load Html in ExBrowser



This command creates a temporary html file with the Data. That file is then opened with the browser. After it's loaded, the tmp file will be deleted.

4.2 ExBrowser Open New Browser Window



This will open a new browser window and make that new Window active.

4.3 ExBrowser NavigateBack

ExBrowser NavigateBack

This will navigate to the previous page (if there is one).

It will target the currently active tab/window.

4.4 ExBrowser Close

ExBrowser Close

This will close the currently active browser within the current thread. Use this at the end of your code when you don't need the browser anymore.

In multithreading, this will only close the browser within the thread from where it's called. It does not influence other bots or running browser in other threads.

4.5 ExBrowser Focus New Window or Tab

ExBrowser Focus new Window or Tab

If the browser opens a new tab or a new window, this command will move the focus of the plugin to that window or tab.

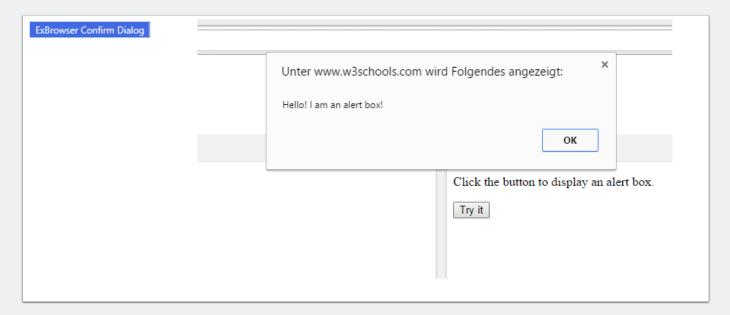
Please remember, there is a difference between what tab/window the plugin is focusing on and what you actually see. The active (visible) window or tab is not automatically what the plugin is focusing on.

So if you click something and that opens a new window or tab, and your next ExBrowser Command is not executed on that tab or browser, try this command.

Or you can use the "Switch to Window" Command to specify the exact Tab / Window you want to focus on.

You can always use the reloadpage command to see what tab or window is currently focused by the Plugin.

4.6 ExBrowser Confirm Dialog



This command can confirm alert popups in the browser.

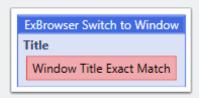
4.7 ExBrowser Close visible Browser Tab



This will send STRG+W to the currently active Tab or Window. if you run this against the last tab, it will close the browser!

Do not use this to close the browser! To close a browser use the close command instead!

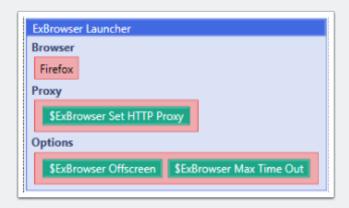
4.8 ExBrowser Switch to Window



This command can be used to switch (focus) on another browser window or browser tab(chrome).

Very important to watch: https://exbrowser.s3.amazonaws.com/ windowmanagement.mp4

4.9 ExBrowser Launcher



This is the main command to load / start a browser session. It will use the current threadid to identify the browser later on.

So if you use this with multithreading, it will launch 1 browser per thread. You can only launch 1 browser per thread.

All proxy options go into the proxy field. And all other options go into the options field. You can have multiple ones in there as shown in the screenshot.

4.10 ExBrowser CleanUp Light



Similar to the regular Cleanup Command. The difference here is, that it will not kill the Chromedriver.exe and PhantomJS.exe processes.

So this command can be used if multiple bots are running on the same PC.

Always keep in mind, all bots that you run at the same time need to use the same ExBrowser Version! Otherwise they could require different versions of the additional components like chromedriver.exe. And then you will run into issues.

4.11 ExBrowser Navigate



This will navigate to the specified URL. It will use the currently active browser window or tab within the current thread.

4.12 ExBrowser Previous Browser Tab

ExBrowser Previous Browser Tab

This is sending the keyboard shortcut STRG+Shift+Tab to the browser.

4.13 ExBrowser CleanUp

ExBrowser CleanUp

This command will reset the plugin. It will close all browsers and remove them from the internal plugin memory.

It will also look for some helper process on the PC where it's executed. So when you run this command, it will kill processes directly. That means it will influence other bots who run on the same system!

That's the reason why we only support running 1 bot with ExBrowser at the same time!

It will also influence other threads in your bot. So you should only use this command at the beginning of your bot. And at the end when you are done with everything. To initialize at the start and to cleanup at the end.

4.14 ExBrowser Open New Browser Tab

ExBrowser Open New Browser Tab

This sends Strg+T to the active browser window to open a new tab. The new tab will be selected by the plugin automatically.

That means all further commands are executed against that new tab.

4.15 ExBrowser Dismiss Dialog

ExBrowser Dismiss Dialog

Simiar to Confirm Dialog. But here it will not click the confirm button, it will click the Dismiss Button.

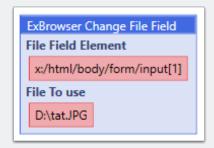
4.16 ExBrowser Next Browser Tab

ExBrowser Next Browser Tab

This is sending the keyboard shortcut STRG+Tab to the browser.

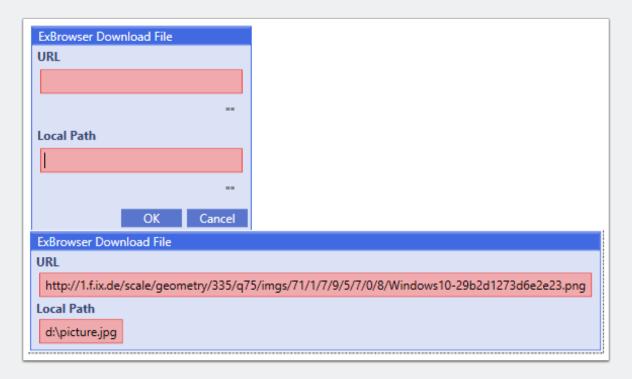
5. ExBrowser File Commands

5.1 ExBrowser Change File Field



Example: https://botfactory.helpdocs.com/exbrowser-plugin/change-file-field-example

5.2 ExBrowser Download File



This Command is NOT using any of the browsers. It's actually a native HTTP Request. But you can open a Browser before the Command (Via Launcher)

If a browser is loaded within the thread where you use the Download File Command. All cookies as well as the UserAgent of the currently loaded Browser within the current thread will be used for the http file download command.

In the Local Path you have to specify a filename as well!

If you want to provide a filename automatically, you can use the \$FilenameFromURL function. To extract a filename from a URL.

5.3 ExBrowser File Upload Dialog Window



Be careful with Multithreading here!

This command will look for a windows with the specified title. This is looking at all applications / windows running on your system.

So if you multithread, the command will NOT only look at the browser windows of your thread. It will check all windows titles from the whole system.

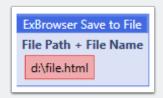
Unfortunately there is no other way. Because there is no browser api to handle the file upload dialog box differently.

If this is a problem for your use case, send me a support ticket with some details.

Example:

https://botfactory.helpdocs.com/exbrowser-plugin/exbrowser-file-upload-dialog-window-example

5.4 ExBrowser Save to File



This Command saves the content of the page into a file. It's not similar to the SAVE Command in the browser itself. Because it will not download images or other stuff. So it's not saving the website for offline usage.

It will save the html content of the page into a file. So whatever is in the "PageSource", it will be saved into the file you specify.

6. ExBrowser Flow Commands

6.1 ExBrowser Wait for Window or Tab

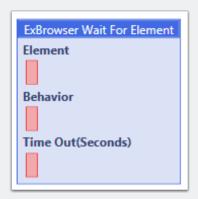


This Command waits for a new browser window or Tab.

In the Window-Tab Title Field you have to write the exact Text that appears in the Windows Title.

It needs to be exact match. Upper and Lowercase matters as well

6.2 ExBrowser Wait for Element



This command will wait until an element appears or disappears on the page. Don't forget the x: in Front of your Xpath Expression in the Element Field

You can specify the Behavior. Default is Appear And the timeout after which the command will continue no matter if the element appeared or disappeared.

6.3 ExBrowser Wait for Dom Ready



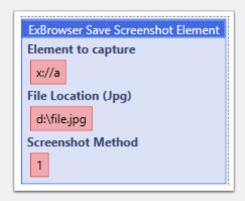
OLD Command.

This was necessary in the past to wait until the browser fully loads a page. But with the latest browser versions and plugin versions, Chrome and Firefox will wait automatically until the page is loaded.

You can then use the "Max Time Out" option to continue faster. Set it to 2 seconds for example and your Ubot Script will continue after 2 seconds automatically.

7. ExBrowser Screenshot Commands

7.1 ExBrowser Save Screenshot Element



This command will take a screenshot of the specified element and save it to the disk into a jpg file.

Start with Method1. But if the screenshot is not correctly. So that some parts are missing, switch to Method 2 and try it again.

Which one is better depends on the browser you use and where the element you want to screenshot is located on the page.

There is no clear rule here, you have to test it.

7.2 ExBrowser Save Screenshot Special

```
ExBrowser Save Screenshot Special

X

100

Y

50

Width

100

Height

200

File Location (Jpg)

d:\test.jpg
```

This command will save a screenshot based on the given coordinates.

7.3 ExBrowser Save Screenshot



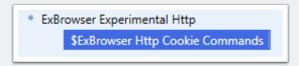
This will save a screenshot of the current page from the active window/tab.

Firefox and Phantom will save a FullPage Screenshot. Not only the visible area, they will screenshot the whole page.

Chrome will take a screenshot of the viewport. So what's currently visible within the browser window.

This behavior can't be changed at the moment.

8. ExBrowser Http Commands



This command can delete cookies, load and save them to disk.

This is only for the new and experimental Http Post Command. NOT for the regular browser.

8.1 \$ExBrowser Http Cookie Commands



This command manages the cookies for the experimental http post command. It can delete all cookies from all threads. It can delete only the cookies from the current thread.

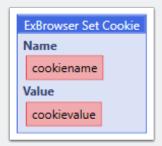
You can load cookies from a file into the current thread.

And you can save cookies from the current thread into a file.

9. ExBrowser Cookie Commands

All cookie Commands are executed against the currently active browser within the active thread.

9.1 ExBrowser Set Cookie

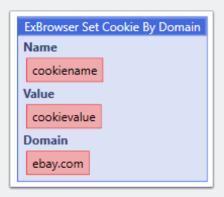


This command adds the specified cookie to the active browser session in the current thread.

Browser needs to be loaded first.

You have to navigate to a website first before a cookie can be set.

9.2 Set Cookie by Domain



This command adds the specified cookie to the active browser session in the current thread.

This command supports the Domain Cookie Field

Browser needs to be loaded first.

You have to navigate to a website first before a cookie can be set.

9.3 ExBrowser Save Cookies



Saves all Cookies from the active browser in the current thread into the specified file.

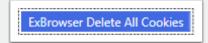
9.4 ExBrowser Load Cookies



This Command loads cookies from a file into the active browser session.

A browser needs to be launched first. And you have to navigate to a website as well. Otherwise cookies can't be loaded into the browser.

9.5 ExBrowser Delete all Cookies



This Command will delete all cookies from the active browser session within the active Thread.

9.6 ExBrowser Delete Cookie



This command deletes the specified cookie from the active browser session within the active Thread.

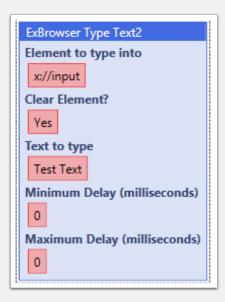
10. ExBrowser Send Text&Keys Commands

10.1 ExBrowser SendKeys to Browser Window



This sends a key to the currently active element within the browser. Can be used to select the text in a textbox for example. And then overwrite it with Type text. To make an element active, use the Click command.

10.2 ExBrowser Type Text 2



Similar to the Type Text Command. But now you have all the options in one single command. You can choose if the element should be cleared before data is typed into it. And you can also add delay. If no delay is specified the default is 0

10.3 ExBrowser TypeText (Human Delay)

ExBrowser Type Text (Human Delay)
Element to type into
x://input1
Text to type
Test Text
-
Minimum Delay (milliseconds)
10
Maximum Delay (milliseconds)
50
OK Cancel

This command will type text into the chosen element.

There will be a delay between each letter typed.

If no delay is specified the default is 100minimum 500 maximum.

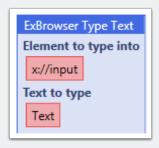
Both fields need to be filled with a number.

If there is already text in a text box, this command will not overwrite or delete the text automatically.

But you can archive that. Use the click command to select an element. Then send special keys strg+a to select everything. Then use type text without specifying an element.

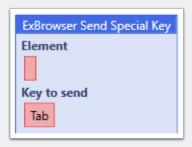
If the element field is empty, it will use the currently active one.

10.4 ExBrowser TypeText



This command will type text into the specified element. Xpath Expression should be unique. If not, the first element that matches the expression will be selected.

10.5 ExBrowser SendSpecial Key



This will send the selected Key to the chosen element within the current thread. It's very important to write a unique Xpath expression.

This will not send the key multiple times if your expression matches multiple elements! It will pick the first one in such a case.

If you leave the Element field empty, Exbrowser will use the Active Element. So you can Click an input field for example and then Send Keys to that field.

That way you can start somewhere and then move from one input element to another via TAB and back for Shift-Tab for example.

10.6 ExBrowser Ultimate Send

Not yet implemented. Don't use!

11. ExBrowser Debug Commands

All Debug Commands are utilized thread specific. There is no overall debug log. All messages are saved related to the given thread ID.

11.1 ExBrowser Save Debug Message



This will save the given text into the Debug log of the current thread.

11.2 ExBrowser Clean Debug Log



This will clean the Debug Log in the current Thread ID

12. ExBrowser Hide Browser Commands

12.1 ExBrowser Window Manager



This command can hide or show the browsers. The browser has to be started with the hidden option.

This will show / hide all browsers from all threads. You cannot hide / show a single browser.

You can launch some browsers with the hidden option and some without, that's no problem.

But the window manager command will show / hide all browser who are started with the hidden option.

If a browser is not started with the hidden option, you can't hide it afterwards.

13. ExBrowser Special Commands

13.1 ExBrowser Switch to Default

ExBrowser Switch To Default

This is a very special command for unique use cases. I think that 99.5% of all users will never use it.

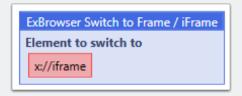
There are other commands you can use to select an element on a website. Like a frame or iframe. And then the driver has the focus on that element.

The switch to default command will release that selection and focus on the main browser window again.

Almost all the scraping and element interaction commands do that automatically. But in some very rare cases this can be useful in combination with the iFrame / Frame Selection Command.

So at the moment it's probably best to not think about this one :-)

13.2 ExBrowser Switch to Frame / iFrame



This is a very special command for a very special use case. I would say in 99,5% of the time, you will not need it.

This command can focus a specific frame or iframe within the browser. This is sometimes necessary on sites with a lot of nested frames / iframes.

But for regular use cases, the element commands as well as the scrape commands will dive into frames and iframes automatically.

14. ExBrowser Timeout Options

14.1 \$ExBrowser Command Timeout



Command Timeout and Page Load Time Out should not be used together. The goal of both commands is to continue with the code even if a page is not yet fully loaded. At the moment there are some limitations with Chrome and other limitations with Firefox. Which makes it a bit hard to give you a generic single option to solve that issue.

The timeout option we had in the past did work for some people and some scenarios but caused massive problems for others. So now we have two options. And you can test both of them and pick the one that works best for the browser you use and your scenario. I can't give you generic rules here at the moment. This is something you have to test.

Hopefully we will come up with a smarter way to do this in the future. But at the moment there are certain limitations in the framework.

14.2 \$ExBrowser Page Load Time Out

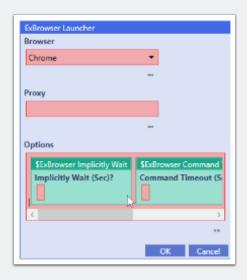


Command Timeout and Page Load Time Out should not be used together. The goal of both commands is to continue with the code even if a page is not yet fully loaded. At the moment there are some limitations with Chrome and other limitations with Firefox. Which makes it a bit hard to give you a generic single option to solve that issue.

The timeout option we had in the past did work for some people and some scenarios but caused massive problems for others. So now we have two options. And you can test both of them and pick the one that works best for the browser you use and your scenario. I can't give you generic rules here at the moment. This is something you have to test.

Hopefully we will come up with a smarter way to do this in the future. But at the moment there are certain limitations in the framework.

14.3 \$ExBrowser Implicitly Wait



Implicitly Wait will add a default "Wait for element" timer for every command and function that is using an Element selector.

Like a click command for example. Without that option, the click command will check if the given element is present on the page and click it, or move on if the element is not there.

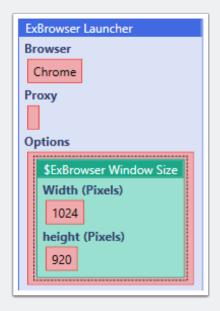
If this option is set to 5 seconds, the click command would wait 5 seconds if the element is not present. And will click it, if it appears within that timeframe. And only move on after the element is there and can be clicked, or the given timeout has run out.

So it basically replaces the wait for element command with a generic timeout for all element commands and functions. So you now have two options. Use a generic timeout, or use individual "wait for element" commands. It depends on the usecase.

Just another tool in the toolbox.

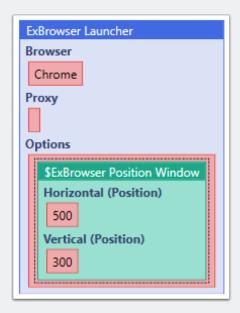
15. ExBrowser Options

15.1 \$ExBrowser Window Size



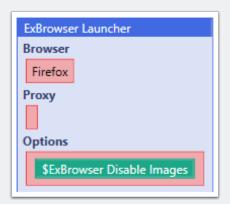
This option will adjust the size of the browser window

15.2 \$ExBrowser Position Window



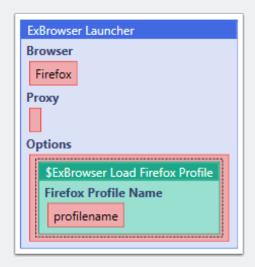
This moves the browser window to the specified position after launch

15.3 \$ExBrowser Disable Images



This will disable images in all browsers. For Chrome and Firefox this is done via Plugins/Extensions.

15.4 \$ExBrowser Load Firefox Profile

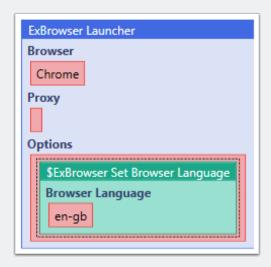


Normally the plugin will create a new and fresh profile every time a browser is launched. If you want to use an existing profile, you can specify the profile name with this option (FF only)

For Chrome please take a look here:

https://botfactory.helpdocs.com/exbrowser-plugin/load-chrome-profile

15.5 \$ExBrowser Set Browser Language



Chrome only!

Overview of different language Codes:

http://www.andiamo.co.uk/resources/iso-language-codes

For Firefox please take a look at the following settings. And test them one by one if they help you archive your goal:

\$plugin function("ExBrowser.dll", "\$ExBrowser Generic Firefox Preference",

"intl.locale.matchOS", "True")

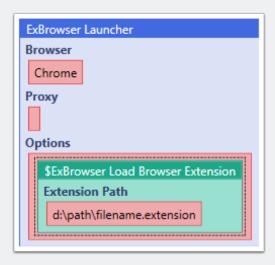
\$plugin function("ExBrowser.dll", "\$ExBrowser Generic Firefox Preference",

"general.useragent.locale", "en-US")

\$plugin function("ExBrowser.dll", "\$ExBrowser Generic Firefox Preference",

"intl.accept_languages", "en-US, en")

15.6 \$ExBrowser Load Browser Extension

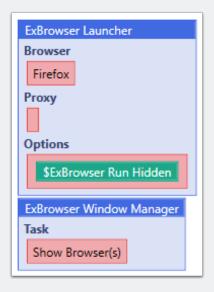


This will load a browser extension file.

Please ensure that you have the correct extension for firefox or chrome and that the extension can be loaded outside the extension store of your browser.

There are some extension that can't be loaded manually. If that's the case, you can't load them with this command as well.

15.7 \$ExBrowser Run Hidden



With this option you can hide Chrome and Firefox after they are launched. You will always see the browser window when it starts. There is no way around that.

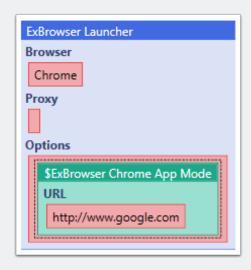
And after it's launched we will hide the window via a windows API.

You can use the Window Manager Command to show and hide the browsers.

It might be that some commands do not work correctly when the browser is hidden.

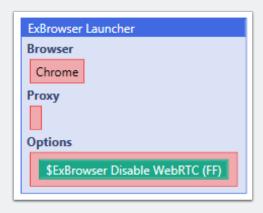
Please keep in mind, neither Firefox nor Chrome support a headless mode out of the box. So this is a workaround to do it as good as possible. But there are limitations. If you need a complete headless browser, please use PhantomJS.

15.8 \$ExBrowser Chrome App Mode



This will launch the browser in a "headless / kiosk" mode. Don't forget to specify the URL. And don't forget to add http:// in front of it. If you only enter www.google.com it won't work

15.9 \$ExBrowser Disable WebRTC (FF)



Firefox only!

This will load a plugin into firefox that is able to disable WebRTC.

I don't know a way to do this reliably with Chrome yet. If you know, please tell me.

15.10 \$ExBrowser Set User Agent

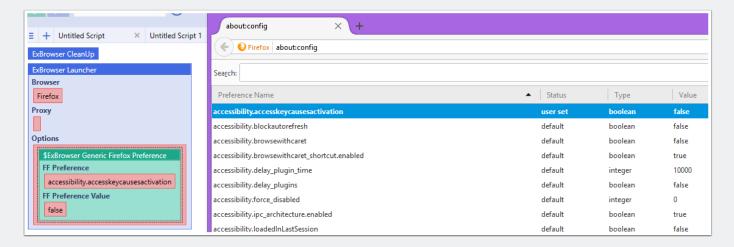


This option will change the UserAgent of the browser.

You find a list of useragents here:

http://www.useragentstring.com/

15.11 \$ExBrowser Generic Firefox Preference

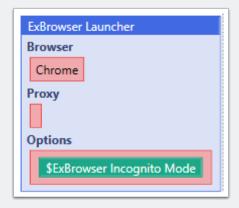


This option allows you to change any preference of Firefox during launch.

There are some options that can't be changed. If you can't change a particular option, run a google search and check if there are known limitations.

This has nothing to do with the Plugin. This is coming from the browser itself then.

15.12 \$ExBrowser Incoginto Mode



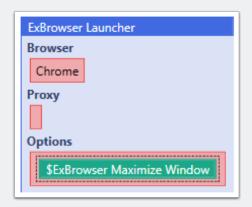
This will launch the browser in incognito mode.

For chrome it will do: chrome.exe --incognito

For Firefox:

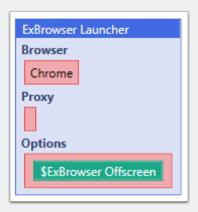
browser.privatebrowsing.autostart = true

15.13 \$ExBrowser Maximize Window



This will maximize the browser window during launch.

15.14 \$ExBrowser Offscreen

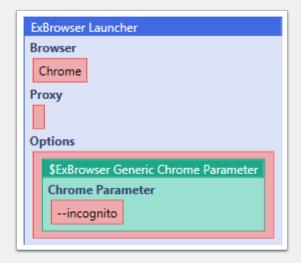


This option will move the browser to an off-screen location. So that it's not visible. The task bar icon is still there, but the browser window itself is no longer visible.

Some commands like open tab, open browser window and others who interact with the browser windows directly might not work properly. Some of them require the browser to be visible.

Please test this properly!

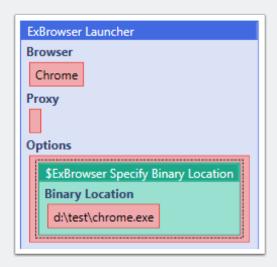
15.15 \$ExBrowser Generic Chrome Parameter



This command adds the parameter you specify to the initialization of the Chrome Browser. It's like adding it to the command line: chrome.exe --incognito

Google will help you to find all the usable parameters.

15.16 \$ExBrowser Specify Binary Location



This option tells the plugin where to find the chrome or firefox executable. You do NOT needs this for a regular chrome or firefox installation.

This is only used if you want to use some of the chrome or ff portable versions who are copied into a different folder on your pc.

You can also use this, if you ship your own portable version of chrome or firefox with your bot.

16. ExBrowser Proxy Options

Chrome and Firefox don't support Socks Proxy Servers with Authentication.

Firefox please read:

If you use Proxy Servers with Authentication and the Firefox Browser, please ensure that the two AutoIT Dlls who come with ExBrowser are copied to the correct locations. As explained in the readme.

Otherwise it will not work!

We currently also only support the English language here. Because the plugin is waiting for the proxy login window within firefox with the Window Title: "Authentication Required" If the window has a different name, it won't work!

16.1 \$ExBrowser Set HTTP Proxy



Uses the given Http Proxy Server Details for the browser.

16.2 \$ExBrowser Set Socks Proxy



Uses the given Socks Proxy Server Details for the browser.

17. Exbrowser Functions

17.1 \$ExBrowser Browser Version

\$ExBrowser Browser Version

This will return the version of the currently launched browser in the current thread. A browser has to be running, otherwise it will return nothing.

17.2 \$ExBrowser Filename From URL



This function will return the filename from a given URL String. In this case it will return xxx.mp4

17.3 \$ExBrowser Browser Alive

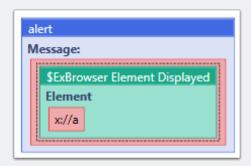


This function can be used to detect if the browser is still running in the current thread or not. It will return true or false.

For the command to work correctly, you have to navigate to a page first. If you run the function directly after launcher, it will still return false. Because it checks if the browser has a title. And that's only true if a site is loaded.

Unfortunately this is currently the only way to detect if a browser was closed manually.

17.4 \$ExBrowser Element Displayed



This will return true or false depending on if the given element is displayed or not.

Always write a unique xpath expression so that only 1 element is found!

17.5 \$ExBrowser Get Cookie



This returns the specified cookie from the currently active browser session

17.6 \$ExBrowser Element Enabled



This will return true or false depending on if the given element is enabled or not.

Always write a unique xpath expression so that only 1 element is found!

17.7 \$ExBrowser HTTP Get Request

```
Message:

SExBowser HTTP Get Request
URL
http://www.google.com
User Agent
Mozilla/5.0 (Windows NT 5.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/41.0.2224.3 Safari/537.36
```

This function will execute a regular Http Get request to download the http content from a webserver. You can save it to a variable as well. And then scrape data via the generic xpath parser for example.

For user Agent string please visit:

http://www.useragentstring.com

17.8 \$ExBrowser URL



This will return the URL of the currently active page/tab

17.9 \$ExBrowser Browser Count



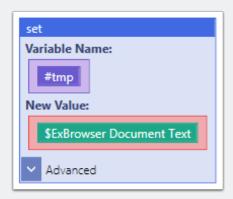
This function returns the currently active browser sessions.

It will NOT detect if the browser process has crashed or if it was closed by the user manually!

It's basically an internal counter that is increased whenever the launcher is used. And decreased when the close command is used.

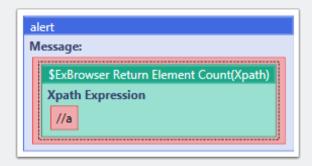
And it's reset with Cleanup.

17.10 \$ExBrowser Document Text



This will extract the html code from the currently running browser in the current thread and return it. So that you can put it into a variable for example.

17.11 \$ExBrowser Return Element Count (Xpath)



This command will return the amount of elements it finds in the html code that match the Xpath Expression

This command will NOT look into frames and iframes automatically like the scrape commands do.

So a scrape command could return more results than the element count command. Because the scrape commands will dive into frames and iframes automatically.

17.12 \$ExBrowser Return Element Count(With Frame+iFrame)

```
$ExBrowser Return Element Count(With Frame+iFrame)

Expression

x://a
```

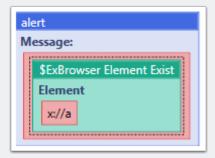
This function is similar to the "\$ExBrowser Return Element Count (Xpath)" but instead it will also look into frames and iframes and give you the total element count.

17.13 \$ExBrowser Title



This returns the title of the currently active page/tab

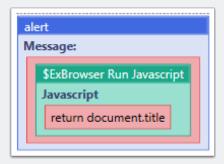
17.14 \$ExBrowser Element Exist



This function will return true or false depending of if the specified element exists or not.

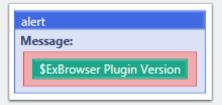
This command will automatically look into frames and iframes.

17.15 \$ExBrowser Run Javascript



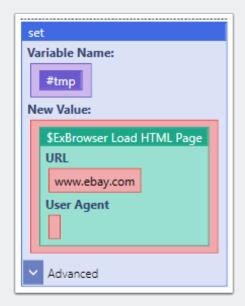
Executes a javascript command and returns data. You have to start a Browser session first.

17.16 \$ExBrowser Plugin Version



This returns the Version of the plugin

17.17 \$ExBrowser Load HTML Page



This is a http get request. It will download the html source from the url you specify.

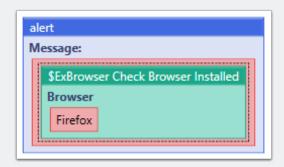
If no User Agent is specified it will use a default one.

You do not have to launch a browser before you use the command. This command is not using chrome,ff or PhantomJS.

But you can launch a browser. If you launch a browser, this command will take over the UserAgent of the browser. As well as all cookies!

So you can login to a page via the browser. And then download content pages vie Load Html Page. Which is a lot faster than loading the data in a full browser. But all cookies will be still there.

17.18 \$ExBrowser Check Browser Installed



This function returns true or false. Depending on if the specified browser is installed or not.

This is done via the registry. The plugin will search through the registry to find the Firefox and Chrome Keys.

This doesn't check if the Browser is installed correctly and fully functional! This just checks if the Chrome / Firefox registry keys are there. And that's an indicator that the browser is installed.

18. ExBrowser Scrape Functions

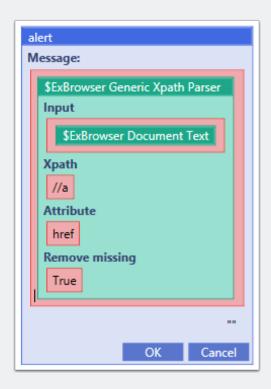
Important:

The scrape commands communicate with the currently open browser in the current thread directly.

They will look into frames and iFrames automatically.

The do NOT support innertext, innerhtml or outerhtml as attributes!

18.1 \$ExBrowser Generic Xpath Parser



This command will execute the given Xpath expression against the input. It supports all attributes as well as innertext, innerhtml, outerhtml.

This command is NOT communicating with the browser directly, like the other scrape commands. But you can also use variables or put the html data directly into the input field.

This command will also NOT look into frames and iframes automatically.

18.2 \$ExBrowser Scrape List Elements Attribute

\$ExBrowser Scrape List Elements Attribute

This function will extract the specified attribute of all elements who match the Xpath Expression.

Important:

The scrape commands communicate with the currently open browser in the current thread directly.

They will look into frames and iFrames automatically.

The do NOT support innertext, innerhtml or outerhtml as attributes!

18.3 \$ExBrowser Scrape Element

\$ExBrowser Scrape Element

This function will extract the innertext of an element. If there are multiple matches for the given Xpath Expression it will only return the first one.

Important:

The scrape commands communicate with the currently open browser in the current thread directly.

They will look into frames and iFrames automatically.

The do NOT support innertext, innerhtml or outerhtml as attributes!

18.4 \$ExBrowser Scrape List Elements

\$ExBrowser Scrape List Elements

This function will extract the innertext of all elements who match the Xpath Expression.

Important:

The scrape commands communicate with the currently open browser in the current thread directly.

They will look into frames and iFrames automatically.

The do NOT support innertext, innerhtml or outerhtml as attributes!

18.5 \$ExBrowser Scrape Element Attribute

\$ExBrowser Scrape Element Attribute

This function will extract the specified attribute of an element. If there are multiple matches for the given Xpath Expression it will only return the first one.

Important:

The scrape commands communicate with the currently open browser in the current thread directly.

They will look into frames and iFrames automatically.

The do NOT support innertext, innerhtml or outerhtml as attributes!

19. ExBrowser Debug Functions

19.1 \$ExBrowser Return All Debug Message

\$ExBrowser Return All Debug Message

Debug Logs are stored per Thread / Browser Instance.

So "Return all Debug Messages". Will only return all messages from that ThreadID. Not from all threads. You have to manage Debug messages within Threads.

19.2 \$ExBrowser Return Last Debug Message

\$ExBrowser Return Last Debug Message

This will return the last Debug Message that was stored in that given ThreadID.

20. ExBrowser Http Functions

20.1 \$ExBrowser Send HTTP Request



Experimental Command. It's not 100% clear if it will remain in the Plugin or not. This depends a bit on if I'm allowed to do it.

The main difference to the Http Plugin is, that this command can take over and leverage cookies from the browser automatically. So you might be able to login with the browser and then execute http post commands without logging in again.

Cookies are managed within each thread. If you don't reset / clear them, they will stay there as long as the same threadid is used.

If you want a clean cookiecontainer you should use: plugin command("ExBrowser.dll", "\$ExBrowser Http Cookie Commands", "Delete Cookies Thread", "")

For Cookie Management take a look at: "Http Cookie Commands"

20.2 \$ExBrowser Http Headers



This is the options function for the Http Request function. It's used to set Http headers.