

# :mod:`webbrowser` --- Convenient web-browser controller

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 1); [backlink](#)

Unknown interpreted text role "mod".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 4)

Unknown directive type "module".

```
.. module:: webbrowser
   :synopsis: Easy-to-use controller for web browsers.
```

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 7)

Unknown directive type "moduleauthor".

```
.. moduleauthor:: Fred L. Drake, Jr. <fdrake@acm.org>
```

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 8)

Unknown directive type "sectionauthor".

```
.. sectionauthor:: Fred L. Drake, Jr. <fdrake@acm.org>
```

**Source code:** :source:`Lib/webbrowser.py`

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 10); [backlink](#)

Unknown interpreted text role "source".

The :mod:`webbrowser` module provides a high-level interface to allow displaying web-based documents to users. Under most circumstances, simply calling the :func:`.open` function from this module will do the right thing.

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 14); [backlink](#)

Unknown interpreted text role "mod".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 14); [backlink](#)

Unknown interpreted text role "func".

Under Unix, graphical browsers are preferred under X11, but text-mode browsers will be used if graphical browsers are not available or an X11 display isn't available. If text-mode browsers are used, the calling process will block until the user exits the browser.

If the environment variable :envvar:`BROWSER` exists, it is interpreted as the :data:`os.pathsep`-separated list of browsers to try ahead of the platform defaults. When the value of a list part contains the string %s, then it is interpreted as a literal browser command line to be used with the argument URL substituted for %s; if the part does not contain %s, it is simply interpreted as the name of the browser to launch. [1]

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 23); [backlink](#)

Unknown interpreted text role "envvar".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 23); [backlink](#)**

Unknown interpreted text role "data".

For non-Unix platforms, or when a remote browser is available on Unix, the controlling process will not wait for the user to finish with the browser, but allow the remote browser to maintain its own windows on the display. If remote browsers are not available on Unix, the controlling process will launch a new browser and wait.

The script `program:webbrowser` can be used as a command-line interface for the module. It accepts a URL as the argument. It accepts the following optional parameters: `-n` opens the URL in a new browser window, if possible; `-t` opens the URL in a new browser page ("tab"). The options are, naturally, mutually exclusive. Usage example:

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 36); [backlink](#)**

Unknown interpreted text role "program".

```
python -m webbrowser -t "https://www.python.org"
```

The following exception is defined:

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 47)**

Unknown directive type "exception".

```
.. exception:: Error
```

```
Exception raised when a browser control error occurs.
```

The following functions are defined:

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 54)**

Unknown directive type "function".

```
.. function:: open(url, new=0, autoraise=True)
```

Display `*url*` using the default browser. If `*new*` is 0, the `*url*` is opened in the same browser window if possible. If `*new*` is 1, a new browser window is opened if possible. If `*new*` is 2, a new browser page ("tab") is opened if possible. If `*autoraise*` is `True`, the window is raised if possible (note that under many window managers this will occur regardless of the setting of this variable).

Note that on some platforms, trying to open a filename using this function, may work and start the operating system's associated program. However, this is neither supported nor portable.

```
.. audit-event:: webbrowser.open url webbrowser.open
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 70)**

Unknown directive type "function".

```
.. function:: open_new(url)
```

Open `*url*` in a new window of the default browser, if possible, otherwise, open `*url*` in the only browser window.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 75)**

Unknown directive type "function".

```
.. function:: open_new_tab(url)

Open *url* in a new page ("tab") of the default browser, if possible, otherwise
equivalent to :func:`open_new`.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 81)**

Unknown directive type "function".

```
.. function:: get(using=None)

Return a controller object for the browser type *using*. If *using* is
`None`, return a controller for a default browser appropriate to the
caller's environment.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 88)**

Unknown directive type "function".

```
.. function:: register(name, constructor, instance=None, *, preferred=False)

Register the browser type *name*. Once a browser type is registered, the
:func:`get` function can return a controller for that browser type. If
*instance* is not provided, or is `None`, *constructor* will be called without
parameters to create an instance when needed. If *instance* is provided,
*constructor* will never be called, and may be `None`.

Setting *preferred* to `True` makes this browser a preferred result for
a :func:`get` call with no argument. Otherwise, this entry point is only
useful if you plan to either set the :envvar:`BROWSER` variable or call
:func:`get` with a nonempty argument matching the name of a handler you
declare.

.. versionchanged:: 3.7
   *preferred* keyword-only parameter was added.
```

A number of browser types are predefined. This table gives the type names that may be passed to the :func:`get` function and the corresponding instantiations for the controller classes, all defined in this module.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 105); [backlink](#)**

Unknown interpreted text role "func".

Type Name	Class Name	Notes
'mozilla'	<div><pre>:class:'Mozilla('mozilla')'</pre><div><b>System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 113); <a href="#">backlink</a></b> Unknown interpreted text role "class".</div></div>	

Type Name	Class Name	Notes
'firefox'	: class: 'Mozilla('mozilla')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 115); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'netscape'	: class: 'Mozilla('netscape')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 117); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'galeon'	: class: 'Galeon('galeon')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 119); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'epiphany'	: class: 'Galeon('epiphany')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 121); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'skipstone'	: class: 'BackgroundBrowser('skipstone')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 123); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'kfmclient'	: class: 'Konqueror()' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 125); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	(1)

Type Name	Class Name	Notes
'konqueror'	: class: 'Konqueror()' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 127); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	(1)
'kfm'	: class: 'Konqueror()' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 129); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	(1)
'mosaic'	: class: 'BackgroundBrowser('mosaic')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 131); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'opera'	: class: 'Opera()' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 133); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'grail'	: class: 'Grail()' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 135); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'links'	: class: 'GenericBrowser('links')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 137); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	

Type Name	Class Name	Notes
'elinks'	: class: 'Elinks('elinks')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 139); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'lynx'	: class: 'GenericBrowser('lynx')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 141); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'w3m'	: class: 'GenericBrowser('w3m')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 143); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	
'windows-default'	: class: 'WindowsDefault' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 145); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	(2)
'macosx'	: class: 'MacOSXOSA Script('default')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 147); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	(3)
'safari'	: class: 'MacOSXOSA Script('safari')' <div> System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) webbrowser.rst, line 149); <a href="#">backlink</a>  Unknown interpreted text role "class". </div>	(3)

Type Name	Class Name	Notes
'google-chrome'	<pre>:class:'Chrome('google-chrome')</pre> <div> <p><b>System Message: ERROR/3</b> (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 151); <a href="#">backlink</a></p> <p>Unknown interpreted text role "class".</p> </div>	
'chrome'	<pre>:class:'Chrome('chrome')</pre> <div> <p><b>System Message: ERROR/3</b> (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 153); <a href="#">backlink</a></p> <p>Unknown interpreted text role "class".</p> </div>	
'chromium'	<pre>:class:'Chromium('chromium')</pre> <div> <p><b>System Message: ERROR/3</b> (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 155); <a href="#">backlink</a></p> <p>Unknown interpreted text role "class".</p> </div>	
'chromium-browser'	<pre>:class:'Chromium('chromium-browser')</pre> <div> <p><b>System Message: ERROR/3</b> (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 157); <a href="#">backlink</a></p> <p>Unknown interpreted text role "class".</p> </div>	

#### Notes:

1. "Konqueror" is the file manager for the KDE desktop environment for Unix, and only makes sense to use if KDE is running. Some way of reliably detecting KDE would be nice; the `:envvar:'KDEDIR'` variable is not sufficient. Note also that the name "kfin" is used even when using the `:program:'konqueror'` command with KDE 2 --- the implementation selects the best strategy for running Konqueror.

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 162); [backlink](#)

Unknown interpreted text role "envvar".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 162); [backlink](#)

Unknown interpreted text role "program".

2. Only on Windows platforms.
3. Only on macOS platform.

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 174)

Unknown directive type "versionadded".

```
.. versionadded:: 3.3
    Support for Chrome/Chromium has been added.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 177)**

Unknown directive type "deprecated-removed".

```
.. deprecated-removed:: 3.11 3.13
    :class:`MacOSX` is deprecated, use :class:`MacOSXOSAScript` instead.
```

Here are some simple examples:

```
url = 'https://docs.python.org/'

# Open URL in a new tab, if a browser window is already open.
webbrowser.open_new_tab(url)

# Open URL in new window, raising the window if possible.
webbrowser.open_new(url)
```

## Browser Controller Objects

Browser controllers provide these methods which parallel three of the module-level convenience functions:

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 200)**

Unknown directive type "attribute".

```
.. attribute:: name

    System-dependent name for the browser.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 205)**

Unknown directive type "method".

```
.. method:: controller.open(url, new=0, autoraise=True)

    Display *url* using the browser handled by this controller. If *new* is 1, a new
    browser window is opened if possible. If *new* is 2, a new browser page ("tab")
    is opened if possible.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 212)**

Unknown directive type "method".

```
.. method:: controller.open_new(url)

    Open *url* in a new window of the browser handled by this controller, if
    possible, otherwise, open *url* in the only browser window. Alias
    :func:`open_new`.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library)webbrowser.rst, line 219)**

Unknown directive type "method".

```
.. method:: controller.open_new_tab(url)

    Open *url* in a new page ("tab") of the browser handled by this controller, if
    possible, otherwise equivalent to :func:`open_new`.
```



## Footnotes

- [1] Executables named here without a full path will be searched in the directories given in the `:envvar:PATH` environment variable.

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main) (Doc) (library) `webbrowser.rst`, line 227; [backlink](#)

Unknown interpreted text role "envvar".