

## **WebParrot introduction and walk-thru.**

WebParrot acts as a caching proxy to allow for repeatable client testing. This tutorial will get you started using WebParrot.

### **Installation:**

WebParrot requires nodejs version 0.6.6 or above.

Nodejs can be downloaded and installed from

<http://nodejs.org/#download>

WebParrot itself does not need to be installed, it is run using nodejs

WebParrot can be downloaded using npm using the command 'npm install WebParrot'

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### **Running:**

To run WebParrot type: 'node <location of WebParrot.js>'.

If nodejs isn't in your path then you will have to run the node executable from wherever you installed it.

WebParrot has several optional command line arguments, use the argument -h to show more information about these or view the readme.

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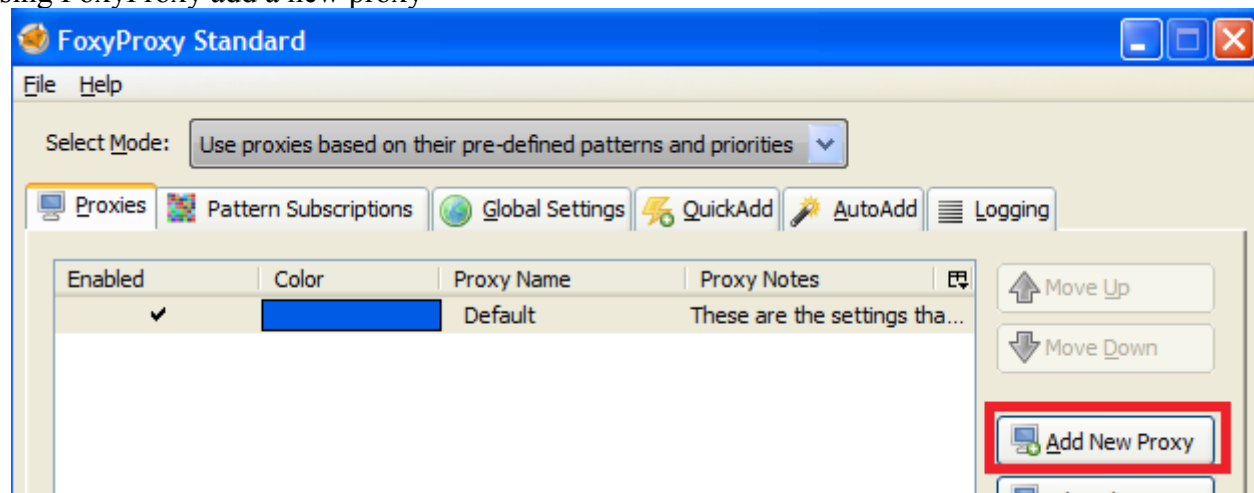
### **Using:**

To direct your traffic through WebParrot set it as a http proxy in your browser. Once you have done so then will start caching any traffic passing through it.

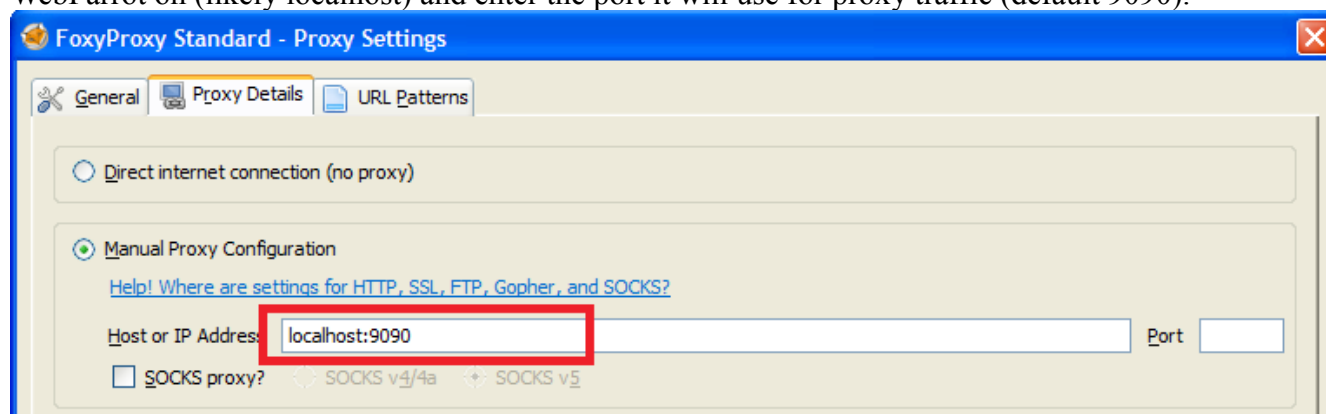
## Firefox:

Several addons exist, however I suggest FoxyProxy.

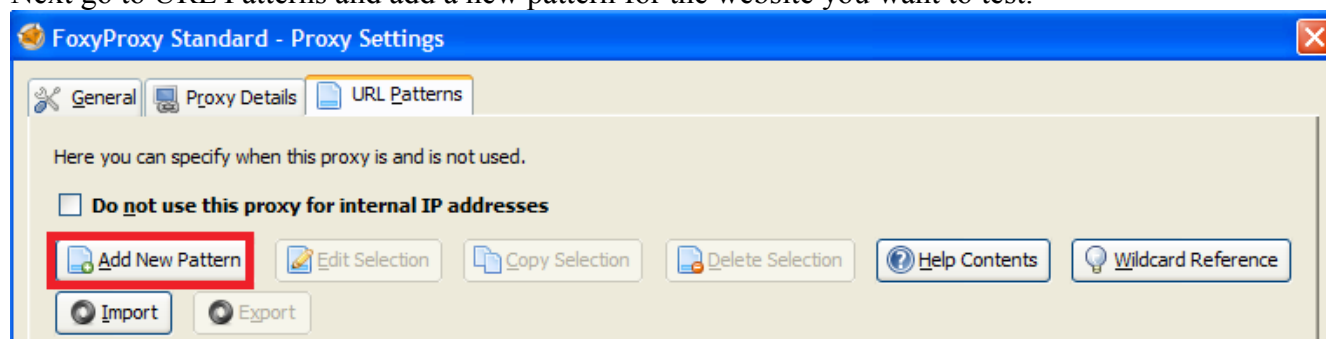
Using FoxyProxy add a new proxy



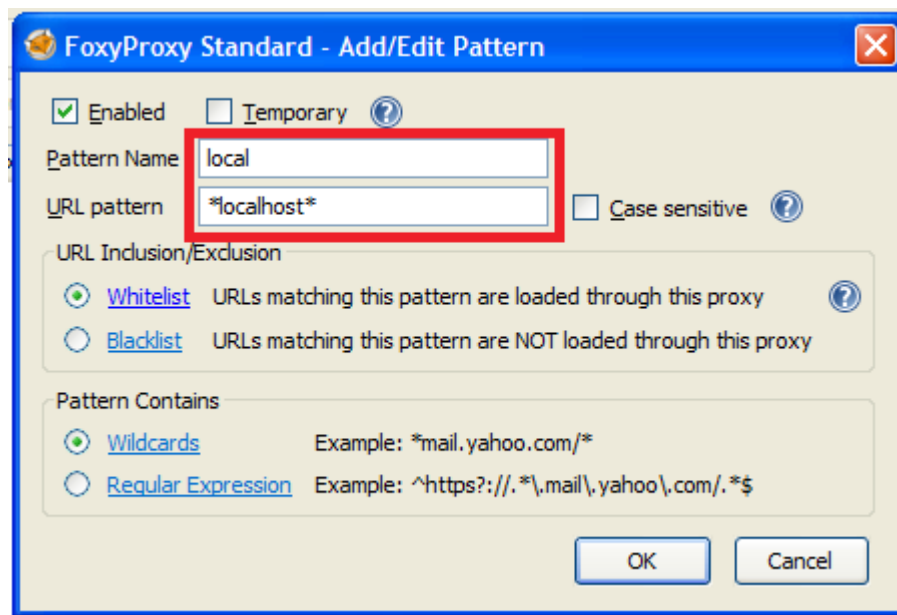
Using the manual proxy configuration, enter the hostname or ip of the machine you are running WebParrot on (likely localhost) and enter the port it will use for proxy traffic (default 9090).



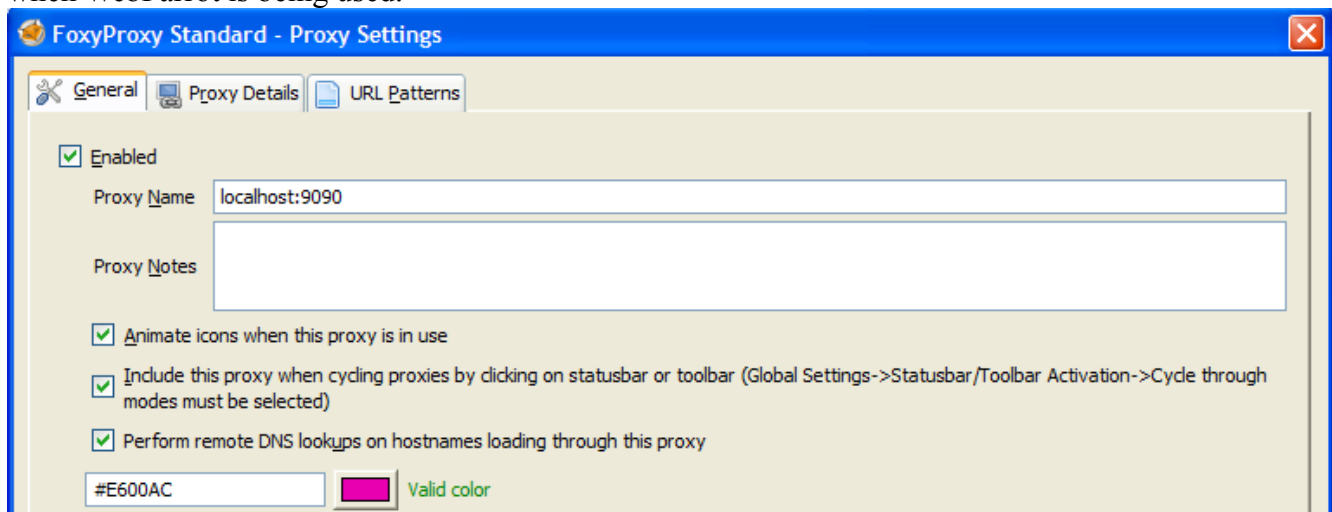
Next go to URL Patterns and add a new pattern for the website you want to test.



I suggest adding a wildcard to the front of any patterns you input (your address bar will not display the http:// part, but FoxyProxy will see it as part of the pattern). Make sure it's set to white list and enabled.



Set it to a new color so you can see when your direct connection is being use (the icon will be blue) and when WebParrot is being used.



You're ready to go!

## Chrome:

Several extensions exist, I suggest 'Proxy Switchy!'

Using Proxy Switchy add a new profile, set it to manual configuration and enter the hostname or ip of the machine you're running WebParrot on (likely localhost) and enter the port it will use for proxy traffic (default 9090).

The screenshot shows the 'Proxy Profiles' window with two tabs: 'Proxy Profiles' and 'Profile Details'. In the 'Proxy Profiles' tab, there is a list of profiles with 'WebParrot' selected. Below the list is a '+ New Profile' button. In the 'Profile Details' tab, the 'Profile Name' is 'WebParrot'. Under 'Manual Configuration', the 'HTTP Proxy' is set to 'localhost' and the 'Port' is '9090'. A red box highlights the 'localhost' and '9090' fields. There is also an unchecked checkbox for 'Use the same proxy server for all protocols'.

Make sure the if the site you're testing is being hosted on your machine that you empty 'No Proxy for' at the bottom of the profiles page.

The screenshot shows the 'No Proxy for' field in the 'Profile Details' tab. The field is empty and highlighted with a red box. Below the field are buttons for 'Error Log', 'Save', and 'Close'.

Next go to switch rules and add a name and pattern for the site to test. Set the Proxy Profile to the one you made for WebParrot

The screenshot shows the 'Switch Rules' window. The 'Enable Switch Rules' checkbox is checked. Below is a table with columns: 'Rule Name', 'URL Pattern', 'Pattern Type', and 'Proxy Profile'. The table has two rows: 'Default Rule' and 'ParrotRule'. The 'ParrotRule' row is highlighted with a red box. Below the table is a '+ New Rule' button.

Rule Name	URL Pattern	Pattern Type	Proxy Profile
Default Rule	All URLs that doesn't match any other pattern		[Direct Connection]
ParrotRule	*localhost*	Wildcard	WebParrot

You're ready to go!

**IE:**

Why are you using IE?!

**System Proxy:**

I recommend against using WebParrot as your system proxy. If you really want to, then you're on your own.

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**Admin Page:**

WebParrot also runs its own web server for administration. This page is hosted on the proxy port so enter <proxy URL>:<proxy Port>/admin (e.g. localhost:9090/admin) into your browser. Note that entering <proxy URL>:<proxy Port> (e.g. localhost:9090) without the /admin will redirect you, however your browser might interpret this as trying to access www.localhost:9090.com

**Demo Page:**

WebParrot has a demo page to show off its abilities. This page is hosted on the proxy port at /demo so enter <proxy URL>:<proxy Port>/demo into your browser.

## Options and notes:

**Modes:**

**Translucent:** In this mode any unknown request will be sent to the server while any known request will be parroted. This is the default mode

**Transparent:** In this mode all requests are sent to the server and the parrot acts like a normal proxy, however all responses will be recorded.

**Opaque:** In this mode no requests will be sent to the server, any unknown requests will receive a blank page. Do not start the parrot in opaque mode.

**Cache issues:**

If you are trying to view a page you have viewed before your browser may send a cache check instead of a normal GET. If the page has not changed then the server will respond by saying that the cached page is correct. This response will be recorded by the parrot. Thus you may try to reload from the parrot only to get a cache response. To avoid this issue either clear your browser's cache before using or set the parrot to ignore that particular request (via the admin page). Also see stripping below.

**Stripping:**

Requests can have the part of the headers that cause these cache issues removed by adding the -strip command line argument. Doing so will remove the 'if-none-match' and 'if-modified-since' headers so the server will never respond with a cache success.

**Locking and ignoring:**

Requests can be set to be locked and/or ignored. Locking a request makes it so that the response will not change, even if a new response is seen. (only makes sense in transparent mode or response is set to ignored). Ignoring a request makes it so that the request is always treated as unknown. Thus in translucent mode the server will always receive the request and in opaque mode a blank page will always be delivered (thus locking is only useful in translucent mode).

**Transcoders:**

Transcoders allow you to modify the content sent from the cache to the client. See transcodersReadme.txt in the transcoders folder for more information.

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