jHTTPp2
Release 0.4.70
User Manual

November 15, 2006

The jHTTPp2 homepage is located at `http://jhttp2.sourceforge.net/`

Contents

1 Introduction

The jHTTPp2 is an open source HTTP proxy server, hosted on the great *Source-Forge.net* website. jHTTPp2 has been developed with several goals in mind:

cross-platform support jHTTPp2 was written in Java. It uses the Java 2 Runtime Environment (JRE) and runs on every OS which has a JRE, eg. Windows, Linux/Unix, Mac OS, [insertyournotsocommonOShere]

high-performance

supports HTTP 1.1 jHTTPp2 implements proxying capability for the `HTTP/1.1` protocol and for the `CONNECT` command (required for SSL connections)

filtering abilities jHTTPp2 has powerful filter rules. They allows you to use wildcard search masks for URLs, block or allow website requests, remove cookies on some selected domains, redirect requests to another host, removes privacy sensitive header from the HTTP requests.

sourcecode available full source code available; GNU General Public License (GPL)

configuration with a webinterface You can use your webbrowser to configure the proxy server.

small size jHTTPp2 consists on the Jar-Archive `Jhtpp2.jar`, which contains all compiled Java-CLASS files. Actual size: less than 30kb.

2 Installation Notes

First, please make sure that you have the Java 2 Runtime Environment installed (important!) Here you will find the JRE for different platforms if it isn't already installed:

`http://java.sun.com/`

The installation procedure is different on different platforms.

2.1 MS Windows 9x,2000,XP

Download the latest binary *Jp2-xx-win.exe* from

`http://sourceforge.net/project/showfiles.php?group_id=25114`

The executable contains a self-extracting installer.

2.2 MacOS, Linux

Download the archive *Jp2-xx-linux.bzip* or *Jp2-xx-other.zip* (latest version) from

`http://sourceforge.net/project/showfiles.php?group_id=25114`

Just extract all files from the archives to a directory.

3 Starting jHTTPp2

If you are using MS Windows, you can start the proxy simply by excuting the file *Jhttpp2.bat*. jHTTPp2 will start in a console window. On Linux or Max OS you can start jHTTPp2 in a terminal or shell window with the `java` command. If this command causes an error, you probably haven't the Java Runtime Environment installed.

If the JRE is installed, then change to the directory where you copied jHTTPp2 and type:

```
java -jar Jhttpp2.jar
```

or

```
java -classpath Jhttpp2.jar Jhttpp2Launcher
```

This should told the Java VM to start jHTTPp2 in the console (text) mode with using the Jhttpp2.jar file as classpath.

- ▷ `Jhttpp2Launcher` is case-sensitive– or you will get "Class Not Found Error" or something.

- ▷ To use the `java` command anywhere, it must (of course) in your PATH variable (applies to MS Windows users, too).

- ▷ Server ports below 1024 requires a `root`-account.

- ▷ You must have write-permission in the directory where you installed jHTTPp2 (for the log files)

If anything goes right, then you will get following output:

```
jHTTPp2 HTTP Proxy Server Release 0.x.xx [xx-xx-xxxx]
Copyright (c) 2001-2003
This software comes with ABSOLUTELY NO WARRANTY OF ANY KIND.
http://jhttp2.sourceforge.net/
Running on port 8088
```

3.1 Stopping jHTTPp2

Point you web browser to following address:

```
http://localhost:8088/admin/jp2-config
```

After entering your username and password, you can click on "Shutdown". jHTTPp2 will shutdown gracefully. If you have disabled the webinterface (and thus can't use it), then you must use Control-C in the jHTTPp2 console window to shut down the server. If jHTTPp2 doesn't run in a console window, then you have to kill the process directly. For this, use the the `kill` command, or when not available (MS Windows), kill the process with the Task-Manager.

4 Configuration

You can edit the configuration file or you can use the webinterface.

4.1   The configuration file

The jHTTPp2 proxy can be configured with the file called `server.properties`. Following entries are supported (so far):

server.http-proxy (true—false) Set this to `true` to use a remote HTTP proxy server. Default: `false`

server.http-proxy.hostname The hostname of the remote proxy (or IP-address)

server.http-proxy.port (integer number) The port number of the remote HTTP proxy

server.filter.http (true—false) If set to `true`, the `Referer` header will be removed and the `User-Agent` header will be changed to a new value. WARNING: Set only to `true` if you know what `Referer` and `User-Agent` mean. Some of your websites may become unusable.

server.filter.http.useragent (Browser identification like "Mozilla/4.0 ....") If server.filter.http is set to `true`, this field overwrites the "User-Agent" HTTP Header (contains information about the browser)

server.filter.url (true—false) This enables the "URL-Filter" of jHTTPp2. The URL-Filter works with wildcard search pattern to block some websites/files or to enable/disable cookies domain-spezific. The wildcard dictionary is stored in a separate binary file ("server.data").

server.enable-cookies-by-default (true—false) This boolean value controls the default handling for cookies. If set to false, all cookies will be removed, if the spezific domain is not catched by a search pattern in the url manager. If set to true, all cookies will be untouched, if no other setting in the URL-Filter is given.

server.debug-logging (true—false) Enables the low-level logging, probably only useful for developer

server.port (Integer number) `server.port` is a number from 0 to 65535; some port numbers (especially below 1024) are reserved for particular protocols. The default value is `8088`, but you can change this, if nesessary. This happens when the default port is already being used by another application in the system. Server port changes take effect on restart.

server.access.log (true—false) If you want to log all accessed addresses, then set this to `true`. In the file `paccess.log` (default filename) you'll find information like: `[Mon Mar 03 17:57:47 GMT+01:00 2003] 127.0.0.1 GET http://bklap:8088/`

server.access.log.filename (filename) Default setting is `paccess.log`

server.webconfig (true—false) Default value is `true`. If you want to disable the web-interface, set it to `false`.

server.www (true—false) The built-in webserver is enabled by default.

Examples:
```
server.filter.http=false
server.access.log.filename=paccess.log
server.filter.url=false
```

```
server.enable-cookies-by-default=true
server.port=8088
server.debug-logging=false
server.access.log=true
server.http-proxy.hostname=127.0.0.1
server.http-proxy=false
server.http-proxy.port=8080
server.filter.http.useragent=Mozilla/4.0 (compatible; MSIE 4.0; WindowsNT
5.0)
server.webconfig=true
server.www=true
```

4.2   Webinterface

A new feature of jHTTPp2 is the webinterface. Go to following address to use it:

`http://localhost:8088/admin/jp2-config`

Note: This address is correct if jHTTPp2 runs on your own system and uses the default port 8088. So you have to replace `localhost` and `8088` with an appreciate hostname and portnumber, if nesessary. The default username and password is *root* and *geheim*. The settings will be saved to the file `server.properties`. Password and username for the webinterface will be stored there, too (not encrypted).

4.3   Browser Configuration

Your webbrowser must be configured to use a HTTP proxy. Enter the following data in the proxy settings: hostname: `127.0.0.1` or `localhost`, port `8088`. jHTTPp2 supports only the HTTP and HTTPS protocol. Thus you must use another proxy program for FTP, SOCKS and GOPHER, if you want to use these protocols over a proxy.

4.4   Security

The built-in web server has it's own document tree, called `htdocs`. Network access to the web server is restricted to that directory (and it's subdirectories). For obvious security reasons, the configuration file `server.properties` is stored outside the `htdocs` document tree. Same with the access log and server log files.

The user-name and password from the web-based configuration module are stored unencrypted in `server.properties`. They will be also send unencrypted over the network (using the HTTP *POST* command) anytime you use the web-based configuration (`http://localhost:8088/admin/jp2-config`)

4.5   Performance Hints

Your Java 2 Runtime Environment should use the Just-In-Time compiler (JIT), to get the best performance of jHTTPp2. The latest JRE's have support for this (Java 2 JRE 1.3 and higher). If you use an old JRE release (1.1 etc), you should consider to update to JRE.

Some Java Runtime Environments offer a special *server* optimized runtime mode (pass the `-server` option to the `java` command), which is designed for long-time running server applications like jHTTpp2.

5   Bugs

5.1   Known Bugs/Limitations

▷ Connections appear not in the access log file when using http://localhost:8088 or http://127.0.0.1

▷ SSL-Connect command seems to work incorrectly under some conditions

▷ Web configuration interface is incomplete

▷ No IP Version 6 (ipv6) Support

▷ No Support for the HTTP/1.1 "Pipelining" feature

▷ jHTTPp2 acts as a NON-caching HTTP proxy

5.2   Reporting Bugs

If you have a specific bug report or a feature request, please visit

`http://sourceforge.net/tracker/?group_id=25114&atid=383422`

This link is also on the jHTTPp2 website:

`http://jhttp2.sourceforge.net/`

When submitting a bug, be sure to include the version number of the jHTTPp2 you are using.

6   Version History

▷ 0.0.1 2001-04-01 *jHTTPp2 was created spring 2001, this was a non-public release*

▷ 0.2.22 2001-05-16 *The first public release on SourceForge.net. This release suffered from the bad HTTP implementation*

▷ 0.3.0 2001-05-20

▷ 0.4.0 2001-06-20

▷ 0.4.50 2003-03-06

▷ 0.4.60 2003-03-13

▷ 0.4.62 2003-05-20 *The SWING-GUI was removed, replaced by the improved web-based configuration interface*

6.1   New Features and Bugfixes in 0.4.50 (and higher)

▷ This user manual; build with LaTex (MikTex 2.2 – LaTex for Windows, `http://www.miktex.org`)

▷ Swing-graphical user interface removed, replaced by web admin module `http://localhost:8088/admin/jp2-config`

▷ Enhanced web administration module

▷ Corrected link on the server's homepage

▷ CLASS archive file size reduced to less than 30kb