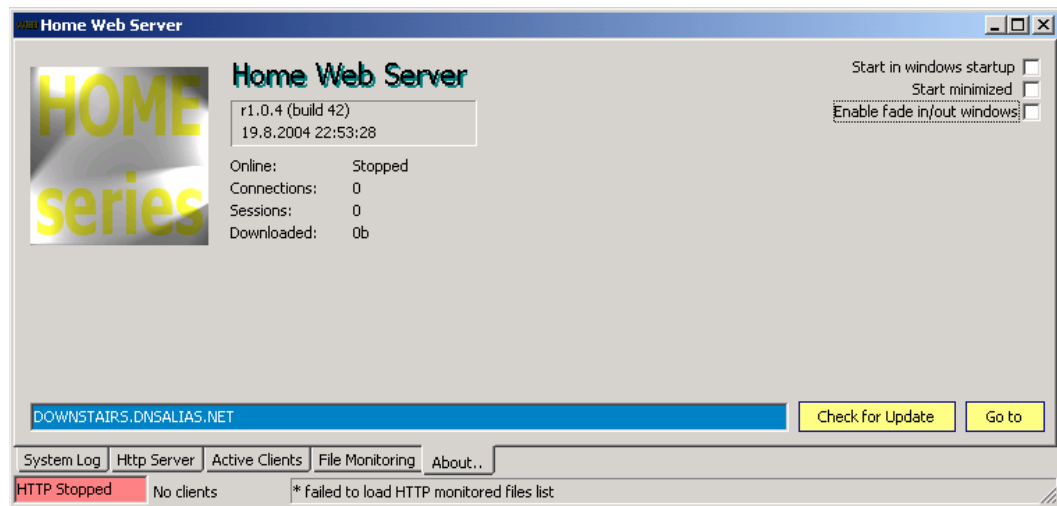


Home Web Server

First revision: 28.08.2004, Ari Pikivirta

Last updated: 16.09.2004, Ari Pikivirta

Introduction

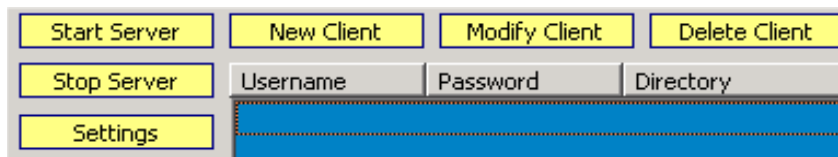


Home Web Server is a freeware Windows web server with lots of features. This is a very common saying, but this time – the phrase has the real meaning. To mention some of home web server features: There is support for open SSL, support for PHP, support for CGI application, support for executing ISAPI extensions, server-replace-tags, virtual root aliases, and much more. This document will describe functions included.

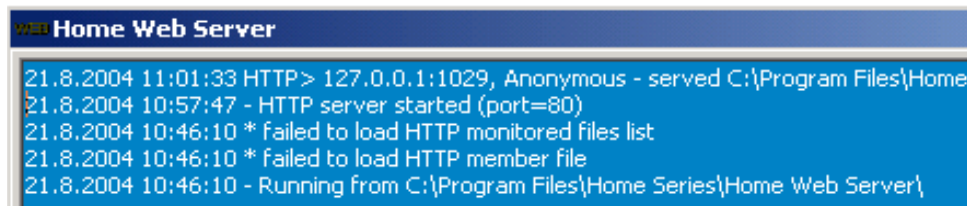
First steps to get it running

After installation is completed the home web server application is already ready to run as http server on your local computer. So, here is how you can see what it takes to look pages served from your computer:

1. Run Home Web Server
2. Switch to "Http server" tab, by clicking the tab at the bottom of the window appeared.



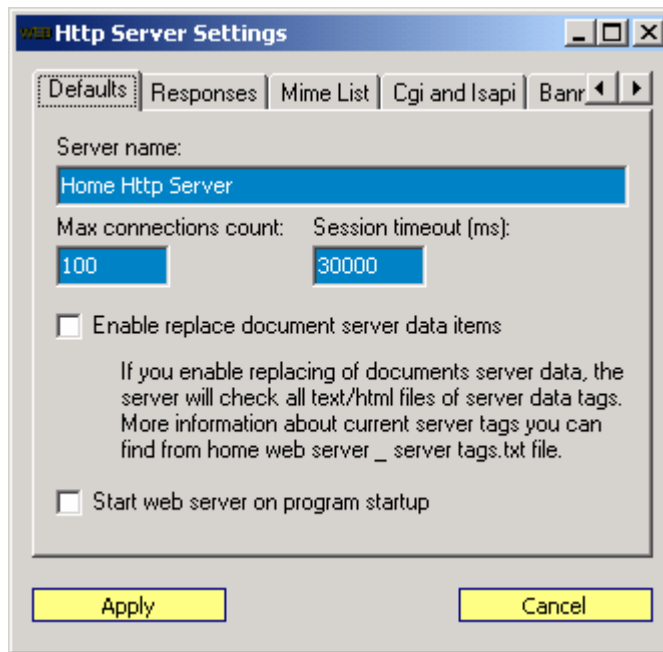
3. Then click "Start server" button. Next you see is that status bar says that your web server has been started at port 80 and also to indicate the web server is running the edit box at bottom left corner turns to green.
4. Next switch to "System log" tab from the bottom of the window.
5. Run your default internet browser and navigate to address: <http://127.0.0.1>. This address always re-presents your local computer.
6. To check that the default page served is coming from your local computer, check out the home web server log (the one we just switched the view to). It should now look like this:



7. You are now done with your first steps to run your own local web server.

It was not so hard, wasn't it? The default page explains also some of the home web server features. By reading that page through and checking out the http source files located under the installation path of home web server you can easily build up very professional looking home page for your self.

Settings, Defaults



Server name:

When some of the http client applications request server name, value entered here will be presented as the web server. So, by changing this you really have your own web server.

Max connections count:

Default is zero. Max connection count defines the maximum number of simultaneous connections allowed. By setting this value to zero there is no limitation of maximum connections.

Session timeout (ms):

For each client connected the home web server creates session, which will carry on clients username and password for example. If you set this timeout very short the client might not be able to browse the "member" pages if defined – because their data are timed out. Session timeout counter is restarted always on clients last request time.

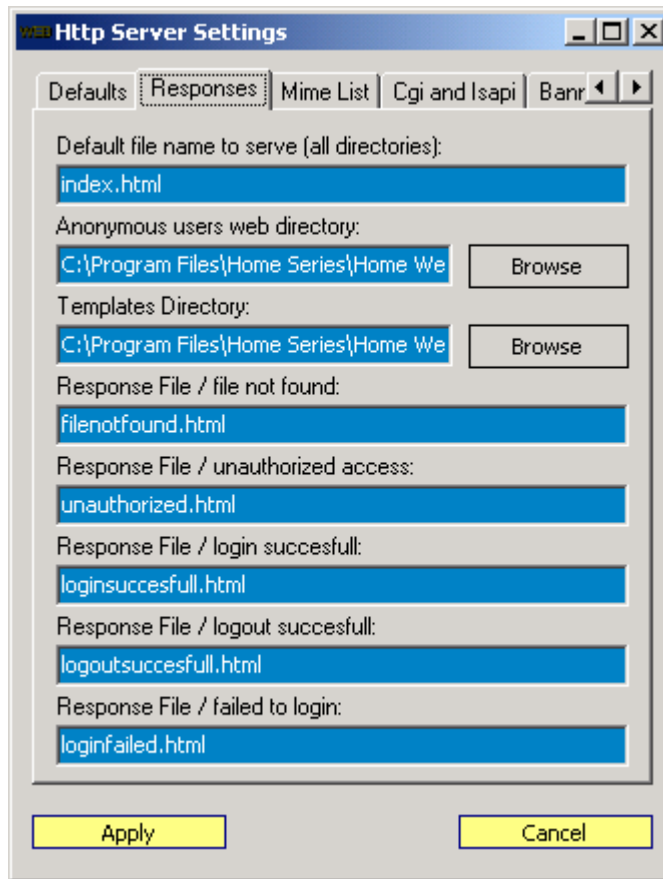
Enable server-replace-tags:

By checking this checkbox you enable server to replace all server-replace-tags before serving out documents containing *text* in it's mime type. This basically means all html and text documents.

Start Web Server at Program startup:

When checked, home web server will start the http (and https) server on program startup.

Settings, Responses



Responses tab on http settings defines the document defaults and templates to serve as follows:

Default file name to serve (all directories):

Default is index.html. If no document is specified in clients request (<http://domain.com/documentname>) then the server checks out if this file is located into that requested folder and serves out this document if it exists. Otherwise request will lead into file not found response.

Anonymous users web directory:

This is root directory of your web server. And all users that has not logged in are served with contents of this directory. By first startup the program checks out where it was installed and then points to the default page (installation dir / http) you saw on first startup if following the step-by-step example.

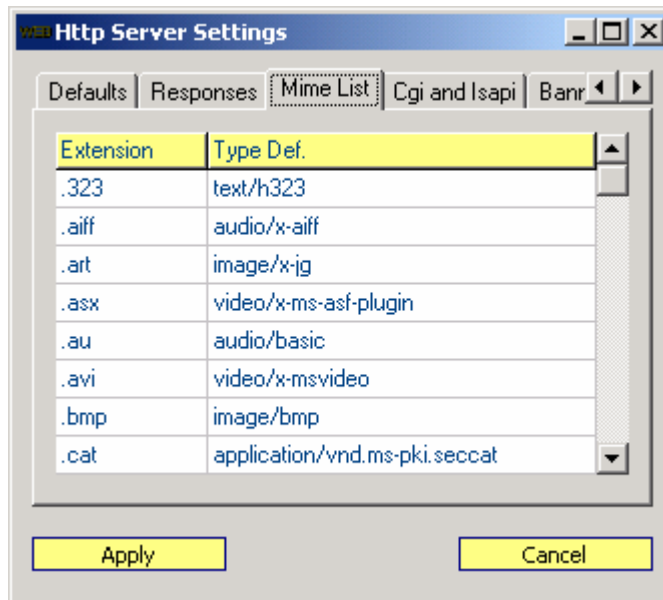
Templates directory:

Templates directory is here for getting the response files into common place. By default the templates directory is also pointing to installation directory / templates. All responses are checked from this directory and if they don't exist the internal default response is served to client.

Response files:

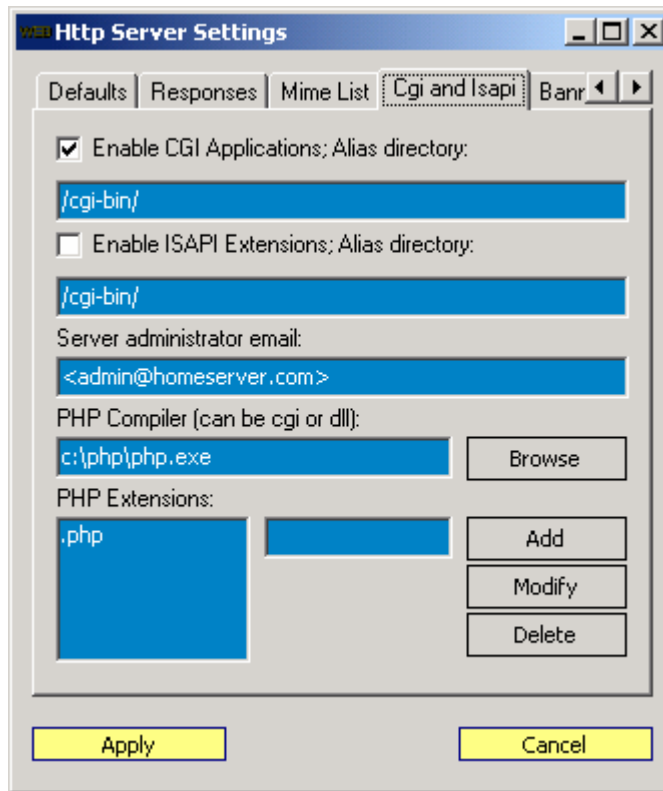
Response files are defined by only filename. The response files are always checked from templates directory.

Settings, Mime List



Mime list tab on http settings window contains the mime types that http server will check before serving out any document. By default, most of the mime types are already defined.

Settings, CGI and ISAPI



Http settings CGI and ISAPI contains following settings:

Enable CGI applications; Alias directory:

By default the CGI application alias is set to "/cgi-bin/" and the checkbox is checked. CGI alias has to be used for executing CGI applications in forms for example. Otherwise the server would just serve them out as download. Also note that to execute CGI applications they must be located into directory named similar to alias.

```
<form name="checkthisout" action="/cgi-bin/sendtoforum.exe"
method="post">
```

Enable ISAPI extensions, Alias directory:

By default the ISAPI application alias is set to "/cgi-bin/" and checkbox is not checked for disabling the ".dll" files execution. The server only executes ISAPI extensions that are requested with the alias directory (from the directory named same: c:\yourhttpdir\pub\cgi-bin\forum.dll).

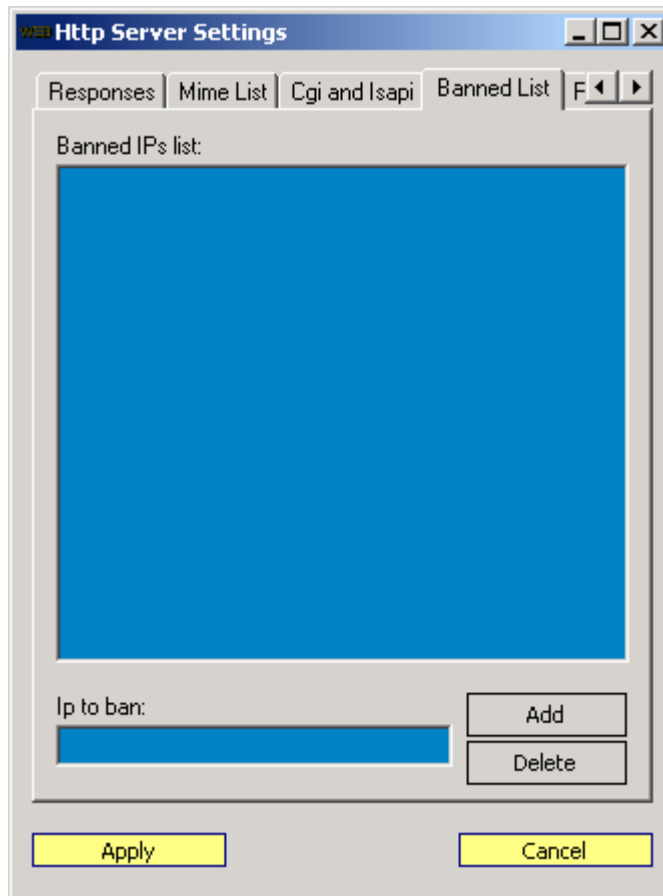
Server administrator email:

This is one of the values that is used in CGI applications. Some CGI applications use this CGI parameter.

PHP compiler:

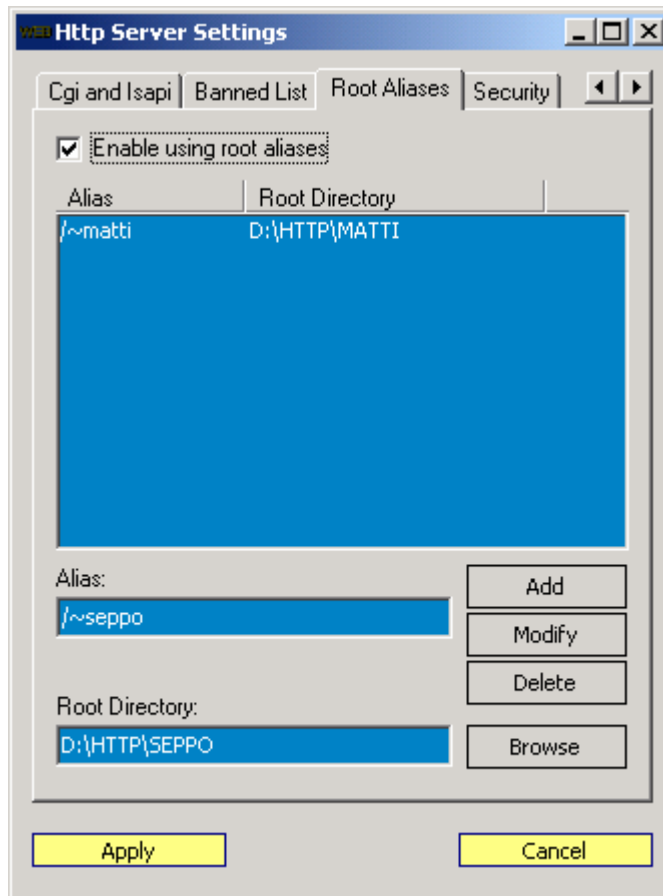
If you want to serve out PHP files you need to use external PHP compiler available from <http://www.php.org> for example. This value is pointing to it's default installation path C:\PHP\PHP.exe. PHP.exe is really considered as CGI application, so the CGI application must be enabled to serve out compiled PHP files.

Settings, Banned List



To disable some IP accessing even anonymous folder of your web server, add the IP into this list. When IP listed here tries to connect it is immediately disconnected before it's request is handled.

Settings, Root Aliases



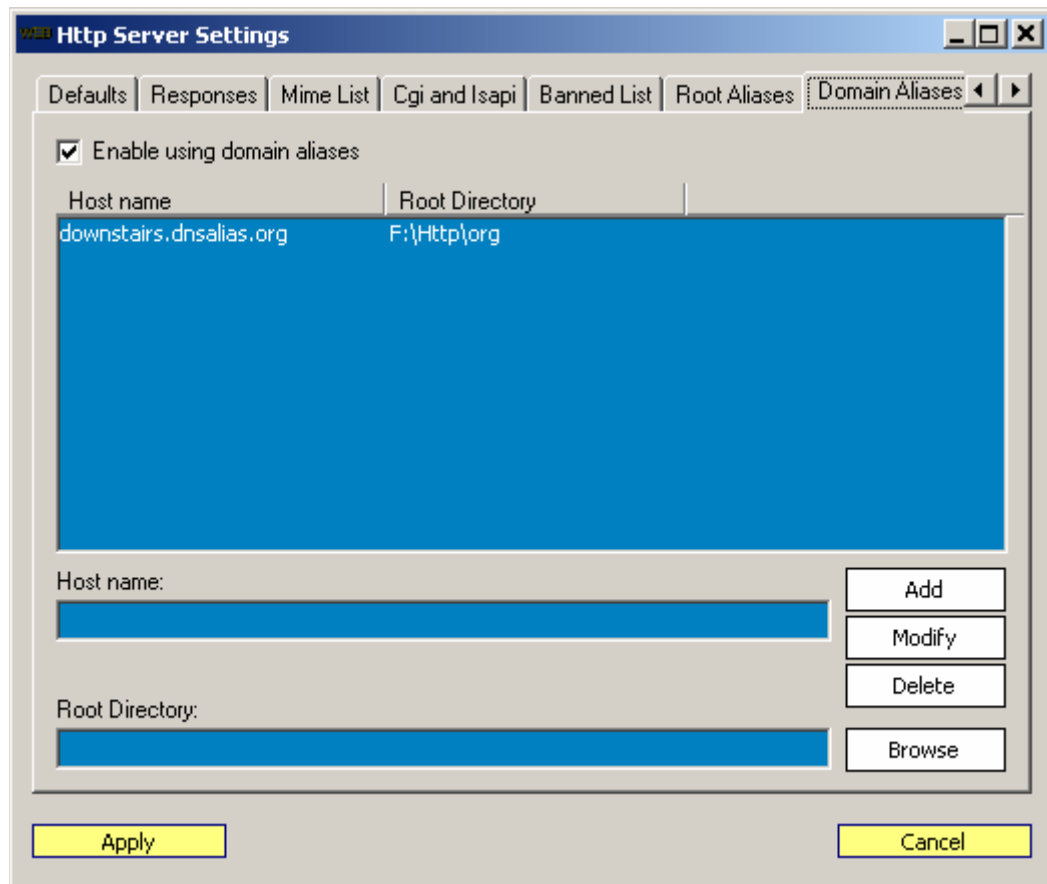
Root aliases mean totally different web root paths for clients requesting documents using these aliases after your domain name. Note that root aliases should always have the "/" in the beginning.

Example:

Location = <http://127.0.0.1/~matti/forum.html>

If there is root alias defined for "/~matti", the server changes this clients root to directory defined for this. In this example the documents will served from D:\HTTP\MATTI.

Settings, Domain Aliases



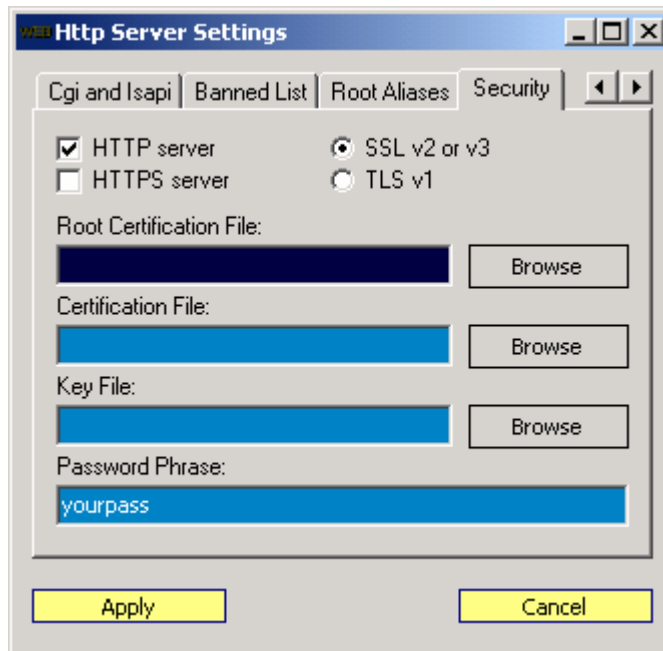
Domain aliases mean totally different web root paths for clients connecting to your ip address using different domain name. By setting these values you can run unlimited amount of domain names on this very same web server, and all those domains can really have their own web roots.

Example:

Your ip: 777.777.777.777
Domain 1: downstairs.dnsalias.net
Domain 2: downstairs.dnsalias.org

Only second domain must be defined (both can be defined, but it is really not needed) with different web root to serve totally different view for users connecting to ".org" instead of ".net".

Settings, Security



On security tab in http settings window, there are all Open SSL related items. They should be filled as follows:

HTTP server checkbox:

To enable running of regular http server this checkbox must be checked. If this is not checked, the port 80 server won't be started at all when start server button is pressed.

HTTPS server checkbox:

To enable running HTTPS server, when starting server, this checkbox must be checked. Also, to run HTTPS server you must have all the certificate files defined.

SSL / TLS:

Security mode select, when running HTTPS server.

Root certification file:

This file is the root certification file of the server (CA).

Certification file:

Personal certification file.

Key File:

Key file extracted from personal certification file.

Password phrase:

When the HTTPS server is started the server needs to have the correct password for the certification. This password is always given when the certificate is created.

For more information about certificates and Open SSL, please visit <http://www.openssl.org>.

Server-Replace-Tags

If the server replace tags on http server settings are enabled the server will replace html and text file following tags:

BUILD	Home server build number
SERVER	Server software name
UPTIME	Online time since server startup (hours)
CONNECTIONS	Amount of connections server has handled after it has been started
CLIENTS	Current active client count
SESSIONS	Sessions handled
BDOWNLOADED	Bytes downloaded
TIME	Local time
DATE	Local date
USER	User name
IP	Users IP address
PORT	Users current port number
SECURE	True/False depending if http or https
DIRLIST(alias;directory)	

Dirlist tag creates explorer style file browser that only searches the files in directory specified. All these files are marked with alias in front of them as a link.

Example tag:

```
||DIRLIST(/temp/;f:\http\pub\temp\)
```

Result is file listing of directory f:\http\pub\temp* contents where all files can be clicked open as
Filename.

||FILESIZE(filename)

Server will replace this tag with filesize (in bytes) of specified file.

Example tag:

||FILESIZE(f:\http\pub\index.html)

||FILEDATE(filename)

With this replace tag server replaces this text in html by specified file date. Date is presented in local computers default date format.

||MONITORCOUNT(filename)

Server replaces this tag in html with the value that exists in monitored files on this filename.

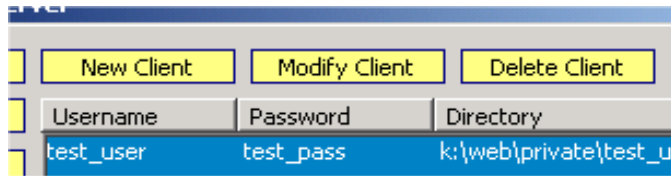
||MONITORCOUNTTODAY(filename)

Server replaces this tag with the amount of donwloads speceified file has on file monitor tab. If file is not defined in monitored files, you will only see error on your web page.

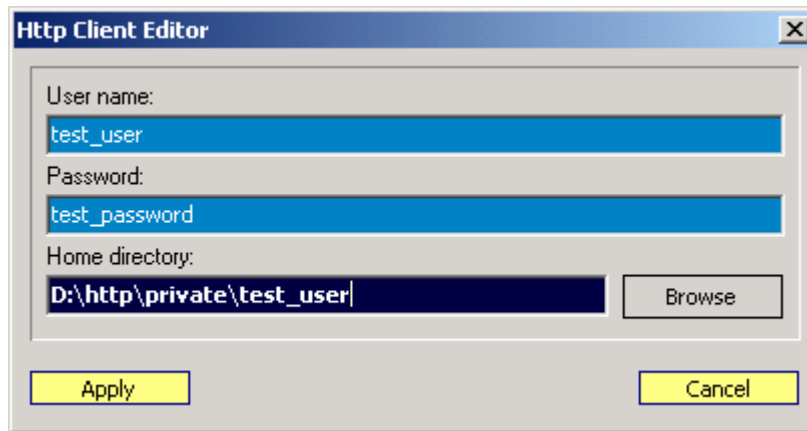
||MONITORAVGPERDAY(filename)

This is similar to "counttoday" replace tag.

Add or Modify Client



To modify or add http member client, you have to click open the Http Settings tab from the bottom of user interface window. From that tab click "New client" to add new client to member list or "Modify Client" to modify existing member data. When starting to modify member, you must first select member to modify from list below the buttons.



When clicked above window is opened.

User name:

User name is the field to check when client tries to log in into his private web pages. This field is case sensitive.

Password:

Password field contains case sensitive password for client to log in to private web pages.

Home directory:

Private folder on your server that are just served to member specified above. All but templates are served from this folder.

To allow clients log into their personal pages, you must define login form and logout form located into public pages (anonymous section). Forms should be build up as follows:

Login form:

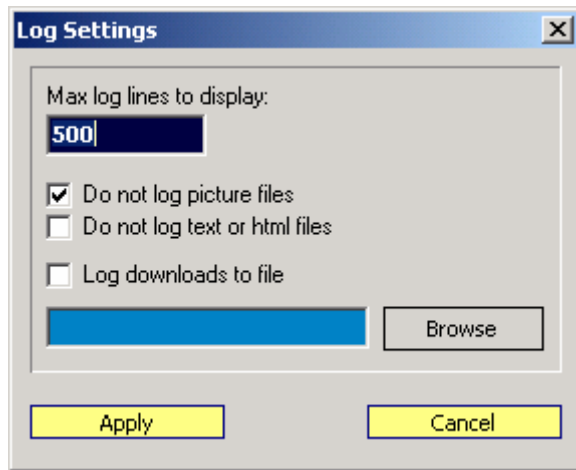
```
<form name="nameisnotimportant" method="post">
<input type="hidden" name="action" value="LOGIN">
<input type="text" name="user"><br>
<input type="password" name="pass"><br>
<input type="submit" value="Login"><br>
</form>
```

Logout form:

```
<form name="nameisnotimportant" method="post">
<input type="hidden" name="action" value="LOGOUT">
<input type="submit" value="Logout"><br>
</form>
```

Note, that these are just examples. Important thing on these forms are the hidden inputs and of course when logging in there must be username and password that are send as parameters on post.

Log Settings



Log settings window can be found on system log tab. Log settings contains the settings how different items are logged while server is running.

Max log lines to display:

Visible log book will contain maximum this amount of lines. All lines above this count will be just erased. Default is set to 500 lines.

Do not log picture files:

If this checkbox is checked then home web server won't log any files served with mime type containing text "image", this basically will prevent logging of all images, unless image type is not defined in mime type list in http settings. Default is not checked.

Do not log text or html files:

If checked home web server wont log any files served containing "text" in its mime type definition.

Log downloads to file:

If checked all files served will be logged into the file defined into edit box below. Select file before checking this checkbox by clicking the browse button on right.