

Personal Homepages at ETH

ETH students and employees own a space for a personal homepage. This homepage is available at `http://n.ethz.ch/~<loginname>/` (The same homepage is also available via https.)

1.1 Access

The files of this personal homepage are stored on the general home directory provided by ETH, which might be different from the home directory provided by your institute.

1.1.1 Access for Linux and Mac OS X

To access the homepage, you can connect to your ETH home directory using the smb protocol. The server location and path to your home directory are:

```
smb://d.ethz.ch/users/all/<username>
```

Please provide your login credentials to connect to the server.

1.1.2 Access for Windows

Windows users can connect using the following address:

```
\\d.ethz.ch\users\all\<username>
```

The home directory can be mapped to a drive letter. This process is richly documented on 3rd party websites (<https://www.google.com/search?client=firefox-b-d&q=windows+map+network+drive>).

1.2 Access via ssh / putty

If you prefer to work with a command-line tool, you can access your homepage files by ssh-ing to `slab1.ethz.ch` providing your username and password. Then, navigate to the subfolder `homepage` to edit the existing files (read on below).

1.3 Files in your homepage folder

When connected to the ETH home directory via smb or as network drive, there is a folder called "homepage".

All the usual web-files placed in this folder will be world-wide available via the URL mentioned before `http://n.ethz.ch/~<loginname>`

Please do not change the name of the file `index.html`. This file is displayed by default when no other filename is specified. The `index.html` file can be edited with a standard text editor. Changes

made to the file will be displayed immediately on the webserver. You might have to refresh your browser to see the changes in your browser.

Feel free to upload more files and link them within index.html. Please note that the space on your ETH home directory is limited to 2 GB at the moment.

2. Additional information

You can enhance your website using PHP, CGI, connect to a database or use authentication. Please read the attached documentation.

2.1 Publish your Homepage

In addition to the mapped network drive, you can also use a FTP client to upload your data. The FTP client used must be able to encrypt passwords with TLS/SSL. Our FTP server allows encrypted access only. Examples: WS_FTP, puTTY, FilleZilla, Fetch (Mac).

The FTP server is called **hg.n.ethz.ch**.

2.2 Protecting Directories

2.2.1 Authentication using a .htaccess.n File:

If you would like to restrict access to your files or directories, you can protect them by using an authentication method. You can create your own user-management (**File-based**) or use a central user administration (**AAI based**).

Place a file named **.htaccess.n** in the protected directory `/nas/<user>/<safedir>`. Replace `<user>` by your username and `<safedir>` by the name of the directory you wish to protect. Please note: the file name should be **.htaccess.n** and **not .htaccess**.

Configure one of the following authentication methods.

2.2.2 File-based authentication:

Using the htpasswd program, create a **.htpasswd** file with your users and store it in the

`/nas/<user>/<safedir>` directory.

Add the following lines

```
SSLRequireSSL
AuthType Basic
AuthBasicProvider file
AuthName "File basierte Authentisierung"
AuthUserFile /nas/<user>/<safedir>/htpasswd
require valid-user
```

to the `/nas/<user>/<safedir>/.htaccess.n` configuration file. This allows **all** users in your `.htpasswd` file to login to your directory.

If you wish to limit access to certain users, replace

```
require valid-user
```

by

```
require user <user1> <user2> ... etc. selecting the appropriate user from your .htpasswd file.
```

2.2.3 AAI based authentication:

Add the following lines

```
AuthType shibboleth
```

```
ShibRequireSession On
```

```
ShibRedirectToSSL 443
```

```
require valid-user
```

to the `/nas/<user>/<safedir>/.htaccess.n` configuration file. This allows **all** users with an AAI user account to login to your directory.

If you wish to limit access to AAI users with Unique IDs `<unique id user1>`, `<unique id user2>`, replace

```
require valid-user
```

by

```
require uniqueID <unique id user1> <unique id user2> etc.
```

AAI users must inform you of their unique IDs. AAI users find their Unique IDs at <http://n.ethz.ch/shibboleth-test/show>.

2.2.4 Enforcing Encryption:

According to the ETH BOT, only encrypted passwords, i.e. using HTTPS, may be transmitted over the net. To block HTTP access in file-based authentication add

```
SSLRequireSSL
```

to your `.htaccess.n` file.

Any `http://` access will result in the appearance of an error page with Error Code 403 (Forbidden).

2.2.5 Dynamic Web Sites, Scripting

Nowadays, in order to design a dynamic web site there are a variety of facilities available. You have the option of writing your own programs or to avail yourself of existing projects (e.g. for forums).

PHP Documentation

Installation

Version: 4.4.7

Extensions: mysql.so, zlib.so, gettex.so

PHP Scripts are executed with suPHP, which means that scripts are executed with your user UID.

Scripts must have the ending .php.

Options

allow_url_fopen	off
display_errors	off
register_globals	off
safe_mode	off

FAQ

How do I obtain additional information about the available PHP?

Create a script (e.g. info.php) with the following content:

```
<?php  
phpinfo();  
?>
```

My newly created or copied script does not function.

Please note that even PHP scripts must be executable. Follow the instructions on the CGI documentation page and make script executable.

CGI Documentation

The Common Gateway Interface (CGI) is an Apache extension allowing the user to create scripts with personal rights. To do this the script context is transformed with the help of a wrapper (suexec).

If you are not yet familiar with this concept, please read the official Apache Documentation, before posing any questions. In addition you can check Wikipedia on the subject.

cgi-bin Directory

For safety reasons, scripts are allowed in the cgi-bin directory only. In addition, to be recognized as such they must have the ending .cgi

Creating executable scripts

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To date, DFS does not have the ability to render files as executables. Using Unix it would be the "chmod u+x file" command. However, since DFS access runs over CIFS/Sharify, newly created scripts must be adapted with an smclient command. This can be done with Unix on a slab PC in the student computing labs or by remote :

```
$ smbclient //n.ethz.ch/user -Ud\\user
Password:
Domain=[D] OS=[Unix] Server=[Samba 3.0.26a-SerNet-RedHat]
smb: \> cd cgi-bin
smb: \cgi-bin\> chmod 755 test.cgi
```

You can ignore the "Pushing string of 'unlimited' length into non-SMB buffer!" message.

Environmental variables

To display environmental variables, create a sample script with the following contents:

```
#!/usr/bin/perl
##
## printenv -- demo CGI program which just prints its environment
##

print "Content-type: text/plain\n\n";
foreach $var (sort(keys(%ENV))) {
    $val = $ENV{$var};
    $val =~ s|\n|\\n|g;
    $val =~ s|"|\\"|g;
    print "${var}=\"${val}\"\\n";
}
```

Now copy this as printenv.cgi in your cgi-bin directory, render it executable and call it at URL <http://n.ethz.ch/student/user/cgi-bin/printenv.cgi> .

Interpreter

The Web server runs on a Linux operating system. You can therefore use the standard interpreters available. The following are most common:

- /usr/bin/perl
- /bin/bash
- /usr/bin/python

Security

Utmost caution is required when using such scripts. **Since scripts are executed within your user context these scripts have the right to delete all your data.** Incidentally, the same applies

to PHP. Thus pay particular attention to parameter processing and keep extraneous software up to date.

Debugging

In order to facilitate error tracing, we have put the “live” Web server error log file at your disposal:

`https://n.ethz.ch/cgi-bin/error_log.cgi`

Upon reloading page, output is updated (`tail -f 50 error_log`).

2.2.6 MySQL Database

Dynamic web pages often require a database. You have the possibility to apply for a 50MB account. We are currently using MySQL 4.1.18. The web-based admin tool, phpMyAdmin is centrally available from the IT Services at <http://www.phpmyadmin.ethz.ch>

Activate/delete your database in the nethz-Administration tool at Tab -> *Meine Services* -> *MySQL*.

2.2.7 Regulations

A personal website (homepage) is available to all ETH employees and students for free of charge.

No order is required. The service is only expected a directory homepage in the central personal home directory.

Use is subject to the [Rules of usage of Telematics at ETH Zurich](#).

Regarding content please refer to Section 3 in Article 8ff.

By using your common sense you will surely figure out which contents are permissible on ETH web pages. **Web pages with pornographic, sexist or politically incorrect contents as well as commercial marketing are not permitted.** The dissemination of copyright protected data is forbidden!

Any transgression will result in appropriate consequences.

Please take note of the ETH Zurich Acceptable Use Policy for Telematics Resources (BOT):

<https://rechtssammlung.sp.ethz.ch/Dokumente/203.21en.pdf>