

Welcome to the CS Intranet, cmlam






## Webpage Authoring How-tos

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### ▶ What is the address of my web site?

The URL of a user's homepage is `http://www.cs.hku.hk/~username`. Suppose your user name is `tmchan`, you may then access your homepage from the Internet via the URL:

`http://www.cs.hku.hk/~tmchan/index.html`

**No illegal MP3 files, pirated software, or any data that infringes the law** should be stored in your web site. Any HKUCS user accounts that are found to provide public access to such files will have their personal homepage suspended without further notice.

**Observe privacy and do not post any personal related data on to the Internet.**

### ▶ How do I upload files to my web site?

#### Within CS department

- If you login a PC running Windows in the CS department, your homepage directory is `W:\public_html`.

On UNIX servers, suppose your UNIX home directory is `/student/03/csis/tmchan`, your homepage directory is `/homepage/student/03/csis/tmchan/public_html`, i.e., Add `"/homepage"` in front of the string representing your home directory and append `"/public_html"` to it.

If you do not know what your UNIX home directory is, login (with Telnet/SSH/FTP) to your account and enter the command `pwd`.

- For example, you may put the HTML file as `W:\public_html\index.html` (for Windows) or `/homepage/student/03/csis/tmchan/public_html/index.html` (for UNIX).

#### Outside CS department

- You may upload your files to your homepage directory by SFTP to `i.cs.hku.hk`, after login [CSVPN](#).

**► What permission do I need to set so that a user can view my web site?**

In order to let other people have the rights to see your homepage, the access permission of your HTML files should be world readable. Please use the following UNIX command to do so:

```
chmod 644 index.html
```

If you place your files under a sub-directory, e.g. /homepage/\$HOME/public\_html/dir\_name/index.html, please use the following command to make the sub-directory world executable:

```
chmod 711 dir_name
```

**► I was told that setting the permissions of every file and directory in my homepage to 777 will make everything work. Is it true?**

Setting the permissions of every file and directory to 777 means allowing everyone to modify or remove your files. Never do that!

**► Why my files are not listed in my personal homepage?**

For security reason, directory index has been disabled on the departmental web servers. If your personal web directory does not have an index file (index.htm, index.html or index.php) in it, the filenames in that directory will not be shown on a web browser.

**► Can I run servlets or JSP programs on CS servers?**

Students cannot run JSP programs on CS servers.

However, there is an alternative way to let you test your servlets or JSP programs. A shared copy of Tomcat 4.1 is installed under F:\APPS\tomcat on all PCs in CS laboratories. See the documentation F:\APPS\tomcat\RUNNING.txt for instructions.

In particular, you will need to set an environment variable CATALINA\_BASE pointing to your configuration and program files. You may put your configuration and program files in anywhere accessible by the PC, such as H: or I:. There is no need to put them under W:\public\_html. You may also use the graphical Java development environment NetBeans for servlet and JSP development.

**► Which CS server may I run my CGI and PHP programs on?**

Two special web servers, **i.cs.hku.hk** and **i2.cs.hku.hk**, are set up for web programming, including CGI and PHP.

We will use **i.cs.hku.hk** in the examples below for demonstration.

## CGI

The following example demonstrates how to run CGI programs on i.cs.hku.hk:

Username: tmchan

Home Directory: /student/00/cs/tmchan

1. If you do not have a cgi-bin directory, create one:

```
cd /homepage/student/00/cs/tmchan/public_html
mkdir cgi-bin
chmod 755 cgi-bin
```

2. Install your script into the cgi-bin directory, and set the proper execution permissions on the file.

```
cp my_cgi_program
/homepage/student/00/cs/tmchan/public_html/cgi-bin
chmod 700 /homepage/student/00/cs/tmchan/public_html/cgi-
bin/my_cgi_program
```

3. The script can now be executed using the following URL:  
[http://i1-test.cs.hku.hk/cgi-bin/cgiwrap/tmchan/my\\_cgi\\_program](http://i1-test.cs.hku.hk/cgi-bin/cgiwrap/tmchan/my_cgi_program)
4. To debug the script, use cgiwrapd, which displays the output of your CGI script in text format, e.g.  
[http://i1-test.cs.hku.hk/cgi-bin/cgiwrapd/tmchan/my\\_cgi\\_program](http://i1-test.cs.hku.hk/cgi-bin/cgiwrapd/tmchan/my_cgi_program)

5. If you need to write non-parsed header CGI scripts, use `nph-cgiwrap` (or `nph-cgiwrapd`) instead of `cgiwrap` in the URL.

## PHP

The web server is configured with PHP version 5. It will process PHP files with the `.php` extension.

The correct permission is 644 for PHP and HTML files, and 711 for directories.

See the [official web site of PHP](#) for further information on PHP programming.

### ► Can I apply a MySQL account for my personal homepage use?

Students can apply for a MySQL account for their personal homepage using the online form at <https://intranet.cs.hku.hk/common/mysqlacct/>

### ► How to control access to my personal homepage?

The CS web servers use the Apache server software. You can use a `.htaccess` file to control access to your web pages.

In the following, we assume that your home directory is `/student/00/cs/tmchan`. You should replace every occurrence of `/student/00/cs/tmchan` with your own home directory. You can check your home directory by the command `echo $HOME`. Under this assumption, your homepage directory will be `/homepage$HOME/public_html`, i.e. `/homepage/student/00/cs/tmchan/public_html`. (For postgraduate students, the homepage directory will be something like `/homepage/home/postgrad/00/snho/public_html`).

Now suppose you want to set up a sub-directory `/homepage/student/00/cs/tmchan/public_html/private`, such that password authentication is required for accessing that directory (URL: `http://www.cs.hku.hk/~tmchan/private`).

## Create your own account & password to authenticate users

1. Create a `.htaccess` file in the `/homepage/student/00/cs/tmchan/public_html/private` directory with the following contents:

```
AuthBasicProvider file
AuthUserFile
/homepage/student/00/cs/tmchan/public_html/private/.htpasswd
AuthName Restricted
AuthType Basic
require valid-user
```

2. If you have not created the password file, create it:

```
cd /homepage/student/00/cs/tmchan/public_html/private;
touch .htpasswd
```

3. Add the user name and password with the `htpasswd` command, e.g.,

```
htpasswd .htpasswd john
```

4. Change the access permission of the files to **world-readable**:

```
chmod a+r .htpasswd .htaccess
```

Notes:

- The password file should be named `.htpasswd` to prevent it from being download through web access.
- You must use the full path for the password file name in the `.htaccess` file.

See the [Apache Web Server Documentation](#) for further details.

## Use CS account password to authenticate users

Instead of using your own `.htpasswd` password file to store user passwords, you may also use the LDAP server of CS Department to authenticate users. The advantage of this method

is that you do not need to distribute new passwords to users. They can use the same usernames and passwords of their CS computer accounts to access your password protected web pages. What you need to do is:

1. Create a `.htaccess` file in the `/homepage/student/00/cs/tmchan/public_html/private` directory with the following contents:

```
AuthName Restricted
AuthType Basic
AuthBasicProvider ldap
AuthLDAPURL
ldap://ldap.cs.hku.hk/ou=people,dc=cs,dc=hku,dc=hk?uid?one
Require ldap-user bruceli nelson
```

or

```
AuthName Restricted
AuthType Basic
AuthBasicProvider ldap
AuthLDAPURL
ldap://ldap.cs.hku.hk/ou=people,dc=cs,dc=hku,dc=hk?uid?one
Require valid-user
```

2. Change the access permission of the `.htaccess` files to **world-readable**:

```
chmod a+r .htaccess
```

## Using both CS accounts and your own accounts

It is also possible to use CS accounts and your own `.htpasswd` at the same time. In the example below, CS users `bruceli` and `nelson`, and any user specified in `.htpasswd` can be authenticated:

1. Create `.htpasswd` as shown in the previous sections.
2. Create a `.htaccess` file in `/homepage/student/00/cs/tmchan/public_html/private` with the following contents:

```
AuthName Restricted
AuthType Basic
AuthBasicProvider ldap file
AuthLDAPURL
ldap://ldap.cs.hku.hk/ou=people,dc=cs,dc=hku,dc=hk?uid?one
AuthLDAPAuthoritative off
Require ldap-user bruceli nelson
AuthUserFile
/homepage/student/00/cs/tmchan/public_html/private/.htpasswd
Require valid-user
```

3. Change the access permission of the `.htaccess` files to **world-readable**:

```
chmod a+r .htaccess .htpasswd
```

### ► How to control access to course homepage ?

Our web server is configured to allow access of course account homepages from clients within HKU only. CS account and password are required for access from the Internet. To change the default setting, the course instructor may create a `.htaccess` file in the `public_html` directory with the following line:

## Accessible from everywhere without logging in:

```
allow from all
```

## Accessible by users having CS account and password only

1. For specific CS users, say `bruceli` and `nelson`:

```
AuthBasicProvider ldap
AuthLDAPURL
ldap://ldap.cs.hku.hk/ou=people,dc=cs,dc=hku,dc=hk?uid?one
AuthzLDAPAuthoritative off
AuthName Restricted
AuthType Basic
require user bruce.li
require user nelson
allow from all
Satisfy all
```

For all CS users:

```
Order deny,allow
Deny from all
AuthName Restricted
AuthType Basic
AuthBasicProvider ldap
AuthLDAPURL
ldap://ldap.cs.hku.hk/ou=people,dc=cs,dc=hku,dc=hk?uid?one
AuthzLDAPAuthoritative off
Require valid-user
Satisfy any
```

2. Change the access permission of the .htaccess files to **world-readable**:

```
chmod a+r .htaccess
```

## Accessible by users having account and password defined by yourself

1. Create a .htaccess file in the

```
AuthBasicProvider file
AuthUserFile
/homepage/student/00/cs/tmchan/public_html/private/.htpasswd
AuthName Restricted
AuthType Basic
require valid-user
allow from all
Satisfy all
```

2. If you have not created the password file, create it:

```
cd /homepage/student/00/cs/tmchan/public_html/private;
touch .htpasswd
```

3. Add the user name and password with the *htpasswd* command, e.g.,

```
htpasswd .htpasswd john
```

4. Change the access permission of the files to **world-readable**:

```
chmod a+r .htpasswd .htaccess
```

### ► Why does the server response internal error when I add a .htaccess file into my homepage directory?

In your .htaccess file, you can only use the **AuthConfig**, **Limit** and **Indexes** directives. Any other directives will return the "500 Internal Server Error" message.

### ► How can I protect my homepage files from reading by other UNIX users?

According to previous instructions, your homepage files are readable by other UNIX users if they 'cd' to your homepage directory. To facilitate better access control, the GID of your public\_html directory was set to 'wwwgrp', the GID of the web server process, when your homepage directory was created.

To prevent other users from accessing your files by cd-ing into your public\_html directory, please run the following command:

```
chmod 750 /homepage$HOME/public_html
```

### ► How can I add a visitor counter to my home page?

To add a page access counter to your home page:

1. Create a file, say `v.count`, in your homepage directory and make it world read-writable.

```
touch /homepage/student/00/cs/tmchan/public_html/v.count
chmod go+rw
/homepage/student/00/cs/tmchan/public_html/v.count
```

2. You may then add the following code in your html file.

```
<img src= "http://i.cs.hku.hk/cgi-bin/Count.cgi?
df=/homepage/student/00/cs/tmchan/public_html/v.count"
align=top alt=" *****">
```

You may also use other [options](#) with the page access counter.

### ► How can I override PHP's default cookie path?

PHP stores its session id cookie, PHPSESSID, under the default cookie path `"/`.

To override PHP's default cookie path, you can create a `.user.ini` file under your `public_html` directory with the following content:

```
session.cookie_path="/~cmlam/"
```

### ► How can I add a URL redirection from a course homepage to a Moodle course?

To redirect from a course homepage, e.g., `http://i.cs.hku.hk/~c9999`, to the Moodle site of the course:

1. Go to the Moodle site of the course and determine its URL, e.g.,

```
http://moodle.hku.hk/course/view.php?id=5226
```

2. create an `index.html` file under the `public_html` sub-directory of `"c9999"` with the following content:

```
<html>
<head>
<title>CSIS9999</title>
<meta http-equiv=refresh content="1;
URL=http://moodle.hku.hk/course/view.php?id=5226">
</head>
<body>
<p>You will be redirected to the course web page of
CSIS9999.</p>
<p>If you are not redirected in five seconds, please click
<a href="http://moodle.hku.hk/course/view.php?id=5226">
<strong>this link</strong></a>
to enter.</p>
</body>
</html>
```