

This handout is for password-protecting content on www.umass.edu-level sites. To protect content on people.umass.edu or courses.umass.edu Web sites, see our *HTPASSWD to Password-Protect Pages on Courses.umass.edu and People.umass.edu Campus Web Sites*.

Looking for an Easier Way to Password-Protect Your Content?

You can store any files you wish to password-protect (including Web pages) on UDrive then either create a generic password, as described in this document, or you use UDrive's sharing tools to limit access to particular members of the UMass community who may then log in with their OIT NetID and password.

Using HTPASSWD to Password Protect Pages on Campus Web Server Web sites

- Using HTPASSWD to Password Protect Pages on Campus Web Server Web sites..... 1
- What is HTPASSWD? 2
- Log in to OIT's Web Hosting Server 3
- Setup the Subdirectory That Will Be Protected 4
- Create the .htaccess File Using NANO 5
- Change Permissions for the .htaccess File 6
- Set the Permissions for .htpasswd 7
- Appendix A: Troubleshooting Solutions to Common Problems with .htpasswd 8
- Appendix B: How to remove password protection..... 9
- Appendix C: How to change usernames & passwords..... 9

Planning Ahead

What do you want to name the directory where password protected documents will be stored?

What do you want the "Topic" on the Login message to say?
(for instance, "Department Meeting Notes")

What will the user name(s) be?

What will the password(s) be?

Make a backup before you begin ...

As with any new endeavor that involves working with computers, it is always a good idea to back up your files before you begin. In this case, back up your Web site!

If you run into trouble with any of the following instructions, you can delete the .htaccess file and the .htpasswd file and start over.

IMPORTANT NOTE ABOUT ACCESS

When you password-protect a directory using HTPASSWD you only block access to that directory from a Web Browser. Any user with shell access to your files (through SFTP) will be able to access the content of these folders unimpeded.

A Word About Protected Directories

Please remember that whether your Web site is protected or not, you should still follow the acceptable usage guidelines as outlined in OIT policies. If you have questions about our policies, please visit www.oit.umass.edu/policies

What is HTPASSWD?

HTPASSWD allows you to require a login and password for access to pages stored in a particular directory of a Web site. This can be useful for a professor who has licensed copyrighted material for a course, for a student developing an online portfolio who wants only certain people to be able to open the pages, or for any academic who wants to share research or papers with a restricted audience.

Note: You need to be able to use UNIX!

The concepts discussed in this handout (UNIX command line sessions, file permissions, directory structure, etc.) assume you are comfortable logging in to UNIX in a command line session, and using basic UNIX commands.

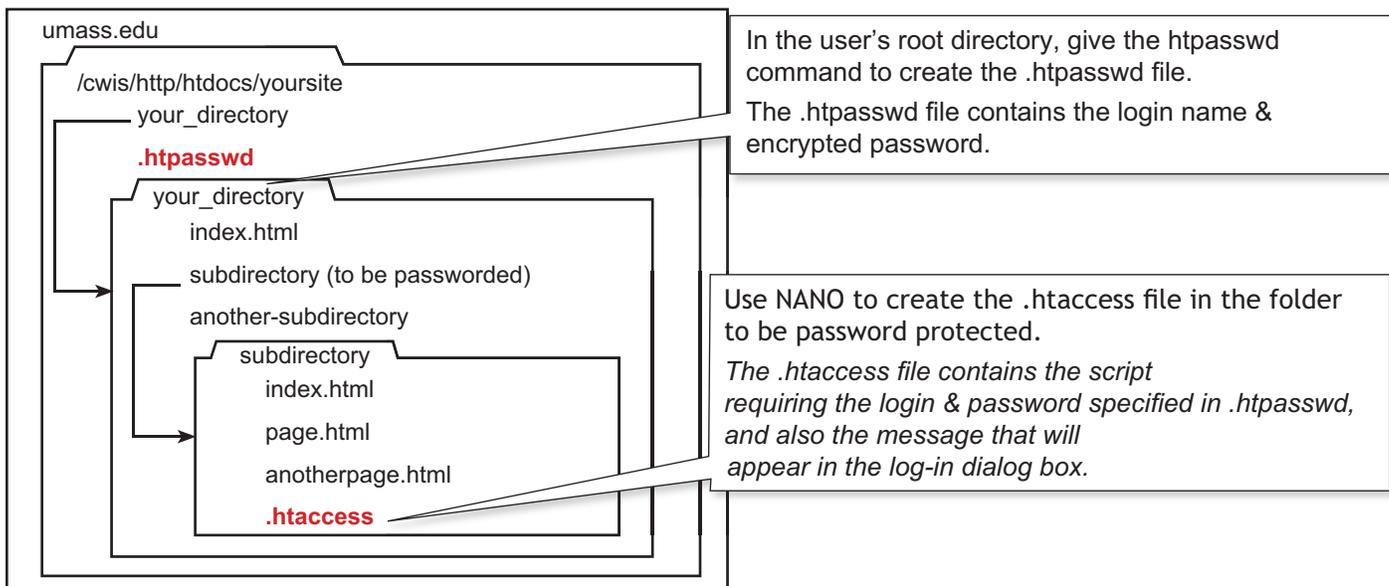
Account requirements

The site you wish to password-protect must be hosted on the campus Web server (www.umass.edu). You need to know the account user name and password for the departmental site.

How does HTPASSWD work?

To use HTPASSWD, you need to create two text files. The first, (.htaccess), contains access information, and is placed in the directory you wish to protect. The second file (.htpasswd) contains usernames and passwords and is placed in the Web site's root directory. When users navigate to the protected part of the Web site, they are prompted for a username and a password. Once they are allowed in, they can re-enter the protected area for the length of the browser session.

Visualizing where to create the .htpasswd and .htaccess files



Log in to The Web Hosting Server

Download a terminal program free of charge from OIT

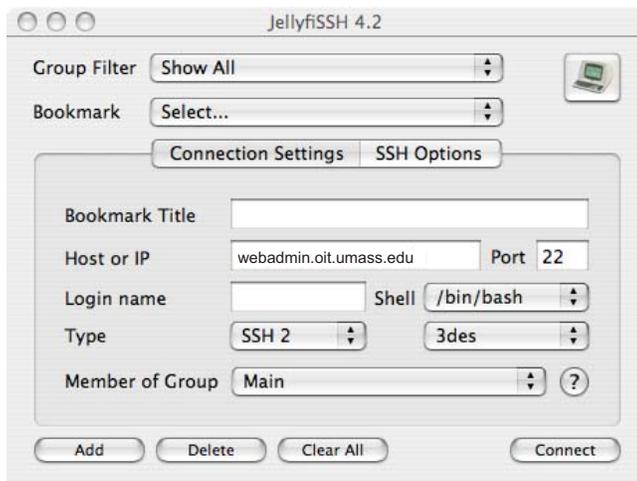
OIT provides SecureCRT for Windows and information on SSH applications for Macintosh computers:

<http://www.oit.umass.edu/download/>

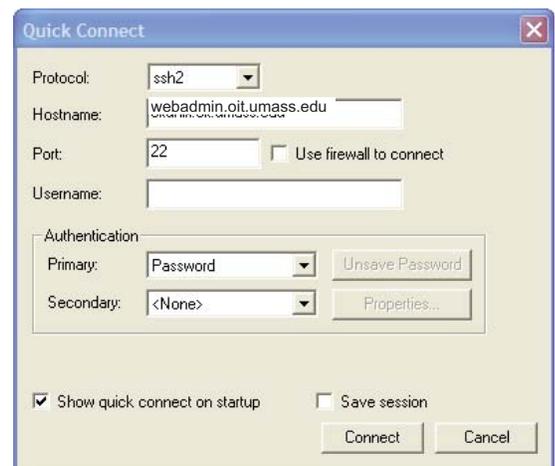
This handout documents how to open a secure terminal session with OIT's Web hosting server (such as SecureCRT for Windows, or JellyfiSSH for the Macintosh).

1. Select **SSH2** from the *Protocol* (SecureCRT) or *Type* (JellyfiSSH) drop-down menu.
2. In the *Hostname* (SecureCRT) or *Host or IP* (JellyfiSSH) field, enter **webadmin.oit.umass.edu**.
3. In the *Username:* (SecureCRT) or *Login Name:* (JellyfiSSH) field, enter the **NetID** which accompanies the Web site.
4. Click **Connect** (both applications). A new window will open and you will be prompted for the OIT Account password.
5. Once you enter your password, you will have access to your Web space.

JellyfiSSH (Macintosh)



SecureCRT (Windows)



Setup the Subdirectory That Will Be Protected

Don't put the .htaccess file in the public_html directory

It is not a good idea to password protect your entire Web site.

Your site should provide, at least, a public entry page from which visitors can link into the protected subdirectory.

Not clear on where to put the .htaccess or .htpasswd files?

For a clear visual image of where to put your files, see *Appendix A of this document*.

Warn your users—
"Password Required"

With every link that leads to passworded pages, provide a warning that a login and password are required.

These instructions assume that you will follow our recommended practice of putting the pages to be passworded inside a single subdirectory (not the main directory) of your Web space.

Locate the subdirectory

1. Use the `cd` command (change directory) to move into the directory one level above the one you want to protect. You can use the `ls` command to help locate the folder you want to protect.
2. If the folder doesn't already exist, you can create one in your Web editing program, such as Dreamweaver, or you can create a new directory using the command below. Enter:
`~$ mkdir foldername`
where *foldername* is the name of the folder you wish to create
3. Directories created by an application such as Dreamweaver will generally be given the proper permissions upon upload. But if you made the directory yourself, you need to set the permissions with the following command:
`~$ chmod 755 foldername`
where *foldername* is the name of the folder you wish to password protect.

The `chmod` command sets permissions for the folder to executable. If you skip that step, access will be denied to the folder whether visitors have the password or not!

Check the permissions

1. Use the `ls -la` command for a detailed list of the directory contents.
2. The first column in the list tells how the permissions are set. The permissions on the folder you want to password should be: **drw xr- r-x**

These are the proper permissions for the passworded subdirectory

```
webadmin1:~/public_html$ ls -la
total 16
drwxr-xr-x  3 oitweb nonstud 4096 Jul  9 11:44 .
drwxr-xr-x  3 oitweb nonstud 4096 Jul  9 11:19 ..
-rw-r--r--  1 oitweb nonstud   79 Jul  9 11:19 index.html
drwxr-xr-x  5 oitweb nonstud 4096 Jul  9 11:43 protected
webadmin1:~/public_html$
```

3. If the permissions are not correct, use the `chmod 755` command. (See step 2 of "Locate the Directory," above.)

Create the .htaccess File Using NANO

Inside the directory you wish to protect, you need to create a file called **.htaccess**. You can do this using NANO, a text editor available on OIT's Web hosting server.

1. Use the `cd` command to move to the subdirectory you want to protect:
`~$ cd foldername`
2. At the command line prompt type:
`~$ nano .htaccess`
 Note that there is a **period** before the word, "htaccess."
 The file will automatically be created and will open for you to edit.
3. With your `.htaccess` file open in NANO, type the lines below.
 Note that these lines are case sensitive and should be entered exactly as shown, except that you need to change the information in italics.

Use the filepath for your site (i.e., `yoursite/password`).

This line gives a name to the dialog box that asks for a username and password. If your password-protected files are all meeting notes, you might use "Meeting Notes" as your `AuthName`.

Note: You don't need to use quotes if your `AuthName` is only one word.

These lines tell the "htpasswd" application what to do when someone tries to gain access to a protected directory. Type the phrase "valid-user," not the name of a valid user.

```
AuthUserFile /cwis/http/htdocs/yoursite/.htpasswd
AuthName "Log in to view department meeting notes"
AuthType Basic

<Limit GET>
  require valid-user
</Limit>
```

Your NANO session might look something like this:

```
webadmin.oit.umass.edu - SecureCRT
File Edit View Options Transfer Script Tools Help
webadmin.oit.umass.edu
GNU nano 1.2.4 File: .htaccess
AuthUserfile /cwis/http/htdocs/yoursite/.htpasswd
AuthGroupFile /dev/null
authName "Log in to view department meeting notes"

<limit GET>
require valid-user
</Limit>
```

Note: Because there is a period before the filename, if you use the `ls` command to get a list of files in the directory, you won't be able to see `.htaccess`. The period causes the file to be hidden. To see hidden files in a directory use the command `ls -la`.

4. Save and close the ".htaccess" file.
 (CONTROL + X exits NANO, answer Y (yes) to save changes, press return to confirm file name as `.htaccess`.)
5. Use the `ls -la` command to check that your file has been created and has the proper name.

Change Permissions for the .htaccess File

1. Stay in the directory where you just saved the .htaccess file. At the command prompt, type the following to set the permissions for the file to “read only:”
`~$ chmod 744 .htaccess`
2. To check the permissions use the `ls -la` command. Permissions should be set to `-rwxr--r--`.

Permissions on .htaccess before the chmod 744 command

Permissions after the chmod 744 command

```

webadmin1:/public_html# cd protected
webadmin1:/public_html/protected# ls -la
total 28
drwxr-xr-x  5 oitweb nonstud 4096 Jul  9 11:43 .
drwxr-xr-x  3 oitweb nonstud 4096 Jul  9 11:44 ..
-rwxr--r--  1 oitweb nonstud  157 Jul  9 11:43 .htaccess
drwxr-xr-x  2 oitweb nonstud 4096 Jul  9 11:30 audio
drwxr-xr-x  2 oitweb nonstud 4096 Jul  9 11:30 images
-rw-r--r--  1 oitweb nonstud 1671 Apr 10 17:00 index.xml
drwxr-xr-x  2 oitweb nonstud 4096 Jul  9 11:30 pdf
webadmin1:/public_html/protected# chmod 744 .htaccess
webadmin1:/public_html/protected# ls -la
total 28
drwxr-xr-x  5 oitweb nonstud 4096 Jul  9 11:43 .
drwxr-xr-x  3 oitweb nonstud 4096 Jul  9 11:44 ..
-rwxr--r--  1 oitweb nonstud  157 Jul  9 11:43 .htaccess
drwxr-xr-x  2 oitweb nonstud 4096 Jul  9 11:30 audio
drwxr-xr-x  2 oitweb nonstud 4096 Jul  9 11:30 images
-rw-r--r--  1 oitweb nonstud 1671 Apr 10 17:00 index.xml
drwxr-xr-x  2 oitweb nonstud 4096 Jul  9 11:30 pdf
webadmin1:/public_html/protected#

```

Create the .htpasswd file

1. To move back to the login level of your account, at the prompt type `cd` and then press the **enter** key (brings you to login directory no matter which directory you are in).
2. The command that creates the .htpasswd file also adds the first user. At the command line prompt, type:
`~$ htpasswd -c .htpasswd username`

This will be the username that must be provided at login. (You will setup the password in the next step.)

Is a single login adequate?

Most of our clients find that a single login offers a sufficient level of protection. You can supply the same login information to all those who you want to have access the password protected directory.

It's also much easier to create and maintain one user rather than multiple separate usernames and passwords!

Should you feel the need, directions for adding individual users can be found on the next page.

Here's what it all means: “htpasswd” calls the program htpasswd, “-c” tells the program to create a new file, “.htpasswd” is the name of this file, and “username” is the name your user must provide.

3. Press **enter**. You will be prompted for a password for your user and then prompted again to verify the password.
 - If you do this right, you are simply returned to the prompt
 - Here's what you'll see if you type mismatched passwords:

```

webadmin1:/public_html/protected# cd
webadmin1:~# pwd
/home/oitweb
webadmin1:~# htpasswd -c .htpasswd username
New password:
Re-type new password:
htpasswd: password verification error
webadmin1:~#

```

You can get a fresh start if you repeat the command that creates the .htpasswd file:

```
~$ htpasswd -c .htpasswd username
```

Set the Permissions for .htpasswd

As with the .htaccess file, you need to set the permissions on the “.htpasswd” file to “read only.”

1. Make sure you are still at the login level of your account.
2. At the command line prompt, type:

```
~$ chmod 744 .htpasswd
```

Make sure to write down each username and password you create!

If you open the .htpasswd file in NANO you will not be able to edit passwords: The characters become encrypted to secure privacy. If you forget a password for a particular user, you'll need delete and then re-create that login.

How to add additional users or remove users

For each additional user, at the prompt, type:

```
~$ htpasswd .htpasswd username
```

In this case, “username” is the name of your user. You will be prompted again for the password. Don't type “-c” again or you will re-create the entire file and wipe out any of the existing users!

To delete users, open “.htpasswd” in nano and simply delete that user's name and password.

Verify Password Protection

1. Make sure you have put an index.html file inside your protected directory. (Nothing special is required to transfer files into the directory. Use SFTP as usual.)
2. Open your browser and navigate to the protected folder in of your Web site.
3. You should be prompted for a username and password.
If you provide the right login info, you should gain entry.

Note: Once you have entered a password you will have access to the site until you quit your browser.

IMPORTANT! To retest access, you need to quit your browser between tests.

Appendix A: Troubleshooting Solutions to Common Problems with .htpasswd

Special issues for Dreamweaver users

DO NOT open the .htaccess file in Dreamweaver; it will cease to function. Dreamweaver cannot be used to edit this file, it must be edited on the server, using one of the server apps such as nano or EMacs.

It is ok to download and upload .htaccess using Dreamweaver, as long as it is not opened (if moved back into the same account at the same directory level). You can't move a .htaccess file from one user account to another, because the filepath in the .htaccess script includes the user account name.

Still Having Problems? Last resort!

If need be, delete both the ".htaccess" and ".htpasswd" files and start over. Make sure to follow the directions carefully!

Problem: You get the Login window, but fail to gain entry.

Great start! This means your permissions are set properly, but you have entered the wrong password or username, or there is a mistake in the file path

Solution 1: Reopen and look over the .htaccess file. Is your filepath to .htpasswd correct?

Solution 2: If that doesn't work, go back and recreate the .htpasswd file.

Problem: If you get a "Forbidden" message when you try to enter the page:

Solution: Check permissions: .htaccess and .htpasswd should have "744" permissions (-rwxr--r--).

Your main Web site folder and your protected directories must have "755" permissions (drwxr-xr-x). If you created the folder in a program such as Dreamweaver, the folder should already have the proper permissions. If you created the folder in UNIX you will also have to set the proper permissions.

Problem: Even though .htaccess is located in a subdirectory, a password is requested when a visitor hits the home page.

Solution: Make sure image or other media files used on pages outside the passworded folder (for instance on the home page for the site) are not stored in the passworded folder.

Problem: A server error message occurs when someone tries to access the passworded pages.

Solution 1: Permissions for the passworded subdirectory should be set to drwvr-wr-x (chmod 755). Permissions for the .htpasswd and .htaccess files should be set to -rwxr--r-- (chmod 744)

Solution 2: Check the script for .htaccess: Make sure that it is exactly correct. Spaces in the file path to .htpasswd is the most common mistake.

Appendix B: How to remove password protection

With WinSCP or Jellyfish

1. Open a command line session and log in to your account.
2. Use the `cd` command to go into your passworded directory.
3. At the prompt type:

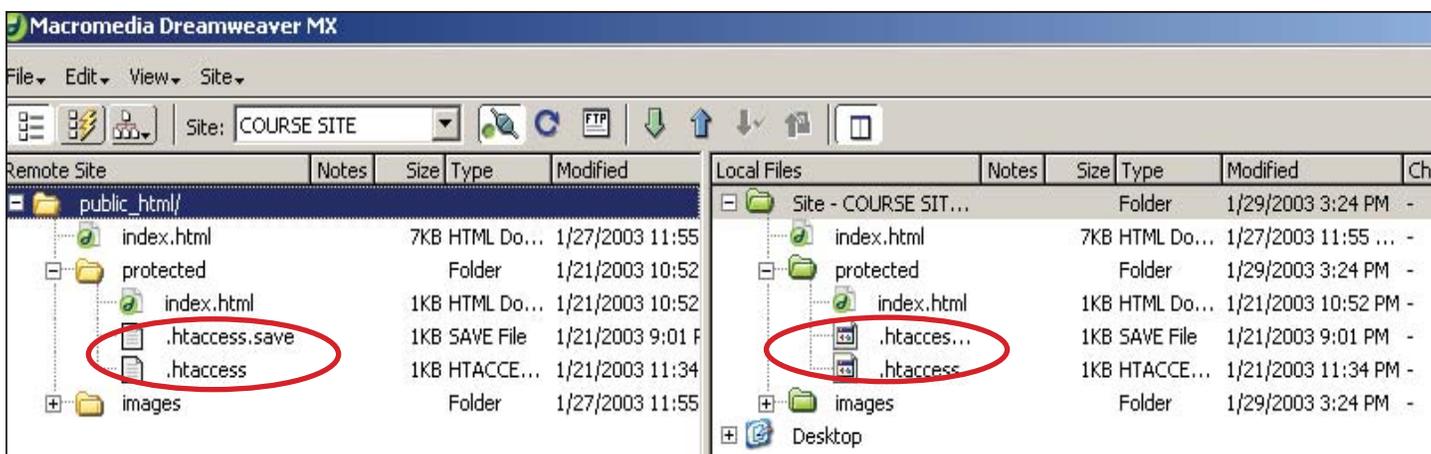
```
~$ rm .htaccess
```

A password will no longer be required to view pages stored in the directory. (You might also want to remove the `.htpasswd` file, but it's not absolutely necessary.)

With an FTP Program

As an alternative you can remove the file using an FTP program such as WSFtp, Fetch, or Dreamweaver.

In Dreamweaver remember to remove both the REMOTE and LOCAL copies:



Appendix C: How to change usernames & passwords

For a single user account:

1. Recreate the `.htpasswd` file as originally directed, (page 5) changing the login information. The old version will be overwritten. The permissions should stick.

For multiple logins

1. Recreate the `.htpasswd` file as originally directed, (page 5) changing the login username and/or providing a new password. The old version will be overwritten. The permissions should stick. All the users but the one new user will be erased from the file.
2. For each additional user, at the prompt type:

```
~$ htpasswd .htpasswd username
```