

Publishing Course, Organization or Personal Pages on www.andrew.cmu.edu

The following documents are included in this section. For an overview of publishing to www.andrew.cmu.edu, please visit [Publishing Course, Organizational or Personal Web pages \(http://www.cmu.edu/computing/web/webpublishing/personal.html\)](http://www.cmu.edu/computing/web/webpublishing/personal.html).

- [How to Publish](#)
- [Authenticated Publishing](#)
- [Restricting Access](#)
- [Locking Your Files](#)

How to Publish Course, Organization or Personal Pages on www.andrew.cmu.edu

This document contains the following sections:

- [Step 1: Request a Project Volume \(Course or Organizational pages ONLY\)](#)
- [Step 2: Create a www Directory](#)
- [Step 3: Copy Your Files](#)
- [Step 4: Publish or Unpublish](#)
- [Update Your Pages](#)
- [Your url](#)

For information related to this topic refer to:

- [Personal, Course or Organizational pages](#)
(<http://www.cmu.edu/computing/web/webpublishing/personal.html>)
- [Using Authenticated Publishing](#)
- [Restricting Access to Your Pages](#)
- [Sending Email from a Web Form](#)
(<http://www.cmu.edu/computing/doc/web/publish/mailto/index.html>)
- ["Locking" Your Files from Publication](#)
- [Using Absolute and Relative References](#)
(<http://www.cmu.edu/computing/doc/web/publish/references/index.html>)

Note: If your web collection is published on www.cmu.edu, refer to the [Publishing to www.cmu.edu](#) (<http://www.cmu.edu/computing/doc/web/publish/wwwcmuedu/index.html>) for help.

This document steps you through the process of publishing pages for your course or organization. Organization pages are subject to the Computing Services guideline for *Network Bandwidth Usage on the Andrew Web Server* (<http://www.cmu.edu/computing/guideline/www-andrew.html>) . It is your responsibility to review and adhere to this guideline.

Last Updated: 7/11/06

Step 1: Request a Project Volume - Course or Organization Pages ONLY

In order to create a course or organization collection, you'll need to request a Project Volume as a place to store your documents. A Project Volume is a special directory in the Andrew File System (AFS) that is assigned to a special purpose.

To request a Project Volume or to request more information, use the [online form \(http://www.cmu.edu/computing/accounts/projvol/form/index.html\)](http://www.cmu.edu/computing/accounts/projvol/form/index.html) or send mail to [Advisor \(mailto:advisor@andrew.cmu.edu\)](mailto:advisor@andrew.cmu.edu). You will receive a response within one working day. The response for your request will include a pathname for your Project Volume. Make sure to note the pathname; you'll need it for the next step.

Faculty please note: If you are assigning a project that requires a group of students to request project volumes, please forward a description of the assignment to advisor@andrew.cmu.edu in advance. It is helpful for the Help Center staff to be prepared before receiving a large number of requests.



Step 2: Create a www Directory

Last Updated: 3/24/09

Step 2: Create a www Directory

To create a WWW directory, follow the appropriate steps for:

- [Course or Organization Pages](#)
- [Personal Pages](#)

Course or Organization Pages

Your Web documents will be stored in a www directory in your Project Volume. Later, when you "publish" your pages, the server copies these files from your www directory to the server.

Follow this procedure to create a www directory:

1. Login to your Andrew account. If you are using a Macintosh or a Windows computer, you will need to use a telnet client to login to your account. We recommend using the following telnet clients:
 - [Windows:Using SSH/SFTP Secure Shell Client](http://www.cmu.edu/computing/doc/software/ssh/index.html)
(<http://www.cmu.edu/computing/doc/software/ssh/index.html>)
 - [Mac: Terminal](http://www.cmu.edu/computing/doc/software/terminal/index.html)
(<http://www.cmu.edu/computing/doc/software/terminal/index.html>)

Use the following settings to establish your telnet connection:
Host: unix.andrew.cmu.edu
Userid or User Name: Your Andrew UserID
Password: Your Andrew Password
2. Type the following command to change your working directory to the Project Volume for the course or organization:
cd pathname
 where pathname is the pathname you were given when you requested your Project Volume.
3. At the prompt, type the following unix command to create the WWW directory:
mkdir www
 This creates a www directory. This is the directory in which your web pages will be stored before they are published. You'll also need to complete the following step to set access rights. Access rights gives the server read access to your www directory. Failure to perform this step will cause your pages to be unreadable after published.
4. While still at the top level of your www directory, type the following UNIX command:
fs sa www system:anyuser rl

Personal Pages

All Carnegie Mellon affiliates are provide space on the Andrew File Server (AFS). Your personal web pages are stored in this directory and must be within a directory named "www". When you "publish" your pages, the server copies these files from your www directory to the server.

Follow this procedure to create a www directory:

1. Login to your Andrew account.

If you are using a Mac or Windows computer, you will need to use a telnet client.

We recommend using the following telnet clients:

- [Windows:Using SSH/SFTP Secure Shell Client](http://www.cmu.edu/computing/doc/software/ssh/index.html)
(<http://www.cmu.edu/computing/doc/software/ssh/index.html>)
- [Mac: Terminal](http://www.cmu.edu/computing/doc/software/terminal/index.html)
(<http://www.cmu.edu/computing/doc/software/terminal/index.html>) (or the native SSH client)

Use the following settings to establish your telnet connection:

Host: unix.andrew.cmu.edu

Userid or User Name: Your Andrew UserID

Password: Your Andrew Password

2. At the prompt, type the following unix command to create the www directory:

mkdir www

This creates a www directory. This is the directory in which your web pages will be stored before they are published.

If you generate a message **mkdir: cannot create directory 'www': File exists** your WWW directory has already been created.

You'll also need to complete the following step to set access rights. Access rights gives the server read access to your www directory. Failure to perform this step will cause your pages to be unreadable after published.

3. While still at the top level of your www directory, type the following UNIX command:

fs sa www system:anyuser rl



Step 3: Copy Your Files

Last Update: 7/11/06

Step 3: Copying the Web Files to Your WWW Directory

Once you've developed your web pages on your personal computer or some other space, you'll need to copy them to the appropriate www directory.

Note: If you have created your Web pages on a Mac or Windows computer, you will need to use a File Transfer Protocol (FTP) client to copy them to the server. We recommend [Fetch](http://www.cmu.edu/computing/doc/software/fetch/index.html) (<http://www.cmu.edu/computing/doc/software/fetch/index.html>) for Mac users and [SSH Secure Shell](http://www.cmu.edu/computing/doc/software/ssh/index.html) (<http://www.cmu.edu/computing/doc/software/ssh/index.html>) for Windows users.

1. Launch your FTP client and use the following settings to copy your files:
Hostname: unix.andrew.cmu.edu
Userid: Your Andrew UserID
Password: Your Andrew Password
Directory: ~/www
Note: You will need to enter your Userid and password if you haven't already authenticated.
2. Copy your web files (i.e., all HTML files, graphics files, etc.) to the WWW directory.
Note: If you are using a Macintosh or PC, refer to the documentation for your FTP program ([SSH Secure Shell](http://www.cmu.edu/computing/doc/software/ssh/index.html) (<http://www.cmu.edu/computing/doc/software/ssh/index.html>) or [Fetch](http://www.cmu.edu/computing/doc/software/fetch/index.html) (<http://www.cmu.edu/computing/doc/software/fetch/index.html>)) for more information about transferring files.
If you are using an Andrew workstation, you can use the UNIX cp command to copy the files. For additional help with using this command, enter "**man copy**" in UNIX.



Step 4: Publish Your Pages

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Step 4: Publishing Your Pages

Publishing

Now that your pages have been copied to the appropriate WWW directory, you need to publish them. Follow these steps to use the publishing service:

1. Launch your web browser and visit the [Publish!](http://www.andrew.cmu.edu/server/publish.html) (<http://www.andrew.cmu.edu/server/publish.html>) web service.
2. Select the appropriate radio button for **Personal**, **Course** or **Organizational** web pages.
3. Enter your **userID** OR **course number** OR **organization project volume** and click **Publish**.

Note: If you added a section letter or other text to your course number when you requested a project volume, you'll need to include it.

Unpublishing

If for some reason you'd like to have your pages completely removed from the server (perhaps you've published your pages elsewhere), you can use the following procedure to "unpublish" your pages. Please note that you do not have to remove your files from your www directory to unpublish them.

1. Using an Andrew workstation, or a Telnet client on a Macintosh or PC, connect to your Andrew account.
2. Type the following command at the UNIX prompt to set your working directory to the WWW directory:
cd / pathname /www
where *pathname* is the pathname for course's project volume, your organizations's project volume, or to you www directory with your personal pages.
3. Type the following command to create the file that will tell the server to remove your files from the server:
touch .unpublish
4. If you have a .notpublish file, remove it (rm .notpublish) so that your pages can be unpublished.
5. Use [Publish](http://www.andrew.cmu.edu/server/publish.html) (<http://www.andrew.cmu.edu/server/publish.html>) or [KWPublish](http://www.andrew.cmu.edu/kweb/publish/) (<http://www.andrew.cmu.edu/kweb/publish/>) to publish your pages as you normally would. The confirmation will tell you that your pages were successfully unpublished.
6. If at some point you would like to publish pages that were previously unpublished:
 - a. Return to your www directory (steps 1 & 2 above).
 - b. Type the following command to remove the unpublish file:
rm .unpublish
 - c. Use [Publish](http://www.andrew.cmu.edu/server/publish.html) (<http://www.andrew.cmu.edu/server/publish.html>) or [KWPublish](http://www.andrew.cmu.edu/kweb/publish/) (<http://www.andrew.cmu.edu/kweb/publish/>) to publish your pages as you normally would.

Last Updated: 1/26/09

Updating Your Pages

Follow this procedure to update your pages:

1. Make the necessary changes to your files. It's probably best not to make the changes in your WWW directory, but on your local machine or in some other space.
2. FTP (i.e.) copy any files that you have changed to the appropriate www directory.
3. Publish the updated pages.

Note: If you need to remove a web page or graphic, you must remove from the local area (e.g., your personal computer or another space) and from the server. If you don't, the web page will continue to be published. Even though you may no longer link to it, browsers will see it if they enter the correct url or if they have previously bookmarked the page.

Last Updated: 7/11/06

Listing Your URL

Once published, the URL for your collection will be as follows:

- Course Pages might appear as **<http://www.andrew.cmu.edu/course/courseid/>** where *courseid* is the course ID number.
For example, Basketweaving 101, course ID 99-101, would have a URL something like this: <http://www.andrew.cmu.edu/course/99-101/>
- Organization Pages might appear as **<http://www.andrew.cmu.edu/org/org-projvol-name/>** where *org-projvol-name* is the name of the project volume in the */afs/andrew/org/* tree.
For example, the URL for the club KGB, with a project volume in the */afs/andrew/org/* tree named *kgb*, would have a URL something like this:
<http://www.andrew.cmu.edu/org/kgb/>
- Personal Pages might appear as **<http://www.andrew.cmu.edu/user/youruserid/>** where *youruserid* is your Andrew user ID.
For example, user Jane Doe with a user ID of *jdoe1* would give her URL as:
<http://www.andrew.cmu.edu/user/jdoe1/>

Last Updated: 7/11/06

Using Authenticated Publishing for Your Course, Organization, or Personal Pages

For information related to this topic refer to:

- [Publishing Course, Organization or Personal Web Pages](#)
- [Restricting Access to Your Pages](#)
- [Sending Email from a Web Form](#)
(<http://www.cmu.edu/computing/doc/web/publish/mailto/index.html>)
- ["Locking" Your Files from Publication](#)
- [Using Absolute and Relative References](#)
(<http://www.cmu.edu/computing/doc/web/publish/references/index.html>)

Note: If your web collection is published on www.cmu.edu, refer to the [Publishing to www.cmu.edu](#) (<http://www.cmu.edu/computing/doc/web/publish/wwwcmuedu/index.html>) for help.

Why Use Authenticated Publishing?

Course, organization or personal pages can be published through the [Publish!](#) (<http://www.andrew.cmu.edu/server/publish.html>) web page by ANYONE who enters the appropriate userID or course number. You will want to use authenticated publishing if you:

- want to restrict read access to your www directory
- want to prohibit others from publishing your pages
- are publishing pages for a course and you want to restrict those pages using [.htaccess](#)

To restrict the publishing of your collection to specific individuals, or to a specific PTS group, follow the steps provided in this document.

Note: PTS groups make it easier to maintain a list of people who may publish your web pages. For more information about how to create and maintain PTS groups, type **pts help** at a UNIX prompt.

Step 1: Create a .kwpublish File

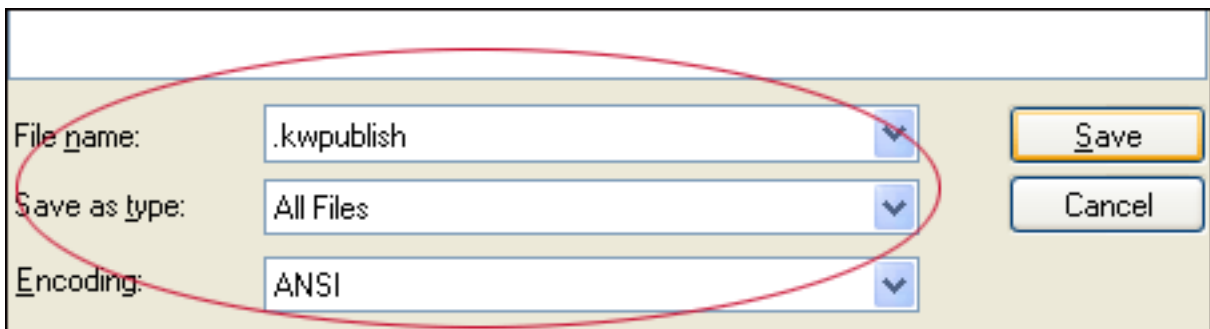
When a .kwpublish file is present in the root of your www directory, the UserWeb server determines that you want to use authenticated publishing. Follow these steps to create the .kwpublish file:

1. Launch a plain text editor (e.g., Notepad on Windows or Text Editor on Mac) and enter the userID(s) of those who should be authorized to publish. For example, if you want to authorize Jane Smith (userID jsmith) simply enter:

jsmith

Follow these examples and rules as you enter the appropriate userIDs or PTS groups:

- If you want to authorize more than one person for publishing, enter their userIDs in succession, separated by a comma, for example:
jsmith,djones,gjohnson
 - You may enter a combination of userIDs and PTS groups. For example, if you want to authorize jsmith and anyone who is a member of the PTS group ju32:99-999 to publish the pages, enter the following:
jsmith,ju32:99-999
2. Once the .kwpublish file contains the correct userIDs or groups, you need to save it WITHOUT the file extension; UserWeb, which is a UNIX server, does not recognize file extensions.
For example, if using Notepad to create the file, select **File > Save As**. Enter the name as **.kwpublish**. In the Save as type: pull down menu, select **All Files**. Click **Save**.



3. Launch an FTP client and copy the **.kwpublish** file to the appropriate www directory for your collection.

Step 2: Set Access Rights for Publishing

In order to use authenticated publishing, you'll need to enter the following command(s):

1. Launch a telnet session.
2. IF YOU PREVIOUSLY followed steps in the *Publishing Course or Organization Pages* document to permit publishing for ANYONE, you'll need to remove that permission. Enter the following command at the root of your afs directory or project volume:
fs sa www system:anyuser l
3. Enter the following command to allow the server read access to your www directory, but to prohibit other Andrew users (except those listed in the .kwpublish file) from reading the files:
fs sa www service.webman rl

Step 3: Use Authenticated Publishing

Follow these steps to use the Authenticated publishing service:

1. Launch your web browser and visit the [Authenticated Publish!](http://www.andrew.cmu.edu/kweb/publish/) (<http://www.andrew.cmu.edu/kweb/publish/>) web service.
2. Select the appropriate radio button for **Personal**, **Course** or **Organizational** web pages.

3. Enter your **userID**, **course number** or **organization project volume** and click **Publish**.

Note: If you added a section letter or other text to your course number when you requested a project volume, you'll need to include it.

Note: You will NOT be able to publish your pages via quick [Publish!](http://www.andrew.cmu.edu/server/publish.html) (<http://www.andrew.cmu.edu/server/publish.html>) since authentication is required. Also, if an unauthorized person attempts to publish your files via [Authenticated Publishing](https://www.andrew.cmu.edu/kweb/publish/) (<https://www.andrew.cmu.edu/kweb/publish/>) a message similar to the following appears: "We're sorry, but publishing is restricted for this website."

Last Updated: 9/20/06

Restricting Access to andrew.cmu.edu Pages through .htaccess

This document contains the following sections:

- [Which Restriction Method Should You Use](#)
- [Restrict by IP Address or Hostname](#)
- [Create the .htaccess File](#)

For information related to this topic refer to:

- [Publishing Course, Organization or Personal Web Pages](#)
- [Using Authenticated Publishing](#)
- [Sending Email from a Web Form](#)
(<http://www.cmu.edu/computing/doc/web/publish/mailto/index.html>)
- ["Locking" Your Files from Publication](#)
- [Using Absolute and Relative References](#)
(<http://www.cmu.edu/computing/doc/web/publish/references/index.html>)

Note: If your web collection is published on www.cmu.edu, refer to the [Publishing to www.cmu.edu](#) (<http://www.cmu.edu/computing/doc/web/publish/wwwcmuedu/index.html>) for help.

Last Updated: 1/13/06

Which Restriction Method Should You Use

The web is a public forum. Anyone with web access can read your course, organization or personal web page. However, it is possible to restrict access to your pages by IP address, hostname or to some set of Andrew users through the use of an **.htaccess** file. The **www.andrew.cmu.edu** web server use Apache 1.3.12. An **.htaccess** file is simply a text file that contains Apache directives or commands.

There are considerations with each of these restriction methods. The best method for protecting your pages depends on who will be using them.

Restrict Access by IP Address or Hostname

- This method allows you to control which machines can access your pages, however, you can not control who uses that machine. Restricting access to software or services by IP address is not considered a secure mechanism. In addition, this restriction becomes less relevant as university affiliates connect to Carnegie Mellon services from remote sites. For these reasons, Computing Services actively discourages the use of IP Address Restriction to restrict access to services.

Restrict Access to a Set of Andrew Users

- This restriction method requires the users of your web pages to have Andrew user IDs. If the published information is essential to someone who does not have an Andrew user ID, this method of restricting access should not be used. At this time Computing Services has no service for users unwilling or unable to acquire a guest account through the Computing Services Help Center.

Last Updated: 1/13/06

Restrict by IP Address or Hostname

The .htaccess file is a text file. Follow these steps to create the file and restrict access to all or part of your web site.

1. First, you must follow instructions provided in the <http://www.cmu.edu/computing/doc/webkwpublish.pdf> *Using Authenticated Publishing* document to configure your collection for KWPublish (authenticated publishing). Once you've configured your collection, test publish and have someone else test publish the collection to be sure that you have configured it correctly.
2. Launch a text editor and save a file called **.htaccess** in the directory that you want to restrict access to.

Note: If you want to restrict access to your entire site, store the .htaccess file in the top level of your www directory. If you want to allow access to the top level, store the file in a sub-directory of your www directory to restrict access only to that sub-directory.

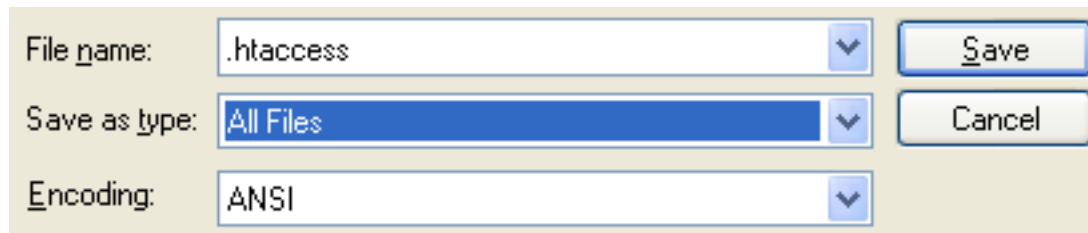
3. Enter syntax similar to the following:

```
<limit GET>
deny from variablename
allow from variablename
</limit>
```

where ***variablename*** is equal to the variables you want to set. Use the notes and examples below to determine the correct syntax.

4. Once the .htaccess file contains the correct syntax, you need to save it WITHOUT the file extension; UserWeb, which is a UNIX server, does not recognize file extensions.

For example, if using Notepad to create the file, select **File > Save As**. Enter the name as **.htaccess**. In the Save as type: pull down menu, select **All Files**. Click **Save**.



5. FTP the .htaccess file to the appropriate level of the www collection and republish using KWPublish.

IP Address Syntax: Notes and Examples

This limitation can be defined by full/partial IP address or by full/partial domain name. In either case, you'll need to use the deny and allow directives along with the IP address or domain name.

deny from *variablename*

This directive defines who cannot access or is "denied" access to the web pages; *variablename* is the full/partial IP

allow from *variablename*

address or domain name to be denied.

Likewise, this directive defines who can access the web pages. Again, *variablename* is the full/partial IP address or domain name to be allowed access.

Important: Be aware that, by default, deny directives are evaluated before allow directives regardless of the order in which they appear in the .htaccess file.

In the example below, access is denied to all users and then allowed to those using a 128.2 IP address or within the andrew.cmu.edu domain.

```
<limit GET>  
deny from all  
allow from 128.2.  
allow from .cmu.edu  
</limit>
```

Last Updated: 1/13/06

Create the .htaccess File to Restrict by UserID

The .htaccess file is a text file. Follow these steps to create the file and restrict access.

1. First, you must follow instructions provided in the *Using Authenticated Publishing* document to configure your collection for KWPublish. Once you've configured your collection, test publish and have someone else test publish the collection to be sure that you have configured it correctly.
2. Launch a text editor and save a file called **.htaccess** in the directory that you want to restrict access to.

Note: If you want to restrict access to your entire site, store the .htaccess file in the top level of your www directory. If you want to allow access to the top level, store the file in a sub-directory of your www directory to restrict access only to that sub-directory.

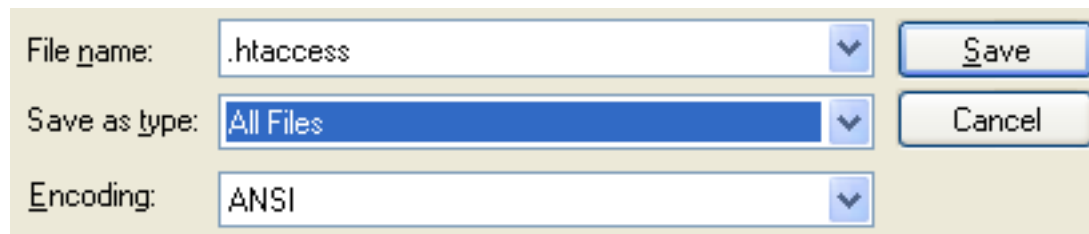
3. On the first two lines of the text file, enter syntax similar to the following:

```
AuthType webiso
<limit POST GET>
require variable
require variable
require variable
</limit>
```

where **variable** is equal to the the userIDs of those you want to allow access to. Use the notes and examples below to determine the correct syntax.

4. Once the .htaccess file contains the correct syntax, you need to save it WITHOUT the file extension; UserWeb, which is a UNIX server, does not recognize file extensions.

If using Notepad (Windows), select **File > Save As** and enter the name as **.htaccess**. In the **Save as type:** pull down menu, select **All Files** and click **Save**.



5. FTP the .htaccess file to the appropriate level of the www collection and republish using KWPublish.

Andrew UserID Syntax: Notes and Examples

Use the require directive within the the .htaccess file to restrict access to an individual userID or any valid userID. The require command must be accompanied by the AuthType WebISO directive, which sets the type of user authentication.

At this time, content cannot be restricted to one realm (e.g., andrew.cmu.edu, cs.cmu.edu) or PTS group. If you need to restrict a directory to a specific realm or PTS group, please contact Computing Services at webmaster@andrew.cmu.edu.

Important: Be aware that, by default, deny directives are evaluated before allow directives regardless of the order in which they appear in the .htaccess file.

In the example below, access is granted to users jd16 and sj8 on andrew.cmu.edu and user ah12 on cs.cmu.edu:

```
AuthType webiso  
<limit POST GET>  
require user jd16@ANDREW.CMU.EDU  
require user sj8@ANDREW.CMU.EDU  
require user ah12@CS.CMU.EDU  
</limit>
```

Note: The realm (e.g., "ANDREW.CMU.EDU") of the email address **MUST** be entered in capital letters.

In the example below, access is restricted to any valid Carnegie Mellon userID:

```
AuthType webiso  
<limit POST GET>  
require valid-user  
</limit>
```

Last Updated: 1/13/06

Locking Your Files From Publication for Course, Organization, or Personal Pages

For information related to this topic refer to:

- [Publishing Course, Organization or Personal Web Pages](#)
- [Restricting Access to Your Pages](#)
- [Sending Email from a Web Form](#)
(<http://www.cmu.edu/computing/doc/web/publish/mailto/index.html>)
- [Using Authenticated Publishing](#)
- [Using Absolute and Relative References](#)
(<http://www.cmu.edu/computing/doc/web/publish/references/index.html>)

Note: If your web collection is published on www.cmu.edu, refer to the [Publishing to www.cmu.edu](#) (<http://www.cmu.edu/computing/doc/web/publish/wwwcmuedu/index.html>) for help.

Locking Your Web Pages for Publication (for Course, Organization and Personal Pages)

If, for whatever reason, you would like to ensure that no one (including you) can inadvertently publish your personal, course or organization web pages, you can "lock" the pages from publishing by saving a file named **.notpublish** in your WWW directory.

Follow these steps:

1. Launch a telnet session.
2. Type the following command to set your working directory to WWW:
cd www
where pathname is the full path name for your organization's project volume, your course's project volume, or the www directory you created for your web pages.
3. Type the following command to create the file that will tell the server not to publish your files:
touch .notpublish

Unlocking Your Web Pages

When you lock your pages, even you won't be able to publish them. If you want to publish your files, remove the **.notpublish** file by typing the following UNIX command while in your www directory:

- `rm .notpublish`

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