

POW-PAK Installation and Configuration

Mac OSX Server

(updated 3/11/07)

The installation and configuration of POW-PAK will be accomplished through several steps:

- 1) Install POW-PAK files
- 2) Enable CGI Scripts on your Server
- 3) Set Permissions
- 4) Edit the district.data file
- 5) Log in as admin
- 6) Contact CurtsWorks

Step 1: Install POW-PAK files

- 1) All the needed files will be in “**powpakosx.zip**”. Locate and open this file. Inside you will find several folders and a file named “**district.data**”.
- 2) On your web server create a folder for POW-PAK where you have all your other web pages. You can name the folder “**powpak**” or “**homepages**” or whatever.
- 3) You need to take note of the full path to this folder as you will need this information later.

Examples may be:

"/opt/apache2/htdocs/powpak" or **"/library/WebServer/Web Folder/powpak"**

Write down the full path for the folder you just created:

- 4) Copy all the folders and files from within the “**powpakosx.zip**” file into the new web-accessible folder you just created for POW-PAK.
- 5) This is where all of the POW-PAK folders and files need to stay except for one particular folder, which is the “**nonweb**” folder. This folder will contain information that should not be web-accessible. Move that folder and its contents to another location on your server that is away from your web documents.
- 6) You need to take note of the full path to the new location of the “**nonweb**” folder as you will need this information later.

Write down the full path for the “**nonweb**” folder:

Step 2: Enable CGI Scripts on your Server

By default your server will not be set up to run a program like POW-PAK. Even if you have used CGI scripts, before, you need to go through these steps to make sure your server is configured correctly for the specifics of POW-PAK.

To enable CGI scripts on your web server, you must edit a file called “**httpd.conf**”. This file controls all the settings for your Apache web server. There are several ways to accomplish this, but I will only explain one method below (the one I am most familiar with).

- 1) First you need to begin the “**Terminal**” application (Go> Applications> Utilities> Terminal). This program will allow you to make needed changes to files and folders.
- 2) You may not have permission to make changes with your current user account, so it is best to become “**root**” which is the most powerful user on the system. You do this as follows:
 - a) In the “**Terminal**” program type “**sudo -s**” and then press the <Enter> or <Return> key.
Note: don’t actually type the quotation marks around the command.
 - b) You will now be asked for a password. Enter the Admin password and press <Enter>.
 - c) Now you have become the “**root**” user and can make needed changes.
- 3) Now you need to navigate to find the “**httpd.conf**” file. By default it should be located at: **/etc/httpd/httpd.conf**
 - a) To see what directory you are current in, type “**pwd**”
 - b) To move up a directory level, type “**cd ..**”
 - c) To move down into a directory, type “**cd [directory name]**” such as “**cd etc**”
 - d) When you get to the “**httpd**” directory, type “**ls**” to get a directory listing. Check to make sure “**httpd.conf**” is in that directory.
- 4) Now that you have found the “**httpd.conf**” file, it is almost time to edit it. To be safe, you should first make a backup of the file. Make a copy by typing “**cp httpd.conf httpd.bak**”
- 5) Ok, now you can edit the file. Editing will be done with a program called “**pico**”. To begin editing type “**pico httpd.conf**”
- 6) The file will now open in “**pico**”. You will be making changes in two locations of the file. For the first change begin by scrolling down through the file until you find the following section (or a section very similar to this):

```
<Directory />
    Options FollowSymLinks
    AllowOverride None
</Directory>
```

- 7) Below that section you need to add a new section to enable CGI scripts in the POW-PAK folder. Type in the following information:

```
<Directory [fullpath to POW-PAK folder]>
Options +ExecCGI
</Directory>
```

Depending upon where you put the POW-PAK folder this section may look like:

```
<Directory "/opt/apache2/htdocs/powpak">
Options +ExecCGI
</Directory>
```

or

```
<Directory "/library/WebServer/Web Folder/powpak">
Options +ExecCGI
</Directory>
```

- 8) Next you need to continue scrolling down through the file until you find a line that reads:

```
#AddHandler cgi-script .cgi
```

Change this line to read:

```
AddHandler cgi-script .cgi .pl
```

Note that the pound sign (#) has been removed and .pl has been added to the end. By making this change you are telling the web server that any file ending with .cgi or .pl is actually a CGI script that needs to be executed.

- 9) Now that the two changes are done, you need to save the file by pressing “**Ctrl**” and the letter “**O**”.
- 10) You can now exit “**pico**” by pressing “**Ctrl**” and the letter “**X**”.
- 11) Finally you need to restart the Apache web server for these changes to take effect. From the “**Terminal**” program, type “**apachectl -k restart**”
- 12) Now you can exit the “**Terminal**” program by typing “**exit**”. (You may have to do this twice to completely exit, once for “**root**” and once for yourself.)

Step 3: Set Permissions

For regular web users to have access to POW-PAK, it is necessary to set the proper permissions on all of POW-PAK’s folders and files. This also is done through the “**Terminal**” program.

- 1) First you need to begin the “**Terminal**” application (Go> Applications> Utilities> Terminal). This program will allow you to make needed changes to files and folders.
- 2) You may not have permission to make changes with your current user account, so it is best to become “**root**” which is the most powerful user on the system. You do this as follows:
 - a) In the “**Terminal**” program type “**sudo -s**” and then press the <Enter> or <Return> key.
Note: don’t actually type the quotation marks around the command.
 - b) You will now be asked for a password. Enter the Admin password and press <Enter>.
 - c) Now you have become the “**root**” user and can make needed changes.
- 3) Now you need to navigate to the directory that holds the POW-PAK folder you created. This directory could be located in such places as:
“**/opt/apache2/htdocs**” or “**/library/WebServer/Web Folder**”
 - a) To see what directory you are current in, type “**pwd**”
 - b) To move up a directory level, type “**cd ..**”
 - c) To move down into a directory, type “**cd [directory name]**” such as “**cd library**”
 - d) When you get to the web documents directory, type “**ls**” to get a directory listing. Check to make sure “**powpak**” (or whatever you named the folder) is in that directory.
- 4) Now you need to change the permissions on the POW-PAK folder and all its sub-folders and files so that web users can access it. To do this, type “**chmod -R 755 powpak**”
Note: replace “**powpak**” with whatever you named the POW-PAK folder.
- 5) Those permissions will work for most of the POW-PAK folders. However, two of the folders need extra permissions set, which are the “**data**” and “**nonweb**” folders.
- 6) First, let’s change the permissions on the “**data**” folder:
 - a) Type “**cd powpak**” (or whatever you named the POW-PAK folder) to move down into that folder.
 - b) Type “**chmod -R 777 data**” to set the needed permissions on the “**data**” folder.
- 7) Now let’s change the permissions on the “**nonweb**” folder:

- a) Navigate to wherever you put the “**nonweb**” folder by typing “**cd ..**” to move up through the directories and “**cd [directory name]**” to move down into folders.
 - b) Stop in the directory that holds the “**nonweb**” folder. Don’t actually go into the “**nonweb**” folder.
 - c) At this point, type “**chmod -R 777 nonweb**” to set the needed permissions.
- 8) Now you can exit from the “**Terminal**” program by typing “**exit**”. (You may have to do this twice to completely exit, once for “root” and once for yourself.)

Step 4: Edit the district.data file

Now you need to personalize POW-PAK by editing a file called “**district.data**”. This is a POW-PAK file that holds information specific to your school and server. You can edit the file with a standard text editor, or even with the **pico** program described above. However, do not use a word processor, like Microsoft Word, since such as program can add extra information to the file that would not make sense to POW-PAK.

- 1) Open “**district.data**” with a text editor or the **pico** program. The file is located in the POW-PAK folder you created.
- 2) Each line in the file has two parts separated by a vertical line (a pipe). The first part of each line is the “**key**”. The second part is the “**value**” for that key. You will need to change several of the values.
- 3) For the “**path**” enter the full path to the directory you set up for POW-PAK.
ex) path/library/WebServer/Web Folder/powpak
- 4) For “**nonweb**” enter the full path to the location of the “**nonweb**” folder.
ex) nonweb/nonweb
- 5) For “**authtype**” enter “program” so you can use POW-PAK’s built-in authentication system.
ex) authtype|program
- 6) For “**district_name**” enter the name of your school district as you wish it to appear.
ex) district_name|Example City Schools
- 7) For “**district_url**” enter the web address of your district’s web site (without the http:// part)
ex) district_url|www.examplecityschools.org
- 8) For “**district_logo**” enter the name of graphics file for your district logo. Save the graphics file in the “**images**” directory of your POW-PAK folder.
ex) district_logo|example_logo.gif
- 9) For “**hck_url**” enter the web address for the POW-PAK folder you created (without the http:// part)
ex) hck_url|www.examplecityschools.org/powpak

10) For “**ev_username**” you do not need to do anything, since this setting is only used on Windows servers.

ex) ev_username|REMOTE_USER

11) For “**support**” you should just leave this as “no”.

ex) support|no

12) Next save the file.

13) Finally you need to copy this file to three different locations so POW-PAK can access it. You can copy the file using whatever method you are comfortable with.

a) Copy “**district.data**” to the “**cgi-bin**” folder inside the POW-PAK folder you created.

b) Next copy “**district.data**” to the “**secure**” folder and the “**admin**” folder which are sub-folders of the cgi-bin folder.

Step 5: Log in as admin

Now that POW-PAK is installed and configured, you may begin using it. First, here are the addresses for important files:

- **POW-PAK Administration** – This is where you will add, modify, and delete users. You access this feature through your web browser by going to:

[web address of POW-PAK]/cgi-bin/admin/admin_login.pl

For example: *http://www.example.org/powpak/cgi-bin/admin/admin_login.pl*

- **POW-PAK User Login** – This is where your staff would go to log into POW-PAK to create and edit their web pages:

[web address of POW-PAK]/cgi-bin/secure/login.pl

For example: *http://www.example.org/powpak/cgi-bin/secure/login.pl*

- **Viewing POW-PAK web pages** – Once your staff has made web pages with POW-PAK, you need to provide links to their creations. Here is the syntax for such links:

[web address of POW-PAK]/cgi-bin/homepage.pl?id=[username]

For example: *http://www.example.org/powpak/cgi-bin/homepage.pl?id=smithj*

At this point, begin using POW-PAK as follows:

- 1) Use your web browser to go to the **admin login** page, as indicated above.

- 2) **Log in** with this information:
 - a) Username = admin
 - b) Password = admin
- 3) Now from the main admin screen, do the following:
 - a) **Change the admin password** (for security reasons)
 - b) **Add any other admins** you wish
 - c) **Add any users** you wish
- 4) Finally, provide your users with the **user login** address, as indicated above, so they may begin creating their web sites.

Step 6: Contact CurtsWorks

Finally, when you have successfully installed the program, **please contact me** with the following information:

- **Your contact info** (school district name, your name, your email address)
- The **web address** for your install of POW-PAK

There are several reasons for doing this:

- 1) This will allow me to contact you about **any bug fixes, updates, or important news**. (*Your email will never be given to anyone else or used for any other purposes.*)
- 2) Also, I will be able to add your district's POW-PAK link to **the Ohio Treasure Chest**, so your teachers will be able to send links from the Treasure Chest straight to their Links Pages in POW-PAK. The Treasure Chest has thousands of valuable educational links for them to access.
- 3) Finally, it serves as an **encouragement** to me, to know who is using the program. As more schools use POW-PAK, I am motivated more to further develop this program.

You can contact me in any of the following ways:

Business email:	info@curtsworks.com
Personal email:	ecurts@neo.rr.com
Mailing address:	P.O. Box 19, Greentown, Ohio 44630
Phone number:	330-685-0470
Skype account:	ericcurts

Extra Info: Optional tech support service plan

Although POW-PAK is free, **I am not able to provide free tech support**. POW-PAK is used by a large number of districts and thousands of teachers. It would take many hours each week to address the number of questions that would arise. Since I already have a full-time job and a family life, it is necessary for me to charge for tech support to justify the time spent.

The **optional tech support service plan is \$250 for a year**. This provides:

- **Tech support** for your **tech staff** and for **your teachers** (with the tech support plan, a link will be activated on the main edit page which your teachers can use to contact me for assistance.)
- **Tech support** through **email, phone, Skype, or remote connection to your server**
- **Prioritized response** to your needs (usually within 24 hours)
- **Prioritized development** of new feature requests (new versions are typically released twice per year)
- A **warm and fuzzy feeling** for helping to support the development of the program

If you **choose not to pay** for the optional tech support service plan, you will still have the following:

- Teachers and tech staff have access to over **60 detailed and easy-to-understand help guides** built right into POW-PAK
- Tech staff have access to this detailed **POW-PAK install guide** to walk you through installing and configuring the program
- Although I would not be able to answer questions from teachers, I will still be glad to take **questions from your main tech person**. In such cases, I will **not be able to guarantee a timely reply**, but will provide a response when I am able to.

Please contact me (info@curtsworks.com) if you are interested in purchasing the optional tech support service plan.

Extra Info: Optional training services

If you want or need **training, professional development**, or any type of **speaking services**, I can be hired for that. Examples could include:

- **Professional development** for your staff (teachers, secretaries, administrators, etc.) on POW-PAK or any other technology need.
- **Training** for your tech support team on POW-PAK.
- **Consulting** on the implementation and use of POW-PAK.
- General technology assistance

Training services typically cost **\$100 per hour plus expenses**. For full details, visit my speaking services web page at:

<http://www.curtsworks.com/speak/>

NOTE: Training services and the tech support plan are **not required for you to acquire POW-PAK**. Such services are completely optional and based upon your needs or wants.

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