

COPS Backup (Cheap Offsite PowerSchool Backup)

Version 2.0

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Description:

COPS Backup is simply an elaborate applescript I wrote as a solution for off-site backup of my server's entire PowerSchool folder. Being that I am not a fan of tape backup, and that the PowerSchool folder is relatively small (if using the Pro version), I figured simply moving the folder to another building's fileserver would work nicely.

The script leverages OSX's command-line utility "hdiutil" to create compressed AES-128 encrypted disk images. This way your backups are secure even if others have access to the backup server.

I have also created an installer for the program that will walk you through the setup including the option to create a reoccurring (monthly or daily) event in iCal to trigger the backup. And a uninstall script which can be found in the program's folder after the setup.

To be specific, the COPS Backup script will do the following whenever run:

- Shutdown the PowerSchool application.
- Create an encrypted disk image file from the contents of the PowerSchool folder. The file is named using the current date.
- Restart the PowerSchool application.
- Mount the AFP share where the backups will be stored.
- Move the backup file to the share, and then eject the share.
- Send a notification email to an email address(es) specified at the time of installation. (Optional)

The time it takes to finish this process will vary based on the size of your PowerSchool folder, and the network speed between servers. There is no progress indicator, but in my experience a 3GB folder takes about 25 minutes to finish over a 100mb/s switched connection.

The script will also do a fair amount of error checking on itself. It is designed to quit the backup process and send a notification email of the error.

Requirements:

- You are running a Pro version of PowerSchool. The database files in PowerSchool Premier versions seem much too large to be contained in an image and then chucked through the network.
- Your PowerSchool server is running Mac OS 10.3 Server or later.
- An AFP Shared folder on another server with enough space to house the backups (see notes section below).
- The PowerSchool server has iCal and Mail installed if you wish to auto-run the backup and receive email notifications (both are optional).

Installation Steps:

1. Copy the COPS Setup file to your PowerSchool server and double click it to start the install (the PowerSchool program can continue to run during this process). The setup program will present a window asking questions as to how you want the backup to run. The questions are pretty straight forward, but here are a few tips:
 - Do not put the "afp://" in front of the address when asked for a path to the backup share. Just as the window states, use the format "someserver.mydomain.org/backup_folder".
 - If you wish to have a backup schedule other than daily or monthly, simple select "No Thanks" and manually setup a reoccurring event in iCal to trigger the backup. This is also true if you wish to trigger it with a cron job or launchd process.

- I HIGHLY recommend you try out the backup script on your PowerSchool test server. If you do not have a test server setup, then duplicate your real PS folder and specify the duplicate folder during the setup process. You can always rerun the installer to change your setup.

Once the installation concludes, it will write a preference file named “com.COPS.Backup” to the ~/Library/Preferences/ folder. If at any point you need to change your initial settings, simply rerun the COPS Installer script.

2. Next, open up the Mail application on your server and configure it with a valid email account. This will allow the script to send email notifications of completed backups or errors occurring during the process.

Restoring From a Backup:

If the need ever arises to restore part or all of a PowerSchool folder from a backup simply:

1. Copy the disk image file from the date needed back to your PowerSchool server.
2. Open the disk image and type in the encryption password you specified during the installation of the script when prompted.
3. Once the disk image is open, copy any needed files from the image to your current PowerSchool folder.

Notes:

- Unlike most backup programs, COPS Backup does not have the ability to delete old backups (or rotate backups if you prefer). This may cause backup files to pile up and use up a significant amount of space on the server housing them. I hope to include rotation in future versions of the program. But until then, I recommend you monitor the space.
- The user password you enter during setup is stored in a preference file on the PS server IN PLAIN TEXT. If this makes you uncomfortable please do not use this program. But keep in mind, if someone had access into your server enough to read the preference file they could just as well copy the entire student database :-)

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