

Introduction:

***HomeArchiver* is a Cshell script that uses the Linux *rsync* command to REPEATEDLY update a copy of your entire *Home* directory on a local FireWire or USB disk.**

This script is recommended **only for disks which are formatted with the ext3 filesystem**. Make certain that you can access the ext3-formatted disk at home! Please verify at home that **ALL users have FULL permissions at the top level** of the filesystem on the disk! And please **make sure there is plenty of disk space available** on your disk. (300 GB or more)

Warning: HomeArchiver does not currently test for available space on your removable disk.

At SBC your disk must be mounted on an SBC Linux computer before running the HomeArchiver script. Your SBC user account must then have WRITE permission at the top level of the filesystem on the disk. This is why you make sure that EVERYONE has write permission. Your user accounts will be different at home and at SBC.

You run the HomeArchiver script from your home directory in a terminal window in the foreground so **do not logout or close the terminal window prematurely!**

Provided you have sufficient space on the disk, you should be able to start HomeArchiver shortly after you begin data collection and stop it soon after you have finished all of your work. **You must always list and verify your backup!** You may do this before or after you stop the HomeArchiver script. If you perform a *normal exit* from HomeArchiver, the script will open all permissions (unix “other” permissions) for all of the data copied to your disk and ask if you are ready to unmount the disk. When you are satisfied with your backup you may **un-mount, power off and disconnect your disk**. That’s it! If you chose not to perform a *normal exit* from the HomeArchiver script then you should open all permissions for “other” for the data on your disk before you leave SBC (see SBC’s “AOTA” script). Otherwise, once you return home you will need to ask your systems administrator to change the file ownerships and permissions on all of your data from your SBC user account to your home user account before you can read your data.

Requirements:

ieee1394a or USB2 removable disk **formatted ext3**
FULL ReadWriteExecute permission on whole disk.
Plenty of **space** available.
Verify compatibility with your home computer(s).

USAGE: HomeArchiver <MOUNTPATH> <BASE_NAME>

MOUNTPATH: must be a valid path where your disk is already mounted
BASE_NAME: is just a PREFIX you specify. HomeArchiver will use your prefix for naming the three control described below. HomeArchiver creates them in your home directory.

BASE_NAME.excluded	(list of files,directories NOT to copy)
BASE_NAME.log	(record of each successive rsync command)
BASE_NAME.enabled	(removing this will initiate a "<u>normal exit</u>" of the script in between rsync commands)

Output:

HomeArchiver will create the three control files described above in your home directory.

HomeArchiver will copy your entire home directory to your disk under a new directory named SBC.<APS-run-number>.

HomeArchiver will write messages to the terminal window describing its status.

Normal exit occurs when the user has removed the BASE_NAME.enabled file. HomeArchiver will fully open permissions on all files and directories that it has copied to your disk under SBC.<APS-run-number> and then prompt the user about unmounting the disk.

Example:

Assume that the current APS run number is **2006-2**, that I am logged into an SBC Linux system as "**user40id**" and that my FireWire disk is mounted at /media/jldata. I decide to use a simple BASE_NAME of "DISK1" so I run the following command in a terminal window FROM MY HOME DIRECTORY:

```
$ HomeArchiver /media/jldata DISK1
```

My data will be saved to /media/jldata/SBC.**2006-2**/**user40id**. The script will sleep 10 minutes between each rsync command. I must remember not to close the terminal window where I ran the script and I must not log out of this system. There is feedback visible in the terminal window as the script does its work.

When ready to leave, I use another terminal window verify that all of my data has been copied to my disk. Using ls or du commands, I examine the data on the disk.

Satisfied that all of my data has been copied
I remove the file "DISK1.enabled" from my home directory.

```
$ rm DISK1.enabled
```

I wait for the script to exit. I notice that HomeArchiver reports that permissions have been opened and answer y or yes when it asks to unmount my disk.

I use the df command to verify that my disk is no longer mounted.

```
$ df -hl
```

If necessary, I **umount** (there is no "n" before the "m") the disk with the command below or **by right-clicking the desktop icon** that represents my disk and **selecting "Umount Volume" from the menu** provided.

```
$ umount /media/jldata
```

I Power off and disconnect the disk.

At home, since I used a normal exit from HomeArchiver I can read my data; but, I may want to ask my systems administrator to change the ownership and permissions of my data to my home account. (chown -R *mylogin:mygroup* SBC.2006-2)