

## **Making data CDs on the medicinal2 offline workstation**

*The CD burner uses CD-R media that typically holds about 600-700 MB of data. If the data to be burned exceeds this memory limit, it needs to be split into multiple directories and burned onto separate disks. CD-RW disks will likely not work.*

1. Copy data from the online workstation (medicinal1) to the offline (medicinal2) if necessary. Using the /net/medicinal1 to view data on the online does not copy the data to the offline. To copy the data to the offline workstation, use the **movedata** or **movedataall** macros in VNMR. (see the documentation on these macros) Typically most user data is in the vnmrsys/data directory so that will be used as the example, though data in any directory owned by the user may be used.

2. Open a terminal window by right clicking on the wallpaper and selecting **Programs->Terminal**

In the terminal window change the directory to the vnmrsys directory by typing  
>**cd vnmrsys**

Check to see how big the data directory is by typing >**du -k data**

All the files/directories within this directory will scroll by. At the end of the list will be a total in bytes. If this number exceeds 700 MB, the data will need to be split into multiple directories before it is imaged and burned.

3. Make an image file of the data directory with **mkisofs** utility:

**mkisofs -l -r -o data.iso data**

(This command uses the form *mkisofs -l -r -o directorytobeimaged.iso sourcedirectory* so the directory name "data" can be replaced to image other directories.)

This command creates an image file called data.iso. This may take a few minutes if the data directory is large. When it is finished, in the terminal window type:

>**ls**

and look for the data.iso file to confirm its presence.

4. When the image has been made, press the open button on the CD writer to open the CD drawer. Put a blank CD in the burner and close the disk.

5. **Caution:** Do not try to write data on a disk with some data on it already! If there is data on the disk, a file manager window will appear on the monitor after inserting the disk.

6. To start the CD writing process, in the terminal window type

>**cdrw -i data.iso**

This will start the CD burn. Wait for the process to finish.

7. At the completion of the CD writing process, the door should open by itself. Push the CD back in and wait. A file manager window should open with the files on the CD displayed. This should confirm the successful creation of a disk. **To eject a CD**, click on “eject” from the File pull-down menu of the File Manager window.

8. Remove disk, and push the door to close it.

NOTE: Do not try to do other things on the workstation while writing the CD, allow it to finish writing.

Excellent source of information on handling and archiving data on CDs:

<http://www.itl.nist.gov/div895/carefordisc/CDandDVDCareandHandlingGuide.pdf>