How to write a CD or DVD on a Linux Data Station

CD writing is no longer performed through VNMR. It is now handled by the operating system and allows the use of CDs and DVDs.

Although CD-RW and DVD-RW media can be used in principle, they entail a high risk of data loss and therefore **multi-session CD or DVD writing is strongly discouraged.** If you chose to use RW media, you do this *entirely at your own risk*. NMR staff only support CD-R, DVD-R and DVD+R and the instructions you are about to read are written for these supported media.

1. Log into your account and select the *second* desktop (Figure 1) by left clicking on the right hand side of the workspace switcher at the top of the screen (there are two desktops).
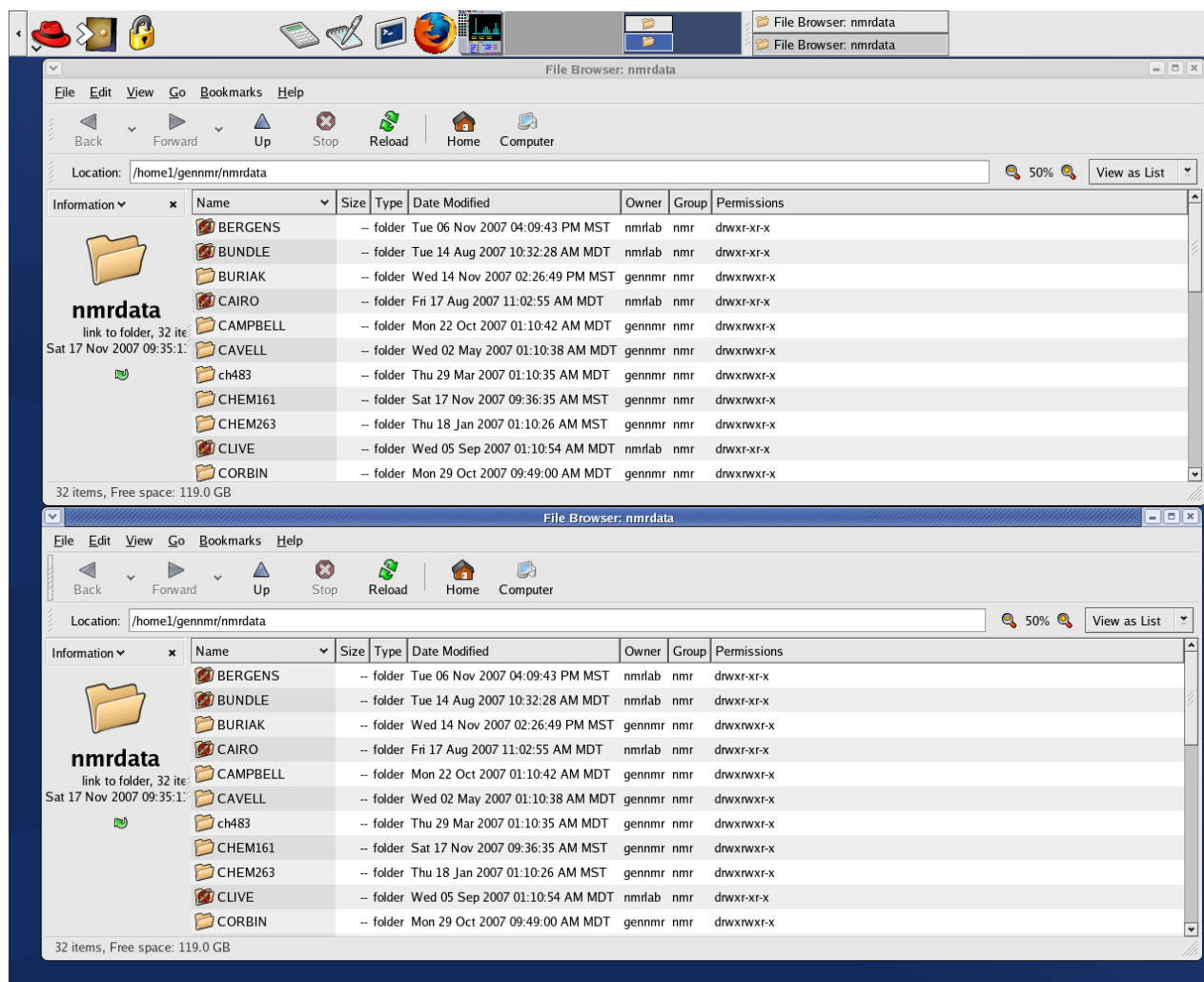

Figure 1: second LINUX desktop for data manipulations

2. Insert an empty CD or DVD into the DVD writer. The CD/DVD writing software, *CD/DVD Creator*, starts automatically and the CD/DVD Creator window appears on the desktop (Figure 2). It is best to left-click-drag this new window to the second monitor to avoid overlap with the existing windows and to make it clear which window does what. **The CD/DVD Creator window should not contain any data.** If data are present within the CD Creator window, a prior CD writing session may have ended ungracefully or a previous user left the check box *Reuse these files for another disc* (Figure 3) checked. In that case, select all items within the CD/DVD Creator window and move them to the

trash. Data moved to the trash from the CD/DVD Creator window will not be deleted from the hard disk or data server – only from the collection of files to be archived. **But make sure that you do not drag files or directories from the two main File Browser windows into the trash. In this case data are deleted from the hard disk!**
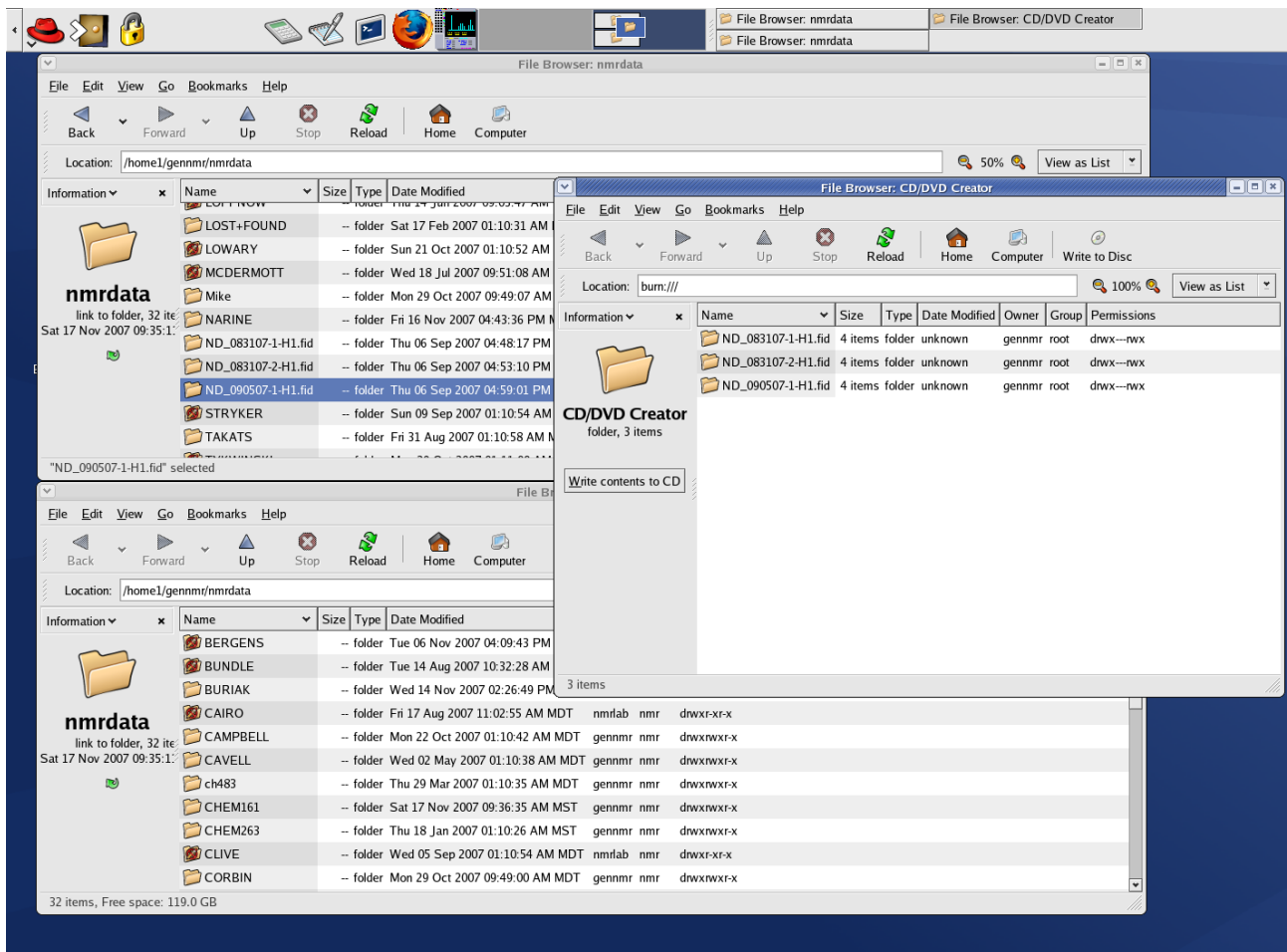

Figure 2: CD/DVD Creator window and File Browser windows

File selection is performed in a similar manner as under MS Windows. Left click on the items that are to be removed then right click on the selected items and select *Move to Trash* from the drop down menu.

Alternatively, all items can be selected and moved to the trash by using the following menu items: Edit → Select All Files followed by Edit → Move to Trash.

3. Using the File Browser windows that are already present, navigate to the desired directory which contains data that you want to archive. Drag and drop the desired items into the CD/DVD Creator window (Figure 2). The data to be archived can be from anywhere within your nmrdata directory structure, i.e. multiple files from different directories can be archived in a single session. If an error is made, items can be safely removed from the CD/DVD Creator window by moving them to the trash (see 2, above).

4. Click on the button **Write contents to CD** in the CD/DVD Creator window. A new window opens as shown in Figure 3. Before writing your data, select the following:

Write disc to:
Pioneer DVD-RW DVR-112D

Disc name:
enter a meaningful name of your choice for the CD/DVD or keep the default

Data size:
ensure that the data size fits on the selected media:
CD: ~700 MB, DVD: ~4.7 GB

Write speed:
Maximum Possible

After Writing:
ensure that the box *Eject disk* is checked and the box ***Reuse these files for another disc* is <u>not</u> checked**

Click on the **Write** button to begin writing your CD/DVD or hit Cancel if you want to start over.
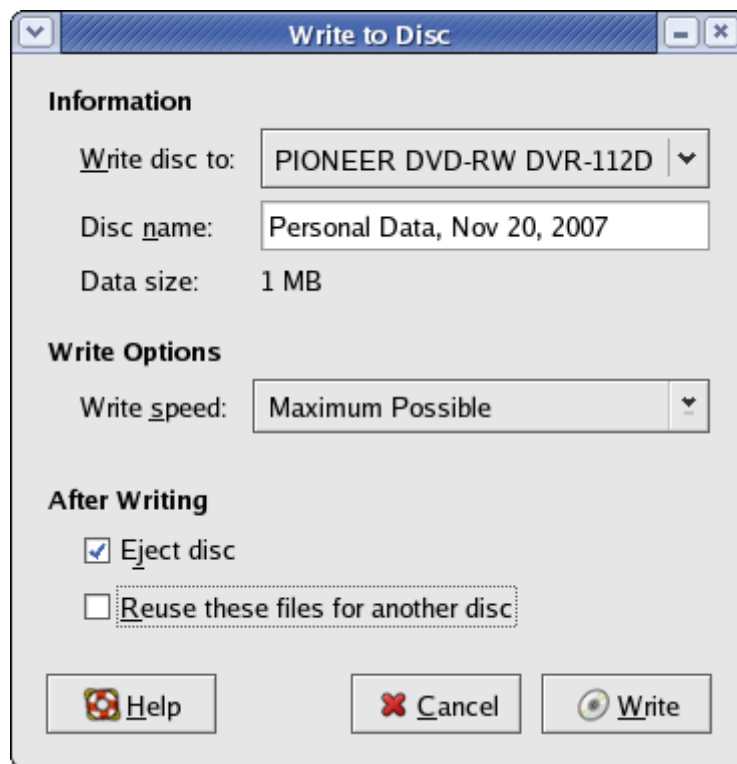
Figure 3: Write to Disk window

5. Relax! your CD/DVD will be finished shortly. The writing speed depends on the media used. Do not interfere with the writing process, even though, at times, it may seem that the process is finished.

The CD/DVD will be ejected automatically once writing has completed.

6. CD/DVD writing is basically a reliable process BUT it is always prudent to check whether the writing was successful.

   Start VNMRJ, insert your CD, then click on the Media button (Figure 4) and navigate to the
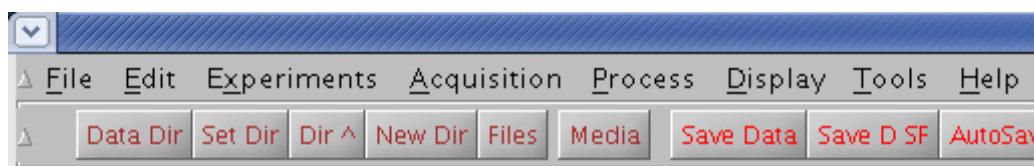
Figure 4: The VNMRJ data manipulation buttons

cdrecorder directory by selecting it and clicking on the Set Dir button. You are now looking at the file structure on the CD/DVD. Select one *filename.fid* from the beginning of the list. Load it and process it. Repeat with a *filename.fid* in the middle and one at the end of the list. If they all process properly, you have the peace of mind that your data are on the CD/DVD in a readable format that VNMRJ can process.

If this testing sounds excessive to you, don't do it. Just remember: **the appearance of a list with filenames alone is not a guarantee by itself that the files, and not only the directory, are really on the CD/DVD**. Furthermore, these are *your* data that you want to ensure you still have when the time comes to write up your thesis or your next publication for Science or Nature!