

Data Archiving How To

Several data archiving systems are available on the XRC computer systems. The choice of archive media may depend on the type of data you wish to archive, the computer system and personal preference. The different archive types are:

Type	Capacity	Media	Machines	OS
DVD	~4.3 Gb	DVD-R/RW (+R/RW)	eddie, bruker, cricket, fenchurch, thrashbarg, trillian	Linux (Win/Mac)
CDROM	~650 Mb	CD-R/RW	eddie, bruker, fen, tb, trillian	Linux (ALL)
8 mm	3 / 7 Gb	8mm 112/160M	macproc1, macsci1	SGI (*obsolete)
4 mm	4 / 12 Gb	DAT DDS-3	eniac	SGI (*obsolete)

Note: The newer Linux machines offer the intuitive **k3b** drag-n-drop interface (FC3+).

To create CD-R and DVD-R or (RW) archives the **XCDROAST** GUI is used. The GUI should already be configured (setup) to use /tmp or /FW1/tmp (on eddie) for temporary files and the SONY DVD writer to create DVD-R or CD-R disks. The XCDROAST procedure for writing CD-Rs and DVD-Rs is almost identical. I recommend creating a (temporary) Master image of the archive rather than "Master and write on-the-fly". Follow the function tree as outlined below. Burn slowly (DVD x4, CDRW x8) as excessive speed can result in a bad write.

Create CD

Master Tracks

Master Source: Select Directories to be archived, "**Accept track layout**".

Create session/image: Calculate the size and then hit "**Master to image file**". Choose a descriptive File prefix such as **D333** in place of the default "track".

Write Tracks

Layout Tracks: Select the image file(s) to archive.

Write Tracks: Choose the Write Device to use. Set the CD-R/RW media size (CD-R: 80 min, DVD-R: 4.7Gb) and press the "**Write tracks**" button.

Note: The SGI machines are still available for recovery of old data.

To archive directories on to tape the **bru** utility is used from the command line. It is important that the directories to be archived are specified relative to your current position and not as absolute locations starting with the root "/". For example to archive the data directory D202 located in /data1/white/D202 follow the following steps.

- 1) Go to the directory above the one which you wish to archive.

```
cd /data1/white
```
- 2) Place a tape in the drive (/dev/tape) and issue the command to Create a new tape archive.

```
bru -cv D202
```