



Date: September 26, 2002

Rev Date:

Project: Channel Archiving Maintenance

Doc. No: H020926A

Subject: Procedures for Maintaining Channel Archives

1. Overview

1.1. The present archiving for Calorimeter logs all channels every 5 minutes. At that rate the raw data files average about 600MegaBytes for 7 days of running. It is therefore convenient to stop and start a new archive every week. This document covers the procedures to follow to maintain the archives.

1.2. NOTE that these archives should be started and stopped by a d0cal user. Also the d0online and chan_archiver setup should be completed.

```
setup d0online
```

```
setup chan_archiver
```

2. Stopping the Archive

2.1. Each week the current running archive needs to be stopped. The following script is run in the /current directory to stop the process. I have this script in my root directory and run it to stop the archive.

```
stop_chan_archiver -p 4814
```

3. Remove Previous Data

3.1. We have been keeping the previous week of data in the /previous folder. Before the new data can be moved to this area the folder must be cleared out. While in the /previous folder issue this command to remove all the files and folders

```
rm -r *
```

4. Move Current to Previous

4.1. With the previous folder empty the current data can be moved there with this script.

```
chan_arch_move cal
```

5. Starting a New Archive

5.1. Run the following script to start a new archive.

```
setup_chan_archiver
cd /projects/archive/cal/current
start_chan_archiver -c config_file -p 4814 -w .
```

6. Determining if the Archiver is running

6.1. To see if the Archiver is running type this command on the machine running the process.

```
ps auxww | grep arch
```

This should return something similar to this...

```
d0rad 31924 0.3 0.2 11868 2532 ? S Sep25 4:52 /d0usr/products/chan_archiver/v1_9_1a/Linux/bin/ArchiveEngine config3
d0rad 31925 0.0 0.2 11868 2532 ? S Sep25 0:01 /d0usr/products/chan_archiver/v1_9_1a/Linux/bin/ArchiveEngine config3
d0rad 31926 1.4 0.2 11868 2532 ? S Sep25 19:58 /d0usr/products/chan_archiver/v1_9_1a/Linux/bin/ArchiveEngine config3
d0cal 14530 0.4 0.5 15332 5016 ? S 11:14 1:03 /d0usr/products/chan_archiver/v1_9_1a/Linux/bin/ArchiveEngine config4
d0cal 14531 0.0 0.5 15332 5016 ? S 11:14 0:00 /d0usr/products/chan_archiver/v1_9_1a/Linux/bin/ArchiveEngine config4
d0cal 14532 0.4 0.5 15332 5016 ? S 11:14 1:07 /d0usr/products/chan_archiver/v1_9_1a/Linux/bin/ArchiveEngine config4
```

It can be seen here that the three d0cal processes are running which are normal for the Archiver.

7. Restarting a Stopped Archive

7.1. Sometimes the Archiver stops for various reasons. If this happens it must be restarted in the following way.

- If the lock file is still present it must be removed.

```
rm archive_active.lck
```

Now restart the archive but use the directory name as one of the command line parameters. For example if the directory name is `dir.20011019-091652` type this..

```
start_chan_archiver -c config_file -p 4814 -w . -d dir.20011019-091652
```

8. Making a CDROM of the data

8.1. A copy of each weeks worth of data must be placed on a CDROM. A PC with a CD burner and running WRQ (X-Windows software with Kerberos) can be used to FTP the data to place it on the CD. The only current machine I know with FTP capability is d0o102.

9. Viewing an archive

9.1. The PC can view an archive using WinBrowser. Please refer to

http://d0server1.fnal.gov/www/online_computing/online_computing.html PPT, PDF, or PS : 4-Apr-2001
- DØ Archiver Tutorial, Vladimir Sirotenko for detailed information on Archiving.