

Calorimeter Process Variable Archiving

3823.124-EN-560

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Starting, Stopping and Monitoring Starting and stopping the Archiver

Text with **yellow highlight** indicates what is typed or printed to the terminal screen.

Additional information and guidelines are available on the online cluster in the `/projects/archive` area.

1) How to **start** an archive:

```
> setup d0online  
> setup chan_archiver
```

```
> cd /projects/archive/cal/current
```

```
> start_chan_archiver -c config_file -p 4814 -w . [-d <directory_file>] [-h <host_name>]
```

Restarting a stopped archive

NOTE: If the archive is stopped for some reason and it needs to be restarted, the directory file name should be included to prevent a new archive from being created.

For example if the archive with the directory file name `dir.20011019-091652` has stop type the following to restart it.

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

2) How to **stop** an archive:

```
> stop_chan_archiver -p 4814 [-h <host_name>]
```

NOTE: The following will be done by the archive manager.

3) To move data from `./current` to `./previous`

This would be done by the person in charge of maintaining the archive with making the weekly file directories and preparing files for storage.

```
> cd /projects/archive/cal  
> rm -Rf ./previous/*  
> CalChanArchMove.py
```

4) To copy, tar and gzip data from `./previous` to scratch

Check that you have directory `/d00lcluster/scratch/archive/cal ...` if not, create it !

```
> cd /projects/archive/cal  
> CalChanArchCopy.py
```

Scripts to move archives from current to previous and to scratch areas are now in `$CHAN_ARCHIVER_DIR/scripts` area and can be used via aliases like

```
> chan_arch_move <det> - move archive files from current to previous directories
```

```
> chan_arch_copy <det> - copy archive files from previous to  
/d00lcluster/scratch/archive/<det>/dir_<det>_xxxxx area and create tar.gz  
and catalog files to be exported to SAM
```

```
> chan_arch_compress <det> - will make tar.gz/catalog files in previous directory without copying  
them into scratch. Will keep only tar.gz and catalog files
```

Here `<det>` is the name of your group, like `smt,cal,..`

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Here are the steps I have been using to maintain weekly archives.

- Friday morning I stop the archiver, wait for it to finish writing data (the lock file will be removed from the directory).
- Move the current archive information to my PC via FTP.
- Remove all previous archive information in the Previous directory.
- Move the current archive into the previous directory
- Start a new archive
- Burn a CDROM of the Archive
- Copy the current archive to d0mino/prj_root/829/d/com/Huffman/dir_***

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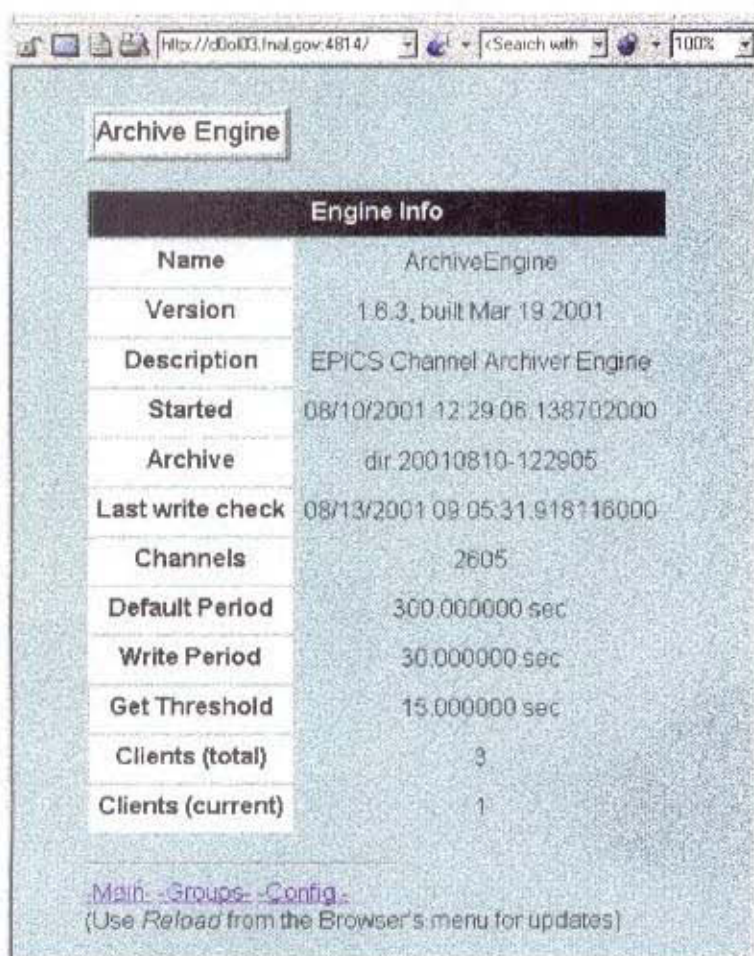
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Monitoring the process

There are two ways to check if the Calorimeter Archiver is running, either through the WEB based front end or directly from a command line.

Once the Archiver is running it can be monitored from a WEB page at the following address.
<http://d0o103.fnal.gov:4814/>

NOTE: This only works with a browser launched from the online machine running the archiver.



Engine Info	
Name	ArchiveEngine
Version	1.6.3, built Mar 19 2001
Description	EPICS Channel Archiver Engine
Started	08/10/2001 12:29:06.138702000
Archive	dir_20010810-122905
Last write check	08/13/2001 09:05:31.918716000
Channels	2605
Default Period	300.000000 sec
Write Period	30.000000 sec
Get Threshold	15.000000 sec
Clients (total)	3
Clients (current)	1

[Main](#) - [Groups](#) - [Config](#)
(Use *Reload* from the Browser's menu for updates)

Each time the browser is reloaded there should be an update reported in the Last write check field. You might have to wait a few minutes to see the update. Calorimetry currently takes readings every (300 sec.) 5 minutes.

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The second method to verify the Archiver is running is to issue this command from a Linux cluster machine. For example running from d0o103 issue the following command.

```
>ps -ef | grep -i arch
```

This will return a list of all archivers currently running. The list might look something like this..

```
> ps -ef | grep -i arch
d0smt 21633 1 1 Aug03 ? 03:43:04 /d0usr/products/chan_archiver/v1
d0smt 21634 21633 0 Aug03 ? 00:00:15 /d0usr/products/chan_archiver/v1
d0smt 21635 21634 2 Aug03 ? 06:43:06 /d0usr/products/chan_archiver/v1
sirotenk 22656 1 0 Aug09 ? 00:36:28 /d0usr/products/chan_archiver/v1
sirotenk 22675 22656 0 Aug09 ? 00:00:09 /d0usr/products/chan_archiver/v1
sirotenk 22676 22675 0 Aug09 ? 00:01:14 /d0usr/products/chan_archiver/v1
d0rad 13188 1 0 Aug09 ? 00:31:47 /d0usr/products/chan_archiver/v1
d0rad 13189 13188 0 Aug09 ? 00:00:06 /d0usr/products/chan_archiver/v1
d0rad 13190 13189 1 Aug09 ? 01:25:42 /d0usr/products/chan_archiver/v1
huffman 1765 1 0 Aug10 ? 00:25:23 /d0usr/products/chan_archiver/v1
huffman 1766 1765 0 Aug10 ? 00:00:03 /d0usr/products/chan_archiver/v1
huffman 1767 1766 0 Aug10 ? 00:14:53 /d0usr/products/chan_archiver/v1
```

```
ps auxww | grep -i huffman
```

This will display all the information pertaining to the jobs running by user huffman. Currently I will be starting and stopping the Archiver so the job will be associated with my name. Whoever runs the job will have this privilege. Below is an example of a running archive.

```
> ps auxww | grep archive
huffman 24825 0.8 0.9 5808 4916 ? S 07:52 0:41
/d0usr/products/chan_archiver/v1_9_1/Linux/bin/ArchiveEngine config_file dir.20011228-075254
-port 4814
huffman 24830 0.0 0.9 5808 4916 ? S 07:52 0:00
/d0usr/products/chan_archiver/v1_9_1/Linux/bin/ArchiveEngine config_file dir.20011228-075254
-port 4814
huffman 24835 0.3 0.9 5808 4916 ? S 07:52 0:15
/d0usr/products/chan_archiver/v1_9_1/Linux/bin/ArchiveEngine config_file dir.20011228-075254
-port 4814
huffman 1209 0.0 0.1 1364 548 tty1 S 09:16 0:00 grep archive
```

An indicator has been added to the Power Supply GUI to show that the Archiver is running. It appears at the bottom left next to the Reconnect button. The text appears in green while it is running and turns red if it has stopped.