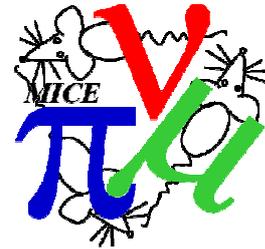


Moving Files from the Online Buffer to micestore

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- The Event Builder(s) will produce a series of ~100 MB files per run saved on the Online Buffers (currently only miceraid1).
- The files are to be named $x.y$ where x is the run number and y starts at 000 and then increments to 001 , 002 , etc. The top level of organisation will be one directory per MICE step with a new subdirectory created every hundredth run; thus data from run 987 will be stored in `.../MICE/StepS/00900/00987.0nn`.
- The Online Monitoring and Online Reconstruction output should be arranged in a hierarchy corresponding to the global namespace used for the data. The proposal is that the files themselves should be named e.g. `OnMon.00987.root` and `OnRec.00987.root` for run 987, etc.
- Currently both the DAQ and the Online Monitoring data is initially stored elsewhere; it is thus necessary to move the files internally within the Online Buffer.
- The DAQ, Online Monitoring, and eventually Online Reconstruction data are all then to be combined into a single tarball per run, stored on a separate RAID system (*micestore*).
- Both the internal file moving and the tarball creation are currently done using a pre-prepared shell script, which must be run by hand at a suitable opportunity.
- The Grid Transfer Box will NFS-mount the relevant area on micestore and will eventually upload the tarballs to the Grid automatically soon after their creation. In the meantime, this upload is done manually by me.
- Thus, at present data availability outside the MLCR is dependent on the completion of two separate manual steps.

For more details, see MICE Notes 247, 252, 255 or 264, and eLog entries #821 and #834.

To run the script:

- You must be logged into a terminal on miceraid1 as the daq user
 - You should check that the Online Monitoring ROOT GUI has been restarted since the most recent run to be requested
 - You must have hit the “Start Processes” button in the DAQ control for the next run after the most recent run to be requested
- Check the old directory to see which runs need dealing with:

```
ls /RAID/mice
```

- Run the script giving the number of the first and last runs in the set to be dealt with:

```
~/moveFiles.sh 1181 1185
```

You must give two numbers, but they can be the same (for a single run). There is some error checking, for simpler mistakes. The first thing the script will do is display

```
Moving files for runs 1181 to 1185 inclusive
```

```
Please make sure the Online Monitoring has been  
restarted from run 1185
```

and wait for 20 seconds - you should quickly check the numbers are right and there isn't a typo of e.g. O for 0; and that the DAQ and the Online Monitoring ROOT GUI have been restarted. If needed or unsure, it is totally safe to stop the script at this point with ^C.

The script will then display

```
Checking run 1181
```

after which it will checksum the files, move them to the required place and then validate they are correct (series of 1181.000 OK messages).

Stopping the script at this point should not permanently lose data, but may leave the run files in an inconsistent state with some in the new space and some in the old.

To continue, re-run the script starting from the run **after** where it stopped, and tidy up by hand anything left behind.

If the script encounters a problem it will stop showing any error messages from the command that failed.

If the problem looks to be minor retry with the next run as above, else for serious or repeated errors do not use the script and contact Henry (*J.Nebrensky* from *brunel.ac.uk*).

- Once the script has finished you will be returned to the command prompt.