

## **Steps for operating MIDAS on idun:**

1. Make sure that idun, the VME crates power supply to ALEPH pre-amplifiers, gas, NIM bin and high voltage are all turned on. If you are using the automated HV supply please refer to the instructions for the control program.

2. Logon to idun using the account

**Login: pierre**

**Password: amaudruz**

3. Change the directory to **home/pierre/nwonline/dironline**. This directory houses versions of the frontend, analyzer and its modules. To start an experiment you first want to start the frontend, type: **feflash** (the front end for FADCs) into the console. This allows the data to be gathered by the computer once the experiment has begun.

4. Now we want to analyze the data and filter out any extraneous events. Open a new console and go to the same directory (**/home/Pierre/nwonline/dironline**) Type: analyzer. This starts the analyzer and uses modules of that analyzer currently operating

5. Lastly we want to record the analyzed data into a file. To do this we use a utility that comes with MIDAS called mlogger. This program will automatically store the data to bragi in the directory **/files3/tpc/rawdata/**. To start this program, type mlogger from a new console.

6. Use the ODB editor for run control. To do this, open a new console and type: **odb**. In the editor prompt simply type start and hit enter. You will see some parameters like comment and run number. Press enter to accept the defaults or customize them. To stop a run, type stop. It is also possible to change experiment parameters with this program.

7. To see events that are currently being acquired, open a new console and change the directory to **/home/pierre/nwonline/** then type: **paw++**

Once loaded, you can look at individual histograms or use one of the MACROS to view all of the pads for one event. The macro that displays all 64 channels is 64panel. When using this, hit the init button first and after that hit the draw button whenever you want to view the histograms.

## **FAQ:**

Q: feflash displays “segmentation fault, core dumped” when I try to start it, what should I do?

A: This usually means that the experiment was not properly shutdown. Try stopping the experiment through the odb editor. Another possibility is that the upper VME crate was not turned on.

Q: How do I look at my \*.mid files after I transfer them to bragi?

A: On bragi, start a new console. Change the directory to **/home/gmd/tpcanal** then type **tpcanal** to begin the program. When asked for work station type just hit enter then you will be prompted for a command **help** will give you a list of possibilities. To read in a file use the command **infile rawdata/<your file>.mid**. If the data is filtered it will likely be **filt#####.mid** (where the #s are filled in with the run number) for unfiltered events the file will be called **run#####.mid**. Depending on the data logging options you could have one or both of these files. You can now read in events by typing **next**. This will take you to the first recorded event in that file. To look at an event type **plot**, then you should see the event. To read in and view subsequent events use **next** and **plot**.

Q: How do I start a console?

A: A console is located on the lower menu bar of the desktop. It is the icon with a shell on it on idun and the icon with a foot for bragi.

Q: How do I tell what directory I am in?

A: Use the command **pwd** (print working directory) in a linux console and that will give you the location that the console is currently working from.

Q: How do I change directories?

A: By using the command **cd/(full directory) or cd (directory wrt current directory)**. For example lets say I was in **/home/pierre** and I wanted to go to **/home/pierre/nwonline/dironline** I could type **cd/home/pierre/nwonline/dironline OR cd nwonline/dironline**. Or if I was in **/home/pierre/nwonline/dironline** and I wanted to go to **/home/pierre** Then I could type **cd/home/pierre OR cd ../..**