

MICE DAQ Quick start-up Instructions – Version 4 - September 27, 2011

Instructions	Explanations and Trouble Shooting
<p>1) Go to the DAQ KVM Terminal and hit the Ctrl key twice to open the KVM Manager. Use the arrow keys to select miceraid2a on the List and press the Return key</p>	<p>The DAQ Terminal (Keyboard, Video, and Mouse) is connected to several computers. This procedure allows selecting the computer named miceraid2a which is the white tower server located on the bottom of the REC Rack.</p> <p>I don't know where is the DAQ KVM Terminal: It is the central set of monitor, mouse and keyboard on the table on the left when entering the MLCR.</p>
<p>2) Select the workspace looking like the one shown on Figure 1.</p>	<p>There is no open session: Log on as daq Password: ask MOM. Hint: alpha And then follow the procedure below.</p> <p>What is a workspace ? On a Linux machine, there is the possibility to group the windows you open in a so-called workspace. By default, there are 4 workspaces available per session. It works like if your monitor is 4 times bigger than what you see on the screen. At any time, you see only the windows opened in the quarter you are looking at. You can move from one workspace to the other by a left-click on the workspace selection tools in the windows manager bar, usually on the bottom– right of the screen. You should see there four little grey squares representing the four workspaces and the windows opened in it in miniature.</p> <p>There is no workspace looking like Figure 1 Check first that you are logged on miceraid2a. If not Go back to point 1). Check that the windows are not simply minimized. Otherwise, you'll have to start the missing processes by yourself: If there is no terminal window, open one by clicking on the corresponding small icon of the window manager bar. If there is no window named “infoBrowser – DATE_SITE = /dateSite” Open one by typing on the terminal [miceraid2a] ~> infoBrowser Move the window to its position shown in Figure 1. If there is no window named “DATEALLDETECTORS_DAQ::ALLDETECTORS_CONTROL” Open one by typing [miceraid2a] ~> /date/runControl/DAQCONTROL.sh Move the window like shown on Figure 1 There is no window named “ALLDETECTORS LDC (1)” or “ALLDETECTORS LDC status display” Don't worry, it might be all right, just continue.</p>

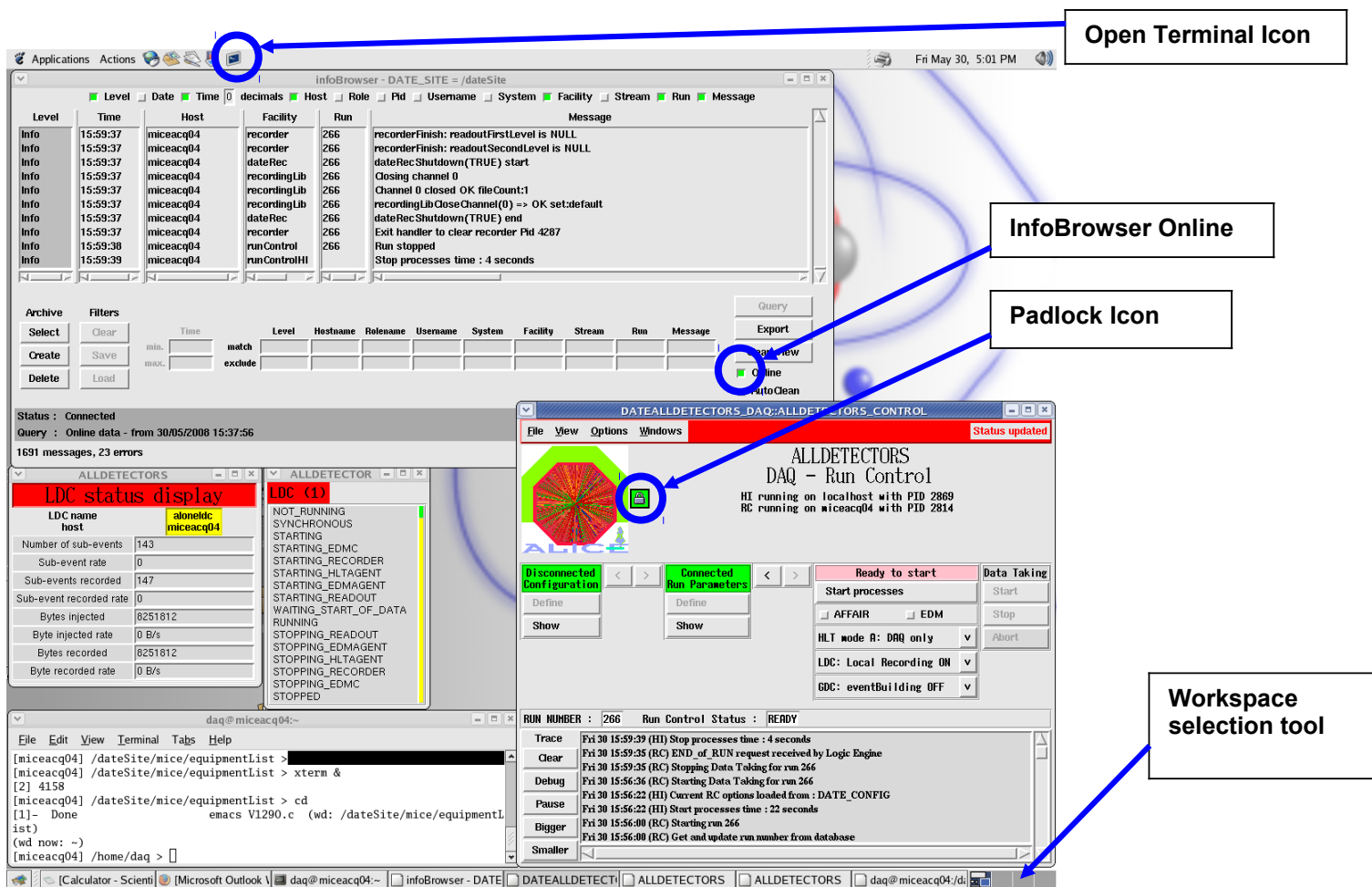


Figure 1: Typical DAQ Workspace. Note that the window named LDC Status Display is expanded in case there is more than one machine involved in the DAQ. There is also an additional GDC(1) area after LDC(1) when the event builder is used.

<p>3) Make sure the infoBrowser is online (the small Online square below the Clean View Button should be green. If it's not, click on it and it should turn green.</p>	<p>The button is red and there is an error message like “While connecting miceacq07:6002 – couldn’t open socket: connection refused. Will retry in xx seconds” You have to start the infoLoggerServer on the other computer (miceacq07): Hit Ctrl twice to open the KVM Manager and use the arrow keys to select miceacq07; Press the Return key. Open a terminal window (if needed) and type [miceacq07] ~> <code>cd /date/infoLogger/Linux</code> [miceacq07] ~> <code>./infoLoggerServer.sh start</code> This should output : DATE: /date/infoLogger/Linux/infoLoggerServer started Go back to miceraid2a using the KVM Manager</p>
<p>4) Make sure the DAQ control is locked by you. The small icon representing a padlock in the DATE Control window should be green. If it's not, click on it and select DAQ Control</p>	<p>The padlock icon is red And there is a message in red saying (HI) smiSM for domain DATEALLDETECTORS_DAQ is dead You have to start the Dim Name Server on the other computer (miceacq04): Hit Ctrl twice to open the KVM Manager and use the arrow keys to select miceacq04; Press the Return key. Open a terminal window (if needed) and type [miceacq07] ~> <code>cd /opt/dim/linux</code> [miceacq07] ~> <code>./dns &</code> This should output : PID ##### - <date and time> - DNS (pid #####) starting up on 172.21.7.70 Go back to miceraid2a using the KVM Manager</p>
<p>5) The two labels “Disconnected Configuration” and “Connected Run Parameters” should be green. If they are not click on the two right arrow (“>”) buttons on the screen, from left to right, successively. Once the Disconnected Configuration label is green you should see the two small windows LDC (#) and LDC status display. Move them as shown in Figure 1.</p>	<p>Explanation: The DAQ is started in four steps: I) Load the configuration (define which sub-detectors and which event-builders are involved in the run. This step requires only access to the DATE database. II) Load the parameters for all the computers involved in the configuration. This step requires access to each computer. III) Start the daq processes on each computer. This will also arm all the front-end electronics equipments (VME boards). It requires access to the VME crates through the VME-PCi Interface IV) Start the run. This requires the hardware trigger to be set and sent to the Trigger receiver board.</p> <p>Report any problem to the DAQ expert</p>

<p>6) In the Ready to Start tab, make sure AFFAIR and EDM are not selected.</p> <p>Use the right-end “v” buttons to select the following configuration HLT mode: A: DAQ only LDC: Local Recording OFF GDC: Local Recording</p> <p>Click Start Processes This will take about 30 to 60 seconds.</p>	<p>How do I know if AFFAIR or EDM is selected? If selected the small square on the left is purple. Click on it to deselect.</p> <p>Report any problem to the DAQ expert. The expert will ask you to look at the messages on the infoBrowser window.</p>
<p>7) Start the Run Click on Start Check in the directory /data/mice that a file is produced.</p>	
<p>8) Stop the Run Click on Stop</p>	<p>I want the run to stop automatically after a given number of events Before clicking on the Start Processes, click on the second button “<” (if you have already started the processes, click on the button “Stop” before). This should make the label “Connected Run Parameters” turn pink. Then click on the button “Define” underneath this label. On the dialog box, click “LDC”. On the parameters window, edit the value of the first parameter: Max Number of sub-events (the default value is 100000). Click the button “Applied tagged value to selected item”. Come back to the first dialog box and click OK. Confirm by clicking yes on the pop-up window.</p> <p>The run stopped by itself The most probable reason is because there was one event with different number of particle triggers in tdc and adc. Restart. If the problem persists, call the expert.</p>

Useful informations:

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Machine roles and IP addresses:

Central Trigger and TOF: **miceacq07** : 172.16.246.13

KL: **miceacq10** : 172.16.246.16

EventBuilder and online monitoring: **miceraid2a** : 172.16.246.20

Data Location

Data is saved on miceraid2a in the directory /data/mice