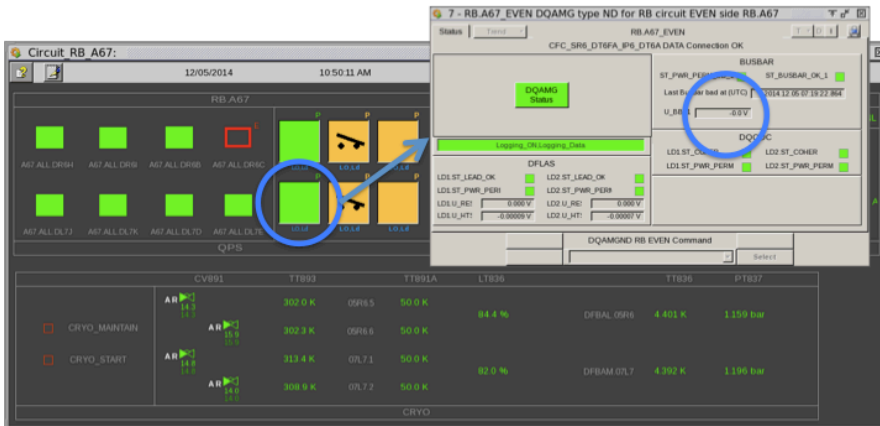


ACTION 1: RESET THE GLOBAL DETECTION CONTROLLER

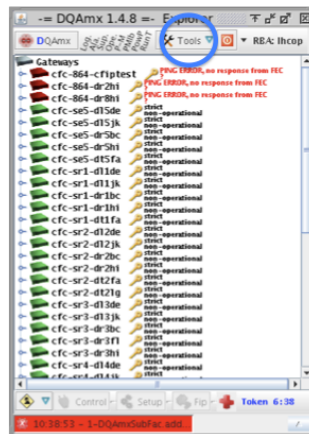
Open the even CL controller and check the voltage of the global busbar detector:



- The voltage is typically ~ 120 V
- Reset the controller (need a login), the voltage will go to 0 V
- IF the voltage was 0V check the other CL controller (the green one above) and reset it

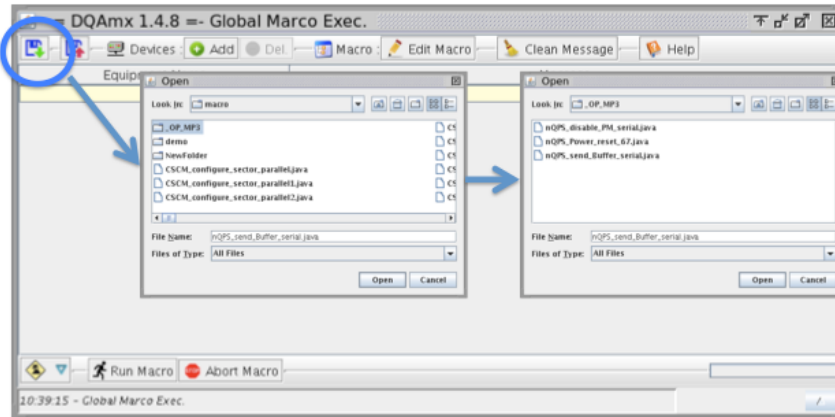
ACTION 2: SEND THE BUFFERS

Open the QPS expert tool under the HWC tab in CCM



- Click on "Tools"
- Click on "Macro"
- Click on "Macro tools" (top one)

- Open on “_OP_MP3”



- Open the macro “**nQPS_send_Buffer_serial.java**” - Nothing will happen
- Click on the “ADD” button type in the filter: “DQAMGNSRB.RB.A12” and depending on the needs append:
 - All crates
 - Only the crates around the quenched magnet (see APPENDIX)
- CLICK on Run Macro
- The **nQPS** controllers will start changing colors several times (green orange, dark orange) .
- **N.B.** at the end the **oldQPS** controller of the quenched magnet will not be back into green status!

ACTION 3: DISABLE THE PM BUFFERS

- Repeat all steps of ACTION2, selecting “**nQPS_disable_PM_serial.java**” (make sure you do it an all units you have selected before in action 2)
- Run the macro – it will take approximately 1 minute

ACTION 4: RESET THE nQPS

- Open the macro “**nQPS_Power_reset_12.java**” –the window will be automatically populated with all 55 nQPS controllers

- Run macro - the macro takes about 20 min

The **nQPS** crates will become dark orange one by one then turn back green. The **oldQPS** crate of the quenched magnet will turn green only after some minutes (you can check the heaters voltage clicking on the magnet...the controller will turn green when the voltage is higher than ~800 V)

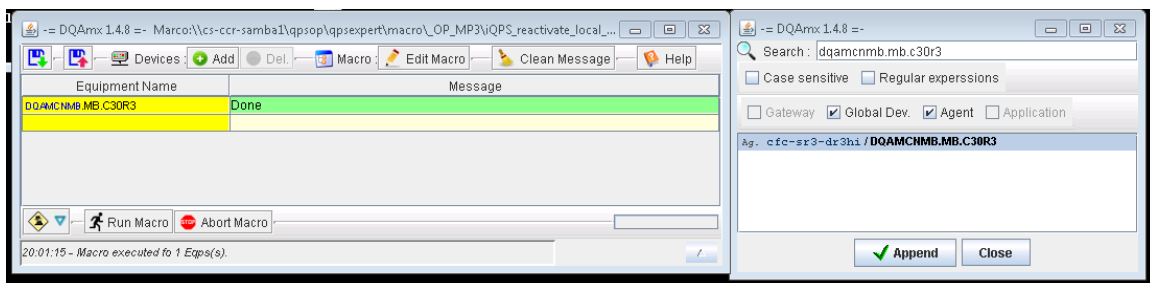
FIXING iQPS Xmas TREE

Sometimes single iQPS quench detectors (DQQDL) loose the communication with one board of their crate controller. As a result the QPS_OK disappears as long as the non-communicating board is selected (automatic toggling switches back and forth every few seconds).

To fix:

- Identify the flipping crates
- Load the macro located in: `_OP_MP3` folder called "iQPS_reactivate_local_com.java"
 - Click on the "ADD" button and type in the filter: "DQAMCNMB.MB."+ blinking crate name (i.e. C30R3) and append the blinking crates (**N.B. the suffix of the crate name is NOT the same as used for PM buffer sending, ACTION2**)
- Execute the macro

You can add as many crates as needed to the list which will execute sequentially After execution of the script the blinking should stop. If not, more severe methods have to be applied...by QPS people!!



APPENDIX

Open the **nQPS** controller of the quenched magnets and the ones next to them

