Setting up the uTCA crate (not necessary for CHROMIE)

Make sure the the FC7 is switched to "crate" mode and the CPLD Config jumpers are set to down/up/up/up/down/up/up/up before sliding it in the crate.

Now install wireshark and figure out the MAC address of the FC7 (do this for one FC7 at a time)

```bash
sudo yum install wireshark-gnome

sudo tshark -i eno1 #or any other ethernet port on your PC
```

Update the ethers and hosts files on the pc:

```bash
sudo vim /etc/ethers #insert the mac address here with the name of the FC7

sudo vim /etc/hosts #insert an ip address (192.168.4.xx) here with the name of the FC7
```

Now download rarp and restart the RARP deamon:

```bash
wget http://dl.fedoraproject.org/pub/epel/6/x86_64/Packages/r/rarpd-ss981107-42.el6.x86_64.rpm

sudo yum install rarpd-ss981107-42.el6.x86_64.rpm

sudo /etc/init.d/rarpd restart
```

Now you should be able to ping the FC7 with the IP address that you gave it.
If you can’t ping the FED/C

• Try to restart the tarp deamon:

  ```
  sudo /etc/init.d/rarpd restart
  ```

After power cycling the FC7s

• Reload the firmware on the FED/C with the FEDTool (https://gitlab.cern.ch/cmspops/FEDtool from G. Auzinger, based on Ph2_ACF)

  ```
  cd /home/teledaq/fedTool/
  fpgaconfig -c settings/HWDescriptionTeleFED.xml -i pixfed_15_3.bit
  fpgaconfig -c settings/HWDescriptionTeleFEC.xml -i pfec_1.2.0.bit
  ```

Then with the pixel_debug_tools (https://gitlab.cern.ch/cmspops/pixel_debug_tools):

• Power up the data SFP on the FED:

  ```
  cd /home/teledaq/pixel_debug_tool
  python powerUpDAQSFP.py pixFED.xml
  python resetSlinkSenderCore.py pixFED.xml
  ```

• Reset the Slink core for the data transmission of the FED
FED status

- Use the `pixel_dashboard.py` tool to keep an eye on the status of the FED

  ```
  cd /home/teledaq/pixel_debug_tools
  python pixel_dashboard.py
  ```

- For now, the FED will always be OOS while running, because of the artificial delay (two fakes modules in detconfig). This ensures that the data of the other modules is in sync.
- If you want to add more lines to the dashboard tool you can edit

  `pixel_dashboard.json`

FED errors after run

```bash
cd /home/teledaq/TriDAS/pixel/PixelAnalysisTools/standalone/error_FIFO_decoder/bin
./dump_error_files_uTCA ../../../PixelRun/Runs/Run_100000/Run_100315/
ErrorDataFED_1_100315.err > errors_100315.txt
```