ATA VNC

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v1.0

1 (Re-)Starting the ATA observing VNC

1.1 Start the VNC

The current observer interface with the ATA is via a VNC hosted on the `obs-node1` machine. VNCs should usually run on the default port `5901`. To start the VNC from scratch, use the following command on `obs-node1`:

```
vncserver :1 -geometry 1920x1080
```

1.2 Delay engines

Once the VNC server is up, connect to it via a client on your local machine. Next up, we'll need to start the "delay engine". Each LO has it's own delay engine that runs independently. To do that, on the first page of the VNC, open up **2 terminals**, and do a:

```
ssh sonata@dsp-control
```

You'll be prompted for the usual `sonata` password. Next, you'll need to do the following:

```
cd /opt/mnt/src/delay_engine
python delay_engine.py -itrf /opt/mnt/share/telinfo_ata.toml -lo b
    -fixed /opt/mnt/share/delays_b.txt -phases
    /opt/mnt/share/phases_b.txt
```

(The make sure you copy the `python` command line by line on the terminal, otherwise the terminal will execute the first line only!)

Now repeat that for LOc:

```
cd /opt/mnt/src/delay_engine
```

```
python delay_engine.py -itrf /opt/mnt/share/telinfo_ata.toml -lo c
    -fixed /opt/mnt/share/delays_c.txt -phases
    /opt/mnt/share/phases_c.txt
```

1.3 atastatus

Next up is to display the "atastatus" utility, which is a GUI showing where antennas are currently pointed. To do so, start a new terminal and run the following:

```
ssh obs@control -X -Y
atastatus
```

This will spawn the "atastatus" GUI.

1.4 Webpages

On another VNC page, start a firefox session, and launch the following pages:

`pipeline-monitor.hcro.org:8081`
`snapmon:9000`
`cam3cntl.hcro.org`

Those will display the pipeline monitor, the ADC/spectrum monitor and the antenna camera.

At the end, the main workspace of the VNC should look something like Fig 1.

2 Recovering a failed VNC

On very rare occasions, and due to unknown reasons, the VNC might hang and stop responding. This will, in turn, cause the subsequent processes running on the VNC to hang. Some of these processes, like observation scripts and the delay engines, are critical processes that should not be duplicated. If this happens, you can either stop the VNC server (as shown above), or start a new one on a different port.

Regardless, you'll need to make sure no old, defunct, processes still exist. To do so, first check if there are any delay engine processes on `dsp-control` are running by `ssh`-ing into `dsp-control` and running a

```
ps aux | grep delay_engine
```

(or similar) and if any exist, you can `kill -9`.

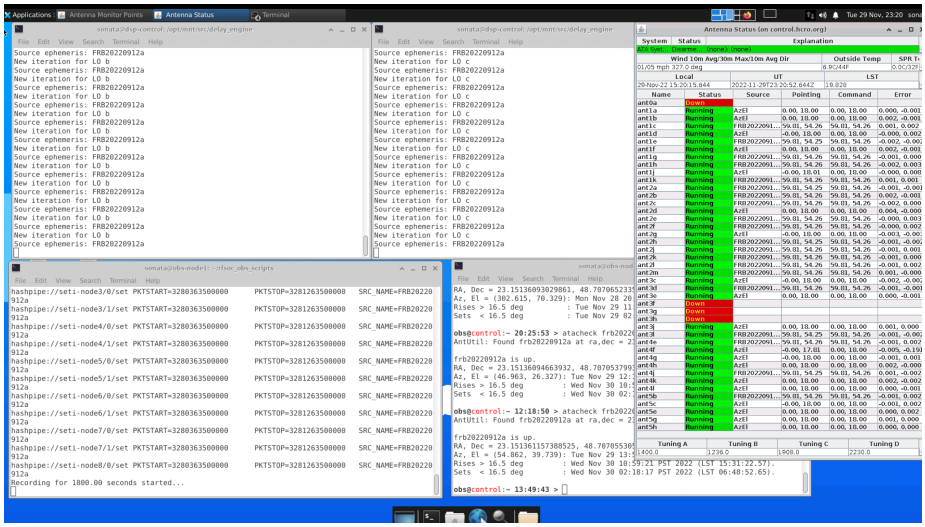

Figure 1: Typical ATA observing VNC