

Observation to DRAGNET Startup Sequence

When DRAGNET participates in an observation, COBALT is started first. The COBALT [runObservation.sh](#) script contacts storage nodes via ssh to run the outputProc binary. COBALT storage cluster specific properties are sourced by `runObservation.sh` from [cobalt_functions.sh](#).

DRAGNET for Storage only

To do the above, the following software and (non-default) system config items need to be in place:

- A LOFAR software release on DRAGNET installed under `/opt/lofar/` that matches the COBALT software release version the COBALT cluster
- The cbmmaster node (thus cbt001) must be able to ssh as user `lofarsys` to all DRAGNET nodes *non-interactively*. This requires:
 - working infiniband network, hostnames, IPs, (default) routes
 - DRAGNET `lofarsys` private key (on `lofarsys` NFS homedir) also available on cbt001 (sync-ed on all COBALT nodes)
 - a user `lofarsys` `.ssh/config` file on cbt001 (sync-ed on all COBALT nodes) that deals with ssh hurdles. Currently (Aug 2017), this contains the following (among other lines) catering for all cases:

```
Host=dragnet dragnet.control.lofar dragproc dragproc-10g
dragproc.control.lofar dragproc-10g.online.lofar drg?? drg??.control.lofar
drg??-10g drg??-10g.online.lofar drg??-ib drg??-ib.dragnet.infiniband.lofar
StrictHostKeyChecking=no
IdentityFile=~/.ssh/id_rsa_dragnet
ForwardX11=no
```

- Subsequently, `rtcp` processes on cbtXXX contact `outputProc` processes on storage nodes via `tcp/ip`.

DRAGNET for Correlation & Beamforming

N/A

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