

# incorrect chrony config causing loss of cockpit data

Gordon Oct 25

Cockpit data was not coming in.

Traced this down a system clock problem on flux. Its clock gradually lost time, and then the dsm\_server process started throwing away samples, with this message in /var/log/isfs/isfs.log:

```
Oct 25 14:54:54 flux dsm_server[30058]: WARNING|sample with timetag in future by 2.305084 secs. time: 2012 Oct 25 20:54:56.861 id=10,20 total future samples=39039001
```

The problem was in /etc/chrony.conf on flux and gully. The chrony processes were configured to use keys, which were different, and so flux was not able to get time information from gully. Commented out

```
# keyfile /etc/chrony.keys
```

statement in both, and restarted chronyd

```
systemctl restart chronyd.service
```

chronyd on flux is configured to get time from gully, via "server 192.168.0.12" directive in /etc/chrony.conf on flux.

The server directives in /etc/chrony.conf on gully now look like so:

```
# server 0.fedora.pool.ntp.org iburst
# server 1.fedora.pool.ntp.org iburst
# server 2.fedora.pool.ntp.org iburst
# server 3.fedora.pool.ntp.org iburst
server ntp.colostate.edu
server c20
server m21
server m22
```

chrony was never able to connect any of the fedora.pool.ntp.org servers. The **chronyc sources** command always returned lines like this for the pool servers:

```
MS Name/IP address          Stratum Poll LastRx Last sample
=====
^? 64.73.32.134              0      6    10y    +0ns[ +0ns] +/- 0ns
^? nsl.your-site.com         0      6    10y    +0ns[ +0ns] +/- 0ns
^? 64.73.32.135              0      6    10y    +0ns[ +0ns] +/- 0ns
^? cheezum.mattnordhoff.net  0      6    10y    +0ns[ +0ns] +/- 0ns
```

The traffic is probably blocked by a firewall somewhere.

In order to have a reference check for our DSMs, I added ntp.colostate.edu as a chrony server for gully, which works, which means our router is not blocking the traffic.

**chronyc sources** on gully with the above server configuration looks like so, which indicates that our DSMs (with PPS from a GPS) have better clocks than ntp.colostate.edu:

```
# chronyc sources
210 Number of sources = 4
MS Name/IP address      Stratum Poll LastRx Last sample
=====
^+ yuma.acns.colostate.edu    2    6    5    +75ms[ +75ms] +/- 173ms
^+ C20                        3    6    5   -1281us[-1287us] +/- 3162us
^+ M21                        3    6    5   +470us[ +464us] +/- 2506us
^* Mu22                       3    6    5    -30us[ -36us] +/- 1799us
```

chronyd