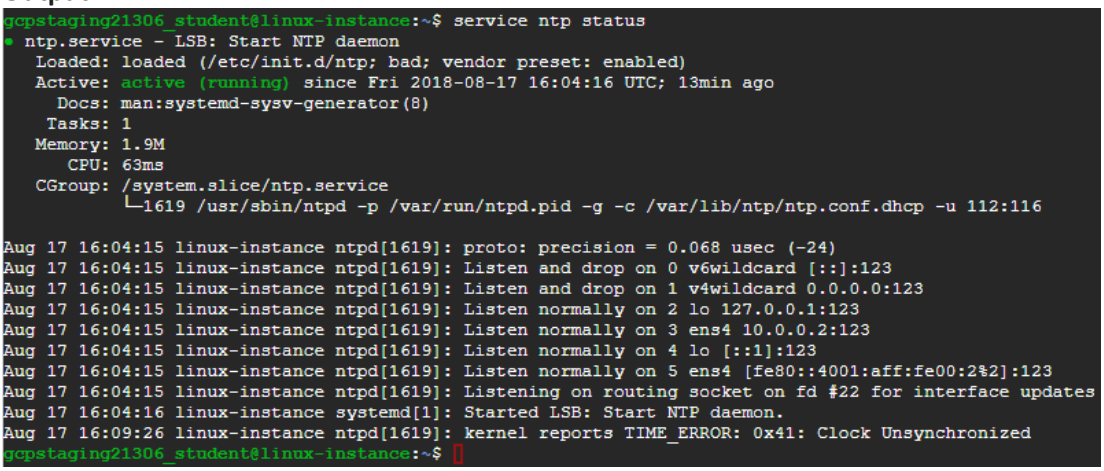
RESTARTING SERVICES

Let's now have a look at the service that is keeping the date and time of the machine accurate: NTP.

```
sudo service ntp status
```

Output:



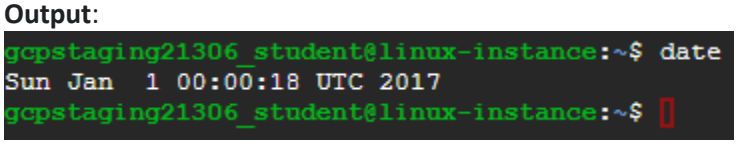
It's running and keeping the time on our machine synchronized with time servers around the world. Now, what if we manually change the date? ntp realizes that this is not normal clock drift. It will detect the change but not interfere. Let's change the date using the date command:

```
sudo date -s '2017-01-01 00:00:00'
```

If we wait a few seconds, we can check that the date is still the same using the date command without parameters.

```
date
```

Output:



Let's look at the last lines in syslog:

```
sudo tail /var/log/syslog
```

Output:

```
gcpstaging21306_student@linux-instance:~$ tail /var/log/syslog
Aug 17 16:12:49 linux-instance systemd[1]: Started System Logging Service.
Aug 17 16:13:01 linux-instance gcpstaging21306_student: This is another test log entry
Aug 17 16:17:01 linux-instance CRON[7336]: (root) CMD (   cd / && run-parts --report /etc/cron.hourly)
Aug 17 16:17:10 linux-instance systemd[1]: Listening on CUPS Scheduler.
Aug 17 16:17:10 linux-instance systemd[1]: Started CUPS Scheduler.
Aug 17 16:19:07 linux-instance systemd[1]: Starting Cleanup of Temporary Directories...
Aug 17 16:19:07 linux-instance systemd-tmpfiles[7416]: [/usr/lib/tmpfiles.d/var.conf:14] Duplicate line for pat
h "/var/log", ignoring.
Aug 17 16:19:07 linux-instance systemd[1]: Started Cleanup of Temporary Directories.
Jan  1 00:00:00 linux-instance systemd[1]: Time has been changed
Jan  1 00:00:00 linux-instance systemd[7020]: Time has been changed
gcpstaging21306_student@linux-instance:~$
```

So, we see that the machine detected the time change, but our ntp service did not change it. This is because the ntp service avoids doing any drastic changes while it's running. It will, however, perform drastic changes when it starts. If we now restart ntp, the service will notice the change in time and fix it to the current time:

```
sudo service ntp restart
```

Once we have restarted it, we can check the date again.

```
date
```

Output:

```
gcpstaging21306_student@linux-instance:~$ date
Fri Aug 17 16:21:33 UTC 2018
gcpstaging21306_student@linux-instance:~$
```

Restarting the service command is a handy way of stopping a service and then starting it immediately back up.

Note: Sometimes the ntp service might take time to update the current time. If you are not getting the current time then execute the date command after few seconds.