Operating System

Subtopics

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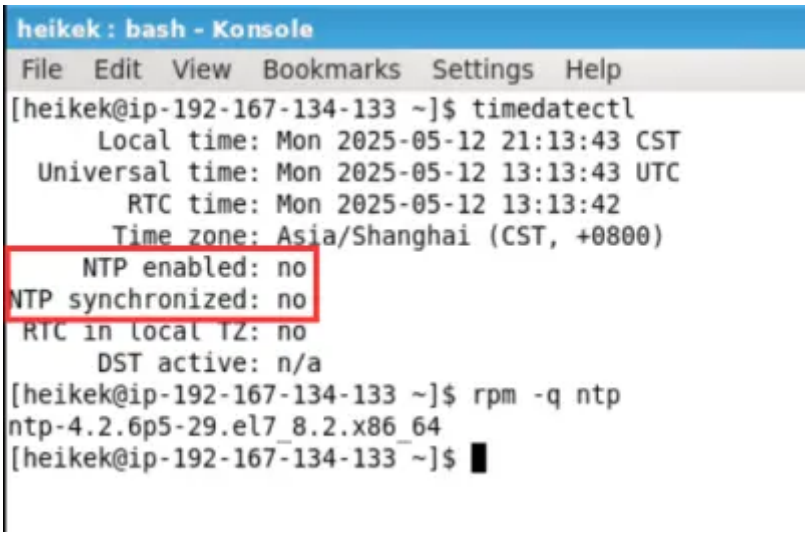
How to check if the system is synchronized?

On RHEL7 the time synchronization is done via **ntp** and on RHEL9 via **chrony**. For license checkout either the license server(s) and the clients need to be synchronized timely.

Please check with

```
timedatectl
```

if the system is **synchronized**.



timedatectl output

In the screenshot above the system is not configured for time synchronization and **ntp** is disabled.

How to configure RHEL7 with ntp?

> **Note**: In general customer IT is responsible to set up the time synchronization. The information below is just for your convenience, but is not part of GLPT support.

Prerequisite:

You need a reliable time server.

Steps to be checked:

1. Check if **ntp** is installed with
   `rpm -q ntp`

   If it is not installed, you can try to get it with
   `sudo yum install ntp`

2. open `/etc/ntp.conf` with an editor (you need editing permissions or `sudo` rights)
   Here you can add the NTP server with adding the line
   server hostname `iburst`
   Example:
   `server time.google.com iburst`

3. Check if **ntp** service is enabled / started with
   `systemctl status ntpd`

   If it is not started / enabled
   1. Enable **ntp** service for being started with a reboot:
      `sudo systemctl enable ntpd`

   2. Start **ntp** service with
      `sudo systemctl start ntpd`

4. Check the time synchronization:
   `sudo ntpq -p`
   The **ntpq** command queries the **ntp** servers defined and you get with **option -p** a table back with statistics.

5. Check with `timedatectl`, if **ntp** is enabled and synchronized.
   If ntp is still not enabled, use:

   `sudo timedatectl set-ntp true`
   `sudo systemctl start ntpd`
   Wait a minute and check with `timedatectl` again.

Addition from user experience

From user experience: even with configuring, enabling and starting the **ntp** daemon the synchronization status was still no (because the time servers configured had an offset). Using

```
sudo systemctl stop ntpd

sudo ntpd -gq

sudo systemctl start ntpd
```

helped here. The options are for (see also https://www.tekopolis.com/sync-ntp-immediately-linux/)

1. **option -q**: overrides the built in sanity check of 1000s. If the system time is over 1000s off from the configured server time, the ntpd process would quit otherwise.
2. **option -q**: for quitting the daemon after the clock has been set

How to configure RHEL9 with chrony?

> **Note**: In general customer IT is responsible to set up the time synchronization. The information below is just for your convenience, but is not part of GLPT support.

Prerequisite:

You need a reliable time server.

Steps to be checked:

1. Check if `chrony` is installed with
   `rpm -q chrony`

   If it is not installed, you can try to install it with
   `sudo yum install chrony`

2. open `/etc/chrony.conf` with an editor (you need editing permissions or sudo rights)
   Here you can add the time server with adding the line
   `server hostname iburst`

   Example:
   `server time.google.com iburst`

3. Check if `chrony` service is enabled / started with
   `systemctl status chronyd`

   If it is not started / enabled

1. Enable `chrony` service for being started with a reboot:
   `sudo systemctl enable chronyd`

2. Start `chronyd` service with
   `sudo systemctl start chronyd`

4. Check with `timedatectl`, if `chrony` is enabled and synchronized.

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