

# Debian 13: Use Private NTP Server

## Status

For hosts in isolated VLANs, we provide access to a local NTP server, via firewall rules.

The local NTP server is at: 192.168.1.12.

See this page for the local NTP server: [Local GPS NTP Time Server](#)

The main router includes a floating firewall rule that forwards UDP port 123 requests to the local NTP server.

It includes most of the VLANs. But can be updated to include other VLANs.

## Configuration

Here are steps to configure an isolated Debian 13 VM to use the local NTP server.

**NOTE: Debian 13 uses a service called, timesyncd.**  
Timesyncd is not as precise as true NTP.  
But, it is good enough.

Timesyncd is installed by default.

We will use it.

You can verify timesyncd is running with this:

```
timedatectl show-timesync --all
```

```
g1white@t1a801:/usr/local/share/ca-certificates$ timedatectl show-timesync --all
LinkNTPServers=
SystemNTPServers=
RuntimeNTPServers=
FallbackNTPServers=0.debian.pool.ntp.org 1.debian.pool.ntp.org 2.debian.pool.ntp.org 3.debian.pool.ntp.org
ServerName=2.debian.pool.ntp.org
ServerAddress=72.30.35.88
RootDistanceMaxUSec=50
PollIntervalMinUSec=30s
PollIntervalMaxUSec=34min 8s
PollIntervalUSec=34min 8s
NTPMessage| leap=0, Version=4, Mode=4, Stratum=2, Precision=25, RootDelay=183us, RootDispersion=381us, Reference=628853E, OriginateTimestamp=Sat 2026-04-18 17:17:49 EDT, ReceiveTimestamp=Sat 2026-04-18 17:17:49 EDT, TransmitTimestamp=Sat 2026-04-18 17:17:49 EDT, Ignored=no, PacketCount=7, Jitter=600us |
Frequency=17410
g1white@t1a801:/usr/local/share/ca-certificates$
```

Edit the config file to listen to the local NTP server.

Open it with:

```
sudo nano /etc/systemd/timesyncd.conf
```

It will be mostly commented out, by default.

This is because the service is using config defaults, or compiled defaults.

Update it to point to the local ntp server, like this:

```
GNU nano 8.4
# This file is part of systemd.
#
# systemd is free software; you can redistribute it and/or modify it under the
# terms of the GNU Lesser General Public License as published by the Free
# Software Foundation; either version 2.1 of the License, or (at your option)
# any later version.
#
# Entries in this file show the compile time defaults. Local configuration
# should be created by either modifying this file (or a copy of it placed in
# /etc/ if the original file is shipped in /usr/), or by creating "drop-ins" in
# the /etc/systemd/timesyncd.conf.d/ directory. The latter is generally
# recommended. Defaults can be restored by simply deleting the main
# configuration file and all drop-ins located in /etc/.
#
# Use 'systemd-analyze cat-config systemd/timesyncd.conf' to display the full config.
#
# See timesyncd.conf(5) for details.

[Time]
NTP=192.168.1.12
#NTP=
#FallbackNTP=0.debian.pool.ntp.org 1.debian.pool.ntp.org 2.debian.pool.ntp.org 3.debian.pool.ntp.org
#RootDistanceMaxSec=5
#PollIntervalMinSec=32
#PollIntervalMaxSec=2048
#ConnectionRetrySec=30
#SaveIntervalSec=60
```

Close and save the config.

Once saved, restart the timesyncd service with:

```
sudo systemctl restart systemd-timesyncd
```

You can check the service status with this:

```
timedatectl show-timesync --all
```

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