## **Procedure for Correcting Server Time and Setting Up a NTP Server**

Before setting up Active Directory in an Ubuntu server, we would make sure that the server and client computer's clocks are within 5 minutes of each other. We can update time daily or create a NTP server in our server farm to solve this challenge.

- 1. Login to the Ubuntu server using the username and password
- 2. We can use the **ntpdate** function which runs when our server boots, but machines can drift over time. We can schedule the function to run daily. We should create a file.

username@ubuntu1:~\$ sudo nano /etc/cron.daily/ntpdate

and type the following code to update to the Ubuntu NTP server:

ntpdate ntp.ubuntu.com

- 3. We press CTRL X and then "y" for yes to save the file and Enter.
- 4. We need to make the file executable by typing:

username@ubuntu1:~\$ sudo chmod 755 /etc/cron.daily/ntpdate

Another method is to make our own NTP server in the farm. Follow these step by step instructions for installing a Network Time Protocol (NTP) Server on the Ubuntu Server.

- 1. Login to the Ubuntu server using the username and password
- 2. Then we install the NTP daemon, which is a program that runs in the background.

username@ubuntu1:~\$ sudo aptitude install ntpd

3. To start to setup the NTP server, we type

username@ubuntu1:~\$ sudo nano /etc/ntp.conf

The file editor will open and we should type:

```
# NTP Servers
server ntp.ubuntu.com
```

4. It is recommended that we synchronize our server with NTP servers, so we can add additional machines.

```
# NTP Servers
server ntp.ubuntu.com
server nistl-dc.WiTime.net
server ntp0.mcs.anl.gov
```

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5. For machines we wish to synchronize quickly, we can type the word "iburst" after the server name.

```
# NTP Servers
server ntp.ubuntu.com
server nist1-dc.WiTime.net iburst
server ntp0.mcs.anl.gov
```

- 6. We press CTRL X and then "y" for yes to save the file and Enter.
- 7. Remove the older NTP program from your Ubuntu server after your new NTP device is working.

username@ubuntu1:~\$ sudo aptitude remove ntpdate