Promon Software Solutions Pvt Ltd

NTP Status & Installation

Proposed Solution Roadmap Details

Version1.0

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1 INTRODUCTION

1.1 Purpose and Scope

NTP is used to synchronize the specified server's current time with all other servers, NTP client will synchronize its clock to the network time server.

1.2 Document Change Management

Date	Version	Comments	Who
31-Oct-2023	1.0		vivekanandan

1.3 References

The content of this document is based on the content of the documents listed below that were made available during earlier project phases.

Ref. No.	Title	Version	Created by
[1]	TimeZone checks with NTP Details	1	Vivekanandan
[2]			
[3]			
[4]			

1.4 Terminology

Item	Definitions
NTP	Network Time Protocol

2 PRE CHECKS

2.1 For Centos Servers

To check NTP is synchronized or Not

```
[vivek@tusass-microservices01 ~]$ timedatectl
      Local time: Tue 2023-10-31 11:29:52 -02
  Universal time: Tue 2023-10-31 13:29:52 UTC
        RTC time: Tue 2023-10-31 13:29:53
       Time zone: America/Godthab (-02, -0200)
     NTP enabled: yes
NTP synchronized: yes
 RTC in local TZ: no
      DST active: no
 Last DST change: DST ended at
                  Sat 2023-10-28 22:59:59 -02
                  Sat 2023-10-28 23:00:00 -02
 Next DST change: DST begins (the clock jumps one hour forward) at
                  Sat 2024-03-30 22:59:59 -02
                  Sun 2024-03-31 00:00:00 -01
[vivek@tusass-microservices01 ~]$
```

To synchronize the Current time

```
devops@tusass-k8s-02:~$ ntpstat
synchronized to NTP server (10.60.151.1) at stratum 3
   time correct to within 29 ms
   polling server every 1024 s
```

Note : The above server synchronizes current time with the remote server 10.60.151.1 within 29ms.

2.2 For Ubuntu Servers

To check NTP is synchronized or Not

```
devops@tusass-k8s-01:~$ cat /etc/issue*
Ubuntu 20.04.2 LTS \n \l

Ubuntu 20.04.2 LTS
devops@tusass-k8s-01:~$ timedatectl
               Local time: Tue 2023-10-31 11:36:44 -02
           Universal time: Tue 2023-10-31 13:36:44 UTC
                 RTC time: Tue 2023-10-31 13:36:43
                Time zone: America/Nuuk (-02, -0200)
System clock synchronized: no
              NTP service: active
          RTC in local TZ: no
devops@tusass-k8s-01:~$

devops@tusass-k8s-01:~$ ntpstat

Command 'ntpstat' not found,
```

For Installing NTP in Ubuntu server

Step 1: Update the System

```
sudo apt update
```

Step 2: Install the NTP package

```
sudo apt install ntp -y
```

Step 3: Configuring the NTP server

```
sudo vi /etc/ntp.conf
```

Step 4: Restarting the ntpd service

```
sudo service ntp restart
```

Step 4: Need to Allow NTP server in UFW Firewall at port 123

```
sudo ufw allow ntp
```

sudo ufw status

Step 5: To synchronize the NTP server we need to use ntpdate

sudo apt install ntpdate

Step 6: Attempt to manually sync our system time with the NTP server

sudo ntpdate <your ntp server's IP address>

Step 7: Need to disable timesyncd to avoid conflict with NTP server

sudo timedatectl set-ntp off

For installing NTP in Centos 7

Step 1: Update the System

yum update -y

Step 2: Install the NTP package

yum install ntp -y

Step 3: Configuring the NTP server

vi /etc/ntp.conf

Note : we need to add server 10.60.151.1 or server ntp.sianiut.tele.gl iburst

Hint - The "iburst" option is used to initiate a burst of eight packets to the NTP server when the NTP daemon (e.g., ntpd or chronyd) is started or when the server is selected as a reference source. It helps speed up the initial synchronization process.

Step 4: Restarting the ntpd service

systemctl restart ntpd

Step 5: Check the Sync status of NTP

ntpq -np

To view output of the connected server