The Advanced Features provides the ability to time from a NPT timing source. There are two options to setup NPT timing:
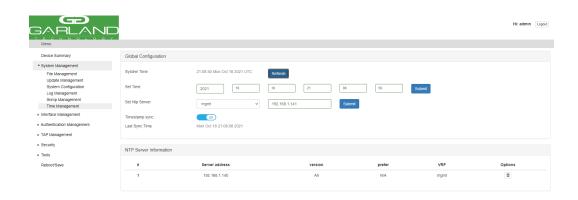
> Basic NTP Timing

> Authenticated NTP Timing

Basic NTP Timing

1. Login to the Advanced Features unit, (admin/gtadmin1).

2. Select System Management.

3. Select Time Management.

4. Set NTP Server, enter the IP Address.

5. Select Submit.

6. Enable Timestamp sync.

The Global Configuration and NTP Server Information will be displayed.

Additional NTP Servers may be applied by repeating Steps 4 and 5. The first NTP server added will be the highest priority, #1. Additional NTP servers added will be #2, #3 etc.

Authenticated NTP Timing

Connect to the Advanced Features unit. A connection to the unit may be established using two options:

Directly connected to the Console Interface to COM Port using Putty/Serial connection.

Connected via the IP Management Interface using Putty/SSH connection.

1. Press the Return key.

2. Enter enable.

3. Enter configure terminal.

4. Enter the following command to configure the minimum distance between the unit and the NTP server. The default is 1ms, (X=1ms to 1000ms).

```
Switch(config)# ntp minimum-distance X
```

5. Enter the following command to define the NTP server IP address (xxx.xxx.xxx.xxx), define the NTP protocol version (Y=1,2,3), define the authentication key (Z=1-64000) and define as the preferred server (prefer).

```
Switch(config)# ntp server mgmt-if XXX.XXX.XXX.XXX version Y key Z prefer
```

6. Enter the following command to enable/disable NTP authentication.

```
Switch(config)# ntp authentication enable / disable
```

7. Enter the following command to create a NTP key ID (X=1-64000) and define the key value (Y=key string).

```
Switch(config)# ntp key X Y
```

8. Enter the following command to authenticate the NTP server identity (X=1-64000).

```
Switch(config)# ntp trustedkey X
```

9. Enter the following command to display the NTP server configuration.

```
Switch# show ntp
```

10. Enter the following command to display the NTP status.

```
Switch# show ntp status
```

11. Enter the following command to display the NTP statistics.

```
Switch# show ntp statistics
```

12. Enter the following command to display the NTP associations.

```
Switch# show ntp associations
```

13. Enter the following command to display the NTP Key(s).

```
Switch# show ntp key
```

14. Enter the following command to clear the NTP statistics.

```
Switch# clear ntp statistics
```