



N Commands

This chapter describes the system management commands that begin with N.

ntp

To configure the Network Time Protocol (NTP) peers and servers for the switch, use the **ntp** command. To remove configured peers and servers, use the **no** form of this command.

```
ntp {peer hostname | server hostname} [prefer] [use-vrf vrf-name]
```

```
no ntp {peer hostname | server hostname}
```

Syntax Description

peer <i>hostname</i>	Specifies the hostname or IP address of an NTP peer.
server <i>hostname</i>	Specifies the hostname or IP address of the NTP server.
prefer	(Optional) Specifies this peer/server as the preferred peer/server.
use-vrf <i>vrf-name</i>	(Optional) Specifies the virtual routing and forwarding (VRF) used to reach this peer/server.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

You can specify multiple peer associations.

Examples

This example shows how to form a server association with a server:

```
switch(config)# ntp server ntp.cisco.com
```

This example shows how to form a peer association with a peer:

```
switch(config)# ntp peer 192.168.10.0
```

This example shows how to delete an association with a peer:

```
switch(config)# no ntp peer 192.168.10.0
```

Related Commands

Command	Description
ntp distribute	Enables CFS distribution for NTP.
show ntp	Displays NTP information.

ntp abort

To discard the Network Time Protocol (NTP) Cisco Fabric Services (CFS) distribution session in progress, use the **ntp abort** command.

ntp abort

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Examples This example shows how to discard the NTP CFS distribution session in progress:

```
switch(config)# ntp abort
```

Related Commands	Command	Description
	ntp distribute	Enables CFS distribution for NTP.
	show ntp	Displays NTP information.

ntp authenticate

To prevent the system from synchronizing with unauthenticated, unconfigured network peers, use the **ntp authenticate** command. Use the **no** form of this command to allow synchronization with unauthenticated, unconfirmed network peers.

ntp authenticate

no ntp authenticate

Syntax Description This command has no arguments or keywords.

Command Default Disabled

Command Modes Global configuration mode (config)

SupportedUserRoles network-admin
network-operator
vdc-admin
vdc-operator

Command History	Release	Modification
	5.2(1)N1(1)	This command was introduced.

Usage Guidelines If the system has been configured with the **ntp passive**, **ntp broadcast client**, or **ntp multicast client** commands, when NTP receives an incoming symmetric active, broadcast, or multicast packet, it can set up an ephemeral peer association in order to synchronize with the sender.

If **ntp authenticate** is specified, when a symmetric active, broadcast, or multicast packet is received, the system will not synchronize to the peer unless the packet carries one of the authentication keys specified in the **ntp trusted-key** global configuration command.

To prevent synchronization with unauthorized network hosts, **ntp authenticate** should be specified any time **ntp passive**, **ntp broadcast client**, or **ntp multicast client** has been specified unless other measures, such as the **ntp access-group** command, have been taken to prevent unauthorized hosts from communicating with the NTP service on the device.

Make sure that you are in the correct virtual device context (VDC). To change the VDC, use the **switchto vdc** command.

This command does not require a license.



Note This command does not authenticate peer associations configured via the **ntp server** and **ntp peer** commands. To authenticate ntp server and ntp peer associations, specify the **key** keyword.

Examples

This example shows how to enable NTP authentication:

```
switch# config terminal
switch(config)# ntp authenticate
```

This example shows how to disable NTP authentication:

```
switch(config)# no ntp authenticate
switch(config)#
```

Related Commands

Command	Description
ntp authentication-key	Configures an NTP authentication key.
ntp trusted-key	Specifies one or more keys that a time source must provide in its NTP packets in order for the device to synchronize to it.
show ntp authentication-status	Displays the status of NTP authentication.

ntp commit

To apply the pending configuration pertaining to the Network Time Protocol (NTP) Cisco Fabric Services (CFS) distribution session in progress in the fabric, use the **ntp commit** command.

ntp commit

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Examples This example shows how to commit changes to the active NTP configuration:

```
switch(config)# ntp commit
```

Related Commands	Command	Description
	ntp distribute	Enables CFS distribution for NTP.
	show ntp	Displays NTP information.

ntp distribute

To enable Cisco Fabric Services (CFS) distribution for Network Time Protocol (NTP), use the **ntp distribute** command. To disable this feature, use the **no** form of this command.

ntp distribute

no ntp distribute

Syntax Description This command has no arguments or keywords.

Command Default Disabled

Command Modes Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines Before distributing the Fibre Channel timer changes to the fabric, the temporary changes to the configuration must be committed to the active configuration using the **ntp commit** command.

Examples This example shows how to distribute the active NTP configuration to the fabric:

```
switch(config)# ntp distribute
```

Related Commands	Command	Description
	ntp commit	Commits the NTP configuration changes to the active configuration.
	show ntp	Displays NTP information.

ntp sync-retry

To retry synchronization with the configured Network Time Protocol (NTP) servers, use the **ntp sync-retry** command.

ntp sync-retry

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Examples This example shows how to retry synchronization with the configured NTP servers:

```
switch# ntp sync-retry
```

Related Commands	Command	Description
	ntp distribute	Enables CFS distribution for NTP.
	show ntp	Displays NTP information.