

# SNTP Configuration Commands

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# Chapter 1 SNTP Configuration Commands

## 1.1 SNTP Configuration Commands

SNTP configuration commands include:

- `sntp master`
- `sntp query-interval`
- `sntp server`
- `sntp peer`
- `sntp source`
- `show sntp`
- `debug sntp`
- `time-zone`

### 1.1.1 `sntp master`

To set the level of the local clock, run **`sntp master num`**; to cancel this settings, run **`no sntp master`**.

**`sntp master num`**

**`no sntp master`**

#### Parameter

Parameter	Description
<i>num</i>	Means the level of the clock.

#### Default

None

#### Command mode

Routing configuration mode

**Remark**

The clock level is disabled by default; if it is enabled, the level ranges between 1 and 15, and will be 8 without configuration.

**Example**

```
Router_config#sntp master 5
```

**Related Commands**

**sntp peer**

**sntp server**

**1.1.2 sntp query-interval**

To set the interval of sending the SNTP requests, run **sntp query-interval *time***. To resume the default settings, run **no sntp query-interval**.

**sntp query-interval *time***

**no sntp query-interval**

**Parameter**

Parameter	Description
<i>Time</i>	Means the interval of sending the requests.

**Default**

The default value is 1, that is, the requests will be sent every minute.

**Command mode**

Routing configuration mode

**Remark**

The time ranges between 1 and 1440 minutes.

**Example**

```
Router_config#sntp query-interval 5
```

### 1.1.3 sntp server

To set the address of the SNTP server, run **sntp server address [key key-number | version version-number]**.

**sntp server address** [key key-number | version version-number]

**no sntp server address**

#### Parameter

Parameter	Description
<i>address</i>	Means the address of the SNTP server.
<i>version-number</i>	Means the version ID of SNTP (1-4).
<i>key-number</i>	Means the key ID of the SNTP server.

#### Default

None

#### Command mode

Routing configuration mode

#### Remark

You can set multiple addresses for the SNTP server. There is no SNTP server by default.

#### Example

```
Router_config#sntp server 1.1.1.1 4
```

#### Related Command

**sntp peer**

### 1.1.4 sntp peer

To set the SNTP peer, run **sntp peer address version**. To delete the SNTP peer, run **no sntp peer address**.

**sntp peer address version**

**no sntp peer address**

**Parameter**

Parameter	Description
<i>address</i>	Means the address of the SNTP peer.
<i>version</i>	Means the version ID of SNTP (1-4).

**Default**

None

**Command mode**

Routing configuration mode

**Remark**

This command is used to set the address of the SNTP peer.

**Example**

Router\_config#sntp peer 1.1.1.1 4

**Related Command****Sntp server****1.1.5 sntp source**

To set the designated local source address when SNTP is triggered, run **Sntp source [interface *inter* | *addr*]**.

**Sntp source [interface *inter* | *addr*]****No sntp source****Parameter**

Parameter	Description
<i>inter</i>	Means an interface.
<i>Address</i>	Means a designated source address.

**Default**

None

**Command mode**

Routing configuration mode

**Remark**

This command is used to designate the source address of sending the SNTP packets.

**Example**

Router\_config#sntp source 1.1.1.1

**1.1.6 sntp authenticate**To enable the SNTP authentication, run **sntp authenticate**.**sntp authenticate****no sntp authenticate****Parameter**

None

**Default**

The authentication is disabled.

**Command mode**

Routing configuration mode

**Remark**

This command is used to enable SNTP authentication.

**Example**

Router\_config#sntp authenticate

**1.1.7 sntp authentication-key**To set the local authentication key of SNTP, run **sntp authentication-key *number md5 type password***.**sntp authentication-key *number md5 type password***

**no sntp authentication-key *number***

## Parameter

Parameter	Description
<i>number</i>	Key number
<i>type</i>	Means the mode to display the password.
<i>password</i>	Means the corresponding MD5 password.

## Default

None

## Command mode

Routing configuration mode

## Remark

This command is used to set the local authentication key.

## Example

Router\_config#sntp authentication-key 2 md5 0 123456

## 1.1.8 sntp trusted-key

To set the trusted local key, run **sntp trusted-key *number***.**sntp trusted-key *number*****no sntp trusted-key *number***

## Parameter

Parameter	Description
<i>number</i>	Key number

## Default

None



**Command mode**

Routing configuration mode

**Remark**

This command is used to set the trusted local key.

**Example**

```
Router_config#sntp trusted-key 1
```

**1.1.9 show sntp**

To display the SNTP related information, run the following command:

**Show sntp****Parameter**

None

**Default**

None

**Command mode**

EXEC mode

**Remark**

This command is used to display the current status of SNTP.

**Example**

```
Router_config#show sntp
Master Mode: Yes      Master Clock Stratum: 5
  Debug Mode: Off     Client Status: idle
Interval to Query SNTP Server: 1 (minutes)
Configured SNTP Server List:
Current SNTP Server : 00010003
Configured SNTP Peer List:
  IP: 1.1.1.1      Version: 4
Current SNTP Peer : 1.1.1.1 00010003
```

The local time (UTC): Date: 2002-3-25 Time: 17:36:59

### 1.1.10 debug sntp

To enable SNTP debugging, run **debug sntp**. To disable SNTP debugging, run **no debug sntp**.

**Debug sntp**

**no debug sntp**

#### Parameter

None

#### Default

None

#### Command mode

EXEC mode

#### Remark

You can browse the SNTP operation according to the displayed information.

#### Example

None

### 1.1.11 time-zone

To open the time zone, run **time-zone name offset-hour offset-minute**. To close the time zone, run **no time-zone**.

**time-zone name offset-hour offset-minute**

**no time-zone**

#### Parameter

Parameter	Description
<i>name</i>	Means the name of a time zone.
<i>offset-hour</i>	Means the offset hour between the local time and the UTC time (-12-12).

<i>offset-minute</i>	Means the offset minute between the local time and the UTC time (0-59).
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**Default**

None

**Command mode**

Routing configuration mode

**Remark**

This command can be used to transfer UTC to the local time.

**Example**

Router\_config#time-zone Moscow +3

**1.1.12 time-range**

To open the time range, run **time-range *name***. To close the time zone, run **no time-range *name***.

**time-range *name*****no time-range *name*****Parameter**

Parameter	Description
<i>name</i>	Means the name of a time range.

**Default**

None

**Command mode**

Routing configuration mode

**Remark**

This command is used to set a time range.

## Example

```
Router_config#time-range aaa
```

### 1.1.13 absolute

To set the absolute time of a time range, run **absolute start *hh:mm day month year* end *hh:mm day month year***. To resume the default settings, run **no absolute**.

**absolute start *hh:mm day month year* end *hh:mm day month year***

**no absolute**

## Parameter

Parameter	Description
<i>hh:mm</i>	Stand for the hour and the minute respectively.
<i>day</i>	Stands for a day.
<i>month</i>	Stands for a month.
<i>year</i>	Stands for a year.

## Default

None

## Command mode

Time range configuration mode

## Remark

This command is used to set an absolute time range.

## Example

```
Router_config_time_range#absolute start 11:11 2 2 2000 end 22:22 3 3 2002
```

### 1.1.14 periodic

To set the periodic time of a time range, run the first one of the following two commands.

**Periodic [*Monday / Tuesday / Wednesda / Thursday / Friday / Saturday / Sunday / daily / weekdays / weekend*] *hh:mm to [Monday / Tuesday /***

***Wednesda / Thursday / Friday / Saturday / Sunday / daily / weekdays / weekend] hh:mm***

**no Periodic**

#### Parameter

Parameter	Description
<i>hh:mm</i>	Stand for the hour and the minute respectively.

#### Default

None

#### Command mode

Time range configuration mode

#### Remark

This command is used to set an absolute time range.

#### Example

Router\_config\_time\_range#periodic monday 11:11 to tuesday 11:11