

SNTP Configuration Commands (GTL-2091)



Digital Data Communications GmbH, Germany.

<http://www.level1.com>

Table of Contents

Chapter 1 SNTP Configuration Commands.....	1
1.1 SNTP Configuration Commands	1
1.1.1 sntp master.....	1
1.1.2 sntp query-interval	2
1.1.3 sntp server.....	3
1.1.4 sntp peer	3
1.1.5 sntp source	4
1.1.6 sntp authenticate.....	5
1.1.7 sntp authentication-key	5
1.1.8 sntp trusted-key	6
1.1.9 show sntp	7
1.1.10 debug sntp.....	8
1.1.11 time-zone	8
1.1.12 time-range	9
1.1.13 absolute.....	10
1.1.14 periodic.....	10

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

```
Console_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

```
Console_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

Console_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

Console_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

Console_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

Console_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

Console_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

Console_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

```
Console_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).
----------------------	---

Default

None

Command mode

Routing configuration mode

Remark

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

Example

```
Console_config#time-zone BeiJing 8
```

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

Console_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

Console_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 / Wednesday / 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

Console_config_time_range#periodic monday 11:11 to tuesday 11:11