

SCCP Network Configuration Mode Commands

Signaling Connection Control Part (SCCP) is a routing protocol in the SS7 protocol suite in layer 4, which provides end-to-end routing for TCAP messages to their proper database.

Command Modes

The SCCP Network Configuration Mode is used to configure properties for Signaling Connection Control Part (SCCP) services for SS7.

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

`[local]`*`host_name`*`(config-sccp-network-`*`sccp_id`*`)#`

Important The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).

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associate

Associates an SS7 routing domain with the SCCP network.

Important In Release 20 and later, HNBGW is not supported. This command must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

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Command Modes

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-sccp-network-sccp_id)#
```

Syntax Description

associate ss7-routing-domain *rd_id*
no associate

no

Removes the association with the SS7 routing domain from the system configuration.

rd_id

This number identifies an already defined SS7 routing domain.

rd_id: enter an integer from 1 through 12.

Usage Guidelines

Use this command to associate SS7 routing domain configurations with SCCP network configurations.

Example

The following command associates the SCCP network with SS7 routing domain 2:

associate ss7-routing-domain *2*

description

This command defines a string that describes the SCCP network. The description is used for operator reference.



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Command Modes

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-sccp-network-sccp_id)#
```

Syntax Description

description *string*
no description

string

This is a string to describe the SCCP network.

string must be an alphanumeric string from 1 through 127 characters in length. If there are spaces in the string the string must be enclosed in double-quotes. For example; "This is a Description".

no

Removes the description from the system configuration.

Usage Guidelines

Use this command to configure a description of this SCCP service for operator reference.

Example

The following command sets the description to "This is the SCCP Service Number 1":

```
description "This is the SCCP Service Number 1."
```

destination

This command configures the SCCP network destination information. Use this command multiple times to set all of the destination information required.



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Command Modes

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-sccp-network-sccp_id)#
```

Syntax Description

destination dpc *pt_code* **{ name** *route_name* **| next-hop** *pt_code* **[priority** *priority* **] | ssn** *subsys_num* **| version** *sccp_ver* **}**

no destination dpc *p_code* **[name** *route_name* **| ssn** *ssn_num* **| version** *sccp_ver* **]**

no

Deletes the specified destination information from the SCCP network configuration.

dpc ***pt_code***

Specifies the SCCP destination point code.

pt_code: Must be in SS7 point code dotted-decimal ###.###.### format or decimal ######## format.

name ***route_name***

The name of the SCCP destination route.

route_name: enter an alphanumeric string from 1 through 64 characters in length.

next-hop ***pt_code*** **[priority** ***priority***

Associates the next destination defined in the SS7 routing domain and assigns the next-hop a priority for use.

pt_code: Must be in SS7 point code dotted-decimal ###.###.### format or decimal ######## format.

priority: Must be an integer from 0 to 15, with 0 setting the highest priority.

ssn ***subsys_num***

The destination subsystem number.

subsys_num: enter an integer from 1 through 255.

version ***sccp_ver***

sccp_ver: enter one of the following to select the SCCP variant:

- ANSI88
- ANSI92
- ANSI96
- BELL05
- CHINA
- GSM0806
- ITU88
- ITU92
- ITU96

Usage Guidelines

Use this command to configure the destination information for the SCCP network.

Example

The following commands set the name of the destination route to default_route, the subsystem number to 1, and the variant version to ITU96, all with a destination point code of 1:

```
destination dpc 1 name default_route
destination dpc 1 ssn 1
destination dpc version ITU96
```

do show

Executes all **show** commands while in Configuration mode.

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Syntax Description

```
do show
```

Usage Guidelines Use this command to run all Exec mode **show** commands while in Configuration mode. It is not necessary to exit the Config mode to run a **show** command.

The pipe character **|** is only available if the command is valid in the Exec mode.



Caution There are some Exec mode **show** commands which are too resource intensive to run from Config mode. These include: **do show support collection**, **do show support details**, **do show support record** and **do show support summary**. If there is a restriction on a specific **show** command, the following error message is displayed:

```
Failure: Cannot execute 'do show support' command from Config mode.
```

end

Exits the current configuration mode and returns to the Exec mode.

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Syntax Description

```
end
```

Usage Guidelines Return to the Exec mode.

exit

Exits the current configuration mode and returns to the global configuration mode.

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Syntax Description

exit

Usage Guidelines

Return to the global configuration mode.

global-title-translation

This command associates a GTT address-map with this SCCP network.



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Command Modes

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

`[local]`*`host_name`*`(config-sccp-network-`*`sccp_id`*`)#`

Syntax Description

global-title-translation address-map instance *instance*
no global-title-translation address-map instance *instance*

no

Deletes the GTT address-map instance associated with this SCCP network.

instance

This value uniquely identifies a specific previously defined instance of a GTT address-map.

instance: enter an integer from 1 to 4096.

Usage Guidelines

Use this command to link a GTT address-map, configured with the GTT Address Map configuration mode, to a specific SCCP network configuration.

Example

```
global-title-translation address-map instance gtt-map1
```

hop-count

This command specifies the hop count for this SCCP network.

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Command Modes

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-sccp-network-sccp_id)#
```

Syntax Description

```
hop-count hop_cnt
default hop-count
```

default

Resets the hop-count value to the system default of 5.

hop_cnt

The hop count to assign to this SCCP network.

hop_cnt: enter an integer from 1 to 15.

Usage Guidelines

Use this command to define the hop count for this SCCP network.

Example

The following command sets the hop count to 3:

```
hop-count 3
```

self-point-code

This command specifies the SS7 point code for this SCCP service.

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Command Modes

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-sccp-network-sccp_id)#`

Syntax Description

`self-point-code` *`point_code`*
`no self-point-code`

no

Deletes the configured self point code.

point_code

Defines the point code to assign to this SCCP network service.

point_code: value entered must adhere to the point code variant selected when the SCCP network instance was defined:

- ITU Range 0.0.1 to 7.255.7
- ANSI Range 0.0.1 to 255.255.255
- TTC Range 0.0.1 to 15.31.255
- a string of 1 to 11 combined digits ad period.

Usage Guidelines

Use this command to assign the self point code to use for this SCCP service.

Example

The following command sets an ITU-based point code for this SCCP service:

`self-pointcode` *`4.121.5`*

The following command removes the configured self-point code:

```
no self-pointcode
```

timeout

This command configures the timeout parameters for this SCCP network.

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Command Modes

Exec > Global Configuration > SCCP Network Configuration

configure > sccp-network *id_number*

Entering the above command sequence results in the following prompt:

`[local]`*`host_name`*`(config-sccp-network-`*`sccp_id`*`)#`

Syntax Description

```
timeout { attack-timer | congestion-timer | conn-est-timer | crd-timer |
 decay-timer | iar-timer | ias-timer | interval-timer | reassembly-timer
 | release-timer | repeat-release-timer | reset-timer | sst-timer } +
default timeout
no timeout timer
```

attack-timer *time*

Defines the time before the attack timer expires.

time: enter an integer between 1 and 10.

congestion-timer *time*

Defines the time before the congestion timer expires.

time: enter an integer between 1 and 10.

conn-est-timer *time*

Defines the time before the connection timer expires.

time: enter an integer between 6 and 12.

crd-timer *time*

Defines the time before the coordinated-state-change timer expires.

time: enter an integer between 60 and 120.

decay-timer *time*

Defines the time before the decay timer expires.

time: enter an integer between 1 and 10.

iar-timer *time*

Defines the time before the inactivity-receive timer expires.

time: enter an integer between 60 and 120.

ias-timer *time*

Defines the time before the inactivity-send timer expires.

time: enter an integer between 30 and 60.

interval-timer *time*

Defines the time before the interval timer expires.

time: enter an integer between 6 and 12

reassembly-timer *time*

Defines the time before the reassembly-timer expires.

time: enter an integer between 10 and 20.

release-timer *time*

Defines the time before the release-assembly timer expires.

time: enter an integer between 1 and 2.

repeat-release-timer *time*

Defines the time before repeat-release timer expires.

time: enter an integer between 1 and 2

reset-timer *time*

Defines the amount of time before the reset timer expires.

time: enter an integer between 1 and 2

sst-timer *time*

Defines the amount of time before the subsystem status test timer expires.

time: enter an integer between 5 and 1200.

default

Resets the timeout parameter to the system default.

no

Deletes the specified timer configuration.

Usage Guidelines

Use this command to assign timeout timers and timeout values for this SCCP service.

Example

```
timeout reset-timer 75
```