

Network Service Entity- IP Local Configuration Mode Commands

The Network Service Entity (NSE) - IP Local configuration mode is a sub-mode of the Global Configuration mode. This sub-mode configures the local endpoint for NS/IP with the commands and parameters to define the management functionality for the Gb interface between a BSS and an SGSN over a 2.5G GPRS IP network connection.

Command Modes

Exec > Global Configuration > Network Service Entity - IP Configuration

configure > network-service-entity ip-local

Entering the above command sequence results in the following prompt:

 $[local] \, host_name \, (\texttt{nse-ip-local}) \, \# \,$



Important

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

- all-nsvc-failure-action, on page 2
- associate, on page 3
- bssgp-timer, on page 4
- do show, on page 5
- end, on page 6
- exit, on page 7
- max-ns-retransmissions, on page 8
- ns-timer, on page 9
- nsvc-failure-action, on page 10
- nsvl, on page 11
- peer-network-service-entity, on page 12
- retry-count, on page 13
- timer, on page 14

all-nsvc-failure-action

Configure how the SGSN handles the NSE when all NSVCs go down.

Product

All

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Network Service Entity - IP Configuration

configure > network-service-entity ip-local

Entering the above command sequence results in the following prompt:

[local]host name(nse-ip-local)#

Syntax Description

all-nsvc-failure-action clear-nse default all-nsvc-failure-action

default

By default, the NSE is not cleared if all NSVCs go down.

clear-nse

Instructs the SGSN to SGSN to clear NSEs if all NSVCs to the BSC are down. This CLI clears the info only in cases where all the NSVC of NSE go down due to ALIVE time out.

Usage Guidelines

Enable the SGSN to clear NSE information when all NSVCs go down.

Example

Use the following command to configure the SGSN to clear NSEs when all NSVCs go down.

all-nsvc-failure-action clear-nse

associate

This command supports the association of DSCP template at network-service-entity ip local level.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Network Service Entity - IP Configuration

configure > network-service-entity ip-local

Entering the above command sequence results in the following prompt:

[local]host name(nse-ip-local)#

Syntax Description

associate dscp-template downlink [<template-name>]
no associate dscp-template downlink

no

Removes the associate services needed for all IP nses.

dscp-template

Configures DCSP for all IP nses.

downlink [<template-name>]

Specifies the DSCP template used for the downlink packets.

template-name: String of size 1 up to 64.

Usage Guidelines

Configuring this command allows the SGSN to send the configured DSCP value to:

- All the GPRS nodal messages.
- All the subscriber specific messages, when dscp template association at gprs-service level and nsei level are absent.

The DSCP template can be defined in sgsn global.

By default, SGSN will apply best effort DSCP value (that is, "0").

Note:

- Atleast one nsvl should be configured, before configuring the DSCP marking at "network-service-entity ip-local" level.
- After the removal of last nsvl, DSCP template association is removed from "network-service-entity ip-local".

Example

The following example associates a DSCP template at network-service-entity ip local level.

associate dscp-template downlink DSCP

bssgp-timer

This command has been deprecated.

do show

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

Product

All

Privilege

Security Administrator, Administrator

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.

Product SGSN

Privilege Security Administrator, Administrator

Syntax Description end

Usage Guidelines Return to the Exec mode.

exit

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

Product SGSN

Privilege Security Administrator, Administrator

Syntax Description exit

Usage Guidelines Returns to the global configuration mode.

max-ns-retransmissions

This command configures the maximum number of transmission retries counter.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Network Service Entity - IP Configuration

configure > network-service-entity ip-local

Entering the above command sequence results in the following prompt:

[local]host name(nse-ip-local)#

Syntax Description

```
[ default ] max-ns-retransmissions { alive count | sns-proc count }
```

default

Resets the specified counter configuration to the default value.

alive count

Sets the maximum number of alive retries.

count: Must be an integer between 0 and 10. Default is 3.

sns-proc count

Sets the maximum number of retries for the SNS procedure

count: Must be an integer between 0 and 5. Default is 3.

Usage Guidelines

Sets the maximum for NS transmission retries.

Example

max-ns-retransmission alive 4

ns-timer

This command sets the network service (NS) counters for the SNS procedure and testing.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Network Service Entity - IP Configuration

configure > network-service-entity ip-local

Entering the above command sequence results in the following prompt:

[local]host name(nse-ip-local)#

Syntax Description

```
ns-timer { sns-guard timeout_val | sns-prov timeout_val | test timeout_val }
default ns-timer { sns-guard | sns-prov | test }
```

default

Resets the selected timer configuration to its default value.

sns-guard timeout_val

Sets the SNS-guard timer which is used in the auto-learn procedure to clean-up learnt BSC/NSE informtation. Timeout value is in seconds.

timeout val: Enter an integer from 1 to 300. Default is 60.

sns-prov timeout_val

Sets the SNS procedure timeout value in seconds.

timeout val: Enter an integer from 1 to 10. Default is 5.

test timeout_val

Sets the test procedure timeout value in seconds.

timeout_val: Enter an integer from 1 to 60. Default is 30 seconds.

Usage Guidelines

Set NS timers to help manage the NSE-IP connection.

Example

The following example sets the test timer to 4 seconds:

ns-timer test 4

nsvc-failure-action

This command enables and disables the sending of an NS-STATUS message with cause 'ip-test fail' when NSVC goes down.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Network Service Entity - IP Configuration

configure > network-service-entity ip-local

Entering the above command sequence results in the following prompt:

[local]host name(nse-ip-local)#

Syntax Description

nsvc-failure-action send-ns-status

default nsvc-failure-action

default

Resets the command configuration to its default value. The default action is not to send an NS-STATUS message. This is applicable only to NSVCs that are auto-learned and not configured.

send-ns-status

Enables the sending of the NS-STATUS message.

Usage Guidelines

Use this command to enable or disable sending an NS-STATUS messages when an NSVC goes down.

Example

Enable sending of the message:

nsvc-failure-action send-ns-status

nsvl

This command creates and instance of a network service virtual link (NSVL) and enters the NSVL configuration mode.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Network Service Entity - IP Configuration

configure > network-service-entity ip-local

Entering the above command sequence results in the following prompt:

[local]host name(nse-ip-local)#

Syntax Description

[no] nsvl instance nsvl_id

no

Removes the identified NSVL definition from the configuration.

instance nsvl_id

Identifies a specific NSVL configuration instance.

nsvl id: Must be an integer from 0 to 3.

Usage Guidelines

Access the NSVL configuration mode.

Example

Enter the NSVL configuration sub-mode to modify the configuration for NSVL instance 2:

nsvl instance 2

peer-network-service-entity

This command has been replaced by the Network Service Entity - Peer NSEI Frame Relay configuration mode.

retry-count

This command has been replaced by the **max-ns-retransmissions** command.

timer

This command has been replaced by the **ns-timer** command.