

# 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(nse-ip-local)#



#### **Important**

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



#### **Important**

For information on common commands available in this configuration mode, refer to the Common Commands chapter.

- all-nsvc-failure-action, on page 2
- associate, on page 2
- bssgp-timer, on page 3
- max-ns-retransmissions, on page 3
- ns-timer, on page 4
- nsvc-failure-action, on page 5
- nsvl, on page 6
- peer-network-service-entity, on page 7
- retry-count, on page 7
- timer, on page 7

# 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.

# 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:

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

### **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.

timer