

SBc Service Configuration Mode Commands

The SBc (SBc-AP) interface is used by the MME to communicate with Cell Broadcast Centers (CBC) and deliver Public Warning Messages to eNodeBs. The SBc Service provides support on the MME for the Commercial Mobile Alert System (CMAS).

Command Modes

Exec > Global Configuration > Context Configuration > SBc Service Configuration

configure > context *context_name* **> sbc-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-sbc-service)#
```

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

Important Beginning with Release 18.4, a valid license key is required to access the commands in this configuration mode. For information about obtraining such a license, contact your Cisco Representative.

- associate, on page 1
- bind, on page 2
- cbc-associations, on page 3
- do show, on page 4
- end, on page 4
- exit, on page 5
- ip, on page 5
- sbc-mme, on page 6
- send, on page 7

associate

This new command specifies the SCTP parameter template to employ for this SBc-AP interface.

Product

MME

Privilege

Administrator

Command Modes

Exec > Global Configuration > Context Configuration > SBc Service Configuration

configure > context *context_name* **> sbc-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-sbc-service)#
```

Syntax Description

associate sctp-param-template *sctp_param_template_name*
no associate sctp-param-template

no

Disassociates the specified SCTP Parameter Template from this SBc service.

sctp-param-template *sctp_param_template_name*

Associates the previously created SCTP Parameter Template with this SBc service.

sctp_param_template_name must be an alphanumeric string of 1 through 63 characters.

Usage Guidelines

Associates a previously created SCTP Parameter Template with this SBc service.

Configuration of the SCTP Parameter template is a pre-requisite for this command.

Changes to the configuration will restart the SBc service.

Associating the SBc service to the SCTP parameter template is not required for the SBc service to be operational.

Refer to the **sctp-param-template** command in the *Global Configuration Mode Commands (L-S) chapter* for more information about configuring a SCTP Parameter Template.

bind

Binds the SBc service to a local SCTP IP address. This interface is used by the SBc service to communicate with the Cell Broadcast Center (CBC).

Product

MME

Privilege

Administrator

Command Modes

Exec > Global Configuration > Context Configuration > SBc Service Configuration

configure > context *context_name* **> sbc-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-sbc-service)#
```

Syntax Description

bind { ipv4-address *ipv4_address_value1* **[ipv4-address** *ipv4_address_value2* **] | ipv6-address** *ipv6_address_value1* **[ipv6-address** *ipv6_address_value2* **]**
no bind

no

Removes the interface binding from this SBc service.

ipv4-address *ipv4_address_value1* [ipv4-address *ipv4_address_value2*]

Specifies the IPv4 address of an interface in the current context through which communication with the CBC occurs.

A second IPv4 address can be specified for multi-homing purposes with the optional **ipv4-address** keyword.

ipv6-address *ipv6_address_value1* [ipv6-address *ipv6_address_value2*]

Specifies the IPv6 address of an interface in the current context through which communication with the CBC occurs.

A second IPv6 address can be specified for multi-homing purposes with the optional **ipv6-address** keyword.

Usage Guidelines

Use this command to bind the SBc service to an IP address.

The command is service critical; removing the configuration will stop the SBc service.

Up to two IPv4 or two IPv6 addresses can be specified for multi-homing purposes.

Refer to the **sbc-mme** command in this chapter to specify the SCTP port number to be used.

Example

The following command configures 2 IPv4 addresses for the SCTP connection (for multi homing):

```
bind ipv4-address 209.165.200.234 ipv4-address 209.165.200.244
```

cbc-associations

Configures the maximum number of Cell Broadcast Center (CBC) connections allowed for this SBc service.

Product

MME

Privilege

Administrator

Command Modes

Exec > Global Configuration > Context Configuration > SBc Service Configuration

configure > context *context_name* **> sbc-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-sbc-service)#
```

Syntax Description

{ default | no } cbc-associations maximum *number*

default

Returns the maximum number of CBC associations allowed to the default of 1.

no

Removes the configured maximum number of CBC associations allowed, and returns the setting to the default value of 1.

maximum *number*

Configures the maximum number of CBC associations allowed for this SBc service.

number must be an integer from 1 to 2.

Default: 1.

Usage Guidelines Use this command to configure the maximum number of CBC associations allowed for this SBc service.



Caution Changes to this configuration will restart the SBc service.

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 All

Privilege Security Administrator, Administrator

Syntax Description **`end`**

Usage Guidelines Use this command to return to the Exec mode.

exit

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

Product All

Privilege Security Administrator, Administrator

Syntax Description **`exit`**

Usage Guidelines Use this command to return to the parent configuration mode.

ip

This command configures the IP parameters on the SGs interface.

Product MME

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > MME SGs Service Configuration

configure > context *context_name* **> sgs-service** *service_name*

Entering the above command sequence results in the following prompt:

`[context_name]host_name(config-sgs-service)#`

Syntax Description **`[ no ] ip qos-dscp`** *`dscp_value`*

no

Removes IP parameter configuration from the SGs service/interface.

qos-dscp *dscp_value*

The **qos-dscp** keyword designates the Quality of Service - Differentiated Services Code Point value to the packet leaving through the SGs interface.

dscp_value is a value assigned to the packet for DSCP marking. The value can be a pre-defined DSCP value or an arbitrary value ranging from 0x01 to 0x3F.

Usage Guidelines SGs interface allows Differentiated Services Code Point (DSCP) marking functionality. DSCP marking helps in packet traffic management. DSCP marking can be performed on both IPv4 and IPv6 packets leaving the SGs interface.

Either the pre-defined DSCP values can be used for marking, or any arbitrary value ranging from 0x01 to 0x3F can be assigned. The default DSCP value is 0x00 or be (Best Effort). The default DSCP value is automatically set when the configuration is disabled.

Example

The following command shows the IP configuration for DSCP marking on the SGs service.

```
ip qos-dscp ef
```

sbc-mme

Configures the SCTP port to be used for the SBc interface.

Product

MME

Privilege

Administrator

Command Modes

Exec > Global Configuration > Context Configuration > SBc Service Configuration

configure > **context** *context_name* > **sbc-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-sbc-service)#
```

Syntax Description

sbc-mme sctp port *port_num*
[default | no] sbc-mme sctp port

default

Returns the command to the default SCTP port of 29168.

no

Removes the configured SCTP port value, and returns the command to the default SCTP port of 29168.

sctp port *port_num*

Configures the SCTP port to be used for the SBc interface.

port_num must be an integer from 1 through 65535.

Default: 29168.

Usage Guidelines

Use this command to configure the SCTP port number for this SBc service.

Example

The following command configures this SBc service to use SCTP port number 21112:

```
mme-sbc sctp-port 21112
```

send

This command enables or disables the warning indication messages towards CBC from MME.

.

Product

MME

Privilege

Administrator

Command Modes

Exec > Global Configuration > Context Configuration > SBc Service Configuration

configure > context *context_name* **> sbc-service** *service_name*

Entering the above command sequence results in the following prompt:

`[context_name]host_name(config-sbc-service)#`

Syntax Description

`[ no | default ]  send { stop-warning-ind | write-replace-warning-ind }`

no

Removes the configuration of sending the warning indication [stop warning / write replace warning] messages towards CBC from MME.

default

Sets the default configuration of sending the warning indication [stop warning / write replace warning] messages towards CBC from MME. By default sending of warning indication messages are disabled.

send stop-warning-ind

Enables the stop warning indication messages towards CBC from MME.

send write-replace-warning-ind

Enables the write-replace-warning indication messages towards CBC from MME.

Usage Guidelines

Use this command to enables or disables the warning indication messages towards CBC from MME.

Example

The following command to stop warning indication message towards CBC from MME:

`send stop-warning-ind`