



# BMSC Profile Configuration Mode Commands

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## Command Modes

The BMSC Profile Configuration Mode is used to configure Broadcast Multicast Service Center profiles for Multimedia Broadcast Multicast Service (MBMS) applications. The mode is accessed by entering the **bmsc-profile** command from the Context Configuration Mode.

Exec > Global Configuration > Context Configuration > BMSC Profile Configuration

**configure > context** *context\_name* > **bmsc-profile** *profile\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-bm-sc-profile)#
```



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## Important

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

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## end

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

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## Product

All

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## Privilege

Security Administrator, Administrator

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## Syntax Description

**end**

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## Usage Guidelines

Use this command to return to the Exec mode.

## exit

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

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**Product**

All

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**Privilege**

Security Administrator, Administrator

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**Syntax Description**

**exit**

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**Usage Guidelines**

Use this command to return to the parent configuration mode.

## gmb diameter dictionary

This command specifies the Diameter dictionary for the Gmb interface in the BMSC profile of an MBMS user service.

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**Product**

GGSN

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**Privilege**

Security Administrator, Administrator

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**Command Modes**

Exec > Global Configuration > Context Configuration > BMSC Profile Configuration

**configure > context** *context\_name* > **bmsc-profile** *profile\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-bmsc-profile)#
```

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**Syntax Description**

```
gmb diameter dictionary { custom1 | custom10 | custom2 | custom3 | custom4
| custom5 | custom6 | custom7 | custom8 | custom9 | standard }
default gmb diameter dictionary
```

**custom1 ... custom10**

Custom-defined Diameter dictionary. Specific to customer requirement.

**standard**

Default: Enabled

Specifies the standard Gmb Diameter dictionary conforming to 3GPP TS 29.061 (Rel. 7).

**default**

Sets the Diameter dictionary to standard.

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**Usage Guidelines**

Use this command to select the Gmb Diameter dictionary in BM-SC profile of MBMS user service.

**Example**

The following command sets the Gmb Diameter dictionary to TS 29.061 (Rel. 7) specific:

```
gmb diameter dictionary standard
```

## gmb diameter endpoint

This command specifies the Diameter endpoint name for the Gmb interface in the BMSC profile of an MBMS user service.

**Product**

GGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > BMSC Profile Configuration

```
configure > context context_name > bmsc-profile profile_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-bmsc-profile)#
```

**Syntax Description**

```
gmb diameter endpoint endpoint_name  
no gmb diameter endpoint
```

**no**

Removes the previously configured Diameter endpoint name for the Gmb interface in the BMSC profile of an MBMS user service.

***endpoint\_name***

Specifies the Diameter endpoint name for Gmb interface. This must be present in all Diameter messages and is the endpoint that originates the Diameter message.

*endpoint\_name* must be an alphanumeric string of 1 through 63 characters.

**Usage Guidelines**

Use this command to create a Gmb Diameter endpoint for a BMSC profile.

**Example**

The following command creates a Diameter endpoint named *test1* in the BMSC profile of an MBMS user service:

```
gmb diameter endpoint test1
```

## gmb diameter peer-select

This command specifies the peer ids of BM-C Diameter primary and secondary host in the BMSC profile for an MBMS user service.

**Product** GGSN

**Privilege** Security Administrator, Administrator

**Command Modes** Exec > Global Configuration > Context Configuration > BMSC Profile Configuration

**configure > context** *context\_name* > **bm-sc-profile** *profile\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-bm-sc-profile)#
```

**Syntax Description** **gmb diameter peer-select peer** *peer\_name* [ **realm** *realm\_name* ] [ **secondary-peer** *sec\_peer\_name* [ **realm** *sec\_realm\_name* ] ]  
**gmb diameter peer-select**

**no**

Removes the previously configured BM-C Diameter peer ids configured in the BMSC profile of an MBMS user service.

**peer** *peer\_name*

Specifies the primary diameter host id for BMSC in this BMSC profile for MBMS user service. This is a unique name that is specified for the primary peer.

*peer\_name* must be an alphanumeric string of 1 through 127 characters including punctuation marks.

**realm** *realm\_name*

Specifies the realm or domain for the Gmb Diameter peer. The realm may typically be a company or service name.

*realm\_name* must be an alphanumeric string of 1 to 127 characters including punctuation marks.

**secondary-peer** *sec\_peer\_name*

Specifies a back-up host that is used for fail-over processing. When the route-table does not find an AVAILABLE route, the secondary host performs fail-over processing.

*sec\_peer\_name* must be an alphanumeric string of 1 through 127 characters including punctuation marks.

**realm** *sec\_realm\_name*

Specifies the realm or domain for the Gmb Diameter secondary host. The realm may typically be a company or service name.

*sec\_realm\_name* must be an alphanumeric string of 1 through 127 characters including punctuation marks.

**Usage Guidelines**

Use this command to select a BMSC Diameter peer and realm in this BMSC profile for MBMS user service.

**Example**

The following command selects a Gmb Diameter peer named *test1* and a realm of *companyx*:

```
gmb diameter peer-select peer test1 realm companyx
```

## gmb user-data

This command configures the parameters in this BMSC profile for user data for MBMS user service.

**Product**

GGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > BMSC Profile Configuration

```
configure > context context_name > bmsc-profile profile_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-bmsc-profile)#
```

**Syntax Description**

```
gmb user-data { mode-preference { multicast | unicast } |
unicast-self-address self_ip_address }
default gmb user-data mode-preference
no gmb user-data unicast-self-address
```

**no**

Removes the configured self address of GGSN for unicast in the BMSC profile for user data of MBMS user service.

**default**

Sets the user data mode to unicast in the BMSC profile for user data of MBMS user service.

**mode-preference { multicast | unicast }**

Default: unicast

Specifies the preferred mode of GGSN for receiving MBMS user service data.

**multicast**: specifies the preferred mode as multicast for MBMS user service.



**Important**

Note that this **multicast** keyword is not supported in this release.

**unicast**: specifies the preferred mode as unicast for MBMS user service.

**unicast-self-address *self\_ip\_address***

Specifies the GGSN's IP address for BMSC to use as the outer destination address for the IP-in-IP tunnel to send multicast data, if the configured preferred data mode is unicast.

*self\_ip\_address* must be the IPv4 address in dotted-decimal notation.

This command must be configured if GGSN's user-data mode-preference is Unicast.

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**Usage Guidelines**

Use this command to configure user data mode and other parameters in the BMSC profile for user data of MBMS user service.

GGSN can receive multicast data from BMSC in one of two modes - Multicast or Unicast. In Unicast mode, BM-SC tunnels the multicast data to the GGSN in an IP-in-IP tunnel instead of direct multicast. This command with the **mode-preference** keyword configures the GGSN's preferred mode for receiving multicast data.



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**Important**

Both GGSN and BMSC must support the Unicast mode of multicast data transfer. If any GGSN or BMSC does not support Multicast mode, BMSC will transfer multicast data using Unicast mode only.

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Use the **unicast-self-address** keyword to configure the GGSN's IP address which the BMSC should use as the outer destination address for the IP-in-IP tunnel to send multicast data, if the selected user data mode to receive multicast data is Unicast.

**Example**

The following command sets the MBMS data transfer mode to unicast:

```
default gmb user-data mode-preference
```