



Broadcast Multicast Service

This chapter provides information on Broadcast Multicast Service (BCMCS) functionality. The product Administration Guides provide examples and procedures for configuration of basic services on the system. It is recommended that you select the configuration example that best meets your service model, and configure the required elements for that model, as described in this Administration Guide, before using the procedures in this chapter.



Important

The features described in this chapter are only available if you have purchased and installed a feature license for Broadcast & Multicast Services.

This chapter contains the following topics:

- [Overview, on page 1](#)
- [Configuring BCMCS, on page 2](#)

Overview

BCMCS eliminates unnecessary replication of data on CDMA2000 wireless networks by transmitting a single stream of data to multiple users. By delivering a single, unidirectional data stream to many subscribers, BCMCS makes more efficient use of wireless network resources than traditional point to point connections.

BCMCS functionality on the system is provided by an existing PDSN service and is enabled by a valid Broadcast & Multicast Services license. In the absence of a valid license, the system functions as a standard unicast PDSN. When a PDSN is functioning in a BCMCS environment, it is designated as a Broadcast Serving Node (BSN). The main features supported by the Broadcast & Multicast Services license are:

- Multicast proxy-host functionality.
- Support for BCMCS-specific A11 messages.
- Authentication of BCMCS flow-IDs using a BCMCS controller.
- Establishment and teardown of BCMCS bearer paths using the multicast framework.
- Support for framing HDLC-like and segment based framing.
- Accounting for the BCMCS flows to charge the originator of the content.

Licensing

The BCMCS is a licensed Cisco feature. A separate feature license may be required. Contact your Cisco account representative for detailed information on specific licensing requirements. For information on installing and verifying licenses, refer to the *Managing License Keys* section of the *Software Management Operations* chapter in the *System Administration Guide*.

Configuring BCMCS

To configure the system for BCMCS:

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- Step 1** Configure the system for PDSN functionality as described in the this Administration Guide.
 - Step 2** Set the BCMCS group user name and password for RADIUS access as described in the [BCMCS Group Configuration, on page 2](#).
 - Step 3** Create a multicast group profile on your RADIUS server to achieve BCMCS functionality as described in the [RADIUS Server Configuration, on page 2](#).
 - Step 4** Save your configuration to flash memory, an external memory device, and/or a network location using the Exec mode command **save configuration**. For additional information on how to verify and save configuration files, refer to the *System Administration Guide* and the *Command Line Interface Reference*.
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What to do next



Important

Commands used in the configuration examples in this section provide base functionality to the extent that the most common or likely commands and/or keyword options are presented. In many cases, other optional commands and/or keyword options are available. Refer to the *Command Line Interface Reference* for complete information regarding all commands.

BCMCS Group Configuration

Use the following example to set the BCMCS group user name and password for RADIUS access:

```
configure
context context_name
pdsn-service pdsn_service_name
bcmcs grpusrname group_name
bcmcs grppasswd group_password
end
```

RADIUS Server Configuration

You must create a multicast group profile on your RADIUS server to achieve BCMCS functionality. The group name and password must be the same as configured in [BCMCS Group Configuration, on page 2](#).

For information about the supported BCMCS attributes, refer to the *AAA and GTP Interface Administration and Reference*.

