



Optional Local and Remote Descriptors

Because a single **add** command sent through a media gateway controller (MGC) may not always specify both the local and remote address or port descriptors, you can now compensate for this by specifying one or more descriptors in a subsequent **modify** command. The media gateway (MG) then records the information received from the MGC, and programs the MPF (media packet forwarder) pinhole after enough information becomes available.

A descriptor can be any one of the following:

- Address
- Port allocation
- Bandwidth reservation

History of Support for Optional Local and Remote Descriptors

Release	Modification
Release 3.5.0	This command was first introduced on the Cisco CRS-1.
Release 3.6.0	No modification.

Contents

This module contains the following sections:

- [Prerequisites for Optional Local and Remote Descriptors, page SBC-435](#)
- [Restrictions for Optional Local and Remote Descriptors, page SBC-436](#)
- [Information About Optional Local and Remote Descriptors, page SBC-436](#)
- [Displaying Statistics on Optional Local and Remote Descriptors, page SBC-436](#)
- [Example of the Show Command for dbe signaling-flow-stats, page SBC-437](#)

Prerequisites for Optional Local and Remote Descriptors

The data border element (DBE) can accept **add** or **modify** commands for terminations with any of the following values:

- Zero or one local descriptor for each stream
- Zero or one remote descriptor for each stream

Restrictions for Optional Local and Remote Descriptors

- After addresses and ports have been selected by using the local descriptor, the DBE rejects attempts to change them.
- Terminations that do not contain both a local and remote descriptor must have a termination state of *OutOfService*. If you try to place a partially specified termination in service, the request is rejected with the following response:

Error Message ER=441 Missing Remote or Local Descriptor

- Wildcard requests to modify the service state of terminations to set them in service can now contain only a single command. In other words, the DBE rejects any transactions with the previously mentioned `error 421` when they have the following format:

```
C={W-MF=ip/1/*{M{TS{SI=IV}}}, W-MF=ip/2/*{M{TS{SI=IV}}}}
```

Information About Optional Local and Remote Descriptors

After receiving an **add** or **modify** command, specifying all local and remote address or port descriptors, as explained under [Prerequisites for Optional Local and Remote Descriptors](#), the DBE then programs the MPF pinhole for a data stream. Prior to that, the DBE stores stream information locally, but does not pass this data to the MPF.

DBE reserves resources for a pinhole when specification of the first local descriptor for either side of the pinhole occurs, including:

- Address and port allocation
- Bandwidth reservation

If this reservation fails, one of two things can occur:

- If the `ginfo` package is busy and the `ginfo/gate_state` provisional, MGC deletes the gate and the **add** or **modify** request returns the following: `510 - insufficient resources failure response`.
- The gate reverts to its previous state and the **add** or **modify** request returns the following message: `510 - insufficient resources failure response`.

Displaying Statistics on Optional Local and Remote Descriptors

The following `show` command displays the statistics on optional local and remote descriptors. The parameters of this command are described below:

```
show services sbc service-name dbe [media-flow-stats | signaling-flow-stats]
```

Table 17 *show services sbc dbe [media-flow-stats | signaling-flow-stats] command*

Parameters	Default Value	Description
<ul style="list-style-type: none"> Signaling pinhole: StateofSignalingFlow Media pinhole: StateofMediaFlow 	Partial or Allocated	Default if neither a local nor remote descriptor is specified.
LocalAddress	0.0.0.0.	Default if no local descriptor is specified.
LocalPort	0	Default if no local descriptor is specified.
VRF Name	-	None
RemoteAddress	0.0.0.0	Set to this value if remote descriptor not specified.
RemotePort	0	Set to this value if remote descriptor not specified.

Example of the Show Command for dbe signaling-flow-stats

show service sbc *mysbc* dbe signaling-flow-stats

```

Signaling Flow:
  State of Signalling Flow: Partial
  Call Age:                10224 ms
  Call Priority:           Routine
  ContextID 2
  StreamID 1
  Side A:
    Name cisco/sip/gn/0/1/0/1/ac/1
    Reserved Bandwidth:    45000 (bytes/second)
    Status:                Out of Service
    VRF Name:
    Local Address:        86.86.17.10
    Local Port:           20000
  Remote Address:         0.0.0.0
    Remote Port:          0
    Packets Received:     0
    Packets Sent:         0
    Packets Discarded:    0
    Data Received:        0 (bytes)
    Data Sent:            0 (bytes)
    Data Discarded:       0 (bytes)
    Gm Discarded Packets: 0
    Media Flowing:        No
    Affected by Routing Error: No
  Side B:
    Name cisco/sip/gn/0/1/0/1/bb/2
    Reserved Bandwidth:    Unlimited
    Status:                In Service
    VRF Name:
    Local Address:        86.86.17.10
    Local Port:           20001
    Remote Address:       200.200.200.136

```

```

Remote Port:                16000
  Packets Received:         0
  Packets Sent:             0
  Packets Discarded:       0
  Data Received:           0 (bytes)
  Data Sent:                0 (bytes)
  Data Discarded:          0 (bytes)
  Gm Discarded Packets:    0
  Media Flowing:           No
  Affected by Routing Error: No

```

Additional References

The following sections provide references related to this feature.

Related Documents

Related Topic	Document Title
Cisco IOS XR master command reference	Cisco IOS XR Master Commands List
Cisco IOS XR SBC interface configuration commands	<i>Cisco IOS XR Session Border Controller Command Reference</i>
Initial system bootup and configuration information for a router using the Cisco IOS XR Software	<i>Cisco IOS XR Getting Started Guide</i>
Cisco IOS XR command modes	<i>Cisco IOS XR Command Mode Reference</i>

Standards

Standards	Title
No new or modified standards are supported by this feature, and support from existing standards has not been modified by this feature.	-

MIBs

MIBs	MIBs Link
—	To locate and download MIBs using Cisco IOS XR software, use the Cisco MIB Locator found at the following URL and choose a platform under the Cisco Access Products menu: http://cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

Technical Assistance

Description	Link
The Cisco Technical Support website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/techsupport

