Distributed MFIB for IPv6 Multicast

Distributed MFIB (dMFIB) is used to switch multicast IPv6 packets on distributed platforms. The basic MFIB routines that implement the core of the forwarding logic are common to all forwarding environments.

Information About Distributed MFIB for IPv6 Multicast

Distributed MFIB

Distributed Multicast Forwarding Information Base (MFIB) is used to switch multicast IPv6 packets on distributed platforms. Distributed MFIB may also contain platform-specific information on replication across line cards. The basic MFIB routines that implement the core of the forwarding logic are common to all forwarding environments.

dMFIB implements the following functions:

- Distributes a copy of the MFIB to the line cards.

- Relays data-driven protocol events generated in the line cards to PIM.

- Provides an MFIB platform application program interface (API) to propagate MFIB changes to platform-specific code responsible for programming the hardware acceleration engine. This API also includes entry points to switch a packet in software (necessary if the packet is triggering a data-driven event) and to upload traffic statistics to the software.

- Provides hooks to allow clients residing on the RP to read traffic statistics on demand. Distributed MFIB does not periodically upload these statistics to the RP.

The combination of distributed MFIB and MRIB subsystems allows the device to have a "customized" copy of the MFIB database in each line card and to transport MFIB-related platform-specific information from the RP to the line cards.

How to Disable MFIB on a Distributed Platform

Before you begin

SUMMARY STEPS

1.

DETAILED STEPS

Procedure

Example:

Example:

What to do next

Disabling MFIB on a Distributed Platform

Multicast forwarding is automatically enabled when IPv6 multicast routing is enabled. However, you may want to disable multicast forwarding on a distributed platform.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ipv6 mfib-mode centralized-only**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable**	Enables privileged EXEC mode.
	Example:	• Enter your password if prompted.
	`Device> enable`	

	Command or Action	Purpose
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**ipv6 mfib-mode centralized-only** **Example:** `Device(config)# ipv6 mfib-mode centralized-only`	Disables distributed forwarding on a distributed platform.

Configuration Example for Distributed MFIB for IPv6 Multicast

This example shows how to disable multicast forwarding on a distributed platform:

```
Device(config)# ipv6 mfib-mode centralized-only
```

Additional References

Related Documents

Related Topic	Document Title
Cisco IOS commands	Cisco IOS Master Commands List, All Releases
IP multicast commands	Cisco IOS IP Multicast Command Reference
IPv6 commands	*Cisco IOS IPv6 Command Reference*
IPv6 features	Cisco IOS IPv6 Feature Mapping
IPv6 addressing and connectivity	*IPv6 Configuration Guide*

Standards and RFCs

Standard/RFC	Title
RFCs for IPv6	*IPv6 RFCs*

MIBs

MIB	MIBs Link
No new or modified MIBs are supported, and support for existing MIBs has not been modified.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	http://www.cisco.com/cisco/web/support/index.html

Feature Information for Distributed MFIB for IPv6 Multicast

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/. An account on Cisco.com is not required.

Table 1: Feature Information for Distributed MFIB for IPv6 Multicast

Feature Name	Releases	Feature Information
Distributed MFIB for IPv6 Multicast	12.0(26)S 12.2(25)S 12.2(28)SB 12.3(4)T 12.4 Cisco IOS XE Release 2.1	Distributed MFIB is used to switch multicast IPv6 packets on distributed platforms. The following command was introduced: **ipv6 mfib-mode centralized-only**.