



IPv6 Support on BVI Interfaces

Integrated routing and bridging (IRB) enables users to route a given protocol between routed interfaces and bridge groups or route a given protocol between bridge groups. IPv6 is supported in the bridge virtual interface (BVI), which is the IPv4 interface for bridged interfaces. This feature allows IPv6 commands to be supported on the BVI so that users can assign IPv6 addresses to a BVI and route IPv6 packets.

- [Finding Feature Information, page 1](#)
- [Restrictions for IPv6 Support on BVI Interfaces, page 1](#)
- [Information About IPv6 Support on BVI Interfaces, page 2](#)
- [Additional References, page 2](#)
- [Feature Information for IPv6 Support on BVI Interfaces, page 3](#)

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

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

Restrictions for IPv6 Support on BVI Interfaces

Bridge-Group Virtual Interfaces (BVI) in IPv6 are not supported with Network Address Translation—Protocol Translation (NAT-PT).

Information About IPv6 Support on BVI Interfaces

IPv6 on BVI Interfaces for Bridging and Routing

Integrated routing and bridging (IRB) enables users to route a given protocol between routed interfaces and bridge groups or route a given protocol between bridge groups. Specifically, local or unroutable traffic will be bridged among the bridged interfaces in the same bridge group, while routable traffic will be routed to other routed interfaces or bridge groups. If you want both bridging and routing capabilities, IRB is required. If you want only bridging, you must disable routing. To disable the routing function for IPv6, you must configure the **no ipv6 unicast-routing** command.

IPv6 is supported in the bridge virtual interface (BVI), which is the IPv4 interface for bridged interfaces. Because bridging is in the data link layer and routing is in the network layer, they have different protocol configuration models to follow. In the basic IPv4 model, for example, all bridged interfaces should belong to the same network, while each routed interface represents a distinct network. Routed traffic is destined for the device, while bridged traffic is never destined for the device. Using BVI avoids the confusion of which protocol configuration model to use when both bridging and routing a given protocol in the same bridge group.


Note

BVIs in IPv6 are not supported with Network Address Translation--Protocol Translation (NAT-PT).

Additional References

Related Documents

Related Topic	Document Title
IPv6 addressing and connectivity	<i>IPv6 Configuration Guide</i>
Cisco IOS commands	Cisco IOS Master Commands List, All Releases
IPv6 commands	<i>Cisco IOS IPv6 Command Reference</i>
Cisco IOS IPv6 features	Cisco IOS IPv6 Feature Mapping

Standards and RFCs

Standard/RFC	Title
RFCs for IPv6	<i>IPv6 RFCs</i>

MIBs

MIB	MIBs Link
No new or modified MIBs are supported by this feature, and support for existing MIBs has not been modified by this feature.	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 IPv6 Support on BVI Interfaces

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 www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1: Feature Information for IPv6 Support on BVI Interfaces

Feature Name	Releases	Feature Information
IPv6 Support on BVI Interfaces	15.1(2)T	This feature allows IPv6 commands to be supported on BVI so that users can assign IPv6 addresses to a BVI and route IPv6 packets. No commands were introduced or modified.

