



Integrated IS-IS Point-to-Point Adjacency over Broadcast Media

Feature History

Release	Modification
12.2(8)T	This feature was introduced.
12.0(22)S	This feature was integrated into Cisco IOS Release 12.0(22)S.
12.2(14)S	This feature was integrated into Cisco IOS Release 12.2(14)S.

This document describes how to configure an integrated IS-IS point-to-point adjacency over broadcast media and contains the following sections:

- [Feature Overview, page 1](#)
- [Supported Platforms, page 2](#)
- [Supported Standards, MIBs, and RFCs, page 3](#)
- [Prerequisites, page 3](#)
- [Configuration Tasks, page 3](#)
- [Configuration Example, page 4](#)
- [Command Reference, page 4](#)

Feature Overview

When a network consists of only two networking devices connected to broadcast media and uses the integrated IS-IS protocol, it is better for the system to handle the link as a point-to-point link instead of as a broadcast link. This feature introduces a new command to make IS-IS behave as a point-to-point link between the networking devices.

Benefits

Using this feature provides performance improvements to the network convergence times of the customer's network because the feature saves the system from electing a designated router (DR), prevents flooding from using CSNPs for database synchronization, and simplifies shortest path first (SPF) computations.

Restrictions

This feature applies only to IS-IS interfaces connected to broadcast media.

Related Features and Technologies

This feature is part of the Integrated IS-IS protocol.

Related Documents

- *Cisco IOS IP Command Reference, Volume 2 of 3: Routing Protocols*, Release 12.2
- *Cisco IOS IP Configuration Guide*, Release 12.2

Supported Platforms

This feature is supported on the following platforms:

- Cisco 2600 Series
- Cisco 3620
- Cisco 3631
- Cisco 3640
- Cisco 3620
- Cisco 3660
- Cisco 3725
- Cisco 3745
- Cisco 7100 Series
- Cisco7200 Series
- Cisco 7500 Series
- Universal Router Module
- Cisco MC3810 Multiservice Access Concentrator
- Cisco uBR7200 Series Universal Broadband Router

Determining Platform Support Through Cisco Feature Navigator

Cisco IOS software is packaged in feature sets that support specific platforms. To get updated information regarding platform support for this feature, access Cisco Feature Navigator. Cisco Feature Navigator dynamically updates the list of supported platforms as new platform support is added for the feature.

Cisco Feature Navigator is a web-based tool that enables you to quickly determine which Cisco IOS software images support a specific set of features and which features are supported in a specific Cisco IOS image. You can search by feature or release. Under the release section, you can compare releases side by side to display both the features unique to each software release and the features in common.

To access Cisco Feature Navigator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions at <http://www.cisco.com/register>.

Cisco Feature Navigator is updated regularly when major Cisco IOS software releases and technology releases occur. For the most current information, go to the Cisco Feature Navigator home page at the following URL:

<http://www.cisco.com/go/fn>

Supported Standards, MIBs, and RFCs

Standards

No new standards are supported by this feature.

MIBs

To obtain lists of supported MIBs by platform and Cisco IOS release, and to download MIB modules, go to the Cisco MIB website on Cisco.com at the following URL:

<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

RFCs

No new or modified RFCs are supported by this feature.

Prerequisites

This feature requires broadcast media connected to the interface and Integrated IS-IS configured on the interface.

Configuration Tasks

See the following section to configure the Integrated IS-IS Point-to-Point Adjacency over Broadcast Media feature. The task is required for the feature.

- [Configuring Point-to-Point Adjacency over Broadcast Media](#) (required)

Configuring Point-to-Point Adjacency over Broadcast Media

To configure an IS-IS point-to-point adjacency over broadcast media, use the following commands beginning in global configuration mode:

	Command	Purpose
Step 1	<code>Router(config)# interface fastethernet number</code>	Configures a fast Ethernet interface and enters interface configuration mode.
Step 2	<code>Router(config-if)# isis network point-to-point</code>	Configures an IS-IS network of two networking devices connected to broadcast media into a point-to-point network instead of a broadcast network.

Configuration Example

This example configures an IS-IS point-to-point adjacency over broadcast media:

```
interface fastethernet 1/0
 isis network point-to-point
```

Command Reference

This section documents the new **isis network point-to-point** command. All other commands used with this feature are documented in the Cisco IOS Release 12.2 command reference publications.

isis network point-to-point

To configure a network of only two networking devices that use broadcast media and the integrated IS-IS routing protocol to function as a point-to-point link instead of a broadcast link, use the **isis network point-to-point** command in interface configuration mode. To disable the point-to-point usage, use the **no** form of this command.

isis network point-to-point

no isis network point-to-point

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values.

Command Modes Interface configuration

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Usage Guidelines Use this command only on broadcast media in a network of only two networking devices. The command will cause the system to issue packets point-to-point rather than as broadcasts. Configure the command on both networking devices in the network.

Examples The following example configures a Fast Ethernet interface to act as a point-to-point interface:

```
interface fastethernet 1/0
 isis network point-to-point
```

