



OSPF Retransmissions Limit

Last Updated: October 27, 2011

Feature History

Release	Modification
12.2(11)T	This feature was introduced.

This feature module describes the change in how the Open Shortest Path First (OSPF) protocol handles retransmissions.

- [Finding Feature Information, page 1](#)
- [Feature Overview, page 1](#)
- [Supported Platforms, page 2](#)
- [Configuration Tasks, page 3](#)

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see 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 document.

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.

Feature Overview

Cisco IOS Release 12.2(4)T added a limit to the number of retransmissions of database exchange and update packets for both demand and non-demand circuits. The retransmission of these packets stops once this retry limit is reached, thus preventing unnecessary use of the link in continual retransmission of the packets if, for some reason, a neighbor is not responding during adjacency forming.

The limit for both demand circuit and non-demand circuit retransmissions is 24.

The limit-retransmissions command allows you to either remove (disable) the limit or change the maximum number of retransmissions to be a number from 1 to 255.



Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

- [Benefits, page 2](#)
- [Restrictions, page 2](#)
- [Related Features and Technologies, page 2](#)

Benefits

The limit-retransmissions command provides for backward compatibility for previous or other releases of Cisco IOS or other routers that do not have this feature.

Restrictions

The limit to the number of retransmissions does not apply for update packets on nonbroadcast multiaccess (NBMA) point-to-multipoint direct circuits. In this situation, the dead timer is used to end communication with non-responding neighbors and thus stop the retransmissions.

Related Features and Technologies

This feature is an extension of the OSPF routing protocol. For more information about configuring OSPF and configuring route summarization and filtering, refer to the "Configuring OSPF" module of the *Cisco IOS IP Routing Protocols Configuration Guide* and the *Cisco IOS IP Routing: OSPF Command Reference*.

Supported Platforms

The limit-retransmissions command is supported for the following platforms in Cisco IOS Release 12.2(11)T:

- Cisco AS5300
- Cisco AS5400
- Cisco AS5800
- Cisco 1400 series
- Cisco 1600 series
- Cisco 1600R series
- Cisco 1710
- Cisco 1720
- Cisco 1721
- Cisco 1750
- Cisco 1751
- Cisco 2500 series
- Cisco 2600 series
- Cisco 3620
- Cisco 3631
- Cisco 3640
- Cisco 3725
- Cisco 3745
- Cisco 3660
- Cisco IGX 8400 Series URM
- Cisco MC3810

- Cisco 7100 series
- Cisco 7200 series
- Cisco 7500 series
- Cisco uBR7200 series

Finding Feature Information in This Module

Your Cisco IOS software release may not support all of the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release.

Finding Support Information for Platforms and Cisco IOS and Catalyst OS Software Images

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

Configuration Tasks

- [Setting OSPF Retransmission Limits, page 3](#)

Setting OSPF Retransmission Limits

SUMMARY STEPS

1. Router(config)# **router ospf***process-id*
2. Router(config-router)# **limit retransmissions**{[**dc** {*max-number* | **disable**}] [**non-dc** {*max-number* | **disable**}]}

DETAILED STEPS

	Command or Action	Purpose
Step 1	Router(config)# router ospf <i>process-id</i>	Configures the router to run an OSPF process.
Step 2	Router(config-router)# limit retransmissions {[dc { <i>max-number</i> disable }] [non-dc { <i>max-number</i> disable }]}	Sets the limit in the number of retransmissions of database exchange and update packets for both demand and non-demand circuits.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

© 2011 Cisco Systems, Inc. All rights reserved.