Configuring OSPF Retransmissions Limit

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OSPF Retransmissions Limit

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

Restrictions For OSPF Retransmissions Limit

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.

Information About OSPF Retransmissions Limit

Overview About OSPF Retransmissions Limit

There is 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.

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.

How to Configure OSPF Retransmissions Limit

Setting OSPF Retransmission Limits

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **router ospf** *process-ID*
4. **limit retransmissions**{[**dc** {*max-number* | **disable**}] [**non-dc** {*max-number* | **disable**}]}
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**router ospf** *process-ID* **Example:** `Device(config)# router ospf 18`	Configures OSPF routing process and enters OSPF router configuration mode.
Step 4	**limit retransmissions**{[**dc** {*max-number* | **disable**}] [**non-dc** {*max-number* | **disable**}]} **Example:** `Device(config-router)# limit retransmissions dc 5`	Sets the limit in the number of retransmissions of database exchange and update packets for both demand and non-demand circuits.
Step 5	**end** **Example:** `Device(config-router)# end`	Exits address router configuration mode and returns to privileged EXEC mode.

Configuration Examples for OSPF Retransmissions Limit

Example: Configuring OSPF Retransmissions Limit

The following is an example of configuring OSPF retransmissions limit.

```
router ospf 18
  limit retransmissions dc 5
```

Additional References for OSPF Retransmissions Limit

Related Documents

Related Topic	Document Title
Configuring OSPF	*IP Routing: OSPF Configuration Guide*
OSPF Commands	*IP Routing: OSPF Command Reference*

Feature Information for OSPF Retransmissions Limit

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 OSPF Retransmissions Limit

Feature Name	Releases	Feature Information
OSPF Retransmissions Limit	Cisco IOS XE Fuji 16.8.1a	The OSPF Retransmissions Limit feature adds 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 feature was introduced.