



## EIGRP Scale for DMVPN

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The EIGRP Scale for DMVPN feature provides an increase in hub scalability for Dynamic Multipoint VPN (DMVPN). Cisco DMVPN is a security solution for building scalable enterprise VPNs that support distributed applications such as voice and video.

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## 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.

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](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

## Information About EIGRP Scale for DMVPN

### EIGRP Scale for DMVPN Overview

Dynamic Multipoint VPN (DMVPN) improves the usage of spoke-to-spoke networks. However, scaling of routing protocols and optimization of routing updates in large scale DMVPN networks remain a challenge. These challenges pertain to neighbor discovery, overhead reduction, and building upon the recent enhancements in the area of scaling routing over DMVPN. IPSEC tunnels, Next Hop Resolution Protocol (NHRP) and Enhanced Interior Gateway Routing Protocol (EIGRP) are established during initial startup of a DMVPN network. It is possible that EIGRP may not process and respond to inbound packets waiting in the interface or socket queue causing the spokes to time out and retransmit which worsens the resource contention issue. The EIGRP Scale for DMVPN feature provides an increase in the scalability of the hub device to 2500 sessions.

The increase in the number of sessions reduces the adverse impact on CPU, system buffers, interface buffers, and queues and it reduces resource contention on the hub during initial startup of a DMVPN network. In a typical EIGRP DMVPN setup, spokes are configured as stubs.

This EIGRP Scale for DMVPN feature is enabled by default and does not have a configuration task.

## Additional References for EIGRP Scale for DMVPN

### Related Documents

Related Topic	Document Title
Cisco IOS commands	<a href="#">Cisco IOS Master Command List, All Releases</a>

### Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	<a href="http://www.cisco.com/support">http://www.cisco.com/support</a>

## Feature Information for EIGRP Scale for DMVPN

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.

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Feature Name	Releases	Feature Information
EIGRP Scale for DMVPN	Cisco IOS XE Release 3.12S	The EIGRP Scale for DMVPN feature provides an increase in hub scalability for Dynamic Multipoint VPN (DMVPN).