

OSPF Area Transit Capability

The OSPF Area Transit Capability feature provides an OSPF Area Border Router (ABR) with the ability to discover shorter paths through the transit area for forwarding traffic that would normally need to travel through the virtual-link path. This functionality allows Cisco IOS XE software to be compliant with RFC 2328, OSPF Version 2.

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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. An account on Cisco.com is not required.

Information About OSPF Area Transit Capability

How the OSPF Area Transit Capability Feature Works

The OSPF Area Transit Capability feature is enabled by default. RFC 2328 defines OSPF area transit capability as the ability of the area to carry data traffic that neither originates nor terminates in the area itself. This capability enables the OSPF ABR to discover shorter paths through the transit area and to forward traffic along those paths rather than using the virtual link or path, which is not optimal.

For a detailed description of OSPF area transit capability, see RFC 2328, OSPF Version 2.

How to Disable OSPF Area Transit Capability

Disabling OSPF Area Transit Capability on an Area Border Router

SUMMARY STEPS

- 1. enable
- 2. configure terminal
- **3.** router ospf process-id [vrf vpn-name]
- 4. no capability transit

DETAILED STEPS

| | Command or Action | Purpose |
|--------|--|--|
| Step 1 | enable | Enables privileged EXEC mode. |
| | Example: | • Enter your password if prompted. |
| | Router> enable | |
| Step 2 | configure terminal | Enters global configuration mode. |
| | Example: | |
| | Router# configure terminal | |
| Step 3 | router ospf process-id [vrf vpn-name] | Enables OSPF routing and enters router configuration mode. |
| | Example: | • The <i>process-id</i> argument identifies the OSPF process. |
| | Router(config) # router ospf 100 | |
| Step 4 | no capability transit | Disables OSPF area transit capability on all areas for a router process. |
| | Example: | |
| | Router(config-router)# no capability transit | |

Additional References

The following sections provide references related to the OSPF Area Transit Capability feature.

Related Documents

| Related Topic | Document Title | |
|---|--|--|
| Configuring OSPF | "Configuring OSPF" | |
| OSPF commands | Cisco IOS IP Routing: OSPF Command Reference | |
| Cisco IOS master command list, all releases | Cisco IOS Master Command List, All Releases | |

Standards

| Standard | Title |
|---|-------|
| No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature. | |

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 XE releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs |

RFCs

| RFC | Title |
|----------|----------------|
| RFC 2328 | OSPF Version 2 |

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 OSPF Area Transit Capability

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 OSPF Area Transit Capability

| Feature Name | Releases | Feature Information |
|------------------------------|--------------------------|---|
| OSPF Area Transit Capability | Cisco IOS XE Release 2.1 | The OSPF Area Transit Capability feature provides an OSPF Area Border Router (ABR) the ability to discover shorter paths through the transit area for forwarding traffic that would normally need to travel through the virtual-link path. This functionality allows Cisco IOS XE software to be compliant with RFC 2328. The command related to this feature is • capability transit |
| | | |