



# OSPF Forwarding Address Suppression in Translated Type-5 LSAs

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The OSPF Forwarding Address Suppression in Translated Type-5 LSAs feature causes a not-so-stubby area (NSSA) area border router (ABR) to translate Type-7 link state advertisements (LSAs) to Type-5 LSAs, but to use the address 0.0.0.0 for the forwarding address instead of that specified in the Type-7 LSA. This feature causes devices that are configured not to advertise forwarding addresses into the backbone to direct forwarded traffic to the translating NSSA ABRs.

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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.

## Prerequisites for OSPF Forwarding Address Suppression

This document presumes that you have OSPF configured on the networking device; it does not document other steps to configure OSPF.



Before configuring this feature, consider the following caution.

**Caution**

Configuring this feature causes the device to be noncompliant with RFC 1587. Also, suboptimal routing might result because there might be better paths to reach the destination's forwarding address. This feature should not be configured without careful consideration and not until the network topology is understood.

## How to Suppress the OSPF Forwarding Address

### Suppressing the OSPF Forwarding Address in Translated Type-5 LSAs

This task describes how to suppress the OSPF forwarding address in translated Type-5 LSAs. Before configuring this feature, consider the following caution.

**Caution**

Configuring this feature causes the device to be noncompliant with RFC 1587. Also, suboptimal routing might result because there might be better paths to reach the destination's forwarding address. This feature should not be configured without careful consideration and not until the network topology is understood.

#### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **router ospf *process-id***
4. **area *area-id* nssa translate type7 suppress-fa**
5. **end**

#### DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>enable</b> <b>Example:</b> Device> enable	Enables higher privilege levels, such as privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
Step 2	<b>configure terminal</b> <b>Example:</b> Device# configure terminal	Enters global configuration mode.
Step 3	<b>router ospf <i>process-id</i></b> <b>Example:</b> Device(config)# router ospf 1	Enables OSPF routing and enters router configuration mode. <ul style="list-style-type: none"> <li>• The <i>process-id</i> argument identifies the OSPF process.</li> </ul>

	Command or Action	Purpose
<b>Step 4</b>	<b>area</b> <i>area-id</i> <b>nssa translate type7 suppress-fa</b> <b>Example:</b> Device(config-router)# area 10 nssa translate type7 suppress-fa	Configures an area as a not-so-stubby-area (NSSA) and suppresses the forwarding address in translated Type-7 LSAs.
<b>Step 5</b>	<b>end</b> <b>Example:</b> Device(config-router)# end	Exits configuration mode and returns to privileged EXEC mode.

## Configuration Examples for OSPF Forwarding Address Suppression

### Suppressing OSPF Forwarding Address in Translated Type-5 LSAs Example

This example suppresses the forwarding address in translated Type-5 LSAs:

```
interface gigabitethernet 0/0/0
 ip address 10.93.1.1 255.255.255.0
 ip ospf cost 1
!
interface gigabitethernet 0/0/1
 ip address 10.94.1.1 255.255.255.0
!
router ospf 1
 network 10.93.0.0 0.0.255.255 area 0.0.0.0
 network 10.94.0.0 0.0.255.255 area 10
 area 10 nssa translate type7 suppress-fa
```

## Additional References

The following sections provide references related to OSPF Forwarding Address Suppression in Translated Type-5 LSAs:

### Related Documents

Related Topic	Document Title
OSPF commands	<i>Cisco IOS IP Routing: OSPF Command Reference</i>
Configuring OSPF	"Configuring OSPF"
Cisco IOS master command list, all releases	<a href="#">Cisco IOS Master Command List, All Releases</a>
OSPFv3 Address Families	"OSPFv3 Address Families" module

**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 releases, and feature sets, use Cisco MIB Locator found at the following URL:  <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a>

**RFCs**

RFC	Title
RFC 1587	<i>The OSPF NSSA Option</i>  <b>Note</b> Configuring the OSPF Forwarding Address Suppression in Translated Type-5 LSAs feature causes the router to be noncompliant with RFC 1587, <i>The OSPF NSSA Option</i>

**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.	<a href="http://www.cisco.com/cisco/web/support/index.html">http://www.cisco.com/cisco/web/support/index.html</a>

## Feature Information for OSPF Forwarding Address Suppression

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

**Table 1: Feature Information for OSPF Forwarding Address Suppression in Translated Type-5 LSAs**

<b>Feature Name</b>	<b>Releases</b>	<b>Feature Information</b>
OSPF Forwarding Address Suppression in Translated Type-5 LSAs	Cisco IOS XE Release 2.1	<p>The OSPF Forwarding Address Suppression in Translated Type-5 LSAs feature causes a not-so-stubby area (NSSA) area border router (ABR) to translate Type-7 link state advertisements (LSAs) to Type-5 LSAs, but to use the address 0.0.0.0 for the forwarding address instead of that specified in the Type-7 LSA. This feature causes routers that are configured not to advertise forwarding addresses into the backbone to direct forwarded traffic to the translating NSSA ABRs.</p> <p>The following commands are introduced or modified in the feature documented in this module:</p> <ul style="list-style-type: none"><li>• <b>area nssa translate</b></li><li>• <b>show ip ospf</b></li></ul>