

Configuring OSPF (NSM Procedure)

OSPF uses the shortest path first (SPF) algorithm to determine the route to reach each destination. All devices in an area run this algorithm in parallel, storing the results in their individual topological databases. Devices with interfaces to multiple areas run multiple copies of the algorithm.

To configure OSPF in NSM:

1. In the navigation tree select **Device Manager > Devices** .
2. In the **Devices** list, double click the device to select it.
3. Click the **Configuration** tab.
4. In the configuration tree, expand **Protocols** and select **OSPF**.
5. Add/Modify the parameters under the respective tabs as specified in Table 1.
6. Click one:
 - **OK**—To save the changes.
 - **Cancel**—To cancel the modifications.
 - **Apply** — To apply the protocol settings.



NOTE: After you make changes to a device configuration, you must push that updated device configuration to the physical security device for those changes to take effect. You can update multiple devices at one time. See [Updating Devices](#) for more information.

Table 1: OSPF Configuration Fields

Option	Function	Your Action
OSPF		

Table 1: OSPF Configuration Fields (continued)

Option	Function	Your Action
Comment	Specifies the comment for OSPF.	1. Enter the comment.
Disable	Specifies whether to disable the OSPF configuration.	1. Specify whether to enable or disable OSPF. <ul style="list-style-type: none"> ■ To enable OSPF, clear the check box. ■ To disable OSPF, select the check box.
Prefix Export Limit	Configure a limit to the number of prefixes to be exported.	1. Enter the prefix export limit or select from the list.
Rib Group	Specifies the routing table group.	1. Select rib group from the list.
Route Type Community	Specifies an extended community value to encode the OSPF route type	1. Select route type community from the list.
Domain VPN Tag	Virtual private network (VPN) tag for OSPFv2 external routes generated by the provider edge (PE) router.	1. Enter the domain VPN tag or select from the list.
Preference	Specifies the route preference for OSPF internal routes.	1. Enter the preference or select from the list.
External Preference	Specifies the external route preference.	1. Enter the external route preference or select from the list.
Reference Bandwidth	Specifies the reference bandwidth used in calculating the default interface cost.	1. Enter the reference bandwidth.
No RFC 1583	Disable compatibility with RFC 1583. Disabling compatibility with RFC 1583 can prevent routing loops.	1. Specify whether to configure RFC 1583. <ul style="list-style-type: none"> ■ To enable compatibility with RFC 1583, clear the check box. ■ To disable compatibility with RFC 1583, select the check box.
No NSSA ABR	Disable compatibility with NSSA ABR.	1. Specify whether NSSA ABR has to be configured. <ul style="list-style-type: none"> ■ To enable NSSA ABR, clear the check box. ■ To disable NSSA ABR, select the check the check box.
Area	Enables you to set up the area details for OSPF.	

Table 1: OSPF Configuration Fields (continued)

Option	Function	Your Action
		<ol style="list-style-type: none"> 1. Expand the OSPF tree and select Area. 2. Set up the area range, interface, sham link remote, stub and virtual link.
Domain ID	Enables you to configure domain ID for the OSPF.	<ol style="list-style-type: none"> 1. Expand the OSPF tree and select Domain ID. 2. Specify the domain ID.
Export	Enables you to specify the export policies to be configured on the peer.	<ol style="list-style-type: none"> 1. Expand the OSPF tree and select Export. 2. Specify the export policies.
Graceful Restart	Enables you to specify the graceful restart parameters for OSPF.	<ol style="list-style-type: none"> 1. Expand the OSPF tree and select Graceful Restart. 2. Set up the graceful restart parameters.
Import	Enables you to specify the import policies to be configured on the peer.	<ol style="list-style-type: none"> 1. Expand the OSPF tree and select Import. 2. Specify the import policies.
Overload	Enables you to configure the local router so that it appears to be overloaded. You might do this when you want the router to participate in OSPF routing, but do not want it to be used for transit traffic.	<ol style="list-style-type: none"> 1. Expand the OSPF tree and select Overload. 2. Specify the comment and timeout.
Sham Link	Enables you to configure the local endpoint of a sham link.	<ol style="list-style-type: none"> 1. Expand the OSPF tree and select Sham Link. 2. Enable the feature and specify the comment and local address.
SPF Options	Enables you to configure options for running the shortest-path-first (SPF) algorithm. You can configure a delay for when to run the SPF algorithm after a network topology change is detected, the maximum number of times the SPF algorithm can run in succession, and a holddown interval after the SPF algorithm runs the maximum number of times.	<ol style="list-style-type: none"> 1. Expand the OSPF tree and select SPF Options. 2. Specify the comment, delay, holddown and rapid runs.

Table 1: OSPF Configuration Fields *(continued)*

Option	Function	Your Action
Traceoptions	Enables you to configure OSPF protocol level tracing options.	<ol style="list-style-type: none"><li data-bbox="1032 384 1414 447">1. Expand the OSPF tree and select Traceoptions.<li data-bbox="1032 457 1414 520">2. Expand the Traceoptions tree and set up the file and flag parameters.

Published: 2009-08-23