

	Command or Action	Purpose
<b>Step 5</b>	<b>router ospf <i>process-id</i></b> <b>Example:</b> Device#(config) router ospf 109	Configures an OSPF routing process and enters router configuration mode.
<b>Step 6</b>	<b>neighbor <i>ip-address</i> [<i>cost number</i>]</b> <b>Example:</b> Device#(config-router) neighbor 192.168.3.4 cost 180	Specifies a neighbor and assigns a cost to the neighbor.  <b>Note</b> Repeat this step for each neighbor if you want to specify a cost. Otherwise, neighbors will assume the cost of the interface, based on the <b>ip ospf cost</b> interface configuration command.

## Configuring OSPF Area Parameters

### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **router ospf *process-id***
4. **area *area-id* authentication**
5. **area *area-id* stub [no summary]**
6. **area *area-id* default-cost *cost***
7. **end**

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Device> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> Device# configure terminal	Enters global configuration mode.
<b>Step 3</b>	<b>router ospf <i>process-id</i></b> <b>Example:</b> Device(config)# router ospf 10	Enables OSPF routing and enters router configuration mode.
<b>Step 4</b>	<b>area <i>area-id</i> authentication</b> <b>Example:</b>	Enables authentication for an OSPF area.

	Command or Action	Purpose
	Device(config-router)# area 10.0.0.0 authentication	
<b>Step 5</b>	<b>area</b> <i>area-id</i> <b>stub</b> [ <b>no summary</b> ] <b>Example:</b> Device(config-router)# area 10.0.0.0 stub no-summary	Defines an area to be a stub area.
<b>Step 6</b>	<b>area</b> <i>area-id</i> <b>default-cost</b> <i>cost</i> <b>Example:</b> Device(config-router)# area 10.0.0.0 default-cost 1	Specifies a cost for the default summary route that is sent into a stub area or not-so-stubby area (NSSA)
<b>Step 7</b>	<b>end</b> <b>Example:</b> Device(config-router)# end	Exits router configuration mode and returns to privileged EXEC mode.

## Configuring OSPFv2 NSSA

### Configuring an OSPFv2 NSSA Area and Its Parameters

#### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **router ospf** *process-id*
4. **redistribute** *protocol* [*process-id*] {**level-1** | **level-1-2** | **level-2**} [*autonomous-system-number*] [**metric** {**metric-value** | **transparent**}] [**metric-type** *type-value*] [**match** {**internal** | **external 1** | **external 2**}] [**tag** *tag-value*] [**route-map** *map-tag*] [**subnets**] [**nssa-only**]
5. **network** *ip-address wildcard-mask* **area** *area-id*
6. **area** *area-id* **nssa** [**no-redistribution**] [**default-information-originate** [**metric**] [**metric-type**]] [**no-summary**] [**nssa-only**]
7. **summary-address** *prefix mask* [**not-advertise**] [**tag** *tag*] [**nssa-only**]
8. **end**

#### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Device> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>

	Command or Action	Purpose
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> <pre>Device# configure terminal</pre>	Enters global configuration mode.
<b>Step 3</b>	<b>router ospf process-id</b> <b>Example:</b> <pre>Device(config)# router ospf 10</pre>	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. The range is from 1 to 65535.</li> </ul>
<b>Step 4</b>	<b>redistribute protocol [process-id] {level-1   level-1-2   level-2} [autonomous-system-number] [metric {metric-value   transparent}] [metric-type type-value] [match {internal   external 1   external 2}] [tag tag-value] [route-map map-tag] [subnets] [nssa-only]</b> <b>Example:</b> <pre>Device(config-router)# redistribute rip subnets</pre>	Redistributes routes from one routing domain to another routing domain. <ul style="list-style-type: none"> <li>In the example, Routing Information Protocol (RIP) subnets are redistributed into the OSPF domain.</li> </ul>
<b>Step 5</b>	<b>network ip-address wildcard-mask area area-id</b> <b>Example:</b> <pre>Device(config-router)# network 192.168.129.11 0.0.0.255 area 1</pre>	Defines the interfaces on which OSPF runs and the area ID for those interfaces.
<b>Step 6</b>	<b>area area-id nssa [no-redistribution] [default-information-originate [metric] [metric-type]] [no-summary] [nssa-only]</b> <b>Example:</b> <pre>Device(config-router)# area 1 nssa</pre>	Configures a Not-So-Stubby Area (NSSA) area.
<b>Step 7</b>	<b>summary-address prefix mask [not-advertise] [tag tag] [nssa-only]</b> <b>Example:</b> <pre>Device(config-router)# summary-address 10.1.0.0 255.255.0.0 not-advertise</pre>	Controls the route summarization and filtering during the translation and limits the summary to NSSA areas.
<b>Step 8</b>	<b>end</b> <b>Example:</b> <pre>Device(config-router)# end</pre>	Exits router configuration mode and returns to privileged EXEC mode.