



## OSPF Flooding Reduction

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## Feature History for OSPF Flooding Reduction

This table provides release and platform support information for the features explained in this module.

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature Name and Description	Supported Platform
Cisco IOS XE 17.18.1	OSPF Flooding Reduction: OSPF Flooding Reduction is a network optimization feature that minimizes unnecessary OSPF LSA refreshes and network flooding, especially for LSAs that are stable and unchanged.	Cisco C9350 Series Smart Switches Cisco C9610 Series Smart Switches

## OSPF Flooding Reduction

The OSPF Flooding Reduction is a network optimization feature that minimizes unnecessary OSPF Link-State Advertisement (LSA) refreshes and network flooding, especially for LSAs that are stable and unchanged.

### How OSPF Flooding Reduction works

OSPF devices periodically refresh LSAs to prevent them from aging out (default every 30 minutes). With flooding reduction enabled, devices set the DoNotAge (DNA) bit in their LSAs. LSAs marked with the DNA bit do not age out, so they are not periodically refreshed or flooded. This reduces control-plane overhead and conserves bandwidth, especially in stable networks with few topology changes.

# Configure OSPF Flooding Reduction

Perform this task on each interface you want to configure OSPF flooding reduction.

## Procedure

### Step 1 **enable**

#### Example:

```
Device> enable
```

Enables privileged EXEC mode.

Enter your password, if prompted.

### Step 2 **configure terminal**

#### Example:

```
Device# configure terminal
```

Enters global configuration mode.

### Step 3 **interface** *type number*

#### Example:

```
Device(config)# interface ethernet 1/0/1
```

Configures an interface.

### Step 4 **ip ospf flood-reduction**

#### Example:

```
Device(config-if)# ip ospf flood-reduction
```

Reduces unnecessary flooding and refreshing of LSAs in stable networks.

### Step 5 **end**

#### Example:

```
Device(config-if)# end
```

Returns to privileged EXEC mode.

## Configuration example for OSPF Flooding Reduction

This example shows how to configure OSPF Flooding Reduction.

```
Device> enable
```

```
Device# configure terminal
```

```
Device(config)# interface ethernet 1/0/1
```

```
Device(config-if)# ip ospf flood-reduction  
Device(config-if)# end
```

