

Chapter 17

Summary of Multicast Routing Options Configuration Statements

The following sections explain each of the multicast routing options configuration statements. The statements are organized alphabetically.

forwarding-cache

Syntax	forwarding-cache { threshold suppress <i>value</i> <reuse <i>value</i> >; }
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options multicast], [edit logical-routers <i>logical-router-name</i> routing-options multicast], [edit routing-instances <i>routing-instance-name</i> routing-options multicast], [edit routing-options multicast]
Release Information	Statement introduced before JUNOS Release 7.4.
Description	Configure multicast forwarding cache limits.
Options	The statement is explained separately.
Usage Guidelines	See “Configuring Multicast Forwarding Cache Limits” on page 137.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

interface

Syntax	interface [<i>interface-names</i>];
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options multicast scope <i>scope-name</i>], [edit logical-routers <i>logical-router-name</i> routing-options multicast scope <i>scope-name</i>], [edit routing-instances <i>routing-instance-name</i> routing-options multicast scope <i>scope-name</i>], [edit routing-options multicast scope <i>scope-name</i>]
Release Information	Statement introduced before JUNOS Release 7.4.
Description	Configure the set of interfaces for multicast scoping.
Options	<i>interface-names</i> —Names of the interfaces to scope. Specify the full interface name, including the physical and logical address components. To configure all interfaces, you can specify <i>all</i> . For details about specifying interfaces, see the <i>JUNOS Network Interfaces Configuration Guide</i> .
Usage Guidelines	See “Configuring Multicast Scoping with the scope Statement” on page 125.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

multicast

```

Syntax  multicast {
            forwarding-cache {
                threshold suppress value <reuse value>;
            }
            scope scope-name {
                interface [ interface-names ];
                prefix destination-prefix;
            }
            scope-policy policy-name;
            ssm-groups {
                address;
            }
            ssm-map ssm-map-name {
                policy policy-name;
                source addresses;
            }
        }

```

Hierarchy Level [edit logical-routers *logical-router-name* routing-instances *routing-instance-name* routing-options],
 [edit logical-routers *logical-router-name* routing-options],
 [edit routing-instances *routing-instance-name* routing-options],
 [edit routing-options]



NOTE: You cannot apply a scoping policy to a specific routing instance. That is, all scoping policies are applied to all routing instances. However, the **scope** statement does apply individually to a specific routing instance.

Release Information Statement introduced before JUNOS Release 7.4.

Description Configure multicast routing options properties.

Options The remaining statements are explained separately.

Usage Guidelines See “Configuring Multicast Scoping” on page 124, “Source-Specific Multicast Groups Overview” on page 130, and “Configuring Multicast Forwarding Cache Limits” on page 137.

Required Privilege Level routing—To view this statement in the configuration.
 routing-control—To add this statement to the configuration.

policy

Syntax `policy policy-name;`

Hierarchy Level [edit logical-routers *logical-router-name* routing-instances *routing-instance-name* routing-options multicast ssm-map *ssm-map-name*],
 [edit logical-routers *logical-router-name* routing-options multicast ssm-map *ssm-map-name*],
 [edit routing-instances *routing-instance-name* routing-options multicast ssm-map *ssm-map-name*],
 [edit routing-options multicast ssm-map *ssm-map-name*]

Release Information Statement introduced in JUNOS Release 7.4.

Description Apply a policy to an SSM map.

Options *policy-name*—Name of the policy for SSM mapping.

Usage Guidelines See “Example: Configuring SSM Mapping” on page 134.

Required Privilege Level routing—To view this statement in the configuration.

prefix

Syntax	<code>prefix destination-prefix;</code>
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options multicast scope <i>scope-name</i>], [edit logical-routers <i>logical-router-name</i> routing-options multicast scope <i>scope-name</i>], [edit routing-instances <i>routing-instance-name</i> routing-options multicast scope <i>scope-name</i>], [edit routing-options multicast scope <i>scope-name</i>]
Release Information	Statement introduced before JUNOS Release 7.4.
Description	Configure the prefix for multicast scopes.
Options	<i>destination-prefix</i> —Address range for the multicast scope.
Usage Guidelines	See “Configuring Multicast Scoping with the scope Statement” on page 125.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

scope

Syntax	<code>scope scope-name { interface [<i>interface-names</i>]; prefix <i>destination-prefix</i>; }</code>
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options multicast], [edit logical-routers <i>logical-router-name</i> routing-options multicast], [edit routing-instances <i>routing-instance-name</i> routing-options multicast], [edit routing-options multicast]
Release Information	Statement introduced before JUNOS Release 7.4.
Description	Configure multicast scoping.
Options	<i>scope-name</i> —Name of the multicast scope. The remaining statements are explained separately.
Usage Guidelines	See “Configuring Multicast Scoping with the scope Statement” on page 125.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

scope-policy

Syntax scope-policy *policy-name*;

Hierarchy Level [edit logical-routers *logical-router-name* routing-options multicast],
[edit routing-options multicast]



NOTE: You can configure a scoping policy at these two hierarchy levels only. You cannot apply a scoping policy to a specific routing instance, because all scoping policies are applied to all routing instances. However, you can apply the **scope** statement to a specific routing instance.

Release Information Statement introduced before JUNOS Release 7.4.

Description Apply a policy for scoping. The policy must be correctly configured.

Options *policy-name*—Name of the multicast scope policy.

Usage Guidelines See “Configuring Multicast Scoping with the scope-policy Statement” on page 126.

Required Privilege Level routing—To view this statement in the configuration.
routing-control—To add this statement to the configuration.

source

Syntax source *addresses*;

Hierarchy Level [edit logical-routers *logical-router-name* routing-instances *routing-instance-name* routing-options multicast ssm-map *ssm-map-name*],
[edit logical-routers *logical-router-name* routing-options multicast ssm-map *ssm-map-name*],
[edit routing-instances *routing-instance-name* routing-options multicast ssm-map *ssm-map-name*],
[edit routing-options multicast ssm-map *ssm-map-name*]

Release Information Statement introduced in JUNOS Release 7.4.

Description Specify IPv4 or IPv6 source addresses for an SSM map.

Options *addresses*—IPv4 or IPv6 source addresses.

Usage Guidelines See “Example: Configuring SSM Mapping” on page 134.

Required Privilege Level routing—To view this statement in the configuration.

ssm-groups

Syntax	<code>ssm-groups { <i>address</i>; }</code>
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options multicast], [edit logical-routers <i>logical-router-name</i> routing-options multicast], [edit routing-instances <i>routing-instance-name</i> routing-options multicast], [edit routing-options multicast]
Release Information	Statement introduced before JUNOS Release 7.4.
Description	Configure additional source-specific multicast (SSM) groups.
Options	<i>address</i> —Address range of the additional SSM group.
Usage Guidelines	See “Source-Specific Multicast Groups Overview” on page 130.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

ssm-map

Syntax	<code>ssm-map <i>ssm-map-name</i> { policy <i>policy-name</i>; source <i>addresses</i>; }</code>
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options multicast], [edit logical-routers <i>logical-router-name</i> routing-options multicast], [edit routing-instances <i>routing-instance-name</i> routing-options multicast], [edit routing-options multicast]
Release Information	Statement introduced in JUNOS Release 7.4.
Description	Configure SSM mapping.
Options	<i>ssm-map-name</i> —Name of the SSM map. The remaining statements are explained separately.
Usage Guidelines	See “Example: Configuring SSM Mapping” on page 134.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

threshold

Syntax	threshold suppress <i>value</i> <reuse <i>value</i> >;
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options multicast forwarding-cache], [edit logical-routers <i>logical-router-name</i> routing-options multicast forwarding-cache], [edit routing-instances <i>routing-instance-name</i> routing-options multicast forwarding-cache], [edit routing-options multicast forwarding-cache]
Release Information	Statement introduced before JUNOS Release 7.4.
Description	Configure the suppression and reuse thresholds for multicast forwarding cache limits.
Options	<p>suppress <i>value</i>—Value to begin suppressing new multicast forwarding cache entries. This value is mandatory. This number should be greater than the reuse value. Range: 1 through 200,000</p> <p>reuse <i>value</i>—Value to begin creating new multicast forwarding cache entries. This value is optional. If configured, this number should be less than the suppress value. Range: 1 through 200,000</p>
Usage Guidelines	See “Configuring Multicast Forwarding Cache Limits” on page 137.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

