

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]
Description	Configure multicast forwarding cache limits.
Options	The statement is explained separately.
Usage Guidelines	See “Configuring Multicast Forwarding Cache Limits” on page 133.
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>]
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 all. For details about specifying interfaces, see the <i>JUNOS Network Interfaces and Class of Service Configuration Guide</i> .
Usage Guidelines	See “Configuring Multicast Scoping with the scope Statement” on page 123.
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 <i>value</i> <reuse <i>value</i> >; } scope <i>scope-name</i> { interface [<i>interface-names</i>]; prefix <i>destination-prefix</i> ; } scope-policy <i>policy-name</i> ; ssm-groups { <i>address</i> ; } }
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> routing-instances <i>routing-instance-name</i> routing-options], [edit logical-routers <i>logical-router-name</i> routing-options], [edit routing-instances <i>routing-instance-name</i> 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.

Description	Configure multicast routing options properties.
Options	The remaining statements are explained separately.

Usage Guidelines See “Configuring Multicast Scoping” on page 122, “Source-Specific Multicast Groups Overview” on page 128, and “Configuring Multicast Forwarding Cache Limits” on page 133.

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

prefix

Syntax `prefix destination-prefix;`

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

Description Configure the prefix for multicast scopes.

Options *destination-prefix*—Address range for the multicast scope.

Usage Guidelines See “Configuring Multicast Scoping with the scope Statement” on page 123.

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

scope

Syntax `scope scope-name {
 interface [interface-names];
 prefix destination-prefix;
}`

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

Description Configure multicast scoping.

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

The remaining statements are explained separately.

Usage Guidelines See “Configuring Multicast Scoping with the scope Statement” on page 123.

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.

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 124.

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

ssm-groups

Syntax `ssm-groups {
 address;
}`

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

Description Configure additional source-specific multicast (SSM) groups.

Options *address*—Address range of the additional SSM group.

Usage Guidelines See “Source-Specific Multicast Groups Overview” on page 128.

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]
Description	Configure the suppression and reuse thresholds for multicast forwarding cache limits.
Options	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 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
Usage Guidelines	See “Configuring Multicast Forwarding Cache Limits” on page 133.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

