

Chapter 18

Summary of DVMRP Configuration Statements

The following sections explain each of the Distance Vector Multicast Routing Protocol (DVMRP) configuration statements. The statements are organized alphabetically.

disable

Syntax	disable;
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp interface <i>interface-name</i>], [edit protocols dvmrp interface <i>interface-name</i>]
Description	Explicitly disable DVMRP on an interface.
Usage Guidelines	See “Disable DVMRP on an Interface” on page 135.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

dvmrp

Syntax	<pre>dvmrp { disable; export [<i>policy-names</i>]; import [<i>policy-names</i>]; interface <i>interface-name</i> { disable; hold-time <i>seconds</i>; metric <i>metric</i>; mode (forwarding unicast-routing); } rib-group <i>group-name</i>; traceoptions { file name <replace> <size <i>size</i>> <files <i>number</i>> <no-stamp> <(world-readable no-world-readable)>; flag flag <<i>flag-modifier</i>> <disable>; } }</pre>
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols], [edit protocols]
Description	Enable DVMRP on the router.
Default	DVMRP is disabled on the router.
Options	The statements are explained separately.
Usage Guidelines	See “Enable DVMRP” on page 134.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

export

Syntax	export [<i>policy-names</i>];
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp rib-group <i>group-name</i>] [edit protocols dvmrp rib-group <i>group-name</i>]
Description	Apply one or more policies to routes being exported from the routing table into DVMRP.
Options	<i>policy-names</i> —Name of one or more policies.
Usage Guidelines	See “Configure DVMRP Routing Policy” on page 136.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.
See Also	import on page 143

hold-time

Syntax	hold-time <i>seconds</i> ;
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp interface <i>interface-name</i>], [edit protocols dvmrp interface <i>interface-name</i>]
Description	How long a neighbor should consider the sending router (this router) to be operative (up).
Options	<i>seconds</i> —Hold time. Range: 1 through 255 Default: 35 seconds
Usage Guidelines	See “Modify the DVMRP Hold-Time Period” on page 135.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

import

Syntax	import [<i>policy-names</i>];
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp rib-group <i>group-name</i>], [edit protocols dvmrp rib-group <i>group-name</i>]
Description	Apply one or more policies to routes being imported into the routing table from DVMRP.
Options	<i>policy-names</i> —Name of one or more policies.
Usage Guidelines	See “Configure DVMRP Routing Policy” on page 136.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.
See Also	export on page 142

interface

Syntax	interface <i>interface-name</i> { disable; hold-time <i>seconds</i> ; metric <i>metric</i> ; }
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp], [edit protocols dvmrp]
Description	Enable DVMRP on an interface and configure interface-specific properties.
Options	<i>interface-name</i> —Name of the interface. 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> .
	The remaining statements are explained separately.
Usage Guidelines	See “Enable DVMRP” on page 134.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

metric

Syntax	metric <i>metric</i> ;
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp interface <i>interface-name</i>], [edit protocols dvmrp interface <i>interface-name</i>]
Description	Define the DVMRP metric value.
Options	<i>metric</i> —Metric value. Range: 1 through 31 Default: 1
Usage Guidelines	See “Modify the Metric Value” on page 135.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

mode

Syntax	mode (forwarding unicast-routing)
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp interface <i>interface-name</i>], [edit protocols dvmrp interface <i>interface-name</i>]
Description	Configure DVMRP multicast traffic forwarding or unicast routing.
Options	forwarding—DVMRP does unicast routing as well as multicast data forwarding. unicast-routing—DVMRP does the routing only. To forward multicast data, you must configure PIM on the interface.
Usage Guidelines	See “Configure DVMRP Routing Modes” on page 136.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

rib-group

Syntax	rib-group <i>group-name</i> ;
Hierarchy Level	[edit logical-routers <i>logical-router-name</i> protocols dvmrp], [edit protocols dvmrp]
Description	Associate a routing table group with DVMRP.
Options	<i>group-name</i> —Name of the routing table group. The name must be one that you defined with the rib-groups statement at the [edit routing-options] hierarchy level.
Usage Guidelines	See “Enable DVMRP” on page 134.
Required Privilege Level	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

traceoptions

Syntax traceoptions {
 file *name* <replace> <size *size*> <files *number*> <no-stamp>
 <(world-readable | no-world-readable)>;
 flag *flag* <flag-modifier> <disable>;
 }

Hierarchy Level [edit logical-routers *logical-router-name* protocols dvmrp],
 [edit protocols dvmrp]

Description Configure DVMRP tracing options.

To specify more than one tracing operation, include multiple flag statements.

Default The default DVMRP trace options are those inherited from the routing protocols traceoptions statement included at the [edit routing-options] hierarchy level.

Options disable—(Optional) Disable the tracing operation. You can use this option to disable a single operation when you have defined a broad group of tracing operations, such as all.

file *name*—Name of the file to receive the output of the tracing operation. Enclose the name within quotation marks. All files are placed in the directory /var/log. We recommend that you place tracing output in the dvmrp-log file.

files *number*—(Optional) Maximum number of trace files. When a trace file named *trace-file* reaches its maximum size, it is renamed *trace-file.0*, then *trace-file.1*, and so on, until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum number of files, you also must specify a maximum file size with the size option.

Range: 2 through 1000 files

Default: 2 files

flag—Tracing operation to perform. To specify more than one tracing operation, include multiple flag statements.

DVMRP Tracing Flags

all—All tracing operations

general—A combination of the normal and route trace operations

graft—Graft messages

neighbor—Neighbor probe messages

normal—All normal operations

Default: If you do not specify this option, only unusual or abnormal operations are traced.

packets—All DVMRP packets

poison—Poison-route-reverse packets

probe—Probe packets

prune—Prune messages

report—DVMRP route report packets

policy—Policy operations and actions

route—Routing table changes

state—State transitions

task—Interface transactions and processing

timer—Timer usage

flag-modifier—(Optional) Modifier for the tracing flag. You can specify one or more of these modifiers:

detail—Detailed trace information

receive—Packets being received

send—Packets being transmitted

no-stamp—(Optional) Do not place timestamp information at the beginning of each line in the trace file.

Default: If you omit this option, timestamp information is placed at the beginning of each line of the tracing output.

no-world-readable—(Optional) Disallow any user to read the log file.

replace—(Optional) Replace an existing trace file if there is one.

Default: If you do not include this option, tracing output is appended to an existing trace file.

size *size*—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). When a trace file named *trace-file* reaches this size, it is renamed *trace-file.0*. When *trace-file* again reaches its maximum size, *trace-file.0* is renamed *trace-file.1* and *trace-file* is renamed *trace-file.0*. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum file size, you must also specify a maximum number of trace files with the *files* option.

Syntax: *xk* to specify KB, *xm* to specify MB, or *xg* to specify GB

Range: 10 KB through the maximum file size supported on your system

Default: 1 MB

world-readable—(Optional) Allow any user to read the log file.

Usage Guidelines See “Trace DVMRP Protocol Traffic” on page 137.

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