Chapter 27

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 *logical-router-name* protocols dvmrp interface *interface-name*], [edit protocols dvmrp interface *interface-name*]

Release Information Statement introduced before JUNOS Release 7.4.

Description Explicitly disable DVMRP on an interface.

Usage Guidelines See "Disabling DVMRP on an Interface" on page 169.

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

dvmrp

Syntax

```
dvmrp {
    disable;
    export [ policy-names ];
    import [ policy-names ];
    interface interface-name {
      disable;
      hold-time seconds;
      metric metric;
      mode (forwarding | unicast-routing);
    }
    rib-group group-name;
    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],
[edit protocols]

Release Information Statement introduced before JUNOS Release 7.4.

Description Enable DVMRP on the router.

Default DVMRP is disabled on the router.

Options The statements are explained separately.

Usage Guidelines See "Enabling DVMRP" on page 167.

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

export

Syntax export [*policy-names*];

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

Release Information Statement introduced before JUNOS Release 7.4.

Description Apply one or more policies to routes being exported from the routing table into DVMRP.

Options *policy-names*—Name of one or more policies.

Usage Guidelines See "Configuring DVMRP Routing Policy" on page 169.

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 177

hold-time

Syntax hold-time *seconds*;

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

Release Information Statement introduced before JUNOS Release 7.4.

Description How long a neighbor should consider the sending router (this router) to be operative (up).

Options *seconds*—Hold time.
Range: 1 through 255
Default: 35 seconds

Usage Guidelines See "Modifying the DVMRP Hold-Time Period" on page 168.

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

import

Syntax import [*policy-names*];

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

Release Information Statement introduced before JUNOS Release 7.4.

Description Apply one or more policies to routes being imported into the routing table from DVMRP.

Options *policy-names*—Name of one or more policies.

Usage Guidelines See "Configuring DVMRP Routing Policy" on page 169.

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 176

interface

Syntax
```
interface interface-name {
    disable;
    hold-time seconds;
    metric metric;
}
```

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

Release Information Statement introduced before JUNOS Release 7.4.

Description Enable DVMRP on an interface and configure interface-specific properties.

Options *interface-name*—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 *JUNOS Network Interfaces Configuration Guide*.

The remaining statements are explained separately.

Usage Guidelines See "Enabling DVMRP" on page 167.

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

metric

Syntax
```
metric metric;
```

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

Release Information Statement introduced before JUNOS Release 7.4.

Description Define the DVMRP metric value.

Options *metric*—Metric value.
Range: 1 through 31
Default: 1

Usage Guidelines See "Modifying the Metric Value" on page 168.

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 *logical-router-name* protocols dvmrp interface *interface-name*], [edit protocols dvmrp interface *interface-name*]

Release Information Statement introduced before JUNOS Release 7.4.

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 Protocol Independent Multicast (PIM) on the interface.

Usage Guidelines See "Configuring DVMRP Routing Modes" on page 170.

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 *group-name*;

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

Release Information Statement introduced before JUNOS Release 7.4.

Description Associate a routing table group with DVMRP.

Options *group-name*—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 "Enabling DVMRP" on page 167.

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]

Release Information Statement introduced before JUNOS Release 7.4.

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: *x*k to specify KB, *x*m to specify MB, or *x*g 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 "Tracing DVMRP Protocol Traffic" on page 170.

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.