H Commands

hardware fabric flow-control multicast

To enable the **Cisco Nexus 7000 Series switch to handle multicast traffic more efficiently in microbursting environments, use the hardware fabric flow-control multicast** command. To disable this feature, use the **no** form of this command.

hardware fabric flow-control multicast [{*all-modulesforced* | *module module-number*}]
no sampler hardware fabric flow-control multicast [{*all-modulesforced* | *module module-number*}]

Syntax Description

all-modules	(Optional) Specifies the fabric flow-control on all modules.
forced	(Optional) Specifies the fabric flow-control mandatorily.
module	(Optional) Specifies the fabric flow-control to individual module(s).
module-number	Specifies module number. The range is from 1 to 18.

Command Default

None.

Command Modes

Global configuration

network-adminvdc-admin

Command History

Release	Modification
5.2(1)	This command was introduced.

Usage Guidelines

None.

This command does not require a license.

Examples

This example shows how to configure fabric flow control on all modules:

```
 switch(config)#
hardware fabric
flow-control multicast all-modules forced switch(config)#
```

Related Commands

Command	Description
show system internal xbar fabric-flow-control-info	Displays the hardware information.

hardware forwarding shim

To enable the hardware forwarding shim header knob**, use the hardware forwarding shim** command. To disable this feature, use the **no** form of this command.

hardware forwarding shim
no hardware forwarding shim

Syntax Description	This command has no arguments or keywords.
Command Default	None.
Command Modes	Global configuration mode Supported User Roles network-admin vdc-admin

Command History

Release	Modification
6.2(2)	This command was introduced.

Usage Guidelines

None.

This command does not require a license.

Examples

This example shows how to enable the hardware forwarding shim:

```
switch# config t
switch(config)# hardware forwarding shim
Disabling shim knob on vdc 1
```

Related Commands

Command	Description
show system internal xbar fabric-flow-control-info	Displays the hardware information.

hardware proxy layer-3 replication

To configure specific modules and physical interfaces on the N7K-M Series module to provide the proxy routing for egress replication of Layer 3 multicast packets on the N7K-F Series module, use the hardware proxy layer-3 replication command. To delete the user configuration and to use all M-series modules in the virtual device context (VDC) for egress replication, use the no form of this command.

hardware proxy layer-3 replication {**exclude** | **use**} {**interface ethernet** *slot*/*port* | **module** *slot-number*} [**module-type f1**]
no hardware proxy layer-3 replication

Syntax Description

exclude	Specifies all available members.
use	Specifies members.
interface	Specifies interfaces.
ethernet	Specifies the ethernet interface.
slot/port	Slot or port number. The range is from 1 to 253.
module	Specifies the modules.
slot number	Slot number. The range is from 1 to 18.
module-type*f1*	(Optional) Specifies the type of modules to perform proxy Layer 3 replication.

Command Default   None

Command Modes

Global configuration mode

Supported User Roles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines   This command applies only to the Cisco Nexus 7000 Series chassis that contains an F1 Series module or an M1 Series module. This command applies when you are using either a FabricPath or Ethernet interface.

This command does not require a license.

Examples   The example shows how to configure a service group timeout in seconds:

```
switch(config)# hardware proxy layer-3 replication exclude interface ethernet 2/1-16,
```

```
ethernet 3/1, ethernet 4/1-2
switch(config)#
```

Related Commands

Command	Description
show hardware proxy layer-3 detail	Displays detailed information on the proxy Layer 3 functionality.

hardware proxy layer-3 replication rebalance-mode

To configure the hardware proxy Layer 3 multicast balance mode for replication, use the hardware proxy layer-3 replication rebalance-mode command. To disable this feature, use the no form of this command.

hardware proxy layer-3 replication rebalance-mode {**auto** | **manual**}
no hardware proxy layer-3 replication rebalance-mode {**auto** | **manual**}

Syntax Description

auto	Specifies to automatically rebalance VLAN interfaces on available replicators.
manual	Specifies to manually rebalance VLAN interfaces on available replicators using the command-line interface (CLI).

Command Default

Manual

Command Modes

Global configuration mode

Supported User Roles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines

This command applies only to the Cisco Nexus 7000 Series chassis that contains an F1 Series module or an M1 Series module. This command applies when you are using either a FabricPath or Ethernet interface.

Note   The system automatically balances all Layer 3 routing traffic among the available proxy routing interfaces on the M Series modules in the chassis.

This command does not require a license.

Examples

This example shows how to automatically rebalance VLAN interfaces on available replicators:

```
switch(config)# hardware proxy layer-3 replication rebalance-mode auto
```

This example shows how to manually rebalance VLAN interfaces on available replicators using the CLI:

```
switch(config)# hardware proxy layer-3 replication rebalance-mode manual
```

Related Commands

Command	Description
show hardware proxy layer-3 detail	Displays detailed information on the proxy Layer 3 functionality.

hardware proxy layer-3 replication trigger rebalance

To trigger one-time load balancing among all the proxy routing multicast replication interfaces, use the hardware proxy layer-3 replication trigger rebalance command.

hardware proxy layer-3 replication trigger rebalance

Syntax Description   This command has no arguments or keywords.

Command Default   Manual

Command Modes

EXEC mode

Supported User Roles

network-admin

vdc-admin

Command History

Release	Modification
5.1(1)	This command was introduced.

Usage Guidelines   This command applies only to the Cisco Nexus 7000 Series chassis that contains an F1 Series module or an M1 Series module. This command applies when you are using either a FabricPath or Ethernet interface.

This command does not require a license.

Examples   This example shows how to configure load balancing among the proxy routing replication interfaces:

```
switch# hardware proxy layer-3 replication trigger rebalance
```

Related Commands

Command	Description
show hardware proxy layer-3 detail	Displays detailed information on the proxy Layer 3 functionality.