
Configuration Commands

Generic Commands

open-flow

Syntax	open-flow
Context	config
Description	This command enables configuration content for OpenFlow Hybrid Switch compatibility. The no form of the command removes the OpenFlow configuration from the context.

of-switch

Syntax	[no] of-switch <i>ofs-name</i>
Context	config>open-flow
Description	This command creates an OpenFlow switch instance. The no form of the command deletes the OpenFlow switch instance from the context.
Default	no of-switch
Parameters	<i>string</i> — Specifies the name of the OpenFlow switch instance, a string up to 32 characters.

controller

Syntax	[no] controller <i>ip-address:port</i>
Context	config>open-flow>of-switch
Description	This command configures the OpenFlow controller for this OpenFlow switch. Up to two controllers can be configured per OpenFlow switch instance. The no form of this command deletes the controller for this OpenFlow switch instance.
Default	no controller
Parameters	<i>ip-address:port</i> — Specifies the IP address and TCP port for the OpenFlow channel to the controller.

description

Syntax	description <i>string</i> no description
Context	config>open-flow>of-switch
Description	This command allows the user to configure a description string for the specified OpenFlow controller instance. The no form of this command deletes the description of the specified OpenFlow controller instance.
Default	no controller
Parameters	<i>string</i> — Specifies a description of the OpenFlow switch instance, a string up to 256 characters.

echo-interval

Syntax	echo-interval <i>seconds</i> no echo-interval
Context	config>open-flow>of-switch
Description	This command configures the Echo Request interval for monitoring the OpenFlow control channels to the controller(s) for this OpenFlow switch instance. The no form of this command restores default value .
Default	10
Parameters	<i>seconds</i> — Specifies an interval, in seconds. Values 1—3600

echo-multiple

Syntax	echo-multiple <i>value</i> no echo-multiple
Context	config>open-flow>of-switch
Description	This command configures the number of consecutive Echo Reply messages that must be lost to declare OF control channel down. The no form of this command restores default value.
Default	3
Parameters	<i>value</i> — Specifies the threshold value for the number of consecutive Echo Reply messages lost. Values 3—100

logical-port-status

Syntax	[no] logical-port-status [rsvp-te mpls-tp]
Context	config>open-flow>of-switch
Description	This command enables status change reporting to the OpenFlow controller for the specified logical port type. To report on multiple logical port types, the command needs to be executed multiple times with different logical port specified as required. The no form of this command disables status reporting for specified or all (no argument) logical ports.
Default	no logical-port-status
Parameters	rsvp-te — Enables reporting on RSVP-TE LSP logical ports. mpls-te — Enables reporting on MPLS-TE logical ports.

shutdown

Syntax	[no] shutdown
Context	config>open-flow>of-switch
Description	This command administratively enables or disables the OpenFlow switch instance. Disabling the switch purges all flowtable entries.
Default	shutdown

flowtable

Syntax	[no] flowtable of-table-id
Context	config>open-flow>of-switch
Description	This command configures the flow table parameters for this OpenFlow switch instance. The no form of this command restores flow table configuration default settings.
Default	no flowtable
Parameters	<i>of-table-id</i> — Specifies an identifier of the OpenFlow table, a string up to 256 characters.

max-size

Syntax	max-size size no max-size
Context	config>open-flow>of-switch>flowtable

Description	This command configures the size for the specified flow table. The OpenFlow switch instance must be shutdown to modify this parameter. The no form of this command restores the default size.
Default	no max-size
Parameters	<i>size</i> — Specifies the maximum size limit for the flow table. The size limit is a total for both IPv4 and IPv6. Values 1 — 262144 Default 1000

no-match-action

Syntax	no-match-action {drop fall-through} no no-match-action
Context	config>open-flow>of-switch>flowtable
Description	This command configures the action for the Flow Table when a packet does not match any entry for the controller. The OpenFlow switch instance must be shutdown to modify this parameter. The no form of this command restores the default action.
Default	no-match-action fall-through
Parameters	drop — Packets that do not match entries in the flow table as programmed by the OpenFlow switch will be dropped fall-through — Packets that do not match entries in the flow table as programmed by the OpenFlow switch will be forwarded using regular processing of the router. Note that fall-through applies if an error occurs that prevents a flow-table from being installed in a filter policy.

switch-defined-cookie

Syntax	switch-defined-cookie [no] switch-defined-cookie
Context	config>open-flow>of-switch>flowtable
Description	This command enables OpenFlow switch-defined Flow Table cookie encoding for flowtable 0 that allows multi-service operation. The no form of the command disables the above function.
Default	no switch-defined-cookie