

JUNOS-to-Cisco IOS/XR Command Reference

Here are some very useful command references when moving between JUNOS and Cisco IOS/XR:

System Administration & General Commands

Juniper Command	Description	Cisco Command	Description
<code>user@host%</code>	Unix Shell - enter cli for Operational Mode.		
<code>user@host></code>	Operational mode	<code>router></code>	user exec mode
	Configuration mode	<code>config t</code>	To enter configuration mode. (from priveledge mode)
<code>exit</code>	To log out	<code>exit</code>	To log out
<code>show version</code>	To show JUNOS version	<code>sh version</code>	To show IOS Version
<code>show system processes extensive</code>	View CPU utilization per process	<code>ssh process cpu</code>	View CPU utilization per process
<code>show system storage</code>	View free disk space in the router's file system	<code>dir</code>	View free disk space in the router's file system
<code>show system uptime</code>	To verify how long router has been up	<code>sh version</code>	To verify how long router has been up
<code>show chassis forwarding</code>	View how long router components have been up.	<code>sh version, sh diag</code>	View how long router components have been up.
<code>show chassis environment</code>	View power supply, fan, and operating temperature	<code>sh environment</code>	View power supply, fan, and operating temperature
<code>show chassis hardware</code>	View router hardware and versions	<code>sh version, sh diag</code>	View router hardware and versions
<code>show chassis routing-engine</code>	To view memory usage	<code>sh memory sum</code>	View memory usage
<code>request system reboot</code>	To reboot router.	<code>reload</code>	To reboot router
<code>show ntp associations</code>	Show NTP associations	<code>sh ntp associations</code>	Show NTP associations
<code>show ntp status</code>	Show NTP Status	<code>sh ntp status</code>	Show NTP Status
<code>show system alarms</code>	View all active alarms on a router		
<code>show system users</code>	View users logged in to a router	<code>sh users</code>	View users logged in to a router
<code>show system connetions</code>	View protocols running on router	<code>sh protocols</code>	View routing protocols running on router
<code>request system logout username</code>	Log a user out of a router	<code>clear line <line nubmer></code>	Log a user out of a router
<code><command> no-more</code>	To extend data to end of page for a single command.	<code>term length 0</code>	To extend data to end of page

Configuration

Juniper Command	Description	Cisco Command	Description
<code>configure -or- edit</code>	Enter configuraiton mode	<code>config t</code>	Enter global configuration mode
<code>set</code>	Set a value in the configuration.	<code><command></code>	Set a value in the configuration.
<code>delete</code>	Remove a value from the configuration.	<code>no <command></code>	Remove a value from the configuration.
<code>up -or- exit</code>	Move you back up the config hierchy tree one level	<code>exit</code>	Move you back up the config hierchy tree one level
<code>top</code>	Move you to the top of the config hierchy.		
<code>edit</code>	Moves you down the hierchy tree. Ex. edit protocols		

<code>disable</code>	Shutdown an interface 'set interfaces so-0/0/0 disable'	<code>shutdown</code>	Administratively shutdown an interface.
<code>activate</code>	Allows the router to recognize a deactivated interface.		
<code>deactivate</code>	Adds an 'inactive' tag to the interface config.		
<code>load override terminal</code>	Opens a paste buffer in the CLI.		
<code>commit</code>	Close the paste buffer with the Ctrl+D keystroke.	Copy and paste configuration	Copy a text configuration into the router.
<code>rollback</code>	Issue before the router can use any new config.		
<code>exit -or- exit-configuration-mode</code>	To easily restore an old configuration.		
<code>run <operational command></code>	Exit configuration mode	<code>Cntrl + Z -or- end</code>	To exit configuration mode
	Use any operational command from configuration mode.	<code>do <command></code>	Enter show commands from configuration mode.

Troubleshooting

General

Juniper Command	Description	Cisco Command	Description
<code>show configuration</code>	View current configuration.	<code>sh running-configuration</code>	View current configuration.
<code>show configuration display set</code>	View the set commands for the configuration		
<code>show class-of-service interface</code>	See most of the CoS configuration for an interface	<code>show policy-map interface</code>	View service-policy applied to interface.
<code>show log messages</code>	To view router event log entries	<code>sh log</code>	View router event log entries
<code>show interfaces</code>	To show ip interface status and config	<code>sh ip interfaces</code>	Show ip interface status and config
<code>show interfaces terse</code>	Displays a summary of all interfaces.	<code>sh ip int brief</code>	Displays a summary of all interfaces.
<code>show interfaces queue</code>	Displays detailed information on interface queues	<code>show policy-map interface</code>	View service-policy applied to interface.
<code>show route</code>	Show all IP routes the router has learned about.		
<code>show route summary</code>	Summary of all routing information	<code>sh ip route summary</code>	Summary of all routing information
<code>show route forwarding-table</code>	View the current IP forwarding table.	<code>show ip route</code>	View the current IP forwarding table.
<code>show route 10.0.0.0/8 detail</code>	View detailed route information.		
<code>clear interfaces statistics all</code>	Clear all statistics	<code>clear counters</code>	Reset all stats.
<code>clear interfaces statistics se-0/0/0</code>	Clear statistics on an	<code>clear counters Serial0</code>	Reset data stats under interfaces or pvcs
		<code>clear ip route *</code>	Clear routing table
<code>request support information</code>	System diagnostic info for Juniper.	<code>show tech</code>	System diagnostic info for Cisco.

BGP

Juniper Command	Description	Cisco Command	Description
<code>show bgp summary</code>	Check the status of BGP peers.	<code>sh ip bgp summary</code>	Check the status of BGP peers.

<code>show bgp neighbor</code>	View detailed informations about each BGP peer	<code>sh ip bgp neighbor</code>	View detailed informations about each BGP peer
<code>show route advertising-protocol bgp neighbor</code>	View BGP routes advertised to a peer	<code>sh ip bgp neighbor advertised</code>	View BGP routes advertised to a peer
<code>show route receive-protocol bgp a peer</code>	View BGP routes received from a peer	<code>sh ip bgp neighbor received</code>	View BGP routes received from a peer
<code>show route protocol bgp (detail)</code>	View BGP routes w/BGP attributes.	<code>sh ip bgp</code>	View BGP routes w/BGP attributes.
<code>clear bgp neighbor x.x.x.x</code>	Reset BGP neighbor session	<code>clear ip bgp *</code>	Reset BGP neighbor session

IS-IS

Juniper Command	Description	Cisco Command	Description
<code>show isis interface (detail)</code>	View IS-IS interface parameters.	<code>sh clns interface</code>	View IS-IS interface parameters.
<code>show isis adjacency</code>	View IS-IS neighbor status	<code>sh clns neighbor</code>	View IS-IS neighbor status
<code>show isis database</code>	View IS-IS Database	<code>sh isis database</code>	View IS-IS Database
<code>show route protocol isis</code>	Command to view all IS-IS routes.	<code>sh ip route isis</code>	Command to view all IS-IS routes.

OSPF

Juniper Command	Description	Cisco Command	Description
<code>show ospf neighbor</code>	View OSPF neighbor status	<code>sh ip ospf neighbor</code>	View OSPF neighbor status
<code>show ospf database</code>	View OSPF database	<code>sh ip ospf database</code>	View OSPF database
<code>show ospf interface (detail)</code>	View OSPF interface parameters.	<code>sh ip ospf interface</code>	View OSPF interface parameters.
<code>show route protocol ospf</code>	Command to view all OSPF routes.	<code>sh ip route ospf</code>	Command to view all OSPF routes.

MPLS

Juniper Command	Description	Cisco Command	Description
<code>show mpls interface</code>			
<code>show mpls lsp</code>	View all ingress, transit, and egress LSPs	<code>sh mpls ldp bindings (detail)</code>	View all ingress, transit, and egress LSPs
<code>show mpls lsp ingress (extensive)</code>	View LSP status		
<code>show mpls lsp transit (extensive)</code>	View LSP status		
<code>show mpls lsp egress (extensive)</code>	View LSP status		
<code>show rsvp interface</code>	View interface RSVP information	<code>sh ip rsvp interface</code>	View interface RSVP information
<code>show route table inet.3</code>	View egress address for all operational LSPs		

Multicast

Juniper Command	Description	Cisco Command	Description
<code>show multicast route</code>	Displays information about active groups and sources	<code>sh ip mroute</code>	Displays information about active groups and sources
<code>show route table inet.1</code>	Displays information about active groups and sources	<code>sh ip mroute</code>	Displays information about active groups and sources
<code>show pim bootstrap</code>	Verify the bootstrap router	<code>sh ip pim bsr-router</code>	Verify the bootstrap router
<code>show pim join extensive</code>	Display info about known groups, sources, & interfaces	<code>sh ip igmp groups</code>	Display info about known groups, sources, & interfaces

<code>show pim rps</code>	Verify the RP	<code>sh ip pim rp</code>	Verify the RP
<code>show pim neighbors</code>	Verify PIM neighbor establishment	<code>sh ip pim neighbor</code>	Verify PIM neighbor establishment

Firewall Filters

Juniper Command	Description	Cisco Command	Description
<code>show firewall</code>	View counters and stats for all filters	<code>sh access-lists</code>	View access-list counters
<code>clear firewall</code>	Clear filter stats	<code>clear ip access-list counters</code>	Clear access-list counters
<code>show interfaces filters</code>	View filters configured on all interfaces	<code>sh ip interfaces</code>	View access-list applied to interface