New and Changed Information

This chapter provides release-specific information for each new and changed feature in the *Cisco Nexus 7000 Series NX-OS Multicast Routing Command Reference*. The latest version of this document is available at the following Cisco website:
http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-command-reference-list.html

To check for additional information about this Cisco NX-OS Release, see the *Cisco NX-OS Release Notes* available at the following Cisco website:
http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-release-notes-list.html

The table below summarizes the new and changed features for the *Cisco Nexus 7000 Series NX-OS Multicast Routing Command Reference*.

Table 1   New and Changed Features

Feature	Description	Changed in Release
Multicast performance enhancement	Added the **hardware forwarding shim** command.	6.2(2)
ip igmp snooping max-gq-miss	This command was introduced.	6.2(2)
show ip igmp groups	Changed the position of the **summary** option in the **show ip igmp groups** and **show ip igmp route** set of commands (The **summary** option used to be after the **vrf** option and now it will precede it).	6.1(1)
ip pim register-until-stop	This command was introduced.	5.2(1)
layer-2 multicast lookup mac (Global configuration mode)	This command was introduced.	5.2(1)
layer-2 multicast lookup mac (VLAN configuration mode)	This command was introduced.	5.2(1)
mac address-table multicast	This command was introduced.	5.2(1)
show forwarding distribution l2 multicast vlan	This command was introduced.	5.2(1)
hardware proxy layer-3 replication	This command was introduced.	5.1(1)
hardware proxy layer-3 replication trigger rebalance	This command was introduced.	5.1(1)

Table 1 **New and Changed Features**

Feature	Description	Changed in Release
hardware proxy layer-3 replication rebalance-mode	This command was introduced.	5.1(1)
show hardware proxy layer-3 detail	This command was introduced.	5.1(1)
ip pim rp-address	Added the keyword **override**	5.1(1)
[**ip** | **ipv6**] **pim jp-policy** *policy-name* [**in** | **out**]	Added the keywords **in** and **out**.	4.2(3)
ip pim pre-build-spt	This command was introduced.	4.2(3)
ip pim sg-expiry-timer	This command was introduced.	4.2(3)
[**ip** | **ipv6**] **routing multicast software-replicate**	This command was introduced.	4.2(3)
ip igmp join-group	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ip igmp static-oif	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ip pim rp-address	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ip pim ssm range	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ip routing multicast event-history	Added the keyword **mfdm-events**. Changed the keyword **mfdm** to **mfdm-debugs**.	4.2(1)
[**ip** | **ipv4**] **routing multicast holddown**	This command was introduced.	4.2(1)
ipv6 [**icmp**] **mld join-group**	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ipv6 [**icmp**] **mld static-oif**	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ipv6 pim rp-address	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ipv6 pim ssm range	Added the keyword **route-map** and argument *policy-name*.	4.2(1)
ipv6 routing multicast event-history	Added the keyword **mfdm-events**. Changed the keyword **mfdm** to **mfdm-debugs**.	4.2(1)
clear ip igmp event-history	This command was introduced.	4.2(1)
clear ip igmp groups	This command was introduced.	4.1(2)
clear ip igmp route	This command was introduced.	4.1(2)
clear ip igmp snooping event-history	This command was introduced.	4.2(1)
clear ip msdp event-history	This command was introduced.	4.2(1)
clear ip pim event-history	This command was introduced.	4.2(1)
clear ip pim route	This command was introduced.	4.2(1)
clear ip routing multicast event-history	This command was introduced.	4.2(1)
clear ipv6 mld groups	This command was introduced.	4.2(1)
clear ipv6 mld route	This command was introduced.	4.2(1)
clear ipv6 pim event-history	This command was introduced.	4.2(1)
clear ipv6 pim route	This command was introduced.	4.2(1)

Table 1   ***New and Changed Features***

Feature	Description	Changed in Release
clear ipv6 routing multicast event-history	This command was introduced.	4.2(1)
ip igmp enforce-router-alert	This command was introduced.	4.2(1)
ip igmp event-history	This command was introduced.	4.2(1)
ip igmp join-group	Added the keyword **route-map** and argument *policy-name*	4.2(1)
ip igmp snooping event-history	This command was introduced.	4.2(1)
ip igmp snooping group-timeout	This command was introduced.	4.2(1)
ip igmp snooping group-timeout (VLAN)	This command was introduced.	4.2(1)
ip igmp snooping link-local-groups-suppression	This command was introduced.	4.2(1)
ip igmp snooping optimise-multicast-flood	This command was introduced.	4.2(1)
ip igmp snooping proxy	This command was introduced.	4.2(1)
ip igmp snooping proxy (VLAN)	This command was introduced.	4.2(1)
ip igmp snooping querier	This command was introduced.	4.2(1)
ip msdp event-history	This command was introduced.	4.2(1)
ip pim event-history	This command was introduced.	4.2(1)
ip pim spt-threshold infinity	This command was introduced.	4.2(1)
ip pim ssm range	This command was introduced.	4.2(1)
ip pim state-limit	This command was introduced.	4.2(1)
ip pim use-shared-tree-only	The keyword **group-list** was added and a route-map policy name was used to define groups	4.2(1)
ip routing multicast event-history	This command was introduced.	4.2(1)
ipv6 pim event-history	This command was introduced.	4.2(1)
ipv6 pim ssm range	The keyword **none** was added	4.2(1)
ipv6 pim use-shared-tree-only	Keyword **group-list** was added and a route-map policy name is used to define groups	4.2(1)
ipv6 routing multicast event-history	This command was introduced.	4.2(1)
ipv6 routing multicast holddown	This command was introduced.	4.2(1)
show ip igmp snooping event-history	This command was introduced.	4.2(1)
ip pim jp-policy	The optional **in** and **out** parameters were added.	4.2(3)
ip pim pre-build-spt	This command was introduced.	4.2(3)
ip routing multicast software-replicate	This command was introduced.	4.2(3)
ipv6 pim jp-policy	The optional **in** and **out** parameters were added.	4.2(3)
ipv6 routing multicast software-replicate	This command was introduced.	4.2(3)

Table 1　　　*New and Changed Features*

Feature	Description	Changed in Release
ip igmp event-history	Replaced the buffer type keywords **debug** and **event** with keywords **group-debugs**, **group-events**, **interface-debugs**, and **interface-events**.	4.1(3)
ip igmp immediate-leave	This command was introduced.	4.1(3)
ip msdp event-history	Changed the buffer type arguments to required.	4.1(3)
ipv6 mld immediate-leave	This command was introduced.	4.1(3)
show forwarding ipv6 multicast route	Added the *group-addr* and *source-addr* arguments.	4.1(3)
show ip igmp interface	Changed output to include vPC information when IGMP is in vPC mode.	4.1(3)
show ip igmp snooping mrouter	Changed output to include vPC information.	4.1(3)
show ip igmp snooping statistics	Changed output to include vPC information.	4.1(3)
show ip pim statistics	Changed output to include vPC information when PIM is in vPC mode.	4.1(3)
clear ip igmp interface statistics	This command was introduced.	4.0(3)
clear ip igmp snooping statistics vlan	Added the keyword **all**.	4.0(3)
clear ip mroute	This command was introduced.	4.0(3)
clear ip msdp route	This command was introduced.	4.0(3)
clear ip msdp sa-cache	This command was removed.	4.0(3)
clear ip pim interface statistics	The interface argument was made optional.	4.0(3)
clear ipv6 mroute	This command was introduced.	4.0(3)
clear ipv6 pim interface statistics	This command was introduced.	4.0(3)
clear routing ipv6 multicast	This command was introduced.	4.0(3)
clear routing multicast	This command was introduced.	4.0(3)
clear ip msdp route	This command was removed.	4.0(3)
ip igmp snooping report-suppression	Global configuration mode was added.	4.0(3)
ip igmp snooping v3-report-suppression (Global)	This command was introduced.	4.0(3)
ip igmp snooping v3-report-suppression (VLAN)	This command was introduced.	4.0(3)
ip msdp peer	The remote AS number was made an optional argument.	4.0(3)
ip pim register-rate-limit	This command was introduced.	4.0(3)
ipv6 pim register-rate-limit	This command was introduced.	4.0(3)
show ip netstack mroute	This command was introduced.	4.0(3)
ip pim bidir-rp-limit	This command was introduced.	4.0(2)
ipv6 pim bidir-rp-limit	This command was introduced.	4.0(2)
clear ip igmp snooping statistics vlan	This command was introduced.	4.0(1)

Table 1   New and Changed Features

Feature	Description	Changed in Release
clear ip msdp peer	This command was introduced.	4.0(1)
clear ip msdp policy statistics sa-policy	This command was introduced.	4.0(1)
clear ip msdp route	This command was introduced.	4.0(1)
clear ip msdp sa-cache	This command was introduced.	4.0(1)
clear ip msdp statistics	This command was introduced.	4.0(1)
clear ip pim interface statistics	This command was introduced.	4.0(1)
clear ip pim policy statistics	This command was introduced.	4.0(1)
clear ip pim statistics	This command was introduced.	4.0(1)
clear ipv6 pim interface statistics	This command was introduced.	4.0(1)
clear ipv6 pim policy statistics	This command was introduced.	4.0(1)
clear ipv6 pim statistics	This command was introduced.	4.0(1)
feature msdp	This command was introduced.	4.0(1)
feature pim	This command was introduced.	4.0(1)
feature pim6	This command was introduced.	4.0(1)
ip igmp access-group	This command was introduced.	4.0(1)
ip igmp flush-routes	This command was introduced.	4.0(1)
ip igmp group-timeout	This command was introduced.	4.0(1)
ip igmp join-group	This command was introduced.	4.0(1)
ip igmp last-member-query-count	This command was introduced.	4.0(1)
ip igmp last-member-query-response-time	This command was introduced.	4.0(1)
ip igmp query-interval	This command was introduced.	4.0(1)
ip igmp query-max-response-time	This command was introduced.	4.0(1)
ip igmp query-timeout	This command was introduced.	4.0(1)
ip igmp report-link-local-groups	This command was introduced.	4.0(1)
ip igmp report-policy	This command was introduced.	4.0(1)
ip igmp robustness-variable	This command was introduced.	4.0(1)
ip igmp snooping (Global)	This command was introduced.	4.0(1)
ip igmp snooping (VLAN)	This command was introduced.	4.0(1)
ip igmp snooping explicit-tracking	This command was introduced.	4.0(1)
ip igmp snooping fast-leave	This command was introduced.	4.0(1)
ip igmp snooping last-member-query-interval	This command was introduced.	4.0(1)
ip igmp snooping mrouter interface	This command was introduced.	4.0(1)

Table 1 **New and Changed Features**

Feature	Description	Changed in Release
ip igmp snooping optimised-multicast-flood	This command was introduced.	4.0(1)
ip igmp snooping report-suppression	This command was introduced.	4.0(1)
ip igmp snooping static-group	This command was introduced.	4.0(1)
ip igmp startup-query-count	This command was introduced.	4.0(1)
ip igmp startup-query-interval	This command was introduced.	4.0(1)
ip igmp state-limit	This command was introduced.	4.0(1)
ip igmp static-oif	This command was introduced.	4.0(1)
ip igmp version	This command was introduced.	4.0(1)
ip mroute	This command was introduced.	4.0(1)
ip msdp description	This command was introduced.	4.0(1)
ip msdp flush-routes	This command was introduced.	4.0(1)
ip msdp group-limit	This command was introduced.	4.0(1)
ip msdp keepalive	This command was introduced.	4.0(1)
ip msdp mesh-group	This command was introduced.	4.0(1)
ip msdp originator-id	This command was introduced.	4.0(1)
ip msdp password	This command was introduced.	4.0(1)
ip msdp peer	This command was introduced.	4.0(1)
ip msdp reconnect-interval	This command was introduced.	4.0(1)
ip msdp sa-interval	This command was introduced.	4.0(1)
ip msdp sa-limit	This command was introduced.	4.0(1)
ip msdp sa-policy in	This command was introduced.	4.0(1)
ip msdp sa-policy out	This command was introduced.	4.0(1)
ip msdp shutdown	This command was introduced.	4.0(1)
ip pim anycast-rp	This command was introduced.	4.0(1)
ip pim auto-rp listen	This command was introduced.	4.0(1)
ip pim auto-rp mapping-agent	This command was introduced.	4.0(1)
ip pim auto-rp mapping-agent-policy	This command was introduced.	4.0(1)
ip pim auto-rp rp-candidate	This command was introduced.	4.0(1)
ip pim auto-rp rp-candidate-policy	This command was introduced.	4.0(1)
ip pim border	This command was introduced.	4.0(1)
ip pim bsr bsr-policy	This command was introduced.	4.0(1)
ip pim bsr-candidate	This command was introduced.	4.0(1)
ip pim bsr forward	This command was introduced.	4.0(1)
ip pim bsr listen	This command was introduced.	4.0(1)

Table 1   **New and Changed Features**

Feature	Description	Changed in Release
ip pim bsr rp-candidate-policy	This command was introduced.	4.0(1)
ip pim dr-priority	This command was introduced.	4.0(1)
ip pim flush-routes	This command was introduced.	4.0(1)
ip pim hello-authentication ah-md5	This command was introduced.	4.0(1)
ip pim hello-interval	This command was introduced.	4.0(1)
ip pim jp-policy	This command was introduced.	4.0(1)
ip pim log-neighbor-changes	This command was introduced.	4.0(1)
ip pim neighbor-policy	This command was introduced.	4.0(1)
ip pim register-policy	This command was introduced.	4.0(1)
ip pim rp-address	This command was introduced.	4.0(1)
ip pim rp-candidate	This command was introduced.	4.0(1)
ip pim send-rp-announce	This command was introduced.	4.0(1)
ip pim send-rp-discovery	This command was introduced.	4.0(1)
ip pim sparse-mode	This command was introduced.	4.0(1)
ip pim spt-threshold infinity	This command was introduced.	4.0(1)
ip pim ssm policy	This command was introduced.	4.0(1)
ip pim ssm range	This command was introduced.	4.0(1)
ip pim use-shared-tree-only	This command was introduced.	4.0(1)
ipv6 mld access-group	This command was introduced.	4.0(1)
ipv6 mld group-timeout	This command was introduced.	4.0(1)
ipv6 mld join-group	This command was introduced.	4.0(1)
ipv6 mld last-member-query-count	This command was introduced.	4.0(1)
ipv6 mld last-member-query-response-time	This command was introduced.	4.0(1)
ipv6 mld querier-timeout	This command was introduced.	4.0(1)
ipv6 mld query-interval	This command was introduced.	4.0(1)
ipv6 mld query-max-response-time	This command was introduced.	4.0(1)
ipv6 mld query-timeout	This command was introduced.	4.0(1)
ipv6 mld report-link-local-groups	This command was introduced.	4.0(1)
ipv6 mld report-policy	This command was introduced.	4.0(1)
ipv6 mld robustness-variable	This command was introduced.	4.0(1)
ipv6 mld ssm-translate	This command was introduced.	4.0(1)
ipv6 mld startup-query-count	This command was introduced.	4.0(1)
ipv6 mld startup-query-interval	This command was introduced.	4.0(1)
ipv6 mld state-limit	This command was introduced.	4.0(1)

Table 1   *New and Changed Features*

Feature	Description	Changed in Release
ipv6 mld static-oif	This command was introduced.	4.0(1)
ipv6 pim anycast-rp	This command was introduced.	4.0(1)
ipv6 pim border	This command was introduced.	4.0(1)
ipv6 pim bsr bsr-policy	This command was introduced.	4.0(1)
ipv6 pim bsr-candidate	This command was introduced.	4.0(1)
ipv6 pim bsr forward	This command was introduced.	4.0(1)
ipv6 pim bsr listen	This command was introduced.	4.0(1)
ipv6 pim bsr rp-candidate-policy	This command was introduced.	4.0(1)
ipv6 pim dr-priority	This command was introduced.	4.0(1)
ipv6 pim hello-interval	This command was introduced.	4.0(1)
ipv6 pim jp-policy	This command was introduced.	4.0(1)
ipv6 pim log-neighbor-changes	This command was introduced.	4.0(1)
ipv6 pim neighbor-policy	This command was introduced.	4.0(1)
ipv6 pim rp-candidate	This command was introduced.	4.0(1)
ipv6 pim sparse-mode	This command was introduced.	4.0(1)
ipv6 pim ssm range	This command was introduced.	4.0(1)
ipv6 pim state-limit	This command was introduced.	4.0(1)
ipv6 pim use-shared-tree-only	This command was introduced.	4.0(1)
restart igmp	This command was introduced.	4.0(1)
restart msdp	This command was introduced.	4.0(1)
restart pim	This command was introduced.	4.0(1)
restart pim6	This command was introduced.	4.0(1)
show forwarding distribution ip igmp snooping	This command was introduced.	4.0(1)
show forwarding distribution ipv6 multicast route	This command was introduced.	4.0(1)
show forwarding distribution multicast	This command was introduced.	4.0(1)
show forwarding distribution multicast client	This command was introduced.	4.0(1)
show forwarding distribution multicast outgoing-interface-list	This command was introduced.	4.0(1)
show forwarding ipv6 multicast route	This command was introduced.	4.0(1)
show forwarding multicast outgoing-interface-list	This command was introduced.	4.0(1)
show forwarding multicast route	This command was introduced.	4.0(1)

Table 1   New and Changed Features

Feature	Description	Changed in Release
show ip igmp groups	This command was introduced.	4.0(1)
show ip igmp interface	This command was introduced.	4.0(1)
show ip igmp local-groups	This command was introduced.	4.0(1)
show ip igmp route	This command was introduced.	4.0(1)
show ip igmp snooping	This command was introduced.	4.0(1)
show ip igmp snooping explicit-tracking	This command was introduced.	4.0(1)
show ip igmp snooping groups	This command was introduced.	4.0(1)
show ip igmp snooping mrouter	This command was introduced.	4.0(1)
show ip igmp snooping querier	This command was introduced.	4.0(1)
show ip igmp snooping statistics	This command was introduced.	4.0(1)
show ip mroute	This command was introduced.	4.0(1)
show ip mroute summary	This command was introduced.	4.0(1)
show ip msdp count	This command was introduced.	4.0(1)
show ip msdp mesh-group	This command was introduced.	4.0(1)
show ip msdp peer	This command was introduced.	4.0(1)
show ip msdp policy statistics sa-policy	This command was introduced.	4.0(1)
show ip msdp route	This command was introduced.	4.0(1)
show ip msdp rpf	This command was introduced.	4.0(1)
show ip msdp sa-cache	This command was introduced.	4.0(1)
show ip msdp sources	This command was introduced.	4.0(1)
show ip msdp summary	This command was introduced.	4.0(1)
show ip pim oif-list	This command was introduced.	4.0(1)
show ip pim neighbor	This command was introduced.	4.0(1)
show ip pim interface	This command was introduced.	4.0(1)
show ip pim policy statistics auto-rp	This command was introduced.	4.0(1)
show ip pim policy statistics bsr	This command was introduced.	4.0(1)
show ip pim policy statistics jp-policy	This command was introduced.	4.0(1)
show ip pim policy statistics neighbor-policy	This command was introduced.	4.0(1)
show ip pim policy statistics register-policy	This command was introduced.	4.0(1)
show ip pim route	This command was introduced.	4.0(1)
show ip pim rp	This command was introduced.	4.0(1)
show ip pim rp-hash	This command was introduced.	4.0(1)

Table 1   ***New and Changed Features***

Feature	Description	Changed in Release
show ip pim statistics	This command was introduced.	4.0(1)
show ipv6 mld groups	This command was introduced.	4.0(1)
show ipv6 mld local-groups	This command was introduced.	4.0(1)
show ipv6 mroute	This command was introduced.	4.0(1)
show ipv6 mroute summary	This command was introduced.	4.0(1)
show ipv6 pim df	This command was introduced.	4.0(1)
show ipv6 pim group-range	This command was introduced.	4.0(1)
show ipv6 pim interface	This command was introduced.	4.0(1)
show ipv6 pim neighbor	This command was introduced.	4.0(1)
show ipv6 pim oif-list	This command was introduced.	4.0(1)
show ipv6 pim policy statistics jp-policy	This command was introduced.	4.0(1)
show ipv6 pim policy statistics neighbor-policy	This command was introduced.	4.0(1)
show ipv6 pim route	This command was introduced.	4.0(1)
show ipv6 pim rp	This command was introduced.	4.0(1)
show ipv6 pim rp-hash	This command was introduced.	4.0(1)
show ipv6 pim statistics	This command was introduced.	4.0(1)
show routing ipv6 multicast	This command was introduced.	4.0(1)
show routing ipv6 multicast clients	This command was introduced.	4.0(1)
show routing multicast	This command was introduced.	4.0(1)
show routing multicast clients	This command was introduced.	4.0(1)
show running-config msdp	This command was introduced.	4.0(1)
show running-config pim	This command was introduced.	4.0(1)
show running-config pim6	This command was introduced.	4.0(1)