



## New and Changed Information

This chapter provides release-specific information for each new and changed feature in the *Cisco Nexus 3000 Series NX-OS Security Command Reference*. The latest version of this document is available at the following Cisco website:

[http://www.cisco.com/en/US/products/ps11541/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps11541/tsd_products_support_series_home.html)

To check for additional information about this Cisco NX-OS Release, see the *Cisco Nexus 3000 Series Switch Release Notes* available at the following Cisco website:

[http://www.cisco.com/en/US/products/ps11541/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps11541/prod_release_notes_list.html)

**Table 1** summarizes the new and changed features, and tells you where they are documented.

**Table 1** *New and Changed Information*

Feature	Description	Changed in Release	Where Documented
Prioritize PACL over SUP TCAM for DHCP	This feature was introduced. Added the <b>hardware profile pacl priority toggle</b> command.	6.0(2)U6(7)	<a href="#">hardware profile pacl priority toggle</a>
Telnet	The error message displayed when the telnet service is not detected has changed from “telnet service not enabled” to “Telnet service is disabled.”	7.0(3)I2(1)	<a href="#">show telnet server</a>
TCAM	The output has changed.	7.0(3)I2(1)	<a href="#">show hardware profile tcam region</a>
TCAM	This command is being deprecated in the 7.0(3)I2(1) release.	7.0(3)I2(1)	<a href="#">show platform afm info tcam</a>
Consistency Checker	Command to trigger consistency checkers on RACLS added.	6.0(2)U2(1)	<a href="#">show consistency-checker racl module</a>
ACL Logging	This feature allows you to monitor flows that affect specific access control lists (ACLs)	6.0(2)U2(1)	<a href="#">clear logging ip access-list cache</a> <a href="#">logging level acllog</a> <a href="#">show logging ip access-list cache</a> <a href="#">show logging ip access-list status</a> <a href="#">show logging level acllog</a> <a href="#">show running-config acllog</a> <a href="#">show startup-config acllog</a>

Table 1 New and Changed Information (continued)

Feature	Description	Changed in Release	Where Documented
IPv6 DHCP Relay Agent	You can enable the IPv6 DHCP Relay Agent and view its configuration by using these command.	6.0(2)U1(2)	<a href="#">ipv6 dhcp relay</a> <a href="#">ipv6 dhcp relay source-interface</a> <a href="#">show ipv6 dhcp relay</a> <a href="#">clear ipv6 dhcp relay statistics</a>
AAA accounting log	You can enable logging of all commands (including show commands). The <b>show accounting log</b> command includes show commands in the command output.	5.0(3)U5(1e)	<a href="#">terminal log-all</a> <a href="#">show accounting log</a>
Syslog Thresholds for System Resources	This feature was introduced.	5.0(3)U3(2)	<a href="#">hardware profile tcam syslog-threshold</a>
DHCP Relay	Added support for Option 82 information to be in encoded string format.	5.0(3)U3(2)	<a href="#">ip dhcp relay information option</a>
IPv6 Support	This feature was introduced.  Updated the <b>hardware profile tcam region</b> command.	5.0(3)U3(1)	<a href="#">hardware profile tcam region</a> <a href="#">ipv6 access-list</a> <a href="#">ipv6 address</a> <a href="#">ipv6 dhcp relay source-interface</a> <a href="#">ipv6 verify unicast source reachable-via</a>
Address Resolution Protocol (ARP) ACLs for Control plane policing (CoPP)	The following commands were added to include support for CoPP ACLs: <ul style="list-style-type: none"> <li>• <b>arp access-lists</b></li> <li>• <b>deny (ARP)</b></li> <li>• <b>permit (ARP)</b></li> <li>• <b>show arp access-lists</b></li> </ul>	5.0(3)U2(2)	<a href="#">arp access-list</a> <a href="#">deny (ARP)</a> <a href="#">permit (ARP)</a> <a href="#">show arp access-lists</a>
Access Control List (ACL) ternary content addressable memory (TCAM) regions	The following commands were introduced to to change the size of ACL ternary content addressable memory (TCAM) regions: <ul style="list-style-type: none"> <li>• <b>hardware profile tcam region</b></li> <li>• <b>show hardware profile tcam region</b></li> </ul>	5.0(3)U2(1)	<a href="#">hardware profile tcam region</a> <a href="#">show consistency-checker racl module</a>
Address Resolution Protocol (ARP) ACLs for Control plane policing (CoPP)	The following commands were updated to include support for CoPP ACLs: <ul style="list-style-type: none"> <li>• <b>deny (IPv4)</b></li> <li>• <b>permit (IPv4)</b></li> </ul>	5.0(3)U2(1)	<a href="#">deny (IPv4)</a> <a href="#">permit (IPv4)</a>

Table 1 New and Changed Information (continued)

Feature	Description	Changed in Release	Where Documented
Access control list (ACL)	<p>This feature was introduced.</p> <p>You can configure ACLs for incoming or outgoing traffic, IPv4 and MAC access lists, or VLAN ACLs.</p>	5.0(3)U1(1)	<p><a href="#">action</a></p> <p><a href="#">clear access-list counters</a></p> <p><a href="#">deny (IPv4)</a></p> <p><a href="#">ip access-group</a></p> <p><a href="#">ip access-list</a></p> <p><a href="#">ip port access-group</a></p> <p><a href="#">mac port access-group</a></p> <p><a href="#">match</a></p> <p><a href="#">permit (IPv4)</a></p> <p><a href="#">permit interface</a></p> <p><a href="#">permit vlan</a></p> <p><a href="#">remark</a></p> <p><a href="#">resequence</a></p> <p><a href="#">vlan access-map</a></p> <p><a href="#">vlan filter</a></p> <p><a href="#">show access-lists</a></p> <p><a href="#">show ip access-lists</a></p> <p><a href="#">show running-config aclog</a></p> <p><a href="#">show startup-config aclmgr</a></p> <p><a href="#">show vlan access-list</a></p> <p><a href="#">show vlan access-map</a></p> <p><a href="#">show vlan filter</a></p>
ACLs on VTY	<p>This feature was introduced.</p> <p>You can configure an access class to restrict incoming or outgoing traffic on a virtual terminal line (VTY).</p>	5.0(3)U1(1)	<p><a href="#">access-class</a></p> <p><a href="#">ip access-class</a></p>

Table 1 New and Changed Information (continued)

Feature	Description	Changed in Release	Where Documented
Dynamic Host Configuration Protocol (DHCP) Snooping	This feature was introduced. You can configure DHCP snooping on switches and VLANs.	5.0(3)U1(1)	<a href="#">clear ip dhcp snooping binding</a> <a href="#">clear ip dhcp snooping statistics</a> <a href="#">feature dhcp</a> <a href="#">ip dhcp packet strict-validation</a> <a href="#">ip dhcp relay information option</a> <a href="#">ip dhcp snooping information option</a> <a href="#">ip dhcp snooping trust</a> <a href="#">ip dhcp snooping verify mac-address</a> <a href="#">ip dhcp snooping vlan</a> <a href="#">ip source binding</a> <a href="#">show ip dhcp snooping</a> <a href="#">show ip dhcp snooping binding</a> <a href="#">show ip dhcp snooping statistics</a> <a href="#">show running-config dhcp</a> <a href="#">show startup-config dhcp</a>
Dynamic ARP Inspection (DAI)	This feature was introduced. You can configure dynamic Address Resolution Protocol (ARP) inspection (DAI) on a Cisco NX-OS switch.	5.0(3)U1(1)	<a href="#">clear ip arp</a> <a href="#">clear ip arp inspection log</a> <a href="#">clear ip arp inspection statistics vlan</a> <a href="#">ip arp event-history errors</a> <a href="#">ip arp inspection log-buffer</a> <a href="#">ip arp inspection validate</a> <a href="#">ip arp inspection vlan</a> <a href="#">ip arp inspection trust</a> <a href="#">show ip arp</a> <a href="#">show ip arp inspection</a> <a href="#">show ip arp inspection interfaces</a> <a href="#">show ip arp inspection log</a> <a href="#">show ip arp inspection statistics</a> <a href="#">show ip arp inspection vlan</a> <a href="#">show running-config arp</a> <a href="#">show startup-config arp</a>

**Table 1** *New and Changed Information (continued)*

<b>Feature</b>	<b>Description</b>	<b>Changed in Release</b>	<b>Where Documented</b>
Remote Authentication Dial-In User Service (RADIUS)	This feature was introduced. You can configure RADIUS server parameters, the shared secret key, and the number of retransmissions to RADIUS servers.	5.0(3)U1(1)	<a href="#">aaa group server radius</a> <a href="#">deadtime</a> <a href="#">radius-server deadtime</a> <a href="#">radius-server directed-request</a> <a href="#">radius-server host</a> <a href="#">radius-server key</a> <a href="#">radius-server retransmit</a> <a href="#">radius-server timeout</a> <a href="#">server</a> <a href="#">show aaa groups</a> <a href="#">show radius-server</a> <a href="#">show running-config radius</a>
Secure Shell (SSH)	This feature was introduced. You can configure a SSH session using IPv4 or IPv6, or create a SSH server key.	5.0(3)U1(1)	<a href="#">ssh6</a> <a href="#">ssh</a> <a href="#">ssh key</a> <a href="#">ssh server enable</a> <a href="#">show running-config security</a> <a href="#">show ssh key</a> <a href="#">show ssh server</a> <a href="#">show startup-config security</a>
Telnet	This feature was introduced. You can configure an IPv4 or IPv6 Telnet session and enable a Telnet server.	5.0(3)U1(1)	<a href="#">telnet6</a> <a href="#">telnet</a> <a href="#">telnet server enable</a> <a href="#">show telnet server</a>

Table 1 New and Changed Information (continued)

Feature	Description	Changed in Release	Where Documented
Terminal Access Controller Access-Control System Plus (TACACS+)	<p>This feature was introduced.</p> <p>You can configure the TACACS+ server parameters, enable a secret password for a privilege level, and create user accounts.</p>	5.0(3)U1(1)	<p><a href="#">deadtime</a></p> <p><a href="#">enable</a></p> <p><a href="#">enable secret</a></p> <p><a href="#">feature privilege</a></p> <p><a href="#">feature tacacs+</a></p> <p><a href="#">server</a></p> <p><a href="#">tacacs-server deadline</a></p> <p><a href="#">tacacs-server directed-request</a></p> <p><a href="#">tacacs-server host</a></p> <p><a href="#">tacacs-server key</a></p> <p><a href="#">tacacs-server timeout</a></p> <p><a href="#">username</a></p> <p><a href="#">show privilege</a></p> <p><a href="#">show tacacs-server</a></p> <p><a href="#">show user-account</a></p> <p><a href="#">show users</a></p>
Authentication, authorization, and accounting (AAA)	<p>This feature was introduced.</p> <p>You can configure AAA authentication methods, authorization methods, accounting methods, Microsoft Challenge Handshake Authentication Protocol (MS-CHAP) authentication, or RADIUS server groups.</p>	5.0(3)U1(1)	<p><a href="#">aaa accounting default</a></p> <p><a href="#">aaa authentication login default</a></p> <p><a href="#">aaa authentication login error-enable</a></p> <p><a href="#">aaa authentication login mschap enable</a></p> <p><a href="#">aaa authorization commands default</a></p> <p><a href="#">aaa authorization config-commands default</a></p> <p><a href="#">aaa group server radius</a></p> <p><a href="#">aaa user default-role</a></p> <p><a href="#">show aaa accounting</a></p> <p><a href="#">show aaa authentication</a></p> <p><a href="#">show aaa authorization</a></p> <p><a href="#">show aaa groups</a></p> <p><a href="#">show aaa user</a></p> <p><a href="#">show access-lists</a></p> <p><a href="#">show accounting log</a></p> <p><a href="#">show running-config aaa</a></p> <p><a href="#">show startup-config aaa</a></p>

**Table 1** *New and Changed Information (continued)*

<b>Feature</b>	<b>Description</b>	<b>Changed in Release</b>	<b>Where Documented</b>
User roles	This feature was introduced. You can create user roles or user role feature groups.	5.0(3)U1(1)	<a href="#">description (user role)</a> <a href="#">feature (user role feature group)</a> <a href="#">hardware profile tcam syslog-threshold</a> <a href="#">permit vsan</a> <a href="#">role feature-group name</a> <a href="#">role name</a> <a href="#">rule</a> <a href="#">vlan policy deny</a> <a href="#">vsan policy deny</a> <a href="#">show role</a> <a href="#">show role feature</a> <a href="#">show role feature-group</a> <a href="#">show user-account</a> <a href="#">show users</a>
Virtual forwarding and routing (VRF)	This feature was introduced. You can configure VRF, VRF-lite features, and the IP features for a VRF.	5.0(3)U1(1)	<a href="#">permit vrf</a> <a href="#">vrf policy deny</a> <a href="#">use-vrf</a>
System Management	This feature was introduced.	5.0(3)U1(1)	<a href="#">show logging ip access-list cache</a>
Unicast Routing	This feature was introduced.	5.0(3)U1(1)	<a href="#">ip verify unicast source reachable-via</a>

