



# New and Changed Information

This chapter provides release-specific information for each new and changed feature in this release of the *Cisco Nexus 9000 Series NX-OS Programmability Guide, 10.1(x)*.

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## New and Changed Information

This table summarizes the new and changed features for the *Cisco Nexus 9000 Series NX-OS Programmability Guide, Release 10.1(x)*, and their corresponding sections.

Table 1: New and Changed Features

Feature	Description	Changed in Release	Where Documented
Telemetry	Added support for destination host name. Added support for Node ID. Added gRPC asynchronous mode feature.  Added trustpoint keyword for the Certificate Trustpoint Certificate. Added commands for the telemetry transport sessions. Added a new sensor path query-condition to support ephemeral event.	10.1(1)	<a href="#">Model Driven Telemetry</a>

Feature	Description	Changed in Release	Where Documented
gRPC Agent	NX-OS does not support gRPC service starting 10.1(x). Hence the gRPC Agent Chapter is deprecated from the programmability guide. The existing gRPC interface has been superseded by the gNMI interface which has been shipping on NX-OS from NX-OS 9.3(1).	10.1(1)	--
Client Based Certificate for gNMI	Enhanced support for gNMI client certificate authentication.	10.1(1)	<a href="#">gNMI-gRPC Network Management Interface</a>
gRPC Network Operations Interface (gNOI)	Added support for gNOI to execute operational commands on network devices.	10.1(1)	<a href="#">gNOI-gRPC Network Operations Interface</a>
Guest Shell 3.0	Added support for Guest Shell 3.0 based on CentOS 8 and Python 3.6. Upgraded the version of the docker on the switch.	10.1(1)	<a href="#">Guest Shell</a>
OpenConfig Model Additions	Added state containers for the OpenConfig ACL at interface-ref level.  Added system config containers for domain-name, login banner and motd banner models.	10.1(1)	<a href="#">OpenConfig YANG</a>

Feature	Description	Changed in Release	Where Documented
Linux Kernel Upgrade	Cisco NX-OS Release 10.0(1) software is based on Yocto 2.6. More applications can be installed by downloading Yocto 2.6, downloading the new software to be built, building the software, and installing the software on the switch.	10.1(1)	<a href="#">Bash</a> <a href="#">Guest Shell</a> <a href="#">Third-Party Applications</a> <a href="#">Nexus Application Development - Yocto</a> <a href="#">Nexus Application Development - SDK</a> <a href="#">Using Docker with Cisco NX-OS</a> <a href="#">Managing Components</a> <a href="#">Model Driven Telemetry</a>

