



New and Changed Information

This chapter provides release-specific information about all features.

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New and Changed Feature Information

This table summarizes the new and changed features, the supported platforms, and links to features.

Table 1: New and Changed Feature Information

| Feature | Description | Release & Platform |
|-------------------------|--|--|
| Provisioning | | |
| Zero-Touch Provisioning | To address network provisioning challenges, Cisco introduces a Zero-Touch Provisioning model. Zero-Touch Provisioning automates the process of installing or upgrading software images, and installing configuration files on Cisco devices that are deployed in a network for the first time. It reduces manual tasks required to scale the network capacity. | Cisco IOS XE Everest 16.5.1a <ul style="list-style-type: none">• Cisco Catalyst 3650 Series Switches• Cisco Catalyst 3850 Series Switches• Cisco Catalyst 9300 Series Switches• Cisco Catalyst 9500 Series Switches |
| Shells and Scripting | | |

| Feature | Description | Release & Platform |
|------------------------------|--|---|
| Guest Shell | Guestshell is a virtualized Linux-based environment, designed to run custom Linux applications, including Python for automated control and management of Cisco devices. It also includes the automated provisioning (Day zero) of systems. This container shell provides a secure environment, decoupled from the host device, in which users can install scripts or software packages and run them. | Cisco IOS XE Everest 16.5.1a <ul style="list-style-type: none"> • Cisco Catalyst 3650 Series Switches • Cisco Catalyst 3850 Series Switches • Cisco Catalyst 9300 Series Switches • Cisco Catalyst 9500 Series Switches |
| Python APIs | Python programmability supports Python APIs. | Cisco IOS XE Everest 16.5.1a <ul style="list-style-type: none"> • Cisco Catalyst 3650 Series Switches • Cisco Catalyst 3850 Series Switches • Cisco Catalyst 9300 Series Switches • Cisco Catalyst 9500 Series Switches |
| Python CLI Module | Python Programmability provides a Python module that allows users to interact with IOS using CLIs. | Cisco IOS XE Everest 16.5.1a <ul style="list-style-type: none"> • Cisco Catalyst 3650 Series Switches • Cisco Catalyst 3850 Series Switches • Cisco Catalyst 9300 Series Switches • Cisco Catalyst 9500 Series Switches |
| EEM Python Module | Embedded Event Manager (EEM) policies support Python scripts. Python scripts can be executed as part of EEM actions in EEM applets. | Cisco IOS XE Everest 16.5.1a <ul style="list-style-type: none"> • Cisco Catalyst 3650 Series Switches • Cisco Catalyst 3850 Series Switches • Cisco Catalyst 9300 Series Switches • Cisco Catalyst 9500 Series Switches |
| Model-Driven Programmability | | |
| Data Models | Cisco IOS XE supports the Yet Another Next Generation (YANG) data modeling language. YANG can be used with the Network Configuration Protocol (NETCONF) to provide the desired solution of automated and programmable network operations. | Cisco IOS XE Denali 16.3.1 <ul style="list-style-type: none"> • Cisco Catalyst 3650 Series Switches • Cisco Catalyst 3850 Series Switches <p>In Cisco IOS XE Everest 16.5.1a, this feature was implemented on Cisco Catalyst 9300 Series Switches.</p> |