



## 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	Release & Platform
Provisioning	
Zero-Touch Provisioning	<p>Cisco IOS XE Everest 16.5.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.5.1b</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> </ul> <p>Cisco IOS XE Everest 16.6.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.7.1</p> <ul style="list-style-type: none"> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1001-X, ASR1001-HX, ASR1002-X, ASR1002-HX)</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.8.2</p> <ul style="list-style-type: none"> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1004, ASR1006, ASR1006-X, ASR1009-X, ASR1013)</li> </ul>

Feature	Release & Platform
Zero Touch Provisioning: HTTP Download	Cisco IOS XE Fuji 16.8.1 <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> Cisco IOS XE Fuji 16.8.1a <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul>
DHCPv6 Support for Zero-Touch Provisioning	Cisco IOS XE Fuji 16.9.1 <ul style="list-style-type: none"> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul>
iPXE	Cisco IOS XE Denali 16.3.2 and Cisco IOS XE Everest 16.5.1a <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3650 Series Switches</li> </ul> Cisco IOS XE Everest 16.6.1 <ul style="list-style-type: none"> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> Cisco IOS XE Everest 16.6.2 <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> Cisco IOS XE Fuji 16.8.1a <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul> Cisco IOS XE Fuji 16.9.2 <ul style="list-style-type: none"> <li>• Cisco Catalyst 9200 Series Switches</li> </ul>
Shells and Scripting	

Feature	Release & Platform
Guest Shell	<p>Cisco IOS XE Everest 16.5.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.5.1b</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> </ul> <p>Cisco IOS XE Everest 16.6.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.7.1</p> <ul style="list-style-type: none"> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1001-X, ASR1001-HX, ASR1002-X, ASR1002-HX)</li> <li>• Cisco Cloud Services Router 1000V Series</li> </ul> <p>Cisco IOS XE Fuji 16.8.1</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.9.1</p> <ul style="list-style-type: none"> <li>• Cisco 1000 Series Integrated Services Routers</li> </ul>

Feature	Release & Platform
Python APIs	<p>Cisco IOS XE Everest 16.5.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.5.1b</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> </ul> <p>Cisco IOS XE Everest 16.6.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.7.1</p> <ul style="list-style-type: none"> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1001-X, ASR1001-HX, ASR1002-X, ASR1002-HX)</li> <li>• Cisco Cloud Services Router 1000V Series</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul>

Feature	Release & Platform
Python CLI Module	<p>Cisco IOS XE Everest 16.5.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.5.1b</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> </ul> <p>Cisco IOS XE Everest 16.6.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.7.1</p> <ul style="list-style-type: none"> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1001-X, ASR1001-HX, ASR1002-X, ASR1002-HX)</li> <li>• Cisco Cloud Services Router 1000V Series</li> </ul> <p>Cisco IOS XE Fuji 16.8.1</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Router models with a minimum of 4 GB RAM.</li> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1004, ASR1006, ASR1006-X, ASR1009-X, ASR1013)</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul>

Feature	Release & Platform
EEM Python Module	<p>Cisco IOS XE Everest 16.5.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.5.1b</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> </ul> <p>Cisco IOS XE Everest 16.6.2.</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.7.1</p> <ul style="list-style-type: none"> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1001-X, ASR1001-HX, ASR1002-X, ASR1002-HX)</li> <li>• Cisco Cloud Services Router 1000V Series</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul>
Model-Driven Programmability	

Feature	Release & Platform
NETCONF Protocol	<p>Cisco IOS XE Denali 16.3.1</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> <li>• Cisco ASR 1000 Series Aggregation Services Routers</li> <li>• Cisco Cloud Services Router 1000V Series</li> </ul> <p>Cisco IOS XE Everest 16.5.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.6.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9400 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco 1000 Series Integrated Services Routers</li> <li>• Cisco ASR 900 Series Aggregation Services Routers</li> <li>• Cisco ASR 920 Series Aggregation Services Routers</li> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> <li>• Cisco cBR-8 Converged Broadband Router</li> <li>• Cisco Network Convergence System 4200 Series</li> </ul> <p>Cisco IOS XE Fuji 16.9.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9200 and 9200L Series Switches</li> <li>• Cisco Catalyst 9300L SKUs</li> </ul> <p>Cisco IOS XE Gibraltar 16.10.1</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9800-40 Wireless Controllers</li> <li>• Cisco Catalyst 9800-80 Wireless Controllers</li> <li>• Cisco Network Convergence System 520 Series</li> </ul>

Feature	Release & Platform
NETCONF and RESTCONF IPv6 Support	Cisco IOS XE Fuji 16.8.1a <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> <li>• Cisco ASR 1000 Series Aggregation Services Routers</li> <li>• Cisco ASR 900 Series Aggregation Services Routers</li> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9400 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> <li>• Cisco cBR-8 Converged Broadband Router</li> <li>• Cisco Cloud Services Router 1000V Series</li> </ul>
NETCONF Global Lock and Kill Session	Cisco IOS XE Fuji 16.8.1a <ul style="list-style-type: none"> <li>• Cisco 1100 Series Integrated Services Routers</li> <li>• Cisco 4000 Series Integrated Services Routers</li> <li>• Cisco ASR 1000 Series Aggregation Services Routers</li> <li>• Cisco ASR 900 Series Aggregation Services Routers</li> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9400 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> <li>• Cisco cBR-8 Converged Broadband Router</li> <li>• Cisco Cloud Services Router 1000v Series</li> </ul>



Feature	Release & Platform
RESTCONF Protocol	<p>Cisco IOS XE Everest 16.6.1</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Router</li> <li>• Cisco ASR 1000 Aggregation Services Routers</li> <li>• Cisco Cloud Services Router 1000V Series</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco 1000 Series Integrated Services Routers</li> <li>• Cisco ASR 900 Series Aggregation Services Routers</li> <li>• Cisco ASR 920 Series Aggregation Services Router</li> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9400 Series Switches</li> <li>• Cisco Catalyst 9500 and 9500-High Performance Series Switches</li> <li>• Cisco cBR-8 Converged Broadband Router</li> <li>• Cisco Network Convergence System 4200 Series</li> </ul> <p>Cisco IOS XE Fuji 16.9.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9200 Series Switches</li> </ul>
gNMI Protocol	<p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9400 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Gibraltar 16.10.1</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul>

Feature	Release & Platform
Model-Based AAA	<p data-bbox="776 289 1052 321">Cisco IOS XE Fuji 16.8.1</p> <ul data-bbox="813 338 1406 678" style="list-style-type: none"><li data-bbox="813 338 1321 369">• Cisco 1000 Series Integrated Services Routers</li><li data-bbox="813 390 1321 422">• Cisco 4000 Series Integrated Services Routers</li><li data-bbox="813 443 1406 474">• Cisco ASR 1000 Series Aggregation Services Routers</li><li data-bbox="813 495 1393 527">• Cisco ASR 900 Series Aggregation Services Routers</li><li data-bbox="813 548 1393 579">• Cisco ASR 920 Series Aggregation Services Routers</li><li data-bbox="813 600 1284 632">• Cisco Cloud Services Router 1000v Series</li><li data-bbox="813 653 1284 684">• Cisco Network Convergence System 4200</li></ul> <p data-bbox="776 709 1065 741">Cisco IOS XE Fuji 16.8.1a</p> <ul data-bbox="813 758 1219 993" style="list-style-type: none"><li data-bbox="813 758 1219 789">• Cisco Catalyst 3650 Series Switches</li><li data-bbox="813 810 1219 842">• Cisco Catalyst 3850 Series Switches</li><li data-bbox="813 863 1219 894">• Cisco Catalyst 9300 Series Switches</li><li data-bbox="813 915 1219 947">• Cisco Catalyst 9400 Series Switches</li><li data-bbox="813 968 1219 999">• Cisco Catalyst 9500 Series Switches</li></ul>

Feature	Release & Platform
Model-Driven Telemetry NETCONF Dial-In	<p>Cisco IOS XE Everest 16.6.1</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.6.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.7.1</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> <li>• Cisco ASR 1000 Aggregation Services Routers (ASR1001-HX, ASR1001-X, ASR1002-HX, ASR1002-X)</li> </ul> <p>Cisco IOS XE Fuji 16.8.1</p> <ul style="list-style-type: none"> <li>• Cisco 1000 Series Integrated Services Routers</li> <li>• Cisco ASR 1000 RP2 and RP3 Series Aggregation Services Routers</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.9.1</p> <ul style="list-style-type: none"> <li>• Cisco ASR 900 Series Aggregation Services Routers</li> <li>• Cisco ASR 920 Series Aggregation Services Router</li> <li>• Cisco cBR-8 Converged Broadband Router</li> <li>• Cisco Network Convergence System 4200 Series</li> </ul> <p>Cisco IOS XE Fuji 16.9.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9200 and 9200L Series Switches</li> <li>• Cisco Catalyst 9300L SKUs</li> </ul> <p>Cisco IOS XE Gibraltar 16.10.1</p> <ul style="list-style-type: none"> <li>• Cisco Cloud Services Router 1000v</li> <li>• Cisco Network Convergence System 520 Series</li> </ul>

Feature	Release & Platform
Model-Driven Telemetry gRPC Dial-Out	<p>Cisco IOS XE Gibraltar 16.10.1</p> <ul style="list-style-type: none"> <li>• Cisco 1000 Series Integrated Services Routers</li> <li>• Cisco 4000 Series Integrated Services Routers</li> <li>• Cisco ASR 1000 Series Aggregation Services Routers</li> <li>• Cisco ASR 900 Series Aggregation Services Routers</li> <li>• Cisco ASR 920 Series Aggregated Services Router</li> <li>• Cisco Catalyst 9200 and 9200L Series Switches</li> <li>• Cisco Catalyst 9300 and 9300L Series Switches</li> <li>• Cisco Catalyst 9400 Series Switches</li> <li>• Cisco Catalyst 9500 and 9500-High Performance Series Switches</li> <li>• Cisco cBR-8 Converged Broadband Router</li> <li>• Cisco Cloud Services Router 1000V Series</li> <li>• Cisco Network Convergence System 520 Series</li> <li>• Cisco Network Convergence System 4200 Series</li> </ul>
In-Service Model Updates	<p>Cisco IOS XE Everest 16.5.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9300 Series Switches</li> <li>• Cisco Catalyst 9500 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.5.1b</p> <ul style="list-style-type: none"> <li>• Cisco 4000 Series Integrated Services Routers</li> </ul> <p>Cisco IOS XE Everest 16.6.1</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 3650 Series Switches</li> <li>• Cisco Catalyst 3850 Series Switches</li> </ul> <p>Cisco IOS XE Everest 16.6.2</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9400 Series Switches</li> </ul> <p>Cisco IOS XE Fuji 16.7.1</p> <ul style="list-style-type: none"> <li>• Cisco ASR 1000 Aggregation Services Routers</li> </ul> <p>Cisco IOS XE Fuji 16.8.1a</p> <ul style="list-style-type: none"> <li>• Cisco Catalyst 9500-High Performance Series Switches.</li> </ul>

Feature	Release & Platform
<b>OpenFlow</b>	
OpenFlow	Cisco IOS XE Fuji 16.9.1 <ul style="list-style-type: none"><li>• Catalyst 9300 Series Switches</li><li>• Catalyst 9400 Series Switches</li><li>• Catalyst 9500 Series Switches</li><li>• Catalyst 9500 Series High Performance Switches</li></ul>

