

Cisco NX-OS Software Release 5.0(2)N2(1) for Cisco Nexus 5000 Series Switches and 2000 Series Fabric Extenders

PB639978

Cisco® NX-OS Software is a data center-class operating system built with modularity, resiliency, and serviceability at its foundation. Based on the industry-proven Cisco MDS 9000 SAN-OS Software, Cisco NX-OS helps ensure continuous availability and sets the standard for mission-critical data center environments. The self-healing and highly modular design of Cisco NX-OS makes zero-impact operations a reality and enables exceptional operational flexibility.

Cisco NX-OS Release 5.0(2)N2(1) introduces several new software features to augment the industry-leading versatility of the Cisco Nexus® 5000 Series Switches, a family of purpose-built 10 Gigabit Ethernet data center-class switches, and provides innovative advances toward higher density, lower latency, and multilayer services. This software release will support up to 16 Cisco Nexus 2000 Series Fabric Extenders on the Cisco Nexus 5548P Switch.

This software release supports all hardware and software features supported in Cisco NX-OS Release 5.0(2)N1(1).

The combination of the Cisco Nexus 2000 and 5000 Series offers a highly cost-effective access layer architecture for 100-Mbps Ethernet, Gigabit Ethernet, 10 Gigabit Ethernet, mixed Gigabit Ethernet, 10 Gigabit Ethernet server, Ethernet or unified fabric, physical, or virtual server environments.

Software Support

Cisco NX-OS Release 5.0(2)N2(1) supports all the software features previously supported on the Cisco Nexus 5000 Series up through Cisco NX-OS Release 5.0(2)N1(1). Cisco NX-OS Release 5.0(2)N2(1) is compatible with In-Service Software Upgrade (ISSU) supported on the Cisco NX-OS Release 4.2. In addition, Cisco NX-OS Release 5.0(2)N2(1) supports the new software features described in Table 1. These features are supported on the Cisco Nexus 5000 and 5500 platforms.

Table 1. New Software Features in Cisco NX-OS Release 5.0(2)N2(1)

Software Feature	Description
VLAN Trunking Protocol (VTP) client and server	Beginning with Cisco NX-OS Release 5.0(2)N2(1), VTP client and server modes is supported for VTP Versions 1 and 2. Prior to this release, VTP transparent mode was the only supported mode. This feature allows users to provision VLANs at a central point and distribute the VLAN database across a Layer 2 domain
VE ports	This feature allows users to build multi-hop Fibre Channel over Ethernet (FCoE) fabrics by interconnecting multiple Fibre Channel forwarders. This interconnection is accomplished by using a new port type called the VE-port, which functions as a Fibre Channel E-port running on top of a lossless Ethernet fabric
Dynamic Host Configuration Protocol (DHCP) snooping with option 82	Beginning with Cisco NX-OS Release 5.0(2)N2(1), DHCP snooping with option 82 is supported. DHCP snooping acts like a firewall between untrusted hosts and trusted DHCP servers. DHCP snooping is enabled on a per-VLAN basis.
Configuration synchronization enhancements	This software release improves the configuration synchronization procedure with support for the PortChannel force option.
Support for increased distance between the Cisco Nexus 2000 and 5000 Series devices	This software release supports up to 3 km between the Cisco Nexus 2000 Series Fabric Extender and upstream Cisco Nexus 5000 Series Switches.
Virtual PortChannel (vPC) enhancements	Several new features have been added to improve the resiliency and operation of vPC, such as: <ul style="list-style-type: none"> • Graceful consistency check • Auto recovery • Per-VLAN consistency check

For More Information

For more information about Cisco Nexus switches, please visit <http://www.cisco.com/go/nexus5000> and <http://www.cisco.com/go/nexus2000>.



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