

Cisco Nexus 1000VE Series Virtual Switch

Cisco Nexus[®] 1000VE Virtual Switch is the next generation of the popular Cisco Nexus 1000V virtual Switches. It provides similar network administration capabilities as the Cisco Nexus 1000V, but in a server footprint that does not require or depend upon in-kernel virtualization platform APIs, such as the VMware third-party virtual switch API.

Prominent feature/Differentiator/Capability

Key use cases:

- Simplified Network Operations:
 - Virtual Network Visibility: provides tools for detailed insight into the virtual network, including superior configuration, monitoring, and troubleshooting.
 - Separation of Duties: enables administrators to manage the virtual and physical network infrastructure in a consistent and seamless manner.
- Security:
 - Support for Cisco[®] TrustSec (Cisco Trusted Security) enables Role-Based Access Control architecture to expand its perimeter beyond the campus and into the data center to include virtual machines that are under its oversight and control.
 - Support for Cisco Virtual Security Gateway (VSG), offering Micro-segmentation capabilities and fine-grained control over east-west traffic.
- Operational Continuity:
 - The Cisco Nexus 1000VE extends the operational runway for existing Cisco Nexus 1000V customers impacted by the impending removal of the VMware third-party virtual switch APIs (slated for VMware vSphere 6.5 Update2). Customers can continue with the same user experience, with the same workflows and processes. The Cisco Nexus 1000VE uses the same NX-OS CLI, the same Virtual Supervisor Module (VSM), and the same licensing model as the Cisco Nexus 1000V.

Product architecture

The Cisco Nexus 1000VE employs the same VSM/VEM (Virtual Ethernet Module) style architecture as the Cisco Nexus 1000V virtual switch, with a Virtual Services Engine (VSE) taking the place of the VEM on each virtualized host. A pair of redundantly configured VSMS control multiple VSEs. All configuration is performed on the VSM and automatically propagated to the VSEs. The VSM is integrated with cloud management and orchestration tools, such as VMware vCenter Server, to push the applicable port-group/port-profile configurations.

Simple migration

The Cisco Nexus 1000VE is designed with simplicity in mind. Customers can use the Cisco Nexus 1000VE migration tool for seamless movement and transition from Cisco Nexus 1000V to Cisco Nexus 1000VE. The migration tool will install a Cisco Nexus 1000VE and offer an in-place running migration or through server maintenance mode.

Platform support

Platforms supported
VMware vSphere ESXi hypervisor host with VMware vSphere release version 6.0 onwards
VMware vCenter Windows appliance version 6.0 U3 or Linux appliance version 6.0 is supported
Cisco Nexus 1100 Series Cloud Services Platform for hosting Nexus 1000VE VSM (Virtual Supervisor Module)
Cisco Cloud Services Platform 2100 (CSP 2100) for hosting Nexus 1000VE VSM (Virtual Supervisor Module)

Licensing

The Cisco Nexus 1000VE Series Virtual Switch is licensed based on physical CPUs (sockets) on the server and includes a Cisco Virtual Security Gateway license. The product will adhere to version-specific licensing.

Customers currently using licenses for Cisco Nexus 1000V, and who have an active service support contract with Cisco, are entitled to receive free upgrade licenses to Cisco Nexus 1000VE; they are requested to use Cisco's Product Upgrade Tool ([PUT](#)). An alternative way is to raise a case with Cisco Technical Assistance Center (TAC) or Cisco Global Licensing Operations ([GLO](#)).

Ordering information

Nexus 1000VE Product Part Numbers:

Part #	Product description
L-N1KVE-VLCPU-01=	Cisco Nexus 1000VE e-delivery CPU License qty 1-pack
L-N1KVE-VLCPU-04=	Cisco Nexus 1000VE e-delivery CPU License qty 4-pack
L-N1KVE-VLCPU-16=	Cisco Nexus 1000VE e-delivery CPU License qty 16-pack
L-N1KVE-VLCPU-32=	Cisco Nexus 1000VE e-delivery CPU License qty 32-pack
L-N1KVE-VLCPU-64=	Cisco Nexus 1000VE e-delivery CPU License qty 64-pack
L-N1KVE-VLCPU-128=	Cisco Nexus 1000VE e-delivery CPU License qty 128-pack
L-N1K-CPU-V3UP-01=	Cisco Nexus 1000VE e-delivery Upgrade License

Warranty

Cisco Nexus 1000VE has a 90-day limited software warranty. For more information about the Cisco Nexus 1000VE warranty, see https://www.cisco.com/en/US/docs/general/warranty/English/EU1KEN_.html.

Cisco and partner services

Cisco Software Application Support plus Upgrades (SAU) is a comprehensive support service that helps you maintain and enhance the availability, security, and performance of your business-critical applications. Cisco SAU includes the following resources:

- Software updates and upgrades: The Cisco SAU service provides timely, uninterrupted access to software updates and upgrades to help you keep existing systems stable and network release levels current. Update releases, including major upgrade releases that may include significant architectural changes and new capabilities for your licensed feature set, are available by software download from Cisco.com. Upgrade license for the next major version can be obtained from the Cisco Product Upgrade Tool ([PUT](#)).
- Cisco Technical Assistance Center (TAC): Cisco TAC engineers provide accurate, rapid diagnosis and resolution of software application problems to help you reduce outages and performance degradation. These specialized software application experts are trained to support the Cisco Nexus 1000VE Virtual Switch. Their expertise is available to you 24 hours a day, 365 days a year, by telephone, fax, email, or the Internet.
- Online support: Cisco SAU provides access to a wide range of online tools and communities to help you resolve problems quickly, support business continuity, and improve competitiveness.

Cisco Capital

Financing to help you achieve your objectives

Cisco Capital can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. [Learn more.](#)



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