

# Cisco Nexus 7000 Series Switches

## A More Scalable and Flexible Data Center

Build a flexible, scalable framework for your new data center network with Cisco Nexus Switches.

The Cisco Nexus 7000 Series is a modular data center-class switching system designed for 10 Gigabit Ethernet networks. The Cisco Nexus architecture scales beyond 15 terabits per second, with future availability of 40Gb and 100 Gb Ethernet and unified fabric I/O modules. This new platform is designed for exceptional scalability, continuous systems operation, and transport flexibility.

The Cisco Nexus 7000 Platform is powered by [Cisco NX-OS](#), a state-of-the-art operating system. The Cisco Nexus 7000 Series is purpose-built for the data center and has many unique features and capabilities designed specifically for the most mission-critical place in the network, the data center.

## The Cisco Nexus 7000 Series Switch:

- Scales beyond 15 Tbps with future support for 40 Gbps and 100 Gbps Ethernet
- Offers operational continuity and transport flexibility
- Unifies data center operations
- Enables XML-based comprehensive and centralized administrative support

## Cisco Nexus 7000 Series Value Proposition:

### Infrastructure Scalability

- System designed for investment protection with a 15 Tbps highly scalable fabric
- Loosely Coupled Architecture to support long-term investment protection
- Cisco Trusted Security for scalable security with link-layer encryption and security group access-control lists and role-based access control
- Efficient physical and power design with front-to-back airflow

### Operational Continuity

- Zero-Service Disruption Architecture
- Connectivity management processor (CMP) for integrated out-of-band management access

- Graceful system operations to minimize the effect of upgrades and other software operations
- Comprehensive XML API for total platform control

### **Transport Flexibility**

- Built to support the emerging 40 Gbps and 100 Gbps Ethernet standards
- Flexible foundation for unified fabrics and unified I/O
- [Virtual device contexts \(VDCs\)](#) to maximize software and hardware resource utilization while providing strong security and software fault isolation
- Lossless fabric architecture to support the requirements of a unified fabric