Cisco Catalyst 9000 Switching Platform

Switching for the new era
The Network. Intuitive.

The world is changing fast. Your network needs to keep up with it – the demand of fast-advancing security threats, and evolving IoT, cloud, and mobility integration.

The network can now learn, adapt, and evolve. Designed to be intuitive, the network can recognize intent, mitigate threats through segmentation and encryption, and learn and change over time. The new network helps your organization to unlock opportunities, enhance security, be more agile, and operate more efficiently.

Benefits

- Twice the density at a lower cost.

- New features packed with Cisco ONE™ Software.

- End-to-end integrated security solution. Handle threats before, during, and after attacks, even for encrypted traffic.

- Simplify and automate. Goal-based policies are created once centrally and applied networkwide.

- Accelerate changes with programmability, supporting open standards and APIs.

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End-to-end security

Get state-of-the-art malware detection with Cisco® Encrypted Traffic Analytics (ETA).

Use behavioral and pattern-based analytics on encrypted traffic to thread the needle between privacy and security.

The end-to-end security provides a reduced attack surface that secures your network before an attack, active analytics to detect malware and threats during an attack, and rapid automated threat response and containment after an attack.

Automation

Now you can do more in less time. With Cisco DNA Center™ and Software-Defined Access (SD-Access), the Cisco® Catalyst® 9000 switching platform can operate as part of one intelligent network fabric, for faster network design, provisioning, and maintenance.

No more constant cutting, pasting, and tweaking switch by switch. Create once, apply networkwide, using cross-domain policy enforcement and automation, all managed from a single interface – Cisco DNA Center.

The Cisco Catalyst 9000 platform also offers multiple programmability options to further simplify configurations and adapt to changes.

The mobility challenge

One network, wired and wireless. The convergence is seamless with the Cisco Catalyst 9000 family.

Across the network, wired or wireless, the policies are applied consistently for security, automation, and assurance, while segmentation separates devices and users to help reduce the attack surface. This delivers the best mobility experience for employees and guests.

The Cisco Catalyst 9000 family has also been optimized to support the industry's highest-density Wave 2 deployments with Cisco Catalyst Multigigabit Technology (IEEE 803.2bz), a technology that extends the life of your existing cabling at 1 to 10 Gbps. And because the switch integrates with the fabric control plane (LISP), access points and clients are reachable in the fabric.

The IoT challenge

The potential scale of the Internet of Things (IoT) – with the number of devices expected to be three times the global population by 2021 - makes manual configuration and policy setting unmanageable. The Cisco Catalyst 9000 switching platform offers flexible and automated network provisioning, segmentation, and policy management to support IoT growth with ease.

The Cisco Catalyst 9000 family of switches also supports a broad array of standards and features that can literally power your digital building. These range from the highest Perpetual Power over Ethernet (PoE), PoE Plus, and Cisco Universal PoE (Cisco UPOE™) density in the industry to support for multicast, Audio Video Bridging (AVB), Time Sync (IEEE 1588), and Bonjour service discovery. The switches will also extend network trust to securely identify and onboard devices using centrally defined policies.

The cloud challenge

Connecting to cloud services exposes more challenges and threats than we have in local networks. Connections are now made inside and outside your network to a variety of different cloud services.

With the Cisco Catalyst 9000 platform, you can simplify, secure, and transform your network to include a cloud or hybrid cloud environment. Equipped with a DevOps toolkit, you have the ability to use open APIs and model-driven programmability to customize provisioning, automation, and monitoring using off-the-shelf applications or your own creation that can be locally hosted on the switch with an onboard x86 CPU complex and container-based hosting environment.

Cisco Catalyst 9300 Series

Cisco Catalyst 9400 Series

Cisco Catalyst 9500 Series

The **Cisco Catalyst 9300 Series** is our leading fixed enterprise switching access platform.

- One Rack Unit (RU), delivering up to 480 Gbps of stacking switching capacity.
- Scale up to 48 wireless access points per unit.
- Flexible uplinks: 1 Gbps, Multigigabit, 10 Gbps, and 40 Gbps.
- Flexible downlinks: Multigigabit, 2.5-Gbps, or 1-Gbps copper. Data, Cisco UPOE, and PoE+ options.
- Optional 120-GB local storage for application hosting and file storage purposes.
- Supports key high availability features: Nonstop Forwarding with Stateful Switchover (NSF/SSO), fast software upgrades, redundant power supplies and fans, and Graceful Insertion and Removal (GIR).

The **Cisco Catalyst 9400 Series** is our leading modular enterprise switching access platform.

- Delivers up to 480 Gbps per slot, 9 Tbps per chassis.
- Replaces the Cisco Catalyst 4500E Series: 48 Gbps per slot, 928 Gbps per chassis.
- Scales up to 384 wireless access ports.
- Flexible downlinks: Multigigabit, 1-Gbps copper Small Form-Factor Pluggable (SFP), 10-Gbps SFP+, Cisco UPOE, and PoE+ options.
- Supports high availability capabilities: In-Service Software Upgrades (ISSU), NSF/ SSO, uplink resiliency, N+1/N+N redundancy for power supplies, and Perpetual PoE.
- Dual serviceable fan-tray design and side-to-side airflow.

The **Cisco Catalyst 9500 Series** is our leading fixed-core/aggregation enterprise switching platform.

- One RU, delivering 960-Gbps switching capacity.
- Replaces the Cisco Catalyst 4500-X Series: 800 Gbps; or the Cisco Catalyst 3850 Series fiber: 480 Gbps.
- Flexible downlinks: 40-Gbps Quad SFP (QSFP) and 10-Gbps (SFP+) switches with granular port densities.
- Supports high-availability capabilities such as patching, GIR, NSF/SSO, and redundant platinum-rated power supplies and fans.
- Supports network system virtualization with Cisco StackWise® virtual technology, which is critical for its placement in the campus core.
- Supports advanced routing and infrastructure services.

Stay ahead of change

- Cisco Catalyst 9000 Family Switches
- Cisco DNA
- Cisco SD-Access
- Cisco ONE

The Network. Intuitive.

Our new Cisco Catalyst 9000 switching platform is the next generation in the legendary Cisco Catalyst family of enterprise LAN access, aggregation, and core switches. These are the first purpose-built platforms designed to take advantage of Cisco Digital Network Architecture (Cisco DNA™) and Cisco SD-Access.

These switches extend our networking leadership with breakthrough innovations in security, mobility, IoT, and the cloud. Like its predecessor, the Cisco Catalyst 9000 platform leverages the strengths of the Cisco Unified Access™ Data Plane (UADP) custom ASIC with policy-based networking. With the new UADP 2.0, the Cisco Catalyst 9000 platform delivers twice the performance with comparable pricing while adding a host of new features and functionality.

The Cisco Catalyst 9000 family is also the first in the line to offer more flexible licensing options. Cisco ONE™ is the new subscription-based software licensing scheme to let you purchase the features and capabilities you need.

Migration path

Existing Cisco Catalyst Switches	New Cisco Catalyst Switches
Cisco Catalyst 3560-X, 3750-X, and 3850 Series	Cisco Catalyst 9300 Series (lead fixed, stackable, access)
Cisco Catalyst 4500E Series	Cisco Catalyst 9400 Series (lead modular access)
Cisco Catalyst 4500-X Series and 3850 Series fiber	Cisco Catalyst 9500 Series (lead fixed core)