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Benefits of Upgrading to Cisco C9610 Series Smart Switches

Why upgrade to the Cisco C9610 Series Smart Switches?

Future-proof your campus core

A future-proof workplace has the agility to support the evolving needs of modern work while being resilient enough to adapt to an unknown future. It is where amazing experiences become the norm, not the exception. Offices become magnets, not just mandates. Technology becomes integrated and extensible, not rip and replace. Collaboration happens everywhere, not just in person. And security is infused from the start, not as an afterthought. This is the new AI Enterprise and is what the Cisco® C9610 Series Smart Switch has been built for. The Cisco C9610 Series continues to evolve the future with continued innovation that helps you reimagine connections, reinforce security, and redefine the experience for your AI Enterprise, big or small.

The new Cisco C9610 SUP-3/3XL supervisors are based on the Cisco Silicon One™ K100 ASIC, which is purpose-built for the evolution of future-proof workplace and optimized for the AI Enterprise.

The K100 ASIC offers a programmable pipeline (P4) and the first network silicon to offer high-performance routing and switching capacity up to 51.2 Tbps (25.6 Tbps full duplex) in the enterprise. This is enabled by a multiple-slice (discreet processing pipeline) internal architecture that includes an on-chip High Bandwidth Memory (HBM). The Cisco C9610 Series leverages a high-performance multiple-core x86 CPU and is Cisco's leading purpose-built modular core and WAN edge services enterprise switching platform, built for security, IoT, and cloud.

Table 1. Upgrade benefits comparison

Trend	Features	Previous modular core switches		Latest modular	Benefits
		Cisco Catalyst 6500 Series	**Cisco Catalyst 6800 Series**	**Cisco C9610 Series**	
Scale and performance versatility	Chassis bandwidth	720 Gbps	up to 2 Tbps	up to 6 Tbps	up to 51.2 Tbps	Better mix and variety of higher speeds with longevity of future upgrades without replacing the switch. Line-rate 400G, 200G, 100G, 50G, 40G, 25G, 10G.
	Throughput	450 Mpps	720 Mpps	780 Mpps	9.6 Bpps	
	400 Gbps (QSFP-DD) 200 Gbps (QSFP56)	-	-	-	✓	
	100 Gbps (QSFP28) 40 Gbps (QSFP+)	-	40G only	40G only	✓	
	50 Gbps (SFP56) 25 Gbps (SFP28)	-	-	-	✓	
Functionality	Simplified campus automation	-	-	-	✓	Optimized discovery and configuration of network devices.
	SD-Access[1]	-	Limited	Limited	✓	Next-generation overlay support for segmentation and policy-based management with integrated threat detection and mitigation.
	MPLS-VPN	✓	✓	✓	✓	
	Programmability	-	Limited	Limited	✓	Advanced Layer 2 + Layer 3 functionality for aggregation and border nodes with open programmable interfaces.
	Application hosting/ containers	-	-	-	✓	

Trend	Features	Previous modular core switches		Latest modular	Benefits
		Cisco Catalyst 6500 Series	Cisco Catalyst 6800 Series	Cisco C9610 Series	
High availability	StackWise® Virtual	-	✓	✓	✓	Greater reliability by way of link, component, and switch redundancy. Better manageability via hitless software upgrades.
	In-Service Software Upgrade (ISSU)	-	Limited	Limited	✓	
	Graceful Insertion and Removal (GIR)/Nonstop Forwarding (NSF)	-	-	-	✓	
	Hot patching	-	-	-	✓	
Security	Macro and micro segmentation	-	✓	✓	✓	Enable converged wired and wireless access for operational simplicity and scale.
	MACsec-256-bit encryption	128 bit	128 bit	128 bit	✓	
	Cisco TrustSec® endpoint security	-	✓	✓	✓	
	Trustworthy solutions	-	-	-	✓	

¹ SD-Access: Software-Defined Access

Finance your switching migration with Cisco Capital

Let financing from Cisco Capital® make migrating your switches and accelerating your digital transformation even easier. Cisco Capital Easy Pay makes this transition as easy as possible with no upfront costs and predictable monthly payments. You pay 90% of the total over a three-year period that is completely interest free. At the end of the term, you have the option to return and refresh the equipment, extend your lease, or purchase the solution at 10% of the original cost. Take advantage of this market-leading interest rate and use your budget for other investments.

Take advantage of **Cisco Capital Easy Pay**

- Reduce cost, complexity, and downtime with Cisco Software-Defined Access. Automate policy, enable fast service creation, and get 360-degree contextual insights across users, devices, and applications. Assure network performance with real-time and historical data analytics to learn, adapt, and even detect problems before they happen.

- Create better customer and employee experiences through higher performance and improved support for mobility and new apps.

- Benefit from advanced end-to-end security, designed to work together to detect and stop threats, reduce security complexity, keep your business more secure, and help your IT staff be more productive.

The Cisco C9000 Smart Switch family is also the first in the line to offer the multi-mode Cisco IOS® XE standard and Cisco Unified License subscription-based software licenses, allowing customers to purchase the features and capabilities they need. See the benefits you could be receiving now by comparing the Cisco C9610 Series Smart Switches to older switches (see Table 1).

Improve your results with our services

No matter where you are in your journey, Cisco and our partners offer services expertise to help you accelerate your digital network transformation – from upgrade and optimization services to award-winning support. We help you speed your upgrade deployments, reduce risk and complexity, and provide business continuity as you refresh your network. To simplify and support your upgrade, Cisco offers services to streamline the process and help you get the most out of your investment. The upgrade service helps control costs, improve operational excellence, and mitigate risk during your refresh.

Learn more about all **services for switches**.