



# The New Era of Networking

Enterprise networks Q4 FY17 launch

## **Cisco's Digital Network Architecture**

Approximately one year ago, Cisco introduced the Cisco® Digital Network Architecture (Cisco DNA™) to the market. We shared our vision for the future of networking with an open, software-driven network that could:

- Abstract network complexity with controllers to automate network processes (March 2016)
- Integrate security up and down the stack for the industry's best threat defense (ongoing)
- Decouple hardware from software through virtualization (March 2017)
- Deliver centralized management to simplify the network (today's announcement)
- Provide deep analytics through machine learning to reveal both IT and business insights (today's announcement, available November 2017)

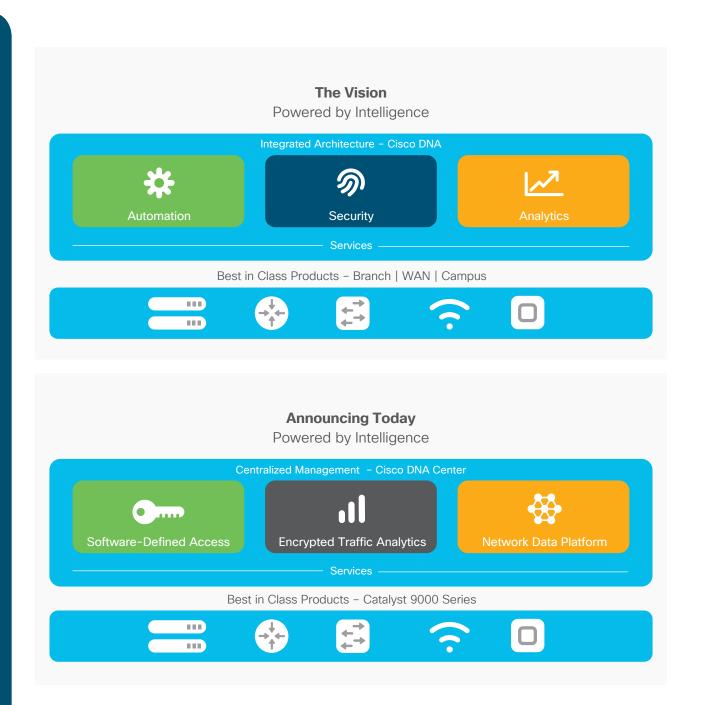
## What's new

We are continuing to add innovations to Cisco DNA to deliver on the promise of the digital-ready network. Cisco is now redefining networking with new groundbreaking solutions, including best-in-class Cisco Catalyst® 9000 Series Switches with Encrypted Traffic Analytics (ETA), integrated architecture solutions with Software-Defined Access (SD-Access), powered by intelligence with the new Network Data Platform (NDP)with Network Assurance. With these innovations, we are also introducing centralized management with Cisco DNA Center, new software subscription licensing, and new advanced and technical support services to help customers deploy these innovations. These solutions join recent innovations in virtualization and security announced in early 2017.



## How to buy

Cisco is making a major change to selling software subscriptions. When our customers adopt this software, they benefit from ongoing innovations and can shift from large capital expenditures to ongoing operating expenses. We recommend leading with the Cisco ONE Advantage subscription licensing model, because the true potential of solving a customer's problem is to use both our hardware and software innovations together. SD-Access is realized through advanced capabilities sold via the subscription license. Customers can still buy infrastructure via the a-la-carte model if they wish. Detailed ordering guides will be available at external launch on June 20, 2017.





## Cisco DNA-ready infrastructure

**Cisco Catalyst 9000 Series Switches:** These switches are security-, IoT-, mobility-, and cloud-ready with enhanced Network as a Sensor (NaaS) capabilities. The entire portfolio uses a single binary operating system, a common UADP 2.0 Application-Specific Integrated Circuit (ASIC), and x86 CPU enabling third party application hosting. The switches offer feature consistency across stackable or modular access, aggregation and core switches with the new ASIC that was developed in-house from the ground up. Security is built in to lower risk. This is the first industry solution that views and detects advanced persistent threats across all traffic and segments from users to applications in the cloud.

What to Sell	New or Update?	What Is It?	Customer Business and Network Priorities	FCS
Cisco Catalyst 9300 Series: Fixed access, Layer 3, stackable switch, 1RU, Cisco IOS® XE. Migrate to this from Catalyst 3000 Series switches.	New	Hardware	Position in greenfield opportunities. In brownfield	June 2017;
			situations, upsell from the 2000-level platforms to block out competition, or migrate from the 3560 and 3750 Series switches. If a customer recently	24-port, Multigigabit FCS August 2017;
			purchased 3650 or 3850 Series switches, position this switch as a future migration option once lab testing and validation cycles can be completed.	48-port Multigigabit FCS November 2017
Cisco Catalyst 9400 Series: Modular access, Layer 3, Cisco IOS XE. Migrate to this from Catalyst 4500E Series switches.	New F	Hardware	Position in greenfield opportunities. In brownfield situations, sell as an upgrade to the Catalyst 4500E	Orderability in July 2017;
			Series switches if your customer wants SD-Access capabilities.	FCS August 2017;
				mGig, 10G, and Sup1-XL SKUs FCS November 2017
Cisco Catalyst 9500 Series: Aggregation/fixed core switch, high speed, 40G, 1RU, Cisco IOS XE. Migrate to this from Catalyst 3850 Series fiber or Catalyst 4500X Series switches.	New Har	Hardware	Position in greenfield opportunities. In brownfield situations, sell as an upgrade to the Catalyst 4500X	24-port, 40G FCS June 2017;
			Series switches if your customer wants SD-Access capabilities.	Remaining SKUs FCS August 2017



## Network security

Sell Cisco Identity Services Engine (ISE) and NaaS solutions such as Cisco Stealthwatch® with Encrypted Traffic Analytics (ETA) to expand and simplify policy across the network and enhance security. Start with simple use cases. Once customers have ISE in place, they are positioned to more easily adopt SD-Access.

What to Sell	New or Update?	What Is It?	Customer Business and Network Priorities	FCS
ISE 2.2: Gain awareness of everything hitting the network. Provide access consistently and efficiently. Relieve the stress of complex access management. ISE requires an appliance on which to run the software. Both physical and virtual appliances are supported.	Update	Software	Customer already has a digital-ready infrastructure of Catalyst 3650 or 3850 Series or Catalyst 9000 Series switches and wants security policy segmentation at the user and device level. Upgrade ISE to release 2.2.	Now
ISE 2.3: This version of ISE is required for Cisco DNA Center automation and assurance capabilities. Requires an appliance on which to run the software. If the customer has ISE 2.2, they simply upgrade to ISE 2.3 by purchasing the Cisco ONE™ Advantage subscription license.	Update	Software and hardware	Customer already has a digital-ready infrastructure of Catalyst 9000 Series switches and wants to easily set security group policies and automatically deploy and configure all devices in minutes.	August 2017
Stealthwatch 6.9.2 with ETA: Only Cisco sees hidden threats in encrypted traffic by analyzing metadata as well as nonencrypted traffic, in real-time. This provides customers with security while maintaining privacy and confidentiality of encrypted data. ETA sees the traffic flowing over the infrastructure using Stealthwatch as the interface with the new Catalyst 9000 Series switches. There is no integration with Cisco DNA Center at this time.	New	Software	Customer has a digital-ready infrastructure of Catalyst 9000 Series switches, and this provides encrypted traffic analytics.	September 2017



### Network automation

Customers want an easy-to-use, intuitive centralized management dashboard to manage their networks. They want to reduce network management cost and complexity through automation. For these customers you should position Cisco DNA Center. Once it is in place, you can propose a basic automation pilot: Plug and Play, sites and profiles, monitoring and troubleshooting. Or if ISE is already deployed, propose an SD-Access pilot to show them the true potential of automation and assurance.

What to Sell	New or Update?	What Is It?	Customer Business and Network Priorities	FCS
Cisco DNA Center: Centralized management for branch, campus, and WAN environments. Built-in expertise to manage and deploy end-to-end network services from a single dashboard. Customers can design, provision, enable policy, and assure Cisco DNA services from one place. No more box-to-box management. Cisco DNA Center serves as the single GUI for APIC-EM and Network Data Platform.	New	Software and hardware	Use an installed digital-ready infrastructure or upgrade to Catalyst 9000 Series switches. Cisco DNA Center is a central management dashboard that enables intuitive control of LAN, WLAN, and WAN.	July 2017
An APIC-EM 2.0 appliance or equivalent server is required for Cisco DNA Center.				
Although DNA Center does not require ISE, ISE enables user and device mapping, visualizes topology, supports software image management, and provides Device 360. ISE integration with Cisco DNA Center is a simple series of intuitive clicks in the Cisco DNA Center Policy workflow.				



What to Sell	New or Update?	What Is It?	Customer Business and Network Priorities	FCS
Software-Defined Access (SD-Access): A new solution that delivers policy-based automation for users, devices, and things from the edge of the network to the cloud. Delivered through Cisco DNA Center, a centralized management console, SD-Access creates a single network fabric that simplifies and scales operations. It is the industry's first software-defined access solution across wired, wireless, and WAN networks managed as a single security entity. SD-Access dynamically adapts to changing needs with policy-based management of the network fabric. Use Cisco DNA Center to prescriptively manage software on network infrastructure, enable campus fabric configurations, and provide predictive assurance. With the integration of ISE 2.3, the customer can centrally manage the user policy. Cisco DNA Center talks to ISE on the back end, imports user groups, and then pushes the configuration back to ISE.	New	Software and Hardware	Customer wants policy-based automation from edge to cloud. Requires ISE 2.3; Cisco DNA Center; digital-ready switches such as the Cisco Catalyst 3850, 3650, 4500E Series; 6880-X; Cisco Nexus® 7700 with M3 line cards, or Cisco Catalyst 9300, 9400, and 9500 Series Switches; Cisco 8540 or 5520 WLC; Wave 2 access points such as Cisco Aironet® 1800, 2800, or 3800 Series; and WAN integration with 4000 Series ISR and ASR 1000 Series.	Limited deployment July 2017; SD-Access Mobility AireOS 8.5 FCS July 2017; FCS November 2017

## DNA analytics and assurance

Customers leverage network intelligence for business and IT insights and use analytics to help achieve assurance, a business outcome. Real-time intelligence gathered from the end-to-end network is used to predict problems, suggest remediation, and automatically take remedial action when applicable.

What to Sell	New or Update?	What Is It?	Customer Business and Network Priorities	FCS
Assurance with Network Data Platform (NDP): Industry's first network analytics platform for the campus. The NDP collects data from the network and normalizes it. Using machine learning models based on 30 years of Cisco network experience, Network Assurance within Cisco DNA Center can help IT to find anomalies and predict future behavior. IT is now able to troubleshoot the network faster by using recommendations from Network Assurance to quickly rectify problems and help prevent downtime.	New	Hardware and Software	Customer wants network and machine learning for consistent worker and customer experiences.	EFT July 2017; FCS November 2017



## Cisco DNA services

Propose Cisco Services to help customers design, implement, and optimize the right network solution based on their business goals. Offer managed services to proactively monitor and manage the network infrastructure. And finally, sell training and technical support.

What to Sell	New or Update?	What Is It?	Customer Business and Network Priorities	FCS
Cisco DNA Advisory Service: Explore DNA migration and transition options. Create a strategic plan that encompasses not only technology, but also people and processes. Identify eight primary areas to address during network transformation.	New in February 2017	Services	Build a cost-effective strategy to move to a digital architecture while maintaining a stable, secure network during the transition.	Now
Cisco Catalyst 9000 Series Services: Services include phased migration planning to introduce new hardware, software, and protocols to the network; ongoing optimization; product technical support; and proactive monitoring and management for network infrastructure.	Updated	Services	Achieve infrastructure excellence faster with less risk.	June 2017
NaaS Services: Cisco offers the best expertise and has the global reach necessary to deploy and optimize security systems quickly and error-free anywhere in the world.	Updated	Services	Successfully deploy enhanced NaaS.	June 2017
<b>SD-Access Services:</b> Delivered by Cisco, these services help customers anticipate change and pivot quickly, securely, and confidently. Twelve new services available. Recommend advisory, optimization and solution support to start.	New	Services	Move to a secure and automated network with ease and confidence.	June 2017



#### Resources

- Seller global launch hub – Enterprise Networks: http://go2.cisco.com/GlobalLaunchHub
- Partner global launch hub - Enterprise Networks: http://www.cisco.com/go/partnerlaunchhul DevNet:

#### What Cisco products are considered part of a Cisco DNA-ready infrastructure?

Cisco Catalyst 9000 Series

Switching

- Cisco Catalyst 9300 Series Switches
- Cisco Catalyst 9400 Series Switches
- Cisco <u>Catalyst 9500 Series Switches</u>

Cisco Catalyst 3650 and 3850 Series Switches

Cisco Catalyst 4500E Series Switches plus Supervisor Engine 8-E

Cisco Catalyst 6500 Series Switches plus Supervisor Engine 6T

Cisco Catalyst 6800 Series Switches

Cisco Nexus 7700 Switches plus M3 card

Cisco Meraki® MS switches\*

Cisco Aironet 3800 Series

Cisco Aironet 2800 Series

Cisco Aironet 1800 Series

Cisco 8540 Wireless Controller

Cisco 5520 Wireless Controller

Cisco Meraki® MR access points\*

Cisco 4000 Series Integrated Services Routers

Cisco ASR 1000 Series Aggregation Services Routers

Cisco Cloud Services Router 1000v

Cisco Integrated Services Virtual Router with Enterprise Network Compute System

Cisco Meraki MX security appliances\*

Cisco Enterprise Network Compute System

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<sup>\*</sup> Meraki integration with Cisco DNA Center is planned for the future.