



# The Cisco DNA-Ready Infrastructure

## Is your network built for the new era in networking?

The foundation for the Cisco® Digital Network Architecture (Cisco DNA) is the world's most modern network infrastructure.

This infrastructure gives you innovative wired, wireless and router solutions, combined with a robust architecture, DNA. With it, you can create and apply policies over the entire network with a few clicks and have the ability to diagnose past issues.

As data traffic is expected to grow exponentially, Cisco's innovation with switching, wireless and routing provides a solid foundation that enables Cisco DNA.

You can roll out new services and applications more easily for the best possible experience with Cisco DNA. And policy compliance can be automated on a per-user-group basis.

Introducing an entirely new era of networking. The Network. Intuitive.



Today's technologies demand a network that constantly learns. Constantly adapts. Constantly protects. So you can work faster, more efficiently and more securely. You need a network informed by context. Powered by intent.

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## Wireless

An exclusive function that the Cisco Aironet® Access Points offer is Flexible Radio Assignment. This feature allows the access point to automatically adjust the network when client surges occur.

### Cisco DNA for Mobility

Pillar	Mobility Features	Mobility Benefits
Insights and Experience	Cisco Connected Mobile Experiences (CMX) with hyperlocation technology	Deliver better analytics and engagements through precise location accuracy of 1 to 3 meters. Analyze visitor behavior, make guest Wi-Fi access easier, track assets quickly and accurately and provide visitors with a better experience.
	Cisco <a href="#">Wi-Fi and beacon</a> data points	Cisco provides the most granular employee, customer, device and application data to gain extensive value from your network via a solution ecosystem with programmability and open APIs.
	Cisco access points deliver modular architecture	Plan for emerging use cases and support the digital ceiling through Wi-Fi and the Internet of Things (IoT).
Automation and Assurance	Cisco High Density Experience (HDX)	Automatically manage the airwaves and improve Wi-Fi performance.
	Cisco <a href="#">Flexible Radio Assignment</a>	Deliver Wi-Fi coverage and capacity to meet service-level demands.
	Cisco DNA Center	Delivers a single pane of management to design, provision, enable policy and assure network services with full visibility of user and device identity, operating systems and applications across the entire network fabric.
	Apple FastLane	Enable iOS devices to intelligently communicate and make a fast-track connection to the best-suited access point, quickly and efficiently, all while saving battery power.

## Cisco DNA-ready wireless products:

- Cisco [Aironet 3800 Series](#)
- Cisco [Aironet 2800 Series](#)
- Cisco [Aironet 1800 Series](#)
- Cisco [8540 Wireless Controller](#)
- Cisco [5520 Wireless Controller](#)
- Cisco [Meraki® MR](#)

## Cisco DNA for Mobility

Pillar	Mobility Features	Mobility Benefits
<b>Security and Compliance</b>	Cisco Application Policy Infrastructure Controller Enterprise Module (APIC-EM) Plug and Play with Quality of Service (QoS)	Adopt software-defined networking technologies with a controller that automates provisioning of the end-to-end infrastructure to deploy applications and services.
	Cisco Jabber® and Lync SDN API	Allow employees to access instant messaging, voice, video, voice messaging, desktop sharing and conferencing from anywhere.
	Cisco's Identity Services Engine (ISE) 2.2	Protect access by preventing unauthorized connections and limit the impact of incidents. Deploy a next-generation identity and access control policy platform that enforces compliance, enhances infrastructure security and streamlines service operations.
	Cisco's innovative purpose-built access points	Protect the airwaves from rogue devices, wireless attacks and interference provide a key set of services for IP applications, including network traffic accounting, usage-based network billing, network planning, security, denial-of-service monitoring capabilities and network monitoring. While maintaining the client experience.
	Cisco TrustSec®	Simplify the provisioning of network access, accelerate security operations and consistently enforce policy anywhere in the network.
	Cisco <a href="#">Stealthwatch®</a> and Cisco Umbrella™ enable end-to-end embedded security	Protect assets by logically segmenting the network with granular policies. Receive advanced network visibility, analytics and protection by seeing everything that happens across your network and data center.

## Switching

The Cisco switching products offer a function called Unified Access Data Plane Application-Specific Integrated Circuit (UADP ASIC) for wired and wireless convergence. This feature enables converged wired and wireless access for operational simplicity and scale.

Cisco DNA for Switching		
Pillar	Switching Features	Switching Benefits
<b>Insights and Experience</b>	Multigigabit uplink support	Support multigigabit access growth for wired and wireless/802.11ac through NBASE-T Cat 5e and Cat 6 speeds of 2.5 and 5 Gbps.
	SmartOperations	Use real-time analytics to help ensure application experience and lower costs with path selection.
	Common features for wired and wireless	Enable converged wired and wireless access for operational simplicity and scale.
	Integrated Wireless LAN Controller	
	UADP ASIC for wired and wireless convergence	
<b>Automation and Assurance</b>	Application visibility across wired-wireless	
	Cisco ONE™ Software Suites	Deploy model-based telemetry.
	DNA Center/SD-Access programmability	Delivers a single pane of management to design, provision, enable policy and assure network services with full visibility of user and device identity, operating systems and applications across the entire network fabric.
	EasyQoS	Use Cisco onePK and OpenFlow application-aware dynamic QoS.
	Cisco APIC-EM	Automate provisioning and policy enforcement for faster SD-WAN deployments.

Cisco DNA-ready switching products:

- Cisco Catalyst® 9000 family
  - Cisco [Catalyst 9300 Series Switches](#)
  - Cisco [Catalyst 9400 Series Switches](#)
  - Cisco [Catalyst 9500 Series Switches](#)
- Cisco Catalyst [3650](#) and [3850](#) Series
- Cisco Catalyst [4500E Series](#) + Supervisor 8E
- Cisco Catalyst [6500 Series](#) + Supervisor 6T
- Cisco Catalyst [6800 Series](#)
- Cisco Nexus® [7700+M3 Card](#)
- Cisco [Meraki MS](#)

Cisco DNA for Switching

Pillar	Switching Features	Switching Benefits
<b>Security and Compliance</b>	Native Flexible NetFlow	Deploy industry-leading advanced threat defense.
	Cisco TrustSec and Security Group Tags (SGT) for wired and wireless	Orchestrate role-based access to corporate resources by any user, with any device, from any location, at any time.
	Cisco Network as a Sensor	Use the network to detect and stop threats faster across all segments; high-performance encryption for secure WAN.
	Native MACsec encryption	Deploy high-performance encryption for a secure WAN.

## Routing

The Cisco DNA-ready routing products combine two unique features that speed up the time it takes to deploy your branch office. With the Cisco Intelligent WAN (IWAN) app with the APIC-EM, IT can automate the provisioning of multiple branch offices and provide intelligent path selection and application control—with minimal programming and customization. These capabilities will simplify and streamline your network operations, reducing costs and saving time.

### Cisco DNA for Routing

Pillar	Routing Features	Routing Benefits
<b>Insights and Experience</b>	Cisco Application Visibility and Control (AVC)	Gain visibility into 1000+ applications for capacity planning and prioritization.
	Intelligent Path Selection (Cisco Performance Routing [PfR] v3)	Use real-time analytics to help ensure application experience and lower costs with path selection.
	WAN Optimization (Cisco Wide Area Application Services [WAAS] and Akamai)	Improve application performance and WAN offload with Layer 4 through 7 optimization and intelligent caching.
<b>Automation and Assurance</b>	Pay-as-you-grow performance and services	Buy what you need now and upgrade later without a complete equipment upgrade.
	Cisco DNA Center	Delivers a single pane of management to design, provision, enable policy and assure network services with full visibility of user and device identity, operating systems and applications across the entire network fabric.
	Cisco IWAN app with APIC-EM	Automate provisioning for faster SD-WAN deployments.

## Cisco DNA-ready router products:

- [Cisco 4000 Series Integrated Service Routers](#)
- [Cisco ASR 1000 Series Aggregation Service Routers](#)
- [Cisco Cloud Service Router 1000v and Cisco Integrated Services Virtual Router](#)
- [Cisco Meraki MX](#)

## Cisco DNA for Routing

Pillar	Routing Features	Routing Benefits
Security and Compliance	Cisco Firepower® Threat Defense for ISR	Deploy industry-leading advanced threat defense.
	Cisco Umbrella Branch (OpenDNS)	Protect the network from malware, botnets, phishing and targeted online attacks using real-time threat intelligence.
	Cisco Stealthwatch Learning Network license	Gain branch network visibility and device-level incident response with packet capture and machine learning (2900 and 3900 Series ISR requires Cisco UCS® E-Series blade).
	Multicore hardware VPN acceleration	Deploy high-performance encryption for secure WAN.

## Services

Accelerate your journey to the new network and realize greater value with [Cisco Services](#). From planning to migration to award winning support, we offer end-to-end guidance and expertise to speed your transition.

## Summary

The world never stops evolving. You need a network that evolves with you. A digital-ready network. Built on a robust Cisco DNA-ready infrastructure.

The Network. Intuitive.

Learn how we can help you stay ahead:

- [Cisco Digital Network Architecture](#)
- [Cisco Routers](#)
- [Cisco Switches](#)
- [Cisco Wireless](#)
- [View 3D DNA-Ready Product Catalog](#)