Cisco unveils network of the future that can learn, adapt and evolve

2017-07-25

Designed to be intuitive, Cisco's new network can recognize intent, mitigate threats through encryption, and learn over time, unlocking opportunities and enhancing business agility CASABLANCA, MOROCCO -- (Marketwired) -- 07/25/17 -- Today Cisco (NASDAQ: CSCO) unveiled intent-based networking solutions that represent one of the most significant breakthroughs in enterprise networking. The introduction is the culmination of Cisco's vision to create an intuitive system that anticipates actions, stops security threats in their tracks, and continues to evolve and learn. It will help businesses to unlock new opportunities and solve previously unsolvable challenges in an era of increasing connectivity and distributed technology.

This new network is the result of years of research and development by Cisco to reinvent networking for an age where network engineers managing hundreds of devices today will be expected to manage 1 million by 2020.

"The network has never been more critical to business success, but it's also never been under more pressure," said Chuck Robbins, chief executive officer for Cisco. "By building a more intuitive network, we are creating an intelligent platform with unmatched security for today and for the future that propels businesses forward and creates new opportunities for people and organizations everywhere."

Today companies are managing their networks through traditional IT processes that are not sustainable in this new age. Cisco's approach creates an intuitive system that constantly learns, adapts, automates and protects, to optimize network operations and defend against today's evolving threat landscape.

"Cisco's Encrypted Traffic Analytics solves a network security challenge previously thought to be unsolvable," said Abdelilah Nejjari, General Manager of Cisco for the Maghreb region. "ETA uses Cisco's Talos cyber intelligence to detect known attack signatures even in encrypted traffic, helping to ensure security while maintaining privacy."

With the vast majority of the world's internet traffic running on Cisco networks, the company has used its unique position to capture and analyze this immensely valuable data by providing IT with insights to spot anomalies and anticipate issues in real time, without compromising privacy. By automating the edge of the network and embedding machine learning and analytics at a foundational level, Cisco is making the unmanageable manageable and allowing IT to focus on strategic business needs.

Already, 75 leading global enterprises and organizations are conducting early field trials with these next-generation networking solutions, including NASA and Royal Caribbean Cruises Ltd.

Informed by context and powered by intent

With this new approach, Cisco is changing the fundamental blueprint for networking with reimagined hardware and the most advanced software. This shift from hardware-centric to software-driven networking will enable customers to experience a quantum leap in agility, productivity and performance. The intuitive network is an intelligent, highly secure platform -- powered by intent and informed by context:

- **Intent:** Intent-based networking allows IT to move from tedious traditional processes to automating intent, making it possible to manage millions of devices in minutes -- a crucial development to help organizations navigate today's ever expanding technology landscape.

- **Context:** Interpreting data in context is what enables the network to provide new insights. It's not just the data that's important, it's the context that surrounds it -- the who, what, when, where and how. The intuitive network interprets all of this, resulting in better security, more customized experiences and faster operations.

- **Intuition:** The new network provides machine-learning at scale. Cisco is using the vast data that flows through its networks around the world, with machine learning built in, and unleashing that data to provide actionable, predictive insights.

The technologies that power the intuitive network

[Cisco Digital Network Architecture (DNA)](#) provides customers with a portfolio of innovative hardware and software to bring the new era of networking to life. Today Cisco is introducing a suite of Cisco DNA technologies and services designed to work together as a single system and empower customers to move at digital speed:

- [**DNA Center.**](#) An intuitive, centralized management dashboard providing IT teams with an intent-based approach spanning design, provisioning, policy and assurance. With full visibility and context across the entire network, DNA Center allows IT to centralize management all network functions.

- [**Software-Defined Access (SD-Access).**](#) SD-Access uses automated policy enforcement and network segmentation over a single network fabric to dramatically simplify network access for users, devices and things. By automating day-to-day tasks such as configuration, provisioning and troubleshooting, SD-Access slashes the time it takes to adapt the network, improves issue resolution from weeks and months to hours, and dramatically reduces security breach impact. Initial analysis with field trial customers and internal testing have shown a reduction in network provisioning time by 67%, improved issue resolution by 80%, reduced security breach impact by 48%, and opex savings of 61%.

- ***Network Data Platform and Assurance.*** This powerful new analytics platform efficiently categorizes and correlates the vast amount of data running on the network and uses machine learning to turn it into predictive analytics, business intelligence and actionable insights delivered through the DNA Center Assurance service.

- ***Encrypted Traffic Analytics.*** Today, almost half of cyber-attacks are hidden in encrypted traffic and this number keeps growing. By utilizing Cisco's Talos cyber intelligence and machine learning to analyze metadata traffic patterns, the network can identify the fingerprints of known threats even in encrypted traffic, without decrypting it and impacting data privacy. Only Cisco can enable IT to detect threats in encrypted traffic with up to 99% accuracy, with less than 0.01% false positives. As a result, the new network provides security while maintaining privacy.

- ***Catalyst 9000 Switching Portfolio.*** Cisco is introducing a new family of switches built from the ground up for the new realities of the digital era, centered on the demands of mobility, cloud, IoT and security. The Cisco Catalyst 9000 delivers unmatched security, programmability and performance by innovating at the hardware (ASIC) and software (IOS XE) layers.

- ***Software Subscription.*** Cisco is now making software subscription an essential element of its flagship campus switching portfolio. When purchasing the new Catalyst 9000 family of switches, customers will access the DNA software capabilities by subscription, either via pre-bundled Cisco ONE software suites or a-la-carte components. Available across the entire enterprise networking portfolio, Cisco ONE software provides businesses with access to ongoing innovation, budget predictability, and a more agile way to consume the technology.

- ***DNA Services.*** To help customers embrace intuitive networking with speed and confidence, Cisco has created a new portfolio of services that leverage our proven experience, best practices and innovative tools. Whether customers are looking to transform their entire network or integrate new security and automation capabilities into their existing network, Cisco has a comprehensive lifecycle of advisory, implementation, optimization and technical services to help them on their journey. Cisco channel partners can also resell these services and build networking practices that incorporate software, security, automation and analytics for their customers.

- ***Developer Center.*** Cisco is releasing a new DevNet DNA Developer Center with resources to help developers and IT professionals create network-powered applications and integrate them within their IT systems and workflows. This includes new learning tracks, sandboxes, and developer support resources for using APIs and building skills.

Availability

- June 2017 - Catalyst 9300 & 9500 Series (orderable)
- July 2017 - Catalyst 9400 Series (orderable)
- August 2017 - DNA Center, SD Access (controlled availability)
- September 2017 - Encrypted Traffic Analytics (scheduled to be available)
- November 2017 - Network Data Platform (orderable), Assurance (scheduled to be available), SD-Access (scheduled for full availability)

Supporting quotes:

NASA

"The Cisco Catalyst 9000 has exceeded NASA's mission-critical requirements for security and

segmentation -- and at twice the performance."
Eric Latta, Solutions Architect. NASA

Royal Caribbean Cruises Ltd.

"From a technology standpoint, our cruise ships are like small cities. Cisco's intent-based networking is transformational in how our IT can securely and remotely provision cruise ships around the world."
Michael Giresi, Chief Information Officer, Royal Caribbean Cruises

Additional Resources

Executive Blog: [The need for more intuitive networking](#) (Chuck Robbins)

Executive Blog: [Breaking Down Cisco's Biggest Innovation in the Past Decade](#) (David Goeckeler)

Feature Story: [Cisco Launches a New Era in Networking](#)

Feature Story: [Seeing threats hidden in encrypted traffic](#)

Read about: [Cisco enterprise networking](#)

About Cisco
Cisco (NASDAQ: CSCO) is the worldwide technology leader that has been making the Internet work since 1984. Our people, products, and partners help society securely connect and seize tomorrow's digital opportunity today. Discover more at newsroom.cisco.com and follow us on Twitter at @Cisco.

Cisco, the Cisco logo, Cisco Systems and Cisco IOS are registered trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries. All other trademarks mentioned in this document are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. This document is Cisco Public Information.

RSS Feed for Cisco: http://newsroom.cisco.com/rss-feeds

Media Contact:

Sonwabise Sebata
PR and Communications Lead: Africa
Cisco
+27 11 267 1000

Source: Cisco Systems South Africa (Pty) Ltd