Secure Intelligent Platforms for the Digital Business
It’s no longer just about Connectivity.

Gordon Thomson
Managing Director. Digital Acceleration, Architectures - Cisco EMEAR
the secure, intelligent PLATFORM delivering value beyond *Connectivity*
Secure, Intelligent Platform for Digital Business

- Security is Foundational
- Reinvent the Network
- Embrace a Multi-Cloud World
- Unlock the Power of Data
- Employee and Customer Experience

Increased Pace of Innovation
Why Platforms: What is Different?
Cisco’s R&D Strategy has been focused on building platform

- User Experience
- Open Architecture
- Systems Integration
Cisco has been working toward this for years

- Data Delivery Platform
- Intelligent WAN (iWAN)
- Network Function Virtualization (NFV)
- Digital Network Architecture
- Policy Enforcement Points (PEP) in the Mobile and DOCSIS Packet Cores
- Software Defined Access (SDA)
- Software Defined Networking (SDN)
- Connected Grid Endpoints
- Connected Grid Routers
- APIC-EM
- Industrial/Field Network Director
- Jasper Provisioning and Connectivity Management
- DevNet
- Cisco DevNet
- Cisco
A Platform Approach: Differentiated and based on Software

- Analytics & Assurance
- Security & Compliance

Automation
Intent-based network for

WAN
Optimize and secure application performance over any connection to the cloud.

Access
Segment your network and secure user access from the edge to the cloud.

Cloud Edge
Securely connect and protect workloads moving into the cloud and between clouds.

Data Center
Run any traditional or cloud native application across any environment.

Re-invent Networking
Reinvent Networking
The role of the network
...the birth of an I.T. headache

- Gordon and his desktop PC
- Gordon goes mobile, wlan, laptop and mobile
- Data, voice, video and sharing – hyper connected and communicative
- Convergence of data and voice – my first ip phone
- Ohoo – security is getting complicated
- Where does the application live – Gordon does not care as long as it works
- Network management still CLI
- 43% of time on troubleshooting
- IT can barely cope
The Enterprise Network Needs New Approach

Today’s Networks
- Manual
- Complex
- Inefficient
- Fragmented
- Rigid
- Opaque

Tomorrow’s Networks
- Open & Software delivered
- Protected everywhere
- Powered by Intuition
- Driven by intent
- Informed by Context
- The more you use it, the smarter it gets
“Intent-based networking systems monitor, identify and react in real time to changing network conditions.”

– Gartner
The Network. Intuitive.

Intent
- Based Network Infrastructure
  - Switching
  - Routers
  - Wireless

DNA Center
- Policy
- Automation
- Analytics

Learning

Context
- Intent-Based Network Infrastructure
  - DC
  - Campus
  - Branch

Security
What Has Been Announced?

One Network Fabric that Automatically Adapts
Software Defined Access
Software-Defined Access
Networking at the speed of Software!

Identity-based Policy & Segmentation
Decoupled security policy definition from VLAN and IP Address

Automated Network Fabric
Single Fabric for Wired & Wireless with Workflow-based Automation

Insights & Telemetry
Analytics and insights into user and application behavior

DNA Center
Policy Automation Analytics

SDA-Extension
User Mobility Policy stays with user

IoT Network

Employee Network
What Has Been Announced?

One Network Fabric that Automatically Adapts
Software Defined Access

Manage the network as one entity
DNA Center
Cisco DNA
Enterprise Portfolio

DNA Center:
Simple Workflows

- DESIGN
- PROVISION
- POLICY
- ASSURANCE

Software-Defined Access

Network Data Platform — APIC-EM — Identity Services Engine

Routers
Switches
Wireless AP
WLC
What Has Been Announced?

One Network Fabric that Automatically Adapts
Software Defined Access

Manage the network as one entity
DNA Center

Agile Infrastructure
Catalyst 9000 Switching Portfolio with Software Subscription

BUILT ON CISCO DNA
SD-Access Support
A single fabric for your digital ready network

Switching
- Catalyst 9400
- Catalyst 9300
- Catalyst 9500
- Catalyst 4500E
- Catalyst 6K
- Nexus 7700
- Catalyst 3850 and 3650

Routing
- ASR-1000-X
- ASR-1000-HX
- ISR 4430
- ISR 4450
- CSR 1000V

Wireless
- AIR-CT5520
- AIR-CT8540
- AIR-CT3504
- Wave 2 APs (1800, 2800, 3800)
- Wave 1 APs (1700, 2700, 3700)
What Has Been Announced?

- One Network Fabric that Automatically Adapts
  Software Defined Access

- Manage the network as one entity
  DNA Center

- Predict Issues Before they Become Issues
  DNA Assurance

- Agile Infrastructure
  Catalyst 9000 Switching Portfolio with Software Subscription

Built on Cisco DNA
Applied Intelligence with DNA Assurance
Converting Data to Business and IT Insights

Visibility
Learn from the network and clients attached to it

Insights
See problems before your end users do

Troubleshoot
Find root cause faster with granular details

Automate
Recognize changes and inform the self-driving network

Predictive Performance
Understand how new services will impact service levels

Industry’s First Self-Predicting Network Analytics Platform
What Has Been Announced?

- Manage the network as one entity
  DNA Center

- Predict Issues Before they Become Issues
  DNA Assurance

- Agile Infrastructure
  Catalyst 9000 Switching Portfolio with Software Subscription

- One Network Fabric that Automatically Adapts
  Software Defined Access

BUILT ON CISCO DNA
Catalyst 9000 + Encrypted Traffic Analytics

Visibility and Malware Detection without Decryption

- Malware in Encrypted Traffic
  - ETA algorithms analyze multiple network data sources

- Security AND Privacy
  - No Information is decrypted

- Detection Accuracy
  - Very High Accuracy
Cybersecurity and Network Context

Machine Learning Identifies Malware

- Talos Threat Intelligence
- Catalyst 9000 network context
- Machine learning identifies malware in encrypted traffic
- Network closed-loop response
Cisco DNA
Delivering real outcomes today.....

67%
Network Provisioning Time Savings

80%
Improve Issue Resolution

48%
Reduced Security Breach Impact

61%
Reduced Operating Expense

* Source: Internal TCO Analysis with Large Enterprise Customer (actual results may vary)
** Capex Reduction based on converging NOT Networks
Customer Cost Benefit: 30% Networking Saving, 4-6% IT Budget Saving

Enterprise IT Spend

Network IT spend typically 15% of total IT spend

Addressable Network Spend

Spend is a mix of Opex and Capex

As-Is

Network Transport 60%

Operations 40%

Transport Charges

Operations Opex

Operations Capex

To-Be

Unbundled Transport + Wireless

Automation

Virtualization

Savings

30%

30%+ savings after investments

As-Is to To-Be

30% Savings

Benefits

Impacting total IT spend by 4-6%

IT Management, Finance, Admin + Service Desk 17%

Applications 33%

End User 11%

Network 15%

Compute + Storage Cisco 24%

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Source: Gartner IT Key Metrics Data (2015)