Cisco Borderless Networks
The Vision And Architecture

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Agenda

- Why Borderless Networks, And Why Now
- Cisco Borderless Network Architecture Vision
- Examples And Proofpoints of The Direction
- Summary
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Internal Corporate Network
(ICT Middle Ages?)

Challenges:
- Efficiency
- Productivity
- Innovation
- Automation
- Scale

HQ Applications & Data

Branch Office

• Human Controlled Interaction
Interconnected Network
(Common Currently)

Challenges:
- Interconnection of networks
- New threats, risks and challenges
- Well defined perimeters

<table>
<thead>
<tr>
<th>Multiple borders in place</th>
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</thead>
<tbody>
<tr>
<td>Outside Inside</td>
</tr>
<tr>
<td>HQ, Branch</td>
</tr>
<tr>
<td>Wired connection, Wireless connection</td>
</tr>
<tr>
<td>PC, Smartphone</td>
</tr>
<tr>
<td>Workplace, Home</td>
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<tr>
<td>Workplace, On travel</td>
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<tr>
<td>Working hours, Off hours</td>
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• Interconnection of networks
• New threats, risks and challenges
• Well defined perimeters
Major Trends Are Reshaping the Industry…

IT Consumerization

Demand Consumer-Like Experience at The Workplace

Video

60% of All Cisco Network Traffic Today Is Video

Mobility

1.3 Billion New Networked Mobile Devices in Next 3 Years

XaaS

E-Mails, Calendaring, Salesforce.Com, Webex, Amazon, Google

Green

Awareness, Compliance, Operational Efficiency
...And Driving Business Imperatives

The Key Change: Putting the Interaction Where the Customer Is

Customer Experience/Innovation
1. Acquire and retain customers
   - Drive innovative new market offering/biz practices
   - Improve quality of products and services
2. Manage customer relationships

Productivity/Operating Expense
2. Lower company operating costs
   - Improve workforce productivity
   - Support globalization

The Transformation
New Borderless Enterprise

Anyone
- Employee, Partner, Customer, Communities

Anything
- Person / Device, Device / Device, Information

Anywhere
- Work, Home, On the Go...

Anytime
- Always Works, Instant Access, Instant Response
From Bordered to Borderless Enterprise

Customers / Partners
Mobile User

Malware

Software as a Service
Infrastructure as a Service
Platform as a Service

Device Border
Location Border
Application Border

HO Applications & Data
Guest Users

Connectivity Border

Coffee Shop
Home Office
Branch Office
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Borderless Networks

New Business Architecture Approach

- Accelerate growth by integrating innovations into the business process—bringing interactions faster to the customer.

- Harness Video as the agent of change to realize closer customer contact, enhance customer experience and customer loyalty.

- Transform the workspace experience and increase productivity. Automate business processes to drive down costs.

Connect More Closely with Your Customer, Partner, Workforce
Borderless Network

What is included? How is it positioned?

- Converge systems and services in order to operate efficiently and innovate readily.
- Couple high-value applications and utilities to an end-to-end intelligent network platform.
- Continue to build Borderless Networks capabilities across five distinct technology fronts.

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Architecting Borderless Networks

Policy Control

Borderless Mobility
Borderless Performance
Borderless Security

Borderless User Services

Medianet
EnergyWise
Network Resiliency and Control

Borderless Network Services

Connection Management
Borderless Networks Evolution

Borderless Policy

Borderless User Services

Borderless Network Services

Borderless Experience

Borderless Integration Framework
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Cisco Virtual Office Solution

- Remote routers can be shipped directly to end user with factory defaults or staged
- Strong PKI security authenticates remote devices
- RSA keys for management and converged VPN tunnels are separate
- Converged VPN to corporate network features active secondary tunnel to facilitate instant failover
- Architecture allows for outsourcing of NOC to separate IT entity
- Management tunnel stays up, allowing centralized push of policy changes
- Spouse and kids are on separate network with access only to Internet
- Mobile access is available from hotspots
Smart Business Architecture for Mid-Size Networks

Network Architecture baseline for 250-1000 connected endpoints, fully tested, documented, jointly roadmapped across product lines.
Smart Business Architecture for Mid-Size Networks

Partner Enablement Assets
At-a-Glance, What’s in It for Me, How to Sell, and Customer Presentation

Design Guide
12-15 pages

Deployment Guide
50 pages

Configuration Reference
50 pages

Network Management Integration Guides
Including Solarwinds, Ipswitch, ScienceLogic

Unified Communications Acceleration Guide
30 pages

Data Center and Collaboration Deployment Guides

http://www.cisco.com/go/smartarchitecture
http://www.cisco.com/go/partner/smartarchitecture
Cisco Integrated Services Router Generation 2 (ISR G2)

Enabling Branch – Customer Interaction

Performance, Scalability, Availability

Virtual Office
Secure Mobility
Customizable Applications
Secure Collaboration
Scalable Rich-Media Services

860, 880, 890
1941, 1941W
2901, 2911, 2921, 2951
3925, 3945

Enhancing the Borderless Experience

Public launch:
http://www.cisco.com/go/experience
Borderless Branch with ISR G2

Service Innovation
- Services “On-Demand”
- Customized Applications
- Cloud extension

Video
- Rich-media applications
- High performance
- Application optimization

Operational Excellence
- Greener technology
- Operational Simplicity
- Rapid ROI with Investment Protection

Business Innovation

Customer Experience

Lowest TCO
Cisco Secure Services Client (SSC)

- 802.1x supplicant

- Intelligent connection management and control
  - Policy driven network type preference
  - Automatic connection to best available network
  - Automatic VPN connection setup

- End user experience
  - Smooth (unattended) network connectivity setup across different environments

CCX Initiative: Cisco Client eXtensions

- Services platform for reliable and high value mobility solutions (on top of standard WiFi)
- Fast addressing customer pain points through accelerated innovation
- Commitment to Standards (70% features developed in CCX so far have made it to standards)
- Delivering Mobile Services across transport layers (roadmap)
- Tested interoperability (Network, Device, OS)

Over 120 vendors participate
90% WiFi silicon CCX certified

http://www.cisco.com/go/ccx
Webex Node for ASR 1000

- SPA HW running SW that extends the Webex cloud service to the enterprise
- Performance and bandwidth optimization for webex, voice, video sessions in a conference


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ScanSafe Acquisition Intent (October 2009)

- **ScanSafe**: Web Security provider
  - Operating fully in a SaaS model

- **Cisco Security solutions and products**
  - Mostly premises-based
  - Network integration

- **Complementary capabilities**
  - Can provide security services and experience independently on location and deployment model

http://www.scansafe.com/
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Summary

- Major Industry Trends Demand Changes in The Way How Infrastructures Are Built
  Connect: Anyone, Any device, Anywhere, Any time
  Need to follow customers with business interactions

- Cisco Borderless Network Architecture
  Business and Technology Approach to Build Infrastructures And Eliminate Barriers for User Experience
  Enables Increase of Customer Intimacy, Productivity, and Agility Across Many Business Models

- Examples And Proofpoints Exist Today, More to Come
  Solutions (CVO, SBA)
  Industry initiatives (CCX)
  Products (ISR G2, ASR1000 Webex SPA…)
Cisco Networkers
Barcelona
Registrujte se