Cisco IT Device Landscape

Corporate Laptops (CYOD)
- Windows: 84,696
- Linux: 7,264
- Apple: 33,780

Corporate VXI Endpoints
- Cisco: 3,101

Mobile Devices (BYOD)
- Apple: 15,873
- Android: 32,536
- BlackBerry: 10,970
- Other: 5,401
- Other: 806

Mar 31 2013
Mobility is More Than Just BYOD
Cisco IT Mobility Strategy

Scaled Architecture
- Any Trusted Device
- Industry Standard Platforms
- Cisco AnyConnect and Device Mgmt.
- Pervasive Wireless and ISE

Flexible Liability
- BYOD-only Smartphones and Tablets
- Corporate Laptops
- Optional Corporate Mobile Service
- Strong Policy and Rules of Use

Service Providers
- Global relationships
- Pro-active cost optimization strategies
- Industry-first pricing models

Robust App Lifecycle
- User-Driven Progression
- Collaboration Apps
- Enterprise and LOB Selection
- Cisco eStore

Social Support
- Proactive Communications
- Self-Service Content
- One to Many Interactive Support
- Traditional One to One
Mobility is More Than Just BYOD
Cisco IT Mobility Strategy

**Scaled Architecture**
- Any Trusted Device
- Industry Standard Platforms
- Cisco AnyConnect and Device Mgmt.
- Pervasive Wireless and ISE

**Flexible Liability**
- BYOD-only Smartphones and Tablets
- Corporate Laptops
- Optional Corporate Mobile Service
- Strong Policy and Rules of Use

**Service Providers**
- Global relationships
- Pro-active cost optimization strategies
- Industry-first pricing models

**Robust App Lifecycle**
- User-Driven Progression
- Collaboration Apps
- Enterprise and LOB Selection
- Cisco eStore

**Social Support**
- Proactive Communications
- Self-Service Content
- One to Many Interactive Support
- Traditional One to One
Creating Consensus

Secured Devices

10 Minute Timeout

4 Digit PIN

Local and Remote Wipe

Trusted Devices

Encryption and Management
## Trusted Devices Standard

### Architectural Principles
- Device security posture assurance
- User authentication and authorization
- Secure storage of corporate data at rest

### Execution Elements
- Core Requirements
  - PIN or Password and Auto Lock
  - 10 Minute Auto Lock
  - Remote and Local Wipe
  - Encryption
  - Anti-Malware
  - Minimum OS Version
  - Device Registration
  - Hardware/Software Inventory
Security Model for Remote Access

- Network Edge
  - Secured Devices
- Core Network
  - Trusted Devices

- 4 Digit PIN
- Remote Wipe
- Encryption
- Management
- 10 Minute Timeout

- Secured Devices
- Core Network
- Trusted Devices
Smartphones and Tablets at Cisco

Cisco has 82% more devices today versus two years ago.

<table>
<thead>
<tr>
<th>Platform*</th>
<th>December 2010</th>
<th>December 2011</th>
<th>December 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone</td>
<td>10,662</td>
<td>20,078</td>
<td>29,083</td>
</tr>
<tr>
<td>iPad</td>
<td>1,822</td>
<td>8,037</td>
<td>13,949</td>
</tr>
<tr>
<td>BlackBerry</td>
<td>15,188</td>
<td>12,617</td>
<td>8,071</td>
</tr>
<tr>
<td>Android</td>
<td>1,390</td>
<td>5,204</td>
<td>8,082</td>
</tr>
<tr>
<td>Others</td>
<td>3,835</td>
<td>2,594</td>
<td>844</td>
</tr>
<tr>
<td>Total</td>
<td>32,897</td>
<td>48,530</td>
<td>60,029</td>
</tr>
</tbody>
</table>

*Includes devices with corporate plans, personal plans, and wi-fi only
Wireless

• Access for mobile
• Additional load on WiFi Infra
• Carrier cost reduction
Seamless Connectivity & Integrated Security

Inside the Enterprise
- Cisco Prime
- Cisco Catalyst Switches
- Wired Network Devices
- AC NAM

Outside the Enterprise
- IronPort WSA
- CSM / ASDM
- MDM
- AC VPN (All Mobile)
- AC Cloud Web Security (All PCs)
Cisco Identity Services Engine (ISE)

Context-aware Identity and Authentication Services

WHO

WHAT

WHERE

WHEN

HOW

- Consistent Security Policy Enforcement Network-wide
- Supports Data Security, Access Control, and Compliance
- Automation & Self Registration
ISE Capability Phasing

1. Profiling
   - Identity of a device on the network
   - Quantify the risk

2. Registration
   - User and end device attribution
   - Identification of end points on Wireless connections
   - Device security posture identification
   - Allows for better policy & security decisions

3. Posture
   - Ability to enforce policy decisions based on context
   - Untrusted devices have restricted access

Phasing based on availability of Capabilities
Mobility is More Than Just BYOD
Cisco IT Mobility Strategy

**Scaled Architecture**
- Any Trusted Device
- Industry Standard Platforms
- Cisco AnyConnect and Device Mgmt.
- Pervasive Wireless and ISE

**Flexible Liability**
- BYOD-only Smartphones and Tablets
- Corporate Laptops
- Optional Corporate Mobile Service
- Strong Policy and Rules of Use

**Service Providers**
- Global relationships
- Pro-active cost optimization strategies
- Industry-first pricing models

**Robust App Lifecycle**
- User-Driven Progression
- Collaboration Apps
- Enterprise and LOB Selection
- Cisco eStore

**Social Support**
- Proactive Communications
- Self-Service Content
- One to Many Interactive Support
- Traditional One to One
A Unique Liability Model

Bring Your Own Device(s)

Corporate Paid Service
- Subsidized Devices
- SP Ordering Portal
- VP Approval

Personal Paid Service
- Employee Discounts
- Multiple Device Support
- Manager Approval

© 2013 Cisco and/or its affiliates. All rights reserved.
All users must accept rules of use when signing up for service.

There is no IT jargon – the rules are simple for end-users to understand.

Cisco has a trade off between employee trust and IT control.

Rules of Use

Cisco Rules of Use

1) Allows Cisco to remotely wipe the device
2) Requires an acceptable password and 10 minute timeout
3) Requires users to immediately report a lost or stolen device.
Policy Implementation

Corporate Policies
- Device Purchase
- Account Liability

Specific Directives
- Theater/Location
- Function/BU

Approvals
- Vice President for Corporate Liable
- Manager for Individual Liable
Mobility is More Than Just BYOD
Cisco IT Mobility Strategy

Scaled Architecture
- Any Trusted Device
- Industry Standard Platforms
- Cisco AnyConnect and Device Mgmt.
- Pervasive Wireless and ISE

Flexible Liability
- BYOD-only Smartphones and Tablets
- Corporate Laptops
- Optional Corporate Mobile Service
- Strong Policy and Rules of Use

Service Providers
- Global relationships
- Pro-active cost optimization strategies
- Industry-first pricing models

Robust App Lifecycle
- User-Driven Progression
- Collaboration Apps
- Enterprise and LOB Selection
- Cisco eStore

Social Support
- Proactive Communications
- Self-Service Content
- One to Many Interactive Support
- Traditional One to One
Service Provider Landscape

Geography
• 137 Providers
• 80 Countries

Business Drivers
• Negotiating Leverage
• Expense Reduction
• Supplier Choice

User Demand
• Latest Devices
• Choice of Coverage
• Easy Cost Management
• Unlimited or High Data Caps
Data Utilization Trends

BlackBerry
50 MB per month

3G iOS/Android
450 MB per month

LTE Android
1300 MB per month
Service Provider Strategy

**Devices**
- Employee purchased via SP ordering portal
- Subsidized prices (built into rate plans)
- 12-24 month contracts
- Employee paid warranties

**Data Plans**
- User based plans
- Personal Hotspot included
- Unlimited wherever possible (Dom/Int’l)
- Pooled where capped

**Voice Plans**
- Pooled where advantageous
- Roaming discounts included in all plans
Mobility is More Than Just BYOD
Cisco IT Mobility Strategy

**Scaled Architecture**
- Any Trusted Device
- Industry Standard Platforms
- Cisco AnyConnect and Device Mgmt.
- Pervasive Wireless and ISE

**Flexible Liability**
- BYOD-only Smartphones and Tablets
- Corporate Laptops
- Optional Corporate Mobile Service
- Strong Policy and Rules of Use

**Service Providers**
- Global relationships
- Pro-active cost optimization strategies
- Industry-first pricing models

**Robust App Lifecycle**
- User-Driven Progression
- Collaboration Apps
- Enterprise and LOB Selection
- Cisco eStore

**Social Support**
- Proactive Communications
- Self-Service Content
- One to Many Interactive Support
- Traditional One to One
User-Driven Demand Progression

Jan 2010
• I want an **iPhone** with email, calendar, and contacts.

Jan 2011
• I want **WebEx Meeting Center** and **Jabber IM** on my iPhone.

Jan 2012
• I want **AnyConnect** and **Enterprise Apps** on my iPhone and iPad.

Jan 2013
• I want **Enterprise Apps** and **Data** on any device, natively.
Cisco IT App Selection

Basics
- eStore
- Security
- Collaboration
- Function
- Virtualization
- EasyApps @Work
The Cisco eStore

- Desktop Apps
  - WebEx Social Apps
  - Mobile Apps
- Virtual HW
  - Desktop HW
  - Mobile HW

- Access to Storefront from all OS & Device Types
- Pervasive Security (versions, enforcement, trusted devices)
- Personalized, User Friendly Catalog for all IT Services
- Integrated with Enterprise Service Management
- Automated and Seamless Service Provisioning
Mobility is More Than Just BYOD
Cisco IT Mobility Strategy

**Scaled Architecture**
- Any Trusted Device
- Industry Standard Platforms
- Cisco AnyConnect and Device Mgmt.
- Pervasive Wireless and ISE

**Flexible Liability**
- BYOD-only Smartphones and Tablets
- Corporate Laptops
- Optional Corporate Mobile Service
- Strong Policy and Rules of Use

**Service Providers**
- Global relationships
- Pro-active cost optimization strategies
- Industry-first pricing models

**Robust App Lifecycle**
- User-Driven Progression
- Collaboration Apps
- Enterprise and LOB Selection
- Cisco eStore

**Social Support**
- Proactive Communications
- Self-Service Content
- One to Many Interactive Support
- Traditional One to One
Right Solution for the Right Situation

- **Call**
  - Major Issue
  - Requires High-Level Expertise
  - Time Sensitive

- **Open a Case Online**
  - Minor Issue
  - Requires Some Expertise
  - Not Time Sensitive

- **Self Support**
  - General Information
  - How To
  - Availability
Self Support Evolution
Consumerized Communications

- Collect intelligence from service providers, blogs, Twitter, and other sources.
- Build a multimedia comms plan, including video, digital signage, social content, and email.
- Participate in launch events and execute comms plan immediately following the announcement.
- Communicate any issues broadly and succinctly; set expectations frequently.
- Manage escalations consistently; people are very passionate and emotional.
Making it Happen: Tangible Results
Mobility Cost Savings Breakdown

**Devices**
- Eliminated $500K/year device spend by mandating BYOD smartphones and tablets
- Prevented $850K/year in device upgrade spend
- Enabled employees to work their way with multiple devices.

**Service Provider Spend**
- Reduced gross annual SP spend by 30% by revalidating company paid service
- Avoided 75% growth in annual SP spend by allowing employees to connect devices with employee-paid service
- Enabled 15,000 additional users at marginal per user cost

**Support Cases**
- Lowered gross case load 25% over two years due to rolling out Social Support on WebEx Social
- Lowered per user case load 40% over two years
- Lowered per device case load 56% over two years
Mobility Service Metrics

*2 year comparison

- 82% more devices
- 28% more users
- 203% more data usage
- 33% fewer cases
- 28% higher satisfaction
- 25% lower per user cost
Conclusions

1. Position IT as an enabler not a barrier
2. Think beyond technology solutions
3. Find the right balance between security and client experience
4. Target high value use cases
5. Test first before a wide scale deployment
Thank you.