Secure and Scalable Infrastructure Using Desktop Virtualization (Mobile Workforce)

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APJC Enterprise Segment
Business as Usual...
What if...

Bank your way...

Deliver a better banking experience...
What If…

Work Your Way…

Anywhere, Anytime, Any Device.
“Work Your Way” Demo
Data Security and Regulatory Compliance
Cisco Desktop Virtualization Solution for Retail Banking

Provides bank employees their apps and data on a virtualized desktop along with voice and video, on devices like laptops, tablets, and IP phones.

Enables the bank greater agility and productivity with lower operating costs.

Gives IT a scalable and secure infrastructure to efficiently deliver the virtual workspaces users need.
Cisco Desktop Virtualization @ a Glance

Data Center
- Scalability and Manageability
- Flexibility
- Application support
- Security and control

Network
- Scalability and Manageability
- Bandwidth optimization
- Security

Clients & Communications
- Integrated Collaboration
- Secure access anywhere on any device

Virtualization eXperience Infrastructure
# Cisco Smart Solution Components

## WORK, YOUR WAY

### VXI Smart Solution

- Tested, Validated, Documented Designs
- Integrated Cisco + 3rd Party Roadmaps
- Solution Lifecycle Management
- Services Practices
- Technical Training and Support
- Cisco and Partner Enablement: Demos, ROI Assets, Tools, Financing

### BYOD Smart Solution

### Remote Expert Smart Solution
Scalability Considerations

Optimized Infrastructure for Desktop Virtualization

- Lower cost for compute + network infrastructure
- Greater virtual desktop density w/o performance impact
- Simple Operation—start in minutes, scale in seconds
- Massive Scalability—scales easily to 1000’s of desktops per UCS system
- Extended memory and I/O to avoid desktop virtualization bottlenecks
Scalability Considerations

Benchmark Results

CISCO UCS B200 M3 BLADE SERVER: UNCOMPROMISED VIRTUAL DESKTOP PERFORMANCE

182 Windows 7 virtual desktops on a single Cisco UCS B200 M3 blade with Cisco and Citrix

The Cisco UCS B200 M3 Blade Server supported 182 Citrix XenDesktop 5.5 virtual desktops.

186 Windows 7 virtual desktops on a single Cisco UCS B200 M3 blade with Cisco and VMware

The Cisco UCS B200 M3 Blade Server supported 186 VMware View 5 virtual desktops.

INNOVATE
The Internet of Everything – Connect The Unconnected
## Security Considerations

### Integrated approach rather than afterthought

<table>
<thead>
<tr>
<th>Integrated</th>
<th>Afterthought</th>
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<tbody>
<tr>
<td>Security is built-in</td>
<td>Security is an add-on</td>
</tr>
<tr>
<td>Synergy between components</td>
<td>Challenging integration</td>
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<tr>
<td>Cost effective, seamless integration</td>
<td>Expensive operation and Integration</td>
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<tr>
<td>Direct focus on policies</td>
<td>Get all the components working</td>
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Security Considerations
Cisco end-to-end security for desktop virtualization

- Employee / Contractor / Guest
- Company-Owned / Employee-Owned
- Cisco Intelligence Network
- Hypervisor
- Wireless / Wired
- Internal / External
- Context-Aware Policy
- ‘Single’ Management
- Network & Security Separation
- Back-end Systems

Cisco INNOVATE
The Internet of Everything – Connect The Unconnected
Security Considerations
Data Centre Security

Server Zones
- Interest Rates Portal
- Client Records
- Trading Tools
- Business Loan Application

Virtual Security Gateway (VSG)

HVD Zones
- IT Admin
- Executives
- Commercial Banker
- Trader

ASA

Network

Public Internet

ScanSafe

Cisco AnyConnect

Commercial Banker

Trader at Desk
Use Case #1 – Call Centre

Customer A

Customer B

New Call Centre

Agents@Home

Ad-Hoc CC

Data Centre

Call Centre
Use Case #2 – Desktop Virtualization @ Branch (1/2)

Virtual Desktop at the Branch

Centralized VXI

Data Centre
Headquarters

Branch Router

Remote Office

WAN

VXI @ the branch

Data Centre
Headquarters

Branch Router

Remote Office

WAN
Use Case #2 – Desktop Virtualization @ Branch (2/2)

Application Virtualization at the Branch
# Use Case #2 – Beyond Desktop Virtualization @ Branch

Virtual Services at the Branch

## Network and Security Services
- **Network Services**
  - Wireless LAN Controller (WLC)
  - Network Analysis Monitoring (NAM)
  - Wide Area Application Services (WAAS)
  - Application Performance Monitoring (NetScout and Visual Networks)
  - IP Address Management (Infoblox and BlueCat)
  - Log Management (LogLogic)
  - Managed Print (Xerox)

- **Control, Accelerate, Analyze**

## Network and Physical Security
- **Network and Physical Security**
  - Video Surveillance (VSM)
  - Voice Policy Firewall (SecureLogix)
  - POS Analytics (Agilence)

- **Secure, Protect, Compliance**

## Collaboration Services
- **Unified Communications**
  - Cisco Unity Express (CUE)
  - Unified SIP Proxy (CUSP)
  - Unified Messaging Gateway (UMG)
  - Survivable Remote Site Voicemail (SRSV)
  - Cisco Unified Communications Manager (CUCM)
  - Fax over IP (Sagemcom and OpenText)
  - Paging over IP (Singlewire)

- **Reach, Communicate, Collaborate**

## Compute Services and Applications
- **Application Infrastructure**
  - Services Ready Engine Virtualization (SRE–V)
  - Microsoft Windows Server on SRE-V
  - Cloud Storage (CTERA)

- **Consolidate, Simplify, Future-proof**

## Industry Applications
- **Industry Applications**
  - Cisco Medical Data Exchange Solution (Tiani Spirit)
  - OSIsoft PI

- **Deliver Value-add Custom Solutions**

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Questions?

Thank You
TOMORROW starts here.