Cisco / Microsoft Unified Communications Integration Overview
The Evolution of the Workspace
Paradigm Shift

- 3.6 Billion mobile devices (1.82 billion internet capable)
- 8 million iPads sold per quarter (5000+ apps written)
- 600k iPhone 4s sold in first 24 hours
- 300k Android Phones activated daily.
- 27M Android devices sold in Q4, surpassed Nokia to #1
- 29% Spend more than 3 hours a day on their mobile device
- 2015 When Smartphone penetration will match computers

Gartner Predicts “…By 2013, mobile phones will overtake PCs as the most common Web access device worldwide…”
5 Predictions for 2011 From IDC

• **IT Spending Will Recover** - IT spending recovery driven by cloud services. IDC predicts spending on IT cloud services will grow at a rate five times higher than the rest of the IT industry - a 30% increase over 2010. The firm also expects to see steady growth in other IT spending, such as hardware (7.8% year-over-year growth) and software (5.3% growth).

• **Non-PC Mobile Devices Will Out Sell PCs** - IDC expects non-PC mobile devices such as smart phone and tables will out sell PCs within the next 18 months.

• **25 Billion Mobile Apps Will Be Sold** - IDC expects nearly 25 billion mobile apps will be sold in 2011, up from 10 billion in 2010, and that the mobile app ecosystem will restructure the channels for digital content and services for consumers.

• **Social Business Software Market Will Grow, Consolidate** - IDC forecasts a growth rate of 38% through 2014 for social business software, and believes more than 40% of SMBs will be using social networks by the end of 2011. The firm also expects 2011 to be marked by consolidation as major vendors acquire smaller players.

• **Social Networks and Mobile Shake-Up Verticals** - Retail, financial services and healthcare will all be shaken up by social networking and mobile devices. IDC predicts consumers will use price comparison apps to shop for better deals, demand mobile banking and payments and 14% of adult Americans will use a mobile health application in 2011.
The change…

• Video is the new Voice

• UC should not be limited to internal parties – most importantly we need to connect to Customers and Partners in rich ways.

• There is a new, high-value workforce individual who drives our company, and they are probably not going to be PC centric.

• Virtualization of the Desktop and the Cloud is here

• Cisco is delivering UC&C solutions meeting these demands today.
Cisco Value
Components of UC&C

Cisco Leadership
- #1 in Enterprise Call Control
- #1 in Video
- #1 in Web Conferencing
- #1 in Audio Conferencing
- #1 in Unified Messaging

Sources: Synergy Research, Frost & Sullivan, Gartner, Intellicom Analytics, Cisco Q4 2009

Note: Enterprise Call Control excludes low-end KTS category
Cisco Differentiated Workflows

• Mobility
  Rich UC services on Smart Phones and Tablets across all operating systems. Microsoft simply sees these endpoints as adjuncts to the PC, not independent user devices requiring unique capabilities.

• Pervasive Video
  Tandberg+Cisco+UMI = Ubiquitous video everywhere; the entire Immersion curve. Microsoft’s proprietary HD video requires all collaborative users to have a Microsoft endpoint or invest in costly, difficult to scale transcoding and trans-rating hardware MCUs

• Cloud/SaaS/Hosted
  Entire solution available in the cloud, with full features today. Microsoft only offers limited options for functionality outside of the enterprise. Full functionality in the future promises to require a certain number of on prem components and fat clients

• Enable the Workspace of the Future
  Service available outside the PC: Macs, Tablets, Phones, VxI and next-gen devices. Microsoft is fixated on the PC desktop as the definition of the workspace. While they provide some functionality for some non-Windows endpoints, all non-Windows endpoints are treated as second class citizens in a Lync deployment.

• Social
  Enterprise Social Software + UC. Microsoft is focused SharePoint document management as the platform for their approach to Social networking. This approach is very limiting in flexibility.

• Deskless Workers
  Microsoft has no solution for Voice over WiFi or dual mode telephones. Users without a PC or Email account have no place in a Microsoft UC deployment
Cisco Unified Personal Communicator Integration with Microsoft Applications
Cisco UC Integrates with Microsoft Applications

- A Cisco Client provides native Presence in Outlook, Office, and SharePoint
- A Cisco Client provides Click to Call from Outlook, Office, and SharePoint
- A Cisco Client utilizes Smart Tags to correlate a highlighted name with a contact through the AD GAL allowing the user to select which number to call for that contact.
- A Cisco Client integrates with the Office Contact card for presence and click to call.
Cisco Unified Personal Communicator
Microsoft Office Suite Integrations

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<thead>
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<th>Microsoft Office Suite 2003</th>
<th>Word</th>
<th>Excel</th>
<th>PowerPoint</th>
<th>MS Outlook</th>
<th>SharePoint</th>
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Microsoft Office Suite 2007

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Microsoft Office Suite 2010

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Presence provided by Cisco Unified Presence.
Cisco Unified Personal Communicator

Additional Integrations

Internet Explorer
Firefox
Clipboard
TEL: URI

Cisco Unified Personal Communicator

Right Click
Right Click
Right Click

Universal Resource Identifier
CUPC Integration with Microsoft Office
Calling Numbers from Right Click Menus

Microsoft Office applications expose a call option via an addition to the “right-click” menu.

Options provide
- Immediate “Call”
- “Edit” number before calling.
CUPC Integration with Microsoft Office
Calling Numbers from Browsers

- Telephone numbers can be selected in Microsoft Internet Explorer or Firefox web browsers
- Right click and Call to dial
CUPC Integration with Microsoft Office
Calling Users from Right Click Menus

• The Persona Menu is a Microsoft menu exposed in Microsoft applications
  Microsoft Outlook
  Microsoft SharePoint

• The Persona Menu is part of Microsoft’s Smart Tag Architecture

• Click to Call extends the “Additional Actions” Menu to provide calling functions

• Click to Call will lookup phone numbers in the Microsoft Exchange Global Address List (GAL)
CUPC Integrations with Microsoft Office
Calling from Outlook Contacts

• Microsoft Outlook contacts can be dialed by simply right clicking the contact
• Options to dial multiple numbers are displayed
• Further option to edit number before dialing
CUPC Integration with Microsoft Office
Office Application Ribbons

- New ribbon application integrations for Word, Excel and Powerpoint* extend click to call functionality in the UC Integration

*Not supported in Office 2003
CUPC Integration with Microsoft Office
Outlook Ribbon

• Outlook integration now also provides a click to call ribbon for contacting sender and recipients
• Right click functions also available
CUPC Integrations
TEL URI Support

Cisco UC Click to Call 8.0 introduces support for TEL: Uniform Resource Identifier.

- Functionality based on RFC3966
- Enables an organisation to quickly and easily add click to call capabilities to web and desktop applications

A simple HTML addition enabled a UC integrated Corporate directory

```html
<a href="tel:88888888">Call</a>
```
Lync Integration Overview
Session Manager & Microsoft Lync Support for Multiple Workloads

- **PSTN**
  - Session Manager
  - VCS Manages Video Endpoints
  - SME manages SIP connectivity enterprise wide
  - Microsoft Lync manages desktop clients and collaboration resources
  - Single Number Reach & SIP Trunking blends Legacy PBX & Lync

- **WAN**
  - VCS
  - Legacy PBX
  - Desktop Server Pool & conf Pool
  - AMG
  - Persistent Media Gateway

- **Desktop Video**
  - Desktop Video

- **Video Room Systems**
  - Telepresence

- **Wireless Endpoint**
  - Wireless Endpoint

- **Legacy Telephones**
  - Legacy Telephones

- **Legacy Telephony**
  - Legacy Telephony
Session Manager & Communication Manager Support for Multiple Workloads

- PSTN
- WAN
- Session Manager
- VCS
- Legacy Telephony

SME manages SIP connectivity enterprise wide

VCS Manages Video
Endpoints until integrated with Communication Manager

Communication Manager and Presence Server manage endpoints

Single Number Reach & SIP Trunking blends Legacy PBX & Cisco

Legacy Telephones

Cisco

Desktop Video

Video Room Systems

WebEx Node

Legacy PBX

Desktop Client

Smartphone including WiFi

Desktop Video Client

Smartphone including WiFi

Legacy Telephony
Microsoft’s Architecture

Lync

Lync Server Pool

SQL

Active Directory
DNS
Exchange
Frontend
Director
Edge Server

A/V Conferencing
Group Chat
Web Conf
Mediation Server
Basic Gateways

Archiving/Monitoring

A/V Conferencing

Web Conferencing

Exchange

WAN

PSTN

SQL

Mediation Server

Gateway

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How do Cisco and Microsoft Coexist in this Environment?

SME manages SIP connectivity enterprise wide

What happens here?

Legacy Telephony

Legacy Telephones

Legacy Telephony

Desktop Video

Video Room Systems

VCS

Desktop Video

Microsoft

Cisco

WebEx Node

Lync Server Pool & conf.

Cisco

Microsoft

WebEx Node

Lync Server Pool & conf.

CUCM & CUP

Legacy PBX

PSTN

Session Manager

Telepresence

WAN
Server Integration Options
Cisco Unified Client Services Framework
Collaboration Architecture for Clients

Desktop & Mobility Integration

Cisco Unified Personal Communicator
Webex Connect
3rd Party EIM (Sametime & MOC)

Cisco Unified Client Services Framework
Call Ctrl Audio Video IM Vmail Presence Conf Directory History Future

Cisco Unified Infrastructure Services
Call Control Data Store Presence Services Calling History Conferencing Services Messaging
Microsoft Client
Microsoft Office Communicator
Microsoft Lync (shown)

Simply drag or right click a contact to start a voice, video or collaboration session

Conversation
Cisco Voice, Video and Conference calling and in Call Controls

Cisco Communication Panel
Voicemail, Communications History, Soft phone / Desk phone control Options & Dial pad
Integration running with Microsoft Lync
Integration with switch visual design based on Microsoft client
New Office Ribbon provides Cisco click to call controls

Outlook, Word, Excel, Powerpoint
Office 2007
Office 2010

Ribbon supported with Microsoft Office 2007 and 2010
Ribbon displayed in Word, Excel, Outlook and Powerpoint
Office 2003 provides right click menu calling
The 8.5(1) release introduces support for OpenAM single sign-on

Users are no longer prompted for UC manager credentials when they start the client

Access to Active Directory by the client will also be authenticated based on user domain login.

Requires upgrade to UC Manager 8.5 & CUCIMOC 8.5

The solution requires the ForgeRock OpenAM Server 9.x
Cisco Jabber
Cisco Jabber Client
Unlock the Power of Unified Communications

Use Contextual Communications to Get Answers and Make Decisions Faster

Status Generated from Multiple Sources

Status Published in Multiple Applications

“Gartner clients making collaboration and communications decisions are increasingly realizing the central role IM and presence play”
Anywhere Access to Business Quality Voice and Video

• Simple, Intuitive User Experience
  Point and Click access

• Voice
  Soft phone or desk phone control
  High quality audio experience
  Uses industry leading call control

• Video – Rich Experience, Interoperable
  High definition video (720P)
  Industry standard (H.264)
  Multiparty, continuous presence

1. High-definition video currently available with on-premises solution only
Multiparty Web, Video, Audio Conferencing

- Industry leading WebEx solution
  - Audio, web and high quality video
  - Scale to 100s of attendees
  - Meetings, Training, Event versions
- Share desktop, applications, and presentations
- Ad-hoc and scheduled meetings
- Consistent, cross-platform experience
  - Share from Windows, Mac, Linux
  - Mobile access

1. High-definition video currently available with on-premises solution only
Multimodal Voice Messages
Access From Any Workspace

- Anytime, anywhere access
  Listen or read messages
  Speech control

- Flexible deployment options
- Secure and reliable
Communicate From Microsoft Applications
IM, Communications Integrated for Easy Access

- View availability and initiate communications
  Dynamic presence status
  Click-to-chat & call (audio/video)
  Point-to-point & multi-party

- Microsoft Outlook, SharePoint, Office
- Browsers, Web applications
Thank you.