



Microsoft Lync: After Enterprise Connect

OVERVIEW

On November 17, 2010, Microsoft announced Microsoft Lync, the next generation of its unified communications and collaboration applications that rebrands Office Communications Server (OCS) as Lync. Lync combines OCS with new video, voice, and web conferencing capabilities into a single solution. This product is primarily a communications application that includes instant messaging (IM), presence, audio, video and web conferencing, enterprise voice, and mobility. In March 2011, Microsoft presented more details about Lync at Enterprise Connect. This updated analysis reflects new information collected by the Cisco team that analyzes Microsoft.

The following are Microsoft's key messages:

- Lync is the linchpin of Microsoft's collaboration strategy; it is the communications "glue" that binds SharePoint, Exchange, and the Office applications.
- Lync is a single client that delivers presence/IM, enterprise voice, and audio, web, and video conferencing.
- The era of PBX is over, "even if it's called Call Manager."
- Video capabilities are improved through interoperability, lower costs, open protocols, and high definition (HD). However, it is necessary to use Microsoft proprietary technology to deliver HD video to endpoints.
- Lync interoperates with multiple devices and applications.
- The partner ecosystem is growing, including systems integrators, independent software vendors, developer communities, and device manufacturers.
- In November, Cisco was indirectly called out as expensive, monolithic, and hiding behind standards. At Enterprise Connect, Microsoft did not publicly attack Cisco.

CISCO RESPONSE

The following is the opinion of Cisco's strategic marketing organization. It was prepared to interpret the implications of Lync for our Cisco colleagues and partners.

Despite Microsoft's messaging that Lync addresses PCs, Macs, browsers, smartphones, and the cloud, it continues to be our opinion that Microsoft remains focused on the desktop computer and its applications. Microsoft does not offer parity to those modern workers who will access communications through a great variety of devices, largely because of the central role of the desktop. Although Microsoft is pushing the notion that Lync has a strong mobile component, it will not be available on the release date. During Enterprise Connect, Microsoft demonstrated a Lync iPhone application that is currently limited to IM and presence. Microsoft set expectations that in Q4 2011, Lync will have mobile clients that enable voice for the Windows Phone OS and iPhone. In contrast, today Cisco has the capacity to support many mobile platforms (such as the iPhone, iPad, RIM, and Windows Phone 7, among others) and has never assumed that the desktop computer would be the device of choice in the future.

Microsoft began promising to incorporate voice into unified communications four years ago. In doing so, Microsoft has validated Cisco's longstanding approach toward communication. Cisco continues to offer a larger set of unified communications and collaboration services, including IP voice. Microsoft, on the other hand, continues to develop in a manner that favors the Microsoft desktop environment.

Microsoft announced a large partner ecosystem, which is not surprising, because it needs its partners to fill the gaps in its solution. For example, its focus on software means that Polycom—which Microsoft brought on stage in

November—must provide critical endpoints. In contrast, Cisco offers a complete end-to-end solution to its customers. Cisco also offers opportunities to partners, but for different reasons. We want our customers to have options and to be able to choose the products, software, and platforms that best suit their business.

Microsoft has issued announcements involving voice before, but it still has not delivered a complete and reliable voice solution. When it comes to real-time collaboration (voice, conferencing, and video), customers expect very high levels of performance and very high levels of quality. Dropped calls and unproven voice networks are not acceptable for most customers. This is in sharp contrast to Cisco's more mature, proven, highly reliable, and high-quality network.

Cisco's unified communications vision is broader than simply a PC desktop offering. It includes a full portfolio of multimedia communications across a variety of operating systems and devices.

LYNC DETAILS

On November 17, 2010, Microsoft announced MS Lync Server 2010. In March 2011, at Enterprise Connect, Microsoft provided further clarification. The features and capabilities of Lync as we understand them include the following:

Improved User Experience

The user experience has been greatly improved compared to previous versions of OCS. Microsoft is embedding basic social networking features such as profile photos and current status within its IM and presence tools. Profiles may be linked to a user's MySite space on SharePoint. Escalating to a web conference, a phone call, or a collaboration event will occur simply through a drag-and-drop interface.

- A single client delivers voice, IM/presence, web conferencing, and video.
- Contact card integration: Lync pushes presence information into the contact card from any Microsoft application. This creates a common look and feel, with click-to-collaborate capabilities.
- Profile data and information are pulled from Active Directory and SharePoint.
- A SharePoint skills search using Bing can be used to find subject-matter experts.
- An activity feed updates work status, out-of-office messages, and titles. However, to report directly from the Outlook calendar, a user must be logged in to Outlook.
- A fast search feature is context sensitive and lists the most popular searches first.
- Through Bing, Microsoft demonstrated uses for real-time translation.
- A conversation history view can reproduce archived IM sessions.

Location Identification Service

The Lync client allows users to update their location information or allows the system to populate the location automatically.

- Enhanced presence: Users can modify their presence information to reflect their physical location.
- E911 allows automatic location updates based on IP subnet, switch port, and wireless access point to extend location information during 911 calls. However, customers must purchase an E911 routing service to actually place emergency calls.

Microsoft still must partner with an E911 service to ensure that Lync customers can direct emergency services to the correct location within the organization.

IM and Presence

The IM and presence workload will be installed and enabled by default in every Lync deployment. No significant improvement was announced for presence and IM capabilities.

Video

Microsoft's video offering is limited to the desktop, using its proprietary codec for HD. It is a non-standards-based approach. Furthermore, it is not apparent that the video quality will meet customer requirements when Lync is hosted in a virtualized data center. There is no real native improvement from previous versions, though Polycom gives the impression that there has been an improvement to HD video interoperability with Microsoft endpoints. This was accomplished by bringing Microsoft's proprietary video codec into Polycom endpoints and registering them with Lync.

In order to operate with Lync, a video endpoint either needs to be aligned with Microsoft's proprietary video codec or needs expensive translation. Companies with an installed base of video endpoints will need to replace the video devices or invest in codec translation software.

Cisco delivers a full range of video solutions, from the Cisco TelePresence® solution to a Cisco WebEx® meeting on an iPad, in addition to standards-based HD video on the desktop. Cisco also provides gateways for the Cisco TelePresence solution to interoperate with any standard platform. Cisco is committed to providing a compelling solution for customers regardless of vendor.

Web Conferencing

Web conferencing is another core feature of Lync Server for basic web meetings.

- A single client is used for voice, video, IM, *and* web conferencing; the Live Meeting client is no longer used.
- The Lync web app offers Silverlight-enabled browser access to web conferencing with a reduced feature set (no PC audio or video).
- Hosted Live Meeting is now the only option for meetings with more than 250 attendees or for training and event capabilities.
- Microsoft demonstrated integration between Lync and Xbox 360 with Kinect game consoles "linking the board room to the living room."

Enterprise Voice

The voice over IP (VoIP) solution provided by Lync Server is positioned and described by Microsoft as an "alternative to traditional PBX-based telephony."

- More devices are available to Lync users from partners (such as SNOM, Astra, and Polycom).
- Feature enhancements:
 - Call park and retrieval
 - Trace of malicious calls
 - Unassigned number
 - Private line
 - Visual voicemail
 - Endpoint transfer to mobile device
 - Display of calling party name
 - Distinctive ring and ringer cutoff
 - Agent anonymity within response groups

Lync's voice (and its video capability) is not as efficient when running in a virtual environment. Also, there are issues involving hold music and the lack of centralized control of what is played.

Voice communications are an integral part of unified communications, with or without the PBX. Any unified communications solution should be able to replace the PBX, and Cisco has been providing this capability for more than 10 years. Cisco is an industry leader, offering a larger set of unified communications and collaboration services, including IP voice.

Mobility

The Microsoft solution for mobile devices (such as iPhone, Nokia, and RIM) is presently limited to IM/presence. We expect to see clients for the major mobile platforms enabling IM and presence by Q4 2011 and voice-enabled clients by 2012.

In November, it appeared that Microsoft Lync users will be able to transfer calls or audio conferences from desktops to phones or mobile phones without disrupting the conversation. This mobility will occur for voice or audio conferencing but, at the carrier level. There is no native solution available yet.

In contrast, Cisco offers a rich communications experience for most mobile operating systems. Clients are available today for Windows Mobile, Nokia Symbian, RIM, iPhone, iPad, and Android (coming soon).

Update: In February 2011, Microsoft recognized that it needed a partner to ensure a complete mobility offer. Microsoft has invested several hundred million dollars to provide Nokia smartphones with the Windows OS.

Update: At the January 2011 Consumer Electronics Show, Steve Ballmer announced that Microsoft would enable tablets via Windows 8, which will not be available until late 2012.

Third-Party Enhancements

Ecosystem enhancements include E911 routing service, support for analog device gateways and Session Initiation Protocol (SIP) device gateways, and contact center partnerships (relationships with Aspect, Genesis, and Clarity Connect).

Cisco works with partners, not to fill gaps in our offer but to provide our customers with choices. In many cases, such as E911, Microsoft is partnering because its offer is not complete. The implication for customers and partners is that a Microsoft infrastructure will be more complex because it will require many more third parties to participate within their solution.

Architectural Enhancements

In response to Cisco product developments, Microsoft has made the following architectural enhancements:

- Branch office resiliency
- Support for server virtualization
- Data center resiliency
- Call Admission Control
- Mediation server enhancements:
 - Colocation
 - Media bypass
 - Support for multiple gateways

Management and Administration

Lync is a complete rebuild of the server and client architectures. No in-place upgrade is available. Customers will be starting from scratch. This is of interest to partners, as it will have a substantial impact on system integration. Partners generate most of their revenue by installing the complex Microsoft offer and then providing services after the sale. In

contrast, Cisco® products are more easily installed, but there is much more opportunity to provide services throughout the technology stack because of Cisco’s broader offer and breadth of functions.

- A new management console based on the Silverlight GUI abstracts the management of Lync components.
- After sales, partners are likely to be troubled by the more fragmented Microsoft architecture. Because the solution requires so many third parties, it is unclear who a customer should call when the system fails. This will be a challenge for partners who provide after-sales support.

Licensing

Voice now requires a separate standalone client access license (CAL) not included within the Enterprise CAL (ECAL) Suite. Table 1 shows perpetual licensing options for Lync. However, customers with active Software Assurance (SA) on the ECAL Suite or the combined OCS CALs (Standard + Enterprise edition) at the time of general availability will be entitled to the Plus CAL through the Lync grandfathering policy. This creates an illusion for some customers that the Lync Plus CAL is free.

Currently, Table 1 describes the licensing available to customers. Please note that on August 1st, 2011, Microsoft will change the licensing options. After August 1st, the Lync Standard CAL will be included within the Core CAL Suite.

Table 1 Lync Licensing Options

Standalone Lync CALs			CAL Suites		
Lync Standard	IM and presence	\$31 per user	Core CAL Suite	Does not include Lync CALs	\$120 to \$300 per user
Lync Enterprise	Web and audio conferencing	\$107 per user	ECAL Suite	Includes Lync Standard and Enterprise CALs—not Plus	\$450 to \$520 per user
Lync Plus ¹	Voice	\$107 per user			

WHAT ARE THE IMPLICATIONS TO CISCO ACCOUNTS?

Lync is Microsoft’s effort to remove existing communications platforms and to lock customers into an application that works best within a Windows environment. After four years of promises, they are finally ready to challenge Cisco. They were equating the PBX and Cisco Unified Communications Manager with mainframes and are painting Cisco as being too expensive. But as of Enterprise Connect, Cisco seemed to be no longer Microsoft’s focus. We should expect Microsoft to talk up Lync aggressively.

Cisco partners and account managers should articulate Cisco’s unified communications and collaboration vision, including the future of social networking, evolving workspace, and video as the new voice. The flexibility of standards-based devices allows Cisco solutions to grow alongside a customer’s changing technology requirements. In contrast, Microsoft remains heavily invested in the PC desktop—its leadership continues to refer to tablets and smartphones as “additive” and not PC replacements. Outside of the Windows environment, Lync becomes significantly less compelling. Tight integration within Windows is both Microsoft’s strength and its weakness.

Microsoft is portraying its heavy reliance on partners to fill out their solution as a strength. In reality, it has to rely on partners because its offer is incomplete; Polycom will be supplying Microsoft’s desk phones, for example. This results in a much more expensive solution than just the Microsoft components. Cisco works with partners to ensure that

¹ The voice CAL will likely not be offered until late in 2011, when voice capability is rolled out.

customers have choices. Beyond unified communications, Cisco addresses a much larger portion of the enterprise infrastructure, and so Cisco creates more opportunities for partners and customers to be successful.

Cisco partners should remember that the total cost of ownership (TCO) of Cisco products is competitive with the TCO for Microsoft products. In addition, Microsoft is new to unified communications, Cisco's offer is more complete, and enterprise voice requires proven, high-quality products supported by reliable networks. Cisco partners will always have more opportunity to create value beyond after-sales services.

LIKELY TIME TO REALITY

Lync was officially released on December 1, 2010 in 150 countries in 38 languages. Cisco employees should check the Microsoft CEC and IWE selling competitively sites for updates. Partners should ask their Cisco colleagues for new information.

REFERENCES

Competitive Edge Portal for Partners

<http://www.cisco.com/web/partners/sell/competitive/index.html>