This paper discusses what IT and telco managers need to know about interoperability between Cisco and Microsoft Lync systems as well as strategies for optimizing the UC environment.

Making it work: Using Cisco and Microsoft Lync to Drive Collaboration

The Unified Communications (UC) industry is fast-paced and rapidly evolving. The continued growth is expanding what "unified communications" means. And it's expanding UC's appeal as well: more than 75% of enterprise IT decision makers are planning partial or full deployments of unified communications in the coming years .

A growing list of applications being added to the standard VoIP and presence features commonly associated with Unified Communications and Collaboration (UCC) is creating challenges to widespread adoption and deployment of UC platforms. The inclusion of web and video conferencing, unified chat, mobility, and other applications has IT and telecom managers aiming for a moving target as they decide which applications fit their definition and which will provide the most efficient and cost-effective productivity solutions for enterprise employees.

Perhaps the most pressing challenge, though, may be that many of the most in-demand technologies come from a number of providers. IP PBX leaders such as Cisco are now joined in the UC space by up-and-comers, as well as established software companies like Microsoft seeking new opportunities in a rapidly growing market. The entrance of new players into the market have given IT and telecom decision makers more solution choices than ever.

But diverse technologies come with their own systemic strengths and weaknesses. So, whether managed by IT administrators or the telecommunications teams, choosing technologies that will integrate and work well together can be a difficult, risky proposition that can have a lasting impact (negative or positive) on an organization's performance.

Because of their respective positions as a dominant market power and rapidly rising viable player, this paper will discuss what decision makers need to know about solution interoperability between Cisco and Microsoft Lync systems and strategies for optimizing the UC environment regardless of which hardware or software is present.

Interoperability can make or break a UC strategy

The sheer number of available vendors and technologies can be overwhelming, turning a normally straightforward procurement and deployment process into a long, drawn-out affair. Purchasing decisions can be based on a number of conventional factors such as price and brand reputation, but also on the unique needs of both IT and telecom groups in the organization.

As a result, many organizations host technologies from an array of different vendors in their environments and it isn't uncommon for two competing systems to be used for the same purposes. However, the multitude of available technologies also creates a more unique—and more serious—challenge: interoperability.

Companies routinely purchase and roll out technologies that provide only immediate complementary functionality to currently deployed systems, but often fail to align with longer-term UCC strategies, if they exist. Organizational leaders aiming to improve employee productivity, access to essential information, and reducing communications costs through Unified Communications strategies must find ways to unite existing infrastructure with any new solutions to provide a cohesive collaborative user experience.

A well-designed UC or UCC solution provides seamless access and functionality across phones and mobile devices, email, live conferencing, integrated chat, and personal devices regardless of manufacturer or brand. As such, UC environments must be designed to integrate with virtually any device, application, or software.

Fortunately, UC technology vendors like Cisco and Microsoft have begun placing greater emphasis on easily integrated applications. Now, IT and telecom managers have more options for achieving desired business outcomes, such as opting for a single vendor-focused environment or mixing and matching solutions.

Deploying a single-vendor UC environment for optimal performance

Owning nearly two-thirds of the on-premise and a growing portion of cloud-based UC deployments worldwide[i], Cisco Systems has been the leading manufacturer and vendor of UC solutions for enterprise collaboration. Call control products like Cisco Unified Communications Manager (CUCM) have been widely adopted and relied upon globally because of its reputation for reliability, low cost of ownership, and scalability for up to 40,000 unique users.

Both the on-premise and hosted solutions—offered as Hosted Collaboration Solution (HCS)—provide a unified infrastructure for session management, voice, video, messaging, mobility, and web conferencing across the enterprise. Organizations that have made significant investments in a trusted, stable, and efficient technology have good reason for choosing to standardize their environments on Cisco solutions instead of seeking products from other vendors.

Building a UC infrastructure predominantly with a single vendor enables organizations to continue operations with few changes to support, procurement, and training procedures. For example, as a Cisco product nears end of life, procurement managers can simply place orders for an updated or upgraded replacement and swap it in for the expired product. Support for the upgraded product will closely resemble—if not be exactly the same as—procedures for previous deployments.
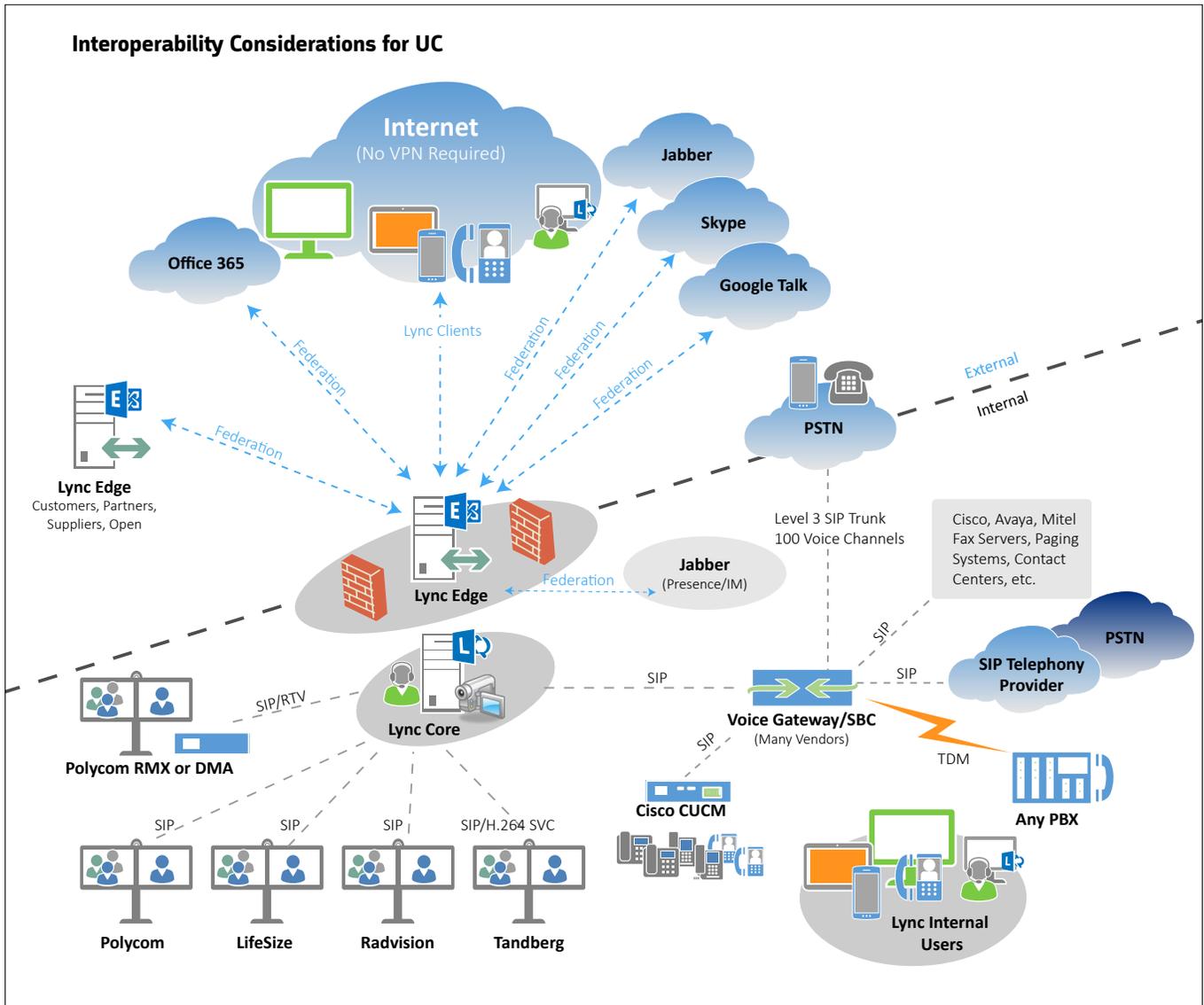
Figure 1. This diagram depicts a UC and voice environment designed with components from multiple vendors.

While continuous upgrades and updates can be costly, keeping deployment and support procedures essentially the same helps the IT department avoid time-consuming installation troubleshooting and training on new hardware and software. At the same time, end users will continue to enjoy the same capabilities, performance, and support as always without interruption or the need to learn a new system or product.

A single vendor solution also streamlines the process for extending and expanding collaboration capabilities. Natively integrated communications gateways, telephony extensions, and collaboration applications in a converged platform help accelerate the expansion of the collaboration environment with few obstacles. In short, interoperability among systems and hardware is never an issue.

Why a single vendor environment may not be right for all organizations

Single vendor converged communications environments are attractive and offer a host of benefits. However, they can also occasionally present some unintended challenges for decision makers to consider.

In particular, the costs of ensuring continued high performance can become significant within a consolidated, single vendor environment. Hardware becomes quickly outdated as technology improves and consistently upgrading to the latest version can add up.

Additionally, many vendor solutions are designed with preference for other hardware from that vendor. Cisco solutions, for example, encourage use of Cisco phones and other hardware for optimal performance. And while these components work flawlessly together, many IT leaders prefer to be able to add phones, video, and other voice without requiring a gateway for the sake of simplicity and cost management.

Expanding functionality with a multi-vendor UC deployment

With dramatic growth in its popularity and functional extensibility in just the last two years, Microsoft Lync has become a major player in the UC space and caught the eyes of many IT and telecom leaders. In fact, the number of businesses planning to replace their existing phone systems with Lync doubled from 2011 to 2012[ii] and by 2013 Microsoft was shipping more enterprise voice lines than any other company[iii].

The third generation of Microsoft Lync is a great option for decision makers seeking a multi-vendor UCC environment for the enterprise. The last couple iterations have seen the features revamped and expanded integration with a litany of ubiquitous Microsoft applications. More importantly, developments within both Cisco and Lync product lines have brought the two solutions closer together with better integration for simpler deployment.

Some decision makers cite an existing and substantial investment in a UC platform as a reason to eschew deploying another platform. However, the release of Cisco UC Integration™ for MS Lync 9.2 and Lync's evolving designs have made it easier than ever for IT leaders to extract maximum value from their existing assets and new resources, while circumventing interoperability challenges that have hindered them in the past.

At a Glance: Single vs Multi-Vendor Environments

Single Vendor

- Ensures interoperability between components
- Minimizes support costs
- Steamlines upgrades and enhancements
- Reduces changes to training and procurement processes

Multi-Vendor

- Better variety of features and capabilities to meet employee preferences
- Potential to reduce costs, licencing fees
- Cooperation between vendors improves interoperability

Cisco UC Integration™ for Microsoft Lync is a desktop integration that provides access to CUCM from Microsoft Lync. The solution is tightly integrated with Microsoft Lync to extend Lync's presence and instant messaging and provide easy access to standard Cisco features like soft-phones, standards-based video, unified messaging, audio and video conferencing, desk-phone control, and phone presence.

Since most organizations already have Lync in their environments courtesy of other Microsoft deployments like Outlook, upgrading voice licensing through Microsoft may be a more cost-effective option than licensing with the legacy vendor and can help further streamline and accelerate the purchasing process. More importantly, because of the advanced functionality of Lync as a PBX replacement and tighter integration with Cisco core infrastructure, a Lync-Cisco blended environment can also help push off expensive upgrades to hardware to extend the life — and value — of existing infrastructure.

While Cisco solutions are traditionally hardware-based systems that tie together phones, computers, and other devices, Lync does the same using just software. Using Lync as a voice and presence application over a Cisco network benefits end users and administrators alike. For example, users have intuitive communications tools through a centrally managed on-screen communicator pod and easy extensibility to mobile devices.

Meanwhile, administrators benefit from reduced deployment and support responsibilities and from the cost savings of offering these enhanced features and functionality without additional hardware purchases. In addition, managers can leverage extensive Lync APIs to dramatically expand the network's capabilities and deliver a customized enterprise collaboration solution by pulling in and integrating external applications.

Making smarter decisions with expert advice and support

Choosing between single vendor and multi-vendor Unified Communications environments is a tall task. Both solutions offer companies significant benefits in terms of productivity, cost management, and collaboration among disparate parties with few, if any drawbacks.

But making such a choice requires an objective assessment of an organization's needs and a time-consuming, accurate inventory of available technologies that can meet those needs. Further complicating the decision are the frequently competing priorities of departments and personnel making decisions. According to Nemertes Research, as much as 85% of the decisions to deploy Microsoft Lync came from C-level executives or senior management, indicating potential for conflicting opinions and platform preferences across various levels of an organization's chain of command.

Instead, it is prudent for organizations seeking expert guidance and objectivity to solicit outside advice. AVI-SPL is a global leader in the design, building, and support of cutting-edge systems and environments that enable enhanced communications and collaboration.

 The company provides professional services, support, and training for organizations globally, of all sizes, and in industries ranging from higher education to manufacturing, and every market in between. Acting as more than just a technology reseller or consultancy, AVI-SPL uses each of its technology partners' solutions within its own environment across its North American locations. AVI-SPL routinely works with its UC customers to help them determine whether a single or multi-vendor solution is right for their enterprise.

About AVI-SPL

AVI-SPL has a team of experts with the experience needed to meet the most technically advanced needs of our clients. We can help you design, build, and support the systems and environments that enable your video communication and collaboration. Our engineers are certified to ensure they have the skills and knowledge necessary to manage projects of all scopes.

AVI-SPL works with Cisco to provide solutions for different markets, including healthcare, education, hospitality, and many more. From integration and fabrication through installation, documentation, training, and support, the team at AVI-SPL is equipped to be your partner every step of the way.

We're ready to help you better understand how video collaboration can fit into your organization. To learn more about video collaboration solutions for midmarket companies, contact us at (866) 559-8197 or visit www.avispl.com.

About Cisco

Cisco is a worldwide manufacturer of video collaboration and video-sharing solutions. Cisco's network-centric platform is changing the nature of work and the way we live. AVI-SPL works with Cisco to provide solutions for different markets, including healthcare (Moffitt Cancer Center), education (Rialto Unified School District), hospitality (Fleming's Steakhouse), and many more.
Learn more about Cisco on avispl.com.

References

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[ii] Nemertes Research Benchmark Report. Irwin Lazar. Microsoft Lync Reality Check. November 2011

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