

CASE STUDY

ARUBA NETWORKS CUTS THE CORD WITH MICROSOFT LYNC

By combining Microsoft Lync Server with its own enterprise WLAN infrastructure, Aruba Networks rolls out unified communication and collaboration over Wi-Fi and eliminates wiring to the desk.



James Nelson and his IT team saw the handwriting on the wall. It was time to either invest millions in capital and operational expenses in a new PBX and additional switches or take an innovative step and cut the cord.

“The Avaya telephony system we purchased as a small company was at its end of life and would soon become a bottleneck to growth,” says Nelson, director of IT infrastructure at 1,500-employee Aruba Networks®.

“Although we began investigating modern PBX systems,” he adds, “we also started considering how we could put our own Wi-Fi infrastructure to work by adopting a UCC [unified communications and collaboration] solution instead.”

LYNC SERVER + ARUBA WI-FI = BIG ROI

Like many companies, Aruba already enjoyed a strong partnership with Microsoft® for enterprise solutions such as Lync® for instant messaging (IM) as well as Exchange, Office and SharePoint®. This partnership includes extensive testing of Microsoft solutions on Aruba infrastructure, resulting in tight, reliable integrations as well as numerous Microsoft certifications.

The partnership also made expanding Lync to include telephony, video conferencing, meeting and other UCC collaboration capabilities a natural path for Aruba.

BENEFITS

- Global Microsoft Lync server over Aruba WLAN deployment improves collaboration.
- Eliminates wires to desktop and desk phones, saving \$2 million in capital and operating expenses over four years.
- Aruba unified communication and collaboration (UCC) dashboard boosts efficiency by giving systems and network administrators a common management platform.
- Integrates Lync Software-Defined Networking (SDN) API with Aruba AirWave™ providing IT with the Aruba UCC dashboard for granular visibility and automated QoS, simplifying operations and reducing costs.
- Aruba AppRF with deep packet inspection enables fine-tuning application traffic, providing end users with high-quality, predictable UCC experience.
- Role-based employee and guest access eliminates the need for dedicated voice VLANs, reducing networking complexity and further enhancing user experiences.

“Adopting full Lync Server UCC capabilities over an enterprise Aruba 802.11ac WLAN enabled us to cut the cord at the desk, resulting in a savings of about \$2 million in capital and operating expenses.”

James Nelson

Director of IT infrastructure Aruba Networks

The Right Tools for #GenMobile Workforce

“By moving to a full Lync Server 2013 UCC platform, we could reduce costs while providing more appropriate tools for our #GenMobile workforce,” Nelson says. #GenMobile is today’s generation of tech-savvy users who rely on their mobile devices for every aspect of work and personal communication.

For example, Lync’s latest federation capabilities enable Aruba employees to participate in Lync conferences with external individuals. “The ability to connect via Lync with customers and partners, as well as internal users, is essential in the #GenMobile age,” Nelson says.

Also, Lync’s latest mobile platform capability enables Aruba employees to leverage all supported modes of communication from their preferred mobile device. “The Lync mobile app is accelerating demand to use the tool wirelessly,” notes Nelson. “Expanding our partnership with Microsoft with the latest version of Lync is key to enabling our employees to work in the manner that is most efficient and effective for them.”

Saving \$2 million on Capital and Operating Expenses

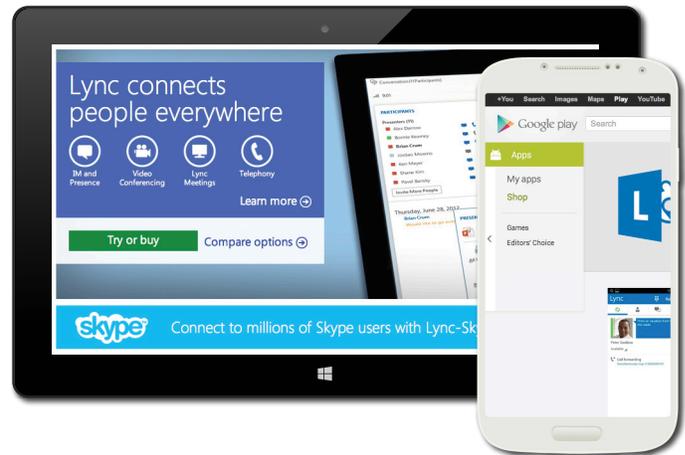
From a cost perspective, Aruba dramatically reduced conference calling services, video conference room equipment and, of course, the impending PBX investments.

“We found that we would avoid over \$1.5 million in third-party conferencing services alone”, says Nelson. “We would also save over \$500,000 in planned PBX upgrades, maintenance fees, and staff resourcing to support our 24/7 telephony requirements.”

Additionally, by deploying Lync over wireless infrastructure, the company could completely eliminate wires at the desktop. “Over the long term, this reflects a significant savings on wired networking costs as we add employees worldwide,” Nelson says.

GLOBAL PHASED ROLLOUT BEGINS

Given the scope of the initiative, Nelson’s deployment team divided the all-wireless workplace project into two primary phases.



The first phase would rollout Lync Server 2013 to Aruba’s multi-story Sunnyvale, Calif., headquarters facility and two remote locations nearby. Converting distant offices in the United States and abroad would comprise the subsequent phase.

Developing a Best Practices Infrastructure

To start, the team conducted a comprehensive infrastructure evaluation using the visual mapping capabilities in Aruba’s AirWave network management to create detailed and granular views of existing equipment.

“As a wireless company, numerous people had APs on their desks to assist with testing,” explains Christian Gilby, director of product marketing for Aruba. “We needed to scrub the air of RF interference by making other arrangements for testing.”

“In addition,” he adds, “a comprehensive mapping project helped ensure we could design our infrastructure for Lync best practices to benefit the #GenMobile workforce.”

Assuring a Reliable Lync Experience

As a result of the site evaluation, the team deployed additional Aruba 802.11ac-enabled AP-225 access points to provide Wi-Fi coverage everywhere on and off campus. Also, Mobility Controllers were updated to Aruba 7200 series models with the latest Aruba operating system, Version 6.4.

“The new Aruba operating system includes a UCC dashboard and several other capabilities that assist with ensuring the QoS we require as well as quick troubleshooting for IT,” Gilby explains.

A key feature of the new operating system is its native capability to tag Lync-related traffic to allow for giving it the QoS appropriate priority. Another feature of the ArubaOS™ includes full application deep packet inspection, enabling systems administrators to further streamline traffic flow.

“We have a BYOD culture at Aruba, plus we’re vendor-agnostic for corporate devices,” Gilby says. “Most of those devices do not tag Lync traffic. With the new ArubaOS natively tagging Lync traffic, and deep packet inspection providing granular application visibility, the appropriate controls can be implemented and the proper QoS can be assigned. This ensures end users have predictable, high-quality UCC experiences.”

Leveraging Lync Software Defined Networking

The Lync SDN API was also deployed. This provides an interface for accessing Lync diagnostic data to monitor and optimize Lync traffic for QoS.

Further, the Lync SDN API was integrated with the Aruba UCC dashboard. “Integrating Lync SDN API and the UCC dashboard enables us to provide high quality VoIP over a wireless network,” says Gilby.

“With the UCC dashboard serving as the front end,” he continues, “Lync and Wi-Fi administrators can use the diagnostic tools in Lync SDN API and AirWave to optimize performance or pinpoint and resolve issues.”

MAXIMIZING BUSINESS USER ADOPTION

As infrastructure and integration tasks proceeded, the team also launched an extensive marketing and training effort to teach employees how to maximize the new all-wireless workplace. “Lync representatives gave onsite presentations plus we produced posters, flyers and emails to promote the rollout,” says Adam Berns, an Aruba unified communications architect.

To test the new system, Aruba included business users and IT personnel. “We wanted a broad cross-section of users to ensure we tested a wide range of scenarios,” Berns says.

“ Our new UCC platform delivers exceptional collaboration experiences ”

Ultimately, removing wired telephony proved uneventful. “After everyone had a few of weeks to get acclimated, we began removing wires,” Berns recounts. “By then, people were already accustomed to using Lync. Now we’re seeing a steady increase in use cases beyond basic voice calls.”

REAPING A MULTITUDE OF REWARDS

As expected, rewards from the new system are abundant. Beyond achieving the anticipated ROI, administration is efficient and effective.

“Rather than hiring dedicated PBX specialists, IT systems administrators are managing Lync,” says Berns. “This gives us much more flexibility because we can have a global team of individuals working on Lync while also pursuing other critical IT projects.”

UCC Dashboard Streamlines Management and Troubleshooting

Systems and network administrators particularly appreciate the UCC dashboard, which enables a variety of tasks ranging from tweaking the QoS of individual calls to differentiating Lync issues from Wi-Fi issues when troubleshooting.

“The dashboard provides systems professionals and networking professionals with an effective communications platform,” Berns says.

“For instance,” he continues, “soon after our rollout, multiple mobile users reported dropped calls, but the issue appeared random. Using the UCC dashboard I examined the historical data produced by AirWave and quickly discovered all the calls had a single AP in common.”

“After sharing this information with the networking team, they investigated and discovered an AP was damaged during installation,” adds Berns. “Without the dashboard and AirWave, uncovering and remedying the issue would’ve taken much longer.”

Now, Lync is available to every employee, on campus and also to those working remotely through Aruba's controller-less solution, Instant.

"Users experience clean, clear communications no matter where they are in the world or which devices they're using," Nelson says.

ABOUT ARUBA NETWORKS, INC.

Aruba Networks (NASDAQ:ARUN) is a leading provider of next-generation network access solutions for the mobile enterprise. The company designs and delivers Mobility-Defined Networks that empower IT departments and #GenMobile, a new generation of tech-savvy users who rely on their mobile devices for every aspect of work and personal communication.

To create a mobility experience that #GenMobile and IT can rely upon, Aruba Mobility-Defined Networks™ automate infrastructure-wide performance optimization and trigger security actions that used to require manual IT intervention. The results are dramatically improved productivity and lower operational costs.

Based in Sunnyvale, California, Aruba has operations throughout the Americas, Europe, Middle East, Africa and Asia Pacific regions.

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