Global Environmental Group Expects 66 Percent Cost Savings from Unified Communications

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Manuel Guede, Senior Systems/Network Engineer, IUCN

IUCN, the International Union for the Conservation of Nature, helps the world find solutions to pressing environmental and development challenges. Founded in 1948, IUCN employs 1,200 workers and organises more than 10,000 volunteers in its effort to provide a neutral forum for governments, nonprofit organisations, scientists, businesses, and local communities to research, develop, and implement cutting-edge conservation science. IUCN needed a more cost-effective, reliable way for its employees and volunteers to communicate and share information. With the deployment of Microsoft Office Communications Server 2007 R2 by Microsoft Gold Partners Lambert Consulting and Interoute, IUCN employees can now make calls from their laptop computers to help IUCN reduce telephony and travel costs while providing highly secure service even in remote areas with low-bandwidth connections.
Situation

IUCN, the International Union for Conservation of Nature, was founded in 1948 as the world’s first global environmental organisation. Today, with headquarters located near Geneva in Gland, Switzerland, IUCN has more than 1,000 member organisations in 140 countries, with support from more than 1,200 employees in 48 countries. The organisation works with more than 10,000 volunteers to promote cutting-edge conservation science, and it runs thousands of field projects around the world to better manage natural environments. IUCN also works with governments, international conventions, and United Nations organisations to develop best-practices and initiate laws for nature conservation and human well-being.

To communicate with one another, IUCN employees and volunteers were relying heavily on email and phone conversations to discuss projects, along with an internally developed intranet site to share important organisational materials and information. With 10 main or regional offices, as well as over 40 country and project offices across the globe, IUCN needed a better, more cost-effective way for employees and volunteers to communicate with each other, as well as with governmental and other conservation organisations.

Because employees and volunteers are so geographically dispersed, most of the calls they place are international. Most recently, the organisation tried using Skype for Voice over IP (VoIP) calls, to reduce the cost of international calls. However, employees found that the call quality was inconsistent, and because Skype was not designed as an enterprise VoIP solution, they had a difficult time finding contacts online. IUCN was also concerned because it could not guarantee the security of calls made across Skype. With an aging Nexspan private branch exchange (PBX) telephony system in place, the organisation knew it could be looking at an expensive migration to move to an enterprise VoIP solution. Also, migrating away from the PBX and its current external provider would mean that employees and volunteers would have to change their phone numbers, which could result in confusion and the additional cost of reprinting business cards and correcting organisational directories.

IUCN also wanted to reduce the amount—and cost—of travel for employees. As an environmental organisation, IUCN is conscious of its own impact on the environment. It had an expensive legacy audio-conferencing solution in place so employees could conduct remote meetings, but IUCN wanted more capabilities, like the ability to share documents and applications, than that solution offered. The other challenge it faced with this legacy solution was that the bandwidth requirements were too great for several of its offices where bandwidth availability was lower.

Finally, IUCN wanted a communication tool that would let employees view presence information, locate contacts easily, and let them talk—whether through instant messaging or through VoIP—without incurring additional charges. All of these challenges led IUCN to consider adopting a unified communications solution.

Solution

When IUCN determined that it needed a comprehensive unified communications
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solution, it briefly considered Cisco, but quickly dismissed that solution as cost-prohibitive due to the expense of hardware and licensing. Like the legacy audio-conferencing solution, Cisco also had greater bandwidth requirements that some IUCN offices could not support, so implementing that solution would have required large infrastructure changes.

To help it find a solution, IUCN turned to Microsoft Gold Partner Lambert Consulting. Lambert Consulting has successfully deployed Microsoft Unified Communications solutions at many international companies. Its services include planning implementations, implementing servers and networks, integrating different telephony systems and SIP Trunk providers, and developing tools to support deployment and training. Beginning in April 2009, Lambert Consulting provided an internal proof of concept for 20 employees using Microsoft Office Communications Server 2007 to show IUCN that it was possible to use audio and video conferencing with Microsoft Office Communicator. IUCN was pleased with the results and decided to deploy the Microsoft solution.

In June 2009, IUCN and Lambert Consulting began planning the deployment, with the goals of providing audio and video conferencing for all IUCN staff—even those with lower-bandwidth connections—and implementing a communications solution that would not rely on a virtual private network (VPN) for connectivity. IUCN also wanted to move away as much as possible from using its current PBX system for telephony, especially at newer locations, where it preferred to use VoIP to place calls. The Information Management Group of IUCN and Lambert Consulting deployed the full solution, including Office Communications Server 2007 R2 and Office Communicator Web Access, and configured the deployment for high availability.

To help with the configuration of the VoIP solution for outbound and inbound calling, Lambert Consulting and IUCN called on Microsoft Gold Partner Interoute, the telecommunications and hosting services provider for IUCN. Interoute operates one of the largest pan-European networks with worldwide coverage, and it owns fiber and has subsea cables connecting Europe to North America, the Middle East, and Africa. Interoute also offers a comprehensive service portfolio that includes Ethernet, virtual private networks, Internet, streaming media, SIP trunking, VoIP, and hosting services. Interoute and Lambert Consulting proposed that IUCN use a SIP Trunking solution to provide a full Microsoft Unified Communications experience for its employees at a low cost. Bastien Aerni, Senior Sales Manager at Interoute, explains, “Interoute is one of the main European service providers able to support desktop-integrated voice over IP solutions from Microsoft, and we are the only provider with such an extensive physical reach with regards to our global network.”

Overall, Interoute believes that most businesses will integrate VoIP solutions, and that Microsoft is a solid choice. As Tony Rogers, Corporate Product Marketing Manager with Interoute, explains, “We partnered with Microsoft because we believe that desktop-integrated voice over IP is the future for how voice capabilities will be delivered.”
The work to configure the telephony solution with Office Communications Server began in September 2009. Lambert Consulting and IUCN deployed five Office Communications Servers. Interoute also deployed two voice gateways, one between Office Communications Server and the PBX, and one between Office Communications Server and the SIP trunk, which carries voice calls directly to Interoute. SIP trunking uses the session initiation protocol (SIP) and real-time transport protocol (RTP) to pass network traffic from Office Communications Server directly to a network service provider over an IP connection. With these two solutions, IUCN has the flexibility to continue to take advantage of its investment in PBX equipment, but does not need to make new investments. Numbers can be easily moved over to the SIP Trunking solution as required and IUCN will gradually increase the percentage of calls carried by this solution.

As part of the full deployment, Lambert Consulting also helped IUCN upgrade from Exchange Server 2003 to Exchange Server 2007 and implemented Exchange Unified Messaging. With Unified Messaging, employees can receive and manage both voice-mail and email messages through the Microsoft Office Outlook messaging and collaboration client.

By March 2010, outbound calling through Office Communications Server was set up for 200 users, while integration continued for inbound calling. As part of the integration, IUCN and Lambert Consulting defined the dial plan—the rules of behavior set in Office Communications Server for all calls that pass through it—to ensure that inbound and outbound calls took the proper routes, and that the system could also support calls to emergency services. The dial plan was then implemented with the help of Interoute. “With this solution, IUCN can move existing phone numbers from the PBX to Office Communications Server individually, or by a range of numbers, which offers greater flexibility,” explains Rob Ibbitson, Chief Architect for Voice Networks at Interoute. The PBX system at the Headquarters in Gland has been fully integrated for outbound and inbound calling, and about 40 employees there have already adopted Office Communications Server softphones as their primary voice solution for making calls outside IUCN, and the number keeps growing.

All employees are able to take advantage of unified communications capabilities such as in-network click-to-call, instant messaging, presence, desktop sharing, federation, and unified messaging. The federation feature is especially important to IUCN, because it makes it possible for two or more organisations to communicate across an IP connection in real time in an encrypted, authenticated, and managed environment. IUCN employees can place Office Communicator calls, share a desktop, start an instant messaging session, or view presence and calendar information for any trusted organisation in its network that has also enabled federation.

IUCN expects that more employees will begin using Office Communications Server softphones as their primary voice solution as they grow more comfortable with the technology. “This sort of integration gives them more confidence,” explains Ibbitson. “Instead of taking a ‘big bang’ approach, they are letting

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people adopt the solution and become tech evangelists for it inside the organisation." The migration is complete at the Swiss headquarters, and Office Communications Server has been deployed to 80 percent of the branch offices around the globe. IUCN expects the deployment to be complete by the end of 2010.

Benefits
With a Microsoft Unified Communications solution in place, IUCN can offer its employees a less expensive, more secure method to communicate with each other, with government agencies and other environmental nonprofit groups, and with volunteers and scientists around the world. It can reduce the need for—and the cost of—travel, while still providing reliable connectivity and robust productivity tools that ease communication.

Reduce Telephony and Travel Costs
By integrating Office Communications Server 2007 R2 with its existing PBX system, IUCN expects to reduce its telephony and travel costs significantly. “With the integration of Office Communications Server and our PBX system, we expect about a 66 percent reduction in the cost of making outside calls,” says Manuel Guede, Senior Systems/Network Engineer at IUCN. As more people across the organisation adopt the softphones as their primary method for making calls, IUCN expects to reduce costs even further.

Because employees inside IUCN can use Office Communicator to talk to each other, IUCN has also been able to reduce travel costs. “We recently held a meeting with our Director General, which is something we have three or four times a year,” explains Guede. “Last time, instead of having everyone travel to Gland for the meeting, we used Office Communications Server to hold the meeting.” Another way it has reduced travel costs is by using Office Communications Server to interview employees for position openings in other parts of the organisation. It has also seen a significant reduction in phone charges for employees who do travel, because they can “call into” the office for free through Office Communicator, without incurring additional charges for the hotel phones or their mobile phones.

Provide Unified, Security-Enhanced Connectivity
Both with Office Communicator and desktop-integrated VoIP calling, IUCN can provide more high-quality, security-enhanced, reliable communication for employees. “With Microsoft Unified Communications, we did not have to have separate licenses for all the provided services or locations. Everything was covered under the license for Office Communications Server, so we could get people worldwide connected easily,” explains Guede. Even offices with limited bandwidth, like those in Bangkok and Africa, experience more reliable service because the bandwidth requirements for capabilities like audio conferencing are lower than with the previous solution.

Employees using Office Communications Server softphones to make outside VoIP calls also experience more reliable quality and can feel more secure discussing business across the network. “Skype did not have the security elements we required,” explains Guede. “We feel that with Office Communications Server, we have a more secure solution.”
Ease Communication for Global Workers

IUCN employees and volunteers can easily search for contacts through Office Communicator. After they have located a contact, they can view presence information and initiate a call or desktop-sharing session, whether the contact is a federated colleague or a coworker inside the organisation. For example, IUCN is currently implementing an enterprise resource planning (ERP) system. The project team needed regional staff to participate in the project and provide input. “Office Communicator gave IUCN the capability to work as a team and helped greatly reduce travel costs for staff to participate in workshops at headquarters,” says Julie Wyman, Head of Information Management at IUCN. “With desktop sharing, people from different countries can link together to share a desktop or a program. With presence, we can see if people are in meetings. It’s very helpful.”

Employees who travel also have easier access to contacts. “Now employees can be in touch wherever they are,” says Guede. “With Unified Messaging, they can still get messages in their inbox when they are traveling. With call-forwarding, people can even reach me through my assistant’s phone number.”

IUCN, Lambert Consulting, and Interoute have implemented a unified communications solution that offers cutting-edge technology to workers so they can be more productive at helping to solve the world’s conservation challenges.
The Microsoft Office system is the business world’s chosen environment for information work, providing the programs, servers, and services that help you succeed by transforming information into impact.

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