Phybridge

TRANSUNION MIGRATES TO IP TELEPHONY WITH THE PHYBRIDGE UNIPHYER, ELIMINATING LOCAL AREA NETWORK BARRIERS AND RISKS

Summary

Industry:
Large Enterprise — Financial Services
Over 1,400 Users in a Single Location

Challenges:
Migrating 1,400+ users in a single site to IP Telephony creating the ideal LAN foundation for success, and how to minimize disruption and risk to the business given size of project.

Selection Criteria:
Looking for solutions to support the business requirements in the most effective manner.

Solution:
Phybridge UniPhyer Network Switch

Results:
- All LAN barriers eliminated.
- Real world testing was completed, eliminating concerns and risks.
- Savings of over $1.5 Million.
- Fast-tracked the project by over six months.
- Cutover completed in a weekend.
- Future data switch requirements will be non PoE-simplified topology.

TransUnion

TransUnion is a global leader in credit information and information management services. For more than 40 years, TransUnion has helped businesses become more efficient in managing risk, reducing costs and increasing revenue, and has advised consumers on ways to improve personal credit health in order to achieve their financial goals. Today, TransUnion provides solutions for over 45,000 businesses and an estimated 500 million consumers in 25 countries around the world.

TransUnion, Chicago Location

Challenge

Communications in any company is a challenge in today's fast-paced, digital world. By the time we read a newspaper article or write a letter, the printed story or crafted message is already 'old news.' Combine this 'need for speed' and 'desire for instant information' with the need to communicate in varying time zones and different languages, and that challenge increases tenfold.

The 1,400 employees located at TransUnion's headquarters in Chicago, Illinois, rise to that challenge each and every day as they strive to provide information and services to their colleagues and customers around the globe. And with every additional phone call made or e-mail received, TransUnion's management team recognized the need to improve its communications infrastructure in order to keep up with the demands of the digital age.

Tony Christopher, Network Engineer Voice/Data of TransUnion Credit, wanted to modernize their communications platform and was looking to move the 1,400 employees to Unified Communications and IP Telephony. The challenge was mitigating financial and operational risk as they migrate to a converged platform.

Selection Criteria

Like many organizations, TransUnion initially planned to achieve their communications enhancements by building on their Local Area Network (LAN) infrastructure to support an IP Telephony solution (the deployment of their IP phones layered on their data network with the IP phone acting as a switch for the

data device connected to it). Layering voice and data is quite common in today's communication world. It can also be costly and time consuming to implement. TransUnion estimated that local area network readiness would cost the company over $1.8 million and take more than 12 months to complete.

TransUnion advocates continuous process improvement and creative problem-solving to its customers. They also practice these same recommendations in their own day-to-day operations, so when Tony was prospected by a Phybridge partner he was intrigued. "I would like to introduce you to a proven innovation that delivers Ethernet and Power over your existing voice infrastructure with four times the reach of traditional switches. It was designed to optimize and future proof your LAN for convergence and beyond and we believe we can save you money while eliminating risk," said the partner. Tony agreed to a meeting to better understand the Phybridge value proposition.

Solution
The Phybridge UniPhyer offers the ideal solution for customers who are looking to optimize and future proof the LAN for convergence and beyond.

The Phybridge UniPhyer is the only data network switch in the world to deliver Ethernet and Power over Ethernet over a single pair of telephony grade wire with 4 times the reach of traditional data switches. Customers are leveraging their existing, proven reliable voice infrastructure to create a separate network path for voice communications, complementing an existing data network, while optimizing an organization's IT infrastructure for voice and data convergence.

"We saved over $1.5 million, fast-tracked the deployment by over 6 months, and completed the 1,400 user migration in a weekend."

Tony learned that installing the UniPhyer switch would allow TransUnion to optimize their local area network and create a separate physical path for voice communications. Phybridge claimed that the ongoing management of the network would be simpler, and the risk of issues compared to a layered network solution would significantly be

diminished. Additionally, a plug and play deployment solution would not require major infrastructure changes, resulting in a lower-cost solution.

Tony found the Phybridge value proposition very interesting. It fit with TransUnion's mandate to seek alternative information resources to make sound financial decisions. He admits however that he was skeptical. The old adage "if it sounds too good to be true, it probably is" was running through his mind. He agreed however, to meet with a local Phybridge partner to get more information.

At that meeting, Tony was provided an estimate of $300,000 to install the Phybridge UniPhyer switch supporting all of the IP telephones in TransUnion's Chicago corporate office. If true, this would result in a $1.5 million dollar savings. To mitigate risk, Tony agreed to a pilot deployment to test the Phybridge solution and confirm that it would meet all of TransUnion's requirements.

Management Considerations
TransUnion's senior management team recognized the technical and economic benefits of the Phybridge solution. The IP Telephony system was purchased and installed at a cost drastically reduced from initial budget forecasts.

Project costs and operational impacts are two concerns that are commonly expressed by management teams in all industries, regardless of size or scope. However, each organization usually has additional considerations when choosing a solution for their IP Telephony needs:

TransUnion welcomed the UniPhyer's ability to improve upon their emergency preparedness planning by creating a more robust 911 system.

Consideration: E911
- The point-to-point topology leveraged by the UniPhyer allowed Tony to map all ports on the Phybridge switches to a specific physical location in the 10 story building creating a robust E911 location database.
- Once in place, the wiring will not have to be touched whatsoever. IP phones can move from one location to another and the E911 location database will be automatically updated with the new location of the IP phone; achieved through SNMP integration.

Ongoing management of the converged LAN was greatly simplified with the physical separation of voice further reducing the total cost of ownership.

Consideration: LAN Management
- The Phybridge backbone was easily integrated into the overall management of the network through SNMP.
- The entire network is managed from a single central location.
- QoS on a Phybridge backbone complementing the existing data LAN is achieved by physically separating voice with each IP phone to have a dedicated point-to-point infrastructure to support requirements. This combined with the Configuration strategy implemented by Tony assures a robust, easy to manage LAN topology ensuring a great user experience.

Future data requirements are greatly simplified. The physical separation of voice on its own Phybridge switch fabric greatly reduces future financial considerations and potential risks when needing to increase bandwidth speeds for data users.

Consideration: Future LAN Requirements
- Data switches do not need to be PoE and the IP phone does not need to be changed to support higher bandwidth speeds needed to support the data device connected to it.

The Pilot
With Phybridge's plug and play deployment solution, TransUnion was able to easily test the usability of the UniPhyer solution without making any financial investment. This same level of "real world" testing is not possible if voice communications are layered on the data LAN network. TransUnion would have had to make significant LAN investments before being able to test even a single phone.

Tony identified end points throughout the building to test. He tested some of the furthest end points from the central closet and chose the most difficult office locations to ensure an accurate test was conducted in a real-world work environment. Several IP phones, including key executive desktops, were connected to the Phybridge switch on various floors of TransUnion's headquarters. This allowed users from all levels of the company to test the solution and experience firsthand the ease of using an IP phone in their day-to-day activities.

The transition during the pilot was seamless for TransUnion's employees and had no adverse effect on their productivity. Tony was satisfied with the results of all testing and was confident that the Phybridge solution would support TransUnion's migration to IP Telephony. With the pilot complete, Tony recommended the UniPhyer to TransUnion's executive team and outlined how the Phybridge solution could be implemented faster and cheaper, but with the same technical results as the layered solution they had initially considered.

"The ability to complete real-world testing without investment or disruption was tremendous value to me. I was 100% confident in my LAN strategy before making a single investment."

TransUnion's senior management team was impressed with the pilot's results. They found tremendous value in the ability to test the solution in a real operating environment, thereby eliminating project risk and proving the solution's viability without having to make a financial investment up front.

Full Deployment of the Phybridge Solution
With TransUnion management on board, the full deployment of the Phybridge solution began:

Site Planning & Preparation
Given all the telephony pairs supporting the IP end points can be clearly identified in the main closet, TransUnion decided to consolidate the pairs by department for easy management once fully deployed.

They calculated the power and back-up power requirements for the project. Given all the Phybridge switches were in a single location TransUnion realized significant savings in back up power costs while reducing power management complexity.

Rack, Stack, Configure
Prior to cutover, TransUnion was able to configure and test all the switches to ensure a successful migration. The following is a summary of the strategy applied by TransUnion:

- Configured WAN routers for QoS and kept the PSTN connectivity for DID/DOD traffic.
- Configured the Phybridge switch fabric for redundancy, enhanced security and optimum performance using VLAN and Redundancy strategies.

- ◊ Clustered the 48 port UniPhyers into 6 groups of 5 on three racks.
- ◊ Created specific VLANs for each of the clusters. This minimized the amount of unnecessary traffic on each cluster.
- ◊ For redundancy, Tony daisy chained the cluster of Phybridge switches together connecting the top switch to a gigabit data switch and the bottom UniPhyer to a different gigabit data switch. By doing so, if either one of the data switches failed or a UniPhyer in a cluster failed there was a redundant path available to minimize down time.
- Racked all the Phybridge switches, connected to the PBX and tested switches based on configuration strategy and locally tested some end points without any business impact prior to cutover day further reducing risk on cutover day.

Deployment & Cutover

The installation of the Phybridge solution began on a Friday evening. Over the course of the next two days, a team of 8 to 12 people worked to complete the transition.

Part of the the team unpacked and delivered 1,400 IP phones to employees' desks. At each desk, they disconnected the RJ11 cable from the old phone, connected it to the PhyAdapter, and plugged the PhyAdapter into the new IP phone.

Other members of the team then began working on the wiring consolidation and mapping. The more accurate the wiring records, the less time this part of the project would take. With consolidation complete and the RJ21 cabling connected to the Phybridge switches, the IP phones were powered up, registered and tested to ensure complete functionality.

Successful Deployment

On Monday morning, just 48 hours from the start of deployment, TransUnion employees arrived at work to find the new IP phones on their desks. Like every other day at the TransUnion head office, numerous calls, faxes, video conferences and voice messages were transmitted worldwide, all without a single quality of service issue.

"The cutover to the Phybridge solution was executed brilliantly," says Tony Christopher, Network Engineer Voice/Data of TransUnion. "And I strongly believe that having a

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Tony Christopher
Network Engineer Voice/Data
TransUnion

dedicated physical path for both voice and data eliminates the quality of service issues I was expecting with the migration to IP Telephony. The Phybridge solution has been a huge success, both operationally and financially for TransUnion."

About TransUnion

As a global leader in information and risk management, TransUnion creates advantages for millions of people around the world by gathering, analyzing and delivering information. For businesses, TransUnion helps improve efficiency, manage risk, reduce costs and increase revenue by delivering high quality data, and integrating advanced analytics and enhanced decision-making capabilities. For consumers, TransUnion provides the tools, resources and education to help manage their credit health and achieve their financial goals. Through these and other efforts, TransUnion is working to build stronger economies worldwide. Founded in 1968 and headquartered in Chicago, TransUnion reaches businesses and consumers in 25 countries around the world.

About Phybridge

Headquartered in Canada, Phybridge was established in 2007 by leading telecommunications industry veteran, Mr. Oliver Emmanuel. Through innovative thinking and sound business strategies, Phybridge has grown to serve customers worldwide. Phybridge's revolutionary network switches provide customers with an easier way to optimize their local area network for IP Telephony. Its flagship product, the UniPhyer, has been named Product of the Year and Best in Show at various unified communications conferences. Building on this success, the company recently launched the PoLRE (Power over Long Range Ethernet) switches to the IT industry. Phybridge simplifies voice and data convergence, enabling customers to spend less time and money managing their IT infrastructure, and focus more on growing their business. Move to the future of Unified Communications with confidence at www.phybridge.com or call us at (888) 901-3633.