

Modernizing healthcare collaboration with next generation voice and networking technologies



Voice communications can often be overlooked as enterprises modernize their information technologies. When the C-suite wants an update on digital transformation efforts, their first question is not likely to be, “How’s the phone upgrade coming?” It’s easy to take for granted a capability that has existed for more than a century.

Yet, voice communication is such a standard part of doing business it is mission-critical for most organizations. Digital voice technologies can also leverage high-speed networks, integrate with data, and extend usage models such as combining office and mobile phone numbers so that customers can always reach you.

Despite these advantages, there are still a lot of TDM PBXs lurking in company and institution closets. TDM is not as flexible or cost effective as cloud-based solutions with SIP Trunking. They also do not integrate well with other platforms that link to enterprise voice solutions as one healthcare provider discovered.

Industry

Healthcare

Challenge

- Strained TDM network needed an upgrade to support improved communication with Microsoft® Teams

Solutions

- Lumen Voice Complete® with SIP Trunking empowers the nursing team to streamline operations and patient care

Challenge

Getting the most out of Microsoft Teams requires an upgraded phone system

A well-known healthcare institution operating a network of teaching hospitals, research centers and other care facilities needed to upgrade voice services. When lives are at stake, communication cannot falter. Doctors and nurses must be able to quickly and reliably communicate with other healthcare workers to make sure they have the medications and tools they need to take care of their patients. In an attempt to streamline communication, the nursing staff at this institution implemented Microsoft Teams as a mode for better collaboration. However, they did not realize the strain this would add to their existing TDM network.

In order to keep up with increasing demands, the healthcare institution experienced the need for frequent bandwidth upgrades to the network. But this resulted in an oversubscription on TDM, driving costs increasingly high. This served as the catalyst to find a new solution that would provide scalable, resilient bandwidth without breaking the bank. The current technology vendor was unable to help with the transition, which meant the institution needed to find a provider that could design and implement a new unified communications solution.

Solution

Voice Complete empowers the nursing team to streamline operations and patient care

Because of the legacy relationship with Lumen as the healthcare institution's internet access provider, and due to proven past performance and experience with healthcare providers, the organization made the obvious choice to work with a proven provider to upgrade its communications infrastructure.

The current solution is built around the Lumen® MPLS/IP VPN backbone as the transport layer with a SIP trunk for quality and security. Using Voice Complete with SIP Trunking, the healthcare institution is now able to implement a scalable solution using existing voice TDM assets while migrating to new technology. Voice Complete creates a single pool of calling resources and concurrent call paths — all in the cloud. In addition, the built-in resiliency with portal management and physical, electrical and geographical diversity created peace of mind that the communications network would survive in the case of an unforeseen disaster.

The final solution consisted of:

- Voice Complete
- MPLS/IP-VPN backbone
- Sonus CPE platform from Ribbon Communications replaced old PBX

Results and future

Scaling Voice Complete into new opportunities

Installation of the new communications solution is currently underway as the healthcare institution focuses on onboarding the remainder of their facilities. Now, in response to both internal and external pressures, as the organization's needs expand, the solution will scale with them.