

For hosted communications providers, staying ahead of technology trends isn't just a choice – it's a matter of necessity. Most providers, regardless of whether they offer voice, data, business applications, or other services, are fully cognizant that they serve an increasingly savvy clientele that expects to leverage the most advanced productivity tools.

This paradigm is particularly true for hosted enterprise communications providers. Delivering telephony functionality over IP networks, no matter how robust, is considered yesterday's news. Customers – both large and small – demand much more from their service providers than basic voice communications; they seek the advanced services that will make their businesses more productive, efficient and competitive. This competitive edge is often delivered through a range of next generation solutions, such as unified communications, collaboration, web conferencing and integration with other business processes. The hosted communications market is certainly capitalising on this trend, as evidenced by an increasing field of highly competent providers, all of whom are eager to compete on technology as well as price. In the hosted world, innovation simply means staying ahead of the competition.

Yet, integrating new technology into a legacy network comes with its own set of challenges. It can certainly be expensive. And it can cause a great deal of duress to both operator and customers. Disruptions in service delivery or radical changes in form and function can be the tipping point that will cause customers to seek out alternative services. So, how does a hosted provider seamlessly move its offerings to a next generation platform without negatively impacting its customers' businesses? And, how does it do it without incurring the enormous expense of replacing its infrastructure every time a new technology wave hits?

PBX Central, a hosted communications provider based in Austin, Texas, needed to find answers to these migration challenges. As a hosted provider, PBX Central supports some 200,000 end users around the USA, both through its direct service offerings, as well as through software licensed to other providers. The company has earned the reputation of being shrewd and well managed, and has developed a product portfolio that certainly rivals competing providers.

KBX, its proprietary communications solution, was initially built on a TDM platform. This first generation product was capable of providing the core IP functionality that its customers required, but was not the ideal foundation to deliver the next generation of services that would redefine the market.

"Our management team understood that the time would come when we would need to port over our core technology to an IP-based platform that would better position us for future growth," explains Mark Castleman, Chief Executive Officer of PBX Central. "The key was finding a partner that clearly had the enabling technology that would allow us to move into an IP environment as seamlessly as possible. After much investigation, we found the right partner in Aculab."

Aculab has unparalleled credentials in developing enabling technologies that allow service providers, applications developers and enterprises to integrate new technologies into existing infrastructure. It has a range of solutions and services that are ideally suited to communications providers seeking to add new services and features for their customers without a wholesale equipment replacement.

The concept of 'extensibility' – or extending the lifecycle of legacy networks – resonates with providers like PBX Central that keep an eye on CAPEX and OPEX while striving to compete and offer new services in a manner transparent to their customers. According to Andrew Nicholson, Product Manager for Aculab, the notion of extensibility makes complete sense in a challenging competitive environment.

“We speak with many businesses and service providers who are eager to offer next-generation services to their customers, but must find cost-effective and transparent vehicles to make this happen,” explains Nicholson. “That’s why so many providers embrace extensibility. It minimises the investment and disruption normally associated with the delivery of new technology.”

After meeting with PBX Central and understanding their specific goals and challenges, Aculab put together a solution centred on Prosody S, a software-based host media processing platform that provides a flexible and reliable foundation for providers looking to expand their service offerings – while retaining much of their existing infrastructure. By relying on the ability of Prosody S to equally manage functionalities originating in TDM and SIP environments, PBX Central has a non-disruptive path to an IP-based platform, giving it the competitive edge it needs.

#### Prosody S

- Software-based enabling solution
- Next generation, IP platform
- SIP call control signalling
- TDM interface ‘look and feel’
- Cost-effective offering
- High channel count density
- Window and Linux OS support

“When Aculab first discussed Prosody S with us, we were very intrigued by the concept of a software-based platform that could handle not only the variety of traffic the KBX solution supports, but also new services available through SIP,” remarks Charlie Miller, Chief Technology Officer of PBX Central. “What was particularly interesting was that we could not find any other vendor that offered a software-based enabling solution. The more we investigated, the more we concluded that Prosody S was indeed the best option for us.”

With a significant diversity of customers and interconnect technologies, PBX Central faced a myriad of network management issues. Customer traffic traversed a disparate network that included PRIs as well as several IP networks. The IP-based KBX platform required technology that could seamlessly integrate data streams converted from TDM, using a basic VoIP gateway, with purely IP-based data coming from new SIP powered applications. It learned that Prosody S not only met these challenges, but also gave it access to field proven protocols as well as a vast array of codecs.

Prosody S gives communications providers an efficient vehicle when it comes to delivering enhanced services. In a typical enterprise class server, Prosody S supports up to 750 voice channels, with channel counts scaling up as the processing power of the host platform increases. Developers leverage this efficient use of channel densities to provide the best platform for delivering rich communications solutions.

In addition, Prosody S operates on Windows and Linux operating systems, and a multitude of hardware platforms, from desktops to multi-processor servers and also virtual environments, providing even more options to operators, businesses and applications developers. As a result, Prosody S continues Aculab’s longstanding ability to extend the lifecycle of both IP and TDM technology, which gives providers even more choices in delivering new services to their customers.

“The fact that Aculab comes from such a rich TDM history was very important to us,” explains Miller. “They know exactly how telephony is supposed to function, from both a provider and a user perspective, because they’ve been working in this environment for so long. We’ve noticed that other vendors don’t seem to get these nuances as easily. Other vendors offered us a ‘box’ and said we needed to re-engineer our KBX platform according to their specifications. Aculab came from a different angle; they worked to fit in with our requirements, rather than demand we change our design to fit into their mould.”

“They knew how to help us and most of all, they knew how to make it as seamless and transparent as possible,” continued Miller.

This innate understanding of telephony functionality was vitally important to PBX Central. Through the software-base approach of Prosody S, PBX Central found it could migrate existing TDM-based applications to a SIP-based environment with relative ease. This seamless transition was especially important as PBX Central rolled out new SIP-based services. Since one of the most compelling benefits of SIP is its ability to drive functionality to the endpoint, introducing new features at the desktop – without interfering with user behaviour – can be a dilemma for the provider. But, as PBX Central soon discovered, it was well within the capabilities of Prosody S.

“We were very pleased to find that Prosody S had the look and feel of a TDM interface, although it was performing in a SIP environment,” says Miller. “That distinction was critical as we ported over our entire KBX application from a legacy to an IP-based world. We were able to convert the KBX feature set to SIP fairly easily and there was hardly any disruption to end users.”

While Prosody S is a comprehensive host media processing platform, there were instances that PBX Central found it needed assistance in making the solution more compatible with KBX. With its past vendor refusing a similar request to make changes in code, PBX Central was surprised and exceedingly pleased when Aculab said it was happy to make these alterations.

“The fact that Aculab was even willing to discuss changing some of their proprietary code just to accommodate our needs spoke volumes,” remarks Miller. “We had not come across any other vendor that would have considered this as a possibility. Aculab’s flexibility certainly reinforced our conviction that we made a sound decision in partnering with them.”

With Aculab’s Prosody S at its core, PBX Central has a flexible, SIP-based platform that is steps ahead of competitive offerings and is perfectly suited to deliver the next generation of applications its customers and end users demand.

And, perhaps most satisfyingly, the path travelled from TDM to SIP was cost-effective and virtually pain free for both PBX Central and its users.

“Aculab did a phenomenal job in structuring a solution that met all of our requirements,” concludes Castleman. “The Prosody S software allowed us to leverage much of what we had already built and gave us the added functionality that will allow PBX Central to grow. Above all, Aculab’s willingness to go outside the box to satisfy customer requirements really sets them apart from other enabling technology vendors.”

For more information, please contact your Account Manager or view our website:  
<http://www.aculab.com>