An Advanced VoIP Migration Strategy for CLECs, ILECs

Mpathix Inc.

Introduction

In a turbulent telecom environment, traditional carriers will always face ROI challenges. Increasing competition, evolving customer needs, and increasing costs make operating profitably more difficult. Voice over IP (VoIP) presents both more challenges and more options for CLECs and ILECs: more competitors on the one hand, but the potential to significantly lower operating costs on the other. While service providers have large investments in legacy technology, new IP-based services are gaining traction as the business models of the future. As a result, these carriers are looking for sensible and cost effective ways to make the transition to IP.

Why move to VoIP?

As VoIP has matured as an alternative to circuit-switched (TDM) dial-tone delivery, both new pure VoIP players such as Vonage and cable carriers alike have put the same kind of competitive pressure on traditional wireline carriers as the expansion of CLECs has put on ILECs. This increasing competition has surely been a factor in many of the business failures we've seen among carriers, as well as in the drop in stock price among vendors over the past four years.

Consequently, both vendors and carriers are looking for more profitable ways of doing business. The results of this search for profitability are higher prices from vendors and the same recurring ROI problem for carriers; this in spite of the cost advantages of the VoIP transport model.

Unlike the pure VoIP players however, wireline carriers face a significant write-down of their legacy investments as part of their VoIP migration plans. Despite this financial reality, every forward-thinking wireline carrier in North America is developing plans to move all or part of their transport networks to VoIP. For example, many carriers have already been using IP-based backhaul networks, and -- due in part to both the increasing voice quality of packet switching and lower CPE costs – are now extending the IP model to transporting end subscriber calls.

Increasing vendor prices and legacy write-downs combine to put existing carriers into a defensive position against the new generation of CLECs. Except in the boardrooms of venture-backed pure IP vendors, there is little doubt that existing carriers will maintain much of their market share, and that new entrants will simply drive down margins for everyone.

But there is a solution to this dilemma. Just as VoIP advantages allow carriers to increase margins and compete more effectively, there are approaches that will allow carriers to extend their cost reductions from a subset of operational costs to network build-out, legacy investment recovery, and a broader set of operational expenses.

The solution is a specific approach to the intelligent application of the technology, rather than a reactive approach to new competition and the artificial sense of urgency that is encouraged by equipment vendors who have their own agendas. Contrary to what some are saying, VoIP is the future; it's not yet the present.

VoIP Migration Strategy: Overview

When migrating to newer technologies that are not telco-hardened, such as VoIP, the key consideration for carriers is protecting the main advantage they have over incipient competitors: network reliability. For core revenue-generating applications such as dial-tone and increasingly important, wireline voicemail for consumers, subscribers expect 100% reliability. While they will settle for "five-nines" reliability, they will not be truly satisfied.

The advent of open platform architectures has begun to solve this dilemma. Increasingly obsolete legacy (and proprietary) platforms from switch, voicemail, and other application vendors have created a requirement to migrate to newer technologies in order to offer new features. Over the past five years, open platform hardware from companies such as Sun Microsystems^{TM} has increased dramatically in processing power and reliability, taking away the only advantage proprietary platforms ever had.

With a simultaneous drop in open platform prices, every hardware vendor, regardless of application provided, has been forced to either migrate to an open system or begin looking seriously at this approach. The laggards are being successfully attacked and the end-of-life announcements of proprietary voicemail platforms have created an enormous market for the replacement of legacy systems.

VoIP Migration Strategy: Details

There are only a handful of voicemail vendors that offer even two out of the three requisites for the intelligent application of newer technologies:

- They must be telco-hardened. Reliability is the #1 requirement of every carrier. They must have at least several million non-IP mailboxes deployed in the most difficult market to penetrate: North America.
- They must offer the newest, highest ROI features available in their industries.
- They must pass the cost advantages of open platform architecture on to their carrier customers.

Mpathix Inc. is the one vendor that accomplishes all three tasks.

When it is truly, technologically open – rather than simply a marketing spin – an open platform architecture means that additions to features, protocol changes, and low cost extension of the platform into new application areas can happen very quickly. The key is in the timing. Major changes or upgrades should be made only when the market shows that a new application or approach is both *feasible* and *profitable*; not when bleeding-edge vendors tell you that you must deploy a new technology just because it's available. In some areas of technology, certain vendors can get away with that approach. But in the area of voicemail, more options are available.

For example, changing from an SS7 signaling approach to the Session Initiated Protocol (SIP) required for Voice over IP is as simple as replacing a 3rd party SS7 stack with a SIP stack from the same or different 3rd party vendor. A true open platform architecture allows for the continual adoption of the latest technologies from the highest reliability vendor. And if the vendor is even more advanced, they can structure their architecture to allow simultaneous application of SS7 and SIP protocols on the *same server*. This approach allows for the best of all possible migration scenarios from TDM to VoIP.

Why the Strategy Works

Adopting a true open platform approach to network build-out reduces both a carrier's costs and increases service offering options. Going to new features and network models such as Voice over IP only when the market (and not the vendors) demands it is the core of the intelligent approach to technology. It will yield the highest ROI, satisfying both internal finance people and outside shareholders.

The most difficult step of this approach is to find vendors who truly pass the savings garnered from open platform architecture and fast-follower technology advancement onto their customers. There are only a few companies that offer this, along with high availability, great customer references, and the latest useable features; however, they don't tend to be the large companies in any industry. Ask for migration pricing. If the vendor doesn't know what that is, find a company that does.

Conclusion

Voice over IP migration is a near-absolute requirement over the coming years for all wireline carriers. This white paper has introduced an innovative approach for CLECs and ILECs to follow to make this transition. The answer is a specific approach to the intelligent application of technology.

The approach requires vendors that are open minded regarding business models that embrace open platform architecture and can evolve from the 100% reliability model of wireline networks into next generation application areas seamlessly.

About Mpathix

Mpathix is a pioneer in providing open system, carrier-grade messaging solutions across MF, SS7, and VoIP networks, including voicemail, faxmail, auto attendant and unified messaging. Based on open architecture, the Mpathix MX platform consistently meets the stringent requirements of telecom and enables service providers to reduce costs while driving new revenue. Unlike competitive legacy systems, the platform is a "future-proof" investment, easily integrating with the latest technologies to evolve with customer needs over time. Mpathix didn't invent the future. Just the future of voicemail.