



VoIP Peering, Round 2

By Hunter Newby

Editor's Note: *The "VolPeer Me" series demonstrates the marriage of Ethernet and VoIP through actual VoIP peering implementations of network operators within the carrier hotels. Its purpose is to show where VoIP peering currently exists, who provides it, who uses it and how.*

It's fitting to wrap up everything around the start of a new year, so I'll take this time to wrap up the 2006 *VolPeer Me* series. This past year has seen profiles of VoIP peering service users ranging from the obvious international wholesale minutes crowd to the not-so-obvious, but increasingly aware, enterprise network operators. Each have their respective motivations and desires when it comes to peering their VoIP traffic, but across the board

Peering Fabric and X-Connect.

In comparison to the number of bilateral VoIP peering arrangements that were established during the year, there were fewer multilateral implementations. This is in part due to the fact that bilateral VoIP connections are really just an evolution for many, if not all, of these relationships that were already in place. Multilateral VoIP peering, on the other hand, is a very new concept. It involves the use of new routing/lookup functionality (ENUM in most cases, SRV in a few) and a new way to look at the exchange of voice traffic—that being a free exchange.

Multilateral voice is not for everyone. Those that still wish to bill per minute have not yet moved to this method and probably will not until they are absolutely forced to. For

The range of VoIP peering services in use during the past year also has varied, which is a good sign that the market niche is not a one-trick pony and has dimensional revenue and sustainability.

they all share one common link: they all have made the move to VoIP Peering.

The 2006 *VolPeer Me* Series acted as a reality check for this emerging market segment to determine who, if anyone, was implementing VoIP Peering services. The results were very promising, to say the least.

For some enterprises and carriers, the motivation was a bilateral trunk replacement of TDM (time division multiplex) for SIP (session initiation protocol). The business case was very straightforward: they already buy and/or sell minutes with one or more providers, and they wish to keep it that way, but they just want to lower the operating expense by cutting out circuit-switched minutes for packet-switched and DS-1s and DS-3s for Ethernet ports. That's fairly simple and not a lot to ask. And seeing how the average savings was 30 to 60 percent for those that implemented VoIP trunks earlier in the year, Christmas came early. The VoIP peering service providers that offered bilateral facilitation featured in 2006 included General Telecom, Interoute, The Voice

others it makes all the sense in the world. This is a trend that will only grow, and the economics dictate as much. The science of it is slightly more complicated than SIP trunking, to the extent of understanding DNS (domain name system), which for some may be challenging, but for most it is largely a function of what they do every day as it is. The VoIP peering providers that offered multilateral services featured in 2006 included The Voice Peering Fabric, VeriSign and X-Connect.

The range of VoIP peering services in use during the past year also has varied, which is a good sign that the market niche is not a one-trick pony and has dimensional revenue and sustainability. Beyond the exchange of minutes, or on-net endpoints in the case of multilateral, there are the protocol conversion and mediation type services of VoIP peering. They include TDM to SIP conversion for those legacy folks that have not yet upgraded to full VoIP, or would just rather outsource, and also other flavors of conversion including H.323 and even varying SIP version mediation.

This is all very relevant and necessary in the VoIP world, for without it there wouldn't be much interoperability or calls passing between networks.

The economic value of these services can be measured by what the carriers do not have to spend to do it themselves, and the savings have been typically in the 10-to-30-percent range. What is difficult to assess, however, is the value they bring to the "network effect" overall. That intangible element is as real here as it is in any other interconnection facility method from the physical layer all the way up to the application layer. No matter how small this piece of VoIP peering is perceived to be, without it the whole chain might be broken. As we learned in the Lunasat-GenTel feature, the protocol conversion was an integral facet to the entire operation that some internally perform and others choose to outsource, but either way it has to be done. The VoIP peering providers that offered protocol conversion services featured in 2006 included General Telecom, Interoute, VeriSign and X-Connect.

During the past year there have been documented VoIP peering cases in closed networks and open ones or, better said, those on private networks and those that ride over

the public Internet. Of all the intricacies of this new service vertical, this is one of the most hotly debated and discussed. The inherently secure nature of private networks is not meant to be seen as an exclusive "members only" club but rather a better way to provision and connect versus using software and routing-based security measures over the public Internet.

The challenge for those VoIP peering service providers that offer a private network solution to VoIP carriers is that the Internet is seen as being available everywhere and everyone already has connections to it. The benefits exist as long as the community is large enough to justify the cost to connect.

The enterprise community has a different outlook, though, in that they will not use the public Internet to carry their internal voice communications, and most of them seek a private network solution away from the public Internet from the outset. This subplot and the development of the other facets of VoIP peering will be very interesting to watch in 2007. **FAT**

Hunter Newby is chief strategy officer of telx. If you know of a VoIP peering implementation and would like to suggest it for a future article, please email him at hnewby@telx.com.

SuiteSolution[®]
Billing and Customer Management

HickoryTech[™]
INFORMATION SOLUTIONS

Every challenge to your profitability—
Every obstacle standing in the way of a new marketing strategy—
Has a Solution.
See the power of our Suite of data services from the inside.

DATA WIRELESS INTERNET PROTOCOL VIDEO BROADBAND WIRELINE

Online demo – www.IS.HickoryTech.com Or call: 877-974-8325