

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

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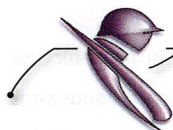
they all share one common link: they all have made the move to VoIP Peering.

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.



Easier Franchising Spurs Fiber to Home, Council Says

By Gary Kim

Streamlined statewide video franchising laws do indeed accelerate the building of fiber-to-home networks, says the Fiber to Home Council, which studied 16 service providers that have begun actual construction in Texas. About 11 of the service providers plan to offer triple play services, while four, with fewer than 200 subscribers each, are unlikely to offer video services immediately. Excluding Verizon, the average number of video customers served by each provider was 3,905.

The Council's study finds all service providers reaching 3,000 or more homes believe the streamlined process has lead them to accelerate their FTTH network construction. The providers say the new law, because it ends time-consuming and expensive negotiations with municipalities for franchises, is substantially decreasing the costs of entry and operation, speeding up actual construction, and also lowers the cost of complying with video regulations.

One of the respondents pointed out that it takes about 18 months to get a single agreement completed, a significant issue for any providers aiming to serve large geographic areas, the Council says. The smaller providers say the easier franchising is spurring thinking about more aggressive "overbuilding" outside their current service territories.

None of these views are unexpected and are in line with what one would expect from market contestants that have the capital and desire to become video providers but find their progress is materially slowed when they have to negotiate with several, or scores, of different local authorities.

Though noting that it is less of an issue in Texas than other states, larger providers say one result of city-by-city negotiations is sometimes "outrageous requests" for items not related in any way to the cable TV franchise issue, the Council report argues. These requests were said to range from requests to purchase Christmas decorations to building sports parks.

At least one smaller provider says the timing required for network construction was unreasonable, considering the size of the deployment and capitalization of their network. Larger

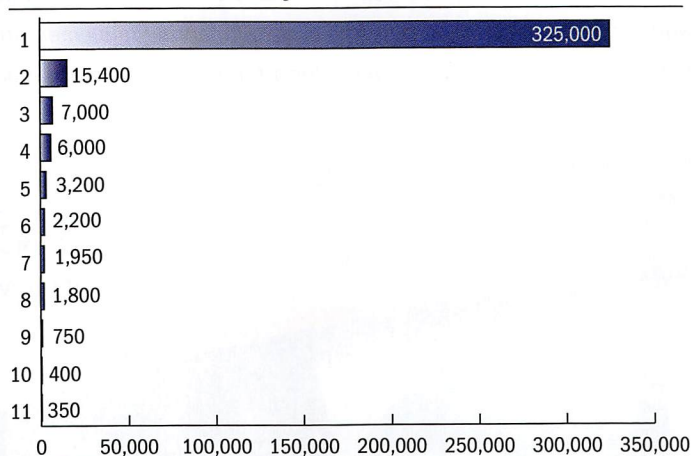
providers say they occasionally have requests to serve entire communities with voice, video and data service, even in areas where the providers have no existing network facilities.

The report says "over 108 statewide video franchise applications have already been granted by the Texas PUC (public utility commission)," bringing competitive video service to more than 660 communities. Some respondents estimate the amount of net new investment in FTTH facilities is in excess of \$1 billion.

And while it might not be fair, or entirely correct, to attribute recent increases specifically to the new law, the Council says "the number of consumers offered video over FTTH increased from 18,000 to 364,000 in just 14 months," a growth rate of 1,815 percent.

Compared to the rest of the United States, Texas FTTH customers receiving video over their connections are 300 percent higher. Nationally, about 1.5 percent of households now buy video delivered by FTTH connections. In Texas, 4.5 percent of households do so. The report does specify, however, how "it should be noted that there could be other factors involved in driving this growth."

Texas Homes Passed by Video Enabled FTTH Providers



Source: RVA Render & Associates

Specifically, Verizon and AT&T had fairly significant plans to deploy video in Texas prior to the enactment of the new law, the Council's report says. However, since passage, Verizon, which had franchises covering 60,000 households before the new law was enacted, has obtained new franchises representing 400,000 homes. By Dec. 1, 2006, about 325,000 homes actually were able to buy video services delivered over an active FTTH connection. Verizon executives interviewed as part of the study say they would have finished up the year with franchises covering just a bit more than 60,000 homes, had the new law not been passed.

About seven of the respondents are competitive local exchange carriers or "overbuilders," while six are incumbent local exchange carriers. **FAT**

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