

## **LONG DISTANCE CONSOLIDATION** CUTTING TOLL CHARGES BY LEVERAGING TRUNKS

### **The Consolidation Opportunity**

Companies with multiple offices typically maintain separate long distance service for each location. This can be costly, since smaller offices can't achieve the volume-based efficiency of a larger office with T1 access or greater to a telecom service provider's network.

A more cost-efficient alternative is to have smaller remote offices place all of their long distance calls through the main office's trunk lines. This allows the company to have all of its calls billed at the lowest possible rate. Even a reduction of a few cents can result in thousands of dollars of savings per month for remote offices with heavy long distance utilization.

The best way to perform this long distance consolidation is by routing voice calls from remote offices to the headquarters PBX over existing IP data links. This allows the calls to be routed without incremental costs that would cut into the savings achieved through consolidation. The use of VoIP also allows calls between offices to bypass the PSTN – making them virtually free.

### **The Technical Challenge**

While VoIP-based long distance consolidation can offer substantial savings to businesses with remote offices, several factors can potentially inhibit implementation of such an architecture. These factors include:

#### **Concerns about the reliability and quality of voice service over IP/Internet connections**

The savings available through long distance consolidation cannot be purchased at the expense of voice reliability and quality. Any VoIP-based consolidation architecture must therefore fully protect the integrity of critical voice communications.

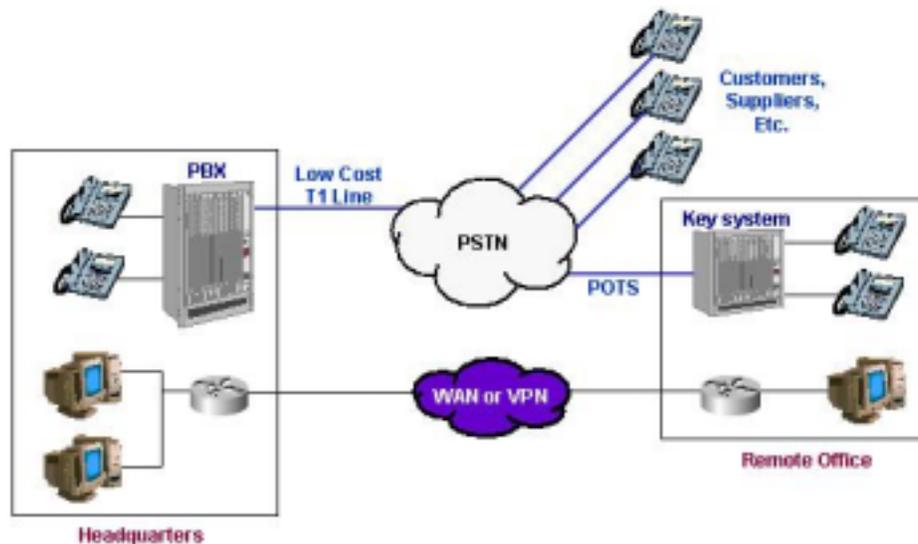
#### **Concerns about infrastructure disruption**

Companies have made significant investments in their PBXs. They do not want to have to overhaul that infrastructure or spend a lot of capital to gain the benefits of VoIP-based long distance consolidation.

#### **Concerns about technical implementation and management skills**

Most IT departments – especially at smaller companies – do not possess extensive VoIP technology expertise. With their staff resources already strained to the limit, these companies may be hesitant about implementing a new technology that is outside of their current core competency.

To be practical and effective in the real world, a VoIP consolidation solution must therefore ensure voice quality, be non-disruptive to existing voice and data infrastructure, and offer simplicity of installation and management.



Smaller remote offices typically maintain their own POTS (Plain Old Telephone Service) connection to the PSTN. This makes calls from those offices more expensive than calls from headquarters and other larger locations that can take advantage of lower-cost T1 trunks.

It also means that calls between offices are billed at regular rates -- another added expense.

*Many companies maintain separate long distance service for each of their remote locations, resulting in inefficient long distance expenditures.*

## Quantum Technologies' Tenor Solution: Quality-Assured, Easy-to-Implement VoIP

Quantum Technologies' patented Tenor switching solution uniquely enables companies to consolidate their long distance traffic onto headquarters trunks via VoIP without compromising voice quality, disrupting existing infrastructure, or making the administration of communications infrastructure unacceptably complex. Long distance calls can easily be routed from remote offices over the corporate data network through the corporate PBX – without incurring PSTN charges. Calls between offices can also be routed over IP connections, resulting in additional savings.

### Guaranteed call quality

Tenor switches vigilantly protect voice-call quality by continually monitoring conditions on IP connections and taking immediate action if those conditions threaten voice traffic in any way. If conditions such as delay or "jitter" become evident, Quantum's SelectNet™ technology automatically and transparently switches any active calls from the IP connection to the PSTN. This can be done in mid-call without interrupting either party. Once conditions on the IP connection return to acceptable levels, VoIP can then be re-activated. The savings associated with VoIP can thus be momentarily sacrificed to ensure that users always experience acceptable call quality.

### Non-stop availability

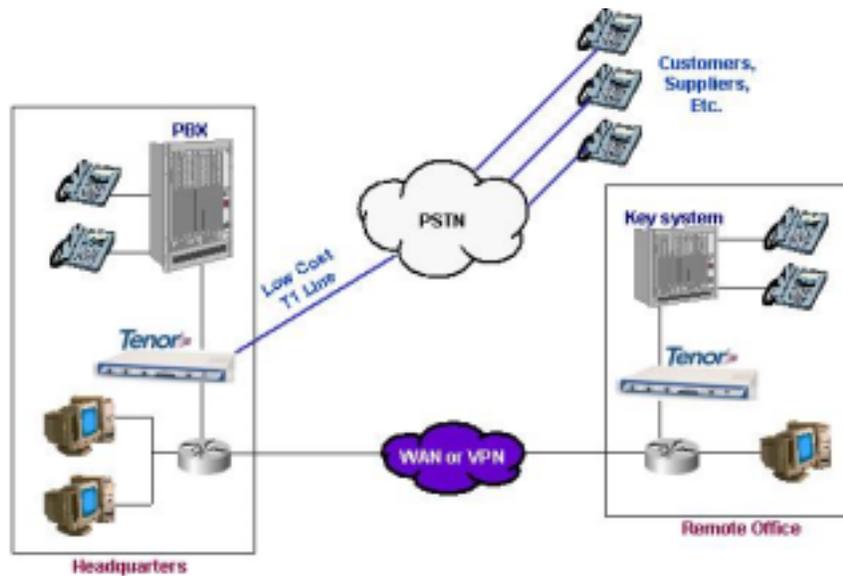
In addition to protecting call quality, Tenor switches also ensure that phone service is never interrupted. In the event that a switch power supply fails, for example, the Tenor's "pass-through" capability allows calls to continue being completed via the PSTN. Even if the headquarters PBX goes down, remote offices can still communicate with each other via their independently operating Tenor units.

### Simple, non-disruptive implementation

The Tenor's unique MultiPath architecture allows it to be easily installed in line with existing PBX trunks and IP routers. Little or no reconfiguration of the PBX is required. The Tenor's integrated call routing functions make it easy to define which calls are to be routed from remote offices to the headquarters PBX.

### Cost-efficiency for fast ROI

With Quintum's Tenors, the cost of equipment and installation can be kept within an appropriate for the size and call volume of each remote office. This allows most installations to fully recoup their VoIP investments within the first 6-12 months.



Using Quintum's Tenor switches, outbound calls from smaller offices can be routed over existing WAN or VPN data connections to headquarters first -- where they can then be sent to the PSTN over a T1. This yields substantial savings on telecom costs. It also allows calls between locations to be transported free of charge.

*With Quintum's Tenor solution, remote offices can easily and inexpensively "piggyback" onto PSTN trunks at headquarters or other larger locations*

### Conclusion

Companies can substantially reduce their long distance costs by consolidating call traffic from smaller remote offices onto larger offices' trunk lines. This is best accomplished by using VoIP and leveraging existing data network connections between locations. Quintum's Tenor VoIP MultiPath Switch provides the ideal solution for implementing such VoIP-based long distance consolidation. With assured call quality, non-disruptive installation, easy management, and low total ownership costs, the Tenor delivers fast ROI without risk or hassle.

### About Quintum Technologies

Eatontown N.J.-based Quintum Technologies specializes in voice-over-IP technologies that bring the reliability and voice clarity of public telephone networks to Internet telephony. Its Tenor VoIP MultiPath Switches help businesses of all sizes migrate to converged networking without risk. Quintum sells its MultiPath switches worldwide through a network of resellers and distributors. For more information call 877-SPEAK IP (1-877-773-2547), 732-460-9000 outside the U.S., or visit [www.quintum.com](http://www.quintum.com).



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