

## **THE MULTI-OFFICE ENTERPRISE CUTTING TELECOM COSTS WITH VoIP**

### **The Savings Opportunity**

In today's information-driven economy, people spend a lot of time on the phone. So, despite falling toll charges, heavily utilization continues to keep phone bills high at most organizations. This utilization can be generally divided into three categories: inter-office calls, domestic calls and international calls. Reduction or elimination of any of these costs can have a significant impact on corporate profitability and can make it less expensive to pursue new geographic markets.

At the same time, most companies have made significant investments in IP-based data network infrastructure in order to effectively deliver information and application services to users across the enterprise. These IP networks typically have sufficient spare capacity to handle some volume of voice traffic. By voice-enabling the IP network, companies can therefore reduce or even eliminate the cost of inter-office calls. They can also substantially reduce their domestic and/or international long distance costs by carrying voice traffic over their IP networks to the office nearest to the call's ultimate destination – or by using the Internet itself – thus bypassing their long-distance carriers.

### **The Technical Challenge**

While the tremendous savings opportunity offered by voice-over-IP (VoIP) are very attractive to companies with multiple, geographically dispersed locations, several factors inhibit their implementation of the technology. These factors include:

#### **Concerns about the reliability and quality of voice service over the IP network**

Conventional voice communications offer excellent, consistent quality and reliability. Business and technology managers don't want to do anything that would jeopardize the level of service that users have learned to take for granted.

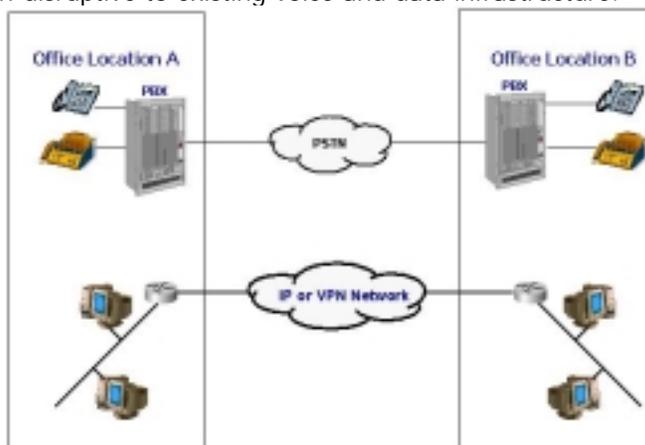
#### **Concerns about technical implementation and management skills**

Most IT departments do not possess extensive VoIP technology expertise. With their staff resources already strained to the limit, they may be hesitant about taking on a new technology that is outside of their current core competency.

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

Companies have made significant investments in both their PBX/voice and router/data infrastructure. They do not want to have to overhaul that infrastructure to gain the benefits of VoIP.

To be practical, VoIP solutions must therefore preserve voice quality, offer simplicity of installation and management, and be non-disruptive to existing voice and data infrastructure.



*Conventional office-to-office voice communications are provisioned via the public switched telephone network (PSTN) using PBX equipment.*

## Quintum Technologies' Tenor Solution: Risk-Free, Non-Disruptive VoIP

Quintum Technologies' patented Tenor switching solution uniquely enables companies with multiple office locations to seize the cost savings opportunities presented by VoIP technology without compromising voice quality, disrupting existing infrastructure, or making the administration of communications infrastructure unacceptably complex. Calls between offices can easily be routed over the corporate IP network, and long-distance calls can be similarly routed – and then “hop off” the network at the location nearest to the call's ultimate destination.

### Guaranteed call quality

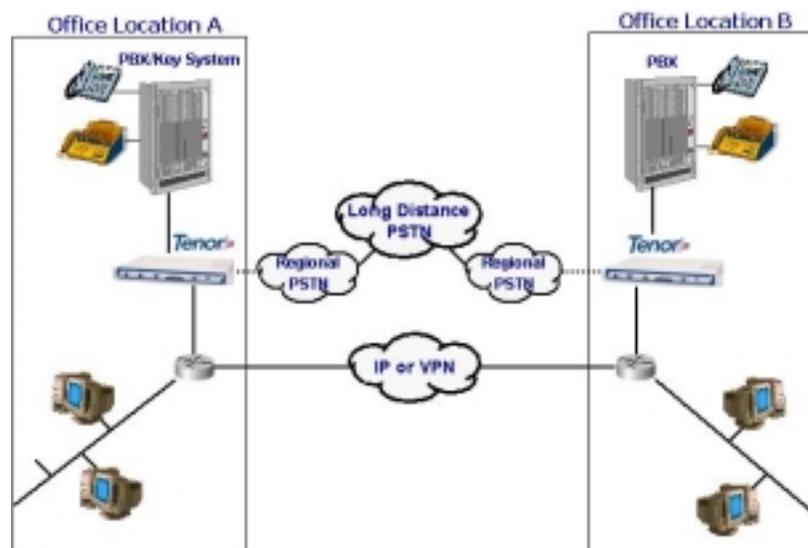
Tenor switches vigilantly protect voice-call quality by continually monitoring conditions on the IP network and taking immediate action if those conditions threaten voice traffic in any way. If conditions such as delay or “jitter” become evident, Quintum's SelectNet™ technology automatically and transparently switches any active calls from the IP network to the public switched network (PSTN). This can be done in mid-call without interrupting either party. Once conditions on the IP network are restored, 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.

### Intelligent “hop-off” routing

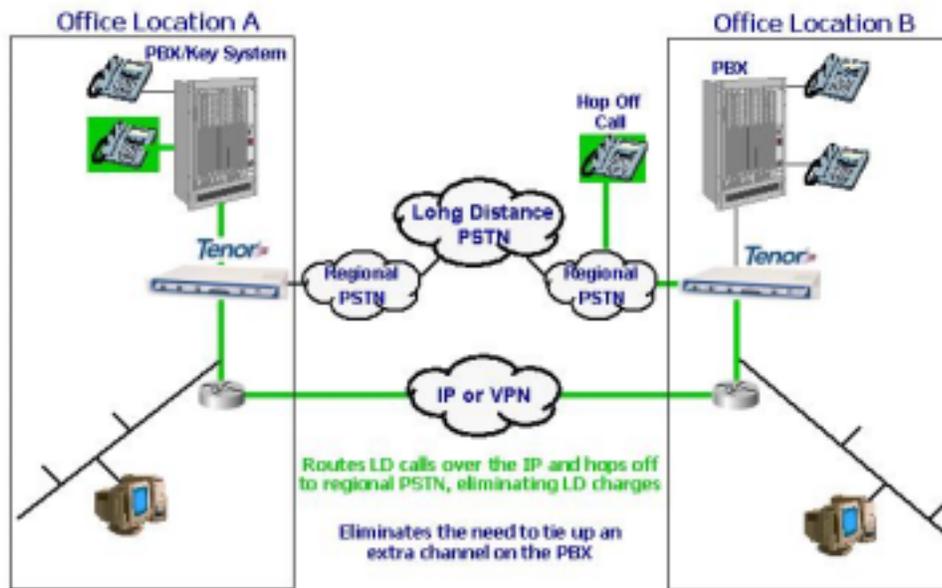
The Tenor's intelligent, easy-to-administer “hop-off” functionality allows users' long distance calls to be first carried to the appropriate local office via the corporate IP network and then switched to the local PSTN for completion. This functionality is easy to configure and update as new locations are brought on-line. It is also entirely transparent to users. They do not have change their dialing habits and will not notice any difference in voice quality. This dramatically reduces long-distance charges – especially when used to bypass international long distance charges.

### Non-disruptive implementation

The Tenor's unique MultiPath architecture allows it to be easily installed in line with existing PBX trunks to the PSTN. This requires little or no reconfiguration of the PBX and eliminates any need to add costly PBX tie trunks. The Tenor's integrated call routing functions identify which calls are to be routed over the IP network. Calls that do not qualify for IP routing simply pass through to the PSTN. The Tenor is thus transparent to the PBX and totally non-disruptive to existing voice and data infrastructure.



*Quintum's Tenor VoIP switching architecture makes it easy to bypass PSTN carrier toll charges and instead carry both inter-office and long-distance voice calls over the corporate IP network.*



*With the Quintum Tenor, companies with multiple locations can easily implement "hop-off" calling that leverages the corporate IP network to bypass long distance carriers – switching calls onto the local PSTN from the location closest their ultimate destination*

## Conclusion

Companies with multiple locations can potentially realize substantial cost savings by implementing VoIP. However, the risk of reduced voice reliability and/or network disruption has prevented many organizations from taking full advantage of these savings opportunities. Quintum Technologies' Tenor VoIP MultiPath Switch eliminates these risk factors – opening the door for companies of all sizes to substantially reduce the cost of inter-office, domestic and international voice communication costs.

## 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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