Application Notes For Tenor® One in a series of Focused Vertical Applications

HOSPITALITY MORE PROFITABLE, LESS EXPENSIVE TELEPHONE SERVICES

The Business Opportunity

For today's traveler, telephone service is as much as part of a hotel stay as a bed and a hot shower. But hotels have traditionally had to charge high rates for phone service because of their own costs (which include high-capacity trunk lines that are often under-utilized) and their need to ensure that those services are sufficiently profitable. These high rates have not been popular with quests.

However, because hotel chains have so many locations – and because those locations are typically connected via an IP network that supports the chain's data services – an important new communications opportunity has emerged. By utilizing that IP network to carry the long-distance portion of guests' voice calls, hotels can significantly lower their telecom costs. In fact, those savings can be substantial enough to allow hotels to pass a significant percentage of those savings on to their guests and still increase their percall profits.

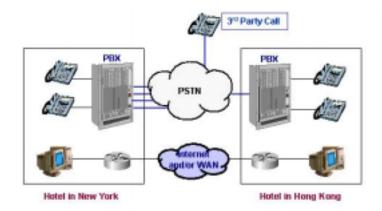
This opportunity is particularly lucrative for hotels with multi-national locations and sufficient spare capacity on their IP networks. International call can be extremely expensive, especially in countries that still have regulated monopolies in place. The use of a hotel's corporate IP network allows the expensive monopolies to be bypassed.

This voice-enabling of the IP network can also be used to eliminate long-distance charges for calls between hotels themselves, as well for forwarding calls from a hotel chain's call center to its individual locations and vice versa.

The Technical Challenge

Hotels are in the hospitality business, not the telecom business. So any voice-over-IP (VoIP) solution that they deploy must be easy-to-implement, easy-to-manage and non-disruptive to existing voice and data network infrastructure. Just as importantly, the use of VoIP technology cannot in any way jeopardize the quality of guests' calls. Any deterioration in call quality would negate the potential business benefits of a VoIP implementation.

Finally, the VoIP system must possess sufficient intelligence to automatically manage call "hop-offs." That is, the system must be able to identify the hotel location closest to the ultimate destination of the call, and route the call over the hotel's IP network to that location. Then, the system must be able to switch that call from the hotel's IP network at that location to the local PSTN for final termination. The system must be capable of being configured for this type of hop-off switching without requiring the hotel chain's technical staff to undertake unduly complex administration.



Hotels typically route their guests' long-distance calls over the PSTN, resulting in high long-distance charges and relatively small profits on phone service.

They also must maintain costly excessive trunk lines to ensure their ability to handle peak loads.

Quintum Technologies' Tenor Solution: Long-Distance Revenue, Local-Only Costs

Quintum Technologies' patented Tenor switching solution uniquely enables hotels 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.

Intelligent "hop-off" routing

The Tenor's intelligent, easy-to-administer "hop-off" functionality allows guests' long distance calls to be first carried to the appropriate local hotel via the corporate IP network. This functionality is easy to configure and update as new hotels are brought on-line. It is also entirely transparent to guests and hotel employees. They do not have change their dialing habits and will not notice any difference in voice quality. This significantly reduces long-distance charges to the hotel, making phone services substantially more profitable even if charges to the guest are reduced.

Reduced trunking requirements

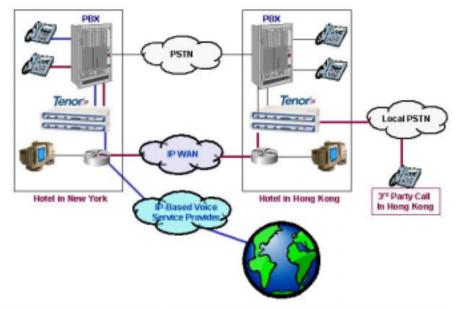
By using existing IP WAN capacity and/or the Internet itself to handle voice traffic, hotels can significantly reduce their trunking requirements – thereby reducing voice infrastructure costs. In particular, they no longer have to "over-provision" trunks to handle intermittent peak traffic levels, since such traffic can be easily and automatically routed over IP links.

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 quests always experience acceptable call quality.

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.



By routing guests' long-distance calls over their wide-area network or the Internet, hotels can cut telecom costs and realize significantly higher profits on phone services.

They can also make use of new VoIP telecom providers to handle peak loads — eliminating wasteful excess trunk line costs.

Conclusion

By virtue of their numerous locations, hotels have a tremendous opportunity to bypass national and international long distance carries by using their existing IP networks to carry voice traffic. Barriers to such a bypass strategy include risk of call-quality degradation, concerns about management complexity, and the need to minimize disruption of existing infrastructure. Quintum Technologies' Tenor VoIP MultiPath Switch overcomes these apparent barriers – enabling hotel chains to reduce their telecom costs while maximizing the profitability of their phone services.

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.



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