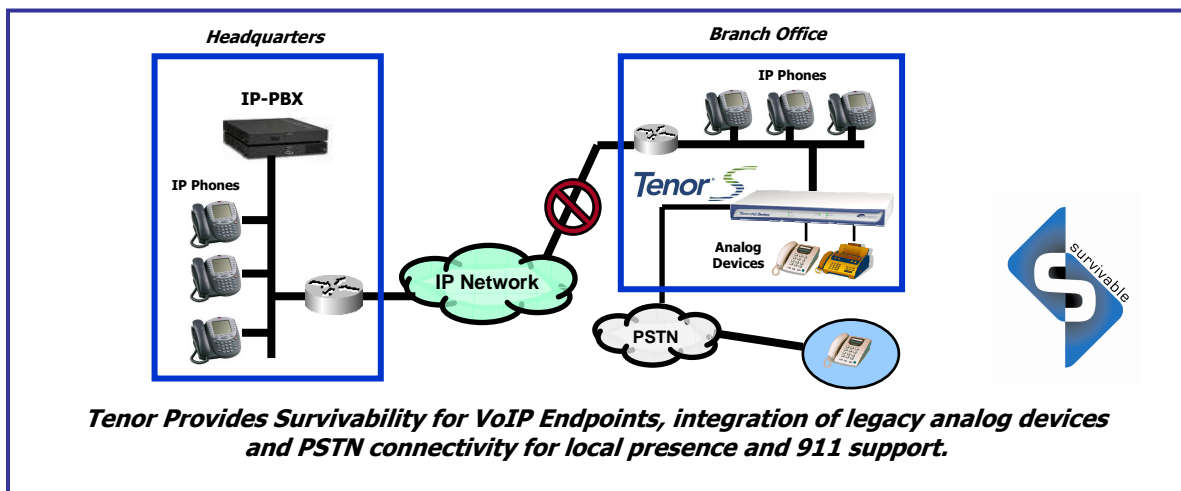


VoIP plans can look good on paper. But any professional with real-world VoIP experience can tell you that all kinds of surprises can foil those plans. In particular, businesses often encounter a variety of unanticipated problems as they deploy VoIP to remote locations.

Fortunately, Qintum's Tenor VoIP switching solutions are specifically designed to address these crucial remote-office implementation issues. Their features and functionality, which are driven by years of real-world VoIP success, ensure that even newcomers to VoIP planning can meet their company's business needs – including those that can unexpectedly crop up when extending VoIP services to remote offices.

REMOTE OFFICE SURVIVABILITY: Centralized IP PBX or hosted PBX/Centrex implementations can leave phone service in remote offices unacceptably vulnerable to network problems. If such a problem disrupts connectivity between the remote office and the IP PBX, voice service ceases to exist – and the business suffers serious consequences.

THE QINTUM SOLUTION: Qintum's Tenor switching platform safeguards voice service availability by embedding a SIP proxy agent in the remote-office switch. This allows essential calling functions to continue even if the connection to a central or hosted IP PBX is lost. This proxy agent provides sufficient routing intelligence to provide users with dial-tone and basic calling capabilities.



ANALOG SUPPORT: Remote offices often require support for a wide range of "legacy" analog devices such as postage meters, security systems and HVAC monitoring units with built-in modems – as well as fax machines, intercoms and non-IP phones. All-IP environments don't provide this support.

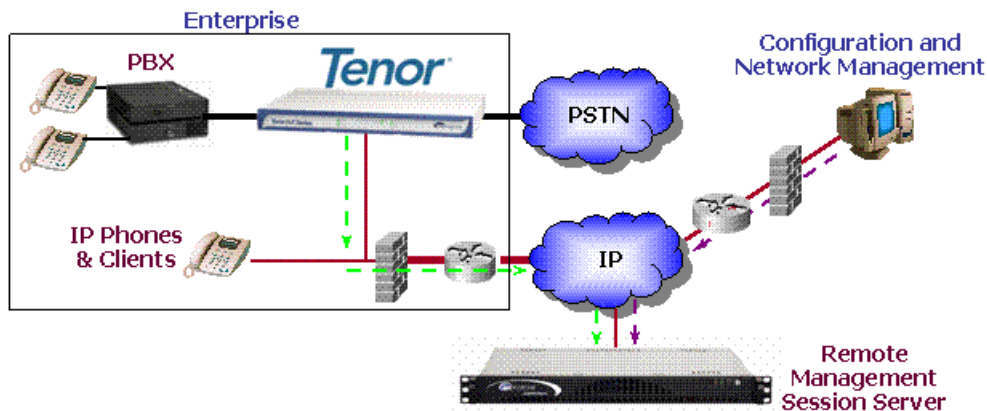
THE QINTUM SOLUTION: Qintum switches can be readily configured to provide as many analog ports as required to support "legacy" communications devices – including fax machines, non-IP phones, and the various types of modem-enabled systems in common use today. The switches readily and efficiently packetize this traffic so it can be transported over the enterprise network – ensuring that convergence initiatives incorporate all communication needs across all remote locations.

PSTN connectivity: For inbound calls, local calls and 911 access, it's typically important to provide remote office with PSTN connectivity. This connectivity must therefore be planned into any VoIP implementation – rather than considered only as an afterthought.

THE QINTUM SOLUTION: In addition to providing an "on-ramp" onto the IP network for analog devices, Qintum switches provide an "off-ramp" for packetized voice onto the PSTN. This ensures the ability of every user to access 911 emergency services. It also allows calls to be made and received via the local loop. Plus, as noted above, this PSTN connectivity provides a ready failover capability in the event of IP network problems.

Remote management: Centralized IT departments and service providers need to be able to effectively manage VoIP infrastructure at remote locations. Complex configuration and awkward remote management of gateways and branch office servers undermines the value of a centrally managed IP-PBX system.

THE QUINTUM SOLUTION: Quintum provides a Tenor Remote Management Session Server (RMSS) that allows IT teams to easily and securely manage distributed Tenor VoIP switches from a single, intuitive application. RMSS provides the complete system configuration, diagnostics, troubleshooting and remote upgrade functionality needed to maintain and optimize the health of VoIP services –even Tenor switches behind NAT firewalls. Switches can be remotely managed via telnet, FTP or Quintum’s own graphical Tenor Management Console. All communications between RMSS and remote switches are encrypted to ensure network security. And each switch can be registered with to two separate RMSS Application Servers to provide redundancy.



RMSS sits on the public, or service provider, network and acts as a bridge between the Tenor and the management tools, allowing Network Administrators/Customer Support to manage access gateways anywhere.

In addition, the “all in one” Tenor switches themselves don’t require nearly the same amount of care and attention as the typical IP PBX vendor’s remote-office server. Once they are configured, they pass signaling through to the central IP PBX and are therefore transparent to IP end-points – so new phones can be installed by simply pointing them at the switch. This greatly reduces remote office management workloads.

Lower total cost of ownership: Other remote-office VoIP solutions typically require some combination of a switch, a gateway device, and/or a dedicated server. Such multi-device approaches increase both capital costs and ongoing management workloads. With Quintum’s Tenor switches, installation and ownership are both simple and cost-efficient. This is a vital consideration for IT organizations that have limited resources and many pressing challenges to face besides VoIP implementation.

THE BENEFITS OF QUINTUM’S SURVIVABLE APPROACH TO REMOTE OFFICE VOIP INCLUDE:

- ▶ **Optimized reliability of voice service to all locations**
- ▶ **Lower capital provisioning costs**
- ▶ **Lower long-term technology ownership costs**
- ▶ **Undisrupted end-user work environments**
- ▶ **Elimination of VoIP project “surprises”**
- ▶ **Secure protection of network infrastructure**
- ▶ **Flexible support of changing remote office requirements**

So if you want to deliver VoIP to remote offices with the greatest possible reliability and cost-efficiency, choose Quintum’s Tenor switching solutions – and avoid the problems that so often plague enterprise VoIP roll-outs.