

Top Taiwanese Brokerage Completes 43-Node VoIP Network in Two Weeks with Quintum's Tenor

Yuan-Fu/MasterLink eliminates toll charges across locations in Taiwan and Hong Kong, cuts total telecom costs by 57%

The Challenge

In June of 2000, Mr. Henry Deng of the Yuan-Fu (English: MasterLink) Brokerage House began to consider voice-over-IP for his company. In just over a decade, MasterLink had grown into a major financial institution with over \$7 billion in assets. Its 42 offices in Taiwan were connected by a state-of-the-art ATM network, with an additional facility in Hong Kong linked to headquarters over a secure Internet VPN. With all of this communication between offices, MasterLink was experiencing significant internal phone costs. The company's external long-distance expenses were also rising with its expanding business activity. As Director of General Affairs for the company's MIS Division, it was Mr. Deng's job to seek a solution.

The Solution

As Mr. Deng began evaluating competing VoIP solutions, he became increasingly attracted to Quintum Technologies' Tenor VoIP switching architecture. For one thing, the Tenor solution would allow him to implement VoIP without disturbing his company's existing PBX and data network infrastructure. That was an important factor in mitigating the risk involved with a move to VoIP. Further mitigating that risk was the fact that Quintum's Tenor switches provided automatic re-routing of calls over the public switched telephone network (PSTN) in the event that any unforeseen breakdown occurred in the company's data network. Critical voice communications would thus be protected.

"As attractive as the potential savings offered by VoIP may be, a company like MasterLink can not afford to jeopardize the reliability of the voice communications between our employees in any way," says Deng. "The technical features of the Quintum Tenor solution give us the utmost assurance that we aren't creating new vulnerabilities for ourselves as we pursue the benefits of VoIP."

Another technical feature of the Tenor architecture that turned about to be important for MasterLink's implementation was its **Call Relay** function that, among other things, allowed the company to more easily perform VoIP from behind its firewall over the Internet VPN that links its Hong Kong office into the corporate network. "Many VoIP devices have trouble negotiating the kind of network address translation (NAT) that we use on our firewall to shield our internal IP addresses from the outside world," explains Deng. "But the Tenor can handle such translations without a problem."

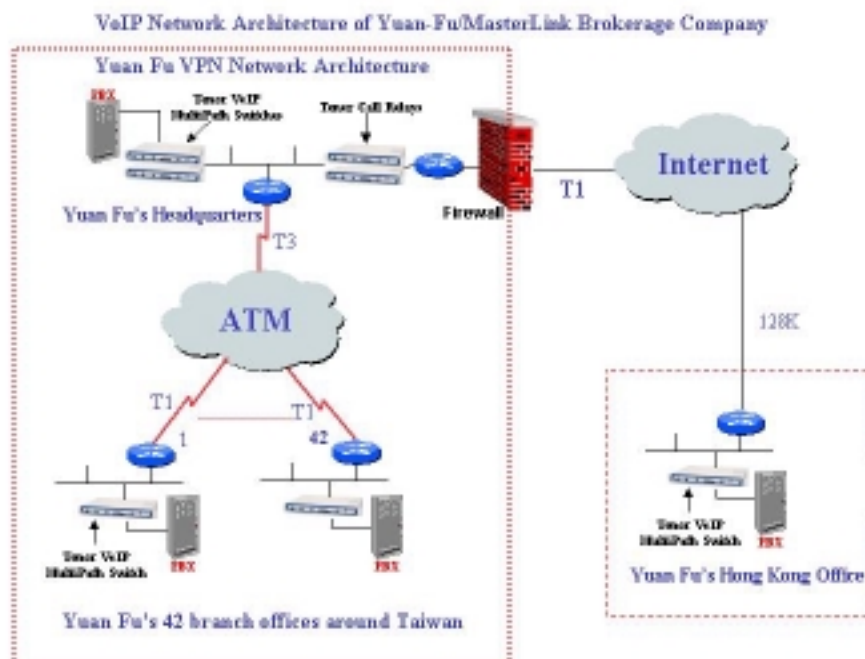
The Quintum Tenor switching solution also gave MasterLink the ability to easily "hop on" and "hop off" its VoIP network. This meant that, in addition to eliminating long distance charges for internal office-to-office calls, the company could also use its VoIP capabilities to bypass the PSTN for calls outside the enterprise. These calls use the MasterLink VoIP network to reach the MasterLink office closest to their ultimate destination, and then "hop off" on to the PSTN for the shorter, local component of the call. Similarly, mobile users can call the closest MasterLink office and "hop on" to the VoIP network from there, similarly reducing their dependency on paid carrier services.

In addition to the unique technical features offered by its Tenor product family, Quintum was also an attractive partner for MasterLink because of its strong presence in Taiwan and its exceptional pre- and post-sales support. "Quintum was very willing to work with us to help us make sure that we were selecting the right approach for our needs and that our implementation went smoothly," Deng recalls.

Two Weeks, No Hassles

The combination of Quintum's strong local support and Tenor's ease of installation enabled Deng and MasterLink to get the VoIP system up and running in just two weeks. They installed one or more Tenor VoIP MultiPath Switches in each of the 42 offices, and two Tenor Call Relay units in the corporate office. The project started on May 5, 2001 and was completed on May 21. "Things went very, very smoothly," says Deng. "The strain on our technical staff was, and continues to be, minimal."

As a result of its VoIP implementation, MasterLink has been able to eliminate toll charges between its offices and – by taking advantage of hop-on/hop-off calling – reduce its total telecom costs by 57%.



"We would strongly recommend that any organization considering a move to VoIP consider Quintum's Tenor solution," declares Deng. "Based on our experience, the Tenor architecture provides a highly reliable, easy-to-implement platform for gaining the significant savings that companies with multiple networked locations can gain by having their voice communications utilize the same infrastructure as their data."

This case study was prepared with the assistance of Mr. Henry Deng of Yuan-Fu and Mr. Andy Lin of Schmidt Scientific.

