

QUINTUM PROVIDES TRANSPARENT VoIP SOLUTION FOR EUROPE'S LARGEST SPECIALTY PROPERTY AGENT

"Every Technology Project Should Go As Smoothly As This One!"

The Challenge

One of the biggest concerns on the minds of business executives as they contemplate deployment of VoIP is whether end-users will notice any loss of quality or reliability. After all, phone service is something they depend on every day. The last thing anyone wants to do is undermine its dependability.

Service quality was certainly the main issue as the Board of Christie & Co. met to discuss the VoIP project proposed by the company's IT Director, Tim Moxon. But when they queried him about whether or not the new VoIP solution – which was to be built using Quintum's Tenor switching platform – would deliver the same quality as their existing voice network, his reply couldn't have been more convincing: "You've all been using it for the past few weeks. What do you think of it?"

That startling revelation confirmed what Quintum's customers around the world already know. Tenor switches deliver exceptional quality and reliability, day in and day out, without disrupting existing telecom and data network environments.

The Customer

Based in London, Christie & Co. is Europe's leading specialist business property agent, focusing on markets including hotel, senior care and retail commercial markets. Part of the Christie Group, Christie & Co. was established in 1935 by George Christie and now employs more than 250 professional and support services staff in offices throughout the UK and in continental Europe with an annual turnover in excess of £25 million.

Over time, the company had developed a fairly heterogeneous voice infrastructure – with PBXs of various types, ages and capabilities scattered across its offices. Moxon's objective was to tie together this existing varied telephony infrastructure, while gaining some measure of independence from the company's PBX vendors and telco carriers.

An earlier software project had already led the company to increase the bandwidth on its data network, so implementation of VoIP would not require additional investments. However, Moxon and his team identified several key requirements for any proposed VoIP solution. Those requirements included:

- **Transparency:** Any system that required users to modify their behavior would likely meet resistance, and introduce a counter-productive learning curve into the task of making a phone call – which, as it stood didn't require any thought whatsoever. To be practical, the solution should not require users to dial any special prefixes or do anything differently than they were accustomed to.

- **Call quality:** Any new system would have to match the call quality of the PSTN. Any perceptible degradation of service would result in immediate cancellation of the project.
- **Ease of Deployment:** Any new system would need to be integrated into the existing voice and data network with a minimum of modifications.
- **Mid-call failover:** To ensure the reliability of the system, calls would have to be immediately re-routed over the PSTN in the event of a problem on the data network. This would have to be done even for calls that were already in progress.
- **PBX independence:** Moxon did not want Christie & Co. to get locked into any vendor's proprietary PBX platform. PBX independence was a must.
- **Protocol support:** To interface seamlessly with the existing telecom environment, the solution would have to support BT's unique DASS-II protocol and ISDNe. The company therefore needed to work with a vendor capable of delivering any required interface customization.
- **Cost:** Because Christie & Co. was already keeping its telecom costs down through the use of least cost routing, its VoIP solution would have to provide reasonable return on investment. The cost of deployment therefore had to be significantly less than what the company was already paying for intra-company calls.

A VoIP solution that could produce these cost savings, provide the company with independence from its current vendors, and allow it to manage one network instead of two would clearly be worth deploying.

The VoIP Solution

Moxon initially investigated a number of VoIP vendors. Some were too expensive. Some wanted to make too many changes to the company's existing infrastructure. Others couldn't work with the company's existing equipment, connections or protocols.

Moxon then asked a trusted IT consultant, Geoff Griffith of Network Installation and Support in Camberley, Surrey, for a suggestion. Griffith recommended going to Techland Group of Loudwater, Bucks. Techland had a well-established reputation for excellence in voice and data networking. It was also the sole UK distributor for Quintum's award-winning Tenor switches. After reviewing Christie & Co.'s needs, Techland determined that the Tenor platform could meet all of the company's requirements.

The Quintum Tenor's unique MultiPath design allowed the VoIP solution to be "dropped in" to the existing voice trunks between the PBX and PSTN. The Tenor made all the intelligent call routing decisions and was transparent to the PBX, making the installation easy and lowering the total cost of deployment.

Griffith and Moxon requested a couple of Tenor digital VoIP switches to run a VoIP pilot between the company's sales headquarters in London and its administrative headquarters in Milton Keynes, about 50 miles to the northwest. The London office had

an aging BT Meridian PBX, while the Milton Keynes office had a more modern Avaya Index switch, so the pilot would clearly test the Tenor's ability to support heterogeneous devices. The two offices also could have as many as 20 calls running between them concurrently at any given time – making it a good route for ensuring call quality under peak loads.

Quintum sent a developer from the US to solve the issues created by the unique DASS-II protocol used by the BT PBX. This problem was quickly addressed, and Christie & Co. had a smoothly functioning, cost-saving VoIP connection in place between its two largest offices.

Several weeks later, the Board met to review Moxon's proposal. That's when he informed them that Quintum's VoIP technology was already in place and delivering superb call quality over the company's own data links. The Board immediately gave Moxon the green light to extend the implementation to company offices in the UK and Europe.

The Result:

Christie & Co.'s VoIP implementation fulfilled all of its requirements. Users needed no retraining, and no modifications were required to either its data network or its PBXs. And call quality remained as high as it had been before.

At the same time, PSTN call volume plummeted between its locations. To estimate the ROI for the project, Moxon compared the company's phone charges to figures from a benchmark of the best corporate deals for national calls and least cost routed international calls. Based on those figures, the project paid for itself in less than a year.

Because other Christie Group business units are using Christie & Co.'s VoIP connections for inter-office calls, Moxon needed to measure and charge those units for calls routed over its data network. Techland provided a solution in the form of its Tenor Cost Accountant program.

Because Quintum's Tenor switches are essentially "plug-and-play," Christie & Co. have also gained much-needed flexibility. When its Victoria Street office in London moves, for example, maintenance of the VoIP network will be a simple matter of unplugging a switch at one address and plugging it in again at the new one.

"Quintum's Tenor VoIP switches do exactly what Techland told us they would do," Moxon declares. "Every technology project should go as smoothly as this one did." To this day, many of Christie & Co.'s customers and staff do not even know about the VoIP project – that's just how invisible and successful VoIP can be.