

Converging at Courts

Courts, the home furnishing specialist, is using the latest technology to provide its customers with top service levels. OEN talked to Mark Gamlin, Courts' voice and data network manager, about how this objective is being achieved following the installation of a converged solution from SwitchIP

Speed of information transfer and fast response to customer requests are key drivers behind the Courts' business and in order to gain a competitive advantage in the retail sector it needs to achieve this in the most cost effective way. The company has grown rapidly since its inception as a tinkers' business in Canterbury over 150 years ago and it now has one of the largest operations of its type, with 116 retail stores and more than 3,000 employees across England and Wales.

In common with other successful businesses, Courts is heavily reliant on technology to underpin its operation - much of it unseen by the millions of customers who every year buy huge numbers of sofas, chairs, dining sets, beds, floor coverings and curtains from the company's high-profile high street outlets and superstores.

The point of contact for most customers is through the front-line retail staff who take their orders. They have little appreciation or knowledge of the behind-the-scenes organisation needed to source the items in the first place, and then to move them through the logistics process from manufacturer to warehouse, to pride of place in the home. They just take it for granted.

Likewise, Courts' managers and staff take the company's telephone and IT systems for granted. They are only noticed when they don't work. So when the time came to upgrade the voice and data services, a key factor was that the transition should be smooth, seamless and entirely uneventful.

Upgrade considerations

There were many reasons behind the company's decision to upgrade its infrastructure with the latest technology. Mark Gamlin, Courts' voice and data network manager for the UK, explains that one of the driving forces was the need to put a halt to the steady increase in costs involved in running its legacy system at a rate that could maintain its high service levels and a need to expand capacity.

The company had a dial-up ISDN-centred WAN (Wide Area Network) that acted as the connectivity hub across head office and its branches. At the end of each trading day an automatic polling session would take place, whereby they system at head office would dial up the branches through ISDN 30 lines and request the figures for the day. In turn the branches would use their ISDN 2 lines to dial back and respond accordingly, a process that could take two to three hours, with any interruptions involving a restart of the data download.

He says that at the time of installation, the ISDN system was cutting edge but the time had come to look for a faster, flexible system that would meet the need for real time customer information and provide room for expansion by providing spare bandwidth for new applications. More bandwidth was required, but new leased lines would be a very expensive option.

He comments: "Traffic peaks at the end of the business day when the system polls each of the stores to tell them to dial back and download trading data. Before we switched to ADSL, we were running

over 120 channels of ISDN30. The data volumes were going up and up - as was the cost - and we were in danger of running out of bandwidth. We clearly had to look at alternatives."

Security was another issue and he wanted to mirror the type of protection that was in place on the company's growing Internet business on the internal network. With hackers an every day reality for online retailers, he says the company was also aware of the security risks associated with the data being transmitted between branches and this needed to be addressed.

An ADSL solution

The answer to all these requirements was in a managed ADSL-enabled VPN (Virtual Private Network) and initially the main focus was on finding a data-centric solution. The company's telephone system had been supported by Switch Communications since 2002, covering the majority of its 130 PBXs, telephone equipment and cabling. While Switch Communications had a dedicated subsidiary for converged services called SwitchIP, Mark Gamlin says initially it was not considered as a potential supplier for the data solution because it was a relatively new and small operation.

However after reviewing seven different suppliers, many of whom were major players, SwitchIP and its proposed InPurple VPN solution won the contract. Mark Gamlin says the company put forward a unique solution and because it offered full quality of service for voice as well as data and video the project could be extended beyond the initial data focus to become a fully converged solution.

Switch had the knowledge of Courts' telecoms requirements to effectively help with the transition to a converged network and the solution was a lot less expensive than the leased line route and more cost effective than some of the other ADSL solutions put forward. While price was important, service and support were equally as paramount in order to ensure data flows were as efficient as possible and that the network, which was to be used for more functionality, had minimum downtime and he says SwitchIP put all the guarantees in place.

The moment of truth

There were time pressures on the installation as the new system had to be up and running before the retailer's busy Christmas period last year and Courts wanted an absolute minimum of disruption during the lead-in period. The solution was trialled with an initial batch of 10 stores, when InPurple was run in parallel with the existing system, after which Gamlin placed the order for the full rollout.



Courts is using the latest technology to provide its customers with improved levels of service and responsiveness



The trial period had given Courts time to see the system in action and to experience the support structure that was in place. SwitchIP had an advantage over larger operators because its network had the capacity to handle Courts' traffic in the evening – a time when many other operators' broadband networks were feeling the strain of heightened consumer usage.

In addition it offered a single point of contact for all services, whereas other suppliers would have had to bring in specialists for different parts of the network and its services. In terms of security, Gamlin says that although virtual private networks built on broadband are noted for their susceptibility to unauthorised intruders and hackers, the inherent design of the InPurple product means it is totally secure against intruders and Courts' in-house data team tested the system thoroughly in this respect prior to placing the order.

Gamlin comments on the roll out: "Looking back, we didn't make it especially easy for SwitchIP to meet our tight timescales. Courts has a very good legal department and it took a little while to conclude contract negotiations which meant the project started a month later than had been anticipated. But SwitchIP pulled out all the stops and brought the project in on time and on budget, even though we also changed the specification several times."

The initial rollout involved Courts' superstores and he says 98 per cent of them did not realise they were being switched over, reflecting the smooth nature of the transition.

Exceeding expectations

The full roll out of InPurple is a long-term project with the legacy telecoms system being gradually phased out and voice traffic brought onto the network. The initial installation however was completed on time and saw the new solution take over the vital data transfer, boosting inter-company communications and customer service levels.

Gamlin says that the end result has been, excellent, improving management reporting, network utilisation, data transfer, downtime and running costs. He adds: "The InPurple service has exceeded expectations, even though we have some way to go before we achieve full convergence of voice and data over a common network, we are safe in the knowledge that we have deployed the right transport system. We are already seeing significant savings in running costs, of at least £100,000 a year and it could be much more as we turn off some of the legacy equipment. We were spending around £377,000 a year on dial-up costs over ISDN."

He adds: "Not only have we reduced call costs - the VPN is 'always on' so we don't pay for metered internal voice calls between any of our sites, nor end of day data downloads - but with a 6 Megabyte feed we have also boosted our former bandwidth by a factor of eight. That's a great outcome: lower costs and greater capacity."

There is a comprehensive support and back-up system in place. The two companies worked very closely together throughout the project and Gamlin says the SwitchIP team shared a lot of knowledge with Courts in order to achieve a dual monitoring system. Courts' data team live monitors the ADSL services at its head office in Morden, as does SwitchIP from its NOCC (Network Operations Control Centre) at Croydon. This means problems are solved before they impact any of the stores and this managed approach reduces the internal costs of network operations.

SwitchIP recommended using the existing ISDN2 equipment as an automatic backup to the VPN, making use of the investment that had been made in the legacy routers and equipment. If a node develops a fault, which Gamlin says is a very rare occurrence, the ISDN lines kick in to maintain an acceptable level of service. He says: "SwitchIP integrated the solution into the existing Courts system, overlaying InPurple across the network, rather than taking out all the

equipment and starting from scratch. This was a more cost effective approach and also has the advantage that we can turn off unwanted equipment as it becomes redundant."


Another benefit of the system has been increased motivation within the IT department. The reliability of the system means internal staff are no longer fire fighting and concentrating on keeping the system running, instead Gamlin says the team is coming up with new ideas and innovations and the whole department has been given a lift.

Future developments

Courts is a great believer in gaining the maximum possible benefit from its investment in technology and Gamlin sees a good deal of opportunity for deployment of additional applications through InPurple. Over the next 18 months the plan is to release more functionality and to look at moving more voice traffic on to the network, as well as moving to video conferencing over broadband, trialling the company's Red Care alarm circuits over the service and, at a later stage, CCTV monitoring.

The initial investment of around half a million pounds is already saving money and boosting efficiency and return on investment will increase because the system's reliability means Courts can start to turn off more of the back up legacy equipment. This means the potential to save another £50,000 a year in costs associated with maintaining those systems.

Gamlin says: "In five years time the system will be very different as it will carry on evolving. We will be using the new capacity to build new customer service levels. We wanted one manageable network that was scalable and adaptable for the future. We have that now and can do a lot to improve customer service."

"I have been in telecoms for 15 years dealing with different suppliers. It is very rare to come across a company like SwitchIP, especially in telecoms. It is a partnership now and we will work together." 

Efficiencies gained

Improved infrastructure

- > ADSL-based VPN provides more capacity and increased reliability for less cost than the expansion of the existing ISDN WAN
- > Increased bandwidth opens up opportunities for new applications to improve business processes and customer service levels

Reduced running costs

- > Initial savings of £100,000 a year on running costs associated with ISDN WAN
- > Potential to save another £50,000 a year when turning off legacy equipment
- > Huge reduction in ISDN call costs that amounted to £377,000 a year
- > Free internal voice calls

Faster data transfer

- > Faster, more reliable data downloading
- > Eight times more capacity for additional data gathering and information management systems

Enhanced communications

- > Improved management reporting and customer response times
- > Ability to implement new customer service applications
- > Video conferencing over broadband capability for improved internal communications

Increased reliability

- > Un-interrupted data transfer across locations
- > Dual monitoring system for real time performance monitoring
- > Reduced downtime and outage

Improved motivation

- > Improved systems and fewer faults for branch staff
- > Increased motivation at IT department due to less fire fighting and time to concentrate on innovations and improvements