The Cisco Systems and BT Health solution for Torex Health is one of the largest IP Telephony and IP Call Centre solutions in European Healthcare

Executive Summary

Torex Health is the leading provider of IT services and solutions to the European healthcare sector. It provides comprehensive, integrated clinical and administrative information systems and management solutions for hospitals, laboratories, GPs and community care.

In the UK, Torex Health provides solutions for both Primary and Secondary Care and is helping the NHS to meet government targets and improve public services.

Torex Health has the largest UK client base for hospital information systems of any supplier. In addition, Torex Health has built strong market positions in Holland, Germany and Switzerland and has recently entered the Australian market.

Torex Health employs some 680 staff and is part of Torex plc, which also focuses on specialist IT solutions for the retail and business markets.

Services

Torex Health provides solutions for both Primary and Secondary Care and is helping the NHS to meet government targets
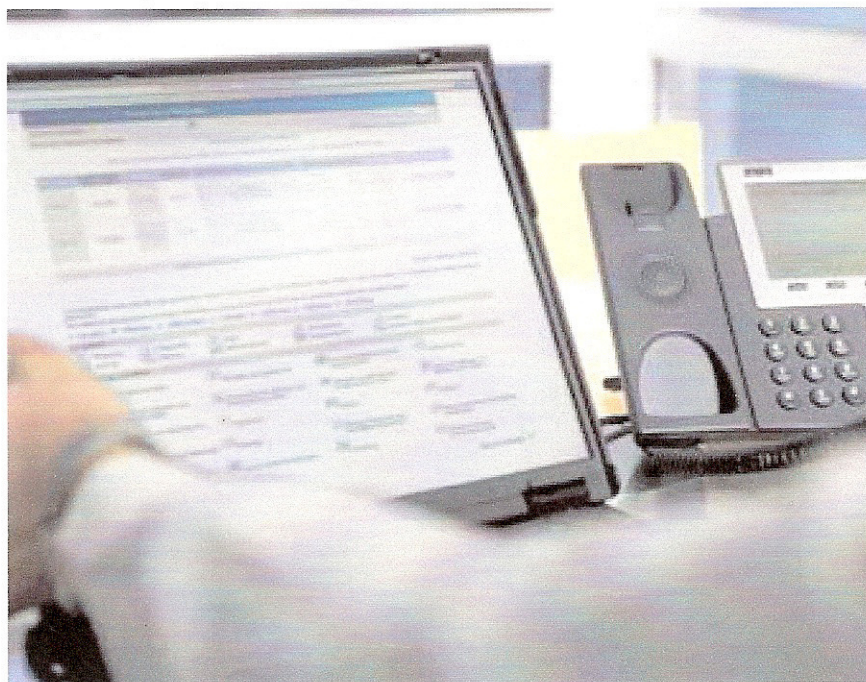
Customer-service focus

When Torex Health decided to move both its Bromsgrove and Basingstoke offices into a single site at Banbury, Oxfordshire, together with the Torex plc head office, the company took the opportunity to review its communications infrastructure strategy.

'We wanted to consolidate some of our key resources into a single main site in order to gain efficiency improvements and provide a better service to our customers, for example through improved facilities for on-site customer training and seminars, and through enhanced Help Desk facilities, ' explains Simon Hawkins, Relocation Project Manager at Torex Health. 'The question was, should we continue with our existing approach of separate voice and data networks, or should we move to a single converged IP network running data, voice and video?'

Proving the case for IP

Torex Health decided to undertake a cost-benefit study comparing traditional PBX-based telephony with IP telephony, with the help of BT Health and Cisco Systems.

BT Health had been supplying Torex Health with telephone networks and services for many years, and in addition BT Health is a specialist IT solutions provider for healthcare. So it made sense for Torex Health to ask BT Health to assist in carrying out the study.

Cisco Systems was chosen to provide the IP technology as Torex Health already had extensive experience of using Cisco solutions for their data LANs and WANs. 'Cisco Systems was always our preferred IP technology supplier because of our experience of using Cisco technology within our organisation, for our LANs and WANs, and the fact that we had an existing Cisco skill set,' explains Dave Spillett, IT and Infrastructure Manager at Torex Health. 'In addition we knew that if we decided to go IP, we would be able to use some of our existing Cisco kit.'

The two-month investigation proved the case for installing a Cisco-based IP infrastructure at the new Banbury site, rather than separate voice and data networks.

Single point solution from BT Health

Following a competitive tendering process, in July 2002, BT Health was selected by Torex Health to design and deliver an IP telephony and data infrastructure based on Cisco IP technology.

'BT Health won the competitive bid as solutions provider on cost but also because of their ability to offer us a single-point-of-contact solution,' says Simon Hawkins. 'Our IP system incorporates many different areas of technology, but BT Health was able to co-ordinate it all for us and achieve the technology in the right sequence at the right time. This would have been a challenge for any systems integrator to achieve.'

Advanced Cisco technology

BT Health built Torex Health's IP solution around Cisco's AVVID (Architecture for Voice, Video and Integrated Data) technology to create an end-to-end IP Local Area Network and Wide Area Network infrastructure, using Cisco Catalyst switches. The Cisco IP Telephony solution is based on the Cisco Call Manager platform and includes Cisco Unity for voicemail management, Cisco IP Contact Centre for help desk services, and 300 Cisco IP Phones offering on-screen access to information and in-line power.
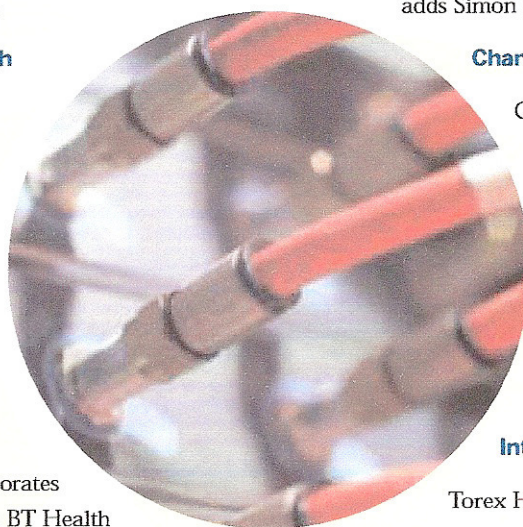
Significant benefits

This advanced IP system is already providing Torex Health with many of the benefits originally highlighted in the cost-benefit study.

Extension mobility Extension mobility offered by Cisco IP Telephony is a major plus for Torex Health. 'Around 260 staff are based here at Banbury. With our IP Telephony system, extension mobility allows us to support homeworking for staff: including developers, client service staff, sales staff and project managers. It also allows hot desking here in the office,' says Dave Spillett.

'Each person can have a single phone number which reaches them wherever they're working. They simply use the web-browser to redirect their calls to their mobile, their home phone or the Banbury building. And when they come into the office, they can sit at any desk and use their PIN number to assign their extension number to that handset. This has allowed us to make savings in terms of office space. And there's no need to transfer calls via a switchboard.'

The opportunity to display information on-screen on the Cisco IP Phone handsets is an additional advantage. 'It's useful to be able to search through the staff list on the phone screen to find a person's extension number, using Cisco Active Directory,' adds Simon Hawkins.

Change management

Change control when staff leave or new staff join is another benefit Torex Health looked at in the comparative study. 'With Cisco IP Telephony, as people join or leave, we can easily allocate new extension numbers. It's also easy to alter the electronic directory. So staff churn is no longer a telecoms issue,' says Dave Spillett.

Intelligent Help Desk

Torex Health's new Cisco IP Contact Centre system supports 50 Help Desk staff. 'We currently offer three separate help desks: for Primary Care, Secondary Care, and Hardware. And we're about to implement a Radiology help desk. The Cisco Contact Centre solution means we can manage multiple help desks through a single system,' explains Dave Spillett. 'In the past, customers had to dial different numbers for out-of-hours support. Now, they dial a single phone number and enter their PIN: the system then recognises the type of support they've signed up to, and knows where to route the calls.' 'And as it is Windows based, we can amend everything ourselves now, without needing a specialist in PBX coded language,' adds Simon Hawkins.

Single infrastructure efficiencies

Torex Health recognises the advantages of installing a single network infrastructure. 'There have been efficiencies in terms of cabling. It makes it easier to reconfigure the building and connections. And when we moved in we were able to plug the PCs and phones into the same network rather than wiring them separately. It will also help with maintenance: the support team will be able to focus on a single product,' emphasises Dave Spillett.

Video capabilities

The new IP solution also offers opportunities to support customers in new ways. 'The opportunity to use video, for example, video training or video conferencing, provides us with an additional 'soft' benefit in terms of the customer service. With the IP infrastructure in place, we can deploy video whenever we choose,' says Simon Hawkins.

Future-proofing

The Cisco-based IP infrastructure is scalable, modular and built to open-standards, to offer enhanced future-proofing. 'Our aim is to continue to grow, organically as well as by acquisition, so it's important for us to remain as flexible as possible in terms of the technology we adopt. We believe that our new IP infrastructure provides a system which we can evolve as our needs change. It puts us in a better position to protect us for the future: for example, expanding the business, adding new sites, interacting with our customers in different ways, and integrating other applications,' continues Simon Hawkins.

Reduced inter-site call costs

In addition, the Cisco IP Telephony solution offers potential future savings on interoffice communications should Torex Health decide to deploy IP Telephony at other sites. With a Cisco Wide Area IP Network already installed, calls between those Torex offices running IP Telephony could be routed toll-free across that network, rather than across the more costly PSTN.

Unified messaging

With the underlying system in place, Torex Health is now installing Cisco's Unity unified messaging. This integrates email, voice-mail and faxes into the same file for web-browser access. 'We're introducing Cisco's unified messaging solution to increase efficiency in two areas. Firstly, to support our senior managers. And secondly, to provide an easily managed generic mailbox for our Help Desk. If all our help desk staff are busy, customers can leave a voice message. This will be stored in the same file as customer emails and faxes, where it can be accessed as soon as one of the team becomes free,' explains Dave Spillett.

Close collaboration

BT Health began implementing the IP solution immediately after winning the contract, while the new building was still under construction.

The tight two-month timescale meant that BT Health had to push implementation through fairly rapidly. This required considerable collaboration between all those involved at BT Health and Cisco.
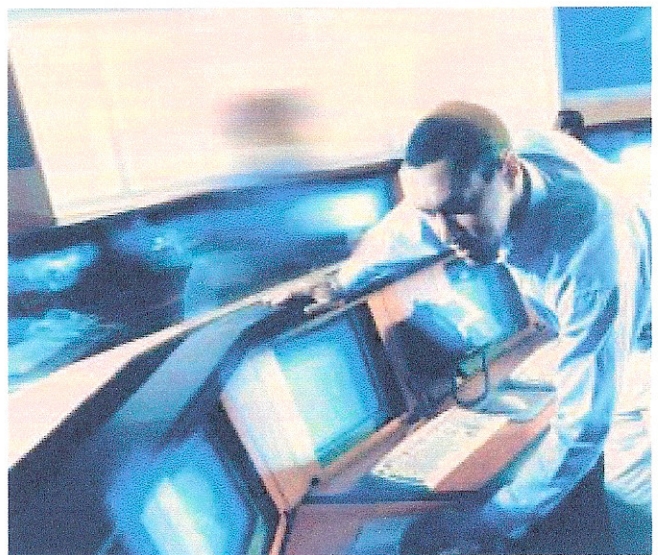
'We were able to field a flexible Virtual Team, with Cisco providing support whenever we needed it,' says Sam Bernstein, Project Manager at BT Health. 'And we arranged regular face to face meetings with Torex Health to discuss their requirements, with weekly reporting back to Torex Health.'

'The successful partnership and high level of co-operation between BT Health and Cisco Systems throughout the assessment and bid process as well as during installation meant that we were all able to pull together on this project from a technical, commercial and implementation perspective: to make it work and to exceed Torex Health's original expectations,' continues Sam Bernstein.

Despite limited site access, which resulted in remote configuration at BT's laboratories, BT Health completed the project on time, to meet the go-live deadline of the end of October 2002.

Meeting healthcare needs

In April 2003, Her Royal Highness The Princess Royal formally opened the new Torex Health and Torex plc headquarters in Banbury. The leading-edge IP solution delivered by BT Health and Cisco at the new headquarters provides Torex Health with an advanced infrastructure that will support its continued leadership in providing solutions and services to healthcare organisations.

'Torex Health has an ongoing commitment to meet the growing needs of the healthcare sector. Our new IP-based system from BT Health and Cisco Systems supports us in providing even better services to our healthcare customers,' *concludes Steve Garrington, Chief Executive of Torex Health.*

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