

## NEXTIRAONE DELIVERS GREEN DATA CENTRE AT JAMES PAGET



**Improving patient outcomes, releasing more “time to care” and improving staff efficiency and productivity are all key objectives for the James Paget NHS Foundation Trust in introducing new communications systems to the hospital. The consolidation of its ICT equipment and services into dedicated Data Centre facilities has also enabled the Trust to gain greater control over operating costs and create environmental savings.**

NextiraOne has supported the Trust during a number of projects to design the new network, that provides the platform for critical clinical and administrative applications and also to consolidate its ICT facilities into state-of-the-art Data Centres. NextiraOne’s dedicated Intelligent Building Services Division designed, planned and project managed the new facilities from the allocation of space to cabling, fit-out and installation. A new virtualisation solution and the introduction of the latest cooling and power supply technologies have also helped towards meeting the Trust’s carbon reduction objectives.

### WORKING WITH NEXTIRAONE

*“We had very clear objectives around reducing our carbon footprint, at the same time as providing fail-safe systems for critical medical applications and business continuity.*

*NextiraOne built our first Nexus Data Centre so the team knew our requirements and expectations intimately. They have given us expert advice throughout and the new system is now providing the Trust, our staff and our patients with improved services.”*

*Stephen Kirk  
Infrastructure Operations Manager  
James Paget University Hospitals  
NHS Foundation Trust*

### THE CLIENT

**The James Paget University Hospitals NHS Foundation Trust provides acute hospital services for the Great Yarmouth, Lowestoft and Waveney areas, serving a population of some 230,000. With over 500 beds in total, the Trust also provides community hospital care at Lowestoft Hospital and at Northgate Hospital in Great Yarmouth, together with an integrated hospital and community children’s service.**

### THE CHALLENGE

**With much of its IT already consolidated into a new Data Centre built in 2008, the James Paget NHS Trust wanted to complete the consolidation process and create a centralised, resilient platform for all its services. With the benefit of greater cost transparency created by having most of the ICT concentrated in one place, James Paget also had a clear objective of reducing operating costs and introducing measures that would improve its carbon footprint.**

The new Data Centre project therefore had to give priority to environmental considerations both in terms of technology and the physical infrastructure of the accommodation. NextiraOne had to design and implement solutions that would cut down the amount of equipment needed and also design the Data Centre to be as energy-efficient as possible, using the best energy efficiency and low consumption technologies.

## CUSTOMER REFERENCE

COLLABORATION & CUSTOMER INTERACTION - SECURE COMMUNICATIONS INFRASTRUCTURE - INTELLIGENT BUILDING SERVICES



## THE SOLUTION

**NextiraOne built James Paget's first Data Centre - Nexus One - in 2008 and the new project was designed to complete the process of consolidating and moving all the Trusts' IT and communications technology into dedicated, purpose-built facilities. This provided the opportunity to build a best-in-class infrastructure and environment which would deliver the services appropriate for a state-of-the-art healthcare provider in the 21<sup>st</sup> century. Resilience, scalability and environmental benefit have all been important considerations throughout the project.**

Together the two Nexus Data Centres have created a highly resilient network infrastructure supporting storage area networking and server virtualisation for the Trust's growing range of administrative functions, clinical applications and admission-critical systems for A&E and Theatre, including the PACS digital X-ray system and links to the national patients records system. Services are deployed across both Data Centres to eliminate any single point of failure, thereby achieving increased service availability, enhanced productivity and contributing to improved patient outcomes.

## WORKING WITH NEXTIRAONE

*"NextiraOne came up with so many great ideas and really helped us to formulate and finalise our carbon reduction agenda in terms of our ICT provision."*

*Stephen Kirk  
Infrastructure Operations Manager  
James Paget University Hospitals  
NHS Foundation Trust*

NextiraOne designed the communications infrastructure using Cisco's Nexus 5000 and Nexus 2000 switches and Cisco ASA Security, plus Power over Ethernet. The company also implemented a new IP telephony solution for the IT help desk and an upgrade of the Trust's existing data switching infrastructure. NextiraOne also provides maintenance, support and Managed Services in a three-year contract covering the Data Centres, plus the networking and equipment. NextiraOne manages and monitors the network, holding regular service reviews with the James Paget team to consider capacity and performance and plan for future needs.

### Green IT at James Paget

The whole Data Centre project was designed and project managed by NextiraOne's Intelligent Building Services Division from the refurbishment of the room, its physical fit-out including false floors, interconnect cabling and new fibre backbone cabling. The environment is controlled using in-row cooling in a self-contained rack solution and free cooling air conditioning, plus an electrical solution based on UPS with generator back-up. The solutions were chosen specifically to meet the Trust's objectives in carbon reduction, providing the greatest energy efficiency, especially for the new blade servers. The power consumption profile of the free cooling air conditioning is expected to provide a payback within two years of installation - and the UPS solution could achieve around 25% reduction in energy costs.

The result is a highly efficient and resilient Data Centre and networking infrastructure, supporting advanced services and applications in a cost-effective, carbon efficient environment, delivering real improvements in efficiency and patient care for James Paget NHS Foundation Trust.

## CUSTOMER BENEFITS:

- Improved business efficiency – Management are always available, whatever site they are working from
- Contact Centre – new technology has significantly improved efficiency and customer service experience
- Dramatic reductions in inter-site call charges
- Reduced staffing costs for switchboard operations, together with an improved customer service
- Improved flexibility and mobility of staff
- Expert support and maintenance provides peace of mind and continuity of operation
- Managed Services Contract provides peace of mind that the system will always be available and reliable
- NextiraOne manages the complexity of the system as a single supplier.

NextiraOne are Europe's leading experts in communications services. The company designs, installs, maintains and supports all of its customers' communications needs from voice to mobility, security and applications. NextiraOne provides seamless, end-to-end communications solutions working with the leading technology vendors in the industry to deliver maximum business benefit to customers.

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