

NOTTINGHAM UNIVERSITY HOSPITALS

EMC cloud architect training helps IT professionals enable its healthcare vision



ESSENTIALS

Challenges

- Deliver the performance and 99.999 percent reliability required to support 24/7/365 clinical applications and services
- Make the transition to cloud computing to enable the Trust's 2016 vision for healthcare delivery

Solution

- Affordable, convenient, and flexible EMC training in a variety of formats, with courses that span specific product training to education and certification for cloud architects in heterogeneous environments

Key benefits

- Knowledge and insight to contribute to strategy and planning and accelerate the transition to cloud
- In-house expertise, knowledge, and skills to make better technology decisions; optimize existing technology investments; and keep systems and operations up and running

Nottingham University Hospitals NHS Trust (NUH) provides hospital, general, and specialized healthcare services for nearly four million people living in the City of Nottingham and surrounding Midlands region.

“We are one of the largest acute healthcare Trusts in the UK,” says Gabriel Rea, services senior systems administrator in the Trust’s Information and Communications Technology (ICT) organization. “We also operate one of the busiest emergency departments in Europe.”

Like other providers, NUH faces challenges from national public spending reductions and unprecedented changes in the way healthcare is organized. It is also pursuing its own vision: to become the best acute care teaching Trust in the country by 2016—as measured by clinical outcomes, patient experience, staff satisfaction, teaching and training, research and development, and value for the money.

DELIVERING CARE—WHILE MOVING TO CLOUD

The ICT organization plays a pivotal role at NUH—both in the delivery of day-to-day patient care and achieving the Trust’s 2016 vision.

“It’s our responsibility to provide working technology with the 99.999 percent reliability that 24/7/365 clinical services require,” says Rea. “At the same time, we’re working to build our own private cloud so we can deliver new kinds of IT services—internally and, eventually, to public health providers across the region.”

Today, approximately 400 healthcare applications and 40 terabytes of patient data rely on ICT infrastructure and operations. To protect data and ensure its availability, the team replicates data between two data center sites using EMC® RecoverPoint software. “We use EMC Avamar® to back up data across both campuses. The backups are also replicated,” says Rea. “EMC Data Protection Advisor (DPA) helps us keep track of it all.”

The team uses fully automated storage tiering (FAST) to optimize the performance of its EMC CLARiiON® networked storage and relies on EMC OpenScale™ to automatically deliver capacity-on-demand to keep up with rapid data growth.

In addition to managing today’s infrastructure and operations, the ICT team is making the transformative changes necessary to enable tomorrow’s healthcare initiatives with more agile, responsive, and efficient IT services delivered via cloud. The NUH computing environment is already 85 percent virtualized, with the goal of reaching 95 percent in the next 12 months. A policy change, requiring that all new applications be supported on the VMware® platform has helped to accelerate the process.

“Virtualization has helped us greatly with server sprawl,” says Rea. “It has dramatically reduced our data center footprint and costs—and our carbon footprint, as well, through lower energy consumption.”

TURNING TO TRAINING

For all its advantages, cloud computing places new kinds of demands on ICT professionals. Managing IT as a Service requires new approaches, skills, and knowledge that transcend the traditional technology domains of servers, storage, networks, and security.

One way that ICT professionals are gaining the expertise to help NUH make the transition to cloud computing and enable future healthcare initiatives is with EMC Cloud Architect training. The Cloud Architect education and certification program provides information architects, designers, and consultants with the understanding and skills needed to effectively manage virtualized data centers and converged infrastructures.

Recently, Rea attended a course on core cloud concepts and principles applicable to heterogeneous environments and technologies. “I wasn’t entirely sure what to expect, but it seemed like it could be helpful to someone like me, who has aspirations for becoming a cloud provider,” says Rea.

“The EMC Cloud Architect course was absolutely excellent. The tutor was amazing, as well. I came back to work full of ideas. The material covered helped me understand what it would take to move forward on our journey to the cloud,” says Rea. “It has enabled me to contribute to the development of our plan and strategy for moving toward private cloud, which has forwarded our organization’s goals.”

The next step, says Rea, who has already attained the EMC Information Storage and Management associate level, is to become certified as a cloud architect.

“One of the most critical challenges that organizations face in moving to cloud is the need to become more operationalized and make the transition from different bunkers of network, server, and storage management and to form virtualized teams,” says Rea. “The EMC Cloud Architect course will benefit all the members of my team. I have recommended that they attend and many of my colleagues are planning to go.”

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GABRIEL REA

SERVICES SENIOR SYSTEMS ADMINISTRATOR, ICT, NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST

FLEXIBLE CHOICES, VALUABLE RESULTS

As a teaching Trust with a vital role in the training of doctors, nurses, and other healthcare providers, NUH understands the value of professional education. Nonetheless, it also faces tremendous pressures to optimize its resources and cut expenditures.

“We don’t have a great deal of budget for training,” says Rea. “So EMC remote, online, and video education options—which minimize time away from the job and eliminate the cost of travel—work well for us.”

Most training decisions are project-driven, he says. “We build training into the quote for new technology, so that we have the skills and knowledge to bring new products on efficiently.”

Recently, his team completed EMC training on the EMC Avamar system and software. “Avamar was replacing another product that we had used for many, many years. The previous product was very familiar to the team and they had developed an affection for it,” says Rea.

“The course quickly and completely turned them around. Now they fully understand why Avamar was a good choice and are very enthusiastic about it,” he says. “I’ve always found that when a team gets behind a technology, they make a much better job of implementing and using it.”

MOVING FORWARD

“Technical and professional training will continue to play an important role as the organization moves to cloud,” says Rea. Currently, the team is in the midst of piloting Virtual Desktop Infrastructure (VDI) to be able to replace thousands of PCs with thin clients. It is also moving data archiving and medical imaging to the EMC Atmos® cloud storage platform to be able to store, manage, and protect big data at scale. Other challenges include evaluating and implementing tools to manage virtual capacity and creating a self-service portal for IT services.

At the same time, the team continues to invest in training to make the most of existing infrastructure and assets. “I’m planning to take the CLARiiON Host Integration Management course before the end of the year and I’d quite like to find the time to take the CLARiiON performance course as well,” says Rea.

“EMC cloud computing and product training helps us to understand and correctly specify and scope new technologies—and then to get the most out of those technologies,” he says.

“Investing in in-house expertise also enables us to respond much faster to technical issues, to resolve them internally more often, and to liaise more effectively with external support organizations, if necessary, because we are able to give them the data they need straightaway in the initial call.”

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller—or visit us at www.EMC.com.

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