

# Research and education network harnesses hybrid cloud

Janet sees how cloud-based technology improves agility, saves hours on moving workloads and gives IT staff more time to boost end-user services



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Peter Kent, Head of Corporate Infrastructure Services, Janet

### Customer profile



Company

Janet Industry Technology (Research

and education)

Country

United Kingdom

**Employees** 165 Website

www.ja.net

### **Business need**

Janet wanted to assess the viability of cloud-based IT solutions for its internal services, looking to increase IT efficiency and deliver better services to customers.

#### Solution

The organisation joined a pilot project for the Dell vCloud. It connected its primary environment to the Dell public cloud to evaluate a hybrid cloud solution.

### **Benefits**

- · Company delivers better business support with simplified disaster recovery
- Janet's internal IT team saves hours in deployment time per server with hybrid cloud
- Organisation reduces cost of scaling disaster recovery to increase efficiency
- Janet launches cloud pilot project quickly with expert assistance
- IT personnel maximise productivity with familiar environment

#### Solutions featured

- Data Center Virtualization
- **Dell Cloud Services**
- Mobile Computing
- Networking
- Storage
- System Management

Janet offers a world-class network infrastructure to meet the needs of the UK's research and education community. The organisation provides this community – which comprises over 18 million users – with more than 5,000 kilometres of dedicated optical fibre, which can run at 100 Gigabits per second (Gbps).

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In addition, Janet – which has been operating for more than 25 years – also provides services such as videoconferencing and cloud computing.

The organisation's employees work closely with their customers to help enhance their teaching and research with IT. Staff use a range of business applications to meet their work goals and rely on the in-house IT team to deliver a responsive service. Given the need for stability, the IT team has created a disaster recovery site for business continuity, an hour's drive from the primary site. The disaster recovery solution has performed well, but Peter Kent, Head of Corporate Infrastructure Services at Janet, wanted even greater value from the organisation's investment. He says: "Our focus is business enablement – that means giving employees what they need to deliver great service to our customers. Disaster recovery is an essential service for the organisation, but it's expensive. The infrastructure takes time and resources just to maintain. I wanted to dedicate these resources to delivering better services to our end users."

Disaster recovery isn't something companies can afford to play around with, so any alternative to the current system had to be stable and secure. Kent says: "Every organisation should have a robust IT disaster recovery plan to allow core services to continue in the event of a disaster. We wanted ours to be completely resilient."

# Janet sees hybrid cloud services as a path to greater-value IT

Kent found a possible solution to his disaster recovery requirements through the Dell™ vCloud. The service provides enterprise-class infrastructure-as-aservice (IaaS) hosted in secure Dell data-centres. Kent was particularly interested in a public cloud-based solution because Janet had recently launched a new service called Janet Brokerage to provide customers with guidance on moving to the cloud and data-centre services. Janet Brokerage is one of many activities supported by the £12.5 million University Modernisation Fund Shared Services and Cloud Programme, which is run by the Joint Information Systems Committee (JISC) and funded by the Higher Education Funding Council for England (HEFCE). It aims to help universities and colleges deliver better efficiency and value for money through the development of shared services. Kent says: "We saw the value of cloud infrastructures for research and education. I wanted Janet to be an early adopter of these services to demonstrate our confidence to customers."

### Technology at work

### Services

Dell Cloud Services

– Dell™ vCloud



Kent spoke to Dell about joining a pilot project for the Dell vCloud. He says: "I started talking to Dell soon after we selected it as one of eight world-class cloud infrastructure suppliers for the new Janet Cloud and Data Centre Framework. We already knew that Dell was running a pilot project for its cloud service and we wanted to join." Kent spoke to his dedicated Dell Account Manager, who helped his IT team roll out a number of Dell solutions across Janet's internal IT infrastructure. "When I spoke to Dell, I was dealing with an organisation that knows us well," says Kent.

# Organisation investigates cloud services with end-to-end solutions provider

Over time, Janet has purchased Dell PowerEdge™ servers and Dell EqualLogic™ storage to support the data centre. It has also bought the Dell KACE™ Family of Systems Management Appliances to make software management and distribution more efficient. Ryan Doughty, Senior Infrastructure Technician at Janet, says: "We use Dell solutions because of their reliability and performance – they help us deliver the level of service our end users demand."

The business has deployed multiple generations of Dell PowerEdge servers, and currently uses Dell PowerEdge R710 servers, many of which are used to host a virtualized environment including VMware vSphere<sup>™</sup> 4.1 server software. These servers are connected to Dell EqualLogic PS4000E storage arrays and Dell PowerVault™ MD3200i storage arrays to ensure data is protected and easy to access. Dell PowerConnect™ 6224 switches are used to connect the storage to the servers, and the environment is backed up using a Dell CommVault® solution with Dell PowerVault storage.

Janet has Dell client devices throughout its offices too. Most staff use Dell Latitude™ E-series laptops to support mobile working. The machines provide reliable wireless connectivity to the network – enabling employees to move freely around their office buildings

and beyond. Kent says: "Some of our employees travel between our offices, visit customer sites, and work from home using their Dell Latitude laptops. The machines have a good reputation. Staff know they can get their work done anywhere."

Kent adds: "We see Dell as an end-toend provider of IT solutions and use it across our entire IT landscape. Our relationship works really well."

# Janet gets hybrid public-cloud trial off the ground – fast

After speaking with Dell, Janet launched a pilot project of the Dell vCloud. Dell Services provides a series of engagements to help customers launch public, private or hybrid cloud solutions. These include workshops, assessments, system design work, implementation and support. In the case of Janet, the IT team already had a design for the trial and simply wanted guidance on connecting the primary environment to the Dell cloud. "We thought Dell's on-boarding process for its cloud solution went well," says Kent. "We joined a webinar where Dell cloud technicians led us through the basics of connecting our environment to the cloud. It was pretty straightforward and took less than 10 hours of staff time to get the solution up and running much quicker than building a traditional physical infrastructure."

Doughty says: "If you're familiar with VMware vSphere software, then connecting to the Dell cloud is easy." During the pilot project, Doughty conducted some basic testing of the Dell hybrid public cloud. He says: "I launched Windows- and Linux-based servers in the cloud and added web storage software. We then left them running to see how they performed. Essentially, we were testing the cloud service concept and getting familiar with the environment."

# IT team can save hours with hybrid cloud, enhancing services

The Janet internal IT team saw it was possible to save significant time by deploying virtual servers in the Dell cloud rather than physical servers in the data centre. "We could save hours per server

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by deploying a server in the Dell public cloud," says Doughty. "That is a major benefit for any busy IT team because it gives them time to focus on higher-value strategic tasks that help end users deliver better services to customers."

Kent envisages a number of important services that he could deliver to Janet employees with the Dell hybrid cloud. "One beneficiary of the Dell cloud would be our various technical development teams," he says. "We plan to offer these teams their own cloud-based servers for testing and service development. The environment would be distinct from our production infrastructure, low cost and easily scalable. We could avoid the procurement cycle for purchasing a physical test and development server. As a result, the teams could develop and launch new services faster - helping Janet's services evolve more rapidly."

# Janet delivers better end-user support with simplified disaster recovery

The company also has a viable alternative for delivering greater value disaster recovery. Kent says the pilot project convinced him that the Dell cloud could offer the stability and responsiveness that disaster recovery requires. But in addition to that, it could provide a much more efficient solution that would allow the IT team to increase its productivity. "If our disaster recovery infrastructure is in the cloud instead of an hour's drive away from the primary site, we will save a lot of time in the long run," says Kent. "Currently, if there's a hardware issue with the disaster recovery site, one of the internal IT team has to take time out of their day to travel there and fix the problem. If the disaster recovery infrastructure is in the Dell cloud, we don't have to worry about it anymore - Dell is in charge. As a result, the team saves additional time, which it can spend on other end-user support activities and projects to deliver business improvements."

### Company reduces the costs of disaster recovery

Doughty is clear on the scalability of the Dell cloud and its advantages in terms of cost. "The key advantage of the cloud infrastructure is the agility. I can request additional processors or more storage space, and they're there. It's a convenient and efficient way to expand our IT," he says. With the disaster recovery solution, the team can scale it up or down depending on requirement, avoiding time-consuming procurement cycles and the expense of installing the IT once it arrives.

### IT personnel stay productive with familiar environment

With VMware at the heart of an integrated vCloud experience, Janet used familiar virtualization software and didn't lose time on training. Kent says: "We saw how simple the Dell cloud is to operate and how we could gain a quick return on our investment." After the success of the public-cloud trial, Janet and JISC have signed deals to continue using the Dell vCloud. "Cloud infrastructures are a great opportunity. We see our future in the cloud - and with Dell," says Kent.

Learn more about Dell vCloud at Dell.com/vCloud

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