

## Cloud-based VDI delivers IT efficiency and scalability for developer and its customers

If the success of an IT project depends on the value it brings not just to the deployer but also to its customers and on to their customers, then Colt Technology's cloud-based desktop-as-a-service project must be high up there. Archana Venkatraman reports

Managed service provider Colt designed and rolled out a scalable, cloud-hosted desktop virtualisation project with its customer, Agilisys, a business process service provider. The project meant Agilisys's customers, including UK borough councils, could benefit from IT efficiency and scalability.

Colt started its desktop virtualisation project in 2010 using VMware's View product, a desktop virtualisation platform.

The project came out of Colt's "Office of the Future" programme, which trialled new technologies and changes in the workplace to help employees work more productively. The programme included support for employees working from home and on the move, along with bring-your-own-device (BYOD) policies.

Colt's IT team prototyped and refined a virtual desktop infrastructure (VDI) strategy for its internal users initially, and later worked with Agilisys to offer a VDI solution to service its end user customers.

#### Cloud-based desktop virtualisation

The Colt-Agilisys project was launched in August 2012.

Colt chose VMware's View product because it delivered the right features, was cost effective and delivered high efficiency, said Brian Keats, the VDI project manager at Colt Technology.

Colt is using a cloud-hosted VDI to manage the infrastructure for Agilisys up to the virtualisation layer. "This means Agilisys has to manage only the application deployment and user interaction layer," said Keats.

The VDI solution was designed to scale to 20,000 users. It allows Agilisys to focus on its core business and user management, while Colt worries about the next new iteration of VDI, infrastructure upgrades and ensuring efficiency, said Keats.

But why cloud-hosted desktop virtualisation? Why not a traditional datacentre-based VDI project?

"The basic 'vanilla' desktop is very rapidly becoming a commodity," said Keats, "so why should companies invest in that when they can focus on adding more value higher up the chain and retain that user interaction which is critical to them?"

"Every time you invent something new or 'home grow' a new solution, you need a variety of highly skilled people, and this can become cumbersome and expensive. By simply replicating our tried-and-tested VDI strategy for Agilisys and its customers using cloud, they have been able to save upfront investment costs in training staff and in new technologies," he said.



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### Desktop-as-a-service platform adds flexibility

Prior to the project, Agilisys and its customers were facing a number of IT challenges. It was difficult for customers to move between offices and locations seamlessly, work from home, secure their data centrally, or even refresh their ageing desktop estate.

Agilisys was also finding it challenging to upgrade users to Windows 7 or Office 2010 or make IT efficiency savings.

Colt implemented the View product using Atlantis ILIO Diskless VDI software. This meant there was no need to buy extra storage hardware, which led to savings in capital expenditure (capex) and operating expenses (opex) by eliminating storage rack space, cooling and maintenance costs.

With these technologies Colt developed a storage-less desktop-as-a-service (DaaS) platform that uses server RAM as primary storage for virtual desktop images. This strategy helped Agilisys improve storage input/output (I/O) performance and the response time.

In addition, because there is no dependence on shared storage, it is able to scale the deployment infinitely in modular units of 100 virtual desktops. "Doing this with no additional storage makes the concept of elastic datacentres a reality," said Keats.

The DaaS solution also included disaster recovery (DR) and high-availability capabilities.

It offered a 40% increase in the number of virtual desktops per server. "This enabled us to deliver a fully resilient system without excessive cost to customers by using spare virtual desktop capacity on each server without duplicating or wasting hardware," he said.

As a multi-tenant DaaS implementation, Colt was able to fully automate the deployment, configuration and provisioning of virtual desktops and the datastore using VMware View and VMware vSphere in combination with Atlantis ILIO Center automation and management software.

The automation available within Atlantis ILIO Center helped Colt provision and roll out multiple racks of servers for thousands of users in less than one hour.

Colt uses the ILIO technology on a vBlock solution. VBlock is pre-configured "cloud-ready" equipment that combines server, networking and storage products from VMware, Cisco and EMC (VCE).

# Colt Technology's stand at VMworld Europe 2012

### Mutually beneficial delivery of desktop virtualisation

Colt is the first organisation to deliver cloud-hosted virtual desktops using Atlantis ILIO Diskless virtual desktop infrastructure (VDI) software, while at the same time enabling local VMware View user personas to be stored at the customers' premises, said Keats.

"This innovative deployment of desktop virtualisation, which helped not only itself and its customer, but also UK boroughs, helped Colt-Agilisys win the award for *Best desktop virtualisation project* at the VMworld Europe 2012 user awards in Barcelona.

The judges were impressed with the multi-tenant desktop-as-a-service (DaaS) implementation, which enabled automation for IT efficiency.

Such an innovative DaaS implementation and its benefits not just for the deployer, but also its customers, is an example that will change the way organisations think about and deploy VDI to gain more IT efficiency, the judges said.



By using the ILIO Diskless technology on the vBlock solution, all we need to do to provision additional users is add another blade with the correct amount of memory and bring it online," he said.

"There is no need to add extra storage, which vastly reduces lead times and the complexity of adding more users to the system."

Ease of operations and scalability are other big benefits, said Keats.

### Integration of leading-edge technologies

On the desktop side, a move to thin clients also enabled the company to save capex and minimise user support issues for Agilisys.

The cloud-hosted VDI project comprised Atlantis ILIO Diskless VDI 3.2; VCE vBlock; Cisco UCS B230 M2 blade servers; VMware View 5 with Persona Management tool for desktop management; VMware ThinApp for application virtualisation; and EMC VNX 5500 for unified storage.

The key to its successful implementation was the integration of leading-edge technologies from different companies, such as VMware, Cisco, Atlantis Computing and EMC, along with Colt's own fibre-based network, according to Keats.

The rewards of the cloud-based DaaS project were far-reaching. Today, IT teams at Agilisys's local council customers can provide employees with access to their data via any device from anywhere, while keeping the councils' data more secure. They also offer improved business continuity, he said. ■

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