South Eastern Health and Social Care Trust (SEHSCT) provides an extensive range of quality health and social care services to over 440,000 people in Northern Ireland. SEHSCT currently employs over 12,500 staff across a wide range of disciplines, including hundreds of nurses, midwives, social workers, dentists, medical professionals, and administrative staff.

The Challenge: Need Simple and Fast SSO Access to VMs across Enterprise

South Eastern Health and Social Care Trust virtualized its server environment using VMware vSphere and vCenter several years ago. When they made the decision to deploy virtual desktops in 2013, VMware Horizon View emerged as the obvious choice. The IT team replaced the clinicians' desktop computers with thousands of zero clients and mobile devices, including Android tablets and iPads, and implemented an Imprivata OneSign single sign-on (SSO) solution to ease access to the virtual desktops from these devices.

"VDI is an excellent way to provide mobility, but it introduces several challenges to the IT environment," explained Darren Henderson, ICT Services Manager for SEHSCT. "If you are doing VDI, you have to be very careful about your choice of software, SSO solution, and storage platform if you want to guarantee an excellent end user experience."

SEHSCT piloted the VDI solution on the Trust's existing HPE StoreVirtual platform. "The HPE solution works very well in our general data center environment, but it's not ideal for the virtual desktops," Henderson reported. "During the initial pilot, we experienced significant performance bottlenecks, even with just fifty users. VDI requires high performing storage to handle the IO spikes during employee logins and other compute-intensive tasks. You need make sure you have sufficient headroom with the storage to be able to cope with the increased load."

The Solution: Tintri VMstore T540 and T850

Henderson first heard about the VMstore solution while attending VMworld. "What really sold me on Tintri VMstore was its ease of use," Henderson explained. "With VMstore, there are no more LUNs to manage. We don't have to worry about carving up volumes, capacity management, and all of that. Since we have a very small IT team, we can't afford to spend a lot of time configuring, tweaking, and fixing things in our storage environment all day long."

SE purchased two VMstore systems in 2013. "We knew that buying a single VMstore system would be sufficient for the VDI environment, but we bought an extra one for our other data center," explained Henderson. "With two active data centers, even if we lose one site, our services will continue uninterrupted."

Henderson was also very impressed with the fast deployment. "It took us longer to physically put the VMstore system into the rack than to connect it," he explained. "After we mounted the box, it only took five minutes to configure the new system. We were absolutely blown away by the simplicity of the Tintri VMstore platform. It was an absolute no-brainer to go with this intuitive solution."

The Result: Simpler Management and Better Visibility

The difference between the standard infrastructure of the past and Intelligent Infrastructure became obvious very quickly. South Eastern Health and Social Care Trust selected the Imprivata OneSign single sign-on solution to simplify access to the virtual desktops. "VDI with SSO provides our healthcare practitioners with fast, instant access to the information they need to provide quality healthcare," Henderson explained. "Our staff can now walk up to any device, swipe their ID cards, and access their virtual desktops in under seven seconds. When they move to a new location, it takes seconds to switch the session to the new device. The performance of the VDI and SSO solution on VMstore is absolutely amazing."

Challenges

- Performance of existing storage platform could not handle VDI spikes
- Wanted to provide simple and fast SSO access to virtual desktops for all healthcare workers
- Needed a solution that was easily scalable to thousands of local and remote users

Solution

- Tintri VMstore T540 and T850
- Tintri Global Center

Results

- Simplified management
- High-performing VDI and SSO environment
- Granular scalability to expand to thousands of VDI users
- Accelerated deployment, with two- to three-hour installation and five-minute configuration

Tintri
Intelligent Infrastructure

The Trust's healthcare employees can also logon to their desktops from home using their username, password, and token code. "Some of our staff prepare for their morning clinics at home over breakfast," explained Henderson. "When they arrive at the outpatient clinics, all of the information is still on their screen. The 'follow me' desktop is something we've been trying to do in healthcare for decades. That functionality is now possible with VDI and SSO on VMstore."

Henderson reportedly has a very large whiteboard in his office with a 'laundry list' of IT projects and management tasks that just keeps getting longer every day. "When you have to manage all of the 'lights-on' tasks in your IT environment, it takes a lot of time away from tackling more important projects," he said. "Our Tintri rep said it would be easy to manage the storage environment, he said it would be fast, and he told us that we wouldn't have any issues. He was absolutely right. VMstore is enabling our team to deliver on other IT projects that we weren't able to get to, rather than just keeping the storage systems running."

Henderson was also impressed with the Tintri Global Center management interface. "With Tintri Global Center, we can easily see if there is a performance issue on the network, server, or storage side," he reported. "We don't have to look at the management console very often, but it is nice to know that it is there. It's almost a waste to have such a great management interface, since the VMstore systems are so reliable!"

"When rolling out VDI and single sign-on to end users, the bottleneck most organizations face is constantly managing all of the infrastructure and buying additional shelves to get the solution to stand up," noted Henderson. "With VMstore, the 'bottleneck' is further upstream. Our only challenge now is keeping enough iPads in stock so we can hand them out to our staff when they request a virtual desktop."

SEHSCT's VDI environment has grown very quickly, from 600 virtual desktops in 2013 to over 2,400 users today. "Since VMstore is an independent node, we don't have to 'size for tomorrow', we can just buy what we need for today," stated Henderson. "With other solutions, we would have to buy a large, expensive storage system up front. VMstore is a much more scalable and cost-effective solution."

After purchasing the two Tintri VMstore T540s in 2013, SEHSCT added two Tintri VMstore T850 systems in 2016 to accommodate growth. "The performance of the first two T540s was great, but the performance of the T850s is simply staggering," Henderson reported. "We could run our entire VDI or environment on the two T850s if we needed to, but it's nice to have the T540s around for redundancy."

South Eastern Health and Social Care Trust is now deploying additional virtual desktops and zero clients for its administrative personnel. "Many of our office workers are asking us if they can trade their old workstations over for the new 'tiny PCs', because the virtual desktops are ten times faster than their old desktop systems."

"We wouldn't have been able to deploy VDI and SSO to all of our end users unless we had VMstore's high-performance, easily scalable storage platform underneath it," Henderson concluded. "VMstore is enabling us to provide unlimited mobility to our medical professionals, and ultimately, better healthcare to all of our patients across Northern Ireland."

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Darren Henderson, ICT Services Manager, South Eastern Health and Social Care Trust

Experience Different! For more information on how Tintri VMstore can turbo-charge your business success through a simple, Intelligent Infrastructure, visit tintri.com/vmstore.

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