Virtualization and SSO removes technology overhead from clinical workflows

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Key facts
Industry: Healthcare
Location: Tampa, Florida
Industry Beds: 206

Challenges
- Reduce technology overhead within clinical workflows
- Rapid deployment of VDI, SSO, and Windows 7
- Achieve a high adoption rate

Results
- Fast, secure No Click Access®
- Reduced login times to three seconds or less
- Streamlined clinical workflows with No Click Access
- Deployed VDI to 95% of the clinical enterprise

Moffitt Cancer Center, the no. 6 cancer hospital in the nation based on U.S. News & World Report, is a 206-bed facility located in Tampa, Florida.

Moffitt, like any other busy clinical environment, is always looking to improve the clinical workflows of care providers. They were particularly interested in saving clinicians’ time, and allowing care providers to focus less on technology and more on patients. That’s why John McFarland, Director of IT Business Management, and his team initiated a comprehensive implementation of virtual desktop infrastructure (VDI) and single sign-on (SSO).

“We wanted to do anything we could do to make our clinicians’ lives easier,” McFarland says. “Anything you can do to simplify the process of getting a clinician to the information they need is well worth the investment and improves patient care.”

A big mountain to climb
The VDI deployment started out as a way to speed up migration to Windows 7 and to make maintenance easier from an IT perspective. However, Moffitt quickly realized there was a critical problem happening in the clinical space — it was taking too long for clinicians to access applications and patient information. This shifted Moffitt’s VDI approach from a migration enablement perspective to a workflow optimization and return-on-investment focus.

McFarland and his team decided to combine their VDI project with single sign-on (SSO) to streamline clinical workflows. “We combined those projects together into one big project that had a nickname of Everest,” laughs McFarland.

Starting with two clinics, the team began deploying zero clients with Imprivata Virtual Desktop Access and Imprivata OneSign® Single Sign-On. “It was wildly successful,” says McFarland. “So our CMIO put the gas on the project and started rolling it throughout the organization very quickly.” Indeed, within eight months of the initial pilot, Moffitt had a solid 85% of their clinical enterprise running on zero clients and VDI.
Single sign-on: Critical to adoption
To ensure their VDI fired on all cylinders, McFarland and his team used a number of different hardware and software solutions, including:

- XenServer as the hypervisor
- XenApp and XenDesktop
- AppSense to manage all profile aspects as well as GP in the environment
- Dell Xeniths, Dell All-in-Ones

And at the endpoints are Imprivata Virtual Desktop Access and Imprivata OneSign providing authentication management and No Click Access, enabling clinicians to sign in at any workstation with a tap of their badge or swipe of their fingerprint.

“The ability to badge into the workstation was a critical component. I don’t even think it was much of a discussion. It was just a ‘we need this to do this.’” McFarland continues, “Again it goes back to the ease of use. That technology shouldn’t have overhead in the workflow. The easier you can make technology to use, the better it’s going to be for adoption.”

A huge success
As of 2016, Moffitt has achieved a solid 95% adoption of VDI across their clinical enterprise, with a peak of 1,500 concurrent desktops during the week.

Implementing VDI across the entire organization has had a huge impact. “At the end of the day, I see our virtual environment as a workflow enabler for the clinical practice,” says McFarland. “The ability to get back to your desktop in seconds rather than minutes really improves patient care. And so the Imprivata piece, the SSO, really enabled that even further.”

Recommended best practices
Throughout this experience, the Moffitt team discovered key best practices to their success. “Really understand seconds,” McFarland advises. “When you’re talking about zero overhead to the workflow, typically three seconds is about as long as someone really wants to wait for anything. What really drove us was the need to get clinicians to patient information as fast as possible.” This focus on reducing overhead is apparent when you look at the time savings Moffitt achieved for logins. An initial boot of the desktop now takes anywhere from 20 to 25 seconds, and subsequent reconnects are two to three seconds at most.

Overall, coming out on the other side of the VDI deployment, McFarland offers this advice: “If you’re a healthcare organization that hasn’t implemented VDI yet, then you’ve got a lot of opportunity if you do, and I encourage any healthcare organization to go down the path.”

In the future, Moffitt looks to continue to bolster their VDI, but also turn their attention toward achieving an “anywhere, anyplace, anyone, any device” approach to access for clinicians. “That’s really the next step for us,” McFarland says. “We want to make VDI even more portable and more accessible outside of the four walls of the hospital.”