

UNIDESK CUSTOMER SUCCESS STORY



Shannon Medical Center: Simplifying VDI Management and McKesson EMR Delivery

This Texas hospital is giving its doctors and nurses greater access to clinical applications, streamlining desktop management, and simplifying delivery of McKesson EMR with Unidesk.



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Mike Russell
Assistant IT Director, Shannon Medical Center



Leading Edge Desktops

Shannon Medical Center is on the leading edge of the VDI trend in healthcare IT, which is seeing traditional fat-client Windows PCs replaced with thin and zero-client terminals. Everything runs on centralized servers in a private cloud, and the data is housed in a central storage array where it is safe and secure.

Shannon moved to the VDI model to give its nurses and doctors more secure interfaces and greater access to the hospital's core applications. The locally owned general medical and surgical hospital located in San Angelo, Texas, which also runs several local clinics to provide full service health care to West Texas, saw increased use of its McKesson electronic medical records (EMR) system as a means to standardize order entry and achieve meaningful use objectives. VDI would be key to increased EMR use.

Today, Shannon is more than 1,600 desktops into its virtual desktop implementation. Says Mike Russell, Assistant Director of IT at Shannon, "The doctors and nurses are generally happy with the performance. I think everybody who switched over has noticed it. I have one doctor who pretty much refuses to use a traditional computer now. He only wants to use the VDI zero clients wherever we put them. He's also using an iPad, which VDI allows, too. Other physicians have begun submitting requests for virtual desktops to be installed as quickly as possible, so that's another good sign!"

A Multi-Vendor Undertaking

Shannon's VDI solution set consists of a wide range of technologies from many different vendors, from Pure Storage flash arrays for storage to Cisco UCS blades for compute to VMware Horizon View™ for connectivity to Imprivata OneSign® for authentication and access. For application delivery and image management, Shannon turned to Unidesk®.

Explains Russell, "We knew VDI would be great, but initially, we were just dragging all of the old problems with managing distributed PCs into the data center. Unidesk has changed the way we do desktop and app management. Now, it's easy."

Imprivata and Unidesk are a particularly strong one-two combination, with Imprivata OneSign streamlining front-end access to virtual desktops and Unidesk streamlining back-end management.

VDI Management Challenges in Healthcare

Healthcare organizations implementing VDI inevitably hit several management obstacles:

1. Delivering and updating EMR and other clinical applications such as McKesson is difficult and unreliable with traditional application virtualization technology.
2. Windows images proliferate, making the delivery of timely patches and security fixes inefficient and time-consuming.
3. Doctors reject non-persistent desktops that don't keep their personalization, yet persistent desktops require too much costly storage.
4. Every desktop is slightly different, requiring different application and virtual machine configurations.

Shannon encountered all of these challenges, which were made more difficult due to the small size of its IT organization. Shannon employs 23 individuals to manage all aspects of IT in support of 3,500 domain users. With only two administrators solely responsible for managing VDI, it became clear early on that Unidesk was needed.

Simple Delivery of McKesson and Other Clinical Applications

Shannon implemented Unidesk as the all-in-one solution to its desktop provisioning, image management, application delivery, storage optimization, and personalization challenges. With Unidesk's advanced layering technology, Shannon is able to efficiently deliver and update all of its clinical applications, including Dragon NaturallySpeaking, Imprivata OneSign, McKesson EMR, Microsoft Office, and many others. Each application is layered separately as a read-only virtual disk to make custom desktop configuration for departments or groups of users fast and easy.

Unlike traditional application virtualization tools that isolate applications in their own "bubble," every Unidesk layered app behaves as if it is locally installed, with each virtual disk representing an application shared by many VMs. All files, data, and registry settings are stored in the usual places, and can be seen by native Windows tools. Apps and plug-ins cross-communicate and share data as if they are natively installed, a critical requirement for healthcare organizations that need EMR apps such as McKesson to interoperate with other applications. Adds Russell:

"We've layered over 140 of our applications with Unidesk just using our internal IT staff. Most apps took only a few minutes to package. Then we just point and click to add them to desktops."

Full Personalization, Minimal Storage

With Unidesk and Pure Storage, Shannon Medical has been able to satisfy the personalization needs of its doctors and administrative staff using two types of desktops:

1. Non-persistent desktops for shared stations are wiped clean after each use and placed back into a floating pool so that the next user always has a fresh, clean VM.
2. Persistent desktops for doctors and administrative staff preserve all customizations, including settings, data, and plug-ins to provide a consistent, follow-me desktop experience.

Unidesk enables both types of desktops to be built using the same Windows OS and application layers to simplify application management. Pure Storage all-flash arrays provide outstanding I/O performance and storage management simplicity, while providing the de-duplication and compression features that enable Shannon to scale VDI and other workloads at much lower cost.

Explains Russell, "Unidesk and Pure Storage help make the economics of going all-flash work in VDI. We have so much I/O now there is no discernible impact on user response times. And going with persistent desktops really eased VDI acceptance. Doctors love that everything is always the same. They use their VMware Horizon View client from any device, and Unidesk does the back-end work of making sure their desktops settings and other personalizations are the same as before, even if IT has been making changes to underlying applications and Windows. Without having to fuss with making their desktops look the way they want or wait as long for desktops to boot or apps to start, our doctors spend more time with patients and using our McKesson EMR."

Plans for the Future

Russell credits Shannon Medical's success with VDI in part to starting with the hard use cases first. "VDI started with IT, and our CIO was one of the first users. If you can't use VDI to do your own job, you shouldn't expect doctors to use it. From my smart phone I've been able to do plenty of work when I'm traveling or nowhere near one of our offices."

Shannon Medical is now focused on achieving its final goal of 2,800 desktops. Concludes Russell, "The only problem we have now with VDI is that we can't get it out fast enough."

DEPLOYMENT DETAILS

Application Management

Unidesk

Server

Cisco

Storage

Pure Storage

End User Computing

VMware Horizon

Users

2600

Application Layers

148 Applications, 1 Windows OS

More Info

5GB of disk space per desktop

Key apps layered by Unidesk - Microsoft Office, Dragon NaturallySpeaking, Imprivata OneSign, McKesson EMR