

Metro Health: Where Desktops Get Better

*Hospital is on the Cutting Edge of Desktop Transformation
with more than 80% of Staff Using Virtual Desktops*

"Liquidware products have closed gaps in our virtual infrastructure and saved us so much time that we can focus on other important improvements that really enhance the quality of patient care."

*– Josh Wilda, Vice President,
Information Technology, Metro Health Hospital*

Organization:

Metro Health Hospital

Virtual Desktop Users
2,000

Products:

Stratusphere™ UX
ProfileUnity™

Overview

Metro Health Hospital is a 208-bed teaching hospital in western Michigan. It is committed to innovation and has received numerous awards, including recognition as a Most Connected Hospital for 2015-16 by U.S. News & World Report, one of America's Most Wired Hospitals by the American Hospital Association's (AHA) Health Forum and the College of Healthcare Information Executives (CHIME), and one of the 50 Greenest Hospitals in America by Becker's Hospital Review. The organization's innovation extends to information technology, with Metro Health Hospital being a very early adopter of desktop virtualization as a way to improve delivery of workspaces to end users. The facility is currently on its fourth generation of virtual desktop infrastructure (VDI), and today, between 80 and 85 percent of its approximately 2,500 physicians, staff and faculty members are using virtual desktops. Liquidware's ProfileUnity and Stratusphere UX are integrated components in the organization's desktop virtualization strategy, allowing more virtual desktops to be optimized for the diverse population of users.

The Challenge

"We're pushing the envelope to decouple our users from the limitations of fixed, local PCs. We have a vision that you should be able to access whatever application or information you need, whenever you want, no matter where you are," said Josh Wilda, VP of information technology at Metro Health Hospital. "We're innovating with virtual desktops to deliver on that vision."

The hospital's VMware® Horizon virtual desktop infrastructure supports approximately 2,000 users, including 500 physicians who need access to numerous resource-intensive applications and image files. A small team is responsible for managing the VDI, and is always looking to push the envelope to make it better. "We need to make virtual desktops' performance responsive and snappy," said Wilda. "Our CIO is really focused on login times, which is directly related to patient care. At

the patient bedside, doctors and staff need immediate access to data. Our goal is for all logins to a new session to be completed within 30 seconds, and a re-login in seven seconds or less. When you have a loved one in the hospital waiting to receive care, the last thing you want is to have to wait while the doctor has to log in. All our efforts are aimed at providing better care to patients.” Over the years, Metro Health Hospital IT staff has delivered many improvements to its virtual desktops. Early on, the organization experienced a few ongoing challenges. Worse, it began experiencing performance degradation. When IT staff tried to uncover the root cause of the decline in performance, it became apparent they lacked sufficient visibility into “inside the guest” metrics to understand how virtual desktops were being configured and used. That lack of visibility drove Wilda and his team to find a better way to monitor and optimize virtual desktops.

The Solution

“We started having performance degradation, and weren’t sure why. We suspected resource contention, but we couldn’t see who our heavy users were or whether hosts were sufficient for the workloads we were running,” said Wilda. “Our monitoring solutions just didn’t provide enough detail about our environment, especially at the user-experience level.” Using its limited resources, the team made what Wilda calls “an educated guess” that storage was the underlying issue causing the desktop problems. It upgraded to solid-state storage in hopes of improving virtual desktop performance. Fortunately, that solved the immediate issue. “That really improved front-end virtual desktop performance,” said Wilda. “Some of the applications used in hospitals are designed to run on big, hog PCs. Because we’ve been able to optimize our architecture and resources, we’re able to push applications that use multiple screens, high-end graphics and analytics to virtual desktops.” “The upgrade worked,” Wilda added, although the team became

convinced more was needed. “We knew, in our next generation upgrade, we needed a stronger view into how the organization was using the desktops.” The organization turned to Liquidware and explored whether Stratusphere UX could provide the visibility and metrics data IT staff required. Stratusphere UX is a user-experience monitoring and diagnostic solution that is purpose-built for desktop environments. Stratusphere UX provides a clear view of all users, machines and applications, and their supporting infrastructure and architecture. Users can click to drill down and isolate areas that are demonstrating “abnormal” behavior as well as verify that the desktop infrastructure is performing as expected. Because Stratusphere UX uniquely provides time-stamped data, the solution is also ideal for conducting comparisons of point-in-time desktop behavior to support vendor bakeoffs, check the impact of changes, conduct proof-of-concept tests and plan for expansion. “If we’d been using Stratusphere UX from the start, we could have diagnosed and fixed our desktop performance issues a lot sooner,” said Wilda.

In contrast, another Liquidware product, ProfileUnity, has been a long-time component of Metro Health’s virtual desktop infrastructure. Wilda said this solution was strategic in allowing the hospital to move forward with desktop transformation. “When we wanted to move to virtual desktops in a big way, we wanted to make sure that the desktop was still personal for the user. ProfileUnity allows us to deliver that personalized experience.” ProfileUnity delivers user profiles and the user environment at login that includes all users’ preference settings, application settings and user-authored data. The result is a customized profile for users that can be managed in a standard, automated way by administrators. Users can make their own customizations while administrators can apply and enforce group policies. ProfileUnity also has numerous features for managing user profiles and the user environment, including context aware filters, AD integration and Application and User Rights Management features.

The solutions automation and management features are a major reason Metro Health Hospital is able to support more than 2,000 virtual desktop users with just two staff members. ProfileUnity also enables the hospital to meet its goal of completing logins in less than 30 seconds. Testing has found that logins with ProfileUnity are up to 10 times faster than Roaming Profiles or group policies and other basic tools.

Because of its ability to capture legacy user settings and map user data, ProfileUnity is also a powerful tool for managing desktop migrations and operating system upgrades, allowing organizations to leverage cross-platform profiles to manage Windows desktops from XP through Windows 10 and Server 2008/2012 r2. "Our current desktop environment has allowed us to manage downtime in a really slick way that greatly minimizes disruption to the organization," said Wilda. "For example, when we upgraded to Windows 7, we were able to move all of our virtual desktop users onto Windows 7 and take them from the test environment to the production environment in 15 minutes."

The Results

ProfileUnity and Stratusphere UX have provided several specific benefits to the hospital, including enabling it to meet its fast login requirements, delivering a personalized desktop for diverse sets of users, providing visibility needed to build, effectively manage, troubleshoot and optimizing a large virtual desktop environment that serves the critical needs of the hospital. Using the Liquidware solutions suite not only saves time and conserves budgets, but more importantly, it supports Metro Health Hospital's mission to deliver on its vision of being a patient-focused innovator.

"The Liquidware products have closed gaps in our virtual infrastructure and saved us so much time that we can focus on other important improvements that really enhance the quality of patient care," said Wilda. "Our staff isn't bound by the limitations of a physical desktop environment. We've had physicians log in from vacation to check patient information and read a study to help treat a specific patient – not to a mobile app, but to his entire desktop! That supports our vision of users being able to log into their desktops from anywhere, and not be bound to a desk when it comes to helping patients." supports Metro Health Hospital's mission.



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