

Smooth Windows Migration Provides Major Enhancement for Insurer's VDI

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-Project Leader
Health Insurance Provider

Organization:
Health Insurance Provider

Virtual Desktop Users:
~1,400

Products:
Stratusphere FIT, ProfileUnity

Overview

A health insurance provider based in the Pacific Northwest had already virtualized most of its desktops when it needed to migrate from Windows XP to Windows 7. The migration gave the company the opportunity to rethink and refresh its mature virtual desktop infrastructure. The result is an environment where more than 98 percent of its 1,400 desktops are virtualized, bringing improved performance and increased responsiveness to users, and enhanced manageability to the IT team. The redesign and migration also taught the IT organization some lessons on how to best configure and manage a virtual desktop infrastructure.

The Challenge

The company had virtualized its Windows desktops years ago, and the environment had grown to support nearly 1,400 users. Over the years, the infrastructure's size and user base changed dramatically, so when the organization had to plan for the end-of-life of its Windows XP desktops, it used the occasion to reassess the architecture of its desktop environment to enhance performance.

"We had a clean slate for the new environment," said the network analyst who led the desktop optimization project. "We had made some problematic design decisions originally that became exposed when we scaled up our virtual desktops, and this was our chance to re-engineer the design to a more modern infrastructure with the best configuration and capabilities to meet our needs."



The original user migration had been relatively simple when the organization initially transitioned employees from physical to virtual desktops years before. The project manager had written scripts to collect user identity and folder information from physical PCs, built an Outlook profile for each user and set their allowable printers. While these tasks got the job done, one major drawback was that the early virtual desktops were not particularly customized. The project manager anticipated that the migration task would be much larger and tougher this time, because it had to support nearly 99 percent of the insurer's employees, who expect a high level of personalization and performance.

"We needed an automated way to do user-state migration," the project leader said. "There are a lot of ways you can do it, but we wanted a solution that would be comprehensive, accurate and convenient."

Several options were examined, but many were cost-prohibitive for the company, while others required a lot of manual steps and considerable configuration effort.

The Solution

For guidance, the company worked with CompuNet, Inc., a Liquidware Labs partner and managed-services provider with extensive experience in a range of virtualization technologies. CompuNet staff utilized their extensive experience to design and recommend a new virtual desktop

architecture. As a first step in planning and designing the new architecture, CompuNet used Stratusphere FIT, the Liquidware Labs virtual desktop assessment solution, to gain in-depth performance data about the legacy desktop environment.

CompuNet then recommended that the project manager evaluate ProfileUnity. The solution was not only cost-competitive, but it also provided the exact features needed to automate a migration of more than 1,000 users and provide reporting and other support to ensure that all events were completed successfully.

Stratusphere FIT defines and captures metrics that support virtual-desktop transformation projects across all platforms, including VMware Horizon Suite, Citrix XenDesktop and Citrix XenApp. CompuNet consultants analyzed the data that Stratusphere FIT collected to design the capacity requirements of servers/storage/GPU and the desktop image, and to create an application strategy.

CompuNet evaluated the metrics to assist with designing a user pooling and tiering strategy. Most importantly, Stratusphere FIT captured the baseline user experience—critically essential information to define "normal" thresholds. These thresholds are used to ensure that the new infrastructure meets SLA targets and provides quality user experience in the near term. Once the environment is in production, however, administrators can use these same metrics to signal when desktop performance may be developing problems and should be investigated.



Based on the performance data and forecasts from Stratusphere FIT—and its own experience in designing high-performance virtual desktop environments—CompuNet recommended a new architecture that featured:

- Persistent virtual desktops running Windows 7 on zero-client hardware
- Non-persistent desktops for conference rooms
- Three base “master” desktop images for developers, analysts and general business users
- VMware Horizon View 6.2
- VMware ESXi 6.0
- Liquidware Labs ProfileUnity for user environment management

The insurer agreed to the recommended architecture and turned its attention to migrating users from the Windows XP desktops to the improved Windows 7 virtual desktops. ProfileUnity automates user migration (both virtual-to-virtual and physical-to-virtual) by automatically “harvesting” user profiles, settings, user-authored data and application settings from existing profiles. ProfileUnity profiles are “universal,” so they can be used on multiple versions of Windows OSs at the same time. Thus, the transition from Windows XP to Windows 7 was seamless. In addition,

ProfileUnity can directly integrate with Active Directory to capture group policies and apply them as before.

“ProfileUnity provided much more granularity and control compared with the approach we used for our first migration,” said the project leader, who had written the migration scripts for the previous virtual desktop project. “This time, the solution captured all the users’ application data, all their menus, customizations—much more than we could have done on our own.”

Another advantage of ProfileUnity is that the solution can automatically “clean up” profiles before the migration begins, so only the appropriate parts of the profile and user-authored data and files are moved over. ProfileUnity further compresses the transfer and network storage of the migrated user profile in a ratio that is as much as 50:1 for more efficient use of storage resources. ProfileUnity also gives administrators the ability to set and automatically enforce application rights management. In addition, ProfileUnity is integrated with FlexApp, thus the company has the option of leveraging application layering in the future to further reduce desktop image complexity and streamline management of their applications.

“ProfileUnity was much less expensive than any other option we looked at, and FlexApp was compelling,” the project leader said.

The Results

The migration was a success, and the transition to Windows 7 desktops was completed with little disruption to users. And today the company benefits in ways they never anticipated, from the ProfileUnity's advanced features as well as from the knowledge and experience they gained through working both with CompuNet and with the Liquidware Labs Support team, who worked intimately with the project management team to re-engineer the environment to better support a robust UEM solution.

Because ProfileUnity is a full-featured user-environment management solution, the insurance provider has benefitted from continual improvements to the desktop-user experience, dramatically shorter login times and simplified monitoring of the environment, enabling administrators to adjust resources before there are performance problems.

"We didn't have any real user profile management ability before. Now we're seeing a significant difference in our user experience. Our login time is now seconds, instead of minutes. Part of the credit for that goes to the Liquidware Labs team as well as the use of ProfileUnity, because their support was outstanding and really helped us configure our settings for top performance.

"We are more effective now, because we can solve problems that we simply couldn't even begin to solve before," said the IT director.

