Application Layering Stretches Valuable Desktop Educational Resources

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—Joe Vaden, IT Support Contractor
University Center at Ponca City

Organization:

University Center at Ponca City
Ponca City, OK

Virtual Desktop Infrastructure Environment:

Approximately 60 VMware virtual desktops

Product:

ProfileUnity™ with FlexApp™

Overview

Basic PC support requirements were taking up almost all the IT staff's time at an educational services facility. To stretch its resources and reduce the time needed for support, the organization virtualized its desktops and introduced application layering with FlexApp, resulting in a more reliable infrastructure that requires less effort to maintain.

The Challenge

"I was spending the majority of the time I was allotted each month just keeping computers updated," says Joe Vaden, a contractor who provides IT support to University Center at Ponca City. "Just doing simple maintenance like a Flash or Java update took about 20 minutes per workstation. Updates like that are needed frequently, and multiply that by 60 workstations, and you see how it takes up a big chunk of time. I wanted to automate as much as possible."

University Center doesn't have a large IT infrastructure – only about 60 total workstations among the offices, classrooms and computer labs – but user requirements are diverse. The IT environment must serve diverse needs with limited resources. First, it must maintain enterprise software required by each of its partner institutions. It also must maintain multiple applications to support a wide range of course offerings and degree programs, including many rarely used applications and configurations. Some professors conduct classes on site, but most instruction is done by videoconference link to the partner institution's campus. This approach makes it essential to keep networks running and optimized. To keep things manageable, the organization essentially kept student computers locked down, not allowing students to store files or customize their desktops with different settings and apps. Still, fulfilling basic support requirements didn't leave Vaden enough time to make all the improvements and optimizations he wanted.

Vaden discussed the dilemma with University Center's Dell rep, who suggested virtualization and referred to InterWorks, an IT consulting

and service provider and Liquidware Acceler8 partner with an office in Stillwater. InterWorks agreed that desktop virtualization – which would be a first for University Center – would reduce the organization's support requirements, for both the current workloads and increasingly as the organization moved forward.

The Solution

Following InterWorks' recommendations, Vaden implemented a VMware-based virtual infrastructure with the Liquidware Essentials bundle as the foundation for virtual environment management. For Vaden, the most valuable capability in the new environment is application layering, which is delivered through Liquidware's FlexApp solution. University Center created a standard desktop image that includes the basic applications that all students need, and the facility now uses application layering to instantly deliver the apps needed by each individual student, based on his or her courses and permissions.

FlexApp provides instant access to applications without requiring them to be stored on the desktop. It redirects application installs to a virtual disk and takes out clutter by optimizing the install for the OS and user profile. FlexApp's new on-demand Click-to-Layer option is an industry first. The technology allows instant delivery of FlexApp-layered applications on-demand upon the application open action by a user. The user simply clicks on the application's native icon on the desktop or in the Start Menu and the application is instantly delivered via FlexApp and is ready for use. The option improves desktop readiness times compared to other app-layering delivery options because applications are not mounted unless they are in use. Now, even dozens of layered applications can be readily available in a user's Windows environment without needing to deliver every available application that may not be used during a user's session.

The improved user experience enabled by FlexApp goes beyond easy access to applications. Because FlexApp was deployed and closely integrated with Liquidware's ProfileUnity User Environment Management solution, all students and staff now get personalized desktops complete with their own applications and preference settings. Plus, students can now store files on the system instead of having to use portable media such as thumb drives, and all desktops and data are now automatically backed up. Launching the virtual desktop platform with the Liquidware Essentials desktop management suite made all these productivity and user experience improvements possible and practical for University Center.

The Results

"ProfileUnity with FlexApp has been a godsend. It saves me so much time," says Vaden. "Before, a basic update would cause me to spend 20 minutes each on 60 machines. Now I spend 20 minutes once, so the time savings are a factor of 60 for me."

University Center at Ponca City has yet to tap into the more advanced features of ProfileUnity and plans to utilize the advanced environment monitoring and diagnostics capabilities of Stratusphere UX as it moves forward, but the savings and efficiencies that the organization has already achieved, has bolstered Vaden's enthusiasm: "Liquidware has been worth every penny, even as we're currently using it. It makes my job easier and makes our computers better for our students and staff."

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