

AkzoNobel's Marine & Protective Coatings Has VDI Well Covered

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- Steve King, Infrastructure Manager
AkzoNobel's M&PC Business Unit

Organization:
AkzoNobel's
Marine & Protective Coatings
Business Unit

Virtual Desktop Users:
500+

Products:
ProfileUnityTM
StratusphereTM UX

Overview

The IT staff of AkzoNobel's Marine & Protective Coatings (M&PC) Business Unit provides support to 5,000 users around the world, leaving little time for performance-enhancement projects. The company introduced virtual desktops to reduce its support burden. This resulted in user-satisfaction ratings jumping by approximately 50 percent, which was helped by a smooth physical-to-virtual transition that kept the desktop look and feel familiar for users and quickly gained user acceptance.

The Challenge

M&PC has 5,000 PC users around the world, from its largest facility (1,000 users) in Felling in northeast England to numerous smaller remote branch sales offices. The IT staff faces many challenges in supporting its widespread Windows XP desktop infrastructure.

"We have to spend so much time installing OS updates, application patches, security updates and other support work just to keep our desktops current," says Steve King, M&PC's Business Unit (BU) infrastructure manager. "Support takes time away from doing development to make our desktops better and faster."

The tug-of-war between maintaining and improving performance was essentially a draw – the average satisfaction rating for desktop performance that King's organization supports was 2.5 on a 5.0 scale for their physical desktops.

The IT staff saw great potential for a virtual desktop infrastructure to improve performance and reduce support requirements. However, typical troubleshooting and maintenance responsibilities aside, one of the strongest challenges the IT staff faced was resistance to change. They knew that anything less than a seamless introduction of virtual desktops would doom any large-scale rollout regardless of the significant benefits it might provide.

M&PC staff is highly experienced with VMware® server virtualization – about 95 percent of its servers are virtualized in the VMware environment – but it moved cautiously into desktop virtualization. Their first-step was conducting an extended proof-of-concept trial that grew to approximately 40 users. The trial ran Windows XP virtual machines even though M&PC was planning to convert to Windows 7, because King wanted to be able to keep any problems that arose from virtual desktops isolated from OS conversion issues.

“There are always some problems when you do an operating system conversion,” King said. “Most of the OS problems would have been blamed on virtual desktops, and it would have been difficult to get buy-in to go further with VDI.”

The proof of concept showed VDI’s potential to improve desktop operations, as well the obstacles to attaining it. The leading challenges the team foresaw for implementing a virtual desktop infrastructure were:

1. Winning user acceptance
2. Providing a virtual desktop experience at least as good as the physical experience
3. Managing the physical-to-virtual migration

“We saw some limitations with the tools that VMware offered for persona management,” King said. “The feature set didn’t seem robust enough to support a large enterprise user base.”

The Solution

Because M&PC considered user experience key to successful desktop virtualization, it sought solutions to address that aspect. That led M&PC to add ProfileUnity from Liquidware Labs to its proof of concept trial. ProfileUnity manages user profiles so all the screen and font settings, application preferences, bookmarks, file locations, printer preferences, and other configurations that users set for their physical desktops are automatically preserved and delivered as part of their virtual desktop.

“It’s great how ProfileUnity lets you keep all your settings when you go from XP to Windows 7,” said King. “We simply logged off a virtual XP PC and logged on to a virtual Windows 7 desktop. Users could not see any difference, and ProfileUnity worked like a dream.”

With ProfileUnity, users get to retain their familiar look and feel while the IT staff gets the support benefits of virtual desktops, including the ability to remotely and simultaneously distribute patches and upgrades across the entire desktop population. ProfileUnity



separates the user profile, settings and data from the operating system and applications. The profile is compressed into a small file that is stored on the central server. The next time the user logs in, he or she receives a fresh desktop that has been loaded with customized profile settings. The entire logon process takes just seconds, and results in a virtual desktop that is both clean and customized.

ProfileUnity played a key role in overcoming user resistance to virtual desktops. M&PC became confident that virtual desktops could serve a large user base, but still faced the obstacle of managing migrations.

“Migrating physical PCs from XP to Windows 7 is limited to around two per day, whereas under VDI we could achieve hundreds if we wished to,” said King. “We started out doing two manual migrations per night. With ProfileUnity/VMware View, we are migrating batches of 50 users per night, and the process is done in about two hours. We could go even faster, but there are user considerations. We want to be sure everyone has received a briefing on virtual desktops before we convert them.”

ProfileUnity has several features for automating physical-to-virtual migrations, although M&PC uses its own methods. ProfileUnity can be installed on a physical PC to capture all user settings and file locations prior to the migration. Application and

OS settings are automatically harvested and data is redirected to a network drive, cloud or other storage location. Next, the administrator creates a master desktop image for the virtual environment. For the migration, the master image, saved user preferences and user data are merged into a virtual desktop that is customized and ready to use the first time the user logs on. There is no user downtime during the migration – ProfileUnity does all the work in the background. After migrations, ProfileUnity offers complete user management by providing flexible ongoing profile management and configuration.

With positive results from its initial production use of virtual desktops, M&PC scaled its VDI to approximately 500 users and intends to keep expanding. When the environment matured beyond proof of concept, the company upgraded its ability to monitor and support virtual desktops.

It implemented Liquidware Labs Stratusphere UX, a desktop monitoring tool for virtual and physical PCs. Stratusphere UX complements VMware® vCenter Performance Manager by providing detailed utilization and performance information for the virtual machine (VM), application host, storage and network levels. King especially likes the scatter-plot graphics that show how virtual desktops are performing on key metrics.

“It usually shows me that all our virtual desktops are performing in the upper-right quadrant, which is the best,” King said. “It has enabled us to be very proactive. If we see an issue, we can either fix it or send the user an e-mail with suggestions for getting better performance out of their desktops.”

The Results

Desktop virtualization has given M&PC the ability to improve its desktop user experience and reduce the support burden. ProfileUnity and Stratusphere UX have given M&PC the ability to build, manage and grow its VDI, which the company plans to continue to do. M&PC used another tool to help conduct an assessment and found it could replace more physical PCs with virtual desktops, and could reduce its support costs in the process.

The cost savings are an added bonus. M&PC pursued VDI as a means to improving desktop systems by freeing staff from support requirements. Desktop user satisfaction ratings, which averaged 2.5 before virtual desktops were deployed, now range between 3.5 and 3.75.

“The majority of people have seen a marked improvement in their desktop performance,” said King. “Besides improving performance, we’ve also improved productivity, especially from mobile workers who can connect from home or anywhere and get full access to their own desktops.”

“Before, we had to do so much support work for desktops just to stand still,” King said. “As an infrastructure manager responsible for a team of technicians, I can’t name any negatives to our conversion to VDI. ProfileUnity has proved a value-add tool in achieving this.”

