



MICROSOFT WINDOWS XP PROFESSIONAL CUSTOMER SOLUTION

Major Engineering Firm Anticipates Significant IT Savings with Deployment of Microsoft Windows XP Professional

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Black & Veatch, one of the top-ranking private companies in the U.S., is deploying Microsoft® Windows® XP Professional throughout the enterprise in an effort to vastly simplify client-PC management, support, and maintenance. In so doing, the worldwide engineering and construction firm anticipates trimming IT costs by up to 40 percent while dramatically enhancing support for users.

Situation

Whatever form of transportation you use to get around, whatever raw material your local utility uses to generate the power that lights your home, and whatever telecom infrastructure your company relies on for data transfer, e-mail, and phone, chances are that Black & Veatch is playing a role. This is the case whether you reside in the United States or in one of 65 other countries where Black & Veatch has designed and/or constructed roads, railway systems, airports, power-generation facilities, telecommunications infrastructures, and thousands of other major engineering projects.

Because of the scale and scope of Black & Veatch's operations, it's a challenge for the company to effectively manage its 7,000+ client PCs located at more than 90 offices in the United States and dozens more overseas. Until recently, those machines were configured in 330 different ways and ran three Windows operating systems with 70 operating-system images. The resulting costs of deployment and maintenance alone came to more than \$2 million a year.

For Black & Veatch CIO Bob Fine, the solution to this challenge was to centralize client management and thereby simplify deployment, administration, and support. Initially, he and his colleagues considered a migration to Microsoft Windows 2000 Professional, but after participating in a pilot of Microsoft Windows XP Professional through the Microsoft Windows XP Rapid Adoption Program, they decided on an enterprise-wide deployment of that operating system instead.



BLACK & VEATCH

Solution Overview

Customer Profile

A \$2.4 billion engineering, construction, and consulting firm specializing in infrastructure development, headquartered in Kansas City and employing 9,000 people worldwide.

Business Situation

Needed a way to simplify deployment, streamline management, enhance support for home and remote users alike, and reduce the current \$2 million in IT costs associated with these activities.

Solution

Benefits

Projected three-year savings of \$2.4 million and internal rate of return of roughly 275 percent. Improved multilingual support and access for users traveling or in remote locations.

Software and Services

Microsoft® Windows® XP Professional

Scenario

Engineering design and construction

Infrastructure

4,600 desktops, 2,600 laptops

Hardware

Desktop: IBM NetVista A40, Pentium III, 1GHz, 512 MB RAM
Laptop: IBM ThinkPad X21, Pentium III 700 MHz, 256 MB RAM

Microsoft®

Solution

According to Fine, by mid-2002 about two-thirds of Black & Veatch's client systems will be fully up and running on Windows XP Professional with the remainder to be deployed about three months later. He and his colleagues expect the deployment to pay for itself in about 15 months, with a projected three-year savings of \$2.4 million, for an internal rate of return of roughly 275 percent. About a quarter of these savings are projected in the area of deployment with most of the remainder in management and maintenance.

Benefits

The Tools to Simplify Deployment

During deployment, Fine and his colleagues will implement two operating-system images, in contrast to the current 70. "This is key because strategically we must be able to maintain a consistent desktop image throughout the organization," he says. Certain Windows XP Professional technologies will play a big role in helping to maintain consistency: namely, SysPrep and the User State Migration Tool (USMT). "During the pilot, we found that SysPrep helped to reduce image-loading time by 40 percent and USMT enabled us to get by with using one-third fewer people on the deployment as compared with earlier Windows deployments," Fine reports. He also believes that USMT, by accurately and comprehensively migrating a given user's data and application settings, will help his company to trim not only deployment time but also deployment errors. "In reducing the number of misconfigurations, and consequently the need for redeployments, we expect to save over \$500,000 per year," he adds.

The Value of Centralized Management

Once Windows XP Professional is fully deployed, Fine and his colleagues anticipate client management to be eased in a number of ways. For example, with the help of such features as Policy-Based Desktop Management and Active Directory™ Group Policy settings, IT executives will have simplified control over the software and configurations on individual machines. "With a user base that's diverse, mobile, and predominantly high-end professional, being able to control what goes on at the client level is a real challenge," Fine says. "That's partly why we selected Windows XP Professional, because it enables us to treat the desktop as an enterprise platform."

Another advantage of the simplified centralized management available through Windows XP Professional, according to Fine, will come in the area of software distribution. "With the Group Policy settings we'll be able to account for everything that's on a given desktop or laptop machine. It will be far easier than before to ensure that all software is upgraded in a timely fashion and licenses are up-to-date."

Similarly, a consistent desktop with more centralized control can simplify asset management. According to Enterprise Deployment Manager Justin Neff, work is now underway to implement a centralized inventory system enabled by Windows XP Professional Policy-Based Desktop Management. "Having this capability means that if there's a hardware problem we can swap out boxes in minutes, saving time for the deployment staff and minimizing user downtime," he says.

Remote Support and Multilingual Capabilities Benefit Users

Corollary client-management issues stem from the highly global environment of Black & Veatch. With offices and staff in 31 countries and a yearly travel budget of \$12 million, Black & Veatch

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Chief Information Officer
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Justin Neff
Enterprise Deployment Manager
Black & Veatch

relies heavily on being able to support users remotely, to give them access their office computers while traveling, and, for employees located overseas, to provide them a working environment in their own language. According to Neff, Windows XP Professional greatly simplifies remote support through its Remote Assistance utility. "We anticipate that Remote Assistance alone will help us to reduce help-desk calls by 25 percent," he says. Remote Assistance also will bolster security, which is of vital importance at Black & Veatch. "With Remote Assistance we'll be able to significantly reduce the need for users to perform delicate administrative functions in remote environments," says Enterprise IT Asset Manager Jeff Phillips. Another security advantage will come through Group-Based Policy Management. "Managing the content of our images and leveraging Group-Based Policy Management will enable us to strike a reasonable balance between the accessibility and the integrity of our client systems."

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In addition to the considerable client-management advantages that Black & Veatch IT executives are anticipating with their rollout of Windows XP Professional, they also predict a number of direct benefits to users. For example, users will be able to access their office PCs through Remote Desktop from any PC on the Black & Veatch network, whether they're in the same building or on the other side of the world. Also, by using Offline Files and Folders, mobile users can ensure critical files are secure by storing them on an enterprise server while also having them immediately accessible when they are disconnected from the network.

Advanced support for multiple languages is another big plus for users at Black & Veatch. "The multilingual support in Windows XP Professional is an obvious advantage for Black & Veatch, which on a typical day has projects going on in up to a dozen countries and supports at least a half-dozen languages among its employees," Fine says. "For example, when we built a major power facility in Bangkok we had to establish a set of localized workstations that were capable of supporting the Thai language. Such work and expense will no longer be necessary once we are fully deployed on Windows XP Professional, because it supports all the languages we now need or anticipate needing in our business."

This kind of forward thinking is a fundamental part of Black & Veatch, as Fine points out: "We're delighted to be one of the first U.S. engineering firms deploying Windows XP Professional, and we're convinced this deployment will keep us in a leading position in the industry when it comes to client technologies."

Windows XP Professional gives you the freedom to do what you want at home and at work—simply, reliably, and securely.

For More Information

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