Pipe and tubular product supplier Metal One decided to implement VMware Horizon Mirage ahead of a company-wide migration project from Windows XP to Windows 7. With the VMware solution, the cost of the migration was 90% less than if it had been carried out manually, and the number of man-hours associated was 65% lower. Horizon Mirage also delivered significant efficiency gains in the area of application management.

Metal One Pipe & Tubular Products Inc. is a provider of ferrous products, including iron and steel pipes, piping and couplers. It also provides related services such as machinery installation, and cutting and mechanical forming of pipes. With its Japan-wide processing and logistics network allied to overseas facilities, it is able to offer customers an integrated end-to-end service. The company was created in April 2011 by the merger of Otofuji Corporation with Metal One Corporations’s tubular products operations.

Planning a 350-Workstation OS Migration

“With a product range that comprises over one million different items, IT is critical to managing the complexity of our business,” says Junichi Kato, a manager in the Systems Department of Metal One’s Corporate Administration Division. “One of the major challenges we have faced recently was the need to upgrade our client OS company-wide, before Microsoft withdraws support for Windows XP.”

In total, the company has some 350 desktops. “The biggest issue was that many of our mission-critical logistics systems only run on Windows XP, and replacing them with Windows 7-compatible versions was going to cost us millions of dollars,” Kato continues. “Senior management could not accept the idea of spending so much on an OS migration that would not add any new functionality. Moreover, even if we had found a way to extend the lifespan of the applications, we would still have needed to spend a lot of time and money upgrading old PCs and re-installing the applications on the new machines.”

One option that the company considered was using XP mode in Windows 7 in order to keep running the existing applications. However, this approach proved less than satisfactory. As Jun Yoshizaki, an assistant manager in the Systems Department explains, “We rejected this idea at an early stage, as although PCs booted up OK in XP mode, their performance in actual-usage scenarios was well short of acceptable benchmark levels.”

The company realised that it would need a more radical solution. In the second half of 2011, it therefore initiated a project to explore possible solutions for OS migration, working in partnership with the vendor that had developed its original system architecture.

Easy OS Migration & Application Management with a VMware Solution

Initially, Metal One considered a solution whereby applications would run on the server, with only the screen data being sent to the terminal. However, this was rejected due to the high costs and the constraints imposed by server OS cycles. Instead, system integrator Sojitz Systems recommended that the company consider VMware Horizon Mirage, a centralised endpoint management and
“We felt VMware Horizon Mirage was the best solution, because it allowed us to keep using the same applications after upgrading the client OS. It reduced our man-hours, and it will improve the efficiency of application management moving forward.”

Junichi Kato
Metal One Pipe & Tubular Products Inc.

Jun Yoshizaki
Assistant Manager, Systems Section, Systems Department, Corporate Administration Division, Metal One Pipe & Tubular Products Inc.

Masamitsu Rito
Assistant Manager, Systems Section, Systems Department, Corporate Administration Division, Metal One Pipe & Tubular Products Inc.

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recovery solution for client PCs in the desktop environment.

By structuring the PC image into a logical set of layers, each of which is owned either by the user or centrally by IT, VMware Horizon Mirage makes tasks such as application management, OS migrations and patch deployments, and system backup and recovery much more efficient. And because Horizon Mirage also incorporates VMware ThinApp, which virtualizes applications and isolates them from the underlying OS, it seemed to meet Metal One’s key requirements of extending application lifespan and improving migration efficiency.

Sojitz Systems and virtualization specialist Softbank BB next assessed the practical viability of the VMware solution by carrying out tests at some 30 locations throughout Japan on Metal One’s corporate network. “This was crucial, as it enabled us to identify potential issues and get used to working with our IT partners,” says Masamitsu Rito, an assistant manager in the Systems Department of the Corporate Administration Division.

Costs Cut by 90%, Man-Hours Cut by 65%

VMware Horizon Mirage delivered considerable benefits in terms of reduced costs and increased operational efficiency. “The cost of the migration to Windows 7 was just one tenth what it would have been if we had not used any virtualization technology,” says Kato. “Had we used the virtualization products offered by other companies, the cost would have only fallen to one fifth, not one tenth, as we would have needed to buy more new hardware and incurred more costs when the virtualization vendor’s support expired. Overall, VMware Horizon Mirage is definitely more cost-effective. What is more, the number of man-hours required to replace all our PCs was approximately just one-third what it would have been if we’d done this manually.”

Yoshizaki adds, “From a system administrator’s point of view, the VMware solution made it very easy to clone Windows 7, and because it allowed us to restore the end user to the previous system in the event of any problems, it gave us complete peace of mind.”

He also has some advice for other companies who want to replicate the cost and man-hour savings that Metal One achieved in its OS migration. “VMware Horizon Mirage offers enormous potential benefits,” he says. “In comparing the costs and man-hours associated with different approaches for the migration from Windows XP, we factored in data centre costs and product licence costs over a five-year life cycle, and concluded that VMware Horizon Mirage offered clearly the best value for money. So when you choose what solution is right for you, your IT usage roadmap is a critical factor.”

Figure 1: Cost and man-hours savings achieved in OS migration with VMware Horizon Mirage