

Top Windows 7™ Deployment Concerns Simplified



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The process of upgrading to a new operating system is a daunting one and a migration to Microsoft® Windows 7™ is no different. But by combining the new features of Windows 7™, core Microsoft toolsets, and a few clever integration techniques, you can deploy Windows 7™ to your desktop fleet with less risk and disruption to business than ever before.

Top Windows 7™ migration concerns

Organisations worldwide are seeing genuine savings by taking advantage of the optimised features of Windows 7™ to simplify infrastructure, along with significant advancements to the user experience. Obstacles, however, are common with any major operating system deployment and a Windows 7™ migration is no exception. By using the new features of Windows 7™, combined with core Microsoft tools, and clever integration techniques, it is possible to overcome major deployment concerns.

Application compatibility

Application compatibility is a major concern with any operating system deployment. Many applications running on Windows XP™ or earlier versions of Microsoft's operating systems were developed to assume that they were running with administration privileges.

Another challenge exists in the form of applications developed to run on Internet Explorer (IE) 6.0 and are not compatible with newer web browsers. Windows 7™ comes with IE 8.0 which means that legacy applications will no longer work in the desired way.

To get around application compatibility concerns, an organisation can either redevelop the application or purchase software with similar functionality. However, to test and fix the application or to find an alternative version can be costly and time consuming.

Dimension Data recommends:

Microsoft's Enterprise Desktop Virtualization (MED-V) provides the answer to many major application compatibility issues with Windows 7™. MED-V delivers applications in a virtual machine that runs a previous version of the operating system, such as Windows XP™. The entire process is transparent to the end user and applications appear and operate as if they were installed on the desktop. The entire lifecycle management of the application is controlled from a console.

To take advantage of MED-V, your organisation will need to make an investment in Microsoft's virtualisation technologies. At the time of going to print, MED-V was the most cost-effective solution available to solve application compatibility issues with Windows 7™. MED-V is available to Microsoft® Licensing 6.0 Volume License/Software Assurance customers as part of the Microsoft® Desktop Optimisation Pack (MDOP).

Branch offices

Deployment of Windows 7™ to branch offices becomes a challenge in countries with bandwidth limitations. Remote deployment of a desktop, which includes Windows 7™ and Microsoft® Office™, with, on average, an additional seven applications, could easily calculate to 6 gigabytes of storage that needs to be copied to the remote branch. An option is to install a server at the remote site. However, when you are dealing with as few as two users, this solution is not viable.

Dimension Data recommends:

The most cost-effective solution to deploy Windows 7™ to branch offices is to install the entire process on a DVD. All that users then need to do is boot the DVD and deployment is conducted remotely once the machine is connected to the domain. The idea is to have as little user intervention as possible because of the high costs involved in dispatching technicians to a remote site. Very little can go wrong by deploying Windows 7™ remotely with a DVD.

Top economical reasons for migrating to Windows 7™

- Windows XP™ has reached end-of-support. Extended support is available for Windows XP™ with a Microsoft® Premier agreement. However, this is a costly option
- Windows 7™ reduces power consumption on the desktop by 30 percent by working with the latest hardware power management capabilities and better managing how application processes use the processor
- Automation and management advancements of Windows 7™ reduce the TCO of the desktop

Risk

With any deployment exercise, IT is pressed to gain ROI on the migration as soon as possible. A Microsoft® study suggests that it is possible to gain ROI on a Windows 7™ deployment exercise in as little as 13 months.

Automation plays a major role in reducing the risk of a deployment exercise. The challenge with migrations of earlier Microsoft® operating systems was that even though technicians followed documented processes, human error meant that they would forget simple tasks such as installing updates or turning on the firewall. Users typically logged a call with the helpdesk within five minutes after being handed back their machines. Windows 7™ is designed to automate the deployment process with routine tasks which, in turn, eliminates human error and variations.

Dimension Data recommends:

By utilising the automated functionality of Windows 7™, combined with integration solutions provided by an established Microsoft® Gold Partner, it is possible to reduce the downtime of a machine build from an estimated 24 hours to 2 hours. The machine can be rebuilt remotely at the user's desk by pushing out an advertisement via the network.

User state

User state migration is about ensuring that all user documents, email and data, are migrated safely without any loss of data during the migration process. This process is normally very slow, as doing this manually takes hours.

Dimension Data recommends:

Automate the process to remove the risk of user error and contract the services of a solutions and services provider to reduce the time to move gigabytes of data from hours to minutes to seconds.

Maintaining the end-user's experience

With any operating system migration it is important to maintain the user experience and to ensure that the look and feel of the machine remains the same as before. Replacing the legacy experience with the new optimised Windows 7™ presents a change in the interface. Many users are content with utilising Windows XP™ and may be reluctant to make the change to the new optimised Windows 7™.

Dimension Data recommends:

Conducting end-user training in the form of workshops and creating awareness around the benefits of Windows 7™ prior to migration are important elements of the deployment exercise. To determine whether your employees may require a communications programme for the planned rollout, it is important to assess the culture of your organisation.

In a knowledge-worker organisation where users have a high level of IT literacy and most have administration rights, little training is necessary and the best deployment approach is to provide users with CD-ROMs to upgrade their machines themselves.

However, with an organisation of 3,000 users or more, it is advisable to retain the services of an experienced communications specialist to create awareness of the upcoming deployment and to conduct training sessions to ensure that users familiarise themselves and take advantage of all the features of Windows 7™. Training and creating end-user awareness will go a long way in reducing calls to the helpdesk following deployment.

Bare metal machines

Windows XP™ and earlier operating system versions were hardware dependent, which meant that a new image had to be created for every model and make of hardware. In a large organisation with, for example, 120 different types of notebooks, creating over a hundred images is simply not a viable option from a timing or resourcing perspective.

Microsoft® has addressed a major concern with deployment to bare metal with the release of Windows 7™. The operating system assists in upgrading the desktop fleet with an imaging format that is not bound to a specific type of hardware (or HAL), resulting in significant time and cost savings.

Practical example

A financial institution with 16,000 seats ran a communications campaign to end-users prior to migration. The campaign consisted of weekly e-mails, as well as stickers and posters handed out by the IT department.

As a result of the successful communications programme, the helpdesk, which had been set up for 12 weeks following the migration, was suspended after one week.



Dimension Data recommends:

Previously, images sent to bare metal machines were 'unmanaged', in that following migration some applications were not installed or failed to join the domain. As a result, end-users manually intervened to change their machines into the same state that they had been prior to migration, sparking a flood of calls to the helpdesk. With free tools available from Microsoft® online or with Microsoft® System center tools, it is possible to send users an 80 percent completed image.

Word of advice: Deployment logistics

The deployment logistics of a migration project need to be managed very carefully. A typical mistake is to pilot the IT department and then rollout to the rest of the users without gaining experience of the actual environment. To avoid the flood of calls to the helpdesk following migration, conduct pilots of small user groups with different roles with the organisation. Select users that are most likely to complain should they not be satisfied with the deployment. IT will then be able to remediate any problems prior to migration to a large number of seats. It is easier to rectify any problems with smaller user groups than after migration to 20,000 seats.

Conclusion: Lessons learned from experience

Although Microsoft® has invested heavily in tools to automate most of the deployment tasks of Windows 7™, organisations will not achieve cost savings during the deployment exercise. The real value of the operating system lies in the savings achieved from leaving the complexities of a legacy operating system behind, as well as taking advantage of the features of Windows 7™ to simplify your organisation's infrastructure.

Upgrading to a new OS, takes time and effort. A successful migration project relies on planning: research any obstacles that may occur, along with remedies to solve any issues. As part of the planning exercise, assess whether your management infrastructure is ready for migration. Can the tools used for deploying software handle a major migration?

With Microsoft's advancements in management tools with Windows 7™, you will need to take a different approach to the management of the operating system than with previous versions. There are, however, some valuable investments your organisation can make in the systems management infrastructure that are not only applicable to simplifying Windows 7™ upgrades, but also the normal operational processes around maintaining an existing OS platform.

Dimension data can help you assess, plan and implement an appropriate desktop strategy today

Dimension Data's solutions for desktop and server infrastructure reduce the cost, risk and complexity of deploying desktops, servers and applications – either physically or virtually. This results in improved security and manageability of the environment.

Dimension Data's expertise in deploying and supporting desktop and server infrastructure comes from completing hundreds of projects around the world. We bring this experience to bear when designing and deploying custom solutions for your requirements.

Please contact us through our website www.dimensiondata.com for more information, insight and advice on market trends, applications and solutions that are tailored to make a positive impact on your business operations.

Dimension Data's **solutions** for desktop and server infrastructure **reduce the cost, risk and complexity** of **deploying desktops, servers and applications** – either physically or virtually.

Top 3 Windows 7™ features

Windows 7™ provides an optimised desktop experience and reduces the overall cost of ownership. How?

Scripting

Scripting is vastly simplified by the introduction of PowerShell 2.0 in Windows 7™. PowerShell is a very "powerful" scripting tool that allows easier remote management and automation of day-to-day tasks for administrators.

Windows Server Group Policy

Almost every aspect of the operating system can be centrally managed via Group Policy.

Security

Windows 7™ includes multiple security improvements, from more secure and intelligent remote access, to built-in drive encryption. The security features of Windows 7™ are extensive and need to be considered over existing offerings from other vendors.

About the author

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