A Clear Path for Windows Migration

Windows 7 on 3rd generation Intel Core vPro platforms makes good business sense

With the release of Windows 8, are you confused about the migration path from Windows XP? Don’t be. It’s really quite simple: If your users are running Windows XP, it still makes good business sense to migrate to Windows 7 as soon as possible.

Windows 7 is a solid operating system for the enterprise and it has definite, proven benefits over Windows XP—both for end users and the IT department. When you deploy Windows 7 on PCs or Ultrabook devices powered by 3rd generation Intel Core vPro processors, you can enhance the business value of your PCs through improved security, manageability, and performance, which helps to reduce support costs and enables higher productivity.

Dear Windows XP Fans: Can We Talk?

Many enterprises still use Windows XP as the operating system of choice for their desktop computers, and it’s no wonder. Windows XP has served business users well for more than 10 years, and it is a known quantity in the enterprise IT infrastructure. Besides, users can be resistant to change, organizations are jittery about the costs of migration, and many custom applications were designed for Windows XP. So it is no surprise that many enterprises still rely on the operating system.

If your organization is one of them, your reasons for delay are about to encounter a solid wall: April 8, 2014. This date marks the end of Microsoft’s extended support for Windows XP. A recent IDC opinion paper sponsored by Microsoft showed that organizations that retain a Windows XP environment not only leave themselves exposed to security risks and support challenges, “but also waste budget dollars that would be better used in modernizing their IT investments.”

Need more reasons to get your migration in motion? How about these?

• Mainstream Microsoft support of Windows XP already ended, so ISVs will likely require Windows 7 for new releases of your business-critical applications much earlier than the Windows XP 2014 end-of-life date.

• Windows XP extended support entails either exorbitant costs or reduced service.

• Windows XP is two full generations behind Microsoft’s current desktop operating system technology. As a result, Windows XP either does not support or poorly supports features that have become commonplace on the latest PCs, such as integrated wireless networking and Bluetooth adapters, more memory, and faster USB performance.

• The end of extended support means that Microsoft will no longer issue security updates, which can potentially leave your PCs, data, and corporate networks vulnerable. Security updates aside, a four-year-old PC can experience 53 percent more annual security incidents than in its first year. These incidents are twice as expensive to resolve on a five-year-old PC compared to a new one.
These issues should not surprise anyone who works in IT. Desktop administrators have known for years that they would have to migrate from Windows XP. But for many, the approach of Windows 8 brings the issue to the forefront and raises new questions:

• What is the best migration path with Windows 8 on the horizon?
• Should I skip Windows 7, like I did Windows Vista*, and go directly to Windows 8?
• What about application and hardware compatibility?

The best migration path for most use cases is actually quite clear: move your remaining Windows XP users to Windows 7 now. Keep reading to learn why that’s the best path and how you can make the job easier.

ADVANTAGES OF WINDOWS 7*

Delivers a better user experience and higher productivity

• The updated architecture of Windows 7 manages memory more effectively, which supports more efficient multitasking with smoother switches between windows.  
• It supports more hardware more easily by using the same drivers that Windows Vista used. This means that hardware manufacturers have had time to issue updated drivers.

Is more secure

• BitLocker Drive Encryption* and BitLocker-to-Go encryption help protect sensitive data on PCs and removable storage devices.  
• Windows 7 is designed from the ground up to be a secure computing environment. Key security features provide a strong foundation to guard against malicious software and other attacks:
  • Kernel Patch Protection  
  • Data Execution Prevention (DEP)  
  • Address Space Layout Randomization (ASLR)  
  • Mandatory Integrity Levels

Gives IT more control

• Windows 7 allows more fine-grained control and new options for customizing Group Policy deployment and application.  
• Windows 7 includes Windows PowerShell 2.0*. This command-line and scripting language helps IT professionals control and automate the administration of Windows operating systems and of applications that run on Windows.

Enhance the value of Windows 7 with Intel architecture

You can get even more from your new operating system when you deploy it on the latest Intel architecture. PCs powered by the Intel® Core™ vPro™ processor family streamline deployment to Windows 7 Enterprise and increase productivity and security while driving down PC management costs. For example, PCs based on 3rd generation Intel Core vPro processors support multitasking that is up to 90 percent faster than on the previous generation.
As you do so, you might want to pick up the pace. Most organizations will require 12–18 months to thoroughly plan and test a new client operating system. Make sure to give yourself enough time for a thorough evaluation and decision-making process. However, if you are late getting started, the following guidance can help you accelerate your evaluation and deployment.

Understand the Costs

For many organizations, the cost of migration ranks near the top of reasons to delay. While initial costs are potentially high, you can minimize them by carefully planning and managing the process. In addition, remember that holding on to Windows XP is actually more costly over time, so make sure you factor in total cost of ownership (TCO) of your client infrastructure. If you look just at the initial migration costs, you are ignoring the larger pieces of the cost equation.

Annual support costs for PCs older than three years often exceed the purchase price of a new PC. So your most cost-effective option might be to time your migration with your PC refresh cycle. In addition to reduced support costs, this approach can deliver lower service desk costs through:

- Built-in tools that allow remote troubleshooting and repair
- Increased user productivity from intelligent performance
- Improved operating system stability with Intel Core vPro platforms

Lower power consumption is an added bonus of newer PCs with the latest Intel processors and a new operating system. Intel Core vPro platforms are up to 50 percent more energy efficient than three-year-old systems. Intel® Turbo Boost Technology intelligently allocates extra processing power when you need it most, and helps reduce power consumption when you don’t. You can also boost energy efficiency with Intel® Wide Dynamic Execution, which delivers more instructions per clock cycle so less power is needed to complete a task. Plus, Windows 7 includes new power management controls with an emphasis on idle power management.

Simplify Migration with Intel Core vPro Platforms

You don’t have to wait for reduced energy and support costs to see the benefits of Intel Core vPro platforms—you can see them during deployment. PCs based on these processors include Intel vPro technology—a suite of management and security features embedded in the hardware—that helps simplify migration.

For example, Intel vPro technology lets you remotely identify and upgrade properly equipped PCs even if they are powered off. This means you can deploy Windows 7 without a desk-side visit and migrate data after hours, which saves IT staff time and minimizes user interruption.

To take advantage of this technology, ensure that Intel vPro technology is configured. This technology works together with the leading management consoles from Microsoft, Symantec, LANDesk, and more than 80 consoles from other vendors to deliver out-of-band management capabilities. These capabilities let you power on PCs over a wireless network and remotely upgrade off-site users. If you don’t currently have Intel vPro platforms in your environment, consider deploying them as part of your normal refresh cycle now. That way, when you’re ready to begin your migration to Windows 7, you have systems in place on which you can deploy the new operating system more cost-effectively.

THINK MIGRATION IS EXPENSIVE? TRY STANDING STILL

Annual support costs can be up to $870 per PC with Windows XP, compared to $168 per PC with Windows 7.

For a five-year-old PC running Windows XP, annual user productivity costs nearly doubled from $177 in year two to $324 in year five, while IT labor costs per PC per year jumped from $451 in year two to $766 in year five.

LEARN BEST PRACTICES FROM ACTUAL MIGRATIONS

In early 2010, Intel began a comprehensive review and migration from Windows XP to Windows 7 on Intel Core vPro platforms.

Our experiences can help you formulate your own migration plan.

For more information, see the Intel IT best practices report (http://intel.ly/JZIqHo) and the Microsoft case study (http://www.microsoft.com/casestudies/Case_Study_Detail.aspx?casestudyid=4000006185).
Your Best Choice for Business PCs: Laptops, Desktops, and Ultrabook™ Devices Powered by the Intel Core vPro Processor Family

You can get the most out of Windows 7 when you run it on PCs powered by 3rd generation Intel Core vPro processors. This processor family and Windows 7 Enterprise deliver the best foundation for an optimized desktop environment. They work together to provide intelligent performance that helps users stay productive. For example, the 3rd generation Intel Core i5 processor runs business productivity applications up to 80 percent faster and allows up to 90 percent faster multitasking.8,9,5

The 3rd generation Intel Core processors further enhance the user experience on Windows 7 through several embedded responsiveness features:

When you migrate to Windows 7, you can make additional performance gains in Microsoft Office 2010* and Windows Internet Explorer 9® when these applications are deployed on PCs powered by 3rd generation Intel Core vPro processors. For example, users can embed videos in Microsoft PowerPoint presentations and take advantage of greater image manipulation and integration capabilities, which are all supported by built-in visuals in 3rd generation Intel Core vPro platforms. Internet Explorer 9 is graphically enhanced and built to integrate with Windows 7 to provide a more intuitive user experience. 3rd generation Intel Core vPro platforms accelerate Internet Explorer 9 with increased multitasking capabilities and built-in visuals.

With Lync 2010®, part of Office 2010, your users have a range of connectivity options to collaborate with peers. Users can set up meetings, invite coworkers or clients, and talk through projects with them by using high-quality video communication. Users can experience secure high-definition video conferences in real time thanks to the built-in visuals and encryption acceleration in 3rd generation Intel Core vPro platforms.

Simplify Your Job with Better Security and Manageability

PCs powered by 3rd generation Intel Core vPro processors also help make your job easier with embedded security and manageability features that are specially designed to address your daily security and management concerns.19

Strengthen Security with Embedded Technologies

With the proliferation of malware and hackers, and the significant threat they pose to business operations and sensitive data, security alone can be a good reason to migrate to Windows 7 and upgrade your PCs. Complementary technologies in Windows 7 Enterprise, Windows System Center Configuration Manager 2007 SP2® and later, and the Intel Core vPro platforms can address many of the security concerns you face. With the joint solution, IT administrators can:

- Isolate, diagnose, and repair infected machines, even if they aren’t responding
- Filter threats and isolate PCs based on IT policy
- Perform continuous agent checking
- Block buffer overflows

And Windows 7 Enterprise Crypto APIs take full advantage of Intel® Advanced Encryption Standard New Instructions (Intel® AES-NI), a new instruction set in the Intel Core vPro processor family that encrypts sensitive data up to four times faster.19,20,5

3 Compared to a three-year-old PC based on an Intel Core 2 Duo processor.
Improve PC Manageability After Migration

In a world where information drives competitiveness, uptime is critical—and manageability features are more valuable than ever. Windows 7 and Intel Core vPro platforms can enable new ways to maintain PCs without impacting productivity. You can manage clients, push updates down the wire, and get alerts even when the client is off or down, improving flexibility and efficiency.

In addition, you can resolve more problems remotely, cutting expensive desk-side visits by up to 56 percent. These savings are possible through Microsoft System Center support for management capabilities embedded in the hardware. For example, you can use a System Center management pack that exposes the functionality of Intel vPro technology to extend Service Manager scenarios with keyboard, video, and mouse (KVM) remote control, IDE-Redirection, and task-oriented and workflow-enabled power control.

Take the Next Steps Today

If your organization still runs Windows XP as its PC operating system, your migration deadline is approaching fast.

Intel recommends that such organizations migrate now from Windows XP to Windows 7. You can get the most from the operating system upgrade when you deploy Windows 7 on PCs powered by 3rd generation Intel Core vPro processors. This combination delivers the performance users need while enhancing your ability to manage and secure PCs, which can help reduce PC support costs.

You can get started with three steps:

1. Evaluate hardware readiness. If you are not going to refresh your PCs, you'll need to make sure all the PCs in your installed base meet the minimum specifications for Windows 7. This upgrade advisor from Microsoft can help:

2. Evaluate software compatibility. Remember that Windows 7 includes Windows XP mode, which allows users to run legacy applications in a Windows XP virtual machine right on their desktop.


WHAT ABOUT WINDOWS 8*?

Some administrators assume that they can move from Windows XP* to Windows 8 and avoid Windows 7. If that is your plan, here are some factors to consider.

Windows 8 is designed as a touch-oriented operating system and should be well suited for tablets and convertible form factors, such as some Ultrabook™ devices.

Enterprise adoption of Windows 8 could lag several years behind its acceptance on consumer devices. If you delay migration from Windows XP until widespread enterprise adoption, that’s several years that your organization could be out of compliance while Windows 8 earns its enterprise credibility.

If you migrate to Windows 7 first, all of your Windows 7 applications, drivers, and peripherals will continue to work on Windows 8. Windows 8 is a great OS for touch-based use cases, and Windows 8 devices can be managed alongside PCs running Windows 7 by using Microsoft System Center Configuration Manager* and Intel® vPro™ technology.