ivanti

Keeping Your Operating Systems Up-to-Date

Advantages for Migrating with Ivanti

Contents

Introduction

With the release of Microsoft Windows 10 and all its various branches, you're likely considering what place the new operating system will have in your organization, and how it will be deployed. There are reasons why organizations struggle implementing a new OS. In this document we will discuss several of those reasons and how Ivanti can help you upgrade and stay current.

Concerns

Productivity

A significant fear of CIOs across the globe is phones ringing off the hook and business disruptions the morning after the migration, either because the migration was unsuccessful or the users no longer have the applications they need to perform their job functions. Disruptions simply cannot happen. Not only does the operating system need to be properly installed, the applications that are key to productivity must be installed and functional.

Even if the OS and applications are working properly, end users can become frustrated and unproductive if the environment isn't properly customized. By capturing the user's profile settings before the upgrade, you can ensure that the environment will be familiar and functional. For example, the user's local printer must have the correct drivers installed and configured. If not, the user will have to do it or create a help desk ticket.

Manpower

Whether you still have a few Windows XP devices in use or you're in a pure Windows 8 environment, there's a certain amount of labor involved in upgrading operating systems. Such labor can be performed by your internal IT staff, outsourced to a third party, or shared with the end users themselves. There are a variety of successful models depending on your organization.

The Ivanti solution lets you leverage all of these labor models, including the use of end users. Productivity workers have never been more technology savvy, and they are increasingly being empowered to make decisions and act upon them. End users can be allowed to schedule their device upgrades for a time that

accommodates their work schedule. They can also be given options on restoring their data.

Data Preservation

In organizations with a large number of legacy operating systems, data backup is essential. For instance, Windows XP can't be upgraded directly. It requires a clean installation. As a result, you must back up the end user's data, install the OS, and restore the data when finished.

Security

There are many aspects of OS migration that impact security. It isn't uncommon for end users to be told to back up their data on external devices before migration and then restore it afterwards. Whether you have financial data, healthcare patient data, or intellectual property on local drives, leveraging external devices is fraught with danger. There are better alternatives to backing up to local devices manually.

Once a device is upgraded, it must be secured with the latest OS and application packages before it's ready for use. A unique advantage of the Ivanti solution is that it accommodates encrypted devices and shared devices such as kiosks. Not only can we migrate data without leaving it vulnerable, we can also migrate data stored on devices by multiple users.

Security should not be taken lightly, and OS upgrades shouldn't represent a security risk.

Scenarios

When it comes to OS upgrades, one size does not fit all. Here are four common scenarios for deploying new operating systems:
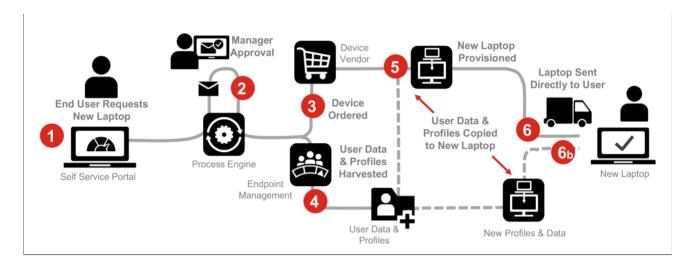
- Migration of existing devices
- Upgrade of existing devices
- New devices with data migration
- New devices without data migration
- Let's run through each of these individually.

Migration of Existing Devices

In this first scenario, a user is running Windows XP. They need to be upgraded to a newer operating system

with their data (user profile and files) preserved. They also need the new system to have the same application functionality.

You cannot upgrade from Windows XP to Windows 7, 8, or 10. In other words, you can't run setup.exe to update the Windows files. The machine needs a clean install of the new OS.

Upgrade of Existing Devices

In this second example, we have a user running Windows 7 or 8 on a device that needs to be upgraded to Windows 10. For devices running Windows 7, 8, or 8.1, a direct upgrade is available. Since you're upgrading the operating system in place, the data is left intact on the device.

New Devices with Data Migration

This third scenario is a typical device replacement. A user is running Windows XP, 7, or 8 and is getting a new device. They need their data (user profile and files) moved to the new device. They also need their new device to have the same application functionality.

Devices without Data Migration

This last scenario is for a new employee. They have no previous device from which to migrate data and simply need a device provisioned. The Ivanti migration solution works in all these instances. Whether you need your data migrated or just have an existing device to upgrade, our solution offers the IT department and the end user flexibility.

User-Centered IT

The heart of IT is about empowering people, and being able to serve and secure all types of users, on all the devices they use, wherever they are. The Ivanti vision of User-Centered IT is the balance between providing end users increased control over their devices while providing the IT department the control they need to maintain security, compliance, and productivity. Ivanti holds to this vision when migrating machines to new operating systems. For instance, IT can allow end users to select when they want to migrate their device plus let them selectively restore the data they want restored. We work with customers to ensure the solution will meet the needs of each department and their broad spectrum of users. We don't require you to create customized images that quickly become obsolete.

Customization

Another advantage is that our solution is highly customizable without hampering scalability. Even geographically dispersed organizations can migrate hundreds of devices a day.

Ivanti Upgrade Services helps you establish a sustainable provisioning strategy that not only works in all the common scenarios, it saves you money.

Key Differentiators of the Ivanti Approach

Encryption

Ivanti has been helping customers migrate operating systems for decades. Our Professional Services team

has assisted many large customers through the process.

Customers in the healthcare and finance industries have faced singular challenges in the migration process due to the encrypted devices in use. Thankfully, those problems are in the past. Ivanti can now migrate devices encrypted with any technology.

Software Titles

Organizations give users machines so they can work more productively. But it's not the OS that makes users productive; it's the applications. Workers must have the functionality available to them after the migration takes place. The Ivanti solution restores to the device either the original application or upgraded titles so users can stay engaged in their work.

User Data and Configuration

Users customize their machines in most cases. They also save data needed in the future. The Ivanti solution gathers user settings and data after the user logs in, thus solving the encryption problem. This data is copied to the network in the background. Most users never notice when the operation takes place. Organizations can determine what data they want backed up. Once the migration is complete, users can select what data they want restored.

KIOSK or Multi-User Devices

Since user data is backed up when the user logs in, multi-user devices are supported.

Ivanti Professional Services

Ivanti Professional Services offers extensive experience performing large-scale migrations. Our engineers have designed a highly reliable and flexible migration process that can be customized to your organization's needs. The solution is not rigid. Changes can be made globally at any time or for specific groups. Our goal is to provide you a system that will handle your migration needs today and in the future.

Vendor Integration

The Ivanti solution can be integrated with most hardware vendors to allow many conveniences. For example, devices can be auto-provisioned in order to ship the machine directly to the end user rather than going through the IT department. Restoration of user data to the device begins as soon as the user logs in.

The applications used on their old device are also installed on the new device, restoring full functionality.

Picking the Time to Migrate

Users generally want to work on newer operating systems, however, they worry about being able to perform their work without interruption. Allowing them flexibility in scheduling the migration buys goodwill. You can free them to choose when they want to migrate or schedule a time with the flexibility to postpone. Nevertheless, as an IT department you can plan for the migration to take place at a designated time if the user has deferred the task too many times.

Restoring Settings and Data

Ultimately organizations own the devices and thus own the liability of what's stored on them. In some cases, company devices can become encumbered with optional or banned content. For this reason, content such as music, movies, photographs, and even software titles can be prohibited from the back-up process.

After the migration takes place, users are able to selectively restore their content. In many cases, they may find old data that's no longer needed.

Advantages for Upgrading Operating Systems with Ivanti

The following sections provide greater detail on how Ivanti enables you to not just "survive" your migration, but to gain a new OS and a better IT environment while keeping migration costs under control.

#1 Your Software License Compliance Remains Intact after the Upgrade

Ivanti creates a "Software License Mapping Matrix" for those programs that are standard among every single computer in your environment (MS Office, Adobe Acrobat

Reader, etc.), as well as for "less standard" applications (Adobe Acrobat Professional). You don't waste budget deploying software licenses to employees who didn't need them in the first place. Whether you're upgrading an existing machine to Windows 7, 8, or 10 from XP, or refreshing hardware with Windows 7 or 8 on it—you need to migrate software licenses based on your mapped plan and your licensing capabilities.

Migration Task	Refresh with New Hardware	Migrate Existing Hardware
Create a company-standard image	No (Not unless new image pushed down)	Yes
Determine what applications, utilities, and settings are required by the end user	Yes	Yes
Capture end-user data	Yes	Yes
Capture end-user profile, security, network, and application settings	Yes	Yes
Deploy new image	No (Only true if preinstalled by the hardware manufacturer)	Yes
Install end user-specific applications not baked into the image	Yes	Yes
Restore end-user profile, security, network, and applications settings	Yes	Yes

#2 Know Your Upgrade Progress at Any Time

It's a fair question: "What executive dashboards are available to show me the status of our migrations?"

The Ivanti SmartVue customizable dashboard application for tablets and smartphones provides IT departments and business executives a real-time view of what's happening in the IT environment based on time and location. You can inform executives of migration progress against plan, e.g., how many machines are being migrated on average per business day, per week, or per month. And with help from Ivanti Professional Services, you can forecast and display how much time remains in the migration process at the current pace, taking into account that migration success rates drop off dramatically for the remaining 20% of machines, typically due to some machines needing more attention or being temporarily unavailable (in storage, users on maternity or paternity leave, etc.)

#3 Users Have Everything They Need, Including Non-Standard Applications

The Software License Mapping Matrix mentioned earlier enables you to map out and preserve all the apps, packages, utilities, websites, favorites, virtualized apps, MED-V, Spoon, ThinApp, etc. that employees care about and that are critical to the business. We're able to detect the versions of those apps and then map where you want those located on the new machine. You can also leverage this ability as an opportunity for

standardization, for example, migrating a particular application to the same version of the application or creating a new standard across the organization.

#4 Security Standards Are Maintained Once You've Upgraded

The Ivanti OS upgrade solution is not just an imaging component or a systems management tool. It's a process-based approach that also includes Ivanti® Security Suite, the endpoint security component. With it you can make sure that machines meet Microsoft Windows vulnerability patch baseline and that appropriate patches for Microsoft and third- party apps, antivirus definitions, etc., are addressed to meet compliance standards such as PCI and HIPAA.

#5 Users Are Provided with Upgrade Scheduling Options

Users are less resistant to a migration when they know what's coming and can have input into the scheduling of changes to their machine. If you've experienced a major OS migration previously, you might recall the frustration that arose when scheduling the migration with the end user. Many times the IT resource would be dispatched to the end user's desk to perform the migration, only to find that the user was not prepared or could not perform the migration. This type of miscommunication can totally derail the overall migration schedule and generate serious cost overruns and delays.

Using the Ivanti Process Manager web console, you define the policies that govern how the migration process will function in your environment. You can easily schedule the migration event, communicate with end users, and gain the needed approvals to safely move forward. If the end user needs to change the migration date, it's not an issue. The process engine simply makes the change with no impact on IT resources.

In addition to managing the schedule, the process engine can communicate with the end user well in advance of the migration date. These communications serve as a mechanism to educate and guide the end user through the migration process. The communications can also be used to deliver special instructions or links to more advanced training designed to help the user through the transition. What's more, because the Ivanti process engine manages the communications between the end user and the migration process, it's possible to have the end user give the final go-ahead before the migration takes place. This method provides a clear audit trail that documents the notifications and approvals granted by the end user.

This seamless integration between Ivanti Process Manager and Ivanti Endpoint Manager enables you to fully automate the migration process and transform an old XP machine into a new Windows 10device with everything the user needs to perform their job function. But most importantly, you're able to extend your existing IT resources and accomplish the migration process with minimal disruption and cost.

#6 Simplify Your Upgrade with Fewer Images

With Ivanti, there's no need for multiple images to migrate machines of varying models or manufacturers. Hardware-independent imaging capabilities handle the two toughest pieces that cause "blue screens"—the hardware abstraction layer (HAL) and the mass storage driver—as well as all your plug-and-play drivers. If you get either the HAL or the mass storage driver pieces in your imaging process wrong, that machine will blue screen, that migration will fail, and there will be associated downtime. And chances are, if it happens to one machine it will happen to many. Ivanti takes care of these issues for you.

While problems with plug-and-play drivers don't cause blue screens, items like appropriate monitor resolution or issues with printers, scanners, or track pads hinder users from being as productive as they could be. Instead of having one image that contains all the drivers for all possible systems in the environment, Ivanti enables you to download only the drivers necessary for each machine, which could mean reducing the size of the image from 15 GB to 8 GB because in some instances 7 GB of image space is taken up by drivers only.

#7 You Avoid Excessive Network Utilization During Upgrade

Ivanti Targeted Multicast™ and Ivanti Peer Download™ content-delivery tools reduce bandwidth consumption and server resource usage, eliminating redundant traffic over your WAN and LAN links. Targeted Multicast technology makes it possible to distribute large packages to many users across the network with a minimum of network traffic. You can easily distribute software, even in those WAN environments with multiple hops and low connection speeds (56k). Instead of sending a package across the wire for each device, only one transfer is made for each subnet. Bandwidth savings increase as the number of devices on each subnet increases. Peer Download is a Targeted Multicast option that forces targeted devices to install a package from a device's local cache or from a peer on the same subnet to conserve network bandwidth.

#8 Machines Meet Your New Naming Standards as Part of the Upgrade

A decision engine determines how a machine will look once it's upgraded, and this also encompasses PC renaming. You have the opportunity to provide consistent naming standards, whether based on a company prefix, user name, site prefix, country prefix, machine prefix, or any other standard.

#9 Make Your Hardware Refresh as Simple as Any Upgrade

It's a common misconception that migration challenges are easily solved simply by purchasing new hardware with Windows 8/10 pre- installed. Of course, many users have aging machines and organizations have considered XP's end-of-life as a business justification to replace hardware. But what about the company's standard image or the software applications needed by

the end user? In addition, what about the user data? How will that get on the new computer? End users won't appreciate the new system if none of their profile or application settings have been migrated. And network and security teams will have the added burden of getting the users into the domain and ensuring that the devices are secure.

While the refresh process is a viable method for getting a new operating system, many of the same costs and resource demands still exist to support the end user. Ivanti provides the capability to accomplish all the migration tasks listed in the following table so that everything looks the way it should and you don't end up with a mess.

#10 All Drivers Are Updated During Your Migration

With Ivanti, all drivers are up-to-date as part of the migration. Integration capabilities with Lenovo, HP, and other hardware brands ensure that BIOS, value-added software, ThinkVantage Technologies, HP battery monitoring, and other drivers supported and endorsed by the manufacturer are kept up-to-date and installed in the first place.

Conclusion

Upgrading from Windows XP, 7, or 8 to Windows 10 can be a challenge, but Ivanti Upgrade Services addresses all the major obstacles. We can provide assistance in set-up and configuration as well as performing the actual migrations. Our project managers keep the upgrades running at a predictable pace, communicating with you every step of the way. You gain a long-term solution that enables you to keep your devices current.

Learn More

ivanti.com

1 800 982 2130

sales@ivanti.com