

Migrating from Windows 7 to 10 Should Be a Top Priority for Retailers

PCs, servers and POS terminals running Windows 7 are pervasive across retail, from checkstands to backrooms to regional and corporate offices. Although Microsoft recently announced the opportunity to purchase additional Windows 7 support beyond the previous end date of January 14, 2020, that support is likely to be costly, limited in scope, and only available under certain conditions. That means it's important for retailers to work expediently toward eliminating Windows 7 from their organizations. With the clock ticking, retailers have some important homework to do to determine the scope of the impact, weigh upgrade options and get new images tested and implemented before the looming deadline.

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Windows 7's monthly – and increasingly large – updates include patches, security updates or service packs that help devices run smoothly and protect them from intrusion. Using an operating system that's no longer supported by its developer significantly increases risk, not just from security breaches, but also from application failures when key developers such as POS software companies stop supporting versions running on that OS. An outdated OS also has possible implications for PCI compliance and chargeback rates.

Migrating from Windows 7 to Windows 10 is the end goal, but getting there requires careful assessment, solid planning and meticulous testing and documentation. A retailer's fleet of PCs and servers running Windows 7 can vary widely in manufacturer, model and vintage, and each one requires a specific plan. Savvy retailers will aim to complete their Windows 10 migration before extra extensions become a costly necessity.

Scoping the Problem

One reason for Microsoft's September 2018 decision to offer support for purchase beyond the January 2020 extension is the massive installed base of Windows 7 machines. In July 2018, Microsoft estimated 184 million commercial PCs were running Windows 7 worldwide (except China), but a month later Computerworld put the number at 378 million. However, a large portion of those enterprises have informed Microsoft they would not make the January 2020 date. Estimates say as many as one half of all Windows PCs will still run Windows 7 in January 2020.

In retail organizations, PCs and servers running Windows 7 are also pervasive, spread across corporate headquarters, regional offices, distribution centers, store backrooms and, notably, at the POS.

While the size of the Windows 7 installed base is the motivator, Microsoft's decision to offer the extension of Windows 7 support comes with numerous caveats. The offer, called Windows 7 Extended Security Updates (ESU) will add support through January 2023, and will likely be costly. Updates are expected to include only security patches

for vulnerabilities rated as “Critical” or “Important,” the top two tiers in the Microsoft’s four-step ranking system. It is possible that only organizations that purchased Windows 7 under specific conditions are eligible to purchase the extension. It’s not clear what percentage of the installed base is eligible for the additional protection.

Given the risks, it’s clear that working expediently toward upgrading from Windows 7 to Windows 10 is smart business for retail organizations seeking to reduce the risks and costs that come from using outdated operating systems. PCs and servers also serve as the unsung infrastructure supporting a broad range of new store devices and back-office functionality, and need to be operating at peak capability to enable the exciting new technologies layered on top.

Weighing the Choices

While upgrading to Windows 10 is the ultimate goal, retailers have a variety of choices to get there. Because they are constantly buying, moving and retiring PCs and servers, most retailers’ Windows 7 installed base runs the gamut from machines well over a decade old to devices purchased only a few months ago. They also typically purchase multiple models from multiple manufacturers. Even the same model from the same manufacturer, produced a few months apart, may use different firmware and specs.

Because of this, retailers are likely to choose several of the following options to manage their migration.

1) Continue to run Windows 7 after the January 2020 initial end-of-life date. Retailers now have two choices if they elect this path; running Windows 7 without support, or pursuing Windows 7 Extended Security Updates (ESU).

Running without Microsoft support means accepting the increased security vulnerability, and weighing the implications for PCI. While a retailer is considered PCI-compliant for the entire period between when compliance is certified and when that certification expires, they will likely encounter issues in the next assessment. Most QIRs are likely to instruct a retailer not to make any changes to the current environment until the OS is updated. It is possible that banks may decline to do business with a retailer with increased vulnerability, or raise chargeback fees to compensate for the risk.

Retailers choosing to continue running Windows 7 will also need to contact their software partners to ensure they will continue to update their applications for Windows 7 users. This is a particular concern for POS software. Or, they can choose to freeze their current software environments until they can upgrade the OS.

According to *Computerworld*, Windows 7 ESU will be available only to enterprises running Windows 7 Professional or Windows 7 Enterprise, and then only if they were obtained via a volume licensing deal. Support will be purchased a year at a time, rising

each year.

2) Buy Windows 7 machines as a spare pool. This will allow retailers to manage the moves, adds and changes required to support day-to-day business while maintaining their current environments, as work continues on preparing for migration across the installed base. Depending on the strategies they choose for the upgrade, retailers can choose between buying newer Windows 7 devices that will also be able to run Windows 10, or take advantage of the mass upgrade cycle by purchasing older machines at a very low cost.

It's important to manage the spare pool inventory carefully to ensure their proper disposition through the upgrade process. Leveraging systems integrator such as Level 10 to manage spare pool inventory as well as perform moves, adds and changes frees up internal IT resources for the upgrade project.

3) Buy new PCs and servers running Windows 10. Retailers could downgrade new Windows 10 hardware to run Windows 7 on a temporary basis, but this requires considerable testing to avoid unexpected issues.

These devices are built to run software written for Windows 10, so future firmware and driver updates will be intended for that operating system and may not run correctly in the downgraded environment. Hardware manufacturers may stop writing drivers for Windows 7 devices. Depending on scope, replacing a large number of old PCs and servers at once is likely to be a costly undertaking.

4) Upgrade Windows 7 machines by installing Windows 10. With the size of the installed base of Windows 7, many retailers are likely to choose this option for at least some portion of their current assets. Machines purchased recently are much more likely to successfully run Windows 10 than those acquired years ago. Retailers should seek information from OEMs about upgradability. Knowledgeable systems integrators such as Level 10 can also help retailers determine:

- Which machines are likely capable of running Windows 10
- What machines will reach end of life, and when
- What replacement inventory is available, and when
- The timeline each OEM is planning for sunsetting of models

Level 10 can also help retailers create a roadmap to physically deploy new hardware.

Retailers' Windows 10 migration strategy is likely to include more than one of these options as they determine what works for various machine types and how PCs and servers are used.

How to Migrate to Windows 10

Many retailers have been through mass operating system upgrades once or twice before. The planning and processes established during those upgrades will be helpful in planning and executing the Windows 10 migration. The good news is that migration from Windows 7 to 10 will likely be easier than XP to 7.

However, that doesn't mean it will be fast, low cost or problem-free. Timing depends on the current state, so it could take months — or years. Migrations will most likely require application and firmware updates. And how seamless it is depends on things like the peripherals being used, and how firmware updates have been done.

Following are recommended steps.

1) Assess the current state. To ensure an efficient and complete upgrade, retailers must understand the status of every current Windows 7 machine. Retailers with an up-to-date configuration management database (CMDB), sometimes built into service tools like Remedy or Service Now, will have easy access to details about every PC and server: OS version, service dates, warranty status, what files are loaded, and so on. Without that, retailers must compile this information, such as pulling data in through a network tool. Microsoft recommends these steps to assess readiness of current environments for an upgrade.

2) Form a solid plan. In addition to a comprehensive plan for the upgrade itself, the project committee will need to make some initial decisions about Windows 10 release type and channel for each set of devices — corporate, POS, and various brands, models and vintages of PC. Some retailers devote a separate set of people and processes to manage migration for POS devices.

3) Create the new image. This entails recreating the image for each device for the Windows 10 operating system, including all software and drivers. While most commercial software is compatible with Windows 10, internally written applications may need to be revisited.

4) Perform thorough regression testing. This entails testing every component and feature on every application that runs on each PC and server. This can be a lengthy, detailed and sometimes tedious process. In the midst of a 3,000-step testing process, finding an issue means stopping the process, resolving it, documenting the change and then starting the entire 3,000-step process again, because one fix could break two other things. Documenting every step is critical to support the migration as well as for future reference.

5) Conduct a proof of concept and pilot. This involves installing the newly upgraded image in limited environments, such as one POS terminal in a store, and running it for

About Level 10

Level 10 is one company, everything IT. With more in-store technologies, less personnel resources and quicker deployment needs, we recognize retail IT teams need less partners to do more. By strategically bundling our services—hardware procurement, software development, asset management, maintenance and repair, in-field technician support and a 24/7/365 service support desk — we create solutions that allow an easy and enjoyable work life. We act as an extension of your IT team through technology and mobile deployments, store openings/closing/remodels, and in-store support work by increasing your service levels and project ease while decreasing cost and risk.

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an extended period to test the image under real-world conditions. An initial proof of concept should be followed by a thorough pilot in each type of environment. Every issue that emerges must also be addressed and documented.

One important component of planning for a pilot and rollout is ensuring there is a reliable way to get the new software images into the new locations, especially the store. Will there be a server available to manage images? Is network bandwidth sufficient to move large packet files, as well as a robust tool to manage the transfer?

6) Rollout the new image. Ensure the rollout plan includes contingencies, such as if several servers go down at once. Unanticipated failures can quickly ripple across an aggressive upgrade schedule.

7) Ensure support. Ensure all forms of support — help desk, depot, and so on — are prepared to support Windows 10. They must also have a process to ensure they don't reintroduce Windows 7 machines back into the installed base.

Upgrading an enterprise-sized fleet of PCs and servers to a new operating system is a routine but essential task that does not drive revenue. For that reason, retailers' Windows migration projects have often been postponed or interrupted in favor of other priorities, such as installing new in-store technology to elevate the customer experience. But with the initial end-of-support looming and the costs of extending past that deadline unclear, the foundational layer that supports those new technologies is at risk. Now is the time for retailers to devote attention and resources to ridding their environments of Windows 7 and upgrading them to Windows 10. Level 10 can help.