Industry White Paper
Windows 11 – The Race to the Finish Line

Closed Loop Lifecycle Planning©
In collaboration with HP®, Microsoft®, and Intel®

September 2024

Submitted by: Jeff Malec, HP Principal Technologist and Lifecycle Subject Matter Expert
Bruce Michelson, Distinguished Technologist Emeritus HP
Close Loop LLC, Manager

Jeff Malec

Jeff Malec is an HP Principal Technologist and Lifecycle Subject Matter Expert. After a 21+ year career with Microsoft, Jeff joined HP and is driving adoption of the modern workplace, Windows 11, and the related lifecycle elements.

Managing the Microsoft and HP relationship for several years, Jeff is an expert in go to market plans and customer adoption strategies.

Jeff holds multiple technical certifications from Microsoft.

Bruce Michelson

Bruce Michelson is an HP Distinguished Technologist (Emeritus) and the Manager of Close Loop LLC. Bruce has over 36+ years in delivering industry white paper and customer engagements. Bruce has delivered over 1,000+ white papers and over 350+ engagements.

Bruce is the author of seven books regarding aspects of lifecycle management. Bruce has numerous copyrights and patents regarding his expertise in User Segmentation, lifecycle management, cost of change, The Ready State©, and Appropriate Incumbent Behavior©.

Bruce teaches IT in Health Care and Advanced Systems and Design at Florida Atlantic University where he is an adjunct.

Bruce is sponsored by the HP, Microsoft, and Intel Alliance for this engagement.

Table of Contents

1.0 Management Summary

Reality is now setting in that the runway to migrate to Windows 11 is getting shorter, if not already ending for many organizations. The end of life for Windows 10 is October 14, 2025, less than a year from this white paper. If an organization has not begun the migration, there are a number of considerations. For those organizations that are in motion today, the investment of time and resources will be beneficial.

Windows 11 isn't just a user interface update. It emphasizes security by making previously optional settings default. Windows 11 serves as the gateway to modern management, making its features increasingly relevant and often essential.

This White Paper will examine Windows 11 migration, noting that many organizations in various stages of the process. Despite varying levels of adoption, all face effort, resources, and costs to meet the end-of-life date.

2.0 Where is Your Organization?

An important question that every organization should consider is, "What is our current status regarding the adoption of Windows 11?"

The answer is variable depending on the organization. The Windows 10 End of Support deadline suggests that the 2025 budget needs to reflect the adoption of Windows 11, however, in deferring, many organizations are challenged with the scope for budgeting.

This section of the White Paper discusses various elements to consider in preparation for the migration. The plan remains a critical success factor.

For IT, the plan is comprehensive and includes numerous elements. Windows 11 differs from other Microsoft operating systems in several ways. Given that many organizations have experienced previous migrations, there may be an assumption that the processes are similar.

While this assumption is partly correct, Windows 11 introduces differences that require careful consideration, reinforcing the importance of the plan. Each subsequent section outlines a key component of the plan. Treating Windows 11 as a project, with a defined critical path and milestones, ensures proper oversight. A project manager is essential to deliver the migration according to scope, timing, and costs. Due to the diverse elements involved, managing Windows 11 as a project is vital for addressing each component's significance to the organization.

2.1 Testing and Applications

Just as with previous operating system migrations, there should be rigorous testing of applications for Windows 11. Based on the available information, most Windows 10 applications are expected to be compatible with Windows 11. However, this does not negate the necessity for thorough testing.

If applications are incompatible, more time is needed to address the issue. Applications in compatibility mode with Edge or other browsers will be available until 2029, but this only provides temporary relief for legacy or technical debt issues. Compatibility and performance on Windows 11 must also be assessed.

2.2 Training and the UX

Windows 11 features a new Start Menu that differs from previous Windows operating systems. Millennials and GenZ users, who are accustomed to a centered Start Menu and a tablet-like interface, may find it easier to adapt quickly. Other users might require training, orientation, or navigation assistance.

The distinctions between these needs focus on the level of effort required to provide appropriate training based on user requirements.

Windows 11 offers extensive resources for end users in the form of concise, accessible content. These resources are available within Windows 11 itself, as well as on platforms such as LinkedIn and YouTube. Additionally, Microsoft has created an Onboarding Kit that includes various communication examples that can be utilized.

2.3 Hardware Baseline

A hardware baseline is now required to run Windows 11 effectively: 8th Gen processors, TPM 2.0, and a secure core profile. Configurations meeting these criteria will support Windows 11. Otherwise, users will see messages and watermarks.

The criteria of the baseline emphasize security as a primary driver. Windows 11 migration can be considered a security initiative led by IT, with security features that were optional in Windows 10 now set as default in Windows 11. Standard SCCM and Intune reports are available to provide organizations with specific insights into the compliance level of their installed base.

Currently, it is important to determine the level of updates required for compliance and ensure that the budgets for 2024 and 2025 are sufficient to meet the October 14, 2025, end-of-life date for Windows 10. If a plan is already in process, the information should include the existing budget for technology updates along with the requirements for compliance for devices not included in the current budget.

2.3.1 With New Hardware Comes Great Capabilities.

New hardware advancements offer a valuable opportunity to understand the enhanced features and capabilities embedded within the silicon. Specifically, new Intel hardware allows organizations to reassess the benefits of vPro and AMT technologies.

Intel has refined its security and manageability tools, providing robust countermeasures to many contemporary organizational challenges. The modernization of Intel's approach is evident in the updated vPro and AMT portfolio, as well as the adoption of PTT and Pluton.

As part of the next generation of entitlements, Intel has reaffirmed the value propositions of its silicon. With the growing prominence of AI and AI-powered PCs, it is noteworthy that Intel has been leveraging AI technologies for an extended period.

The Intel ISV community has built upon this foundation for their AI development efforts. When considering the implementation of Windows 11, it is critical to integrate the hardware entitlements into the planning process to facilitate smooth adoption.

2.4 App Store

The new App store will be a likely hub for modern management of Windows 11. Microsoft tools such as Intune and Autopilot will leverage the App Store as a new vector for updating applications such as Edge,

Start Menu, AI Small Language Models, Language Packs, and potentially Copilot as Microsoft modularizes Windows.

There are various methods to incorporate applications into IT infrastructure. The App Store introduces a next-generation model for application management by standardizing and reducing the diverse approaches to adding software to the existing software asset management base. In addition to operational advantages, this approach enhances security by ensuring that applications undergo thorough vetting and regular updates with governance through the App Store.

2.5 IE

IE was removed from Microsoft as of June 2022, and most organizations have addressed this End of Support status for the browser. As a part of Windows 11, any applications, including applications that might leverage IE APIs will not be compatible.

Native applications often serve specific lines of business, departments, or divisions. Testing should include production-like quality assurance to prevent unexplained failures.

3.0 The Lift

The Lift for Windows 11 not only includes the direct effort to deploy the solution, but provides an opportunity for "future proofing" and leveraging technology so that the effort is more easily translated into a repeatable motion for IT and the organization.

The Lift includes:

- Data Analytics
- Software In-Take
- AI

Each of these will be briefly discussed as the rationale for consideration is that Windows 11 provides the business case and model for adoption of these best practices.

3.1 Data Analytics

Data analytics are becoming, if not already, "table stakes." Data driven decisions are now an integral part of enterprise decision making. With Windows 11, there is a compelling rationale to include data analytics in the conversation since the digital end user experience (DEX), system performance, and security is a set of building blocks.

Data analytics provides the framework for future decision making and for current assessing of the health and status of the installed base.

The Windows 11 compliance reporting from SCCM and Intune are examples of the strength of analytics in decision making.

3.2 Software In-Take

Software In-Take is the process through which applications from various sources (such as new applications, modules of existing applications, downloaded applications, etc.) are incorporated into the overall software asset management solution.

The inclusion of Software In-Take in the Windows 11 migration process is crucial because it necessitates a decision regarding which applications should be transitioned from Windows 10 to Windows 11. If this process lacks due diligence and rigor, there is a risk of simply migrating redundant or similar sets of software. At that point, the issue evolves into an IT issue rather than a problem for end users or departments.

Software In-Take not only identifies new titles entering the organization's installed base but also assesses associated risks, if any, and establishes strategies for updates and versions.

3.3 AI

When Windows 11 was announced and the timeline defined, AI was not as prominent in technology discussions as it is today. There are two considerations for AI in the context of the Windows 11 migration that need to be addressed.

The first consideration is that the planning and strategy for AI may impact decisions regarding lifecycle, security, governance, and other organizational requirements. As the Windows 11 and the associated technology refresh strategy are outlined, there is a need to determine if AI should be included in the planning process. This includes evaluating AI as both an application and discipline, as well as considering AI PCs (NPUs) as part of the refresh strategy.

The second consideration is that the discussion and due diligence required for AI could interfere with the planning and execution of the Windows 11 project. AI has the potential to distract from the timeline necessary to complete the Windows 11 migration. Both AI and the Windows 11 migration are important initiatives and are somewhat interdependent. Failing to engage in thorough due diligence with AI may affect the cost of change when AI is later adopted.

This represents an additional element to consider in the Windows 11 migration.

4.0 Modern Management

Closed Loop Lifecycle Planning defines modern management as, "a cloud-first, highly automated, highly secure, IT infrastructure built around the end user personas. Personas represent the outcomes from leveraging the user segmentation methodology."

Initially perceived as a transient trend in IT, cloud computing has now demonstrated its enduring value and passed the test of time. It plays a significant role in modern IT infrastructure management.

Whether an organization fully adopts cloud computing or integrates it as part of a hybrid approach, the business and use cases for modern management have fundamentally altered how devices and application delivery are managed.

Closed Loop Lifecycle Planning has concluded that, "Windows 11 is the on-ramp for modern management."

The operating system itself is the key enabler for modern management. From the hardware baseline establishing a new norm for compliance based upon security, to the entitlements included in the portfolio, Windows 11 successful implementation provides the appropriate management and diligence to take the next steps to implement modern management.

4.1 Intune

From a manageability perspective, organizations are recognizing that migrating from Microsoft SCCM to Intune is an essential part of the transition process. This migration often necessitates the allocation of resources and the acquisition of skills to anticipate and accommodate new policies, processes, and procedures for managing both hardware and software.

To successfully implement Intune, it is imperative to revisit and execute a comprehensive App Store strategy. The reason Windows 11 serves as the pivotal on-ramp is due to its seamless integration with Intune and the App Store, which relies heavily on the adoption of Windows 11.

The sooner Windows 11 is fully implemented, the quicker the adoption of modern management practices can be achieved, thereby allowing organizations to balance competing projects more effectively.

4.2 Autopilot

Autopilot is a transformative technology that mitigates technical debt. Technical debt not only pertains to software and applications but also encompasses legacy processes.

Provisioning and imaging methods remained unchanged for decades prior to the advent of modern management. Modern management introduces a new set of economics that are not only compelling but also provide a more rapid execution plan and enhance the end-user experience.

5.0 The Implications

Like all decisions, there are implications for the deferring or avoiding the Windows 11 migration.

Closed Loop Lifecycle Planning has concluded that, "there are no right or wrong answers, only conscious and unconscious decisions."

Since the announcement of Windows 11, many organizations have deliberately chosen to defer its adoption. This may have been due to an expectation of a longer adoption period or considering alternative migration paths. Regardless of the reasons, numerous organizations now find themselves in a challenging situation.

In addition to current technology refresh plans, meeting the hardware baseline for Windows 11 may require additional resources. Beyond platform considerations, the implications of testing applications and the necessary resources before October 2025 could place significant strain on available resources.

There are several other factors to consider, including potential disruptions to end users, supporting infrastructure, and business operations. A key assumption that is reasonable to hold is that failing to implement Windows 11 by its end-of-life date will create technical debt, which most likely will be seen as a deliberate decision.

5.1 Extended Support

Microsoft has announced the pricing for extended support for Windows 10. While extended support is available, it underscores the importance of upgrading.

Windows 11 was announced in June 2021, but its adoption has been slower than expected despite a planning horizon over a three-year period. Organizations are now accelerating their efforts to adopt Windows 11. The pricing for extended support offers an economic measurement opportunity; however,

migrating to Windows 11 based on enhanced security features provides a more straightforward justification.

5.2 No Support

Not extending support, and assuming the risk, while always an alternative is really not a realistic alternative. This White Paper would be remiss if this were not positioned.

The bad actors would like nothing better than to gain access to non-supported operating systems. October 2025 is a real date. Modern end point security depends upon Windows 11 adoption.

6.0 Potential Next Steps

Organizations that have "kicked the can" are looking at the 2025 budgeting process. The budget is not only for any hardware baseline gap, but to define the detail plan including resources, testing, training and other elements.

The overall premise of Windows 11 pegged by Closed Loop Lifecycle Planning is that, "Windows 11 is a security initiative, delivered by IT."

The timing is now at a critical stage. Awaiting the approvals for the 2025 budgets, and implementing Windows 11 in a 10 month timeframe, for many organizations is very much like a "big bang refresh."

The runway for Windows 11 adoption is now very narrow, with little room for unanticipated events and projects.

One of the key insights gained is that Windows 11 requires project management resources and disciplines. To ensure successful execution, it should be managed as a project, which may necessitate adopting a timely approach.

Another important factor is to include all potentially impacted internal teams, such as lines of business, security, executives, human resources, supply chain, and IT, among others.

The implementation of Windows 11 has prompted the organization to examine processes within a tighter timeframe.

The next crucial step is to determine how best to accelerate progress and meet or exceed expectations, including adhering to the proposed schedule.

Appendix

1. Closed Loop Lifecycle Planning - A Complete Guide to Managing Your PC Fleet, Bruce Michelson, published by Addison-Wesley Division of Pearson Education, ISBN 978-0-321-47714-9.
2. Appropriate Incumbent Behavior©, copyright Bruce Michelson.

Other Books by Bruce Michelson

1. Closed Loop Lifecycle Planning©, Client Computing in the Health Care Industry, by Bruce Michelson, Published by IDG, ISBN 978-1-61623-045-6.

2. Closed Loop Lifecycle Planning© - What It Is and Why It Is Important to You, by Bruce Michelson, Published by Bookmasters, ISBN 0-9667607-0-0.

3. We Are All Retail, The Race to Improve the Retail Experience in a Post Covid World, by Bruce Michelson and Leif Olson, Published by Archway Publishing, ISBN 978-1-6657-3394-6.

4. IT Strategies in the Post-Pandemic Era, Part of the Closed Loop Lifecycle Planning© Series, published by Archway Publishing, March 2023, ISBN 978-1-6647-3856-9.

5. Zero Trust, by Bruce Michelson and Cody Gerhardt, published by Archway Publishing, May 2023, ISBN 978-1-6657-4191-0.