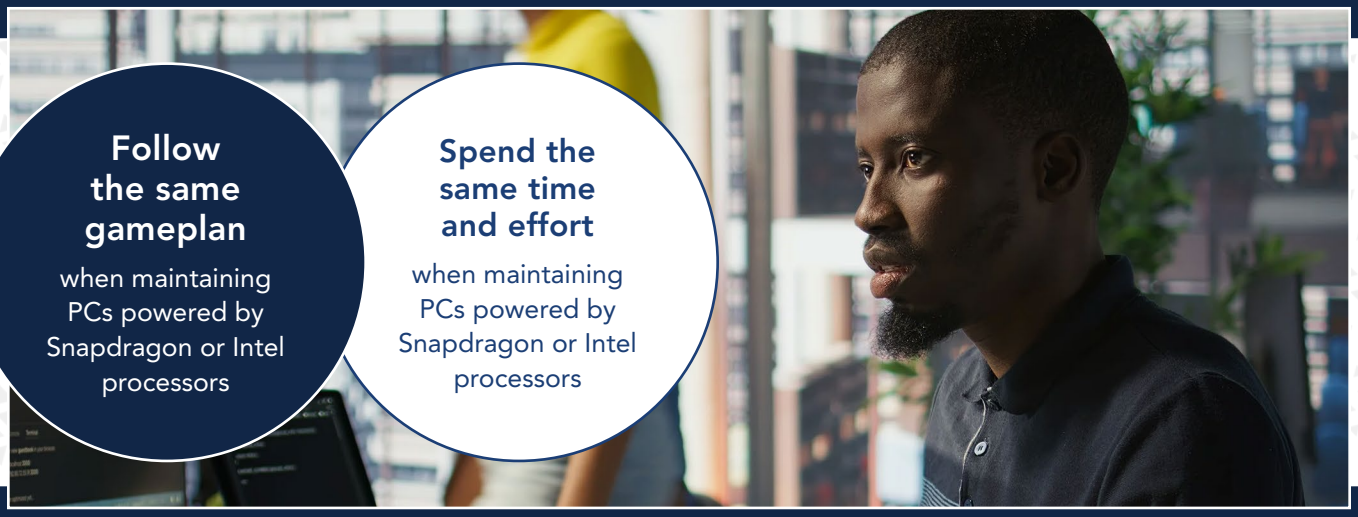
Adding Copilot+ PCs with Snapdragon to your endpoint management routine is no problem

We compared the time and effort required to complete 10 common management tasks on Windows 11 Pro PCs with Snapdragon X Series or Intel Core Ultra processors



A key part of an IT decision-maker's job is to weigh benefits and costs. Diversifying your corporate fleet makes sense from the end-user perspective because, according to Qualcomm® Technologies, Acer®, ASUS, Dell™, HP, Lenovo®, Microsoft, and Samsung Copilot+ PCs with Snapdragon® X Series CPUs "deliver multiple days of battery life, unparalleled performance plus efficiency to accelerate productivity and creativity."[1] Copilot+ PCs and AI PCs contain CPU, GPU, and specialized neural processing units (NPUs) for on-device AI tasks. But Microsoft requires that Copilot+ PCs have NPUs that can process a minimum of 40 trillions of operations per second (TOPS).[2]

To help determine the ease of maintaining a mixed fleet of AI PCs and Copilot+ PCs powered by Snapdragon or Intel® processors from the IT perspective, we completed 10 common endpoint management tasks on Windows 11 Pro PCs powered by Snapdragon X Elite, Snapdragon X Plus, and Intel® Core™ Ultra processors. We completed these tasks using both Windows Autopilot with Microsoft Intune and Microsoft Configuration Manager, two of the most common PC management tool sets.

We found no downsides to this mixed-CPU scenario in any of our tests. You get the benefits of cutting-edge technology—the potential for improved productivity and end-user experiences—and your IT admins don't have to scramble to learn new management tools.

How we tested

We report the average time and steps for mission-critical endpoint management tasks on similarly configured 14-inch Copilot+ PCs and AI PCs, with all running Windows 11 Pro:

Snapdragon	Intel
Dell Latitude™ 5455 AI PC • Premium laptop with an 8-core Snapdragon X Plus X1P-42-100 processor • 16 GB of DDR5 memory • 512 GB of NVMe® SSD storage • The integrated Qualcomm® Hexagon™ NPU delivers 45 TOPS.[3]	**Dell Latitude 5450 AI PC** • Business laptop with a 12-core Intel Core Ultra 5 135U processor • 16 GB of DDR5 memory • 512 GB of NVMe SSD storage • The integrated Intel AI Boost NPU delivers 11 TOPS.[6]
HP EliteBook 6 G1q Notebook AI PC • Next-gen notebook with a 12-core Snapdragon X Elite X1E-78-100 processor • 64 GB of DDR5 memory • 1 TB of NVMe SSD storage • The integrated Qualcomm Hexagon NPU delivers 45 TOPS.[4]	**HP EliteBook 640 G11 Notebook PC** • Premium notebook with a 12-core Intel Core Ultra 5 135U processor • 32 GB of DDR5 memory • 1 TB of NVMe SSD storage • The integrated Intel AI Boost NPU delivers 11 TOPS.[7]
Lenovo ThinkPad® T14s Gen 6 AI PC • Next-gen AI PC with a 12-core Snapdragon X Elite X1E-78-100 processor • 64 GB of DDR5 memory • 1 TB of NVMe SSD storage • The integrated Qualcomm Hexagon NPU delivers 45 TOPS.[5]	**Lenovo ThinkPad T14s Gen 6 AI PC** • Next-gen AI PC with an 8-core Intel Core Ultra 7 268V processor • 64 GB of DDR5 memory • 1 TB of NVM SSD storage • The Integrated Intel AI Boost NPU delivers 48 TOPS.[8]

Dell Latitude 5455 AI PC *HP EliteBook 6 G1q Notebook AI PC* *Lenovo ThinkPad T14s Gen 6 AI PC*

- **Asset management and accountability:** Getting real-time visibility into which company-issued devices are connected, vulnerable to attack, or failing.
- **Backups:** Setting up regular file backups to prevent data loss.
- **Customized startup programs:** Preventing employees from installing and running unauthorized software.
- **Disk cleanup:** Removing unnecessary files and applications to free up disk space and improve performance.
- **Driver updates:** Ensuring all hardware components have the correct drivers installed for optimal performance.
- **Network configuration:** Setting up and managing Wi-Fi connections and other network settings.
- **Software installation:** Installing and configuring new software as needed by end users.
- **Software updates:** Keeping the operating system and applications up to date with the latest patches and updates.
- **System optimization:** Checking system performance, managing startup programs, and optimizing settings for better performance.
- **User account management:** Creating, modifying, and deleting user accounts and managing permissions

We report the average time and steps necessary to execute these tasks using two different sets of management tools where appropriate:

- Windows Autopilot with Microsoft Intune
- Microsoft Configuration Manager (formerly Microsoft Endpoint Configuration Manager (MECM) and System Center Configuration Manager (SCCM))

Note that the times we report in this study do not include the initial setup of the Autopilot with Intune and Configuration Manager environments. We cover that process, which we completed on the same Windows 11 Pro PCs, in this corresponding deployment study.

The Copilot+ PC with Snapdragon advantage

According to Qualcomm Technologies, Copilot+ PCs powered by Snapdragon X Series processors include a number of features that boost end-user productivity, creativity, and communication:

AI-accelerated user experiences: Copilot+ PCs powered by Snapdragon contain dedicated NPUs for on-device AI features and capabilities.[9]

Performance and efficiency: Copilot+ PCs powered by Snapdragon deliver superior battery life and performance.[10]

Connectivity: Copilot+ PCs powered by Snapdragon include Qualcomm® FastConnect™ Mobile Connectivity System for multi-gigabit Wi-Fi 6 and 7 performance, expanded efficiency and capability, and ultra-low latency.[11]

▶ Learn more about Snapdragon X Elite processors

Qualcomm Technologies also notes these features of Copilot+ PCs powered by Snapdragon X Series processors that support the administrator experience:

Microsoft secured-core PCs: Integrated hardware, firmware, and software protections to protect devices, identities, and data.[12]

Advanced security: Additional silicon-based TPM (Trusted Platform Module), Zero Trust sensors, and resiliency features for OS, firmware, and BIOS protection.[13]

App Assure: This Microsoft FastTrack benefit is a quick way to ensure compatibility of business-critical apps following deployment in mixed-CPU environments.[14]

▶ Learn more about Snapdragon X Plus processors

What we learned

For a detailed breakdown of the steps we completed for each task, see the science behind the report.

Asset management and accountability

Keeping a centralized record of company-issued devices, their pertinent details, and their software statuses provides your IT team with the tools they need to identify vulnerabilities, streamline security and compliance audits, and make sure all devices are accounted for. We found that getting real-time visibility into new devices was straightforward, no matter which CPU powered the Windows 11 Pro PCs we tested or which Microsoft endpoint management tools we used.

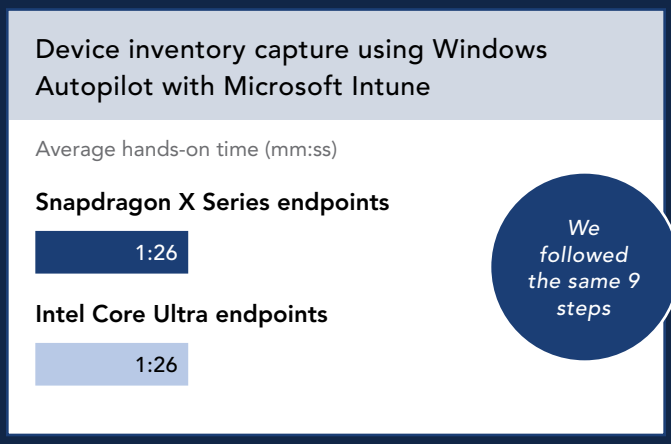


Figure 1: Average total time and steps to capture device inventory. Source: PT.

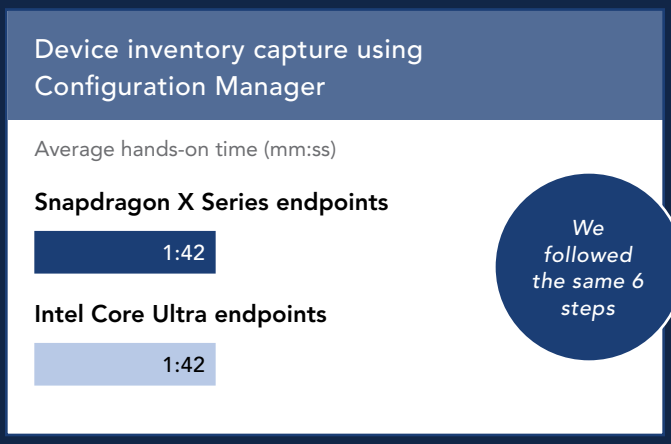


Figure 2: Average total time and steps to capture device inventory. Source: PT.

Backups

Backups are a safety net against accidents, equipment failure, and cyberattacks. Setting up regular file backups to prevent data loss is essential for business continuity and quick data recovery. In our Autopilot with Intune tests, we found that creating and implementing a redirection-to-OneDrive policy for all of our endpoints was simple. This task required only that we select "Windows 10 and later" to set the ball rolling.

In a Configuration Manager environment, this backup task would require a third-party application or redirection through user profiles in Microsoft Active Directory. This would be the case for all of the systems we tested, so we did not complete this task with Configuration Manager for this study.

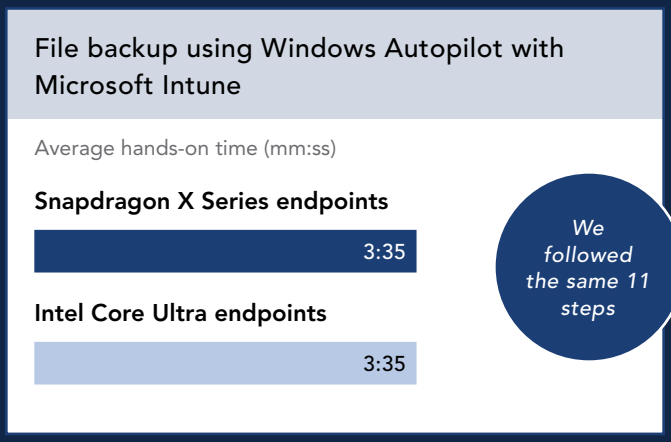


Figure 3: Average total time and steps to perform a file backup. Source: PT.

Customizing startup programs

By customizing which applications launch on startup, you can speed boot time and ensure that your employees have the tools they need to get the job done. Plus, preventing employees from installing and running unauthorized software helps your company enhance security and maintain control over the device environment. In both of our Microsoft environments, these processes were identical—regardless of processor.

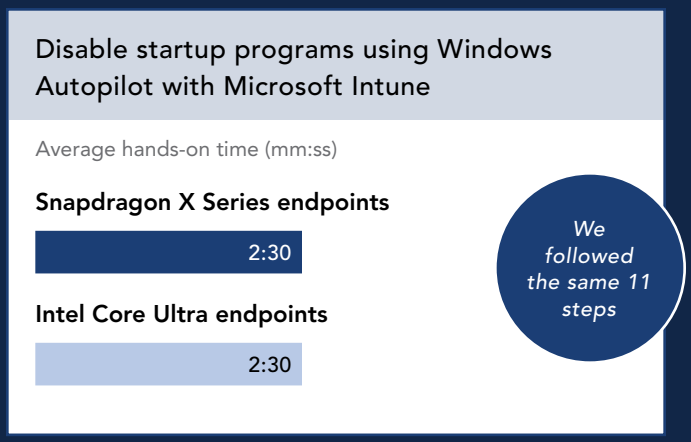


Figure 4: Average total time and steps to disable startup programs. Source: PT.

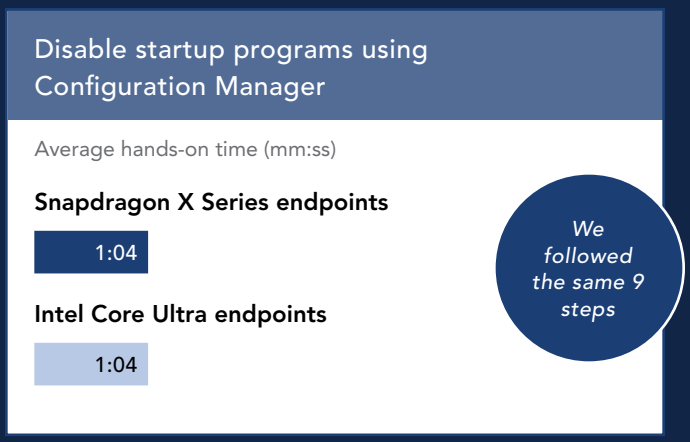


Figure 5: Average total time and steps to disable startup programs. Source: PT.

Disk cleanup

Removing unnecessary files and applications to free disk space and improve performance is another crucial step in optimizing end-user productivity. For both ARM- and x64-based Windows 11 Pro PCs, disk cleanup was the same within each Microsoft endpoint management solution. In the Autopilot with Intune environment, we created a Storage Sense policy. In the Configuration Manager environment, we used the Assets and compliance tab to create Storage Sense configuration items. The results were identical across all endpoints.

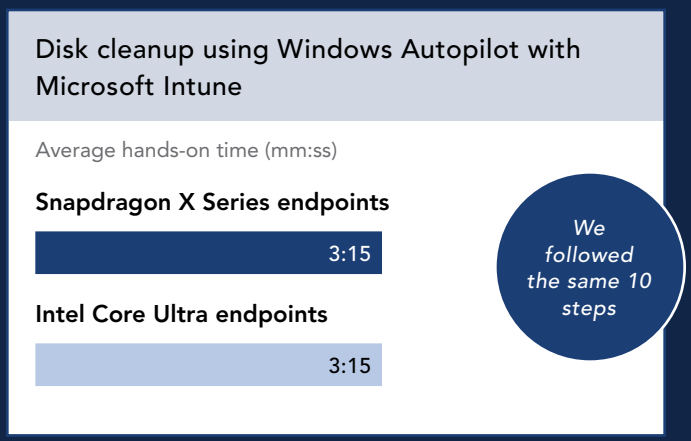


Figure 6: Average total time and steps to clean up a disk. Source: PT.

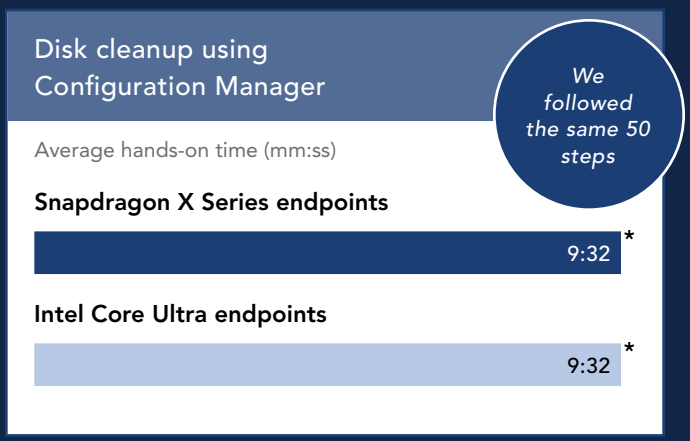


Figure 7: Average total time and steps to clean up a disk. Source: PT.

**In order to keep a consistent chart size, the scale of the bars in this figure differ from the rest.*

Driver updates

Whether your team is updating drivers to improve functionality, fix bugs, patch vulnerabilities, or resolve device issues, the smoother this process is, the more tasks they can tackle in a day.

In our Autopilot with Intune tests, we found that Intune was flexible enough to handle different methods.

For HP and Lenovo, the individual drivers broke out nicely and we could deploy these devices by simply repackaging them. Any vendor that packages drivers as executables can be performed this way. Updating device drivers on the HP and Lenovo endpoints required 16 steps that took between 2 minutes and 28 seconds and 2 minutes and 46 seconds.

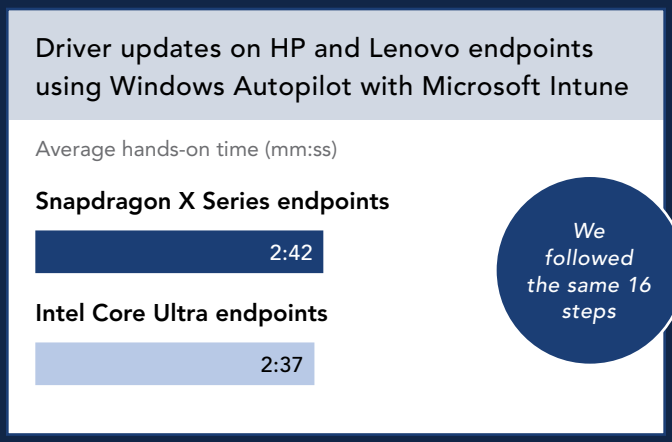


Figure 8: Average total time and steps to install drivers on HP and Lenovo endpoints. Source: PT.

For Dell, we used the vendor's native tool. We did this by executing a script that calls on the tool to perform the updates. This approach should work with any system that contains such a tool from its vendor. Updating device drivers with PowerShell and a Dell vendor application required 7 steps that took 1 minute and 25 seconds.

In Configuration Manager environments, OEM drivers are integrated into freshly deployed images. Afterwards, vendor tools installed on the client systems can be used to maintain those updates. For this study, we did not attempt to perform OEM driver updates using MCM.

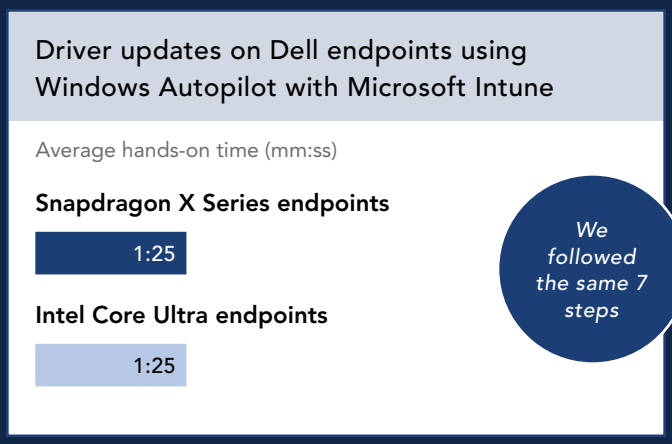
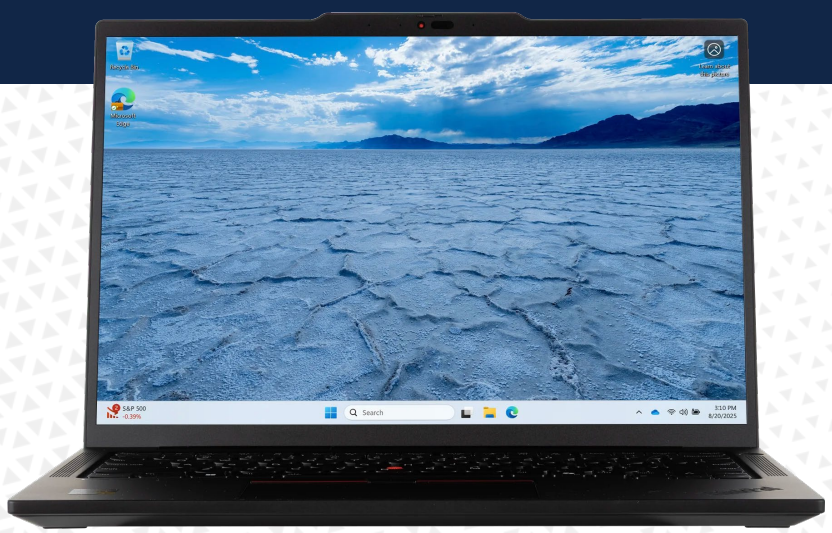


Figure 9: Average total time and steps to install drivers on HP and Lenovo endpoints. Source: PT.



Network configuration

Whether it's to improve network performance or to enhance security, upgrading and replacing wireless access points can cause disruption and downtime, so you want to make any corresponding device adjustments smooth as possible. To see whether diversifying your corporate fleet might complicate this process, we examined the time and effort required to set up and manage Wi-Fi connections and other network settings in mixed-CPU environments. We found deploying a Wi-Fi profile using Autopilot with Intune to be identical in both instances.

We were unable to complete this task in Configuration Manager, because in April 2022, Microsoft removed the use of Wi-Fi profiles to deploy wireless network settings to users in Configuration Manager.[15]

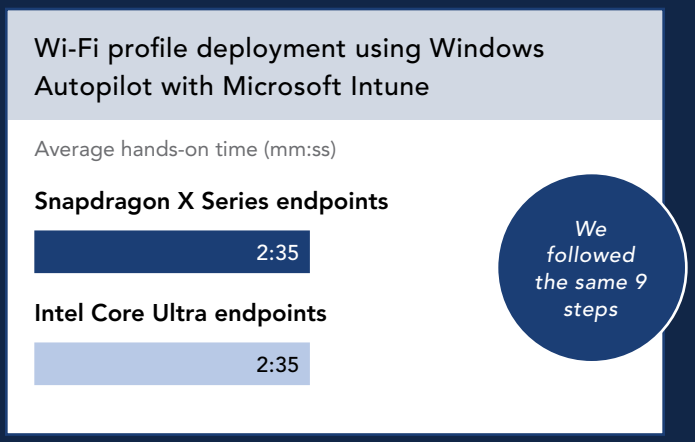


Figure 10: Average total time and steps to configure a network. Source: PT.

Software installation

Having IT lead your software installation efforts instead of your end-users reduces the likelihood of introducing security risks, disclosing sensitive data to bad actors, and encountering compatibility issues. The downside to this approach is that it increases the IT workload. To determine whether performing this task on a fleet including devices powered by both Snapdragon and Intel processors added extra complexity, we installed and configured new software on all of the Windows 11 Pro PCs under test.

In the Autopilot with Intune scenario, we had to convert the software, create the app, and upload the package. This process involved 16 steps that took just over 2.5 minutes of administrator time.

To deploy software using Configuration Manager, we had to create a device collection that designated the ARM or x64 CPU, create the app, distribute the content, and assign the application to the appropriate device collection. This process involved 48 steps that took just over 5 minutes of administrator time.

With both of the tools and approaches we used, the experiences were the same regardless of the processor powering each device.

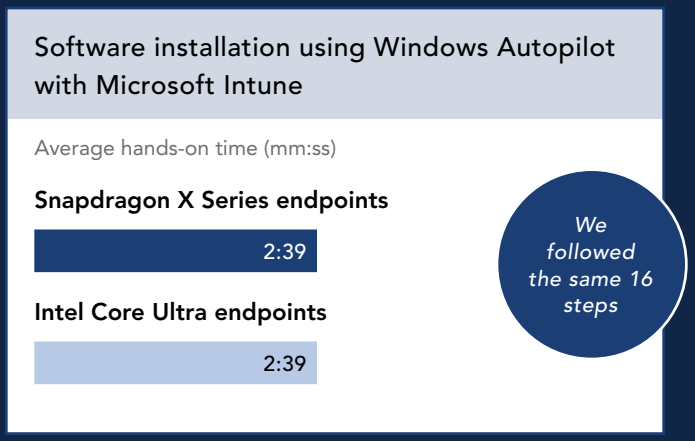


Figure 11: Average total time and steps to install software. Source: PT.

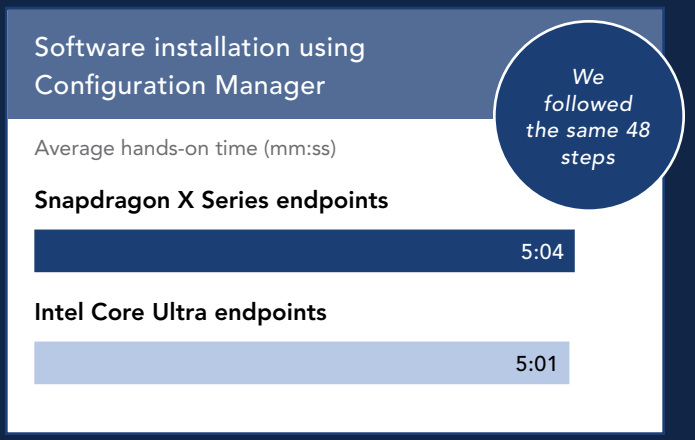


Figure 12: Average total time and steps to install software. Source: PT.

Software updates

Acquiring the appropriate Windows 11 Pro PCs for employee use is only the beginning. Over the years that your company owns these devices, IT staff can devote many hours to taking care of them—from periodic software updates to patching potential security issues. And rolling out software updates or security patches that eat into your end-users' time might frustrate them. No one wants their teams to resort to using unauthorized apps or cloud services to get their work done during prolonged outages. So, the more smoothly that mission-critical software updates happen, the less chance you'll be dealing with bigger problems in the future.

In our hands-on tests using Autopilot with Intune, we found that it was simple to create update rings and that the default updates for all users included Windows drivers and Microsoft product update options. We implemented an OS update in 7 steps, which took under 2 minutes of hands-on IT admin time.

In the Configuration Manager scenario, we again followed the same steps across all systems, which took exactly the same amount of hands-on time.

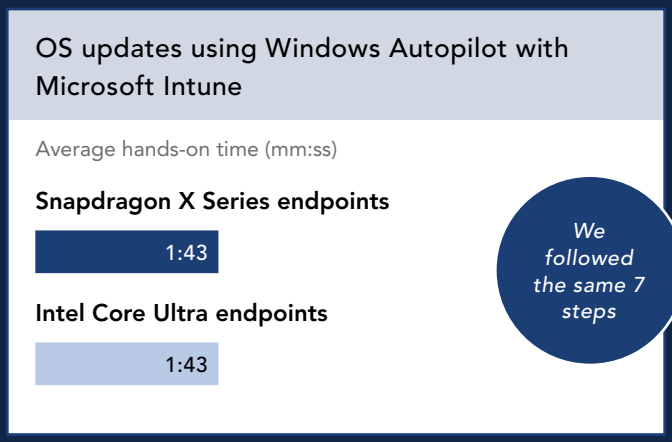


Figure 13: Average total time and steps to update software. Source: PT.

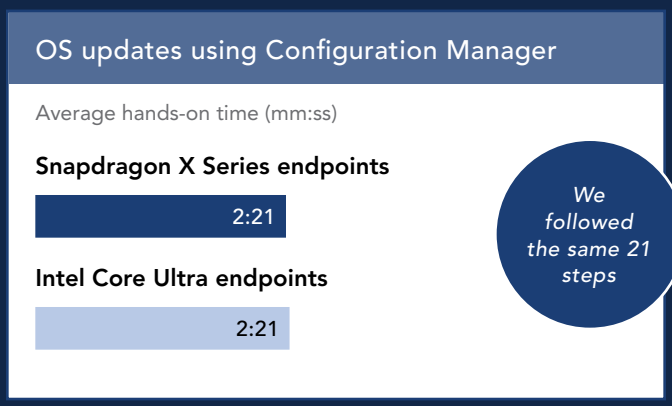


Figure 14: Average total hands-on time and steps to update software. Source: PT.

System optimization

With regular system optimizations, end-users may achieve better workload processing speeds and the ability to multitask without huge slowdowns. But manually optimizing individual PCs can seriously drain both IT time and resources. To see how diversifying your fleet to better meet end-user needs might affect this process, we compared the times and steps required to check system performance, manage startup programs, and optimize settings for better performance for Windows 11 Pro PCs with Snapdragon or Intel processors. We found creating and implementing an optimization profile for all users and all devices using the Intune console required the same 9 steps and took the same time: 1 minute and 49 seconds.

In the Configuration Manager environment, we created Group Policy Objects within the domain, where we defined and assigned Organizational Units within the Active Directory. For new systems, Configuration Manager is able to target specific Organizational Units upon deployment. For this system-optimization task, the systems under test automatically received the optimization policies we assigned to the respective Organizational Objects.

Figure 15: Average total time and steps to optimize a system. Source: PT.

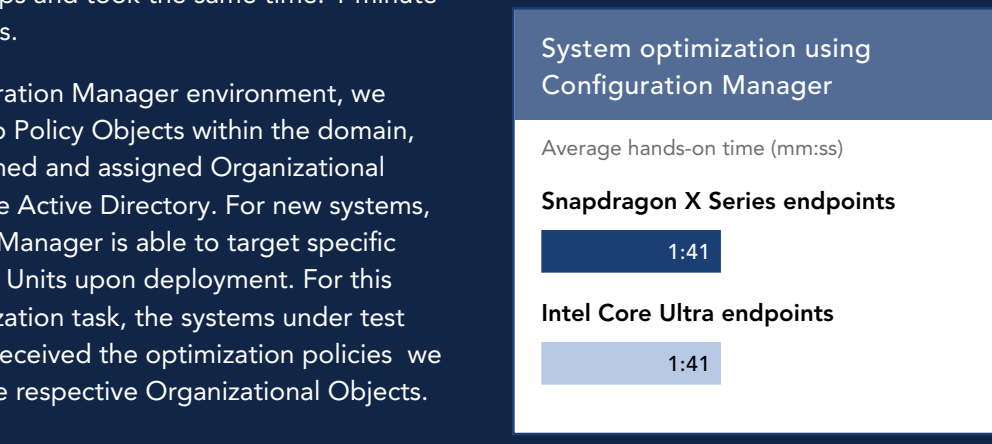


Figure 16: Average total time and steps to optimize a system. Source: PT.

User account management

Personalizing users' experiences not only increases employee satisfaction, but it also lets your company control access to proprietary resources and sensitive data. For this test, we created, modified, and deleted user accounts, as well as managing permissions. We found that it was a simple matter to complete three essential user account management tasks in the Autopilot with Intune environment.

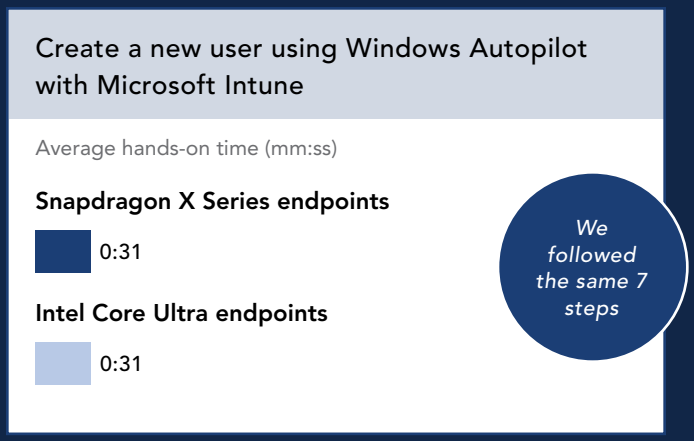


Figure 17: Average total time and steps to create a new user. Source: PT.

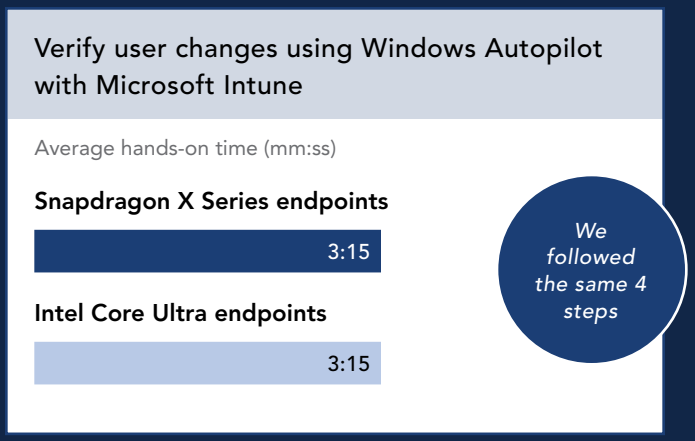


Figure 19: Average total time and steps to verify user changes. Source: PT.

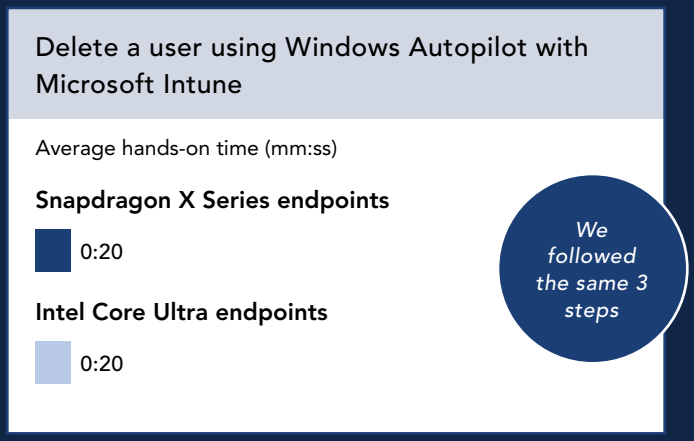


Figure 18: Average total time and steps to delete a user. Source: PT.

In the Configuration Manager environment, we created users in an Active Directory. Then, we imported that user account data from Active Directory into Configuration Manager, where we added users to User Collections and used those as targets.

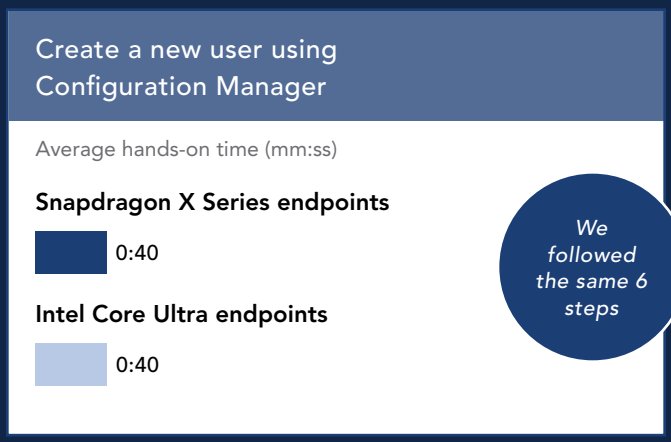


Figure 20: Average total time and steps to create a new user. Source: PT.

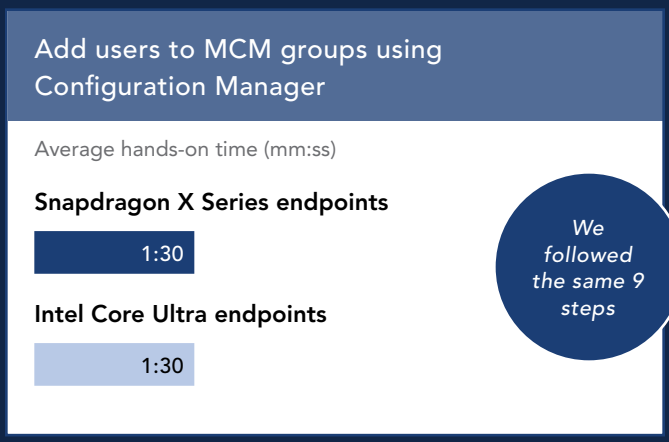


Figure 22: Average total time and steps to add users to MCM groups. Source: PT.

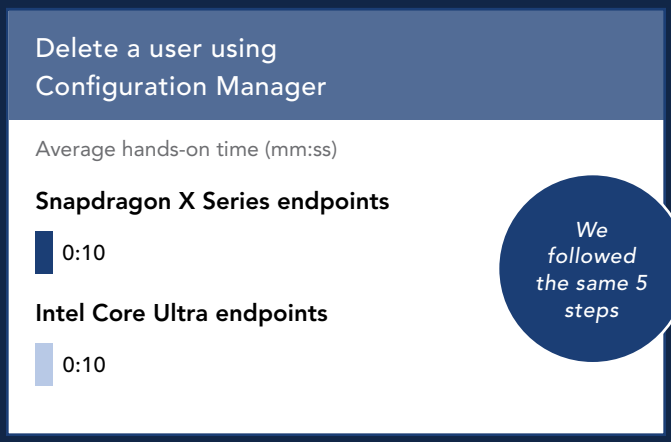


Figure 21: Average total time and steps to delete a user. Source: PT.

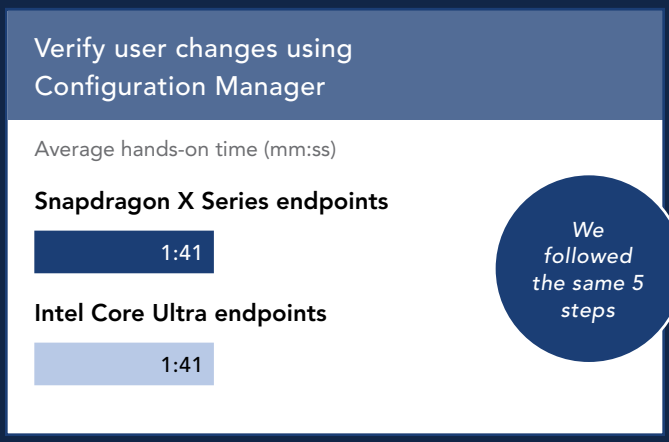


Figure 23: Average total time and steps to verify user changes. Source: PT.

Conclusion

We found that completing common management tasks on Windows 11 Pro PCs powered by Snapdragon X Series and Intel Core Ultra processors presents no additional complexity or increased IT workloads. Across these common endpoint management tasks—including device inventory, backups, startup program customization, disk cleanup, driver updates, network configuration, software installation and updates, system optimization, and user account management—IT administrators can follow the same procedures, use the same tools (Windows Autopilot with Microsoft Intune or Microsoft Configuration Manager), and expect consistent time and effort regardless of CPU architecture.

1. Qualcomm, "Snapdragon X Series is the Exclusive Platform to Power the Next Generation of Windows PCs with Copilot+ Today," accessed September 9, 2025, https://www.qualcomm.com/news/releases/2024/05/snapdragon-x-series-is-the-exclusive-platform-to-power-the-next-.
2. Qualcomm, "What TOPS means," accessed October 6, 2025, https://www.qualcomm.com/content/dam/qcomm-martech/dm-assets/documents/What-TOPS-Means-Snapdragon-X-Series.pdf.
3. Qualcomm, "Snapdragon X Plus," accessed September 8, 2025, https://www.qualcomm.com/products/mobile/snapdragon/laptops-and-tablets/snapdragon-x-plus.
4. Qualcomm, "Snapdragon X Elite," accessed September 8, 2025, https://www.qualcomm.com/products/mobile/snapdragon/laptops-and-tablets/snapdragon-x-elite.
5. Qualcomm, "Snapdragon X Elite."
6. TechPowerUp, "Intel Core Ultra 5 135U," accessed September 8, 2025, https://www.techpowerup.com/cpu-specs/core-ultra-5-135u.c3558.
7. TechPowerUp, "Intel Core Ultra 5 135U."
8. TechPowerUp, Intel Core Ultra 7 268V," accessed September 8, 2025, https://www.techpowerup.com/cpu-specs/core-ultra-7-268v.c3793.
9. Qualcomm, "The platform for on-device AI," accessed September 8, 2025, https://aihub.qualcomm.com.
10. Qualcomm, "Battery life meets performance: You no longer have to decide which you value more in a PC," accessed September 8, 2025, https://www.qualcomm.com/news/onq/2024/06/battery-life-meets-performance-copilot-plus-pcs-powered-by-snapdragon-x-series.
11. Qualcomm, "Raising the bar for wireless connectivity," accessed September 8, 2025, https://www.qualcomm.com/products/technology/wi-fi/fastconnect.
12. Microsoft Ignite, "Windows 11 Secured-core PCs," accessed September 8, 2025, https://learn.microsoft.com/en-us/windows-hardware/design/device-experiences/oem-highly-secure-11.
13. Qualcomm, "Snapdragon X Series: A new era for enterprise efficiency," accessed September 8, 2025, https://www.qualcomm.com/news/onq/2025/01/snapdragon-x-series-a-new-era-for-enterprise-efficiency.
14. Microsoft Ignite, "App Assure," accessed September 8, 2025, https://learn.microsoft.com/en-us/windows/compatibility/app-assure.
15. Microsoft Intune, "Create Wi-Fi- profiles," accessed September 8, 2025, https://learn.microsoft.com/en-us/intune/configmgr/protect/deploy-use/create-wifi-profiles.

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This project was commissioned by Qualcomm Technologies.