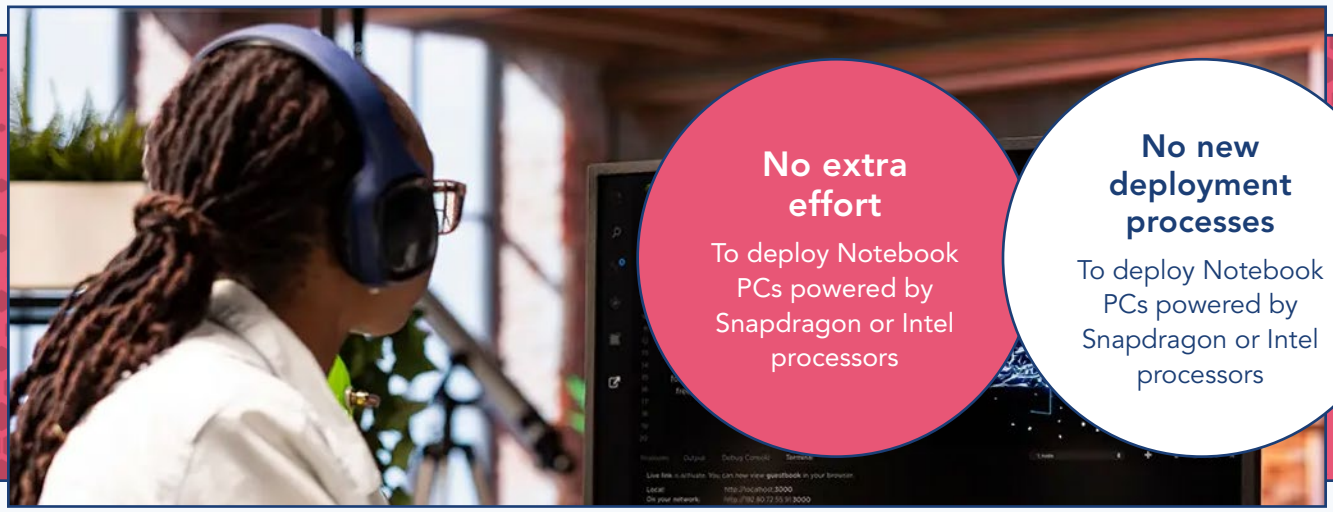
Adding Copilot+ PCs with Snapdragon to your HP fleet won't require IT deployment changes

We measured the time and effort required to complete OS deployment on HP EliteBook Notebook PCs powered by Snapdragon and Intel processors in two Windows environments



In response to the demand for AI, HP has unveiled next-gen Copilot+ PCs powered by Snapdragon® X Series processors.[1] Copilot+ PCs run AI tasks on specialized neural processing units (NPUs), which Microsoft requires have at least 40 trillions of operations per second (TOPS) of processing capability.[2] Copilot+ PCs with Snapdragon X Series processors provide 45 TOPs and "AI capabilities that are redefining the personal computer experience – all with industry-leading performance and multi-day battery life."[3] But how easily will Notebook PCs powered by Snapdragon X Series processors integrate into your x64-based environment?

To find out, we deployed an HP EliteBook 6 G1q Notebook AI PC powered by a Snapdragon X Elite X1E-78-100 processor and an HP EliteBook 640 G11 Notebook PC powered by an Intel® Core™ Ultra 5 135U processor. We completed this test using both Windows Autopilot with Microsoft Intune and Configuration Manager deployment approaches.

We found both deployment approaches required the same time and steps—regardless of processor.

How we tested

We report the average time and steps for OS deployment on these 14-inch HP PCs. Both Notebook PCs contain CPU, GPU, and NPU architecture and were running Windows 11 Pro:

Snapdragon	Intel
HP EliteBook 6 G1q Notebook AI PC	**HP EliteBook 640 G11 Notebook PC**
Copilot+ PC with a 12-core Snapdragon X Elite X1E-78-100 processor. The integrated Qualcomm® Hexagon™ NPU delivers 45 TOPS.[4] This EliteBook Notebook AI PC was configured with 64 GB of DDR5 memory and 1 TB of NVMe® SSD storage.	Premium notebook with a 12-core Intel Core Ultra 5 135U processor. The integrated Intel AI Boost NPU delivers 11 TOPS.[5] This EliteBook Notebook PC was configured with 32 GB of DDR5 memory and 1 TB of NVMe SSD storage.

We investigated how OS deployment works for organizations using Windows Autopilot with Microsoft Intune or Microsoft Configuration Manager (formerly Microsoft Endpoint Configuration Manager [MECM] or System Center Configuration Manager [SCCM]).

To simulate an organization using these Microsoft endpoint management tools, we reset the Notebook PCs to factory settings, added device IDs to Intune, and deployed operating systems via Microsoft Autopilot supported by Microsoft Entra ID and Intune. We configured organizational settings and performed user logins on each Intune-managed system.

Next, we reset the Notebook PCs to factory default and booted the systems on a local network connected to

Configuration Manager. We automatically deployed Windows 11 Pro operating systems using Configuration Manager task sequences. Configuration Manager applied organizational settings based on its internal settings and policies. We then performed domain user logins on each Configuration Manager endpoint.

In a corresponding study focused on management, we also complete mission-critical endpoint maintenance tasks on the same HP Notebook PCs. Read the management study to see what we found.

Key features of Copilot+ PCs with Snapdragon

According to Qualcomm Technologies, new Copilot+ PCs powered by Snapdragon X Series processors take end-user productivity, creativity, and communication to the next level:

AI-accelerated user experiences Copilot+ PCs powered by Snapdragon contain dedicated NPU for on-device AI features and capabilities.[6]

Performance and efficiency: Copilot+ PCs powered by Snapdragon deliver superior battery life and performance.[7]

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.[8]

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

Microsoft secured-core PCs: Integrated hardware, firmware, and software protections to protect devices, identities, and data.[9]

Advanced security: Additional silicon-based TPMs (Trusted Platform Modules), Zero Trust sensors, and resiliency features for OS, firmware, and BIOS protection.[10]

App Assure: This is part of the Microsoft FastTrack benefit and a quick way to ensure compatibility of business-critical apps continue to work following deployment in mixed-CPU environments.[11]

▶ Learn more about Snapdragon X Elite processors

Deploying devices

Investing in Copilot+ PCs that offer robust performance tailored to your evolving business requirements can help you incorporate AI into daily routines. If you decide to add AI PCs to your mix, it's crucial to make sure this transition doesn't create additional work for IT teams. Having standard OS deployment processes that work efficiently regardless of processor architecture helps IT teams get employees' new or re-imaged devices up and running as quickly as possible. As the results that follow indicate, OS deployment processes for HP EliteBook Notebook PCs powered by Snapdragon or Intel processors were identical. This study looks at Snapdragon vs. Intel OS deployment. However, based on our recent study comparing deployment of AMD and Intel processor-powered systems, you can likely expect similar results against AMD processors.

Approach 1: Autopilot with Intune

We found that deploying both HP EliteBook Notebook PCs required the same 5 steps through the management tabs in the Intune management hub:

1. Export the hardware hash.
2. Upload the device ID.
3. Power on the device.
4. Register the device.
5. Log into the device.

The only true admin downtime occurred between steps 4 and 5, when we had to wait for Autopilot to create a Microsoft Entra object. This "system" process averaged just under two minutes on the ARM-based HP EliteBooks Notebook PC and just over two minutes on the x64-based EliteBook Notebook AI PC.

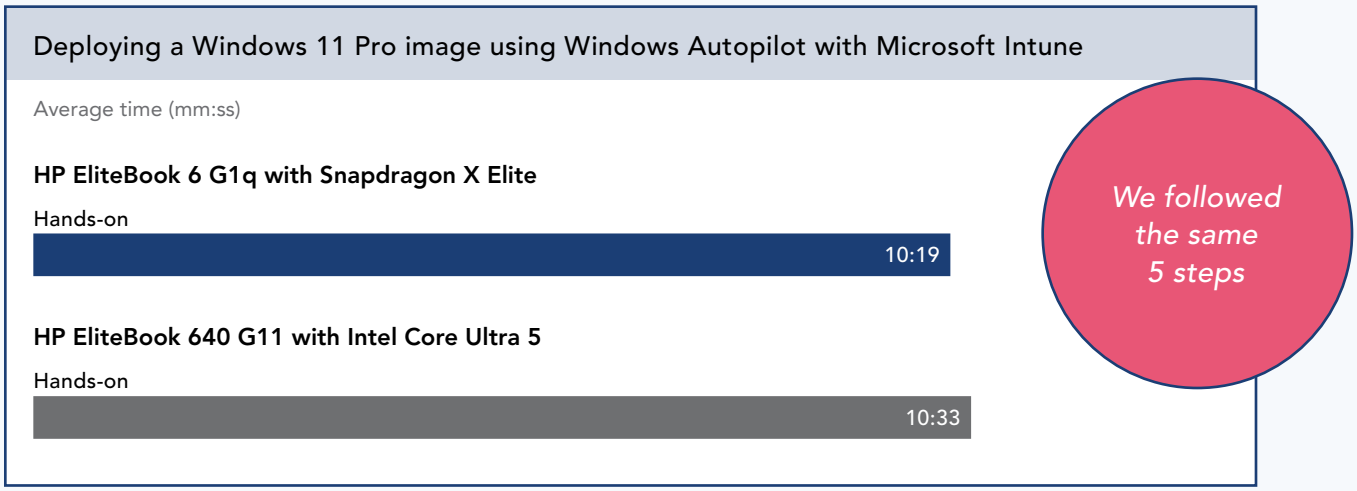


Figure 1: Average total time to deploy a Windows 11 Pro image using Windows Autopilot with Microsoft Intune. Source: PT.

Approach 2: Configuration Manager task sequence

We found that deploying both HP EliteBook Notebook PCs required the same 5 steps when using Windows 11 ARM- and x64-specific Configuration Manager task sequences:

1. Press the power button on the target device.
2. To bring up the boot menu, press F12 during boot.
3. Select PXE BOOT from the boot menu and press Enter.
4. When prompted, enter the password for the MCM shares.
5. When prompted, select the installation option presented for your system (Windows 11 ARM or Windows 11 x64) and press OK.

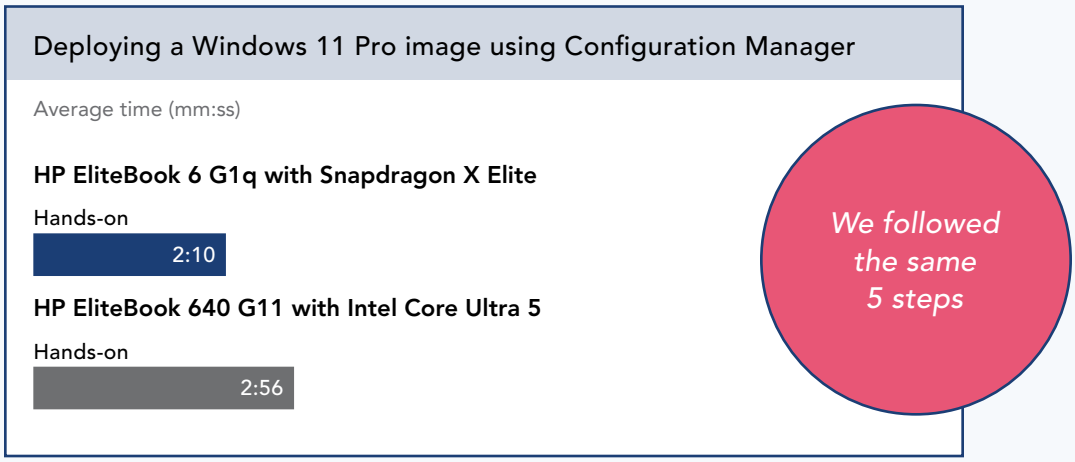


Figure 2: Average total time to deploy a Windows 11 Pro image using Configuration Manager. Source: PT.

Conclusion

In our hands-on Windows Autopilot with Microsoft Intune and Configuration Manager tests, we found OS deployment of HP EliteBook Notebook PCs powered by Snapdragon X Series or Intel Core Ultra processors was as quick and easy. This consistency enables IT teams to maintain streamlined workflows—allowing businesses to optimize performance and resource utilization without disrupting established deployment practices.

1. Qualcomm, "Qualcomm Computex 2024 Keynote Unveils "The PC Reborn" with Snapdragon X Series and Copilot+ PCs," accessed October 6, 2025, https://www.qualcomm.com/news/releases/2024/06/qualcomm-computex-2024-keynote-unveils--the-pc-reborn--with-snap.
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 Series is the Exclusive Platform to Power the Next Generation of Windows PCs with Copilot+ Today," accessed October 6, 2025, https://www.qualcomm.com/news/releases/2024/05/snapdragon-x-series-is-the-exclusive-platform-to-power-the-next-.
4. Qualcomm, "Snapdragon X Elite," accessed October 6, 2025, https://www.qualcomm.com/products/mobile/snapdragon/laptops-and-tablets/snapdragon-x-elite.
5. TechPowerUp, "Intel Core Ultra 5 135U," accessed October 6, 2025, https://www.techpowerup.com/cpu-specs/core-ultra-5-135u.c3558.
6. HP Tech Takes /…, "HP and Qualcomm: Redefining Mobile Computing with Snapdragon X Elite," accessed October 6, 2025, https://www.hp.com/us-en/shop/tech-takes/snapdragon-x-elite-omnibook-x-review.
7. HP Tech Takes /…, "HP and Qualcomm: Redefining Mobile Computing with Snapdragon X Elite."
8. Qualcomm, "Raising the bar for wireless connectivity," accessed October 6, 2025, https://www.qualcomm.com/products/technology/wi-fi/fastconnect.
9. Microsoft Ignite, "Windows 11 Secured-core PCs," accessed October 6, 2025, https://learn.microsoft.com/en-us/windows-hardware/design/device-experiences/oem-highly-secure-11.
10. Qualcomm, "Snapdragon X Series: A new era for enterprise efficiency," accessed October 6, 2025, https://www.qualcomm.com/news/onq/2025/01/snapdragon-x-series-a-new-era-for-enterprise-efficiency.
11. Microsoft Ignite, "App Assure," accessed October 6, 2025, https://learn.microsoft.com/en-us/windows/compatibility/app-assure.

Read the science behind this report ▶

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