

# Windows Autopilot & Intune: Device Enrollment Simplified

**Windows AutoPilot:** A cloud-based technology that simplifies the setup and configuration of a new device or existing one, particularly in larger organizations. IT admin can configure and set up devices remotely, without needing to physically touch the machines, reducing the manual workload involved in deployment. For this guide I am using a Microsoft E5 license. Key features include **Out-of-Box Experience (OOBE), Zero-Touch Deployment, Dynamic Configuration Profiles, User-Driven Mode, Integration with Azure Active Directory**, etc.

I will follow five major steps in the **Microsoft Intune Admin Center** after enabling MDM & WIP from **Microsoft Entra Admin Center** to manage Cloud PCs and enforce data protection through Windows Information Protection (WIP) for this process:

- 1 Create a Device Group** (e.g. [Autopilot devices](#)): It allows for assigning deployment profiles, apps, and policies to specific devices based on role, department, or location, making device management and customization easier.
- 2 Configure the Enrollment Status Page (ESP)** (e.g. [Enrollment status](#)): It ensures that the devices are fully configured with apps and policies before users can start using them.
- 3 Create Windows Autopilot Deployment Profile** (e.g. [Autopilot profile](#)): We need to define how a device should be configured during setup, including things like user experience, security settings, and which apps and policies to apply, ensuring a consistent and automated setup for devices.
- 4 Assign Apps:** Deploy the required apps to the **device group** such as Microsoft 365 Apps etc.
- 5 Register the Device in Intune-Autopilot:** The hardware ID of the PC from manufacturer or using PowerShell command (Hyper-V PC).

Let's go to **Microsoft Entra Admin Center** and search for **MDM & WIP** and check the *user scope* to **all** for both.

The screenshot shows the Microsoft Entra Admin Center interface. On the left, there is a navigation sidebar with various sections like Home, What's new, Diagnose & solve problems, Favorites, Identity, Protection, Identity Governance, Verified ID, and Permissions Management. The main content area is titled "Microsoft Intune" and shows settings for "MDM user scope". There are three radio buttons: "None", "Some", and "All", with "All" being selected and highlighted with a red box. Below this are fields for "MDM terms of use URL" (set to <https://portal.manage.microsoft.com/TermsofUse.aspx>), "MDM discovery URL" (set to <https://enrollment.manage.microsoft.com/enrollmentserver/discovery.svc>), and "MDM compliance URL" (set to <https://portal.manage.microsoft.com/?portalAction=Compliance>). Below these is a "Restore default MDM URLs" button. Further down is a section for "Windows Information Protection (WIP) user scope", which also has "None", "Some", and "All" radio buttons, with "All" selected and highlighted with a red box. Below this is a "WIP terms of use URL" field (set to [https://enrollment.manage.microsoft.com/TermsOfUse.aspx](#)) and a "Restore default WIP URLs" button. At the bottom right of the main content area, there is a "Save" button.

Let's dive into the details of each step mentioned above from **Microsoft Intune Admin Center**:

**Step 1 Create a Device Group:** Go Microsoft Intune Admin Center and Groups and Create the new group I gave Autopilot devices as group name and leave other as default now.

The screenshot shows the Microsoft Intune Admin Center interface. On the left, the navigation bar has 'Groups' selected. The main 'Groups | Overview' page shows basic information like 'Total groups' (4) and 'M365 groups' (3). A 'New group' button is highlighted with a red box. On the right, a 'New Group' configuration dialog is open. It shows 'Group type' set to 'Security', 'Group name' set to 'Autopilot devices', and 'Group description' set to 'Devices group for autopilot configurations'. The 'Create' button at the bottom is also highlighted with a red box.

**Step 2 Configure the Enrollment Status Page (ESP):** Click Devices > Windows > Enrollment > ESP then click on create

The screenshot shows the Microsoft Intune Admin Center interface. On the left, the navigation bar has 'Devices' selected. The main 'Windows | Enrollment' page shows sections for 'Enrollment notifications', 'Windows Hello for Business', 'Windows Autopilot device preparation', 'Device preparation policies', and 'Windows Autopilot'. Under 'Windows Autopilot', the 'Enrollment Status Page' option is highlighted with a red box. Below it, a sub-page titled 'Enrollment Status Page' is shown with a '+ Create' button highlighted with a red box. The sub-page content includes a note about the enrollment status page appearing during initial device setup and first user sign-in, and a table for managing the status page settings.

👉 Name the ESP ( Enrollment status) then proceed to the next step. Adjust the setting as needed then next.

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Microsoft Intune admin center

Create profile

Basics Settings Assignments Scope tags Review + create

Name \* Enrollment status

Description

Show app and profile configuration progress No Yes

Show an error when installation takes longer than specified number of minutes 120

Show custom message when time limit or error occurs

Setup could not be completed. Please try again or contact your support person for help.

Turn on log collection and diagnostics page for end users

Only show page to devices provisioned by out-of-box experience (OOBE)

Block device use until all apps and profiles are installed

Allow users to reset device if installation error occurs

Allow users to use device if installation error occurs

Block device use until required apps are installed if they are assigned to the user/device All Selected

Previous Next

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👉 Assign the group that we have created in Step 1 i.e. Autopilot devices and leave the scope tag default

Microsoft Intune admin center

Create profile

Basics Settings Assignments Scope tags Review + create

Included groups Add groups Add all users Add all devices

Groups Filter Filter

No groups selected

Search

2 results found

All Groups

Name	Type	Details
Autopilot devices	Group	
CloudPCHub	Group	

Selected (1)

Autopilot devices

Create

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👉 Review and create the Enrollment Status Profile

Microsoft Intune admin center

Create profile

Summary

Basics

Name: Enrollment status  
Description: No Description

Settings

Show app and profile configuration progress: Yes  
Show an error when installation takes longer than specified number of minutes: 120  
Show custom message when time limit or error occurs: Yes  
Error message: Setup could not be completed. Please try again or contact your support person for help.  
Turn on log collection and diagnostics page for end users  
Only show page to devices provisioned by out-of-box experience (OOBE)  
Block device use until all apps and profiles are installed  
Allow users to reset device if installation error occurs  
Allow users to use device if installation error occurs  
Block device use until required apps are installed if they are assigned to the user/device

Assignments

Included groups: Autopilot devices

Previous Create

**Step 3 Create Windows Autopilot Deployment Profile:** Again *Devices > Windows > Enrollment > Deployment Profiles* and proceed to create profiles then *Windows PC*

The screenshot shows the Microsoft Intune admin center interface. The left sidebar has 'Devices' selected. The main navigation bar shows 'Home > Devices | Windows > Windows | Enrollment'. Under 'Windows | Enrollment', there are several sections: CNAME Validation, Co-management Settings, Device platform restriction, Device limit restriction, Enrollment notifications, Windows Hello for Business, Windows Autopilot device preparation, Windows Autopilot rules, Devices, Deployment profiles, and Enrollment Status Page. The 'Deployment profiles' link is highlighted with a red box.

The screenshot shows the 'Windows Autopilot deployment profiles' page. The left sidebar has 'Devices' selected. The main navigation bar shows 'Home > Devices | Windows > Windows | Enrollment > Windows Autopilot deployment profiles'. The page title is 'Windows Autopilot deployment profiles'. It features a table with columns for 'Description', 'Join type', and 'Assigned'. A tooltip for 'Windows PC' is shown over the 'Description' column header. The 'Create profile' button is highlighted with a red box.

The screenshot shows the 'Create profile' wizard for 'Windows PC'. The steps are: 1. Basics, 2. Out-of-box experience (OOBE), 3. Assignments, 4. Review + create. The 'Name' field is filled with 'Autopilot profile'. The 'Convert all targeted devices to Autopilot' switch is set to 'Yes'. The 'Next' button is highlighted with a red box.

👉 Name the profile ([Autopilot profile](#))

👉 You can change the **Out-of-box experience (OOBE)** as required, I leave it as default now. **Assign the group** that we have created in step 1 Autopilot devices. Then *review and Create*

Microsoft Intune admin center

Create profile Windows PC

Basics Out-of-box experience (OOBE) Assignments Review + create

Configure the out-of-box experience for your Autopilot devices

Deployment mode \* User-Driven

Join to Microsoft Entra ID as \* Microsoft Entra joined

Microsoft Software License Terms Show Hide

Important information about hiding license terms

Privacy settings Show Hide

The default value for diagnostic data collection has changed for devices running Windows 10, version 1903 and later, or Windows 11.

Hide change account options Show Hide

User account type Administrator Standard

Allow pre-provisioned deployment No Yes

Language (Region) Operating system default

Automatically configure keyboard No Yes

Apply device name template No Yes

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Microsoft Intune admin center

Create profile Windows PC

Basics Out-of-box experience (OOBE) Assignments Review + create

Included groups

Add groups Add all devices

Groups Remove

Autopilot devices Remove

Previous Next

**Step 4 Assign Apps:** Go to *Apps > Windows > add*

Microsoft Intune admin center

Home > Apps | Windows >

Windows | Windows apps

Search Add Refresh Filter Export Columns

Filters applied: Platform, App type

Search by name or publisher

Name	Type	Status
------	------	--------

👉 For example, I have added **Microsoft 365 Apps** and selected the desired apps as shown below

Microsoft Intune admin center

Home > Apps | Windows > Windows | Windows apps > Add Microsoft 365 Apps

Microsoft 365 Apps (Windows 10 and later)

1 App suite information 2 Configure app suite 3 Assignments 4 Review + create

Suite Name \* Microsoft 365 Apps for Windows 10 and later

Description \* Microsoft 365 Apps for Windows 10 and later

Get help with markdown supported for descriptions.

Preview Microsoft 365 Apps for Windows 10 and later

Publisher Microsoft

Category Productivity

Show this as a featured app in the Company Portal No

Information URL https://products.office.com/explore-office-for-home

Privacy URL https://privacy.microsoft.com/privacystatement

Developer Microsoft

Owner Microsoft

Notes

Logo Change image

Office

Next

Microsoft Intune admin center

Home > Add Microsoft 365 Apps

Microsoft 365 Apps (Windows 10 and later)

Configuration settings format \* Configuration designer

Configure app suite

Select Office apps ⓘ

8 selected

- Access
- Excel
- OneNote
- Outlook
- PowerPoint
- Publisher
- Skype for Business
- Teams
- Word

Select other Office apps (license required) ⓘ

App suite information

These settings apply to all apps you have selected

Architecture ⓘ

Default file format \*

Update channel \* ⓘ

Remove other versions ⓘ

👉 Change the settings as needed

Select other Office apps (license required) Visio Online Plan 2

### App suite information

These settings apply to all apps you have selected in the suite. [Learn more](#)

Architecture ① 32-bit 64-bit

Default file format \* Office Open Document Format

Update channel \* ① Current Channel

Remove other versions ① Yes No

Version to install ① Latest Specific

Specific version Latest version

### Properties

Use shared computer activation ① Yes No

Accept the Microsoft Software License Terms on behalf of users Yes No

Install background service for Microsoft Search in Bing ① Yes No

Languages ① No languages selected

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👉 Add the group created in step 1, Review and create

Microsoft Intune admin center

Home > Add Microsoft 365 Apps Microsoft 365 Apps (Windows 10 and later)

Required ①

Group mode	Group	Filter mode
Included	Autopilot devices	None

+ Add group + Add all users + Add all devices

Available for enrolled devices ①

Group mode	Group	Filter mode
No assignments		

+ Add group + Add all users

Uninstall ①

Group mode	Group	Filter mode
No assignments		

+ Add group + Add all users + Add all devices

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👉 Let's add one more app, *WhatsApp* and follow the same process as before to add it to the device group.

The screenshot shows the Microsoft Intune admin center interface. On the left, there is a navigation sidebar with various options like Home, Dashboard, All services, Devices, Apps, Endpoint security, Reports, Users, Groups, Tenant administration, and Troubleshooting + support. The main area is titled "Search the Microsoft Store app (new)". A search bar at the top contains the text "what". Below the search bar is a table with columns: Name, Publisher, Type. The first result, "WhatsApp", is highlighted with a red box. Other results include "WhatsApp Beta", "What Doth Life", "What is my number", "Doodle What", "What color is it?", "Course for Whats New in Logic Pro X 10.4.2", "what 2 eat", "Whats New Course For Logic Pro X 10.4", "Whats New Course For Rx9", "What did I watch?", "Whats New Course For Cubase 10", and "Whats New Course For Final Cut Pro 10.4".

**Step 5 Register the Device in Intune-Autopilot:** Let's get the device ID, I am using Hyper-V PC. Run the code shown below in PowerShell, you will have csv file in the following path that has device ID. For more detail see the link (<https://learn.microsoft.com/en-us/autopilot/add-devices>)

The screenshot shows two windows. On the left is a PowerShell window with the following command and output:

```

1 md c:\HWID
2 Set-Location c:\HWID
3 Set-ExecutionPolicy -Scope Process -ExecutionPolicy Unrestricted -Force
4 Install-Script -Name Get-WindowsAutopilotInfo -Force
5 $env:Path +=";C:\Program Files\WindowsPowerShell\Scripts"
6 Get-WindowsAutopilotInfo.ps1 -OutputFile AutopilotHWID.csv

```

Gathered details for device with serial number: 1289-9332-7561-2730-9146-6269-26

PS C:\Windows\system32> md c:\HWID  
Set-Location c:\HWID  
Set-ExecutionPolicy -Scope Process -ExecutionPolicy Unrestricted -Force  
Install-Script -Name Get-WindowsAutopilotInfo -Force  
\$env:Path +=";C:\Program Files\WindowsPowerShell\Scripts"  
Get-WindowsAutopilotInfo.ps1 -OutputFile AutopilotHWID.csv

Directory: C:\

Name	LastWriteTime	Length	File
HWID	2/15/2025 3:13 PM	-----	

Gathered details for device with serial number: 1289-9332-7561-2730-9146-6269-26

On the right is a file explorer window showing a file named "AutopilotHWID" in the "HWID" folder of "Local Disk (C:)".

👉 Let's import the device ID: *Devices > Windows > Enrollment > Devices > Import* and import the extracted **AutopilotHWID** file (copied from Hyper-V PC to host PC).

The screenshot shows the Microsoft Intune admin center interface. On the left, there is a navigation sidebar with various options like Home, Dashboard, All services, Devices, Apps, Endpoint security, Reports, Users, Groups, Tenant administration, and Troubleshooting + support. The main area is titled "Add Autopilot devices". A red box highlights the "Import" button in the top right corner of the main content area. Below the button, there is a note: "Import Windows Autopilot devices from a .CSV file. When assigning users in the .CSV, make sure that you are assigning correct UPNs. Learn more about formatting requirements here." There is also a text input field with the path "AutopilotHWID.csv" and a "Select" button. At the bottom, there is a "Formatting results" section showing "Total rows: 1" and "Rows formatted correctly: 1". A large blue "Import" button is at the bottom right.

👉 Add the device to the group from step 1 : Groups > All Groups > Select the groups and click on it to proceed, Click on Add members and select the device you want to add

The screenshot shows the Microsoft Intune Admin Center interface. On the left, there's a navigation bar with various icons for Home, Dashboard, All services, Devices, Apps, Endpoint security, Reports, Users, Groups, Tenant administration, and Troubleshooting + support. The 'Groups' icon is highlighted. In the main content area, the title is 'Autopilot devices | Members'. Below it, there are tabs for 'Overview', 'Diagnose and solve problems', 'Manage', and 'Members'. The 'Members' tab is selected, indicated by a blue background. A red box highlights the '+ Add members' button at the top of the page. To the right, there's a search bar and a table titled 'Add members' with columns for 'Name', 'Type', and 'Email'. Below the table, there's a list of results with a search bar and filters for 'All', 'Users', 'Groups', 'Devices', and 'Enterprise applications'. A red box highlights the 'Selected (1)' section which contains one item: '1289-9332-7561-2730-9146-6269-26'. At the bottom of the page, there's a note: 'Try changing or adding filters if you don't see what you're looking for.'

👉 The device is added to the group, but profile status is not assigned

The screenshot shows the 'Windows Autopilot devices' page in the Microsoft Intune Admin Center. The left sidebar includes icons for Home, Dashboard, All services, Devices, Apps, Endpoint security, Reports, Users, Groups, Tenant administration, and Troubleshooting + support. The 'Devices' icon is highlighted. The main area shows a table with columns: Serial number, Manufacturer, Model, Group tag, Profile status, Purchase order, and Userless Enrollment Sta...'. A red box highlights the 'Serial number' column for the first row, which contains the value '1289-9332-7561-2730-9146-6269-26'. The 'Profile status' column for the same row has a red box around its value 'Not assigned'.

👉 Let's Sync the device: Devices > Windows > Enrollment > Devices > Sync. In about 10 minutes, the profile status will be assigned.

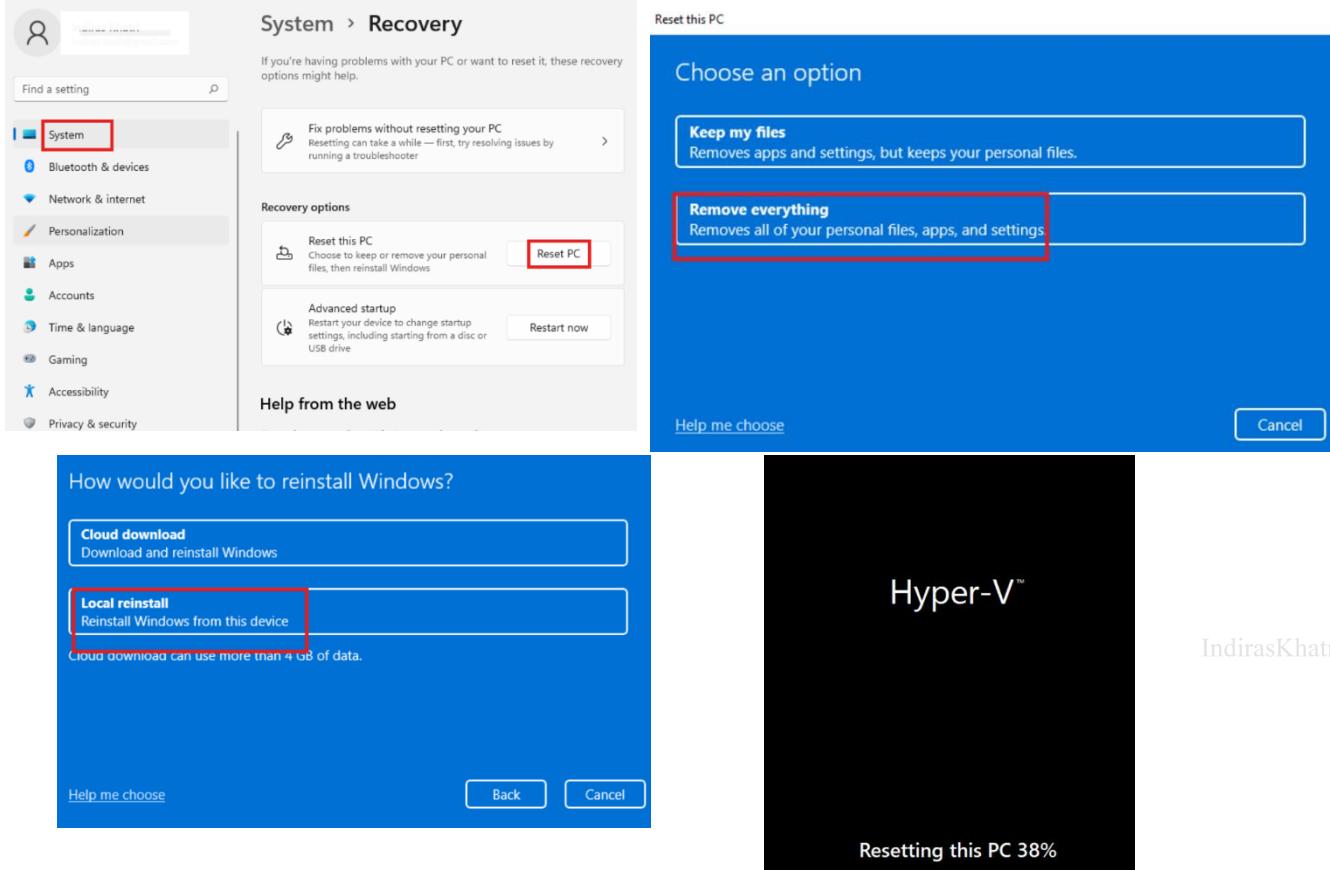
This screenshot is identical to the previous one, showing the 'Windows Autopilot devices' page. The only difference is in the 'Profile status' column for the device with serial number '1289-9332-7561-2730-9146-6269-26'. The value 'Not assigned' has been replaced by 'Assigned', indicating that the profile status has been updated after the sync process.

\* The Autopilot Configuration is completed

👉 Let's reset and configure the PC: *Settings > system > recovery PC > reset PC*, then follow the on-screen instructions

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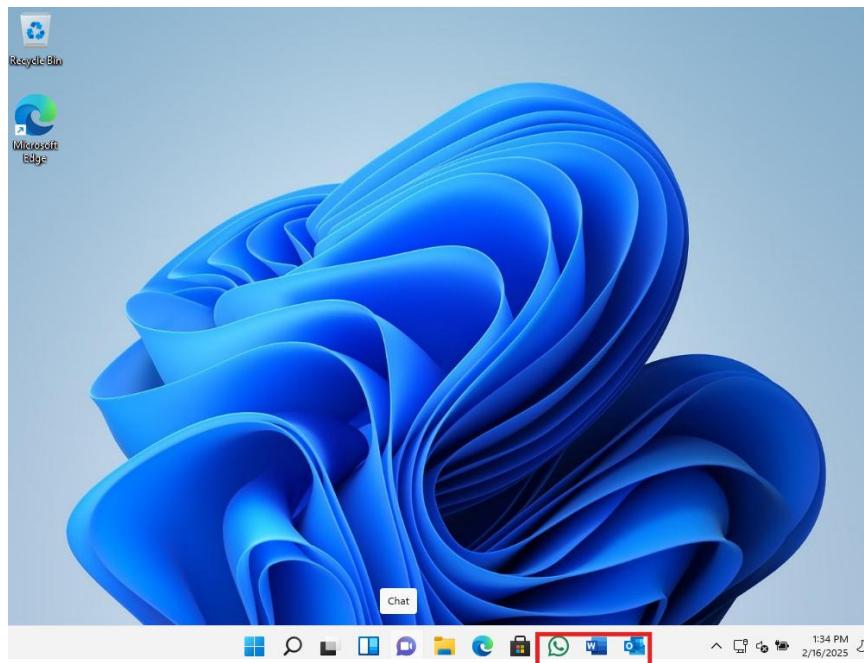
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👉 Any active user with valid credentials can login into the PC. The PC is ready to use with all apps installed

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If the device is lost or stolen, IT administrators can remotely wipe it from Microsoft Intune, ensuring no sensitive information is compromised or stolen. The device from Intune, no sensitive information will be lost or stolen. Additionally, Windows Autopilot offers flexibility in configuring the user experience during the enrollment process, allowing for a more personalized and efficient setup. With Microsoft Intune Autopilot, IT teams can automate and streamline device deployment, reducing manual intervention and errors. Microsoft Intune Autopilot is a game-changer in modern device management, simplifying and securing the enrollment process while maintaining seamless user experience.

\*\*\*\*\*Thank you for reading this content\*\*\*\*\*

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