How to use this presentation



This presentation is to support the Surface Modern Solutions Partner Enablement Program and PSSs as they present on Surface devices and program details.

This deck is strictly Microsoft and qualified partner confidential.

Last Update: August 26, 2020

For questions, or to check for the latest version please email: teamsms@microsoft.com



Zero-touch deployment and Windows Autopilot training deck

Part of Microsoft Endpoint Manager

Microsoft Surface Modern Solutions Program

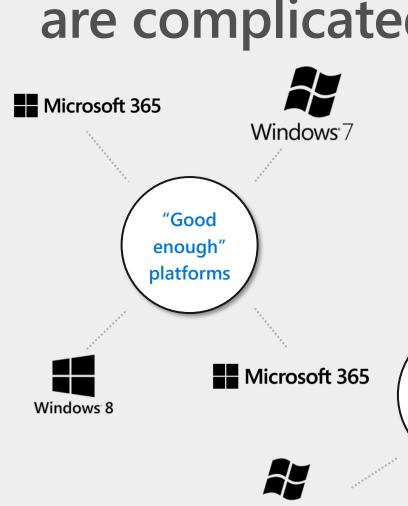


The purpose of this deck:

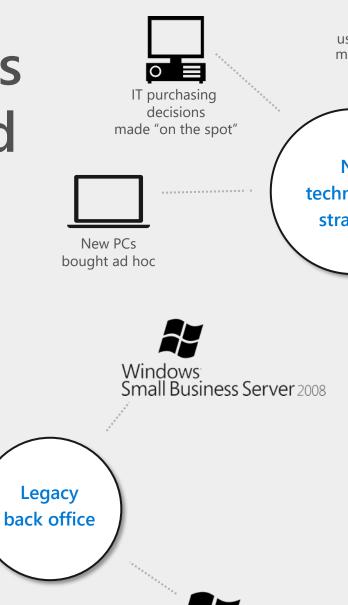
To explain how Windows Autopilot technology enables "out of the box" experiences for customers and how it fits into the modern workplace.



IT environments are complicated



Local Logins /MSA





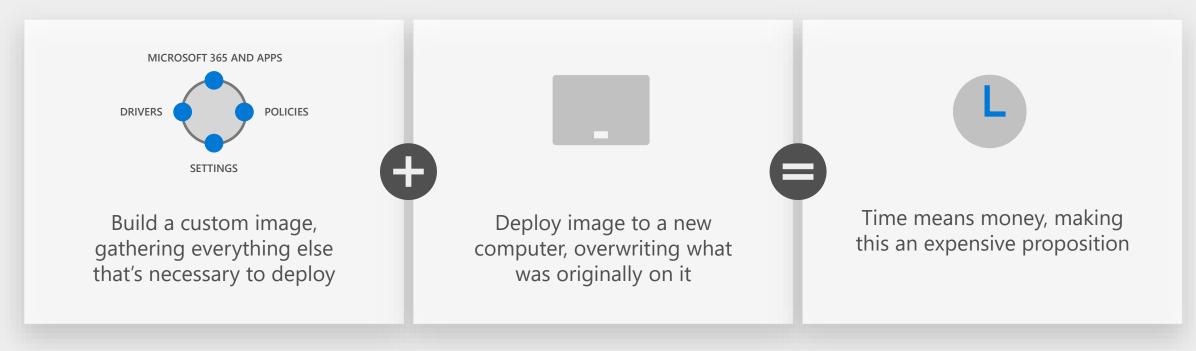








And traditional Windows deployment can be costly and time consuming



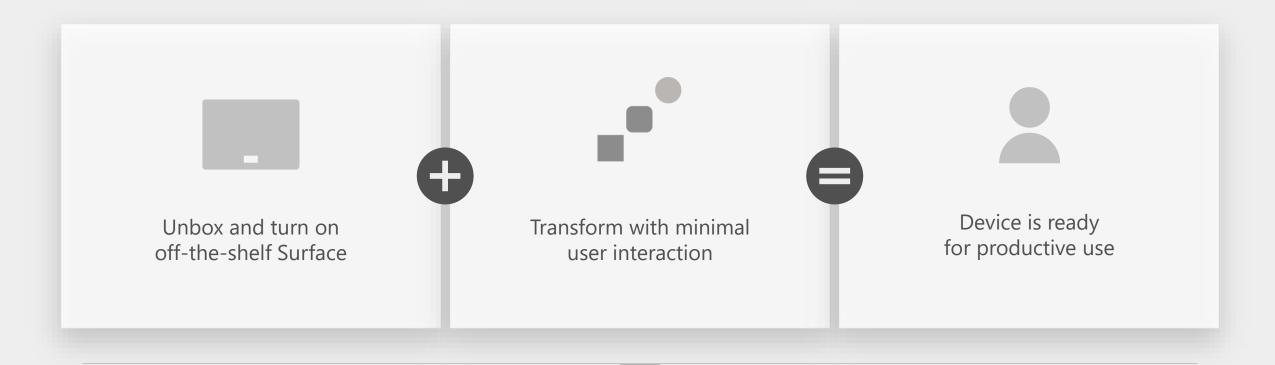
Surface Enterprise Management Mode

Introducing zerotouch deployment

By bringing together Microsoft hardware and software for your customers, Surface devices can be shipped to your customers so they are ready to use out of the box, reducing deployment time and helping employees be productive from day one.



Zero-touch deployment is streamlined and simple



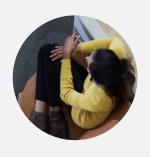
UEFI Management in Intune with Surface DFCI

An overview of the zero-touch deployment journey

Jackie is hired by Contoso as a field account executive.

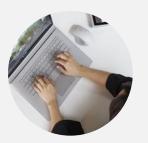
Jackie receives her Surface device. Within 15 minutes, she's signed in and has access to what she needs for her first call. Jackie is attending a confidential event where cameras and microphones aren't allowed. She contacts IT.

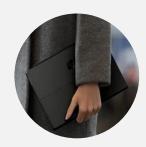
Jackie notices after her first week that her battery life is shorter than she expected. Jackie drops her Surface device and it breaks. She contacts Microsoft and receives a new device the next business day. She signs in. Her profile loads automatically, and her OneDrive files are restored.

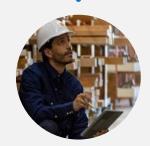




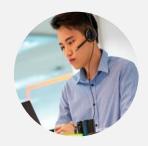








Contoso IT has a device kit shipped from their distributor to Jackie, scheduled to arrive on her first day. They use Windows Autopilot provisioning to provide Jackie access to corporate resources and applications. They also enable Silent Configuration to back up all employees' user data to OneDrive for Business.



Contoso IT uses Device Firmware Configuration Interface (DFCI) in Intune to disable the cameras and microphones on her device so that she's compliant.



Contoso IT runs Surface Diagnostic Toolkit for Business and solves the issue with a firmware and driver update.



Contoso facilitates and profits from this deployment without ever touching the physical device.

From day one, users enjoy:

Surface-optimized Windows 10

- + Software
- + Settings
- + Updates
- + Features
- + User data

Ready to use





Why Surface is right for zero-touch deployment





57%

Boost in employee productivity when using Surface.¹

55%

Enhancement in creativity and teamwork.¹

78%

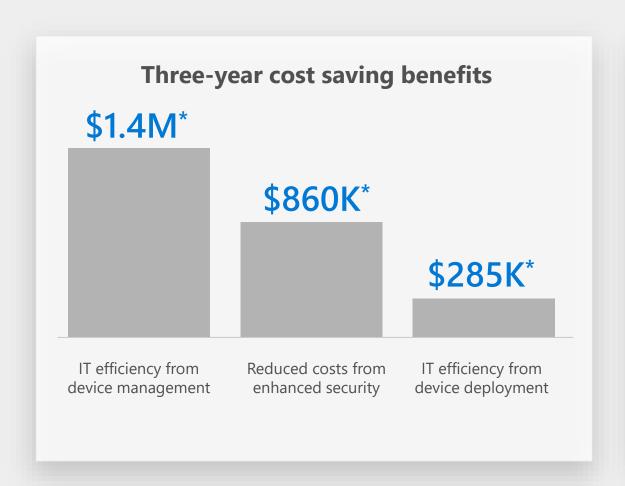
of Microsoft customers agreed they had reduced IT time and labor in configuring and deploying Surface devices compared to non-Surface devices.¹

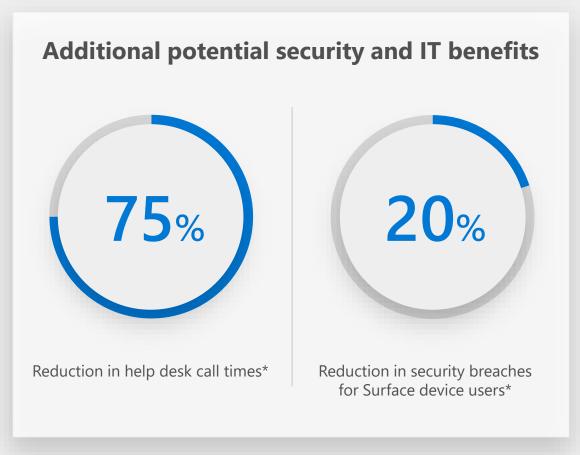
1. Source: Zero-Touch Deployment: A cornerstone of modern device management, Microsoft Surface publication, 2020.

Microsoft property - Do not share without Microsoft approval

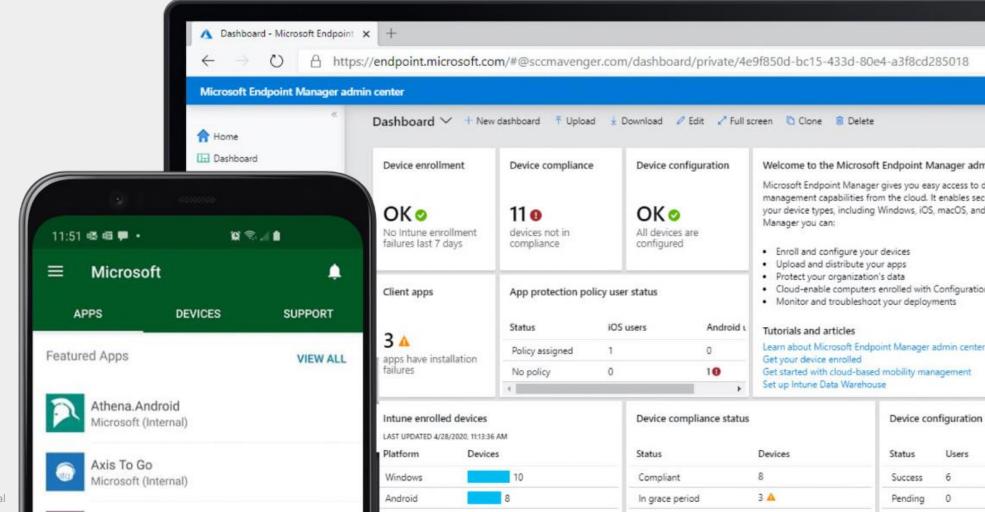
Better together

Surface and Microsoft 365 can streamline IT administration, improve security, and lower costs

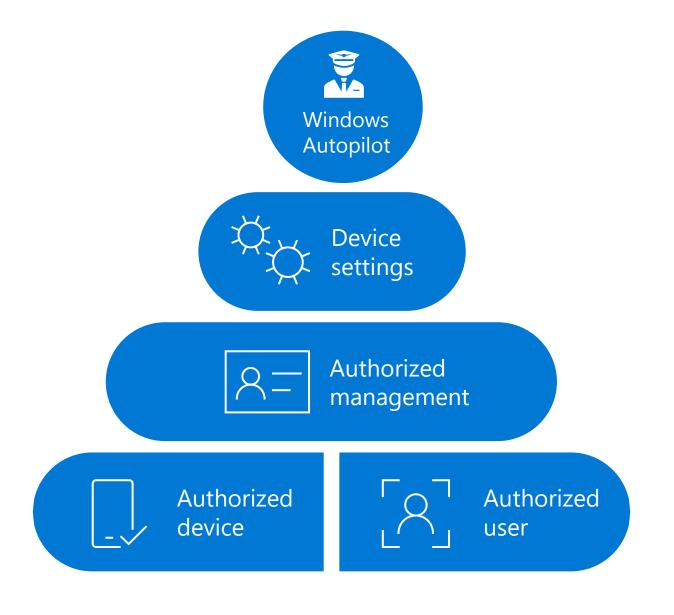




Microsoft Endpoint Manager tools empower IT departments to better manage devices remotely



Cloud management with Microsoft Endpoint Manager

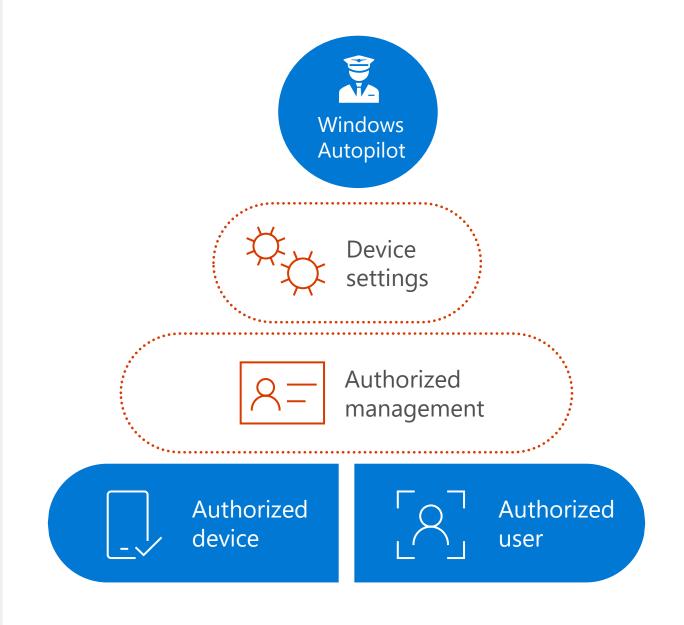


Azure Active Directory

Users may join devices to Azure AD

Users have MDM User scope enabled

<u>Device group</u> for target Windows Autopilot devices

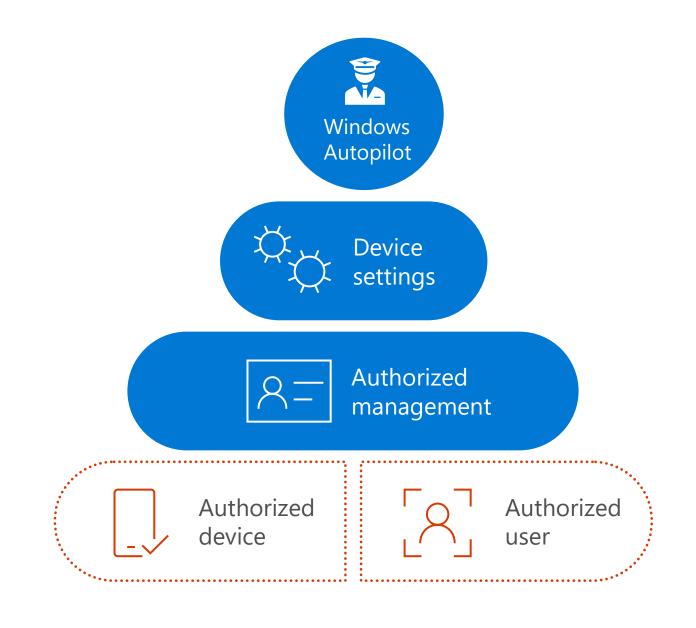


Intune

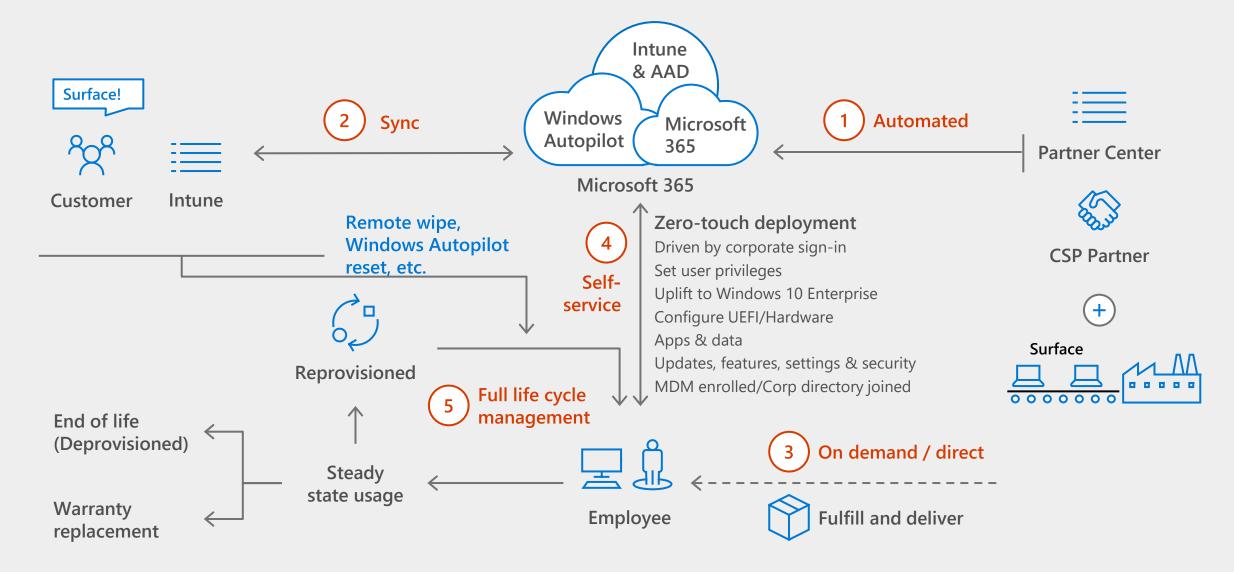
User-driven Windows Autopilot
Profile assigned to device group

Enrollment Status Page profile assigned to device group

Deploy Device Firmware Configuration Interface profile assigned to device group



Modern device life cycle management:



Windows Autopilot for Windows 10, the foundation for zero-touch deployment



What is Windows Autopilot?

Windows Autopilot is a set of technologies that enables companies and their device suppliers to set up and preconfigure Windows 10 devices, as well as reset, repurpose, and, if necessary, recover them.

Hardware manufacturers can enable their devices to be Windows Autopilot–ready right out of the factory. IT teams can then work with the hardware vendor and device distributor to set up deployment profiles and application configurations for different types of users, depending on their roles within the company, their access rights, their geographies, and other parameters.

other parameters.

Endpoint Manager, **IT departments**average of 4 hours for each Surface

deployed *

This eliminates the need for a company's IT department to maintain and manually load corporate images, device drivers, and other configuration elements.

Once the device supplier preconfigures a device as required, it can be shipped directly to the user, with no IT involvement required. When the user turns on the device and goes online, Windows Autopilot automatically delivers all the applications, policies, and settings they need.

Thanks to Microsoft Autopilot and Microsoft Endpoint Manager, IT departments saved an average of 4 hours for each Surface device deployed.*

*Maximizing Your ROI From Microsoft 365 Enterprise With Microsoft Surface, A Forrester Total Economic Impact™ Study Commissioned By Microsoft July 2020

Zero-touch deployment is not just for big businesses

Windows Autopilot is not only beneficial to large enterprises. It also enables small to midsize businesses to leverage a wider IT team than their own.

When they use the full capabilities of Surface devices, these more agile businesses are able to readily digitally transform with little to no infrastructure to manage, with a process that's easy and simple.



Danish IT leader brings its global workforce together more securely with collaborative tools and technologies

KMD is a leading Danish software and IT services firm. To help its global workforce innovate and build a more open organizational culture, all while meeting rigorous security and compliance requirements, KMD has upgraded to Microsoft 365 on Surface devices. While employees enjoy the experience of working with upgraded hardware, KMD's IT department enjoys the streamlined process of managing these devices with Windows Autopilot and Windows 10.

With everything in the cloud, getting a device up and running takes about 10 minutes. It used to take 24 hours and involve restoring from a full backup"

Anders Damm Christensen Senior Head of Modern Workplace and Web Experience KMD



Low-cost airline soars by using Surface Pro with LTE Advanced as Electronic Flight Bag

Based in Oslo, Norway, award-winning Norwegian Air Shuttle is one of Europe's principal low-cost carriers and one of the largest airlines in Scandinavia. When the airline needed to update the devices it uses as Electronic Flight Bags (EFB), it found that the device best suited to the changeable cockpit environment also answers its telecommunication needs—the Surface Pro with LTE Advanced. The Norwegian team is working to perfect the next advance in its device strategy, using Windows Autopilot deployment to load Windows 10 and manage updates with self-service provisioning.

Wherever I send the device, I can be sure that through the Intune portal and Windows Autopilot, it will be set up exactly as we want: all the settings, eSIM profiles, and software."

Klaus Olsen

EFB Administrator
Norwegian Air Shuttle



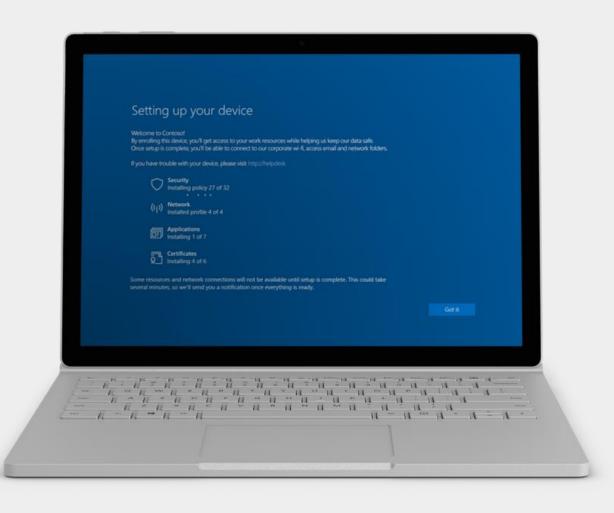
Getting started with Windows Autopilot



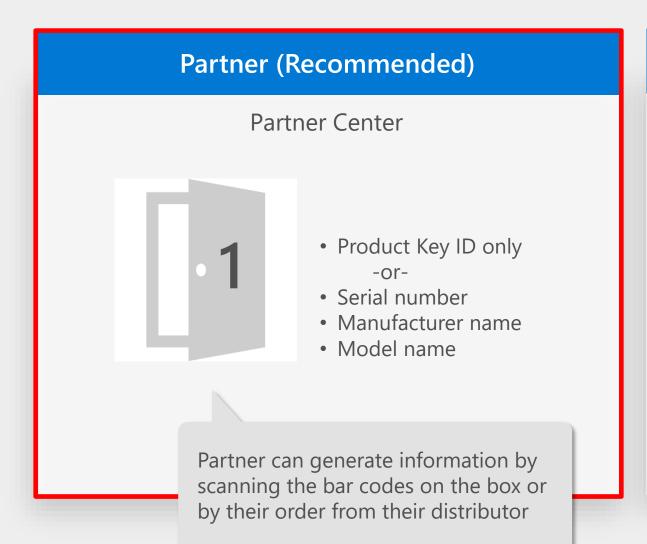
Surface and Windows Autopilot

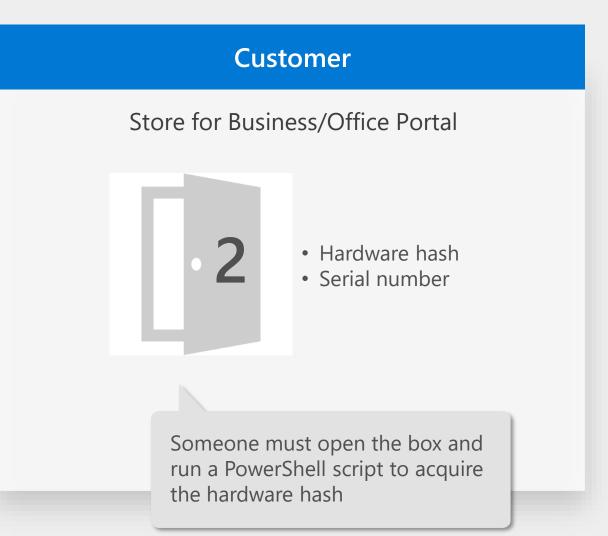
Surface and Microsoft sales/support are engineered to support Windows Autopilot deployment:

- Surface ships with the Microsoft Signature image with preinstalled Microsoft 365 apps for seamless Windows Autopilot deployment
- The Microsoft Cloud Solution Provider (CSP) network may enroll Surface devices through automated APIs or with simplified CSV files in Partner Center
- Devices returned to Microsoft through warranty are automatically removed and updated
- Surface is engineered to enroll in customer tenants quickly and supports managing firmware through DFCI



Windows Autopilot // Registration requirements





Windows Autopilot // Licensing requirements

One of the following is needed to provide Azure Active Directory (automatic MDM enrollment and company branding) and MDM functionality:

- Microsoft 365 Business subscriptions
- Microsoft 365 F1 subscriptions
- Microsoft 365 Academic subscriptions
- Microsoft 365 Enterprise E3 or E5 subscriptions
- Enterprise Mobility + Security E3 or E5 subscriptions, which include all needed Azure AD and Intune features
- Azure Active Directory Premium P1 or P2 and Intune subscriptions (or an alternative MDM service)

See https://docs.microsoft.com/en-us/windows/deployment/windows-autopilot-requirements-licensing for more information

Windows Autopilot for Surface opportunities

	Existing Microsoft 365 deployment	Active Microsoft 365 opportunity	No Microsoft 365	Competitive MDM
Existing Surface deployment	P1	P2	P3	
Active Surface opportunity	P1	P2	P3	
No Surface	P2	Р3	X	
Other OEM				

(P1) Short-term

(P2) Med-term

(P3) Long-term

Value to partners



Benefits to partner

- Greater account control and deeper engagement
- Changes costly custom imaging practice to highvalue Modern Desktop Deployment and Managed Services practice
- Entry point for Surface ADR/DMPs into CSP Program, and additional device revenue for CSP partners
- Increased Microsoft 365 cross-sell/upsell revenue opportunities
- Zero-touch configuration from Microsoft to end user
- Points to Modern Manageability practices



Partner-led services

- Via Partner Center, enable devices by serial number
- Manage Windows Autopilot apps/policy settings via Intune and Microsoft Store for Business
- Management of Microsoft 365 environment to include device inventory management
- Provide triage support desk services to customer sites
- Migration services from custom imaging to Windows Autopilot
- Develop customer strategy for moving to Modern Management

Value for commercial partners, Microsoft sellers, and customers

Partners provide the services and support to drive commercial deployments

Value-added services:

Asset tagging, 24-hour replacement, etching, kitting, buy and hold, device registration

Customer savings:

End custom imaging

Self-service deployments for end users

Get modern with centralized cloud-based device management



Partner services:

Streamline operations with deployment/managed/migration services powered by Microsoft 365

Microsoft sellers:

Offers a consultative solution sales approach

Enables trusted advisor role

Achieves Modern Workforce and customer objectives

Windows Autopilot registration methods

		Customer		
Device serial number	Windows product ID	Hardware hash	Manufacturer name	Device model
Yes		Yes		

Partner				
Device serial number	Windows product ID	Hardware hash	Manufacturer name	Device model
Yes	Yes			
Yes		Yes		
Yes			Yes	Yes

Device list for upload through Partner Center with a formatted XML file

Partner Center CSV upload file—the header:

Device serial number, Windows product ID, Hardware hash, Manufacturer name, Device model

Partner Center CSV Option 1: PKID only

📙 new 1 🔣

1 Device serial number, Windows product ID, Hardware hash, Manufacturer name, Device model

2 ,3301234563777,,,,

The Microsoft Product Key ID (PKID) now on the product box for:

Surface Pro 7

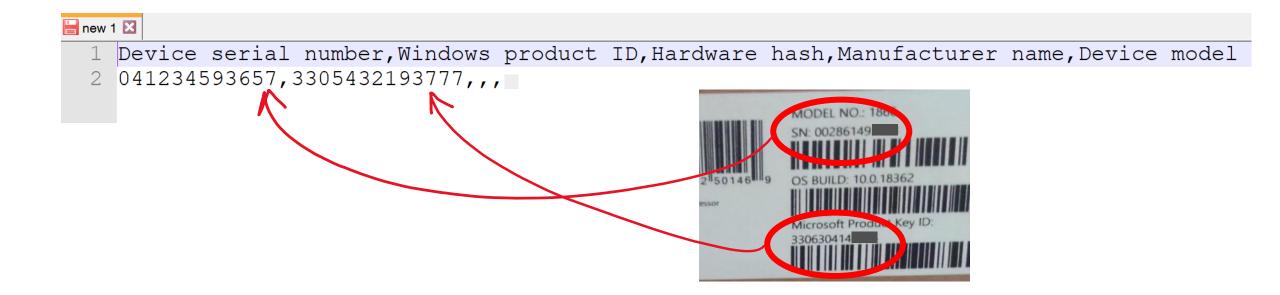
Surface Pro X

and Surface Laptop 3



Partner Center CSV Option 2: Serial Number + PKID

Note: We recommend adding the serial number to easily identify the devices in Partner Center and Intune



Partner Center CSV Option 3: Serial Number + Manufacturer + Model

```
Device serial number, Windows product ID, Hardware hash, Manufacturer name, Device model

2 002123483853,, Microsoft Corporation, Surface Pro

3 002123583853,, Microsoft Corporation, Surface Pro

4 002123683853,, Microsoft Corporation, Surface Laptop
```

For **all** Surface devices that were produced after January 2018, you can simply use the following three well-known items:

- Serial number
- Manufacturer name
- Device model

Tip: Identify manufacturing date by checking the serial number: 002123683853

Surface device model naming

Name	Device Model in CSV		
Surface Studio	Surface Studio		
Surface Book 3	Surface Book 3		
Surface Laptop	Surface Laptop		
Surface Go 2	Surface Go 2		
Surface Pro (5 th gen)	Surface Pro		
Surface Pro (5 th gen) with LTE Advanced	Surface Pro		
Surface Studio 2	Surface Studio 2		
Surface Laptop 2	Surface Laptop 2		
Surface Pro 6	Surface Pro 6		
Surface Pro 7	Surface Pro 7		
Surface Laptop 3	Surface Laptop 3		
Surface Pro X	Surface Pro X		

We designed Surface to support Windows Autopilot. The UEFI manufacturer name and model name are consistent across all of our devices.

You must double-check other OEM devices to ensure the inputted value exactly matches the BIOS/UEFI settings of the device.

Partner Center CSV – Other options

There are a variety of valid combinations, especially if you're working with other OEMs.

Hardware Hash + PKID

Hardware Hash + Serial Number

Hardware Hash + PKID + Serial Number

Hardware Hash only

PKID only

Serial Number + OEM Manufacturer Name + OEM Model Name

Common CSV issues and how to address them

Error importing Windows Autopilot devices from a CSV

Partner Center doesn't recognize the CSV and says it is formatted incorrectly.

The device is already registered

After a correctly formatted CSV is uploaded, the system says the device has already been registered.

Incorrect CSV formatting for the portal type

Partner Center doesn't accept the CSV file as uploaded despite it being correctly formatted.

Device is not found after the CSV is uploaded

The CSV is correctly formatted, but Partner Center doesn't recognize the device for Windows Autopilot.

Ensure the .csv file has not been edited in Excel or any editor other than Notepad.

Some of these editors can introduce extra characters, causing the file format to be invalid.

The device has already been uploaded to an organization and must be removed to reenroll.

If the company is unknown, contact Microsoft 365 support.

CSV files generated for upload to Intune are different than the format required for Partner Center.

The CSV for Partner Center must be created following this guide.

Devices manufactured before 2018 can only be enrolled into Windows Autopilot through Intune using the Hardware Hash method.

This can be automated with a ConfigMgr task sequence.

Windows Autopilot // Deployment Scenarios

1703

User-driven mode with Azure AD join

Join device to Azure AD, enroll in Intune/MDM 1809

User-driven mode with hybrid Azure AD join

Join device to AD, enroll in Intune/MDM

Coming soon!
Deploy over VPN
(preview in Q1CY20,
1903+)

1903

White glove deployment

White glove partners or IT staff can pre-provision Windows 10 PC to be fully configured and business-ready for an org or user 1809

Windows Autopilot for existing devices

Windows 7/8.1 to Windows 10

ConfigMgr task sequence, followed by Windows Autopilot user-driven mode

New! Hybrid Azure AD join support

1903

Self-deploying mode (preview)

No need to provide credentials, automatically joins Azure AD

General availability targeting CY20

Windows Autopilot User-driven hybrid Azure AD join

Setting up your device for work

This could take a while and your device may need to reboot...



Device preparation Show details Complete



Device setup Hide details

Working on it...

Security policies (1 of 1 applied)
Certificates (1 of 1 applied)
Network connections (No setup needed)
Apps (8 of 9 installed)



Account setup

Waiting for previous step to finish

User-driven hybrid Azure AD join

- Connect to a network
- Authenticate to Azure AD

Password-less with phone sign-in

Enroll in Intune

Perform offline domain join

Coming soon! VPN support (preview in Q1CY20, 1903+)

 Track progress with the Enrollment Status page

Policies
Apps (Win32, MSI, UWP)
Certificates
Network, VPN connections

Coming soon! Integration with ConfigMgr task sequences (H1CY20)

Windows Autopilot Self-deploying mode (preview)

٠.,

Just a moment...

Self-deploying mode (preview)

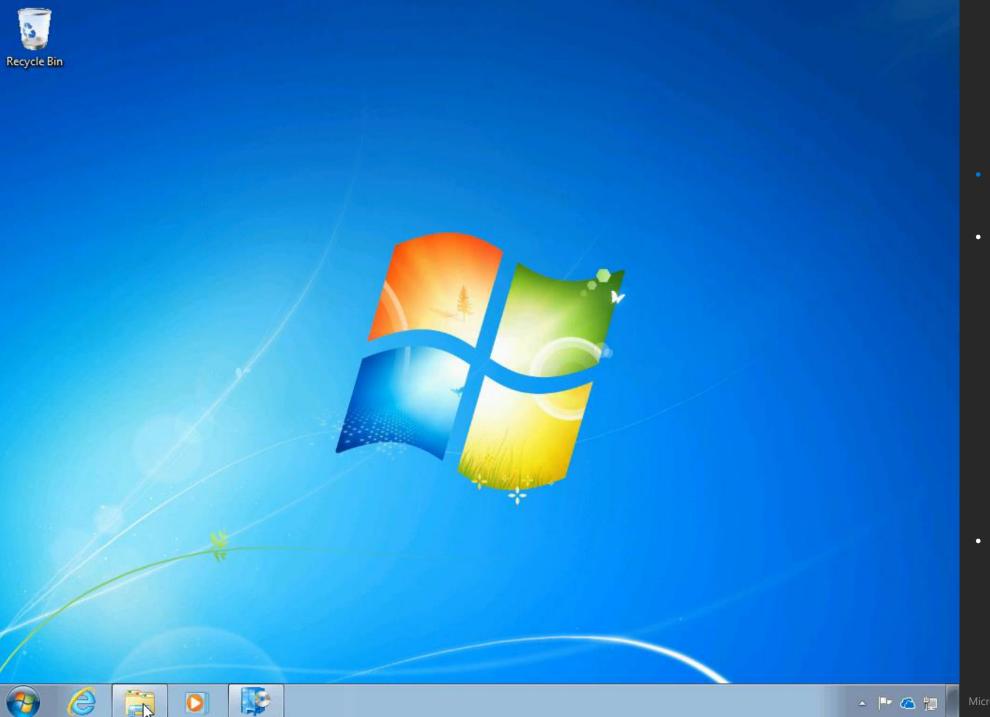
- TPM attestation to authenticate to Azure AD
- Enroll in Intune
- Track progress with the Enrollment Status page

Policies, including Kiosk profiles Apps (Win32, MSI, UWP) Certificates Network, VPN connections

Coming soon! Integration with ConfigMgr task sequences (H1CY20)

General availability in CY20

Windows Autopilot for existing devices



Windows Autopilot for existing devices

- **New! Support for hybrid Azure AD join**
- **ConfigMgr task sequence to** deploy Windows 10

No state migration

Data is already in the cloud with OneDrive for Business

Reformat drive, apply image, inject drivers

Drop in Autopilot Configuration File. js on

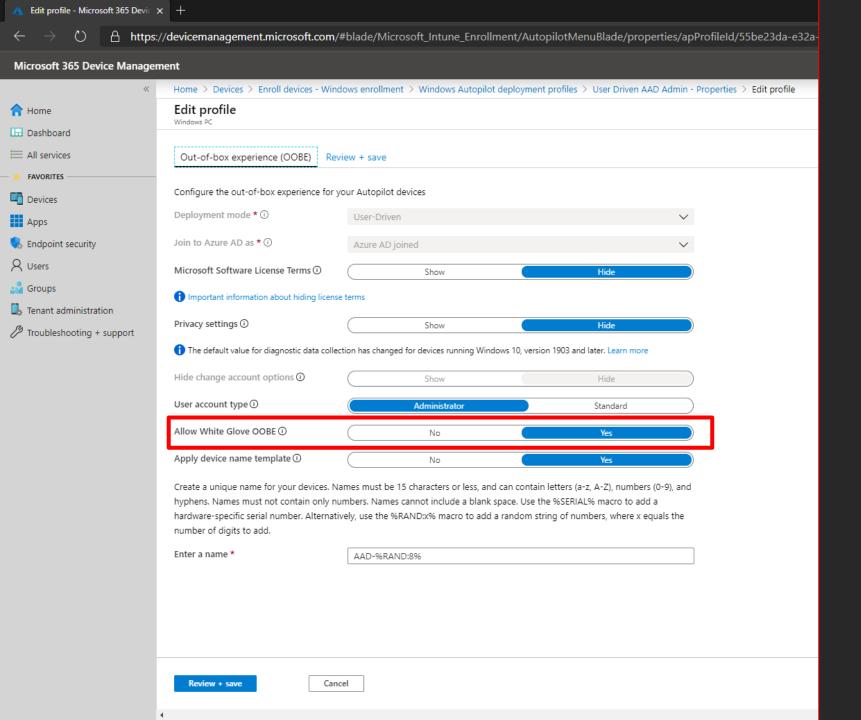
Standard user-driven process once booted into Windows 10

Coming soon! Integration with ConfigMgr task sequences (H1CY20)





Windows Autopilot White glove deployment



White glove deployment

Must be enabled in any user-driven profile where it is to be used

Supports Azure AD join and hybrid Azure AD join

 Profile must be assigned via Microsoft Intune

If you assign the profile via Microsoft Store for Business or any other mechanism, Intune will reject the white glove MDM enrollment

 Supports physical machines with wired Ethernet connections

White glove process starts before the Wi-Fi connection OOBE screen, hence the Ethernet requirement

 Wi-Fi can be used with Shift-F10 then command "start ms-availablenetworks:"

Let's start with region. Is this right?



Yes



- Press Windows key five times to start
- Choose Windows Autopilot provisioning option
- Confirm settings

Configure user with companion app, refresh

Coming soon! Configure group tag, computer name with companion app (Q4CY20)

- Click "provision" to start
- Reseal when done

Green screen for success, red screen for failure



This might take several minutes

White glove user flow

• Standard user-driven process

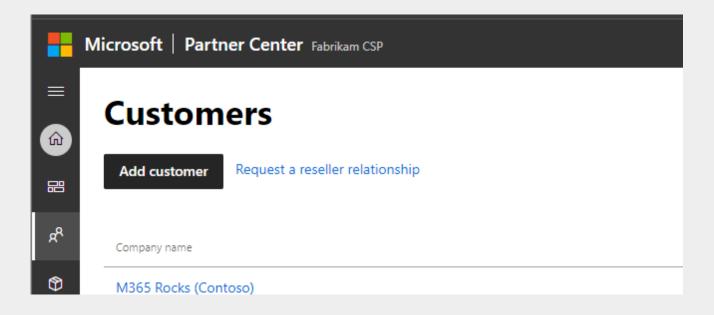
For Azure AD join: Enter credentials, go through device and user ESP

For hybrid Azure AD join: Enter AD credentials to sign in, go through user ESP

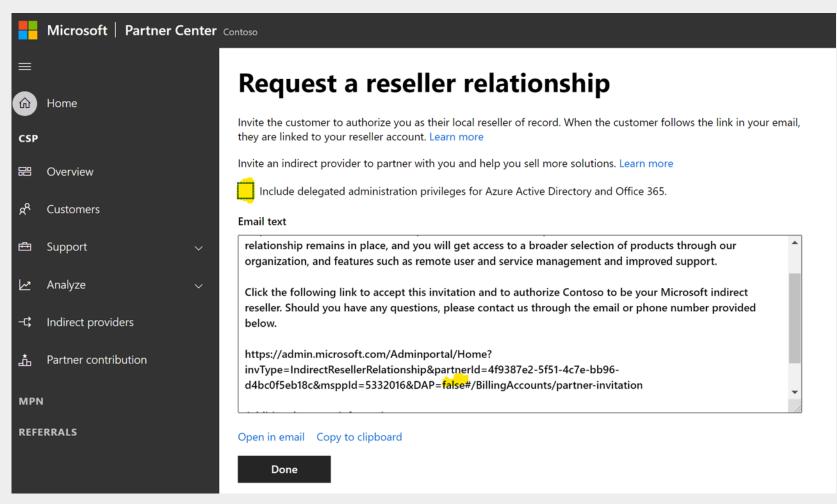
Don't turn off your PC

Adding a new customer in Partner Center

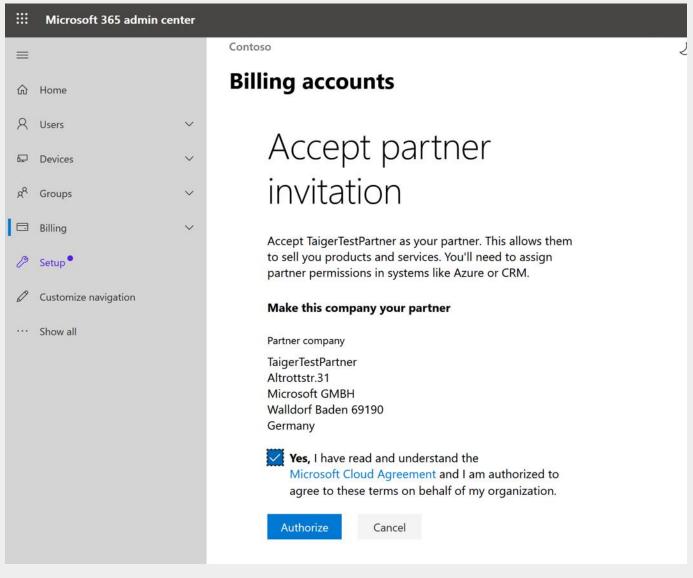
https://partner.microsoft.com/dashboard/mpn/overview



Create invite to your customer—send it by email to tenant admin

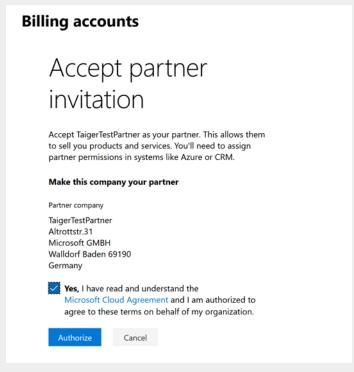


Customer view of relationship request



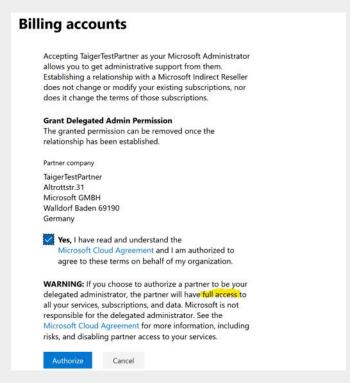
- Partner sends the link to customer
- Customer global admin must approve the relationship
- A reseller relationship is sufficient—
 no delegated admin rights are required to
 enroll devices

Reseller relationship options: Cloud reseller vs. delegated admin rights



The standard right should be "Cloud Reseller."

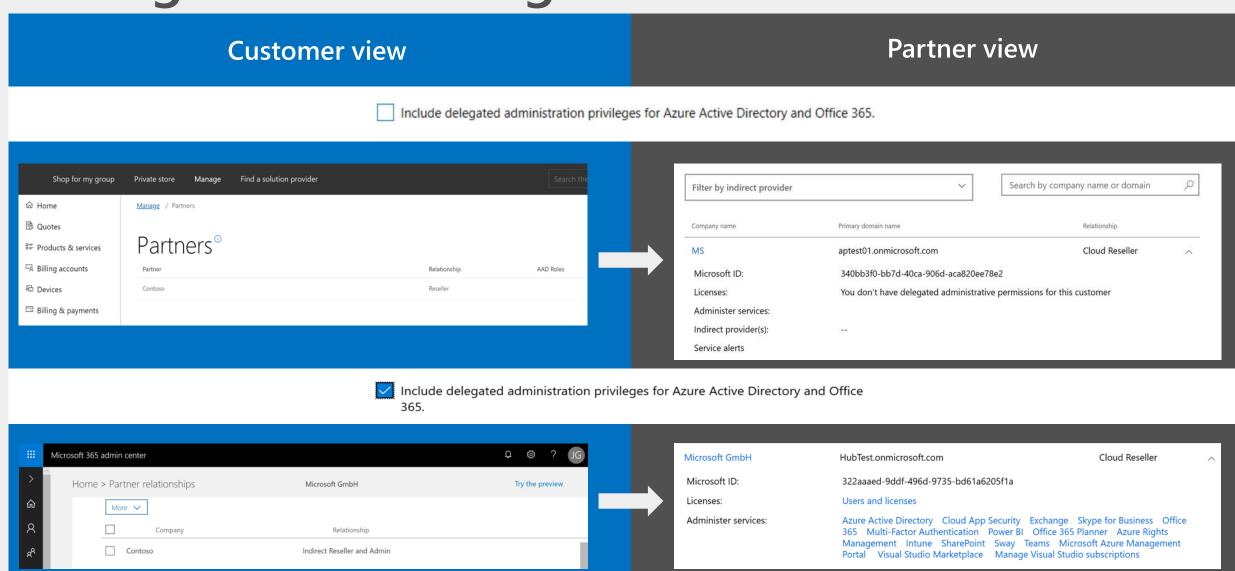
This is the minimum you need as a partner to register devices to the customers' tenant.



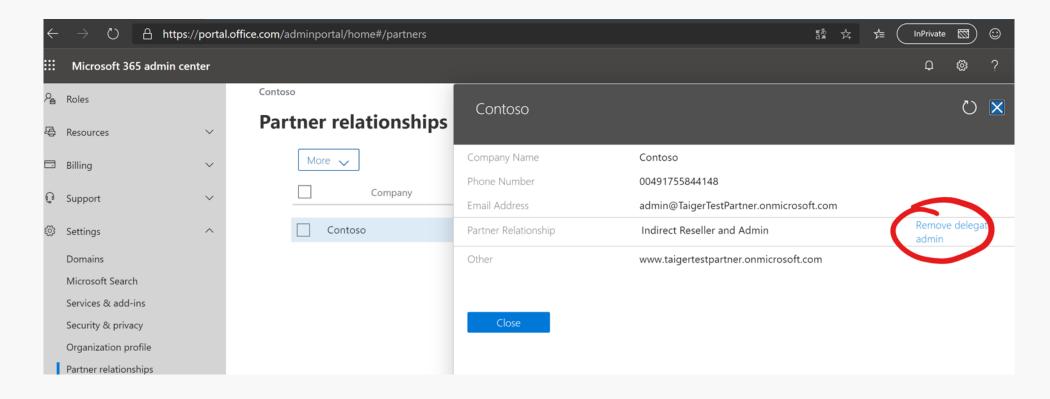
"Delegated Admin Permission" gives the partner full access to the customers' cloud resources.

Please discuss with the customer upfront if this right is needed at all.

Delegated admin rights



Tip: Delegated admin rights can be deleted



A customer can remove delegated admin rights using the Admin Portal:

https://portal.office.com/adminportal/home#/partners

Common deployment issues and how to address them

Policies and apps are not deploying to the devices

Despite policies and apps being configured in Intune, they are not pushing to the Windows Autopilot device during deployment.

Windows Autopilot devices do not appear in Intune

After completing deployment, the device appears in Azure AD but not Intune, and no configurations have deployed to the device.

Microsoft Store apps are not deploying to devices

Microsoft Store apps appear in Intune and are assigned, but they do not install with the Windows Autopilot deployment.

"Something went wrong"

The phrase "Something went wrong" is displayed on the Enrollment Status page and the deployment fails.

Device configuration profiles and app deployments must be assigned to a group of users in Intune.

Ensure each profile or app is assigned and the devices are in the correct group.

Intune must be selected as the MDM authority in Microsoft 365.

This step is *not* automatically enabled for Microsoft 365 customers, despite it being included.

Microsoft Store apps added through Intune can only be assigned as "Available," not "Required."

Store apps must be acquired in Microsoft Store for Business and then synced with Intune.

The device you're working with fails to meet network requirements.

This can occur in environments with restrictive firewalls that block access to Microsoft systems, so check the network.

Escalation path and resources to help



Reference the Microsoft Docs Windows Autopilot page

For comprehensive step-by-step directions for Windows Autopilot deployment and more, review the Microsoft Docs.

2

Review the FAQ & troubleshooting document

For more frequently asked questions and up-to-date troubleshooting info, review this first.



Use the Surface Partner Community forum

Interact with other partners and search a collection of posts and resolved issues.



Seek additional help

If you are still unable to find the answer to your question after these steps, reach out for additional help.

aka.ms/AutopilotDocs

aka.ms/SurfaceAutopilotHelp

aka.ms/SurfaceCommunity

If you have a Partner
Development Manager or
Surface Global Black Belt,
contact them directly.
Otherwise, contact Surface
Support for escalation.

Work with your local distributor to understand their Windows Autopilot and Surface Device-as-a-Service offering.

Summary

- Zero-touch deployment is an out-ofthe-box solution for your customers to allow employees to maintain productivity in the modern workplace
- Azure Active Directory and Intune are required for Windows Autopilot
- Windows Autopilot helps small to midsize businesses leverage greater capabilities through a simple process
- Windows Autopilot allows you to register, reset, repurpose, and recover devices





Thanks





Additional resources

- · Windows Autopilot video overview: https://www.youtube.com/watch?v=4K4hC5NchbE
- · Enroll devices using Windows Autopilot Microsoft Intune: https://docs.microsoft.com/en-us/intune/enrollment-autopilot
- · Windows Autopilot requirements Windows Deployment: https://docs.microsoft.com/en-us/windows/deployment/windows-autopilot-requirements-network
- · Learner Home: https://partneruniversity.microsoft.com/?whr=uri:MicrosoftAccount&courseId=18817

Windows zero-touch deployment and Windows Autopilot introduction

Watch the "Introductions and overview" video here* to learn more about:

- What zero-touch deployment is
- The device journey and what happens throughout the process
- The advantages of using Surface devices with Windows Autopilot
- Some typical Windows Autopilot deployment scenarios
- The value of Windows Autopilot to you as a partner

