Windows 10 Autopilot

Jörgen Nilsson
Onevinn

Microsoft MVP Most Valuable Professional

Microsoft Årets Partner 2018 | Modern Workplace

Simplified

Traditional deployment

DEPLOYMENT

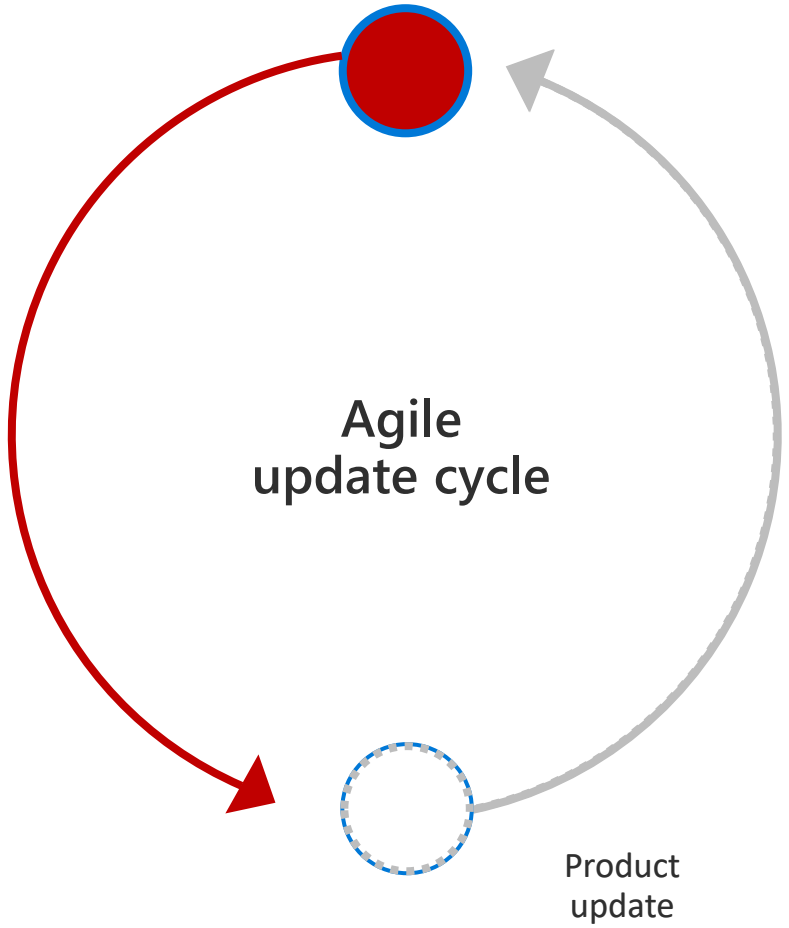
IMAGING

INFRASTRUCTURE

APPLICATIONS

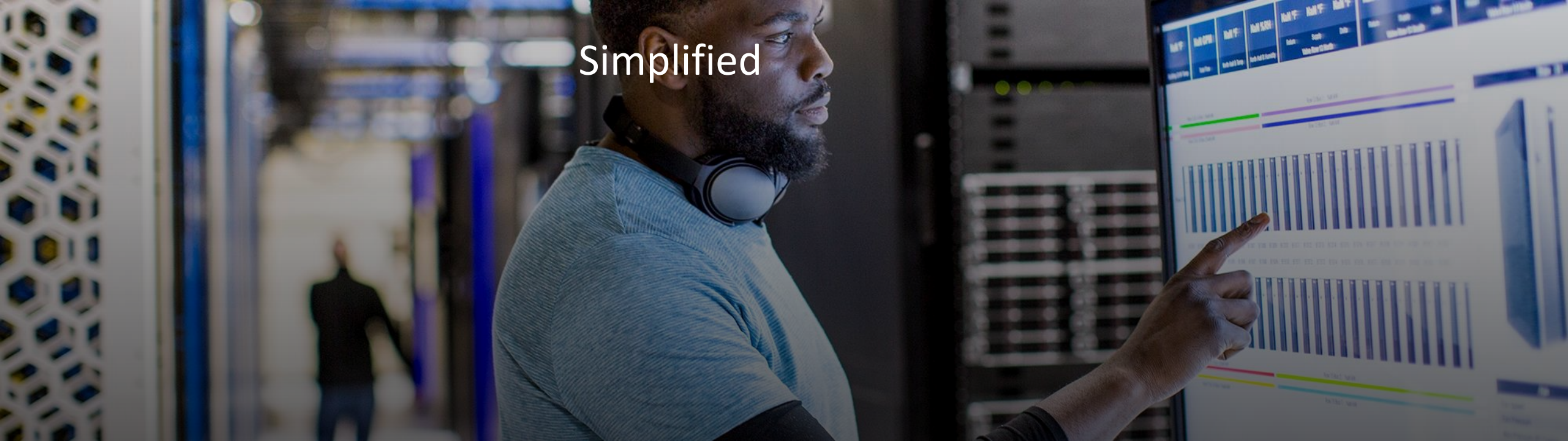
Windows as a service

- Increased security
- Improved productivity
- Simplified deployment



2 updates per year

onevinn



Simplified

Streamline deployment and updates with modern tools

Application compatibility IT can trust

Streamline deployment and updates

With modern tools powered by the cloud

Windows as a service

Help ensure users and devices are safe and productive with the latest feature and quality updates

In-place upgrades

Automatically preserve apps, settings, and data

Windows Update for Business

Update devices directly from the cloud to minimize your IT effort

Express updates

Streamline downloads and reduce the load on your network

Delivery optimization

Enable peer-to-peer transfer of updates

Application compatibility you can trust

Upgrade with confidence and ensure devices and apps stay healthy

Windows Analytics

Get project guidance and recommendations for device upgrades and fe
updates

Ensure your Windows 10 devices are properly updated and secure

Identify and address issues affecting end users

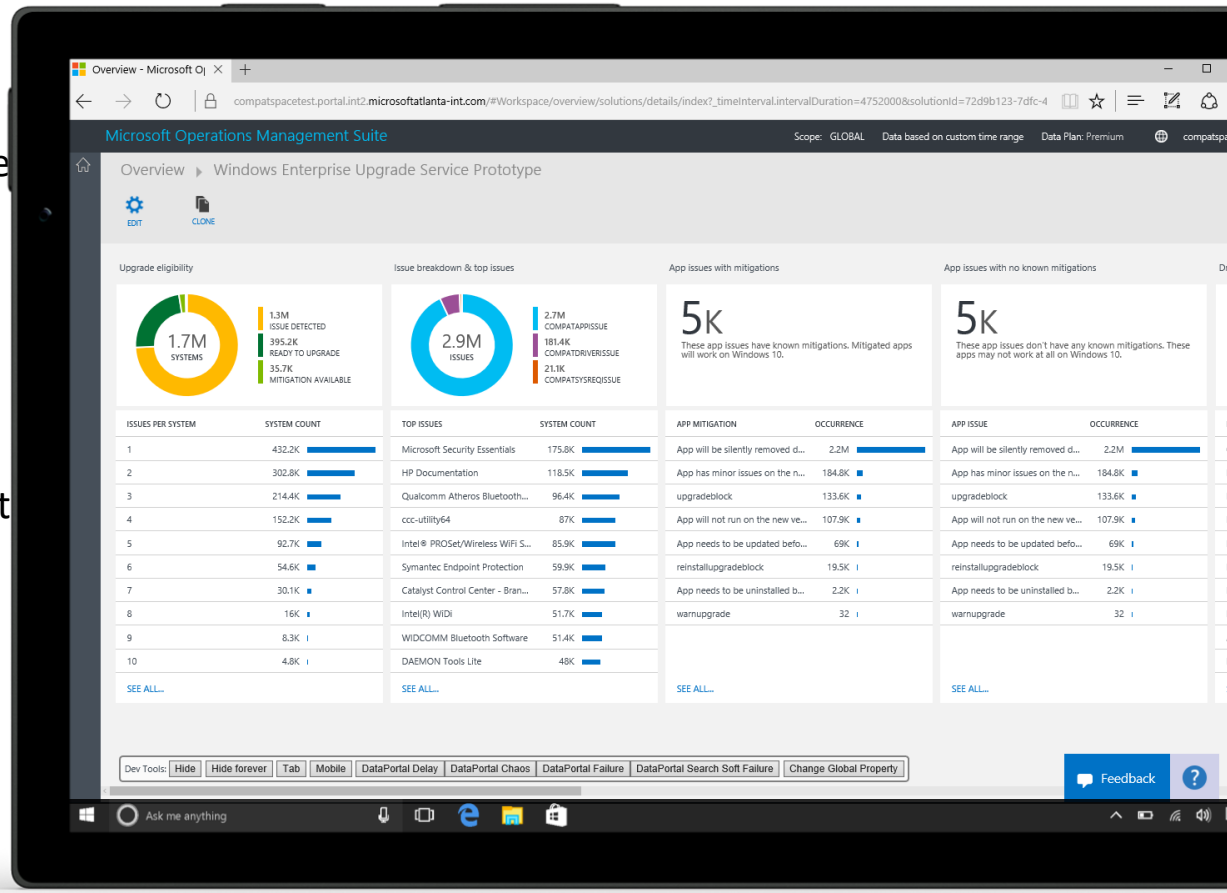
Windows Insider Program for Business

Explore new features, validate apps and prepare your organization for t
version of Windows 10

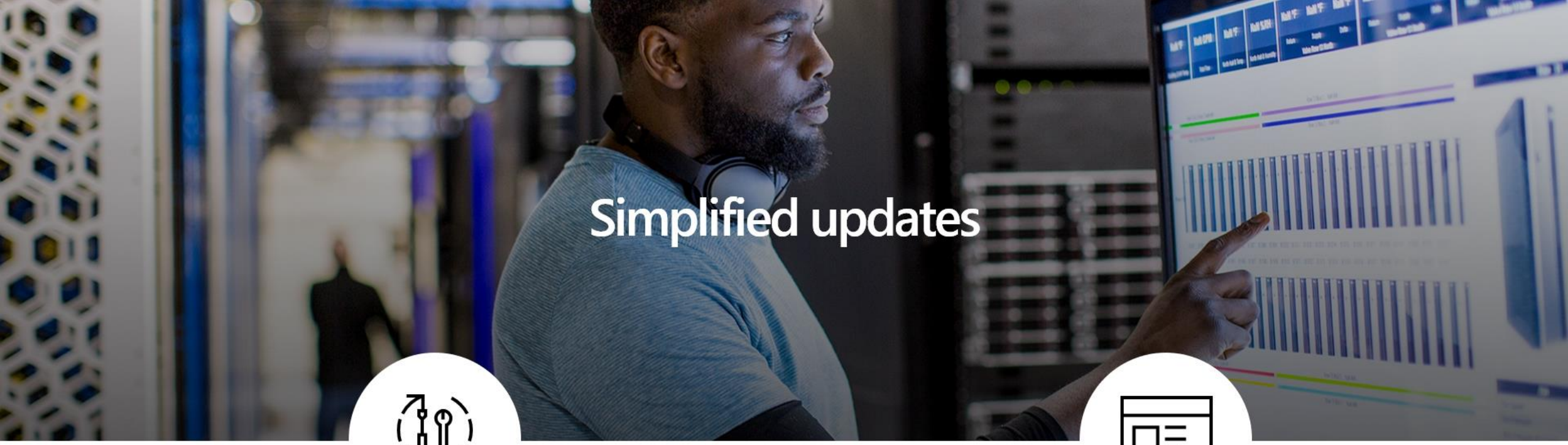
Ready4Windows.com

View Windows 10 ISV support statements

Get usage information for every app version



onevinn



Simplified updates

Streamline deployment and updates with modern tools

Windows as a service

In-place upgrades

Windows Update for Business

Express updates

Delivery optimization

Application compatibility IT can trust

Windows Analytics

Windows Insider Program for Business

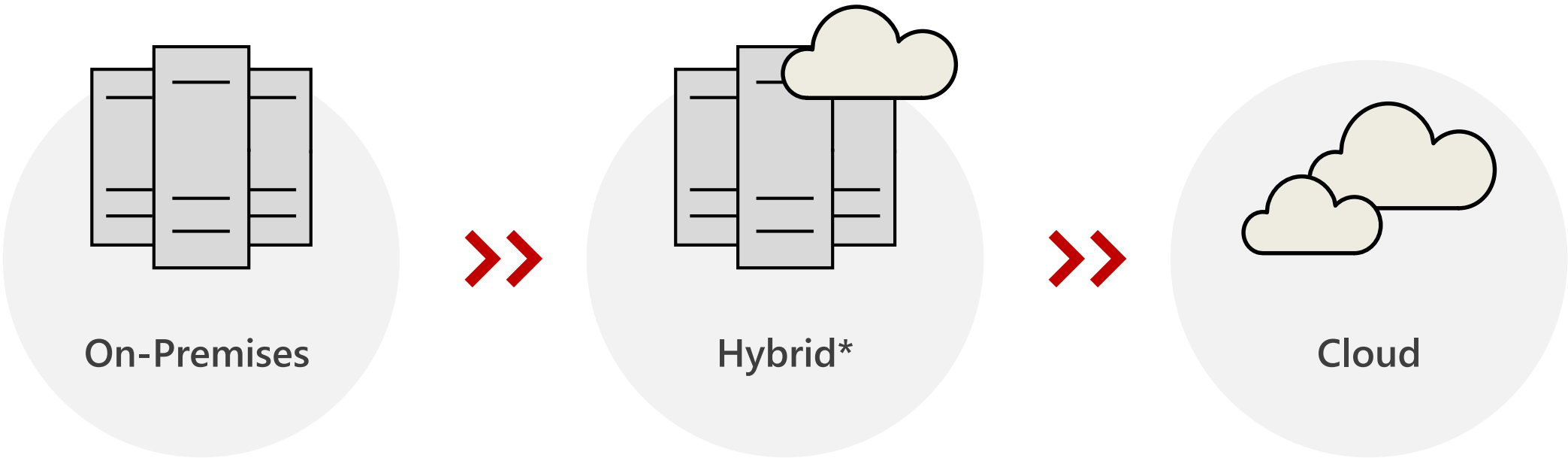
Ready4Windows.com

onevinn

Flexible management

Flexible device management

Windows 10 provides the flexibility to leverage the cloud at your own pace



On-Premises

Existing organizations can use traditional methods and tools to manage devices.

Hybrid*

Bridge to move from traditional to modern workloads.

Cloud

New organizations can use tools that are built with cloud-first in mind.

*Requires Hybrid Azure Active Directory Join

onevinn

Flexible management

Deliver enterprise-ready devices easily

Simplify device management

onevinn

Deliver enterprise-ready devices

Windows Autopilot[1]

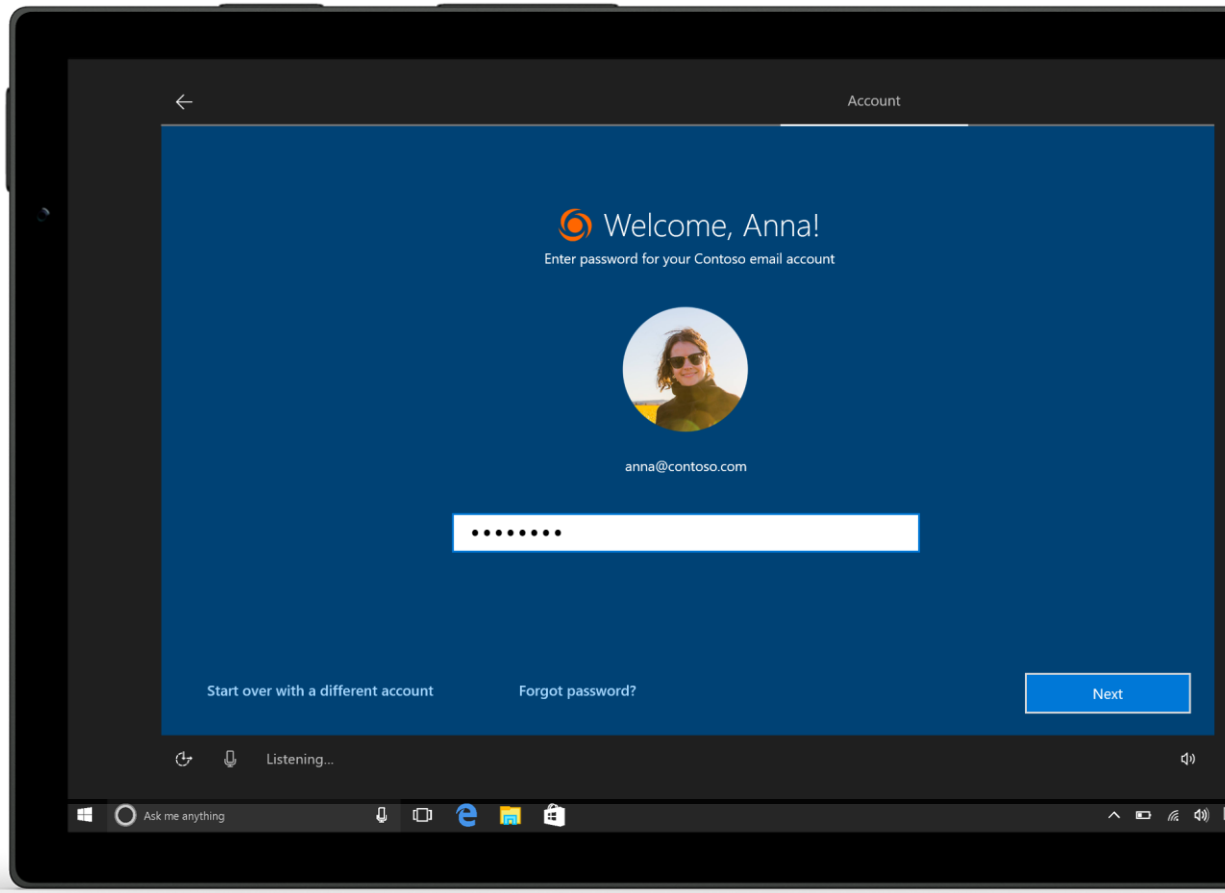
Get new devices up and running fast, without reimaging, all powered by the cloud

Automatically configure settings, security policies and install apps like the Office 365[2] apps

Windows Subscription Activation

Easily step up from Windows 10 Pro to Windows 10 Enterprise or Windows 10 Education, without rebooting

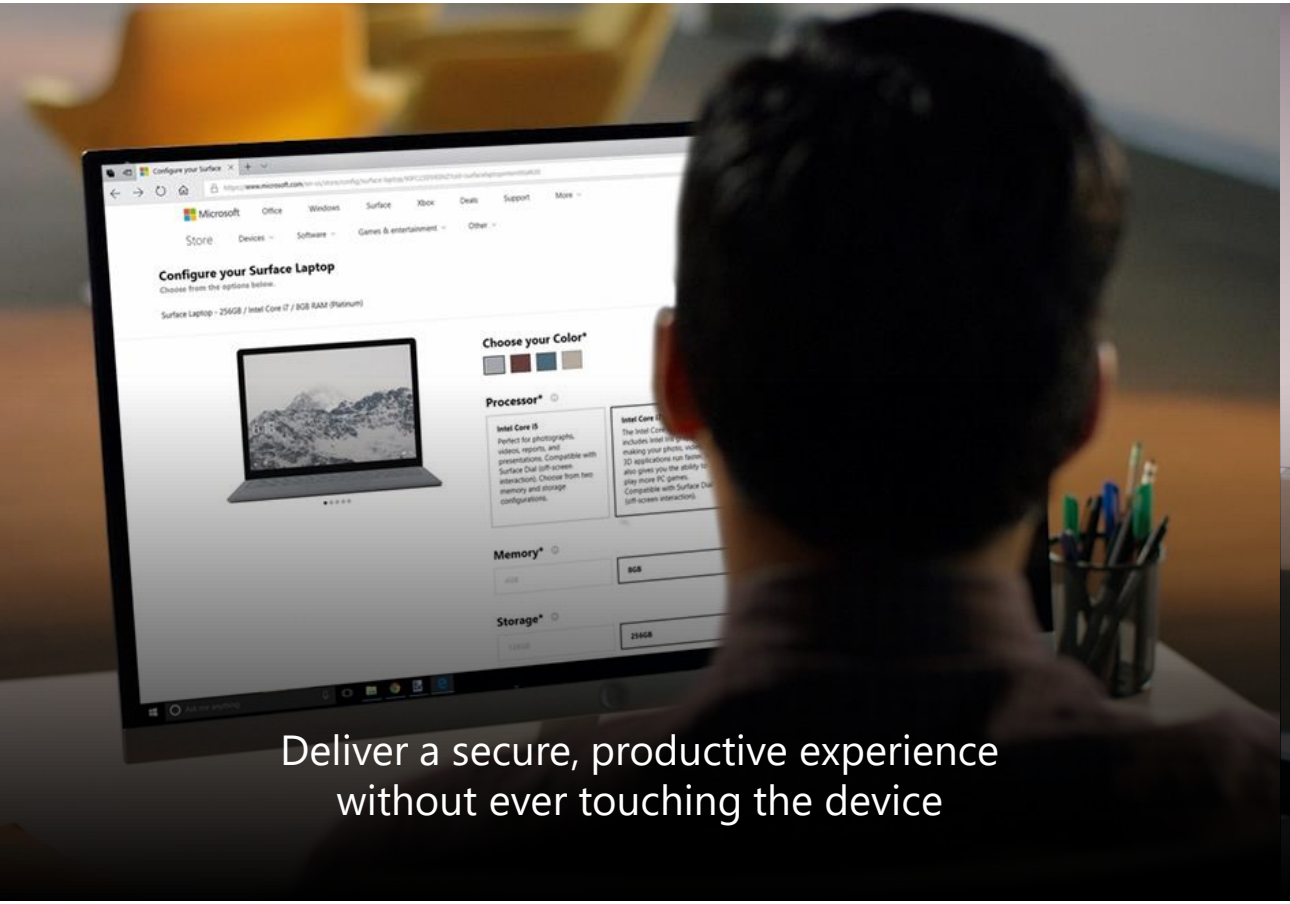
With a self-service experience, lowering help desk costs



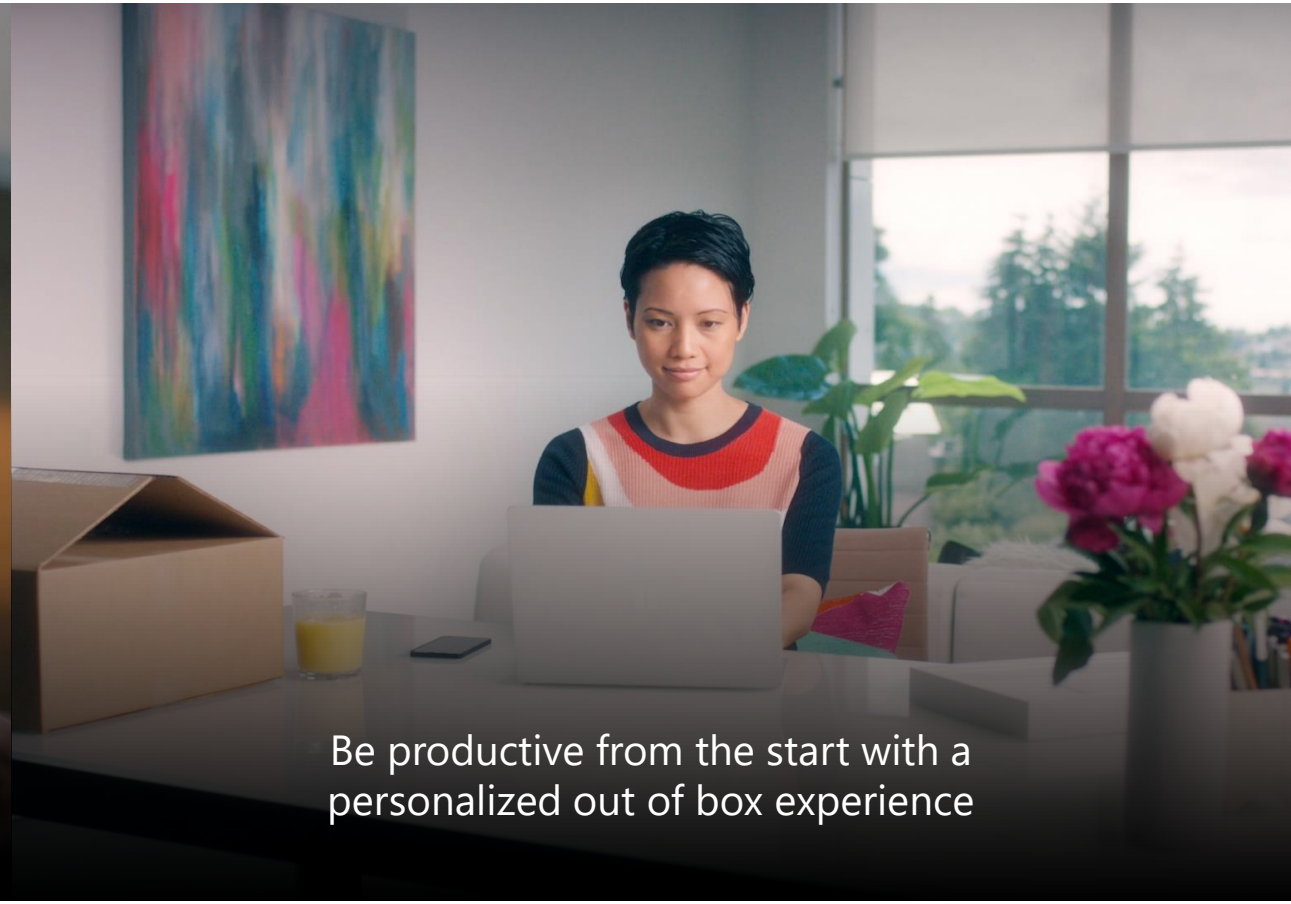
[1] Requires Azure Active Directory and Intune to complete Hybrid Azure Active Directory Join. Sold separately.
[2] Subscription sold separately.

Transform device deployment with Windows Autopilot

Great for IT and end users



Deliver a secure, productive experience without ever touching the device



Be productive from the start with a personalized out of box experience

onevinn

Simplify device management

- Device and app management with the cloud
- Mobile Device Management[1]
- Utilize Group Policy and MDM side by side, in order to transition from on-premise to cloud management

- Mobile Application Management
- Manage corporate assets without impacting personal data
- Enforce pin and data protection policies on BYOD devices

- Windows Shared Devices
- Quickly setup and maintain custom device scenarios

- Microsoft Store for Business[2]
- Find, acquire, manage, and distribute apps, including custom LOB apps to Windows 10 devices[2]

[1] MDM requires an MDM product such as Microsoft Intune or other 3rd-party solutions (sold separately).
[2] Available in select markets. Functionality and apps may vary by market and device.

Flexible management

Deliver enterprise-ready devices easily

Windows Autopilot

Windows Subscription Activation

Simplify device management

Mobile Device Management

Mobile Application Management

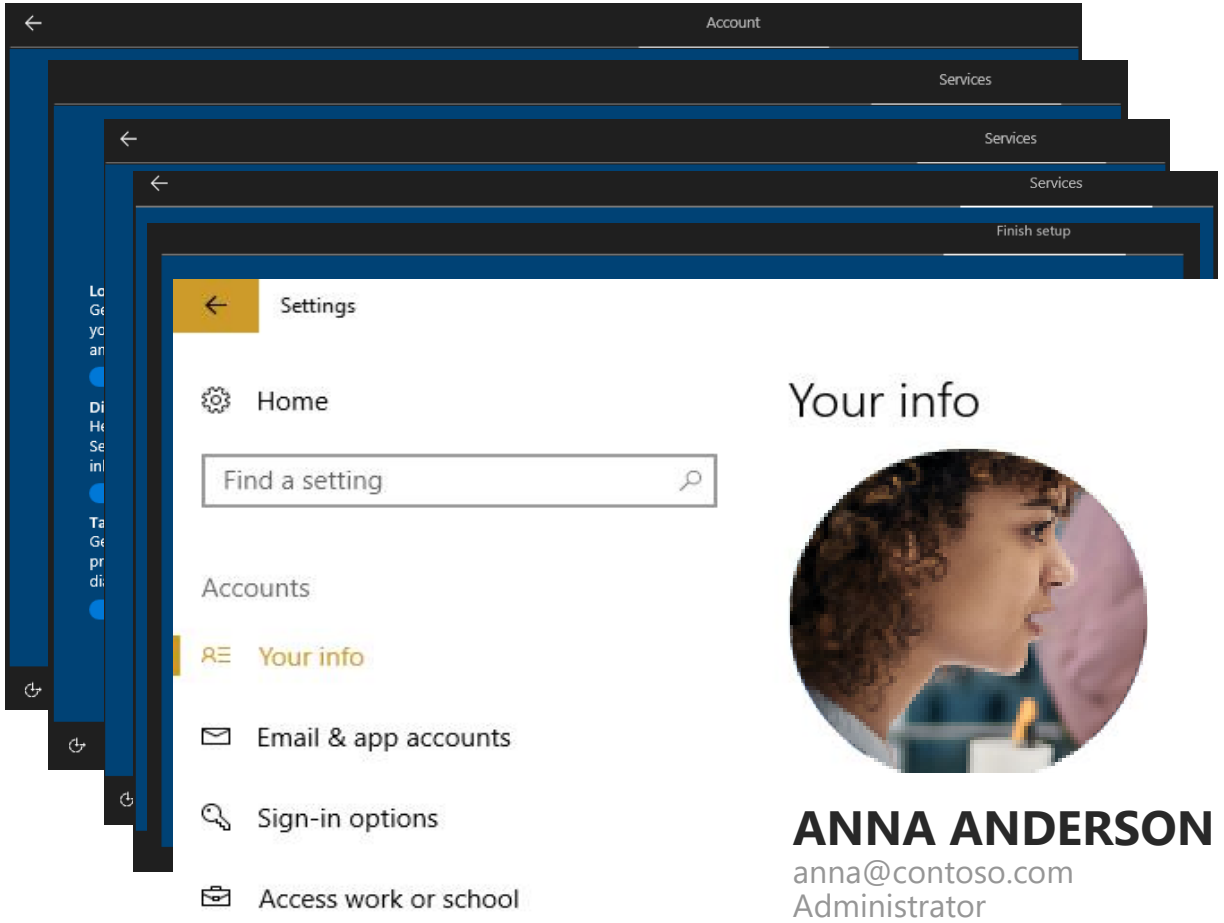
Windows Shared Devices

Microsoft Store for Business

onevinn

OOBE Challenges

- Non-trivial decision making (Personal vs Org Owned disambig, Privacy Settings, OEM Registration) generates Helpdesk calls
- Time for configs and apps to install. Block access, show progress
- OOB account is always Admin – majority of enterprises want standard accounts on corp-owned devices

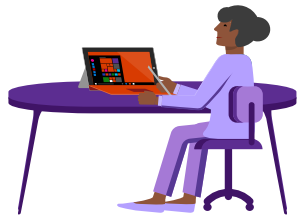


OEM/Reseller

Ship

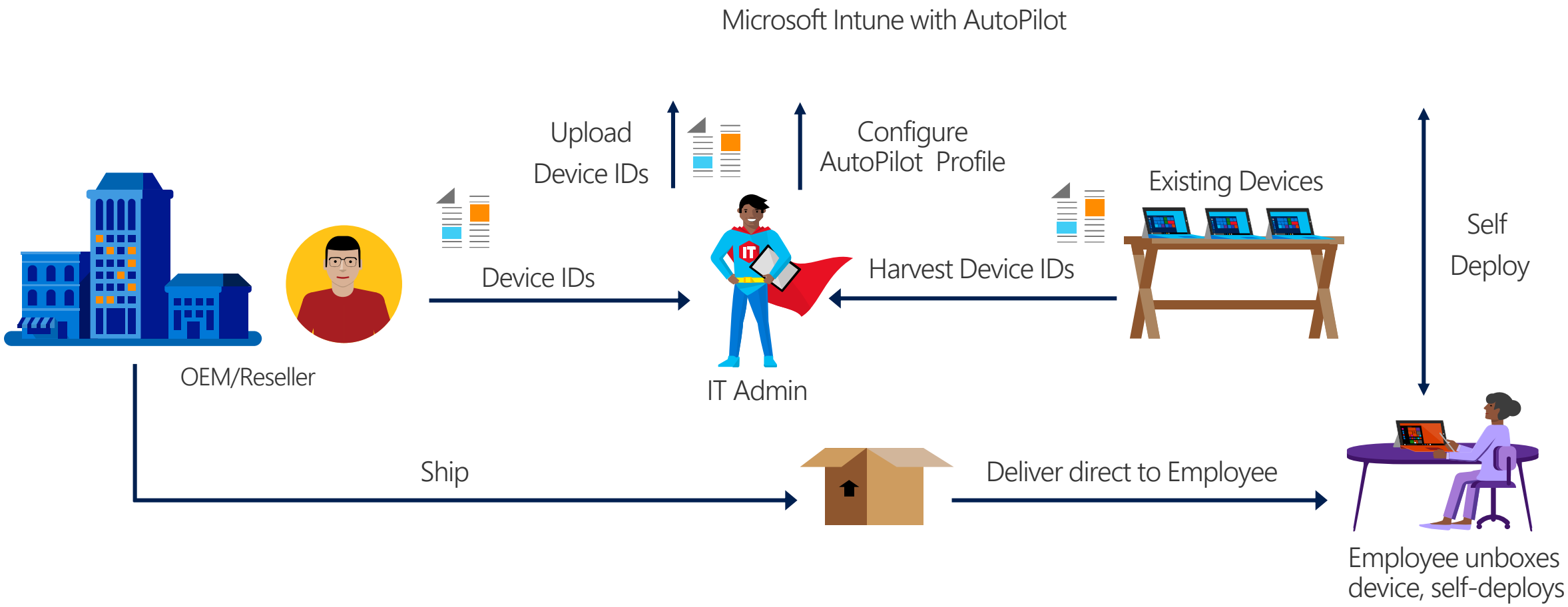
Off-the-shelf and Shrink-wrapped Devices

Deliver direct to Employee

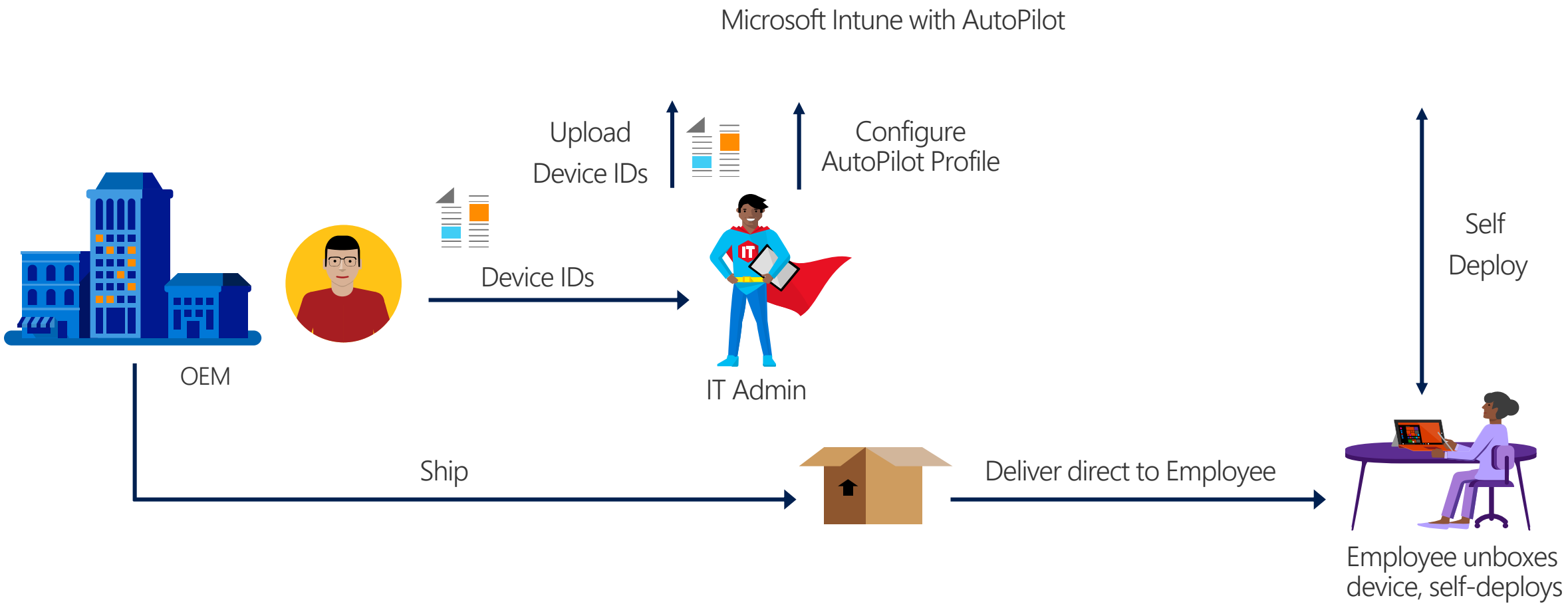


Employee unboxes device, self-deploys

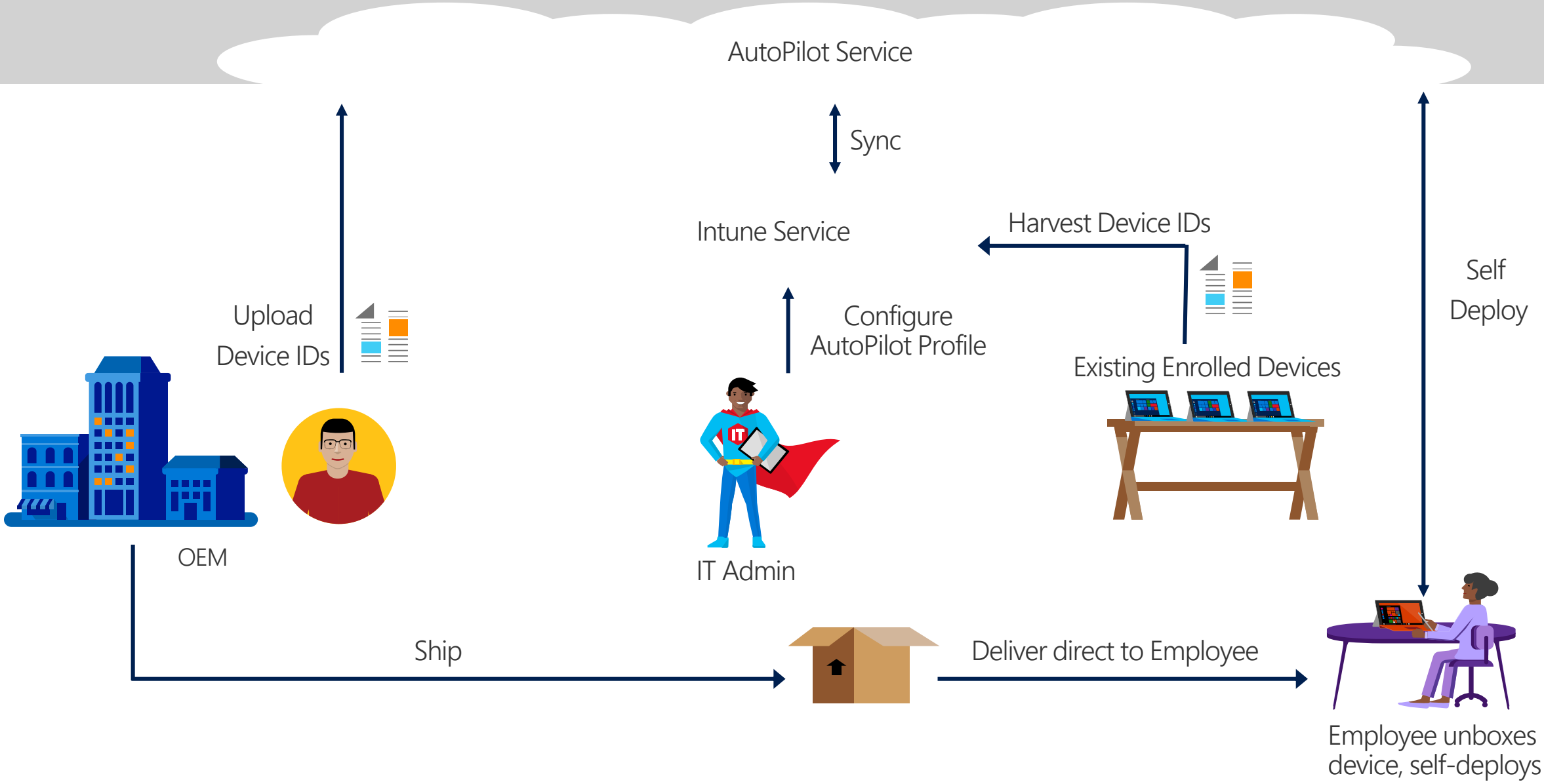
WINDOWS AUTOPILOT



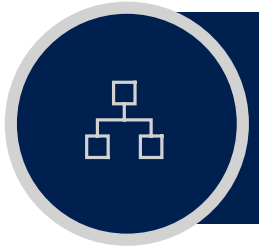
WINDOWS AUTOPILOT



WINDOWS AUTOPILOT



OEM support for Windows Autopilot



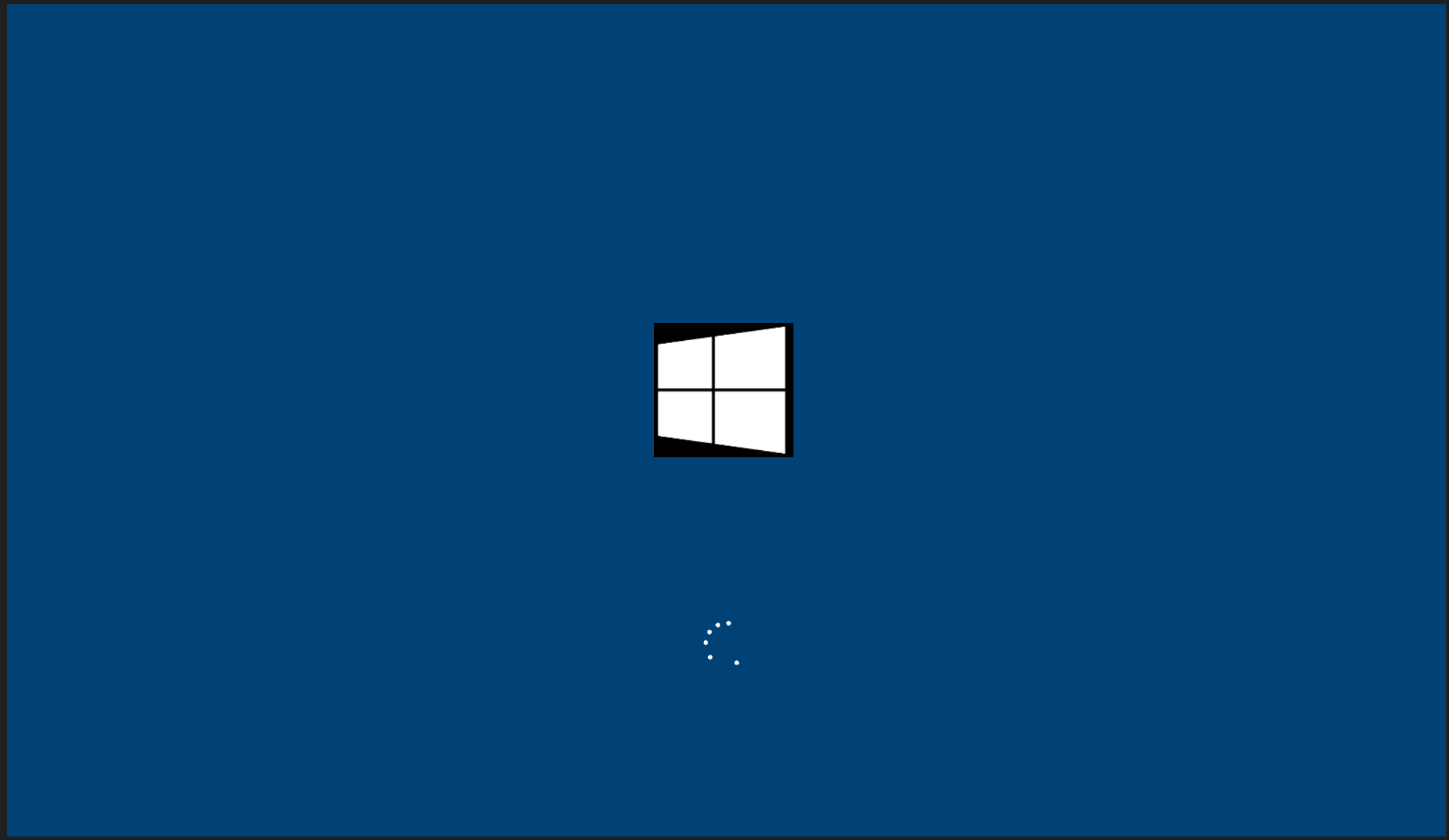
Timelines to support Windows AutoPilot

First half of CY2018:

- Surface (Live now!)
- Lenovo (Live now!)
- Dell (Live now!)

Second half of CY2018:

- HP
- Panasonic
- Fujitsu
- Toshiba



Let's start with region. Is this right?

United Arab Emirates
United Kingdom
United States
Uruguay
Uzbekistan
Vanuatu
Vatican City
Venezuela

Yes

Is this the right keyboard layout?

US

United States-Dvorak for left hand DVORAK L

United States-Dvorak for right hand DVORAK R

United States-International QWERTY

Albanian QWERTZ

Azerbaijani PUSUDB

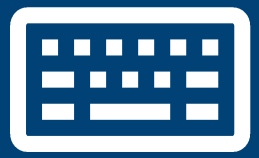
Azeri Latin QUERTY

Belgian (comma) AZERTY

Yes

Basics

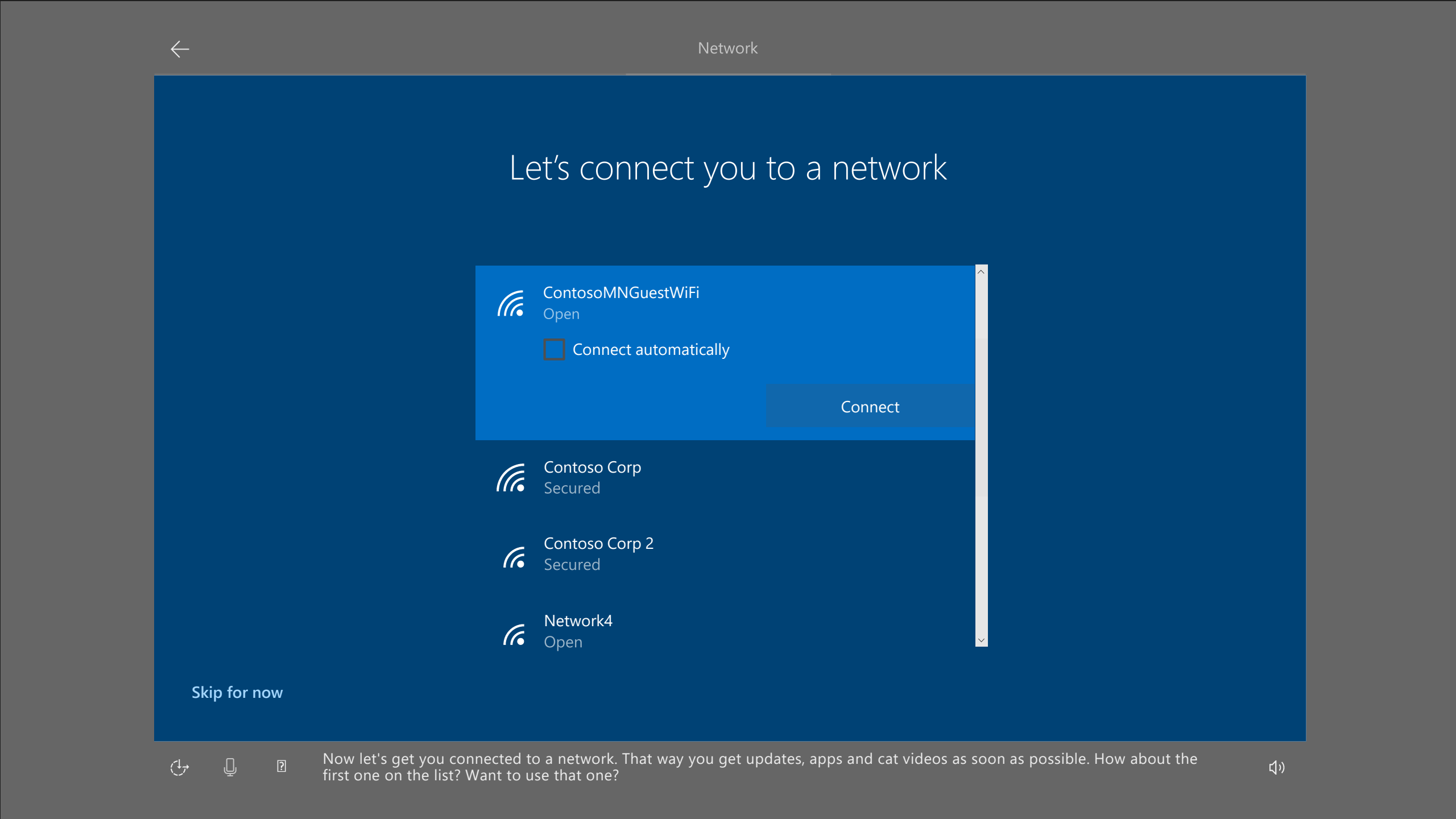
Want to add a second keyboard layout?

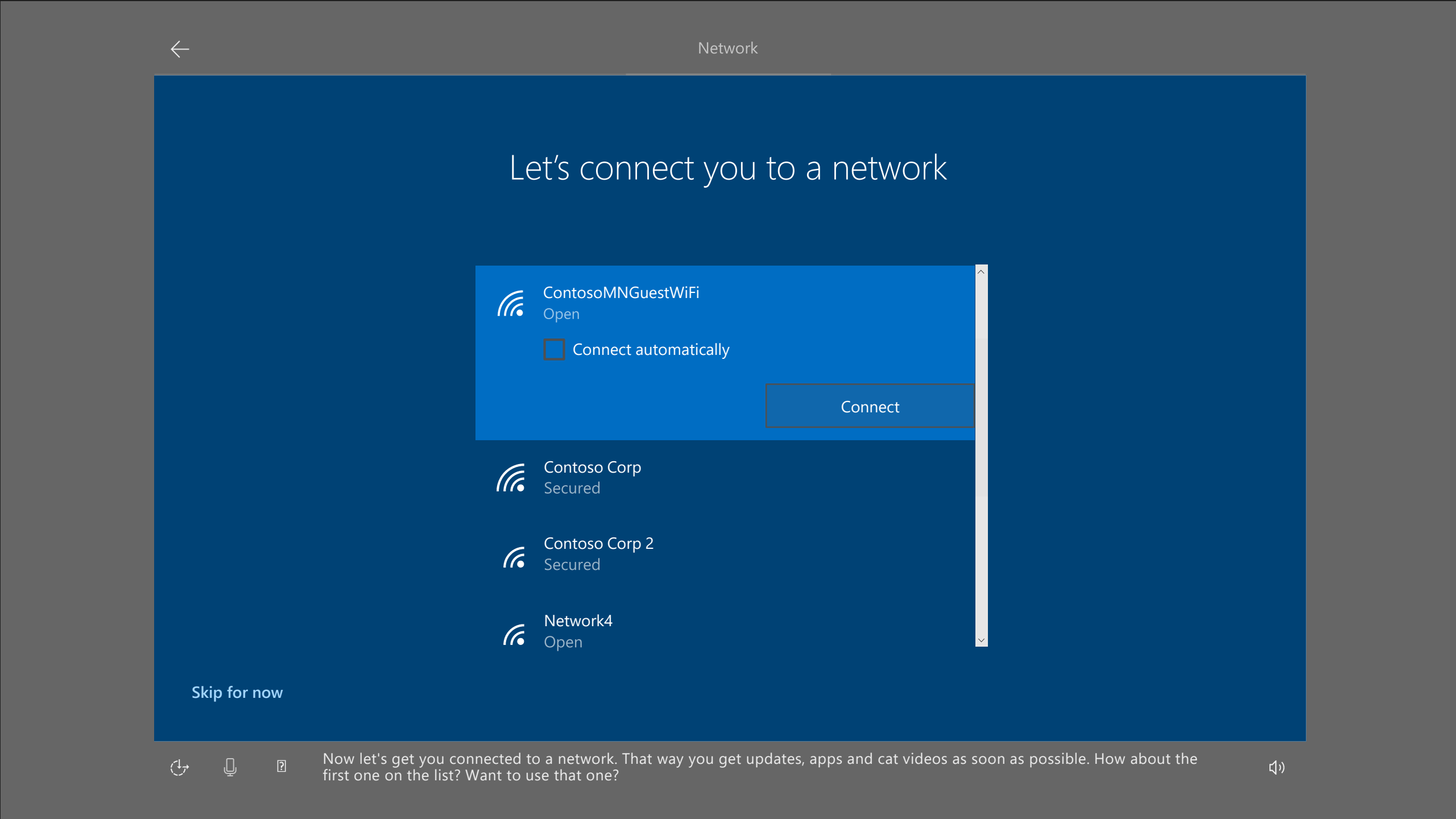


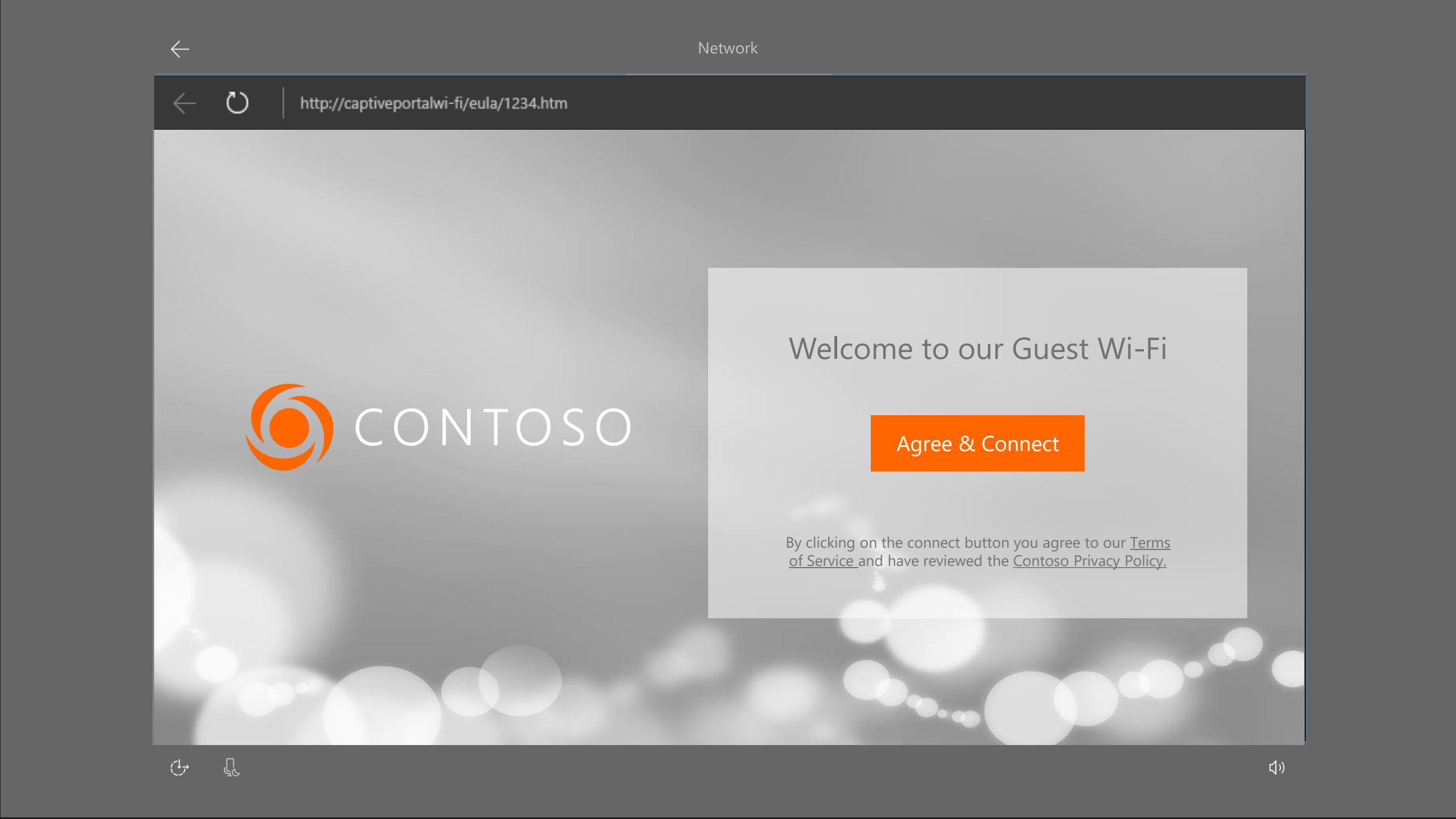
Add layout

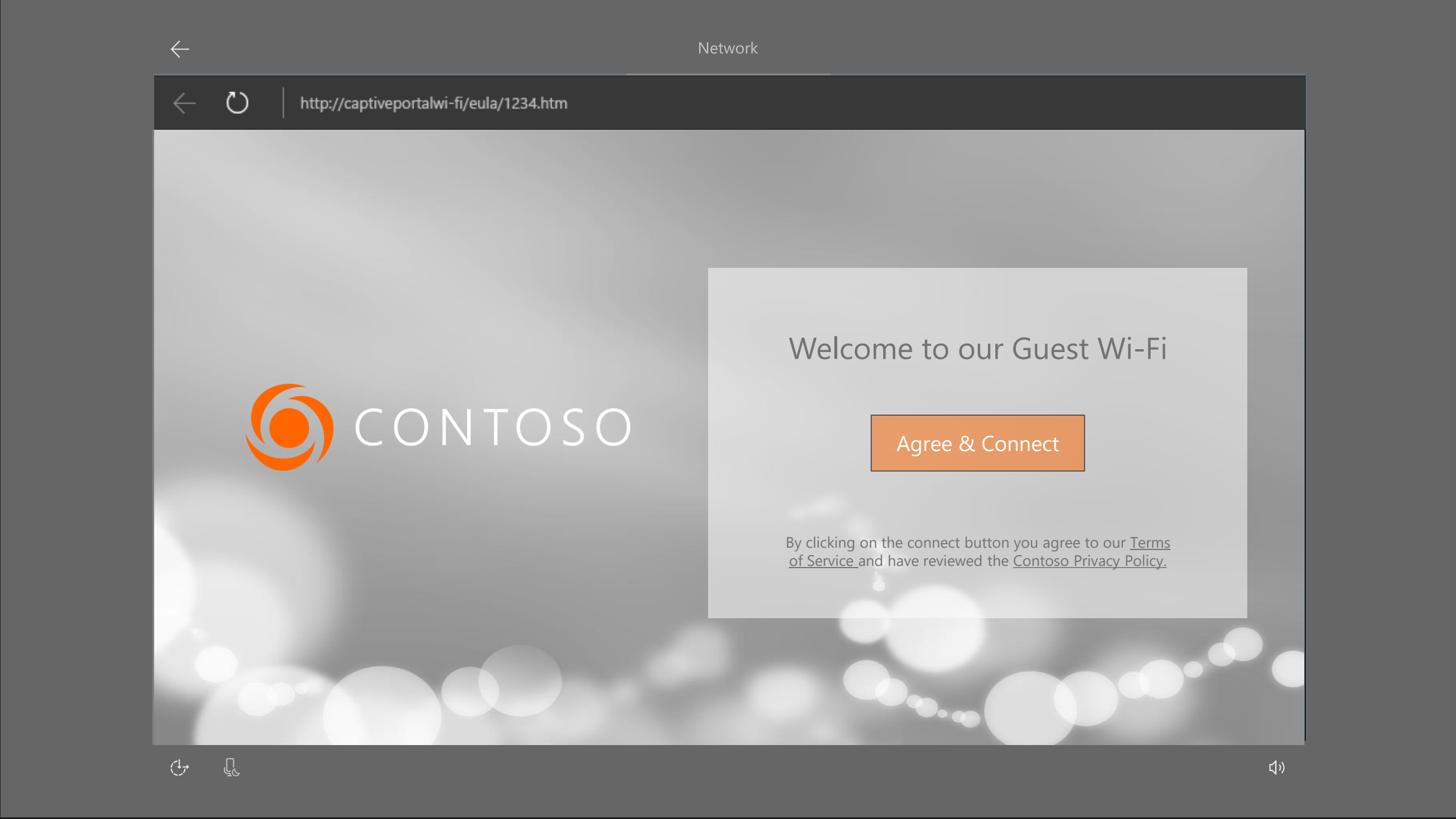
Skip

Listening...


Network
Let’s connect you to a network
ContosoMNGuestWiFi
Open
Connect automatically
Connect
Contoso Corp
Secured
Contoso Corp 2
Secured
Network4
Open
Skip for now
Now let's get you connected to a network. That way you get updates, apps and cat videos as soon as possible. How about the first one on the list? Want to use that one?


Network
Let’s connect you to a network
ContosoMNGuestWiFi
Open
Connect automatically
Connect
Contoso Corp
Secured
Contoso Corp 2
Secured
Network4
Open
Skip for now
Now let's get you connected to a network. That way you get updates, apps and cat videos as soon as possible. How about the first one on the list? Want to use that one?


Network
http://captiveportalwi-fi/eula/1234.htm
CONTOSO
Welcome to our Guest Wi-Fi
Agree & Connect
By clicking on the connect button you agree to our Terms of Service and have reviewed the Contoso Privacy Policy.

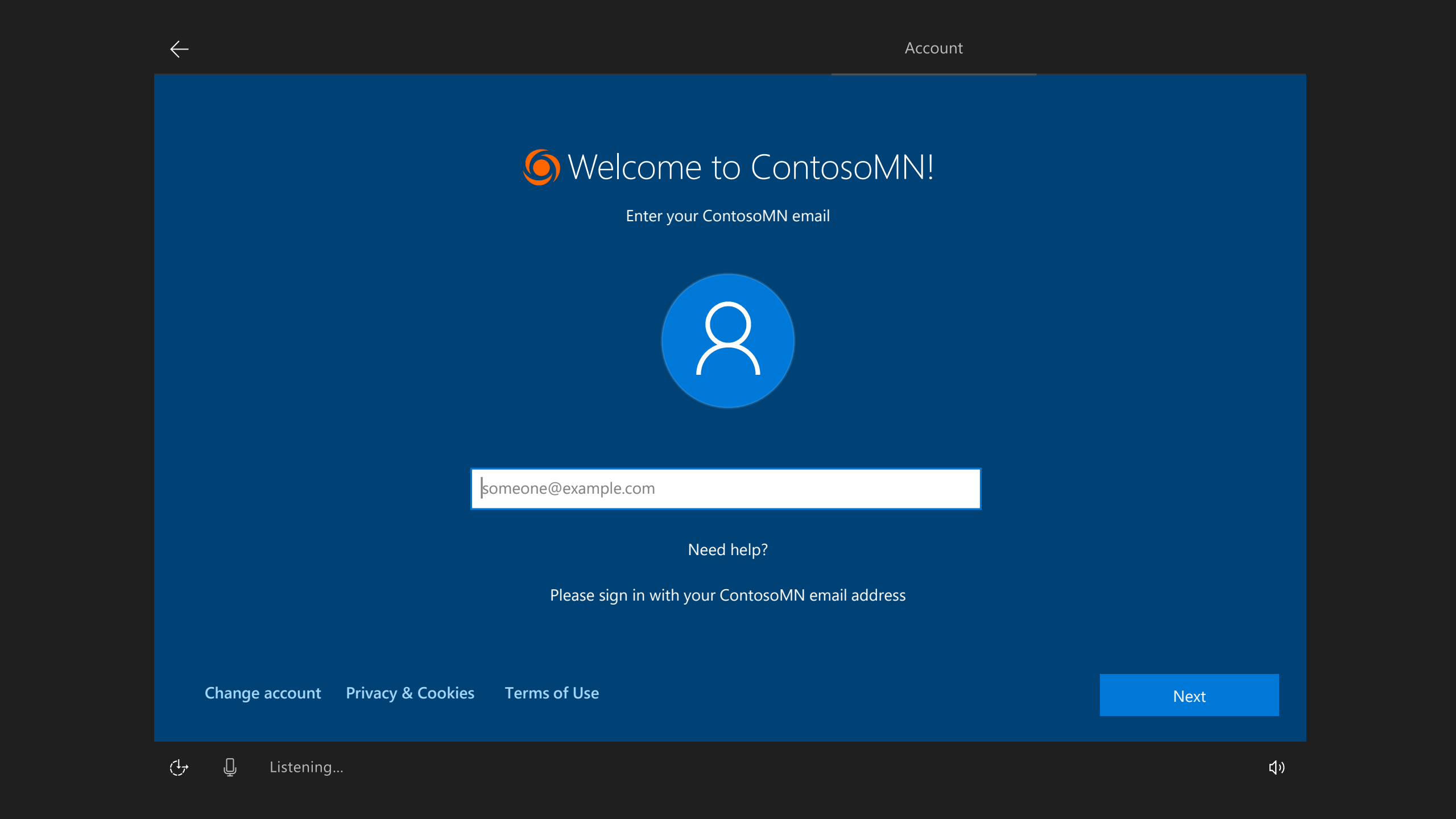

Network
http://captiveportalwi-fi/eula/1234.htm
CONTOSO
Welcome to our Guest Wi-Fi
Agree & Connect
By clicking on the connect button you agree to our Terms of Service and have reviewed the Contoso Privacy Policy.

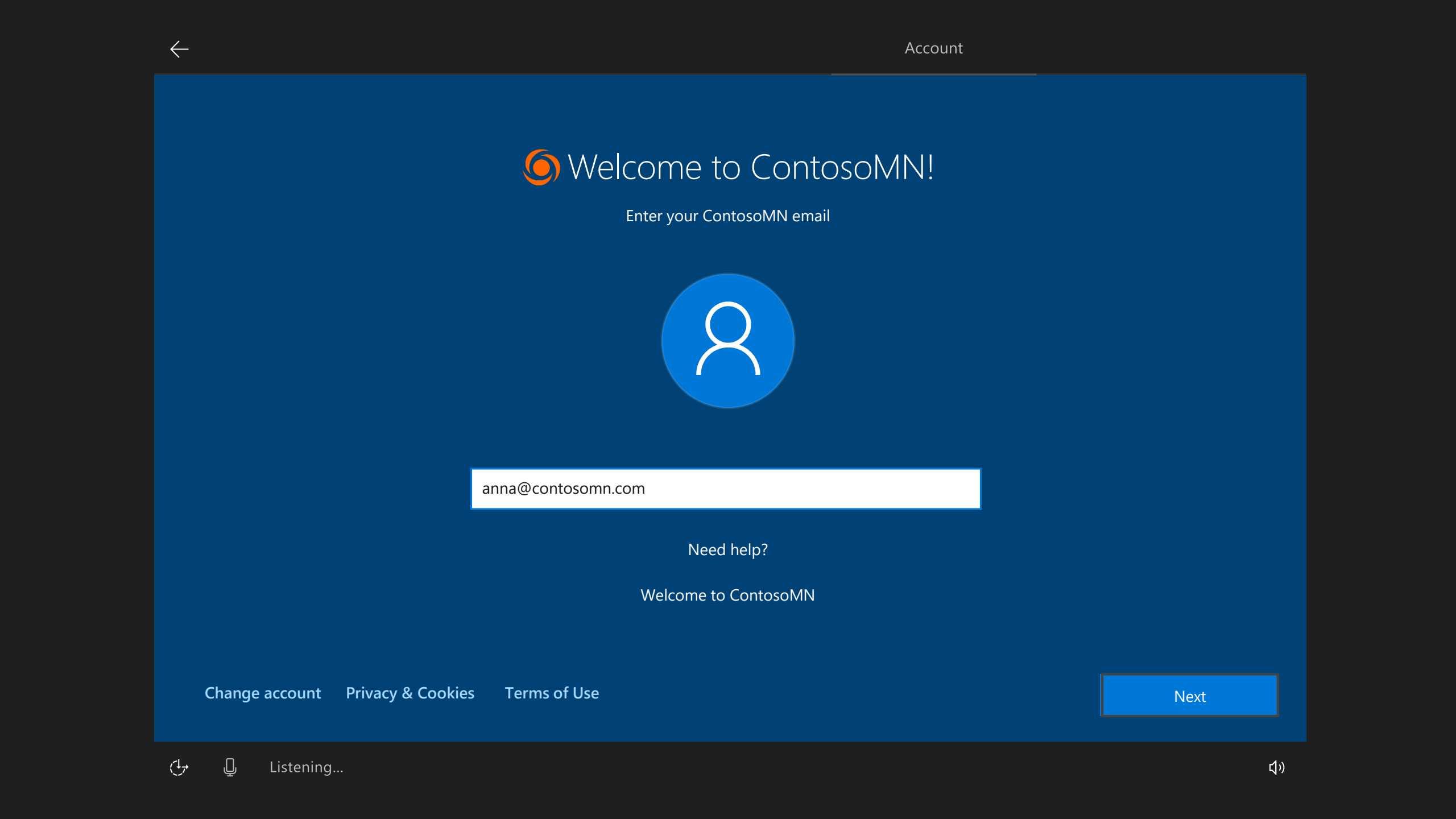
Network

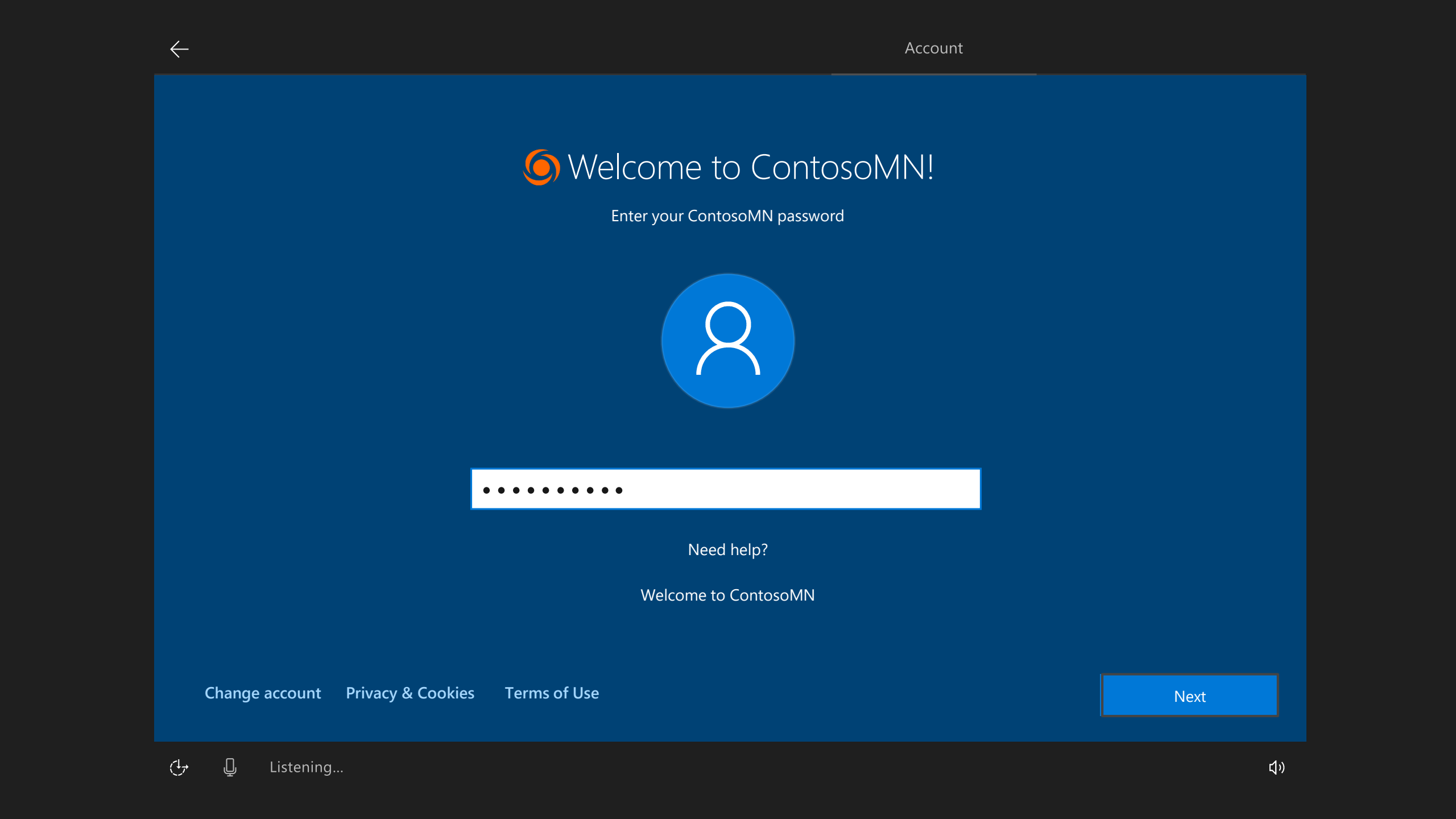
Just a moment...

Network

Now we can go look for any updates


Account
Welcome to ContosoMN!
Enter your ContosoMN email
someone@example.com
Need help?
Please sign in with your ContosoMN email address
Change account
Privacy & Cookies
Terms of Use
Next
Listening...


Account
Welcome to ContosoMN!
Enter your ContosoMN email
anna@contosomn.com
Need help?
Welcome to ContosoMN
Change account
Privacy & Cookies
Terms of Use
Next
Listening...


Account
Welcome to ContosoMN!
Enter your ContosoMN password
Need help?
Welcome to ContosoMN
Change account
Privacy & Cookies
Terms of Use
Next
Listening...

Finish setup

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 Show details
Getting things ready...

Account setup Show details
Waiting for previous step to finish

Finish setup

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 Show details
Working on it...

Account setup Show details
Waiting for previous step to finish

Finish setup

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 Show details
Complete

Account setup Show details
Waiting for previous step to finish

We’re getting everything ready for you

Don’t turn off your PC

This will just take a moment

Don’t turn off your PC

Leave everything to us

Don’t turn off your PC

Almost there

Finish setup

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 Show details
Complete

Account setup Show details
Getting things ready...

Finish setup

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 Show details
Complete

Account setup Show details
Working on it...

Finish setup

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 Show details
Complete

Account setup Show details
Complete

We’re getting everything ready for you.

Don’t turn off your PC

This might take several minutes.

Don’t turn off your PC

We want everything to be ready for you.

Don’t turn off your PC

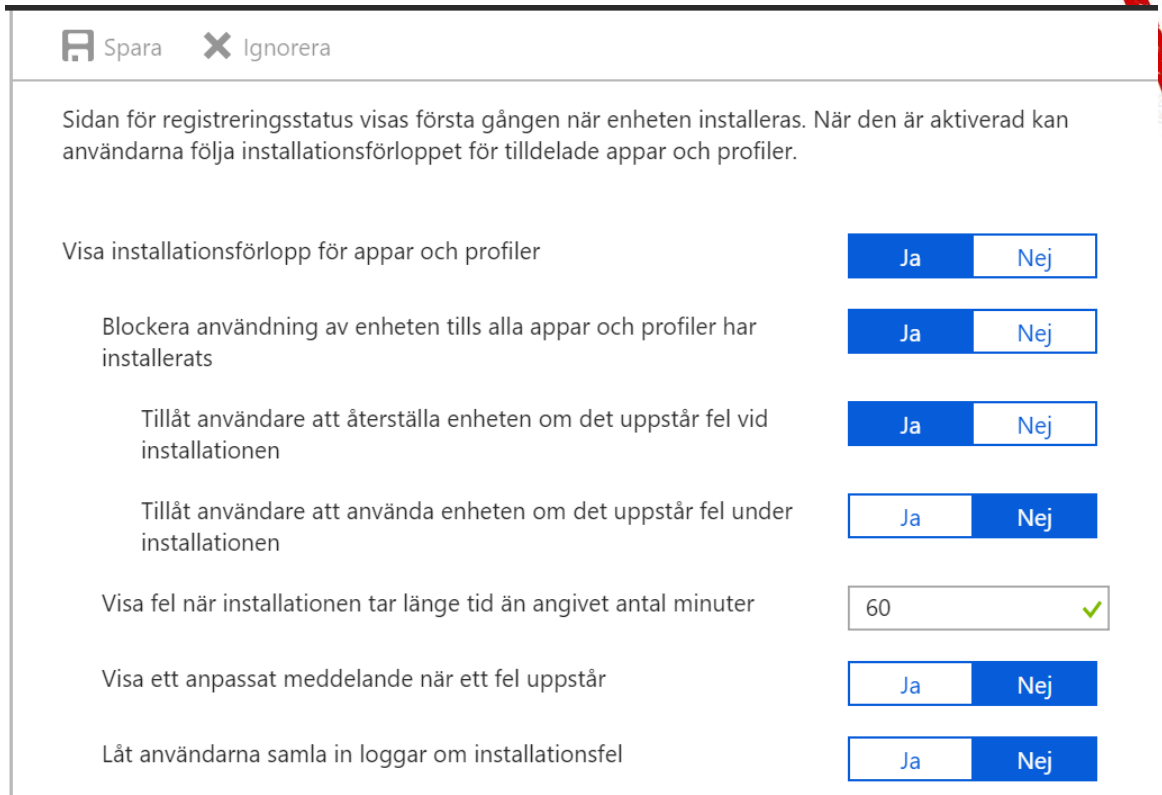
Let's Start!

Förutsättningar

- Azure AD Join, AD Domain join (Preview)
- Importera DeviceID i Store for Business alternativt Intune portalen-Använder man Intune, alltid Intune portalen.
- (PowerShell Script) måste köras i full Windows 10, inte WinPe eller Windows 7 för att extrahera DeviceID (SCCM inventerar DeviceID i Windows 10 från SCCM 1802)
- Azure AD P1 or P2 – krävs för autoenrollment i Intune
- Enheten behöver ha BIOS konfigurerat rätt
- Bitlocker kan antingen hanteras av self-encrypting disks eller med policy
- Datornamn går att styra, exempelvis prefix+serienummer
- Om Wi-Fi används måste språk för väljas samt Wi-Fi

Nyheter

- AAD Group Targeting for Autopilot profiles (Default target)
- Set Auto-redeployment in Intune
- Re-install from Intune console
- Self-driven deployment (Kräver TPM 2.0 (fysisk hårdvara)



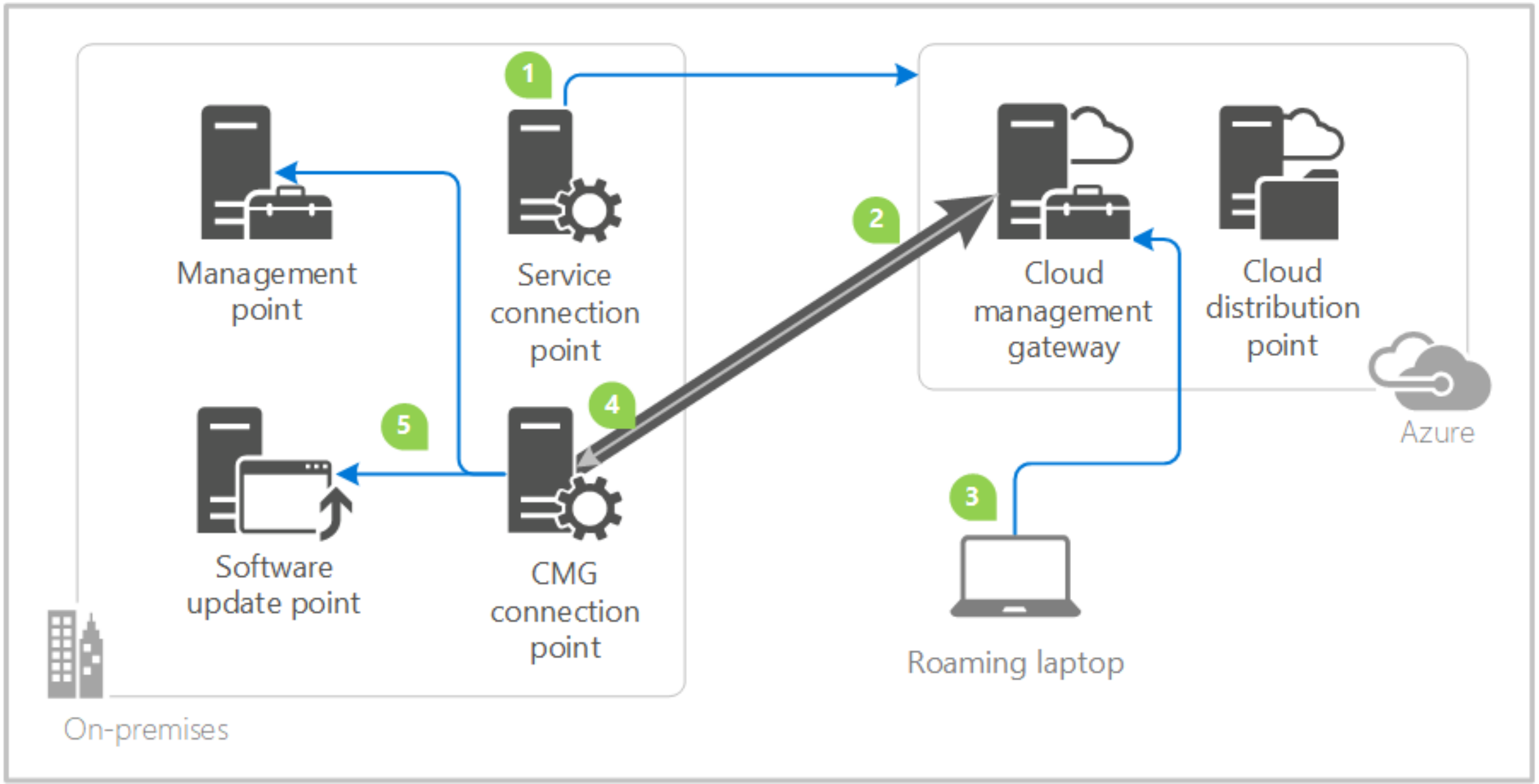
onevinn

Cloud Management Gateway

- Cloud Management Gateway är en roll i Configuration Manager som använder Azure för att möjliggöra hantering av enheter utanför det egna nätet.
- Med CMG kan vi hantera AzureAD Joined devices i Configuration Manager
- Configuration Manager klienten kommer ned från CMG (CM 1806)
- Just nu saknar vi exempelvis i Intune
  - Win32 Inventering
  - Firmware/driver update support
- Befintliga integrationer med SCCM fortsätter fungera delvis

onevinn

CMG arkitektur

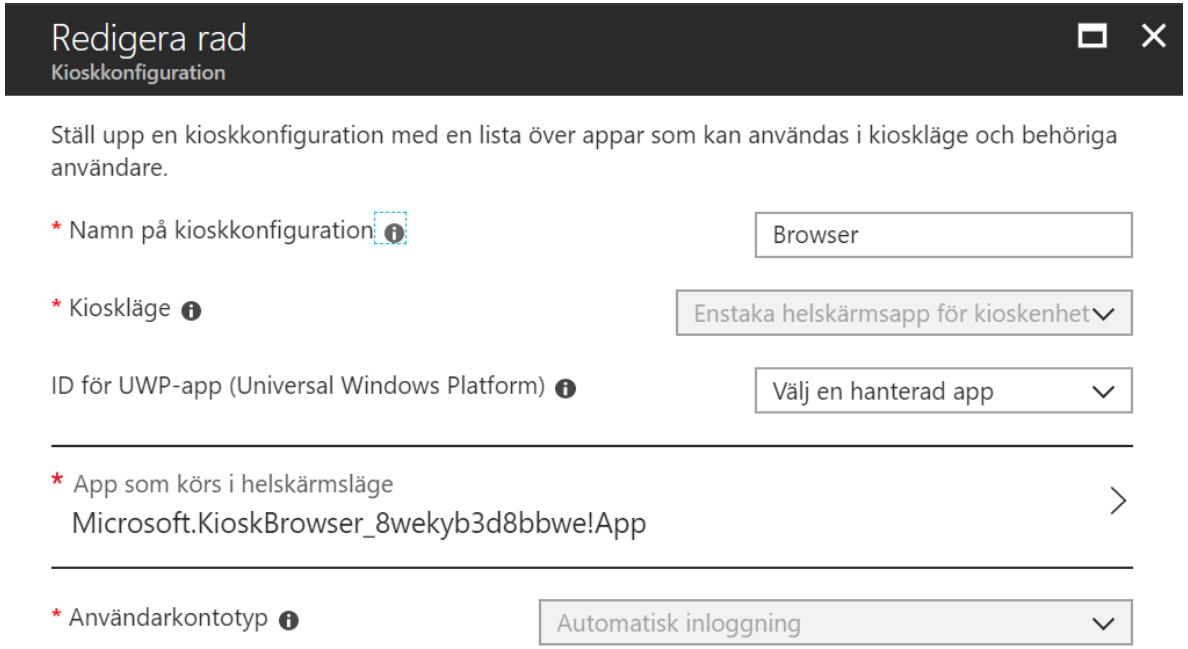


Mer nytt/på gång - Autopilot

- Autopilot for Hybrid AADJ
- Windows 7 – Windows 10 rip and reuse (CM 1810,nedladdning till 1806)
- Forced enrollment
- Remove OEM bloatware
- Auto-register enrolled devices in AutoPilot
- Block Personal devices
- Device renaming without reboot
- User Personalization

Kiosk - Windows 10 1803

- Kiosk Mode support
- Kiosk App finns i Windows Store, konfigureras via Intune
- Kiosk-läge med flera appar
  - Distribuera start meny, nedlåsning.
- Licensiering
- Autoinloggning
  - Lokalt
  - AzureAd
  - Domain Account
  - Autologon



Welcome! Let's get you set up for work.

This may take a while, but leave everything to us.
Please don't turn off this device.

Set up manually

Next

Sync your Activities?

Resume activities between devices with Timeline and let Windows recommend recent activities. Sync your activities to the cloud to get started.

Review the Learn more and privacy statement for info about the activity history, what happens when you send your activity history to Microsoft, and how we respect your privacy.

Learn more Privacy statement

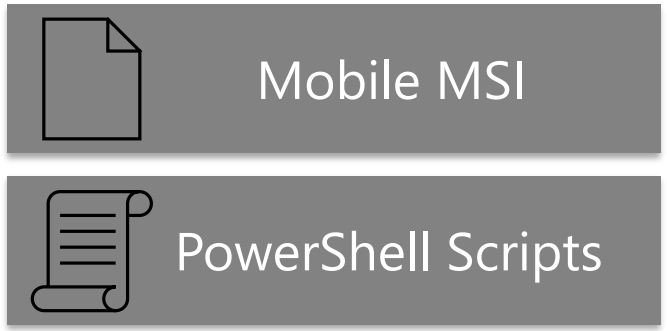
No Yes

Lessons learned

- Datorerna bör levereras med ”Signature edition” av Windows 10 har en kostnad för vissa leverantörer
- Att Dell, Lenovo, Atea? levererar en dator förregistrerad i Windows Autopilot kan ha en kostnad
- Datorer går inte att köpa med Windows 10 Enterprise
- Processer, verktyg måste till för hantering av dessa enheter
- Co-Management med Configuration manager kan användas för att komplettera Intune där det behövs.
- Utbildning av Helpdesk, On-site tekniker

Intune Win32 Software Distribution

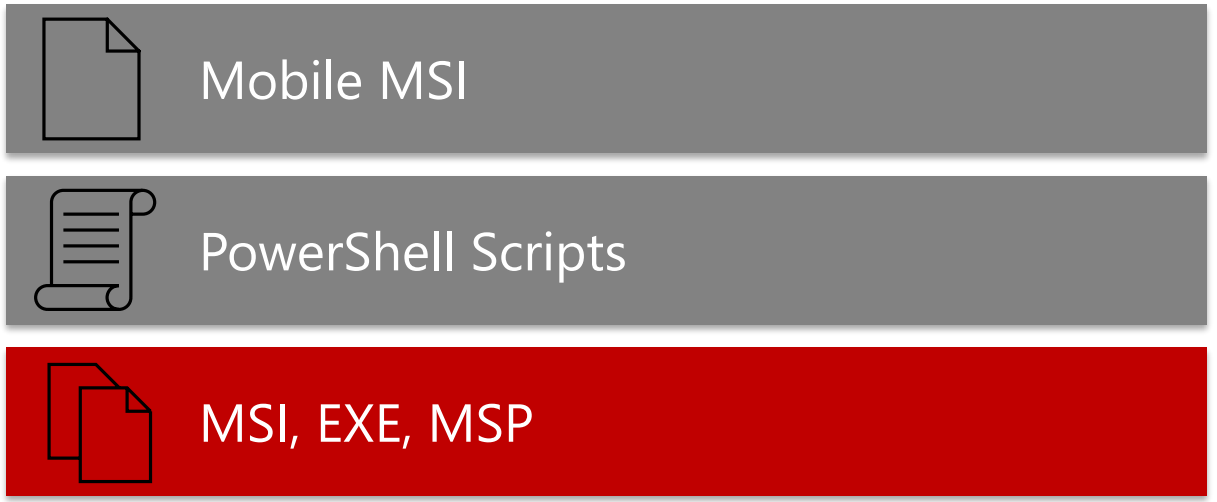
In the Past



Limited to single file MSI for Win32 apps

Challenge for customers to deploy complex Windows apps

What's New



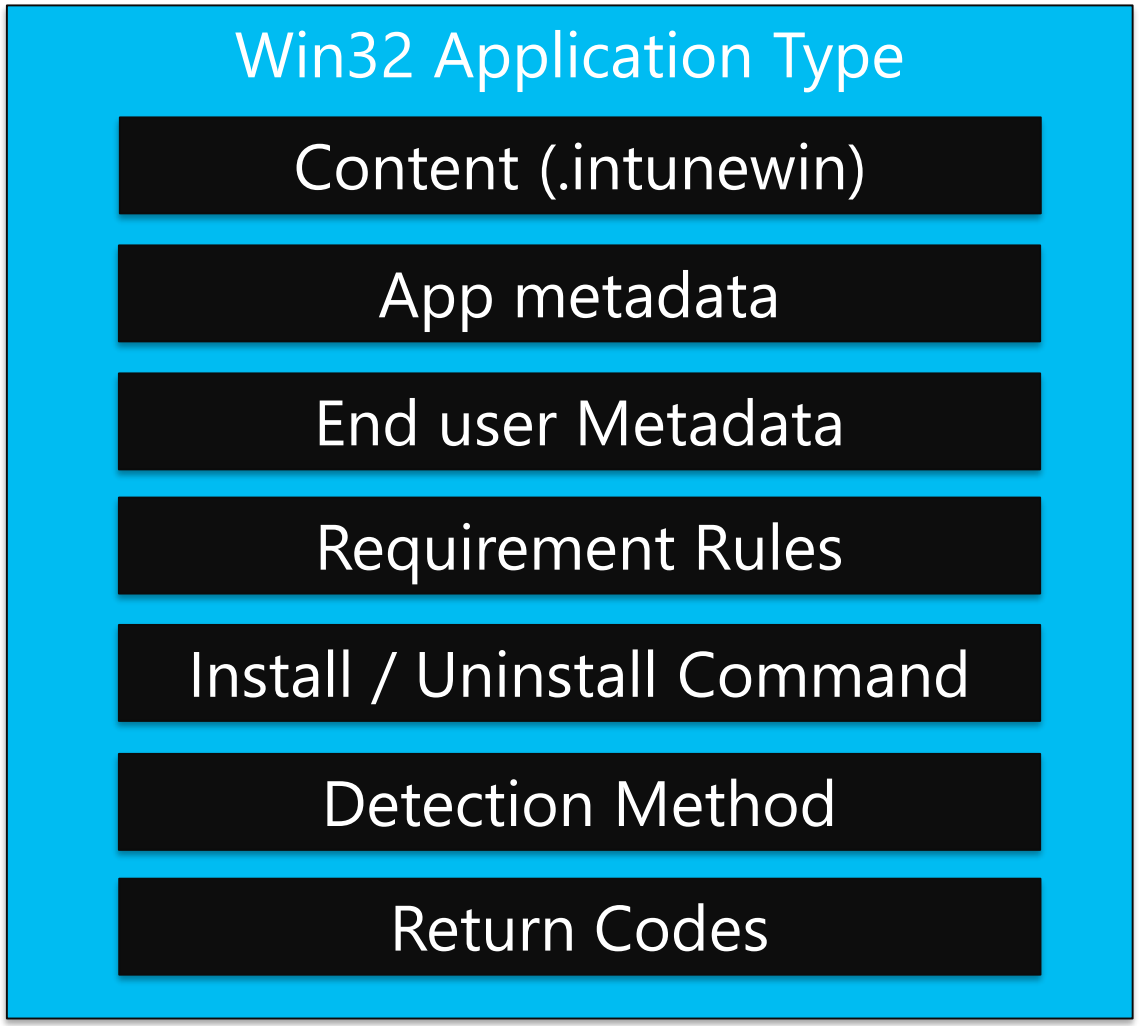
- ✓ Leverage MSIX packaging tool to convert your existing Win32 apps to MSIX
- ✓ Use new Intune capability to directly deploy Win32 apps (MSI, EXE and MSP/MST)

App-Install Choose the right tool!

Use ConfigMgr	If you are currently using Configuration Manager for app deployment and have other on-prem IT management needs (like OS deployment, task sequences, software update via WSUS/SUP)
Use Intune	If you are a cloud-only customer, or looking to move your environment to pure cloud

Application Model Diagram

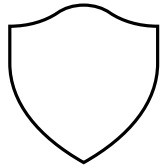
Windows Installer
(MSI, EXE, MSP)



- Prep/Upload content
- Keep your apps organized
- The “friendly” information for your users
- Can/cannot install app
- Command line and options
- Is app installed?
- Triggers install retry and reporting

Prepping the content

Download tool → Generates app manifest → Encrypt installation files → Convert installation files



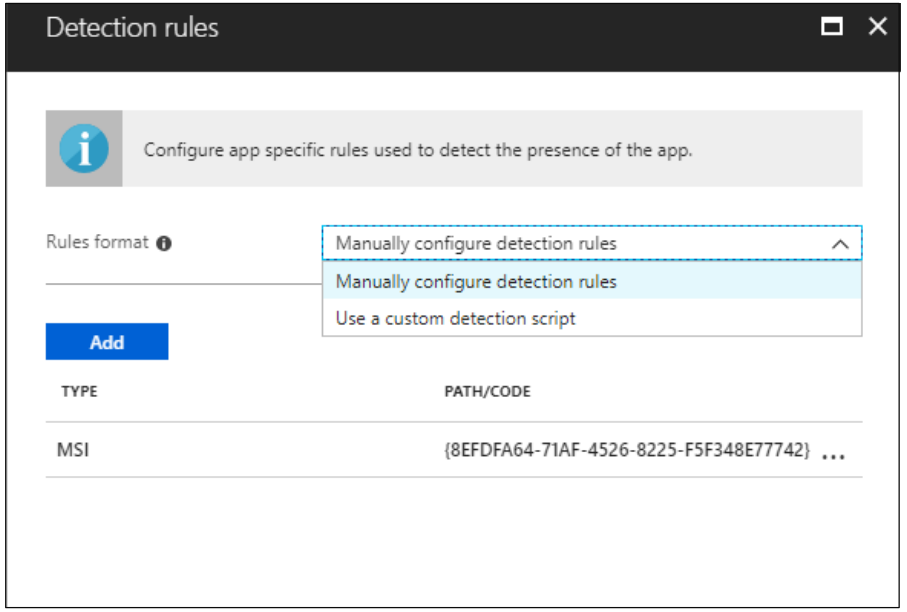
Build rich detection rules for determining application presence

Includes File, Windows Installer and Registry

- Windows Installer – Product code and version
- File – File and Folder properties including exists, version, date/time and size
- Registry – Key exists, value exists, comparisons of registry values

Expressions containing multiple rules can be built

Custom PowerShell script detection

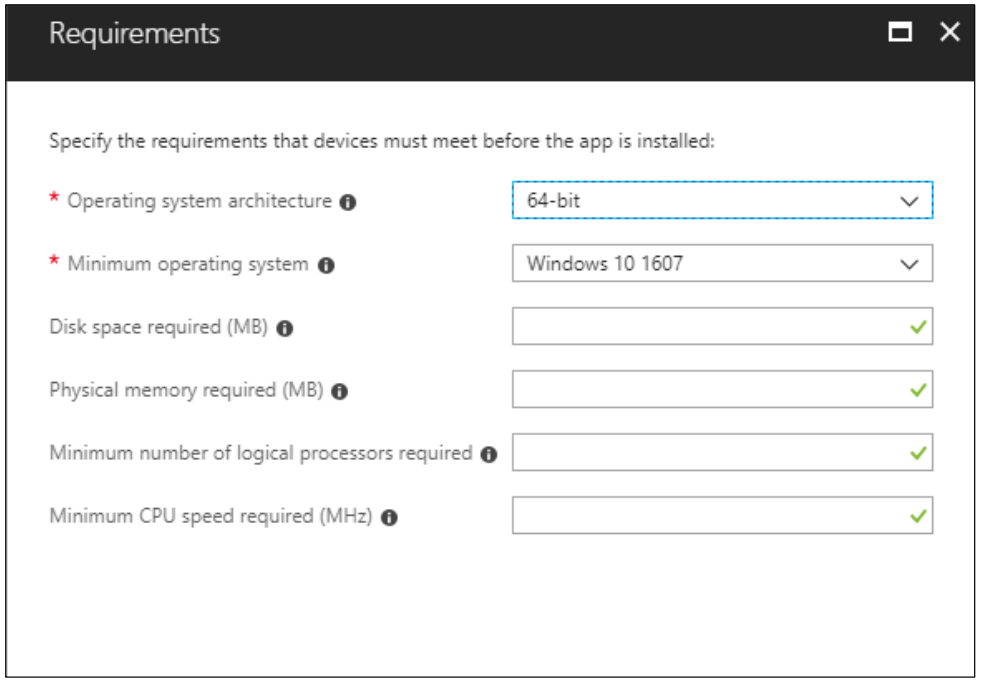


Provide specific conditions that must be met for successful app deployment

Properties of OS and device

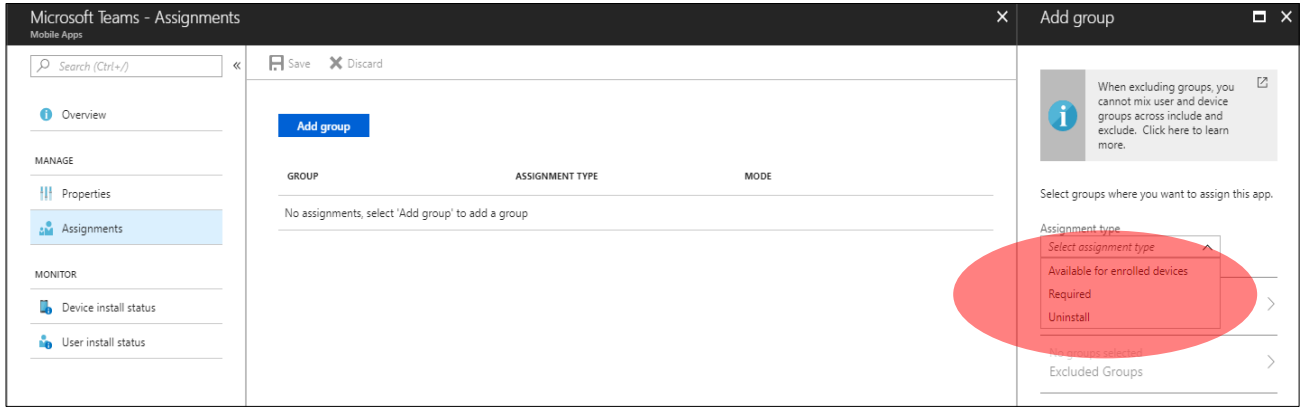
- Minimum operating system version
- Free disk space
- System architecture

Rules are per app



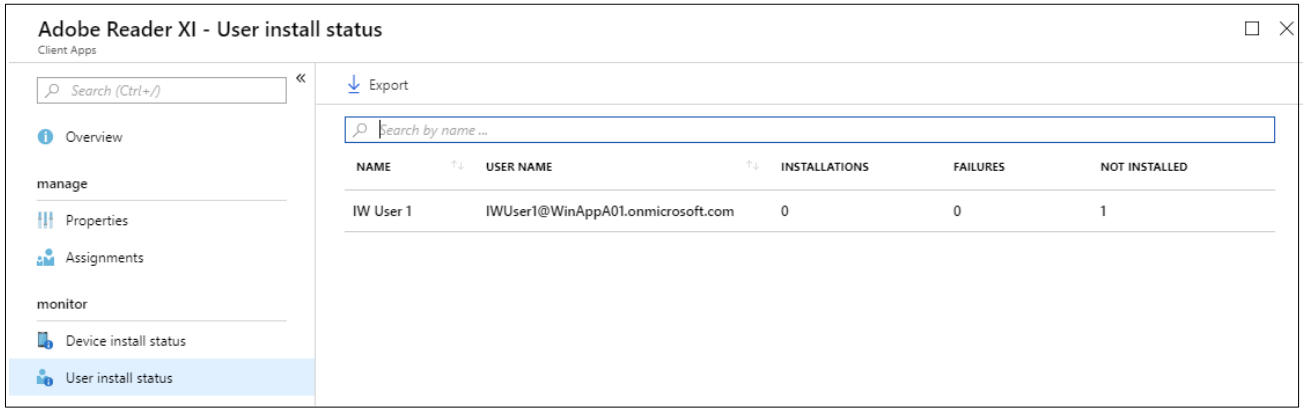
App Assignment

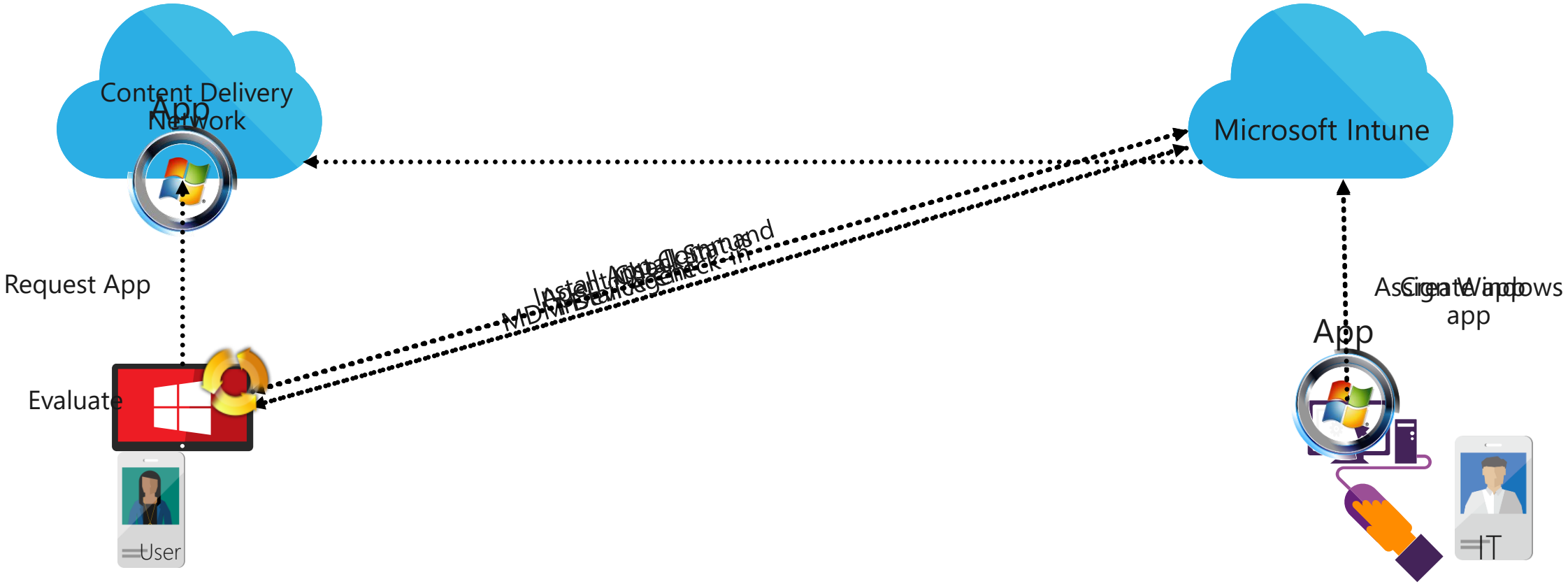
- Required
- Available
- Uninstall
- Rich targeting (include/exclude)



Monitoring

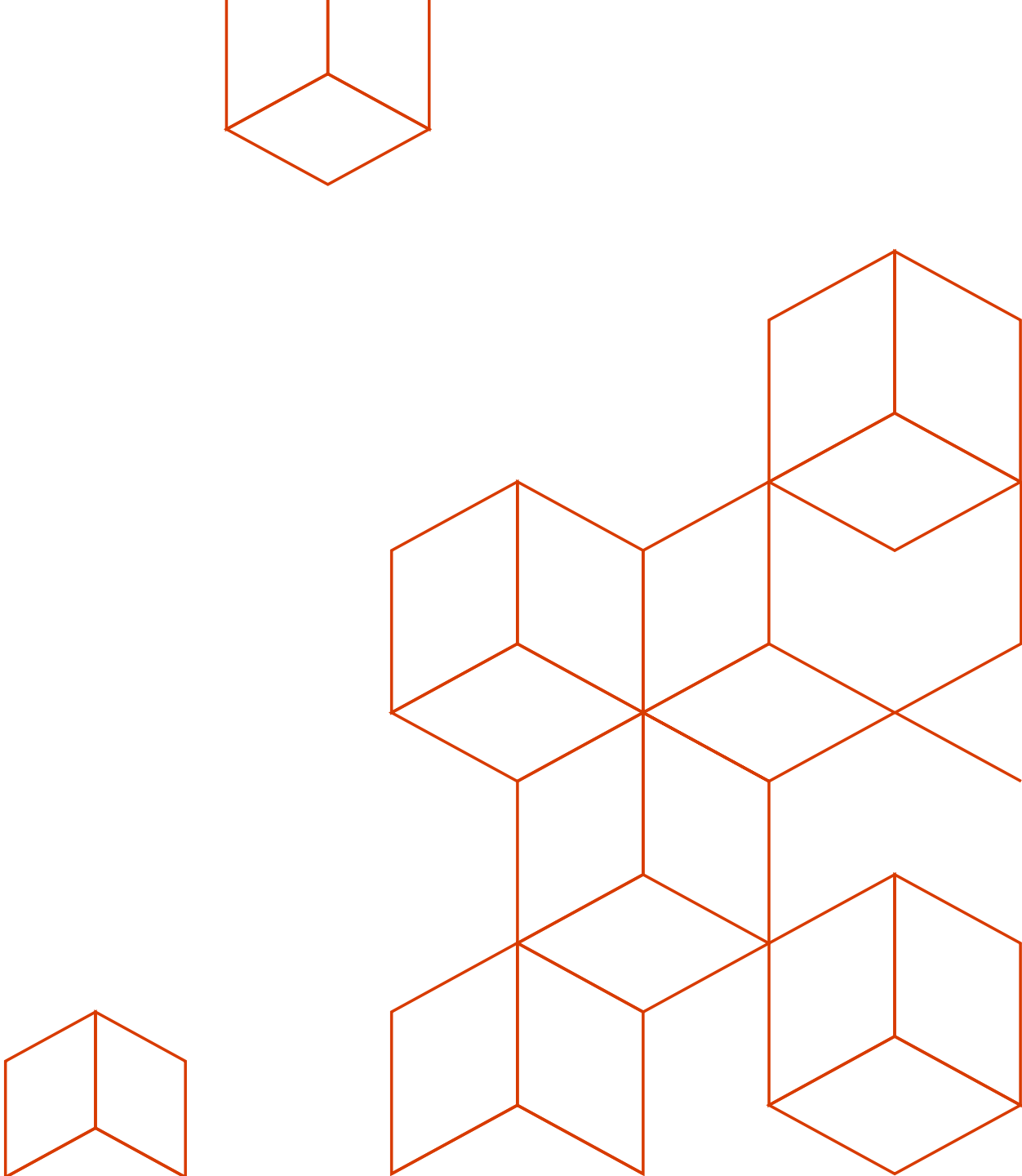
- Aligns with Intune app reporting



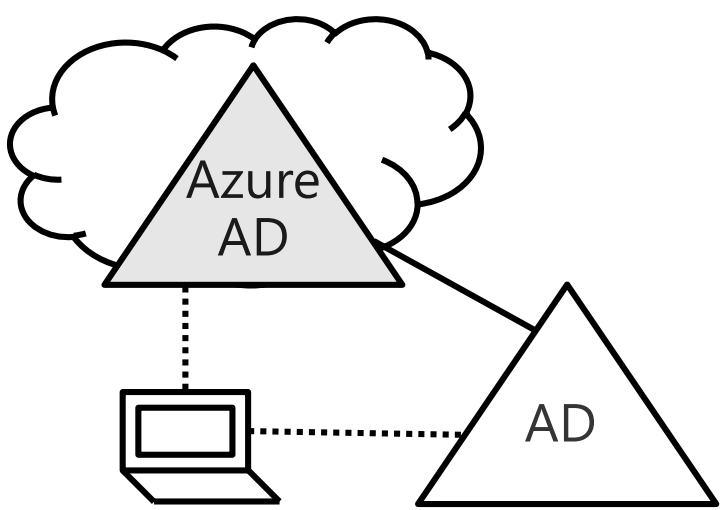

Content Delivery Network
App
Microsoft Intune
Request App
Evaluate
User
App
IT

App Install Demo

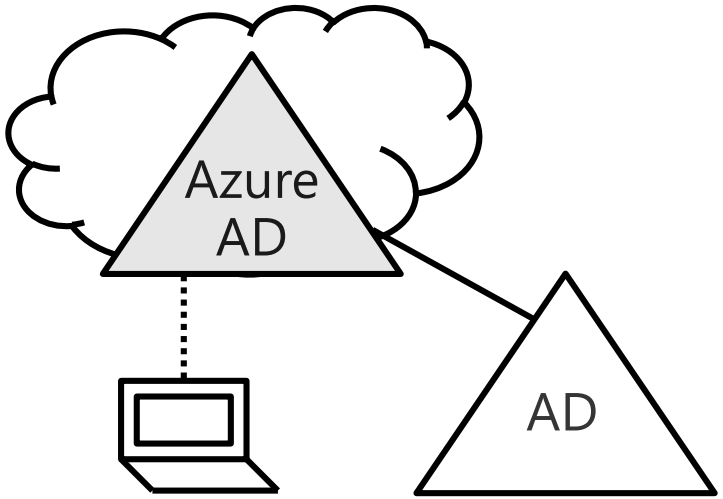
Mahyar Ghadiali



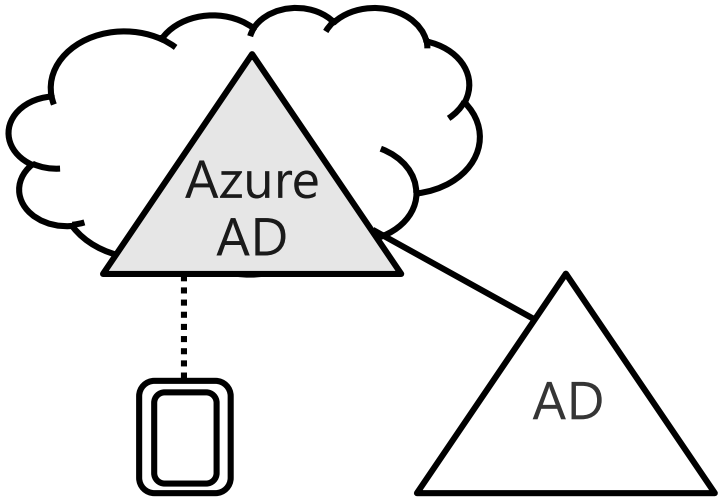
Device states in Azure AD



Hybrid Azure AD joined

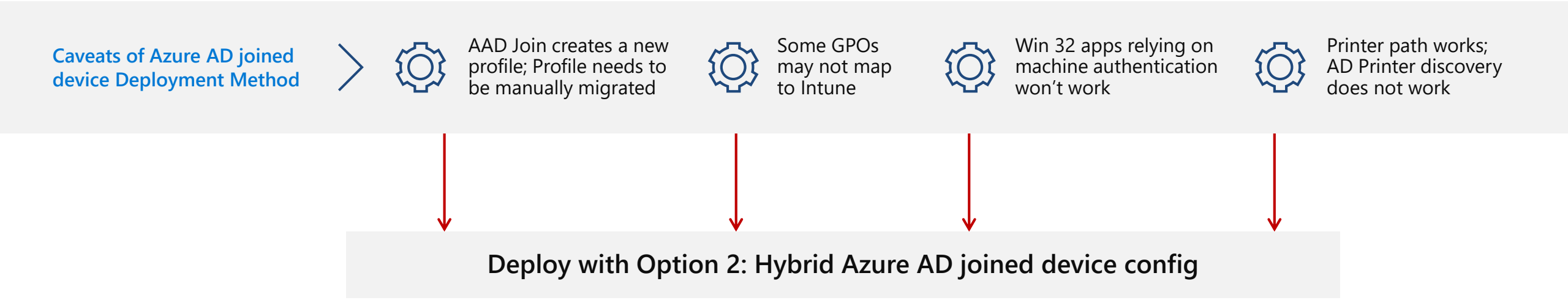


Azure AD joined



Azure AD registered

Why Hybrid AD Join?



Microsoft’s guidance is to use Azure AD Join whenever practical

Azure AD joined device config is the preferred path for non domain joined devices

Hybrid Azure AD joined device config is the preferred path for existing domain joined devices

Always consider Azure AD Join first

Consider Using both: Hybrid Azure AD joined device config for existing domain devices and Azure AD joined devices for new devices or device refresh