

# Modern Management of Windows - Intune & Autopilot



# Who am I

## Terence Beggs

Senior Systems Officer - London Metropolitan University

- Specializing in SCCM, Intune, Azure, Office 365 and PowerShell

Blogger - [www.SCCConfigMgr.com](http://www.SCCConfigMgr.com)

- We focus on all things Windows, PowerShell, Azure, EMS and Automation.

NOTE: I used slides from BRK3031 - Deploying Windows 10 - User-driven cloud deployment with Windows AutoPilot from Ignite 2017



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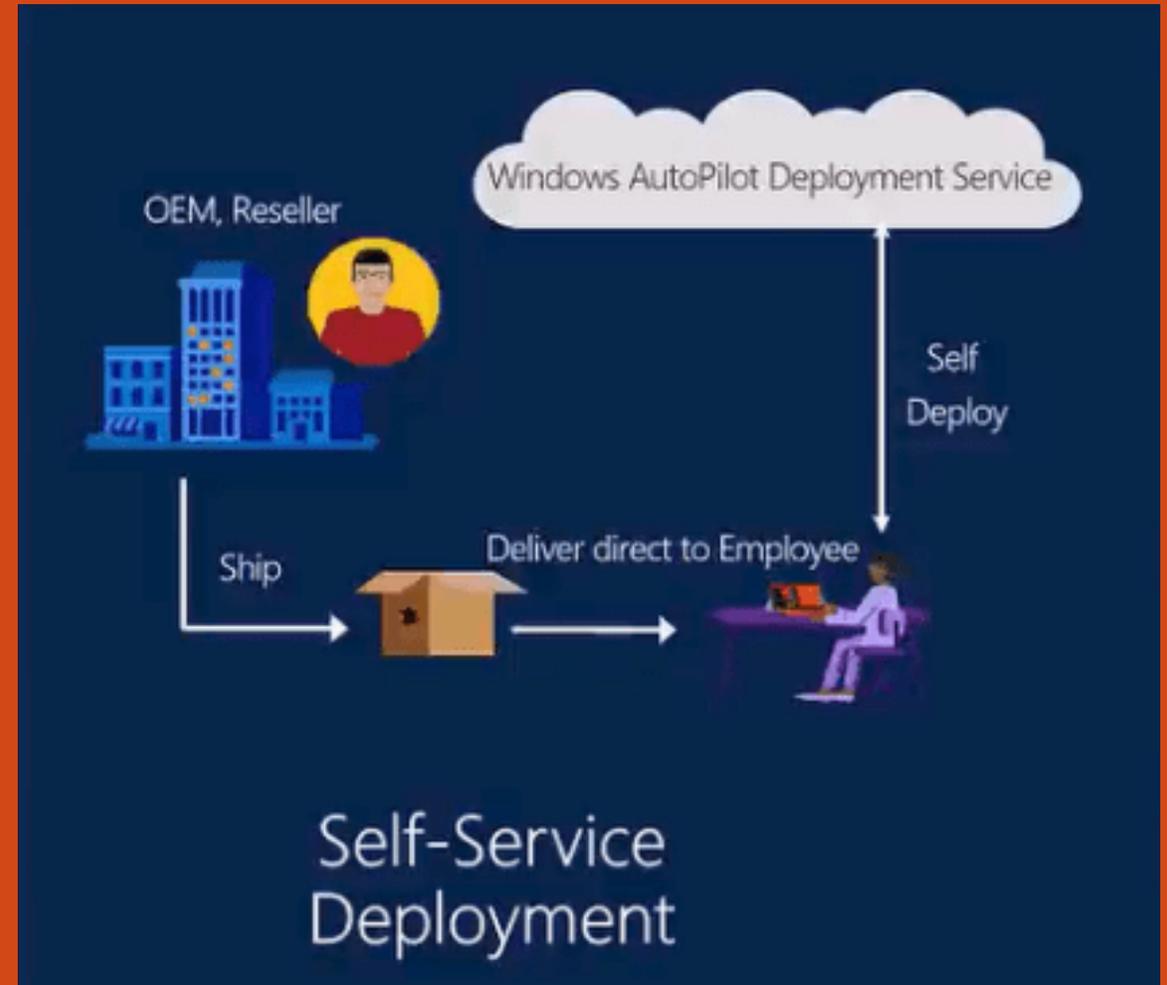
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# What is Autopilot?

With Microsoft Intune and AutoPilot, you can give new devices to your end users without the need to build, maintain, and apply custom operating system images to the devices.

When you use Intune to manage AutoPilot devices, you can manage policies, profiles, apps, etc. on the devices after they are enrolled



# What Autopilot allows you to do

- Automatically join devices to Azure Active Directory (Azure AD)
- Auto-enroll devices into MDM services, such as Microsoft Intune (*Requires an Azure AD Premium subscription*)
- Restrict the Administrator account creation
- Create and auto-assign devices to configuration groups based on a device's profile
- Customize OOB (some) content specific to the organization

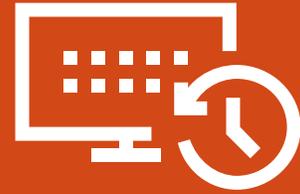


# What Autopilot is not

- Autopilot is not an SCCM imaging replacement
- It is an alternative to OSD not a replacement (yet)
- Does not replace Active Directory AD Join
- Intune MDM polices are not the same as GPO's



# Traditional versus Modern



Traditional on-prem

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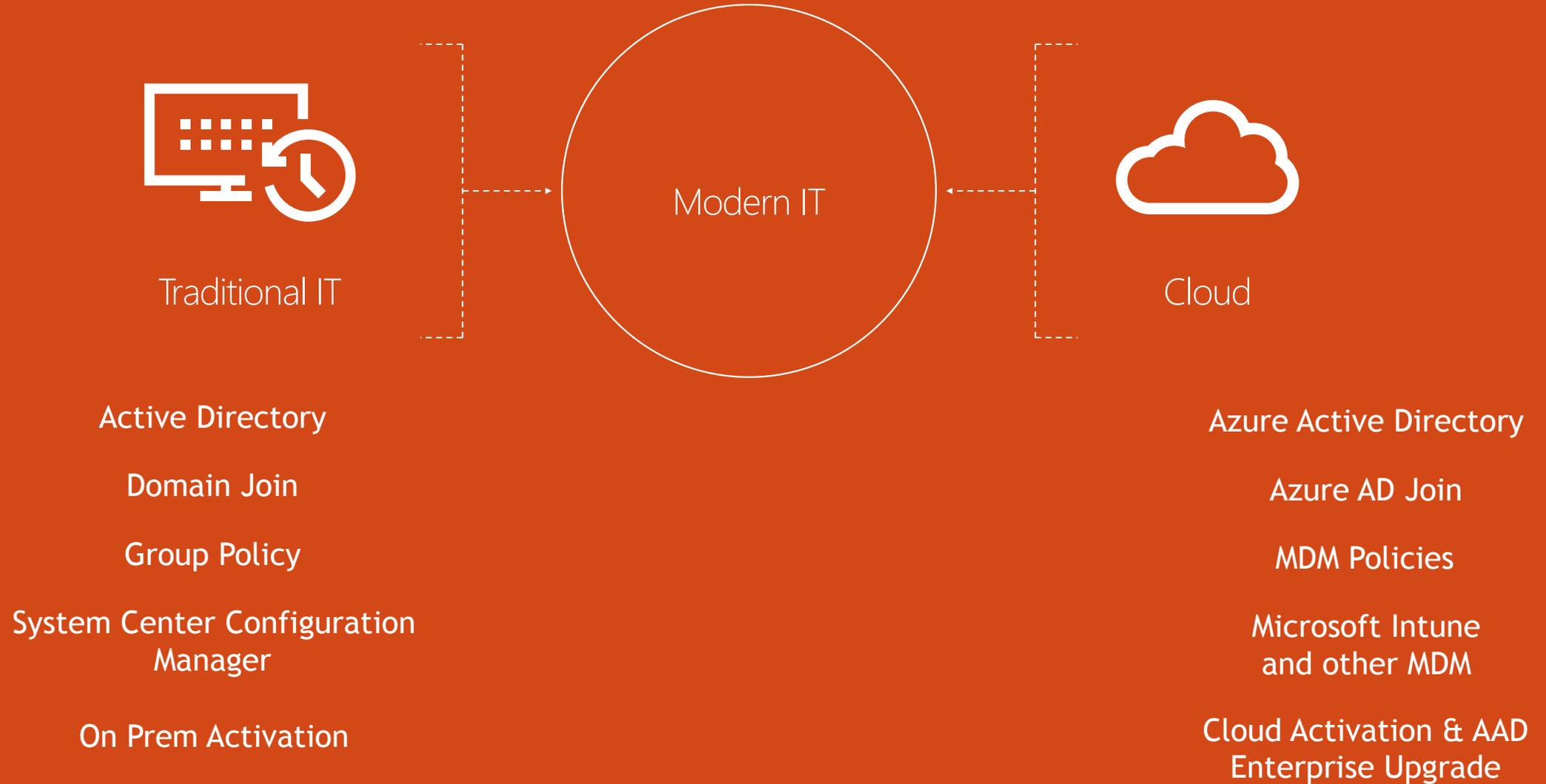
Active Directory

Domain Join

Group Policy

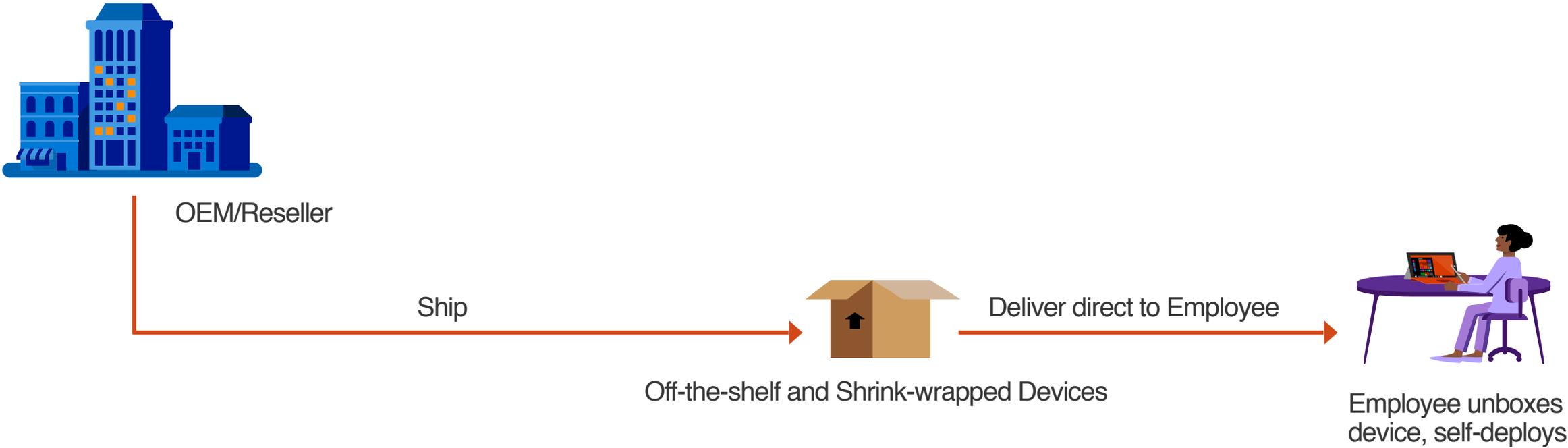
System Center Configuration  
Manager

# Windows 10 designed for modern IT



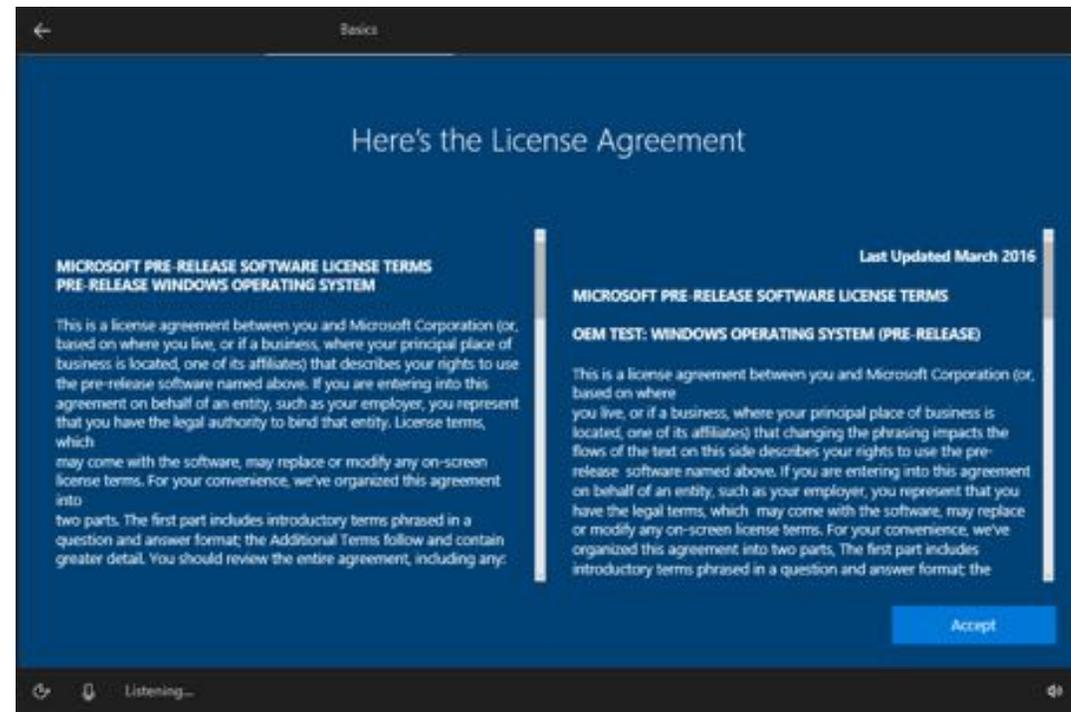
# Non-AutoPilot Enrolment

- Custom images are not allowed.



# Non-AutoPilot Enrolment

- Custom images are not allowed.
- Employees have to accept the organizations EULA



OEM/Reseller

Ship



Deliver direct to Employee

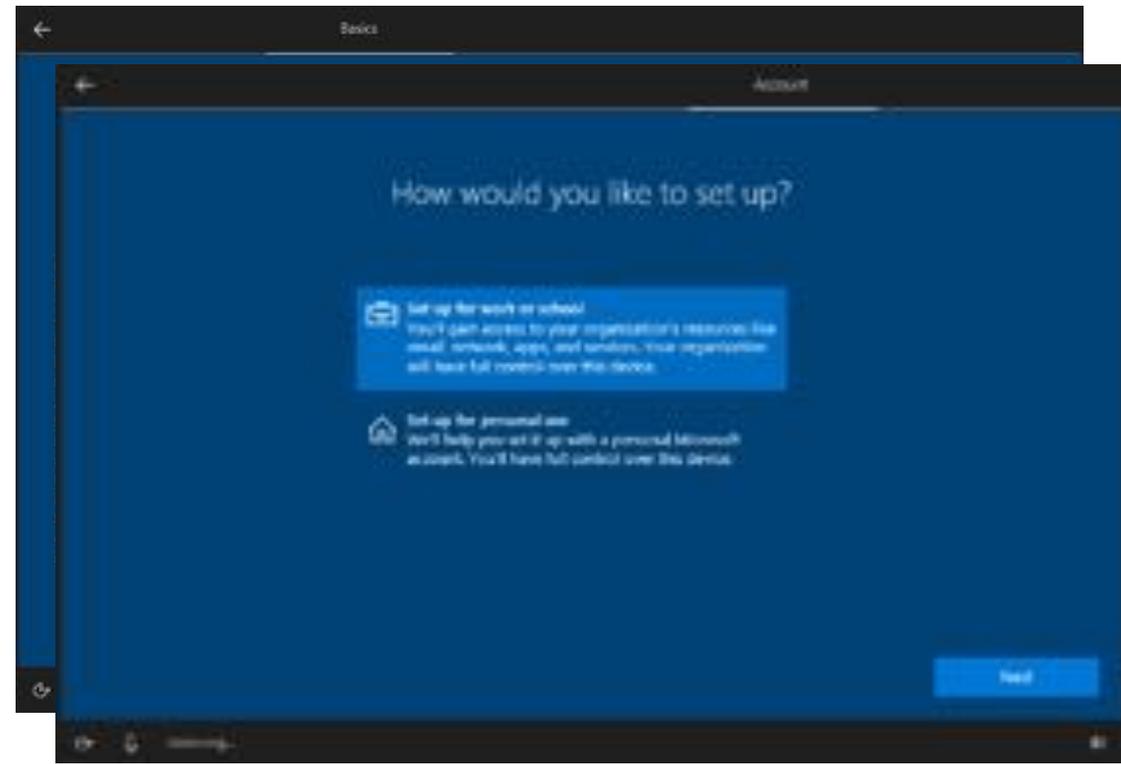


Off-the-shelf and Shrink-wrapped Devices

Employee unboxes device, self-deploys

# Non-AutoPilot Enrolment

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- Non-trivial decisions are confusing (Personal vs Corporate Owned, Privacy Settings, OEM Registration) generates Helpdesk calls



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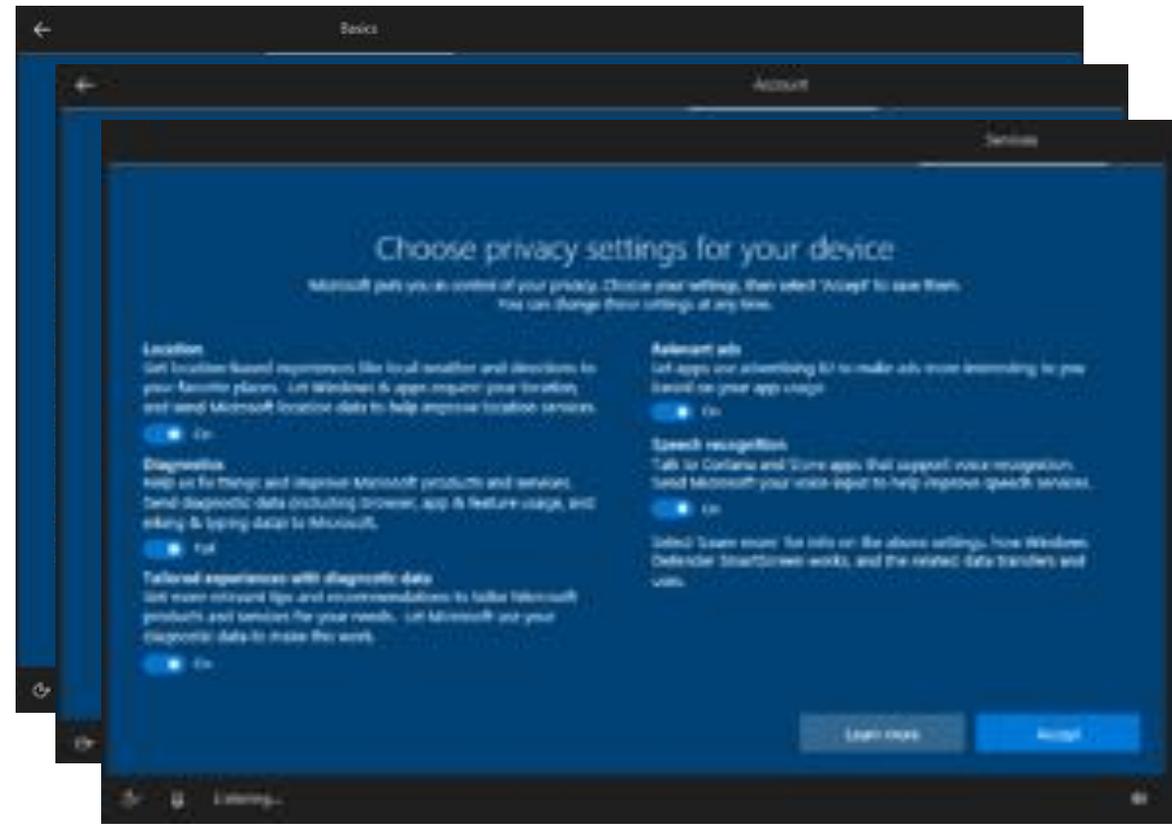


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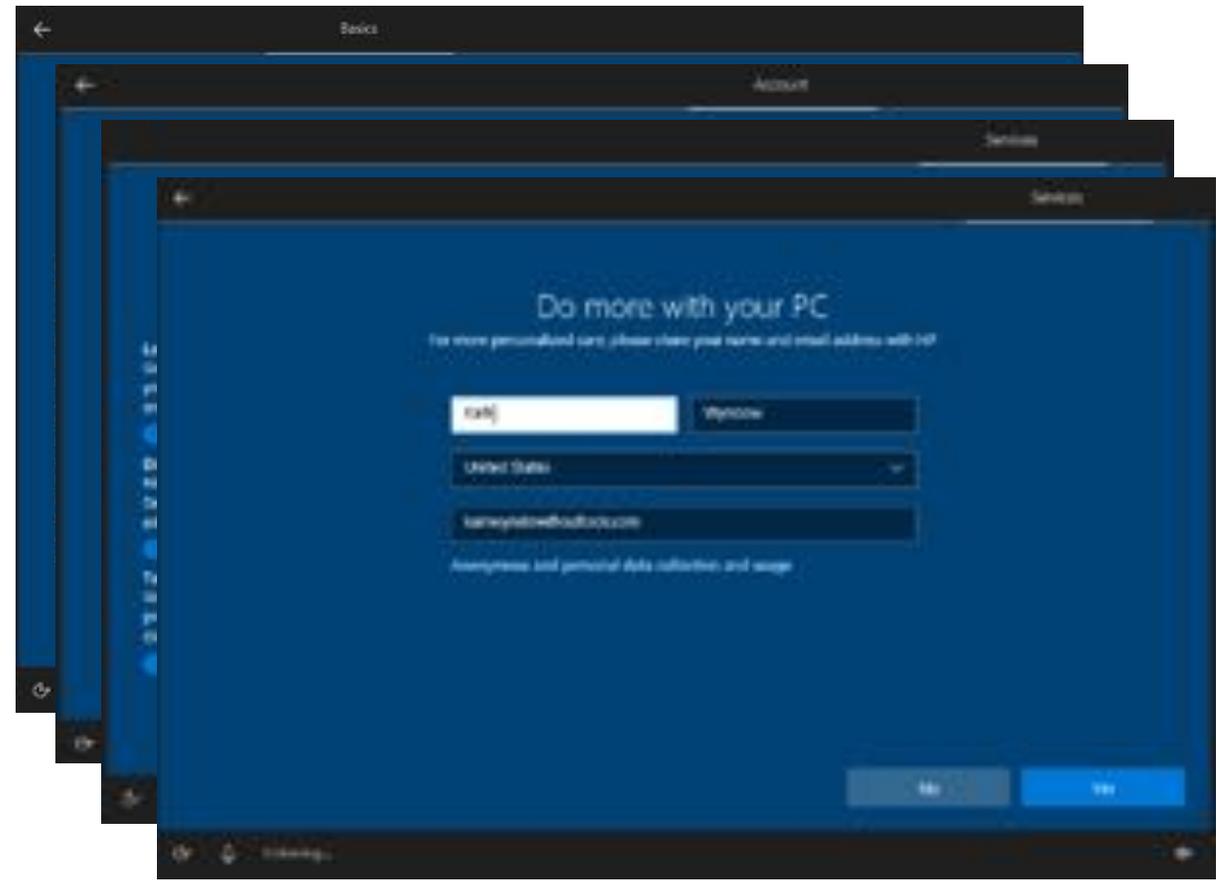


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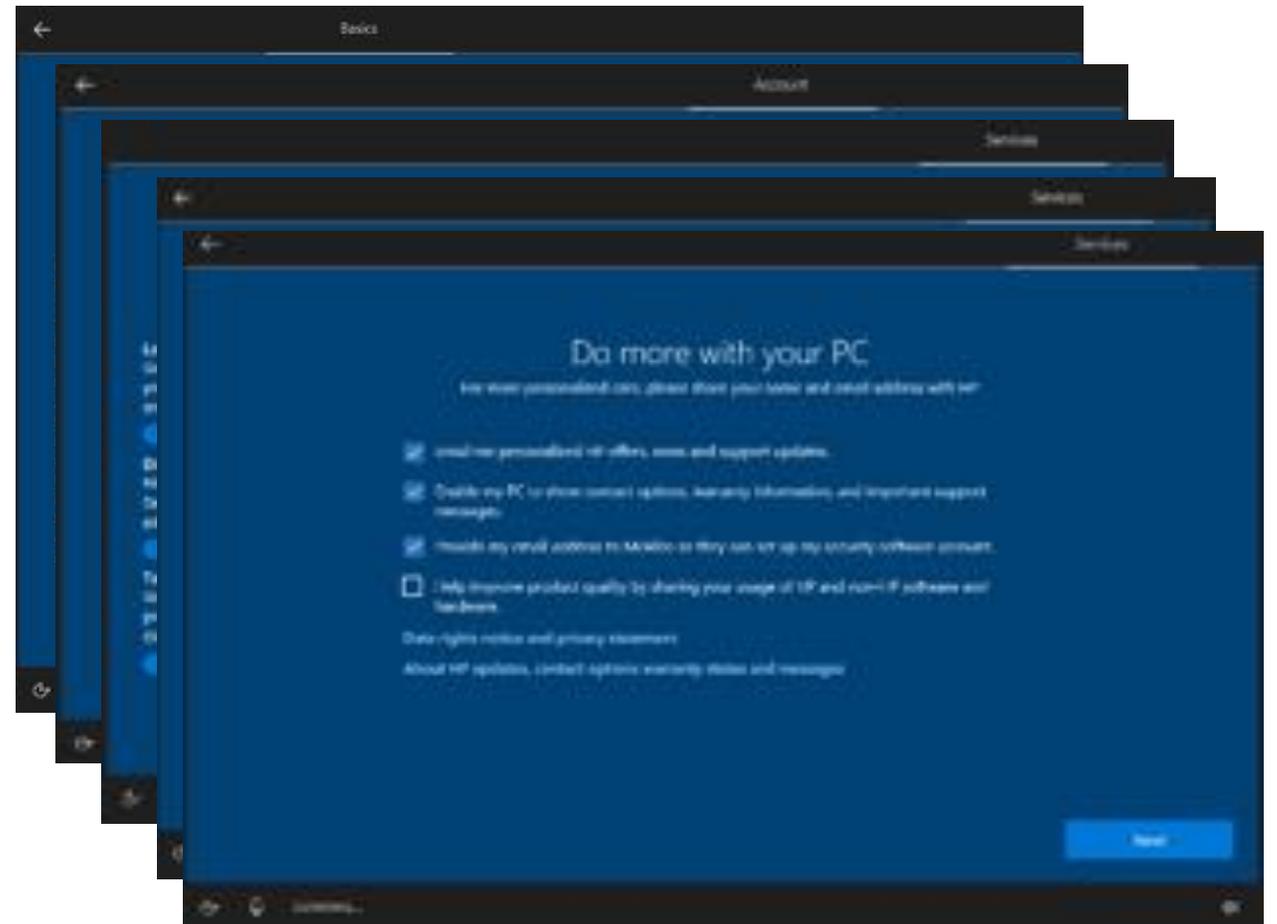


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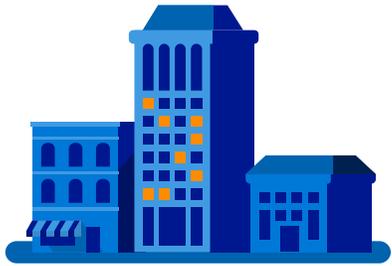
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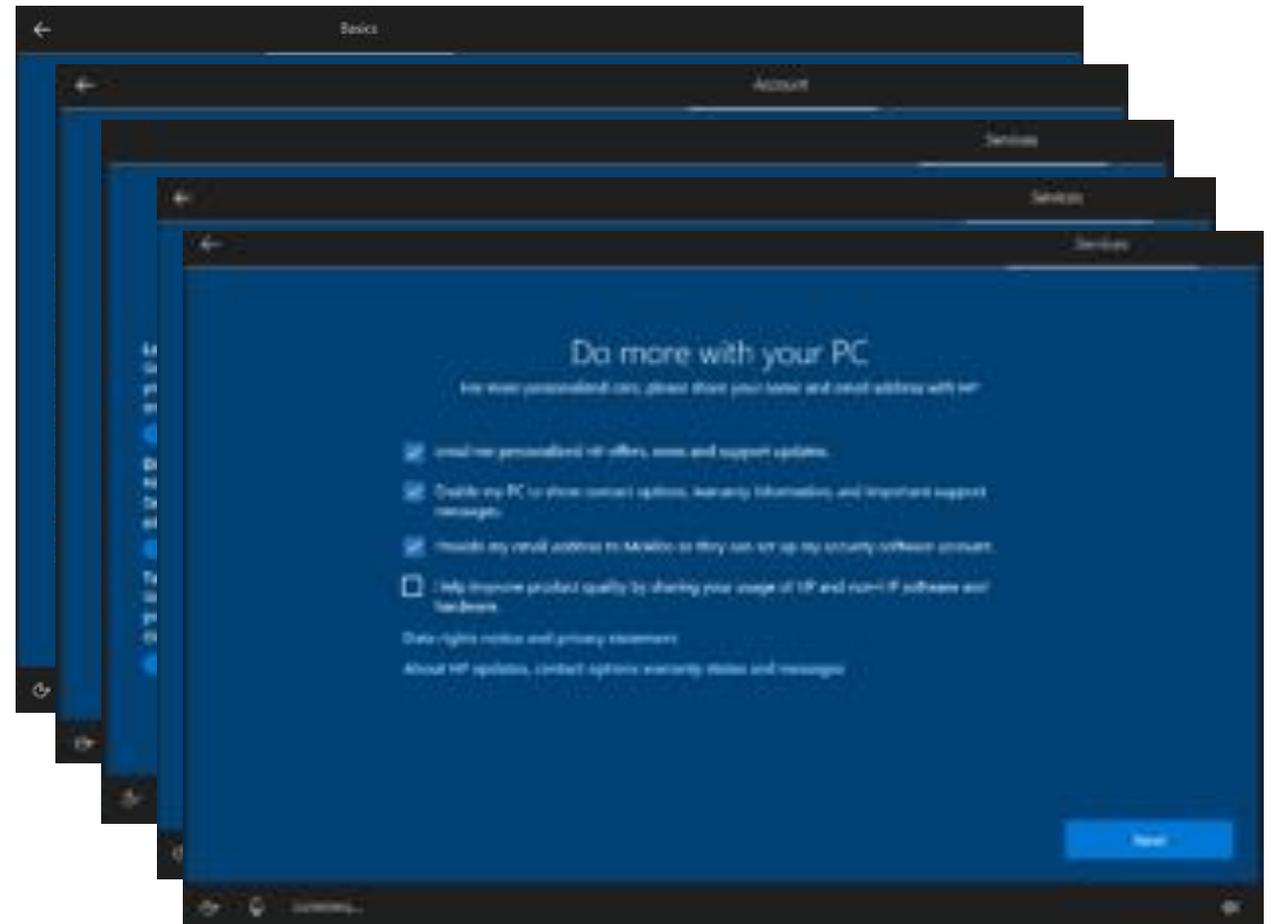


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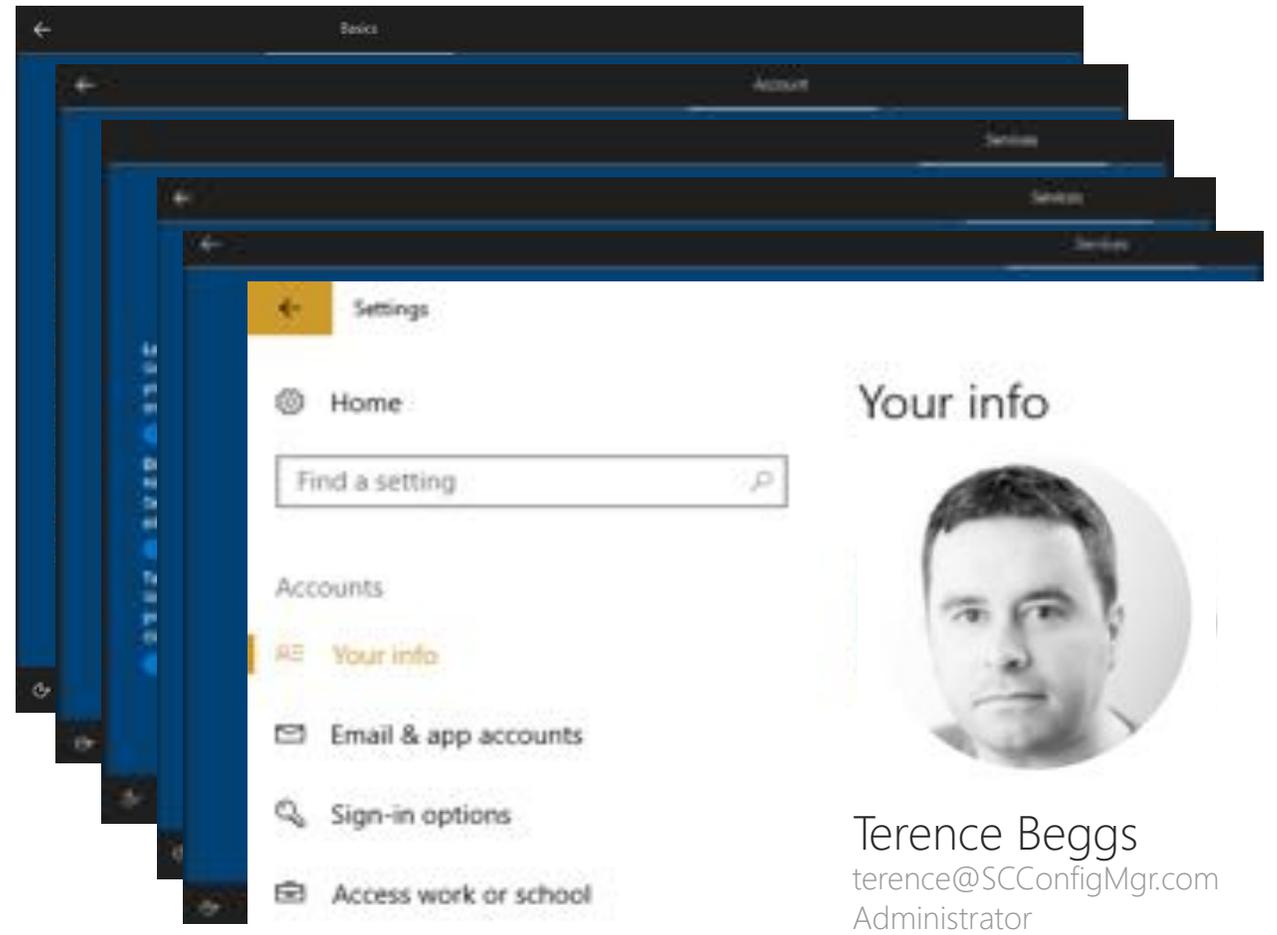


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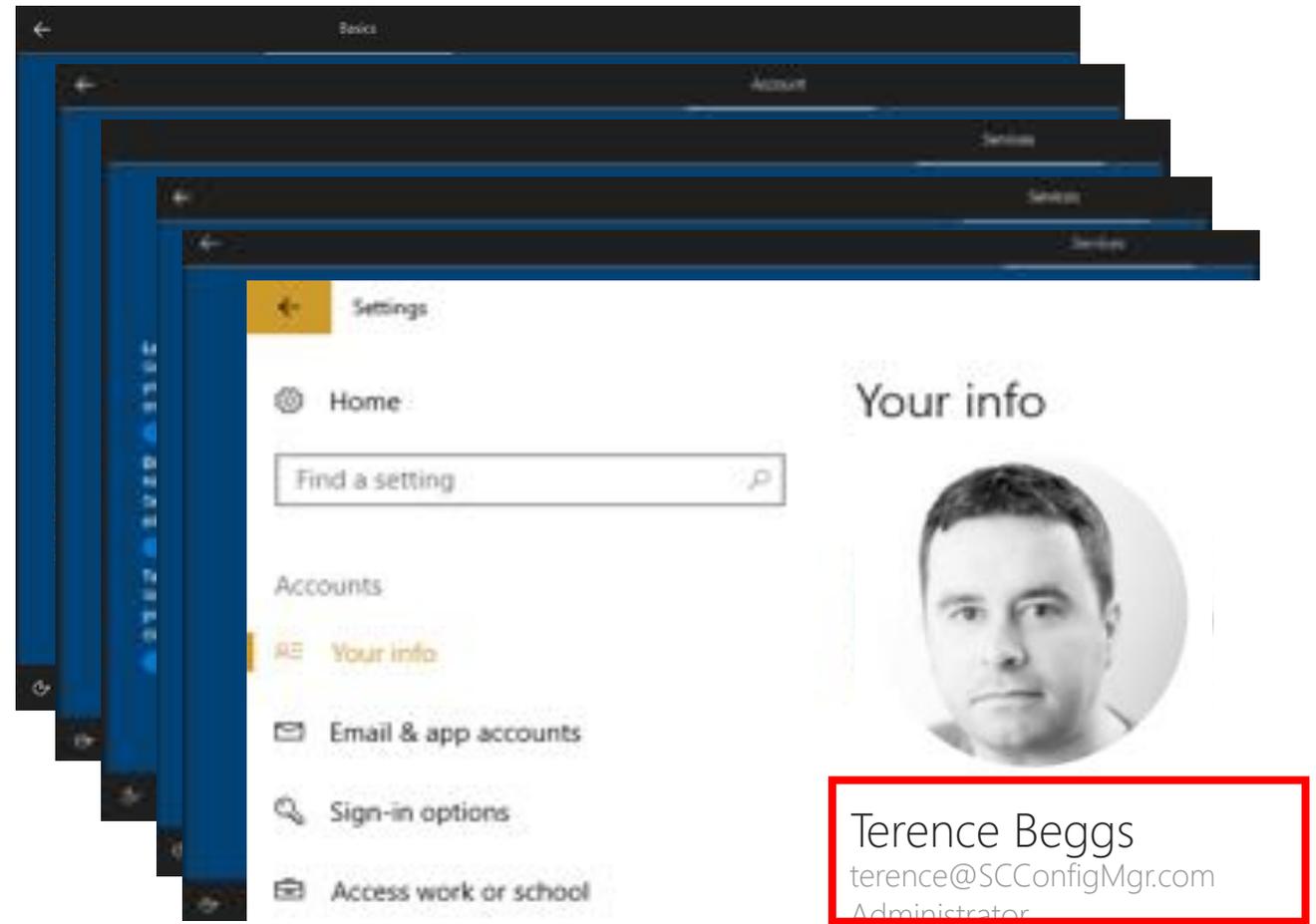


Off-the-shelf and Shrink-wrapped Devices

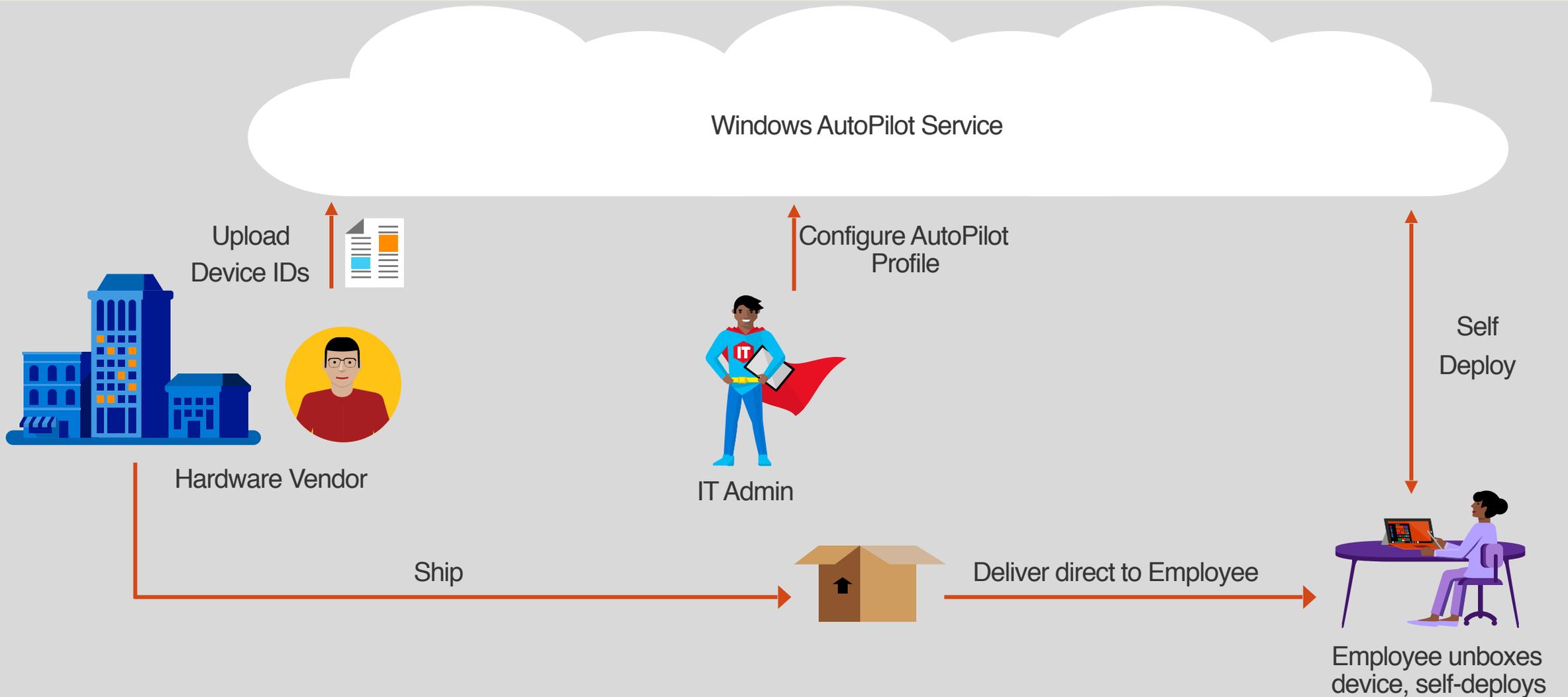
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Employee unboxes device, self-deploys



# INTRODUCING WINDOWS AUTOPILOT



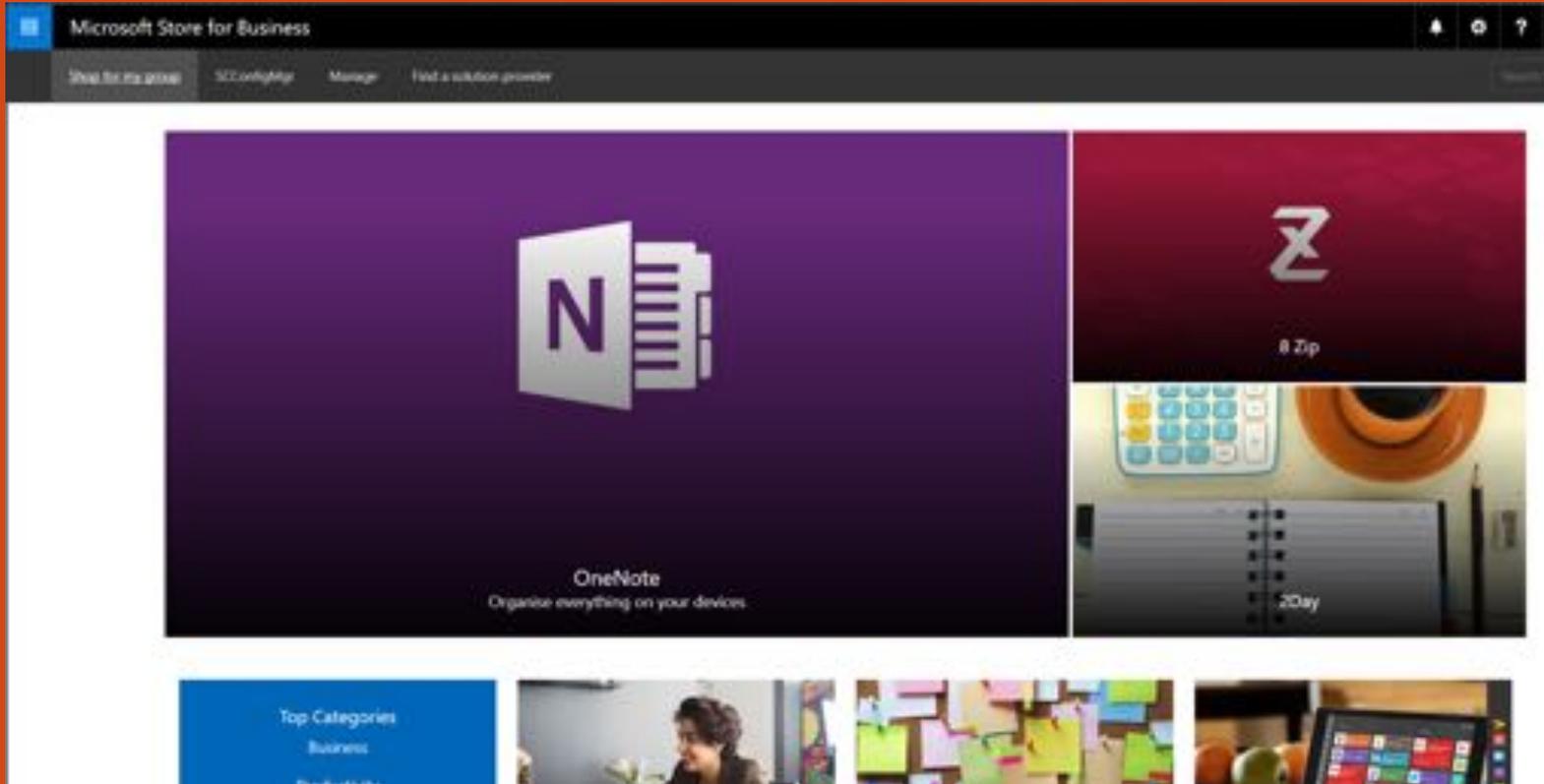
# Prerequisites for AutoPilot

1. Devices must be registered to the organization
2. Company branding needs to be configured
3. Network connectivity to cloud services used by Windows AutoPilot
4. Devices have to be pre-installed with Windows 10 Professional, Enterprise or Education, of version 1703 or later
5. Devices must have access to the internet
6. Azure AD Premium P1 or P2
7. Users must be allowed to join devices into Azure AD
8. Microsoft Intune or other MDM services to manage your devices



# Step 1: Create AutoPilot Profile

Sign into the Windows Store for Business



# Devices

[Get more info](#)

Refine results:

Profile: All

Group: All

[All devices](#)

[AutoPilot deployment](#)

[Remove device](#)

Device name

Profile

Serial number

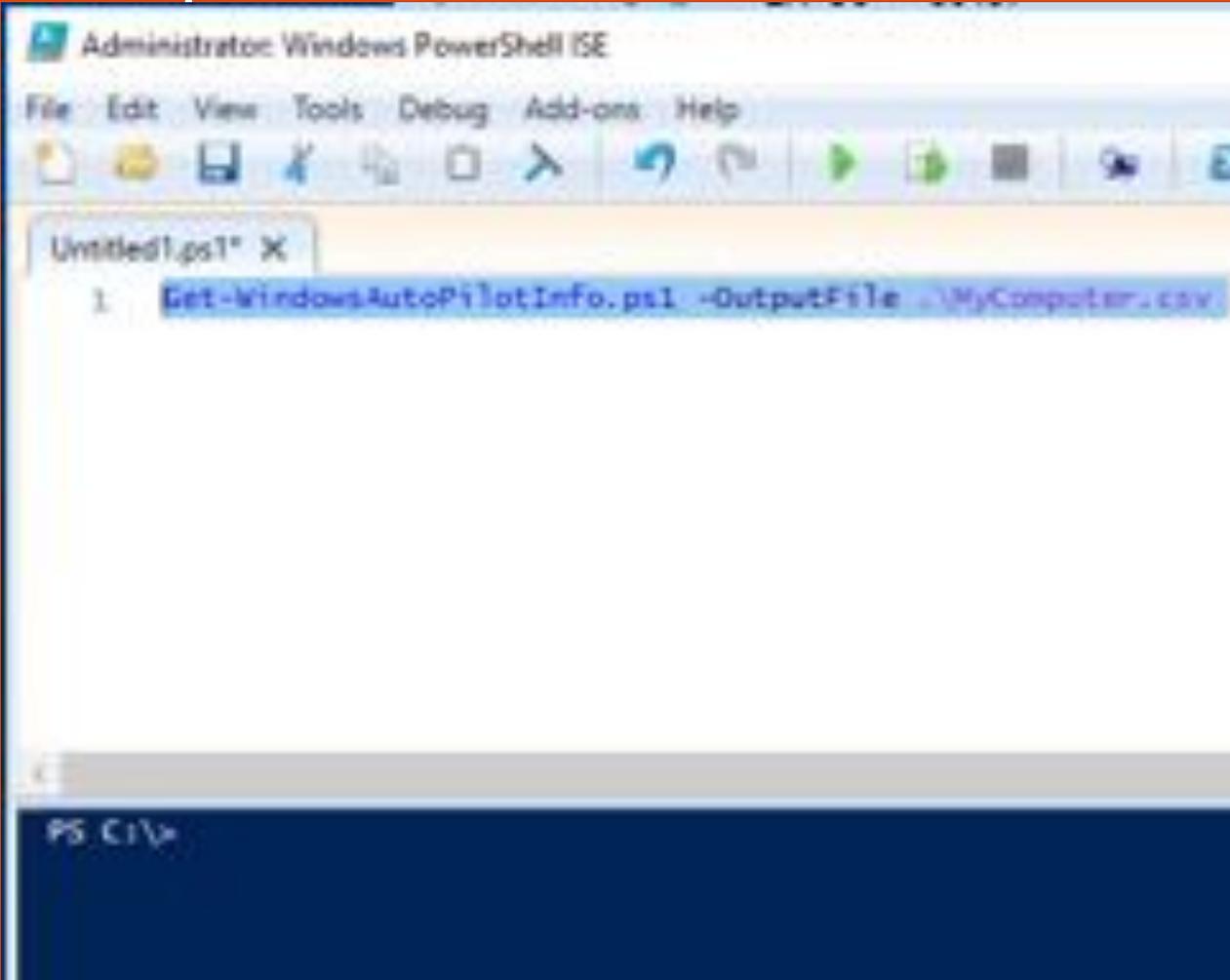
Windows product ID

No results found.

# Step 2: Gather AutoPilot Device

Michael Niehaus has created a PowerShell module to gather data.

<https://www.powershellgallery.com/packages/Get-WindowsAutoPilotInfo/1.1/DisplayScript>

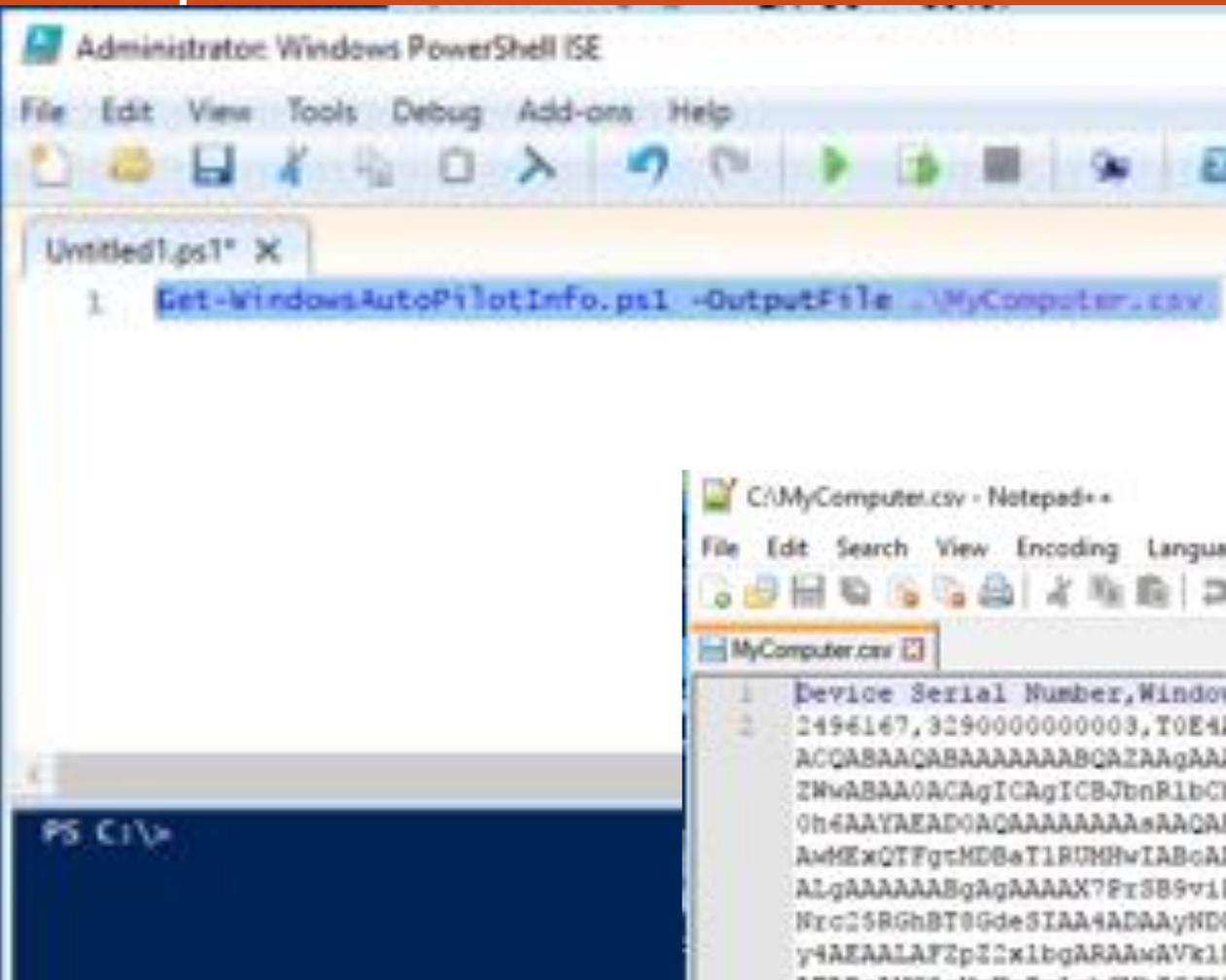


The image shows a screenshot of the Windows PowerShell ISE (Integrated Scripting Environment) running as Administrator. The window title is "Administrator: Windows PowerShell ISE". The menu bar includes File, Edit, View, Tools, Debug, Add-ons, and Help. The toolbar contains various icons for file operations and execution. The main editor area shows a single line of PowerShell code in a file named "Untitled1.ps1":  
1. `Get-WindowsAutoPilotInfo.ps1 -OutputFile ..\MyComputer.csv`  
The bottom status bar shows the PowerShell prompt "PS C:\>".

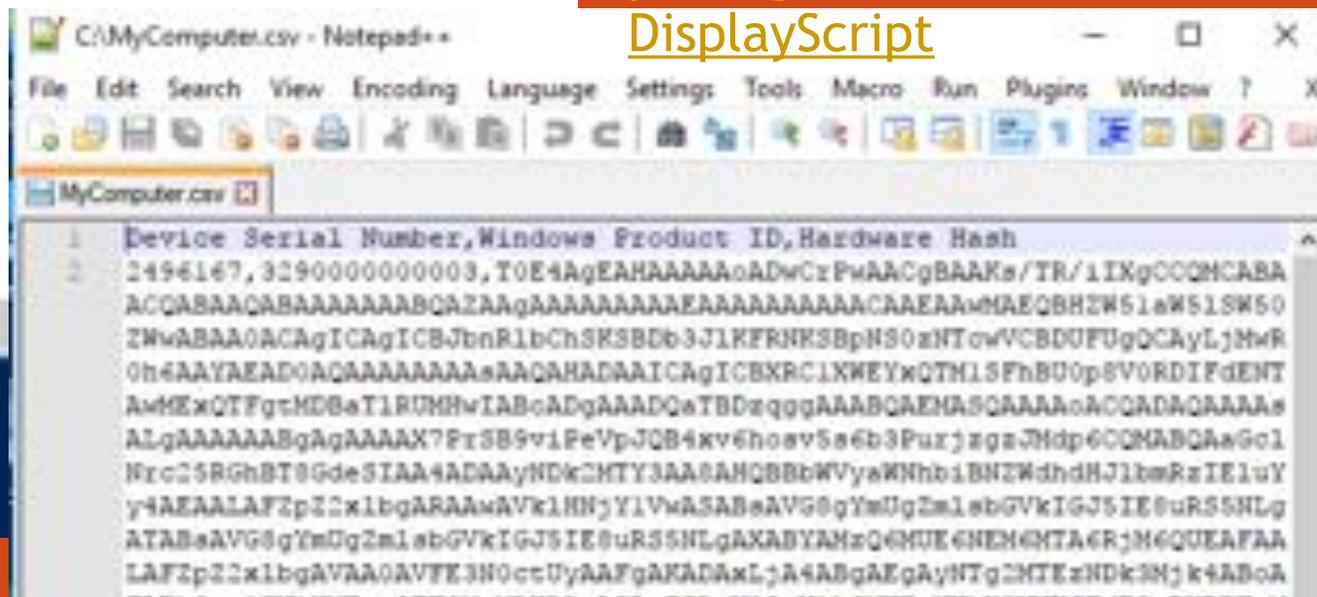
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```
Administrator: Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
Untitled1.ps1* X
1. Get-WindowsAutoPilotInfo.ps1 -OutputFile .\MyComputer.csv
```



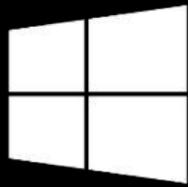
```
C:\MyComputer.csv - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ? X
MyComputer.csv
1 Device Serial Number,Windows Product ID,Hardware Hash
2 2496167,32900000000003,T0E4AgEHAHAAAAAaADwCrPwAACgBAAKs/TR/1IXgCCQMCABA
ACQABAAACABAAAAAABCAZAAgAAAAAEEEEEEEEEEEEEEEEEECAAEAAwMAEQBHZW51aW51SW50
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Nrc25RGhBT0GdeSIAA4ADAAyNDk2HTY3AA6AHQBbWVyaWNhbiBNZWdhdHJlbnRzIE1uY
y4AEAAALAFZpZ2x1bGARAaAVK1HNjY1VwASABeAVG0gYmUgZmlzbGVkIGJ5IE9uRS5NLg
ATABeAVG0gYmUgZmlzbGVkIGJ5IE9uRS5NLgAXABYAMzQ0MUE6NEM6MTA6RjM6QUEAFAA
LAFZpZ2x1bGARAaAVFE3H0ccUyAAAFgAKADAxLjA4ABgAEgAyNTg2MTEzNDk3NjYk4AB0A
```

# Step 3: Import AutoPilot Device Data

The screenshot displays the 'Manage / Devices' interface in Microsoft Intune. At the top, there is a breadcrumb 'Manage / Devices' and a title 'Devices' with a 'Get more info' link. Below the title is a search bar labeled 'Search devices' with a magnifying glass icon. To the right of the search bar, there are filters for 'Refine results: Profile: All' and 'Group: All'. Below the search bar, there are three buttons: '+ Add devices', 'AutoPilot deployment' (with a dropdown arrow), and 'Remove devices' (with a trash icon). Below these buttons is a table header with columns: 'Device name', 'Model', 'Serial number', and 'Windows product ID'. The table content is empty, and the text 'No results found.' is displayed below the header. A mouse cursor is visible over the table area.

# Demo – AutoPilot in action





Let's start with region. Is this right?

United Arab Emirates

United Kingdom

United States

Uruguay

Uzbekistan

Vanuatu

Vatican City

Venezuela

Yes



Listening...



# Is this the right keyboard layout?

United Kingdom

Canadian Multilingual Standard

English (India)

Irish

Scottish Gaelic

United States-Dvorak

United States-Dvorak for left hand

Yes



Listening...





Want to add a second keyboard layout?



Add layout

Skip



Listening...





# Let's connect you to a network

 Eduroam  
Open

Connect automatically

Connect

 CoffeeShopWiFi  
Open

 LondonMet Devices  
Secured

 LondonMet Guest  
Secured

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?





Agree & Connect

Welcome to our tree  
Wi-Fi

By clicking on the connect button you agree to our [Terms of Service](#) and have reviewed the [Contoso Privacy Policy](#).



Network



Just a moment...





Now we can go look for any updates



# Welcome to SCConfigMgr LSE Demo

Enter your SCConfigMgr email



Need help?

Please sign in with your SCConfigMgr email address

[Change account](#)

[Privacy & Cookies](#)

[Terms of Use](#)

Next



Listening...





# Welcome to SCConfigMgr LSE Demo

Enter your SCConfigMgr email



Terence@SCConfigMgr.com

Need help?

Please sign in with your SCConfigMgr email address

[Change account](#)

[Privacy & Cookies](#)

[Terms of Use](#)

Next



Listening...





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Listening...



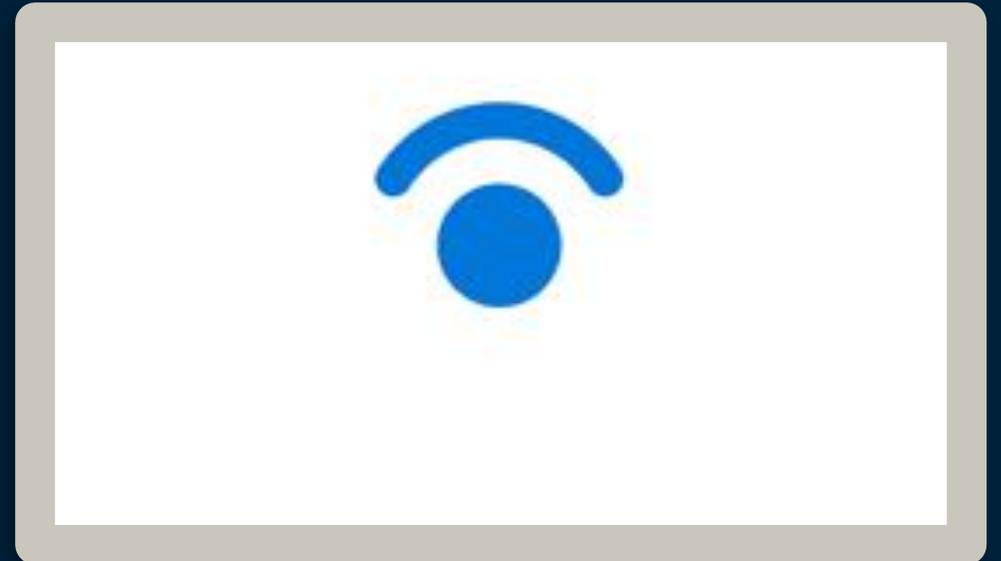
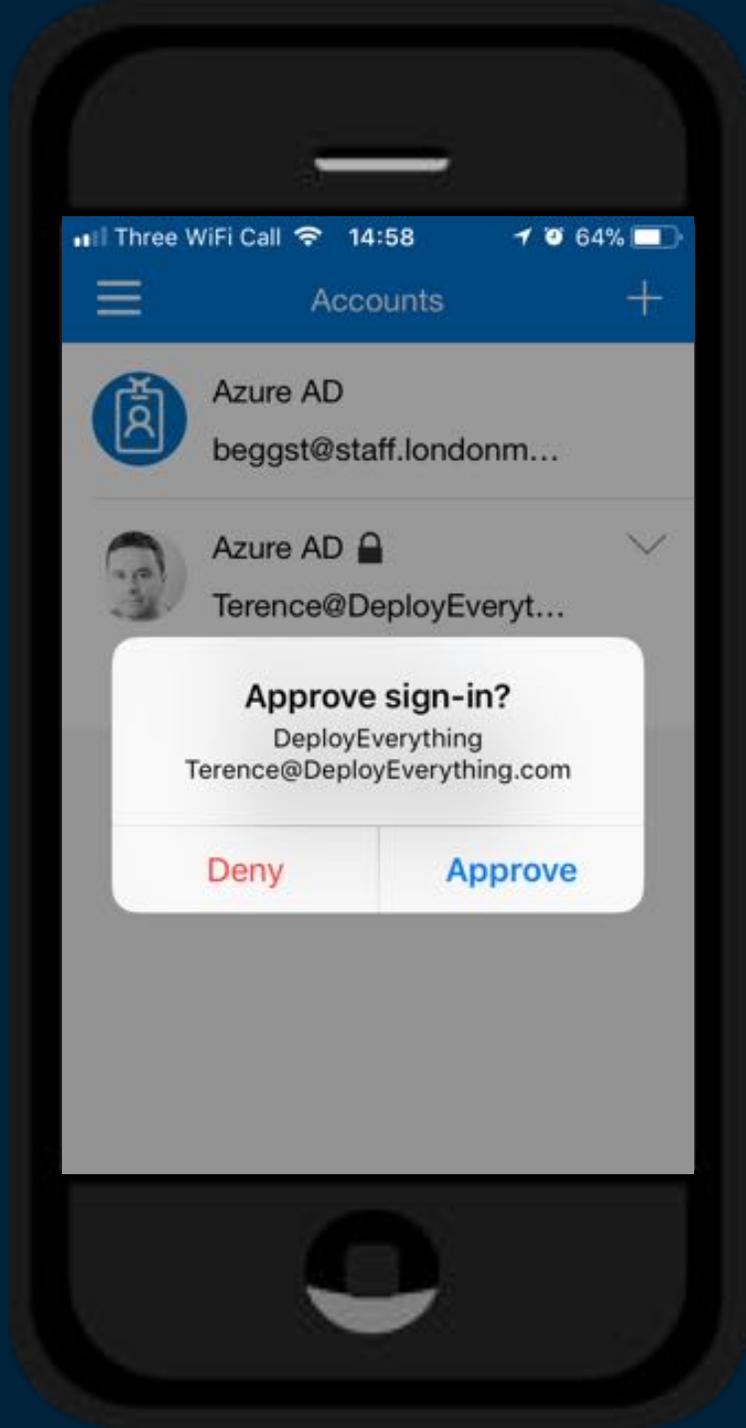
This might take several minutes

Don't turn off your PC

# Windows Hello and AutoPilot

If your using Windows Hello in Azure then the end user can setup a pin.

Also provides additional security using MFA





## Help us protect your account



We've sent a notification to your mobile device. Please respond to continue.

\*\*\*\*\*

[Use a different verification option](#)

Next



Please wait while we setup your device...



Network



Just a moment...



We're getting everything ready for you.

Don't turn off your PC

This might take several minutes.





# Demo – Post AutoPilot Setup

- Apps: Company Portal, Office 365
- Desktop Apps: Using package manager Chocolatey(Chrome, Firefox, VLC etc)
- Device Configuration: Bitlocker, Security Profiles, Start Menu, Desktop Experience, Lockscreen
- Device Compliance: Bitlocker
- PowerShell Script: OneDrive Config, Driver Update





# Demo – Automatic Redeployment

So what happens if the end user needs their machine rebuilt.

Do they call IT Support?

Well no, they can do it themselves from anywhere they like.





13:51

Monday 15 January

CTRL +  + R



Feel free to  
contact me.

Contact  
Details



Our Website [http://  
www.scconfigmgr.com/](http://www.scconfigmgr.com/)



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