

Modern Deployment – Autopilot for the Real World *and then some...*

GET-EXPERTS

Mikael Nystrom



Johan Arwidmark

@mikael_nystrom



@jarwidmark

Mikael.nystrom@truesec.com



johan@2pintsoftware

MVP – 15 Years



MVP – 15 Years

Steak



Steak

GET-EXPERTS

Jordan Benzing



@JordanTheITguy



jordan.benzing@truesec.com



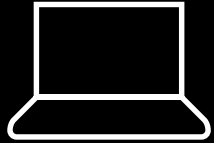
Patch Master



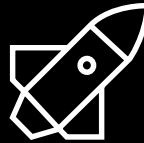
Ramen



Windows Autopilot



Un-box and turn on
off-the-shelf Windows PC



Transform with minimal
user interaction



Device is ready
for productive use

***"Deploying a Windows device should be as simple as getting a new phone."
- Michael Niehaus, Microsoft***

Demo

Preparing for Windows Autopilot

Windows Autopilot

AVAILABLE in 1703	AVAILABLE in 1809	AVAILABLE in 1903	AVAILABLE in 1903	AVAILABLE in 1809
User-driven mode with Azure AD Join	User-driven mode with Hybrid Azure AD join	Windows Autopilot white glove (preview)	Self-deploying mode (preview)	Windows Autopilot for existing devices
Join device to Azure AD, enroll in Intune/MDM	Join device to AD, enroll in Intune/MDM Coming soon! Deploy over VPN (preview in Q1CY20, 1903+)	White glove partners or IT staff can pre-provision Windows 10 PC to be fully configured and business-ready for an org or user General availability targeting CY20	No need to provide credentials, automatically joins Azure AD General availability targeting CY20	Windows 7/8.1 to Windows 10 ConfigMgr task sequence, followed by Windows Autopilot user-driven mode New! Hybrid Azure AD Join support

Windows Autopilot // Cross-scenario features

AVAILABLE in 1803+

Enrollment status page

Track progress of:

- Policies
- Certificates
- Win32, MSI and UWP apps
- Office

New! Disable for Nth users

Coming soon! Integration with ConfigMgr (H1CY20)

Coming soon! Options for skipping user ESP, targeting users and computers

AVAILABLE in Intune

Device lifecycle management

Register and de-register devices

Coming soon! Improved performance

Coming soon! Edit group tags (Q4CY19)

Coming soon! Assign computer names (Q4CY19)

AVAILABLE in Intune

Reporting and monitoring

See information about Windows Autopilot deployments

Coming soon! Windows Autopilot deployment report (Q4CY19)

Coming soon! Windows Autopilot log collection

Windows Autopilot // Cross-scenario features

ONGOING

Windows and device config

Make it easier to set up Windows 10 defaults, features, firmware configuration, etc.

New! DFCI firmware configuration

Planned! Remove list of in-box apps

Planned! Add language packs and features

ONGOING

Delivery optimization

Cache content so it doesn't need to be downloaded repeatedly from the server

New! Office 365 ProPlus install support (preview)

Planned! Automatic Connected Cache discover for white glove

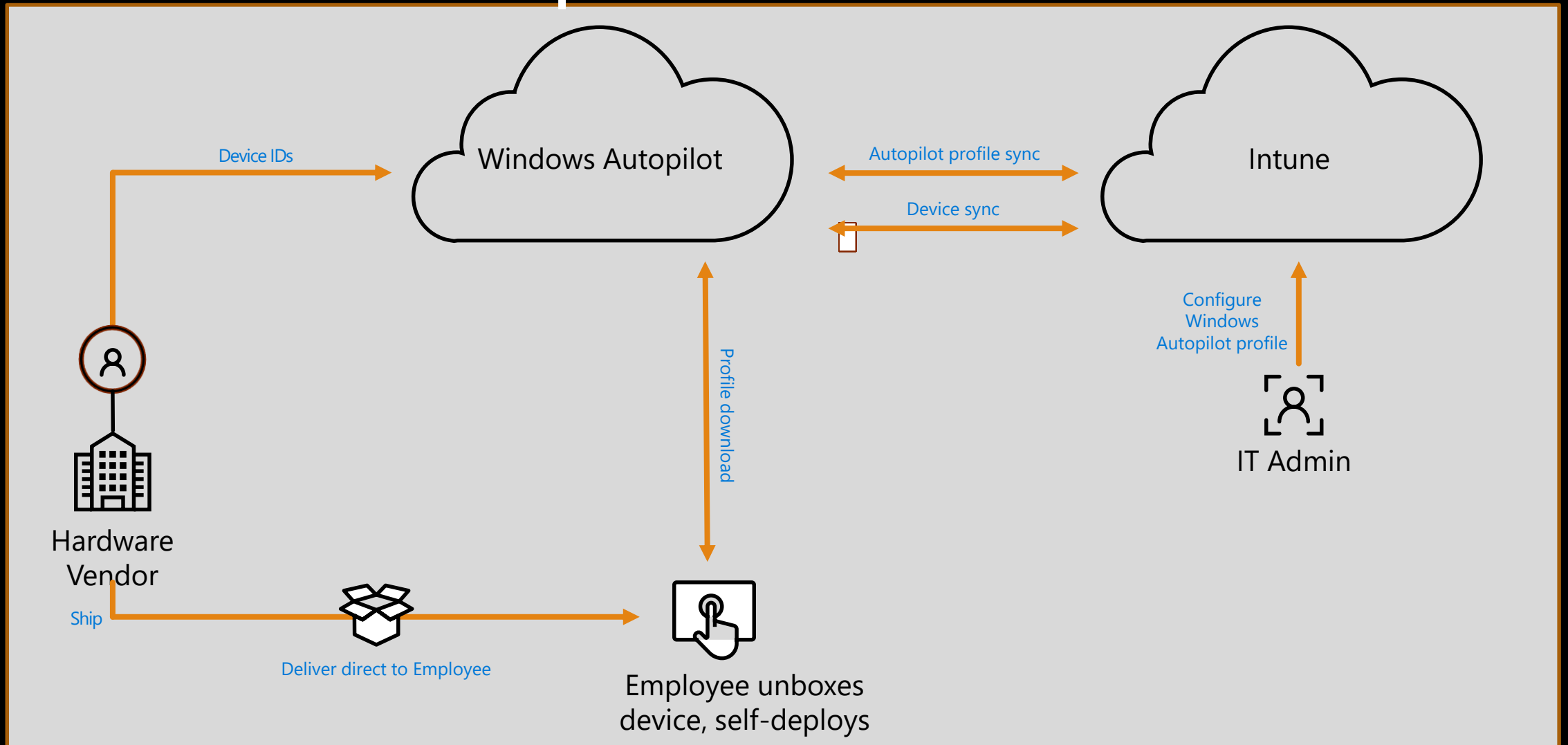
AVAILABLE in 1903+

Windows Autopilot update

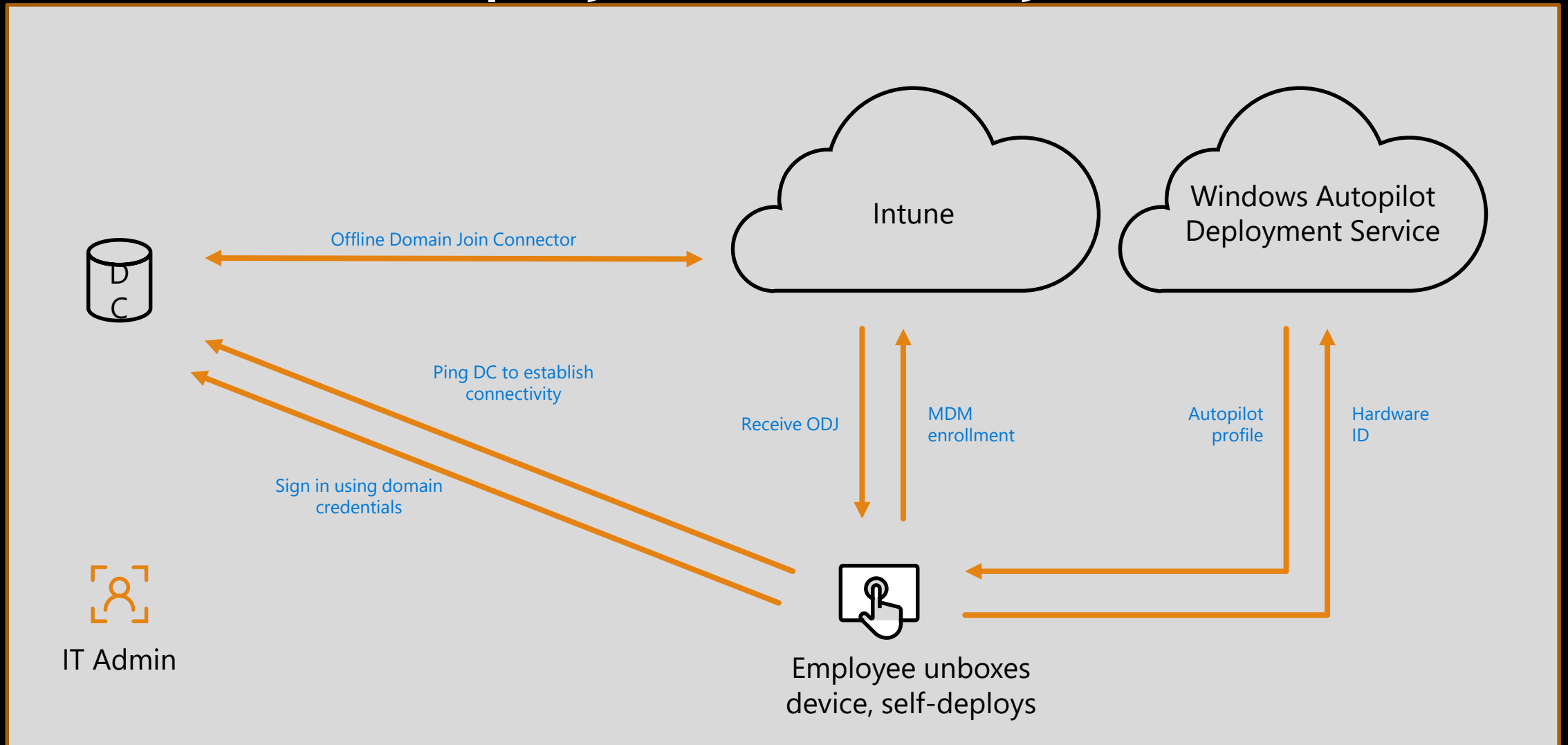
Automatically install the latest Windows Autopilot features and updates

Windows 10 1903 (September KB4517211+) or later

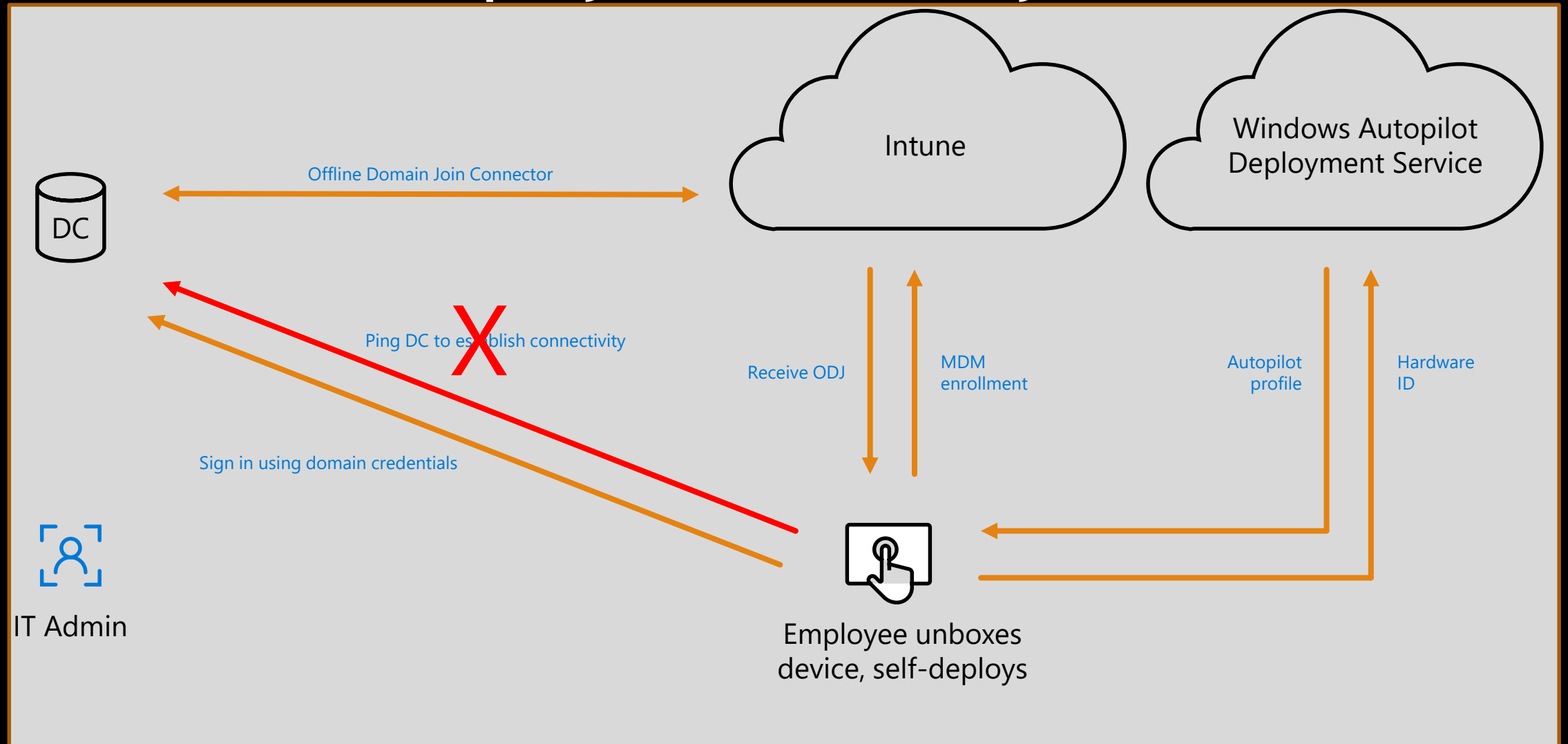
Windows Autopilot overview



User-Driven deployment with Hybrid Azure AD



User-Driven deployment with Hybrid Azure AD



Demo

Windows Autopilot in Action

Windows Autopilot, upcoming features

User-driven Hybrid Azure AD Join over the internet - VPN support (Q1CY20 preview)

Integration with Configuration Manager for running task sequences (H1CY20)

Group tag editing (Q4CY19)

Direct computer name assignment (Q4CY19 for Azure AD)

Windows Autopilot deployment report (Q4CY19)

Aligned naming options for Azure AD and Hybrid Azure AD (CY20)

Guided scenarios to help with initial setup and configuration

ESP enhancements for targeting, disabling user ESP, Nth user

Full network documentation (URLs, IP addresses, etc.)

Windows 10 configuration for features, language packs, in-box apps

Windows Autopilot, future ideas

Troubleshooting and logging improvements

Migration of apps and settings from an old computer

Provisioning performance - the need for speed

Configuration of Windows 10 preferences and defaults (vs. just policy/settings)

Device lifecycle management improvements

Better handling of OS languages

PowerShell Deployment Toolkit (PSD)

Why....

The knowledge in VB Script are limited

There is still a need of solutions like MDT

PowerShell provides functionality beyond VB Script

Support for additional transport protocols, like
http/https

Why

The knowledge in VB Script are limited

There is still a need of solutions like MDT

PowerShell provides functionality beyond VB Script

Support for additional transport protocols, like http/https

The basics

MDT is using PowerShell for everything but:

- Task Sequence is controlled by VB Scripts
- Actions in the Task Sequence are based on VB Script

What if we just shift from VB Script to PowerShell, change actions to PowerShell and create new Task Sequence Template that are based on the capability of PowerShell?

What if we change the mind set of OS Deployment at the same time?

Development and Curation Partners



PSD Solution Development and Design

Develop a **NEW** OSD
over-the-Internet scenario

Modernize the Microsoft
Deployment Toolkit

- Migrate to PowerShell scripting vs VBS, WSF
- Maintain MDT feature parity (as much as possible)

No compiled code

- Strength, power and flexibility of PowerShell
- In keeping with MDT design tenets

PSD is an “open solution”

- **Open Source approach**
- **Community code development and contribution**
- GitHub repository and publishing

Demo

PowerShell Deployment Toolkit

Demo

PowerShell Development