OneDrive Known Folder Move (KFM) Workshop

Microsoft

Scope of this deck

Scope

Provide guidance on how you can **roll out OneDrive KFM**:

- **Deploy** OneDrive client and log installation
- **Define** OneDrive policy to enable KFM
- **Check** compliance on managed devices and remediate KFM settings
- **Report on** OneDrive deployment and configuration

Out of Scope

The following topics are **outside** the focus of this presentation:

- **Setting up core infrastructure** (AD, DNS, AD Connect, SCCM)
- **Third-party tools** and/or custom applications integration

Agenda

What we'll cover

1. Pre-requisites

2. Plan for Scenarios

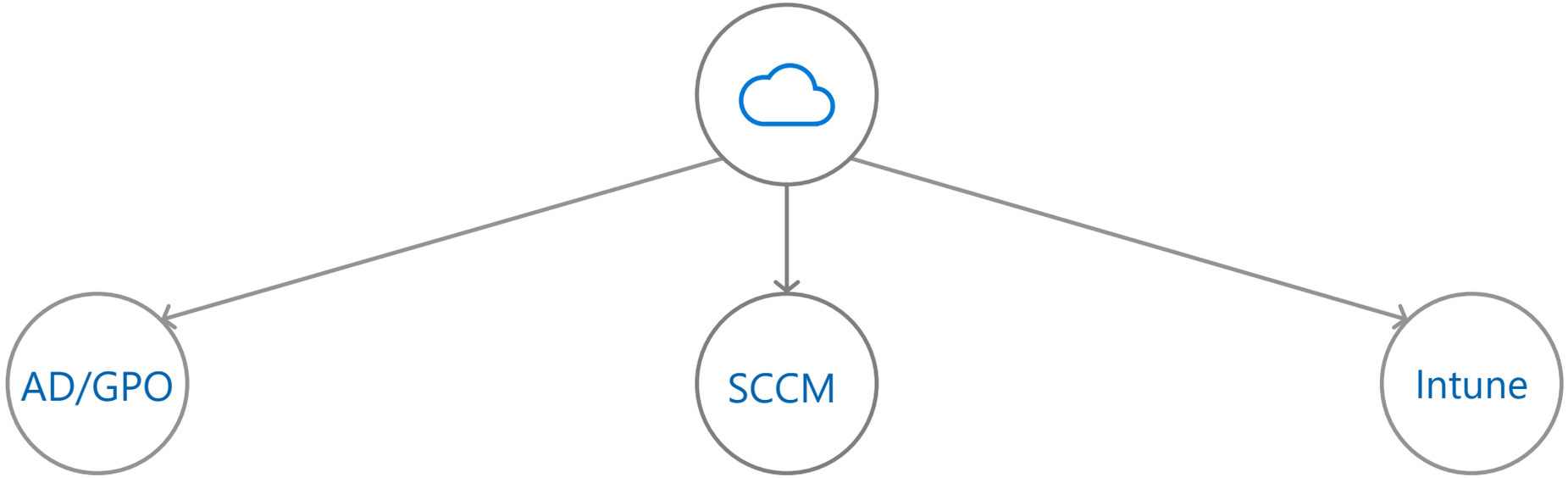
3. Deployment

4. Report and monitor

Keep your files protected and backed up using KFM

Ways to Deploy

Choose the simplest option based on your requirements



Centrally deployed and configured via AD/GPOs

Centrally deployed and configured via SCCM

Deploy PowerShell script policy to Azure AD Joined Machines

simple to more complex scenarios

Plan for common challenges

Limited Network Bandwidth

Assess the number of users and computers per user to which you'll deploy the sync client.

Assess the available bandwidth and network conditions.

Measure the network utilization of the sync client for a pilot group.

When you deploy, control the sync throughput and limit sync upload rate.

Roll out gradually and monitor other potential

OneNote and/or PST in known folders

Proactively report which users have OneNote files or .PST files in their known folders, OR

Reactively engage with those users if it fails for them to move those files elsewhere, e.g. OneNote

OneNote migration with KFM – In development

Require other known folders like Favorites, Videos, etc.

For other known folders like Favorites and Videos, please use Folder Redirection with Offline Files . Keep in mind KFM won't work if you have previously used Folder Redirection on Desktop, Pictures, or Documents.

Plan for common challenges continued

Large Mac Device population	Upvote the following user voice regarding Mac + KFM.
Limited storage on machines	Deploy using Files on Demand.
VDI environment	Only persistent desktop environments are supported at this time Windows Virtual Desktop provides new Windows 10 Multi-User (EVD) OS with Office, OneDrive Files On-Demand (per machine), Microsoft Teams and more – in development.

Deploy KFM using Active Directory + GPOs

Option 1

OneDrive KFM GPO

Use Group Policy Management console

Add OneDrive ADM files to central store

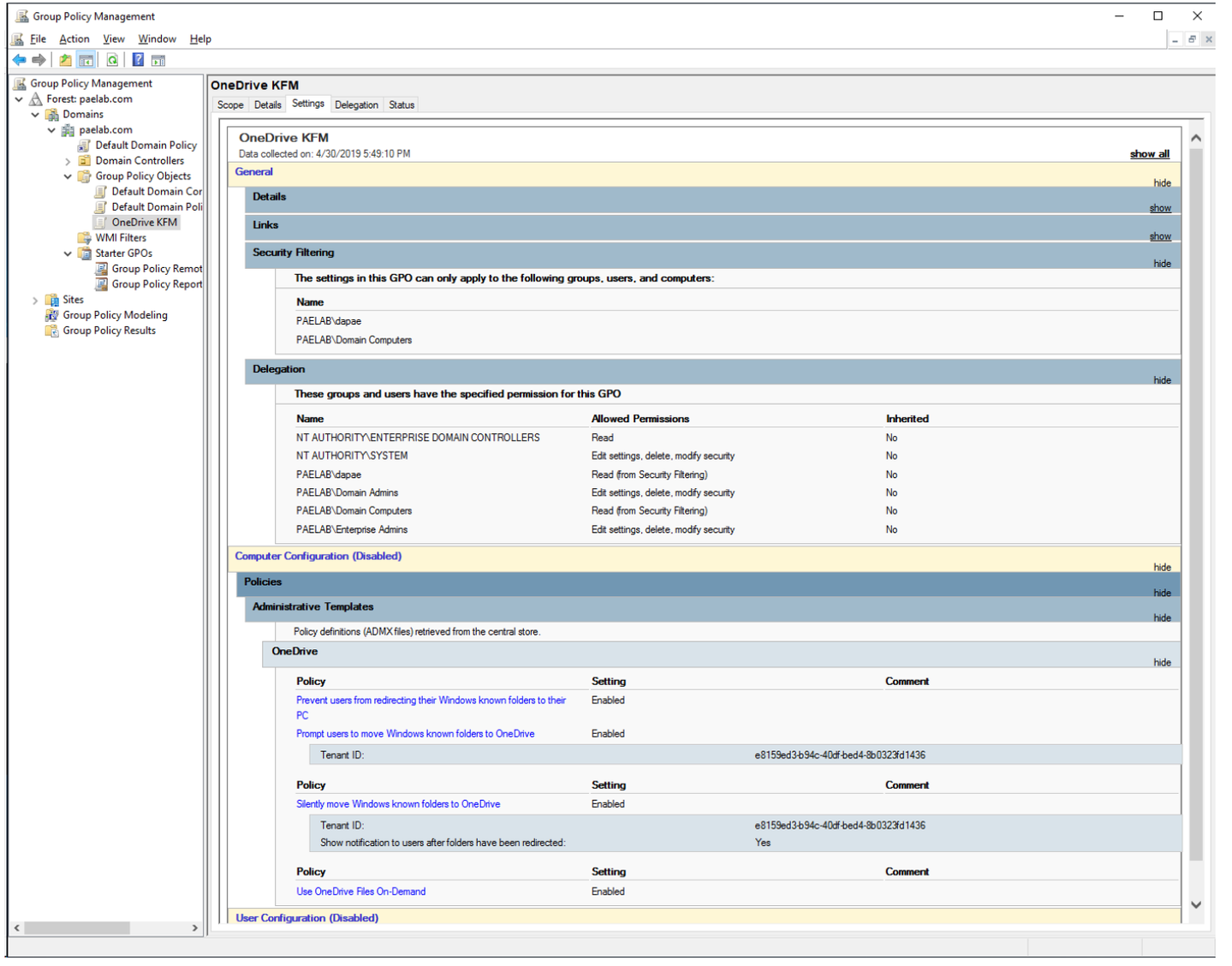
Configure OneDrive GPO settings

Specify subset of users or computers for OneDrive KFM GPOs using security filtering

Link GPO to a new or existing OU

Evaluate the deployment and make policy adjustments

Add next wave of objects to security group used in GPO security filtering



Key GPOs when first deploying KFM

Registry Key	Description	Enabling this policy
KFMOptInWithWizard	Prompt users to move Windows known folders to OneDrive	[HKLM\SOFTWARE\Policies\Microsoft\OneDrive]"KFMOptInWithWizard"="Tenant ID"
KFMBlockOptOut	Prevent users from redirecting their Windows known folders to their PC. Enable to disable the "Stop protecting" button.	[HKLM\SOFTWARE\Policies\Microsoft\OneDrive]"KFMBlockOptOut"="dword:00000001"
KFMSilentOptIn	Silently move Windows known folders to OneDrive. Use this setting to redirect your users' Documents, Pictures, and Desktop folders to OneDrive without any user interaction.	[HKLM\SOFTWARE\Policies\Microsoft\OneDrive]"KFMSilentOptIn"="Tenant ID"
KFMSilentOptInWithNotification	Notify user after successful folder redirection.	[HKLM\SOFTWARE\Policies\Microsoft\OneDrive]"KFMSilentOptInWithNotification" = "dword:00000001"
AutomaticUploadBandwidthPercentage	Limit the sync client upload rate to a percentage of throughput. Recommend setting when enabling KFMSilentOptIn or KFMOptInWithWizardsilently.	[HKLM\SOFTWARE\Policies\Microsoft\OneDrive]"AutomaticUploadBandwidthPercentage"="dword:00000032" Hexadecimal 32 = Decimal 50 or 50% of throughput
FilesOnDemandEnabled (optional)	Use OneDrive Files On-Demand. This setting lets you control whether OneDrive Files On-Demand is enabled for your organization.	[HKLM\SOFTWARE\Policies\Microsoft\OneDrive]"FilesOnDemandEnabled"="dword:00000001"

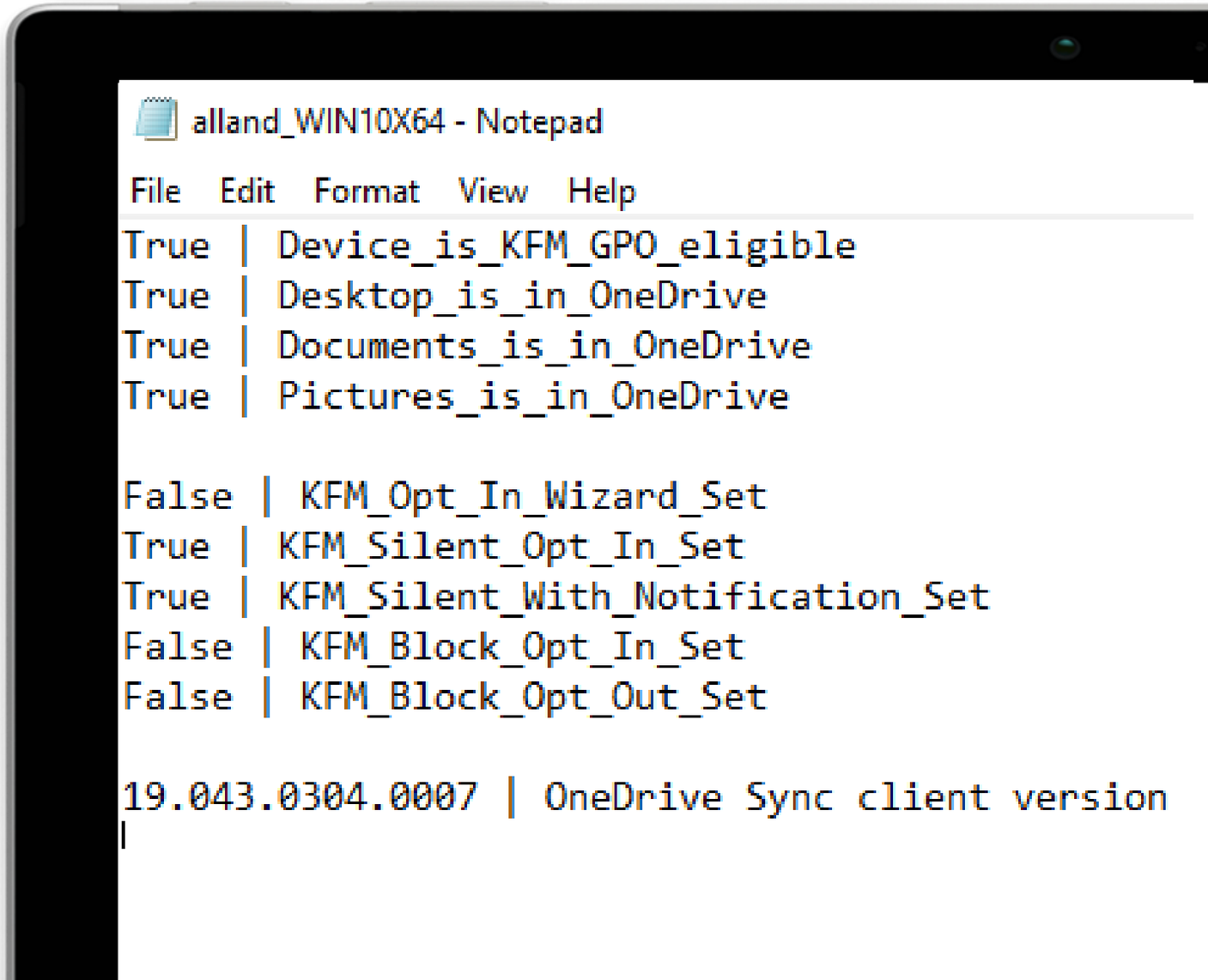
Visit https://docs.microsoft.com/en-us/onedrive/use-group-policy for entire list of OneDrive sync client settings

Monitor with PowerShell

Script will check:

- Know Folder Move (KFM) eligibility (for whatever device it was run on)
- Payload details (number of items and size of content within known folders)
- KFM status (have the known folders been moved to OneDrive)
- KFM GPO state (what GPOs have been set)

https://aka.ms/kfmStatus



Deploy KFM using SCCM

Option 2

Pre-requisites

OneDrive users licensed and sites provisioned

Sync Client Version 18.111.0603.0004 or later

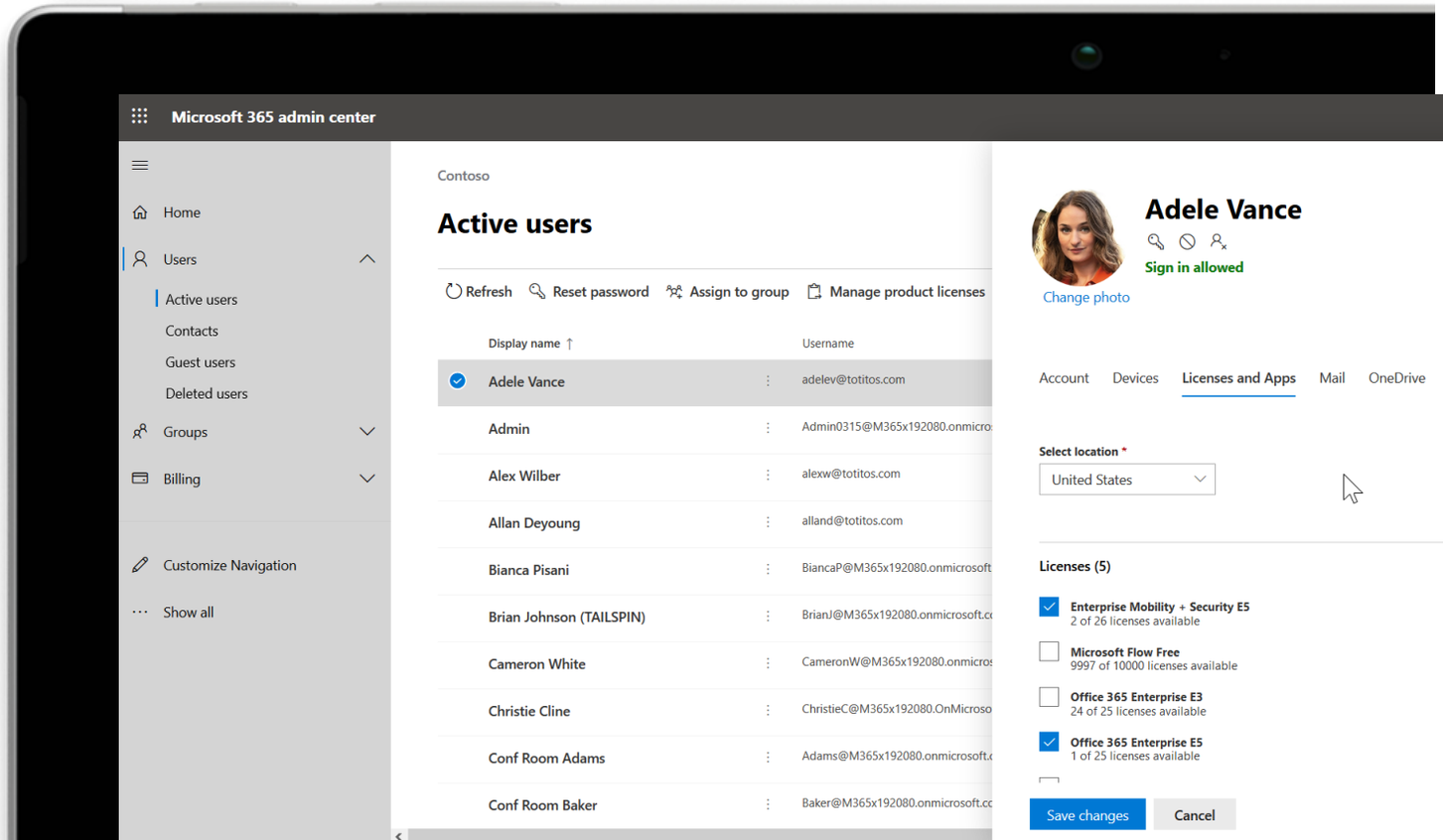
O365 Admin Portal Access

System Center Configuration Manager (current) is setup and ready to deploy apps and configurations

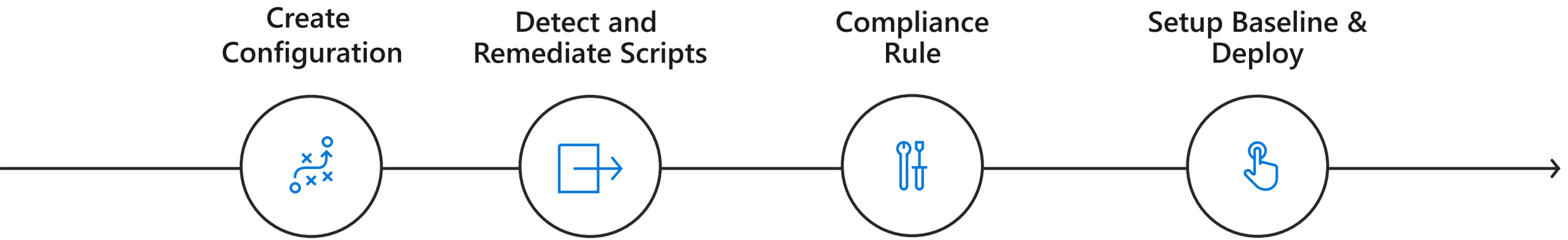
PowerShell scripts can run on Windows devices

Network team included in bandwidth conversations

SSCM Build 1902 introduces a OneDrive for Business profile to setup a compliance policy



Deploy KFM via SCCM



Specify configuration settings that will be used

Detect scenarios and remediate to ensure successful deployment

Setup compliance rule to report out what devices are compliant

Prepare baseline and deploy KFM

https://docs.microsoft.com/OneDrive

Create a Configuration Item (CI)

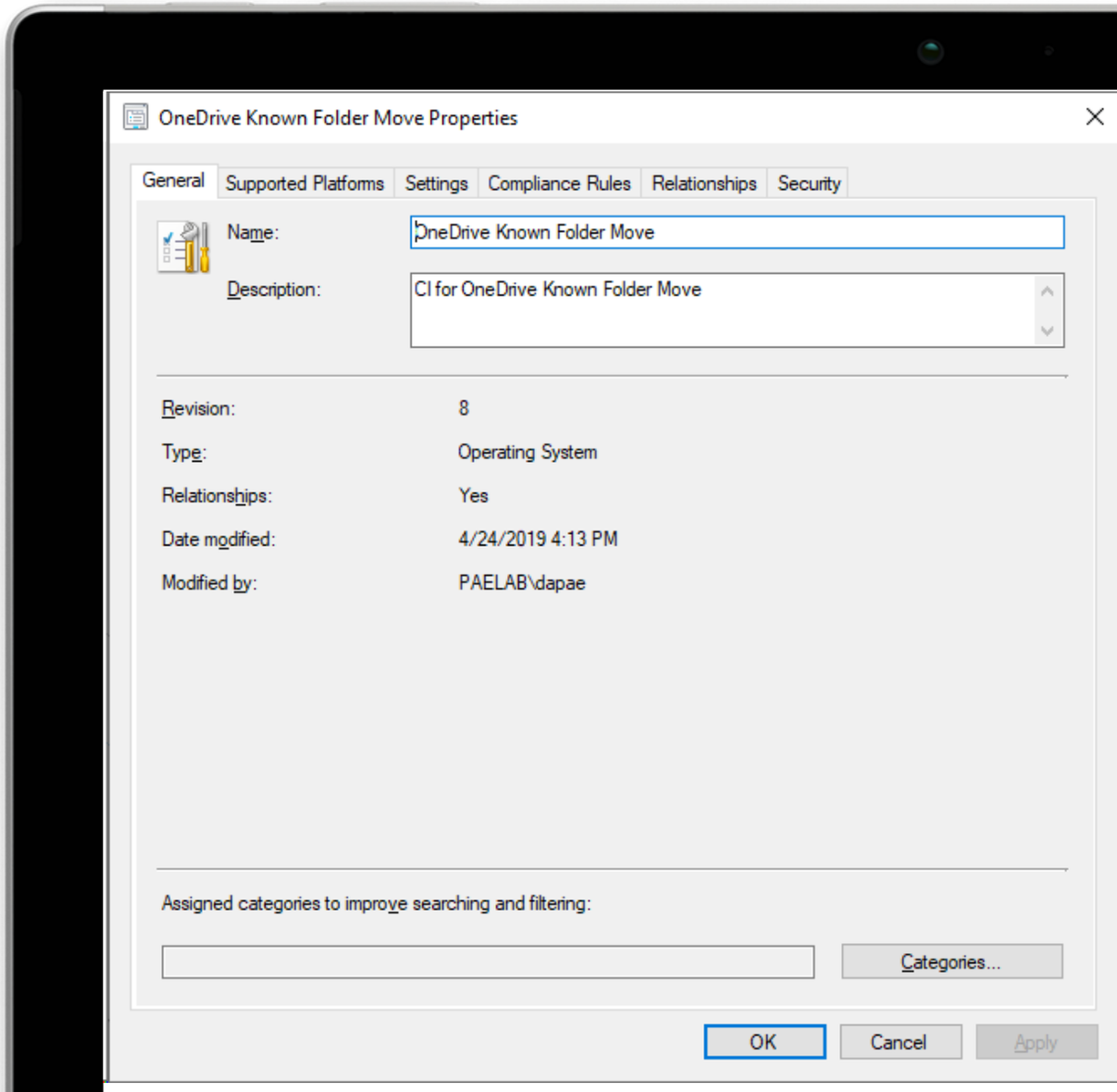
CI contains detection, remediation and compliance rules. For OneDrive:

Specify the Windows OS version

Script to detect the OneDrive registry key

Script a remediation steps to add OneDrive KFM registry keys/values

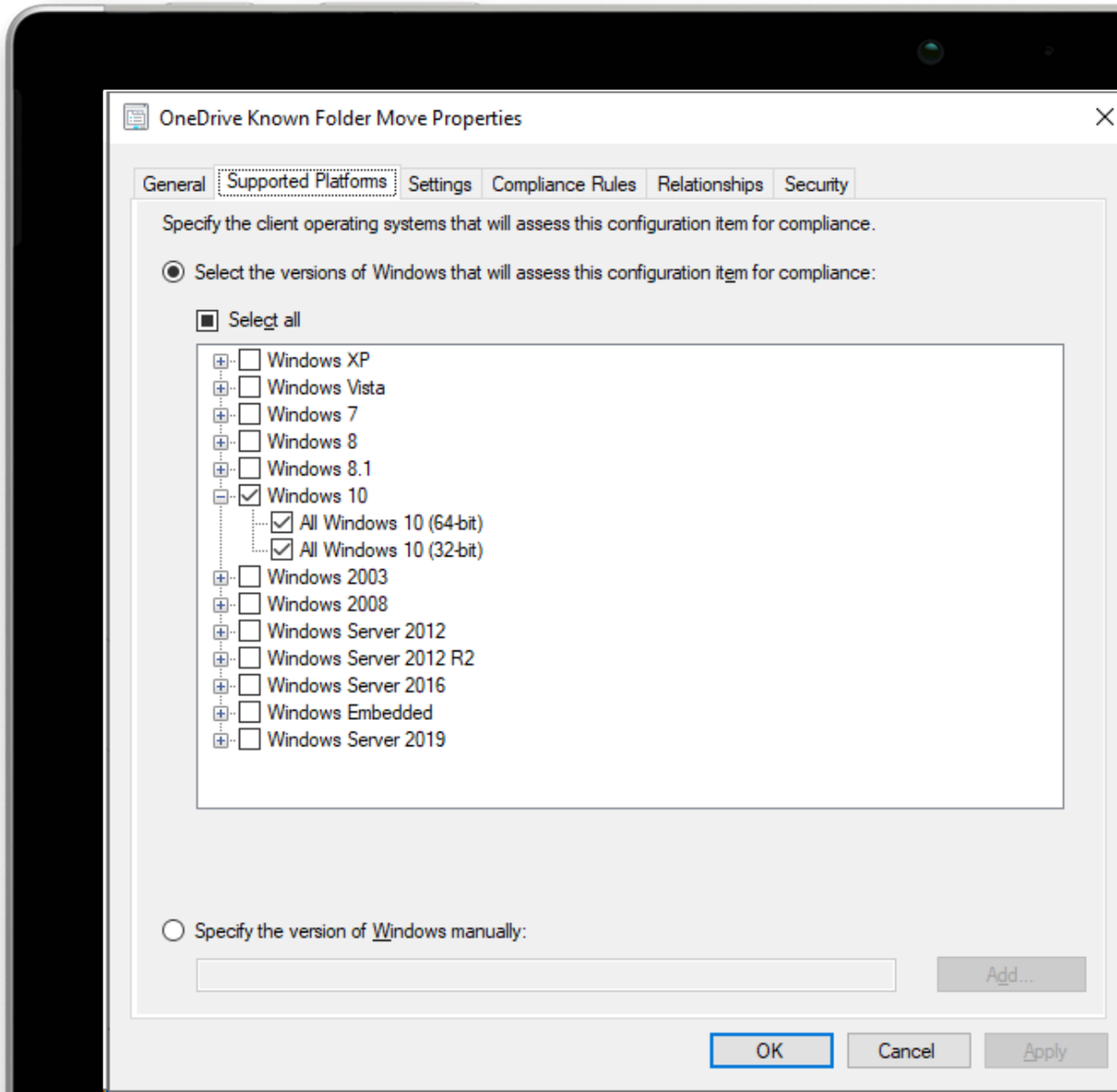
Use a compliance rule to remediate the OneDrive KFM policy



Supported Platforms

Known Folder Move works with:

- Windows 7
- Windows 8/8.1
- Windows 10



Settings – Discovery Script

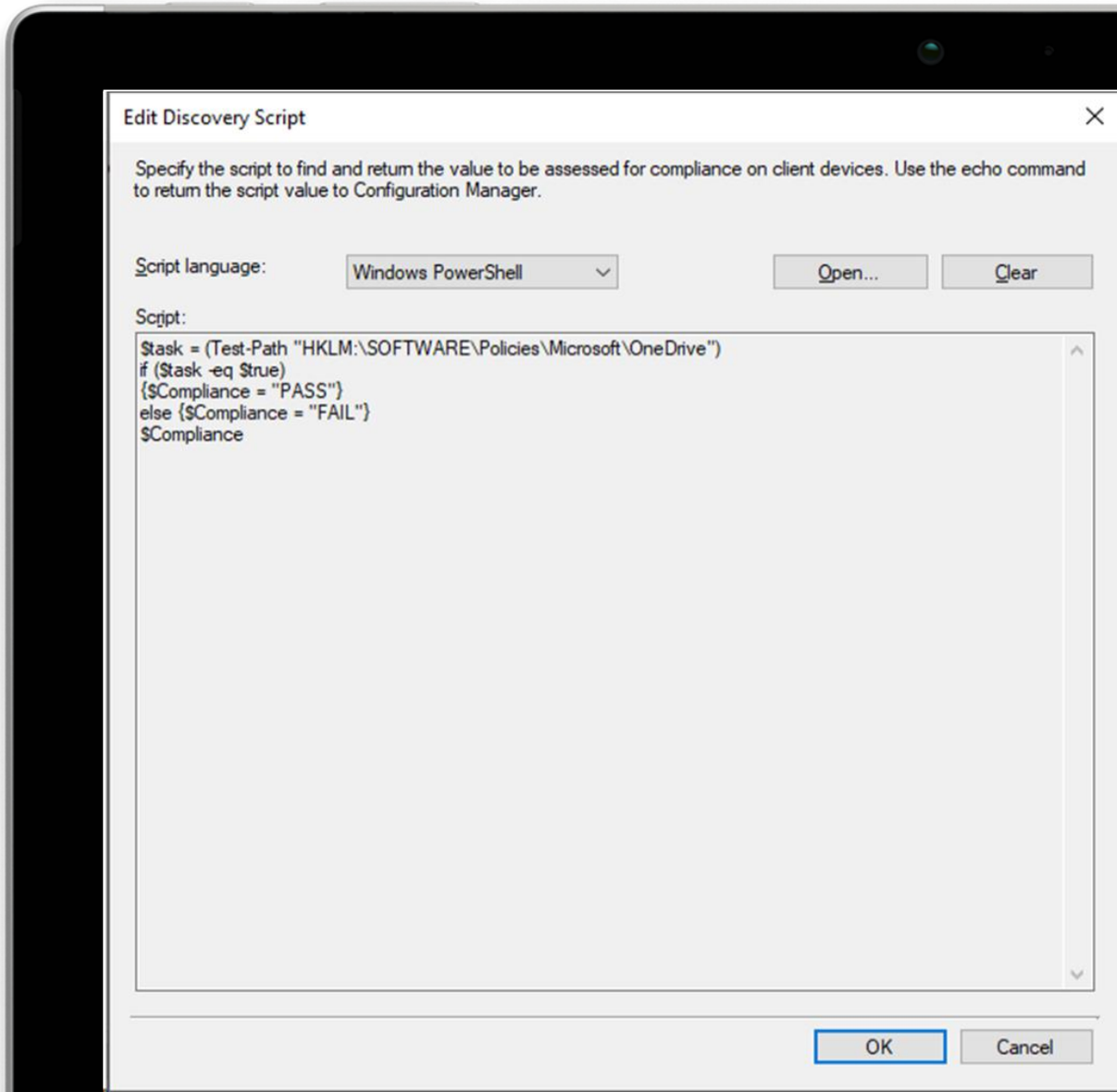
Test for OneDrive registry key

Assign PASS if key exists

Else send FAIL value to compliance rule

Simple to extend to evaluate more

```
$task = (Test-Path
"HKLM:\SOFTWARE\Policies\Microsoft\OneDrive")
If($task -eq $true){
$Compliance = "PASS"
}
Else{
$Compliance = "FAIL"
}
$Compliance
```



Settings – Remediation Script

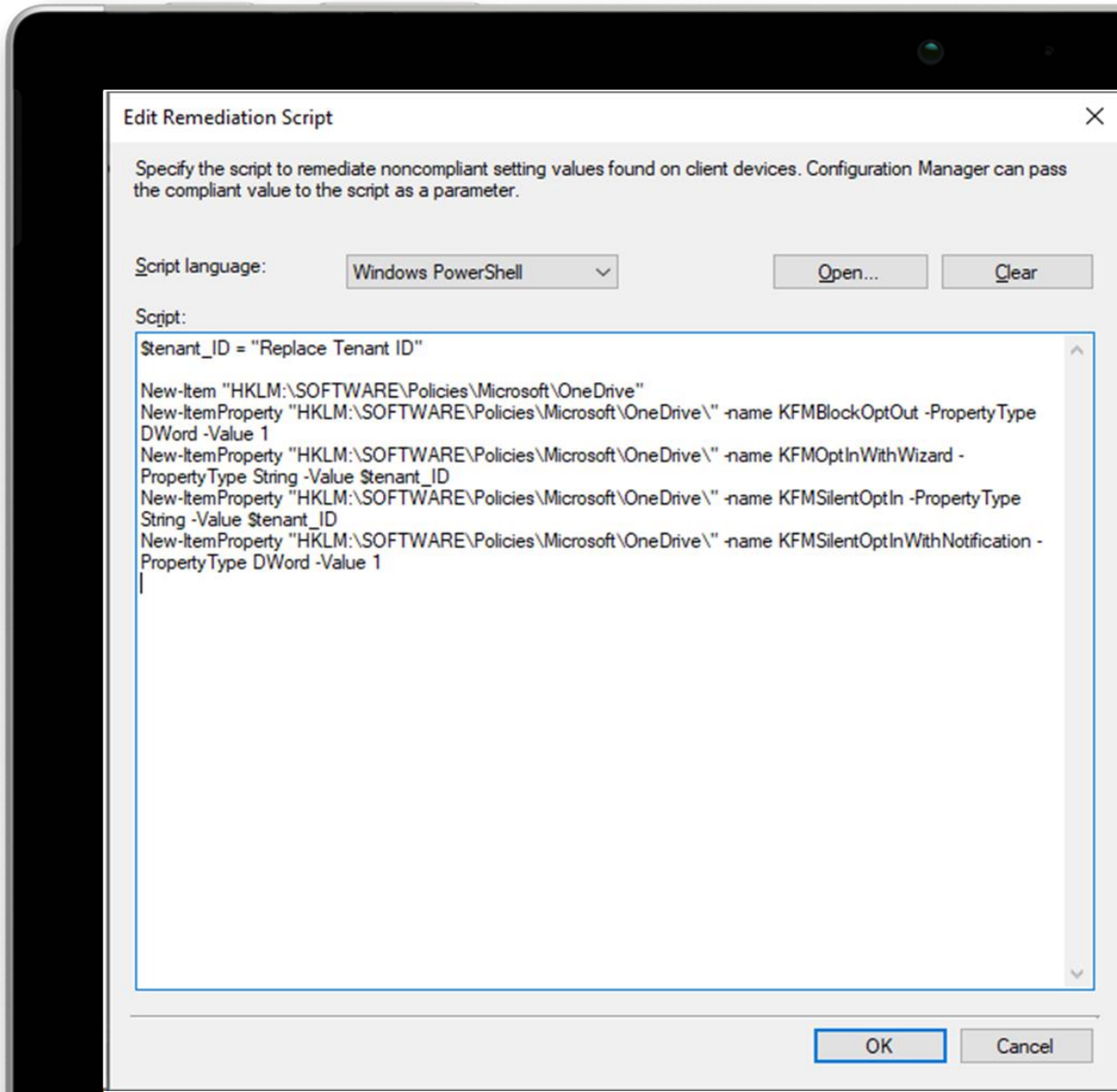
Script exactly which OneDrive KFM policies to deploy

Enforce users to keep known folders directed to OneDrive

Prompt users to move Windows known folders

Silently move known folders and notify when redirection is successful

```
$tenant_ID = "Replace Tenant ID"
New-Item "HKLM:\SOFTWARE\Policies\Microsoft\OneDrive"
New-ItemProperty "HKLM:\SOFTWARE\Policies\Microsoft\OneDrive\" -name
KFMBlockOptOut -PropertyType DWord -Value 1
New-ItemProperty "HKLM:\SOFTWARE\Policies\Microsoft\OneDrive\" -name
KFMOptInWithWizard -PropertyType String -Value $tenant_ID
New-ItemProperty "HKLM:\SOFTWARE\Policies\Microsoft\OneDrive\" -name
KFMSilentOptIn -PropertyType String -Value $tenant_ID
New-ItemProperty "HKLM:\SOFTWARE\Policies\Microsoft\OneDrive\" -name
KFMSilentOptinWithNotification -PropertyType DWord -Value 1
```



Compliance Rules

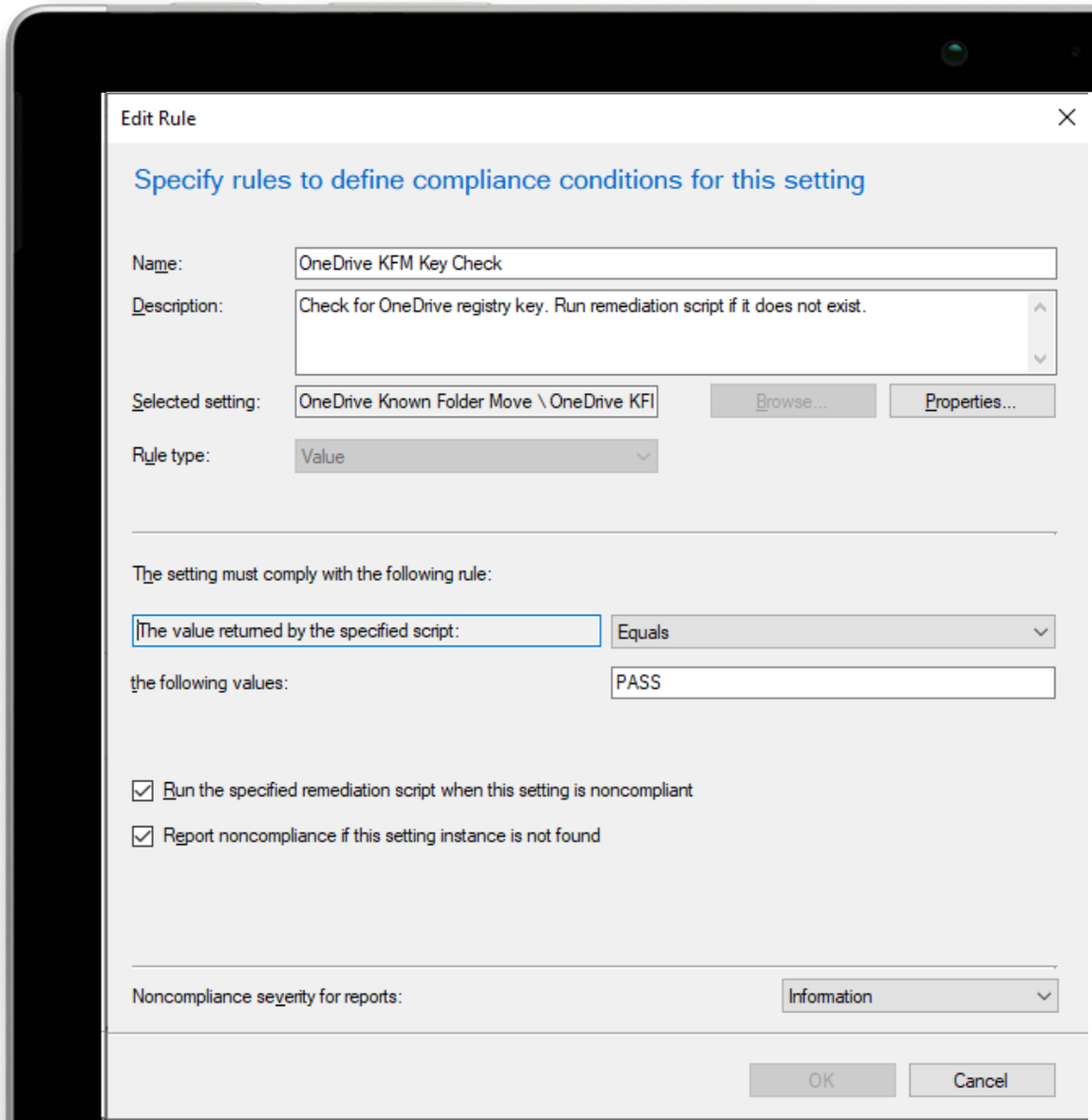
Detection value passed to rule

PASS = no remediation script

FAIL = remediation script adds OneDrive registry key/values to non-compliant device

Must check “Run the specified remediation script…”

Enable Report noncompliance and set sev reports

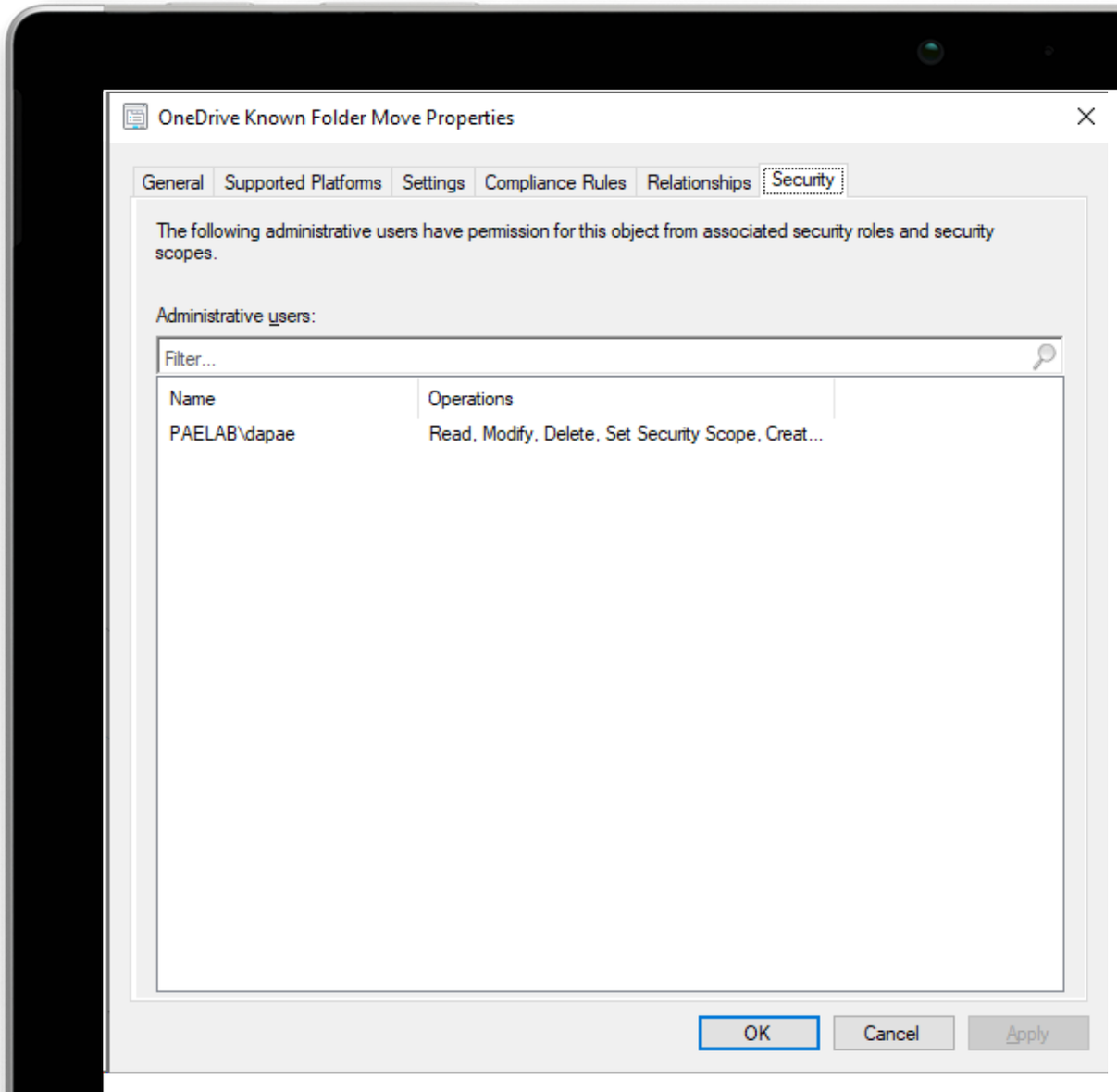


Security

Security content:

This is set using the CI wizard and defines users who can manage a CI.

The administrative users are defined when SCCM is installed/configured.

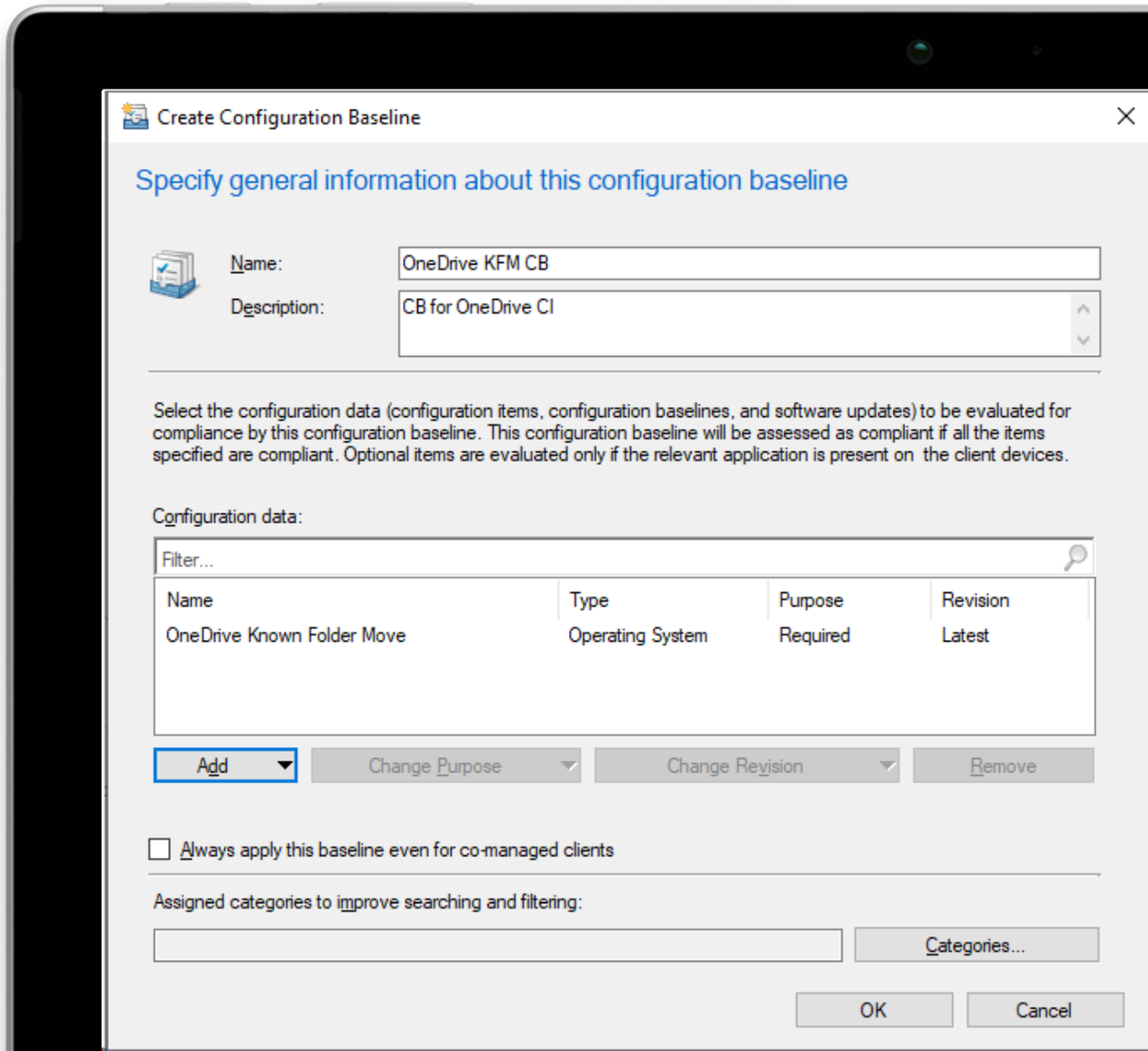


Configuration Baseline (CB)

Needed to deploy to your device collection

Create a new CB

Add the OneDrive KFM CI



Deploy to Device Collection

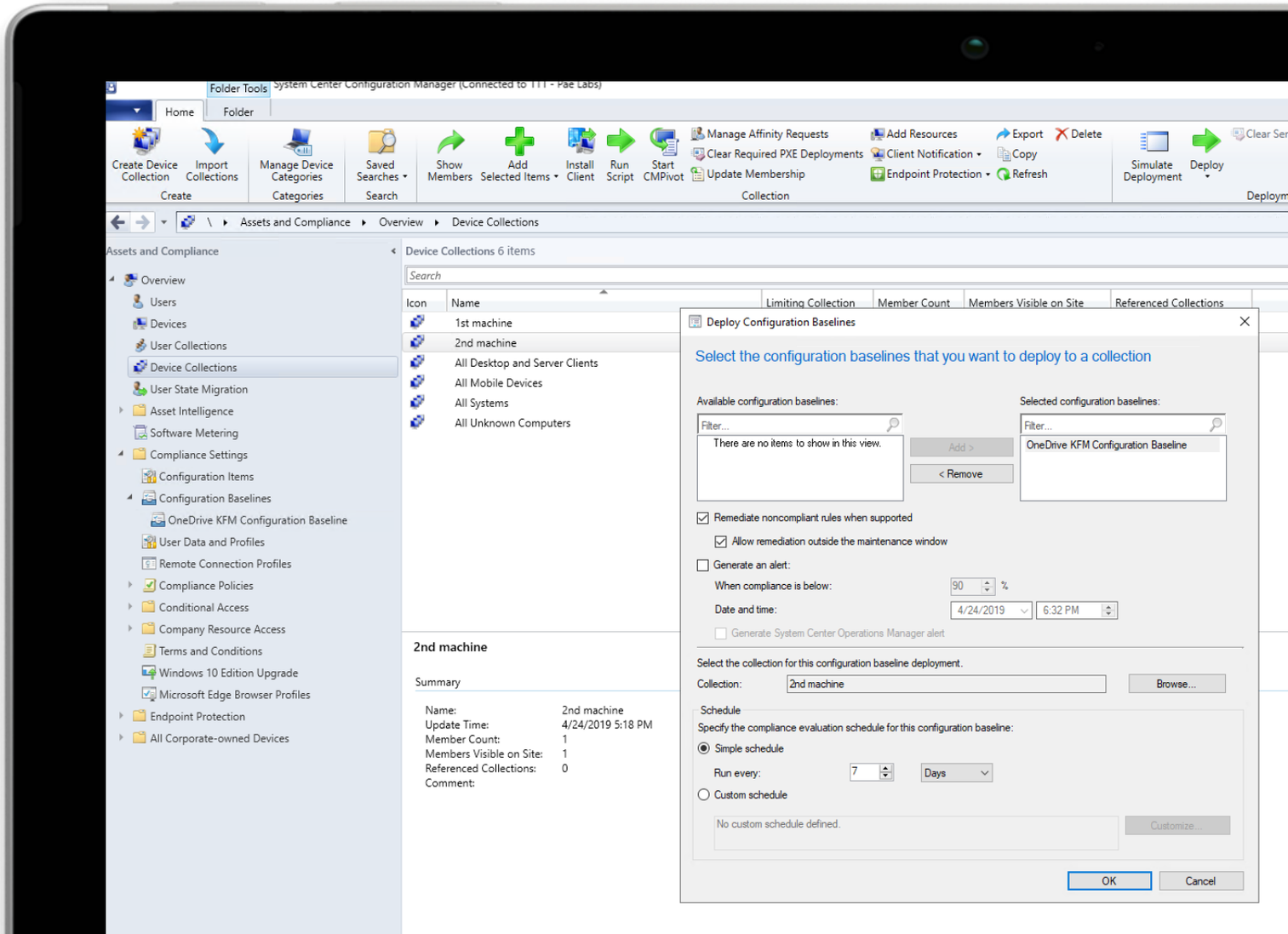
Start with a lab collection

Measure the network impact and success of the deployment

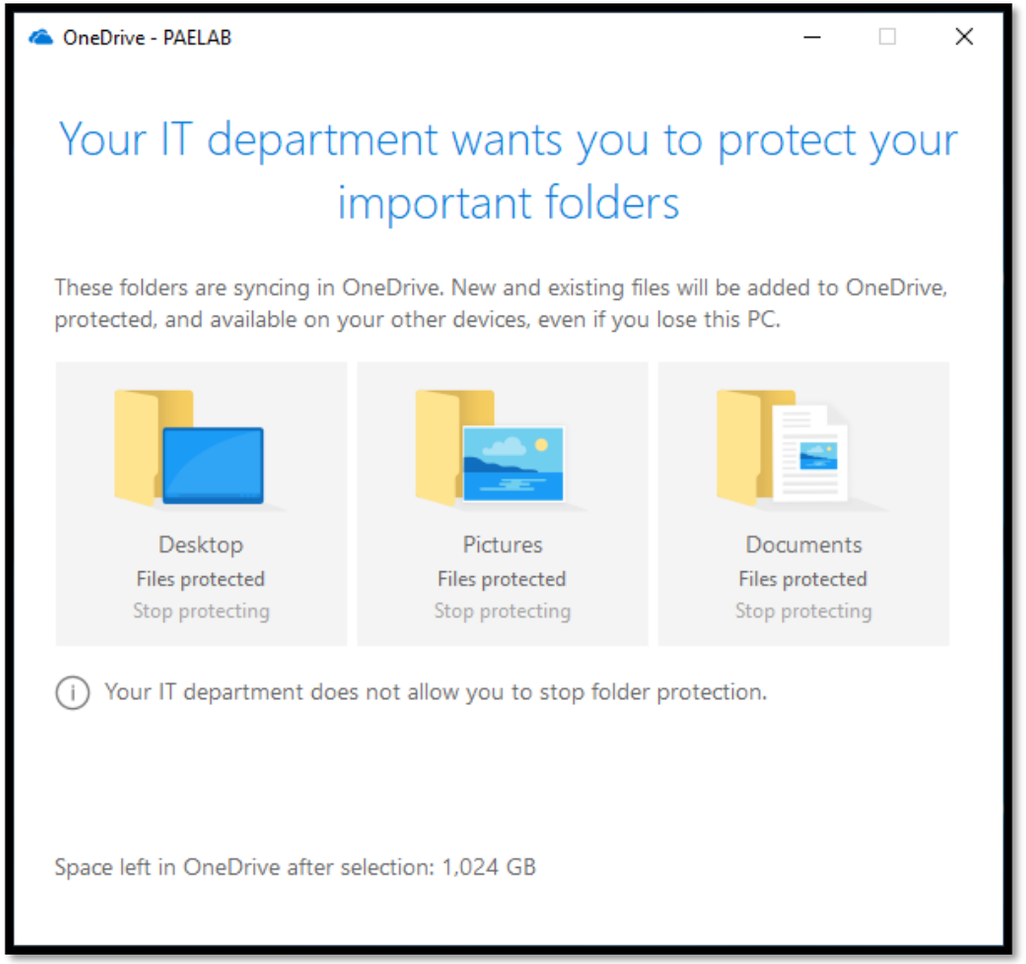
Review deployment outcomes

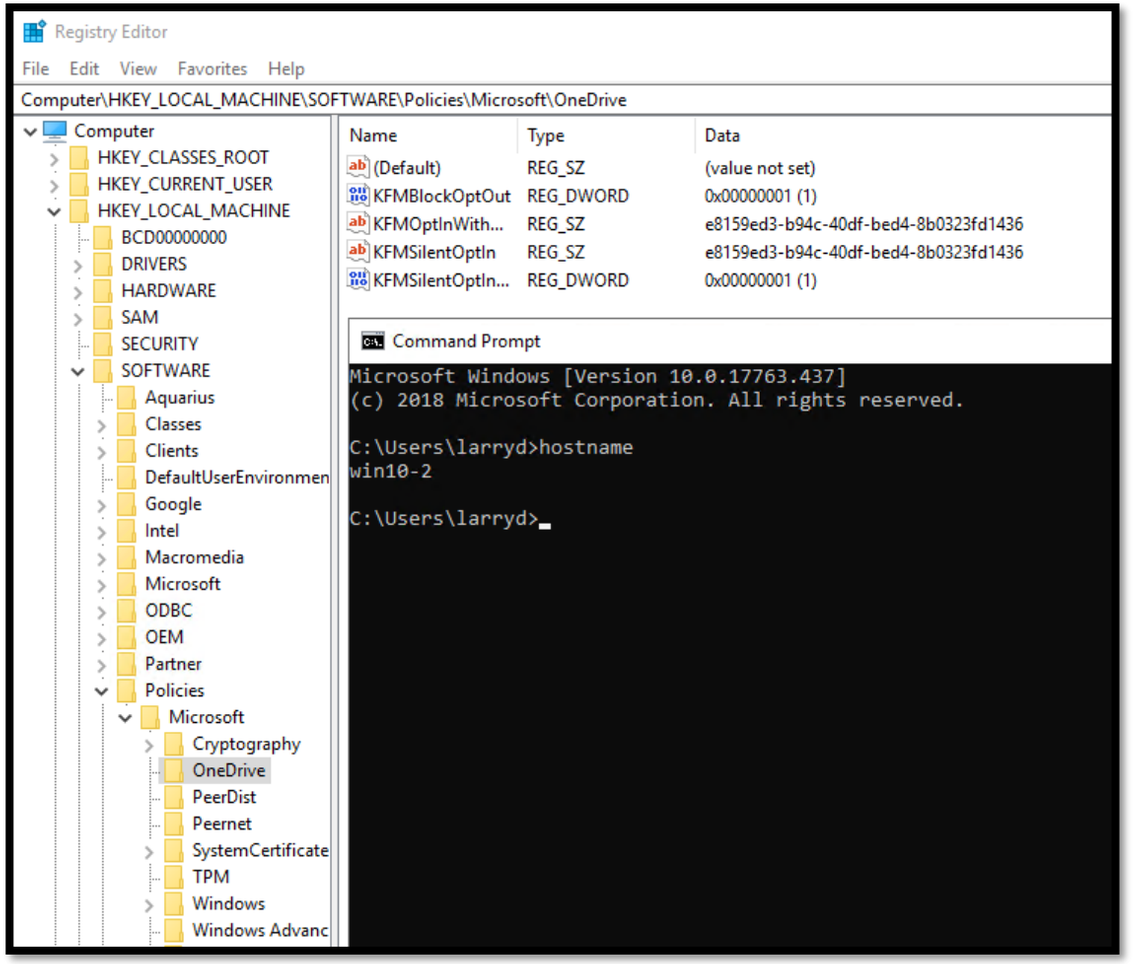
Fine-tune the CI scripts if you need to adjust KFM policies

Repeat for first wave of devices (IT early adopters)



OneDrive KM Policy Deployed

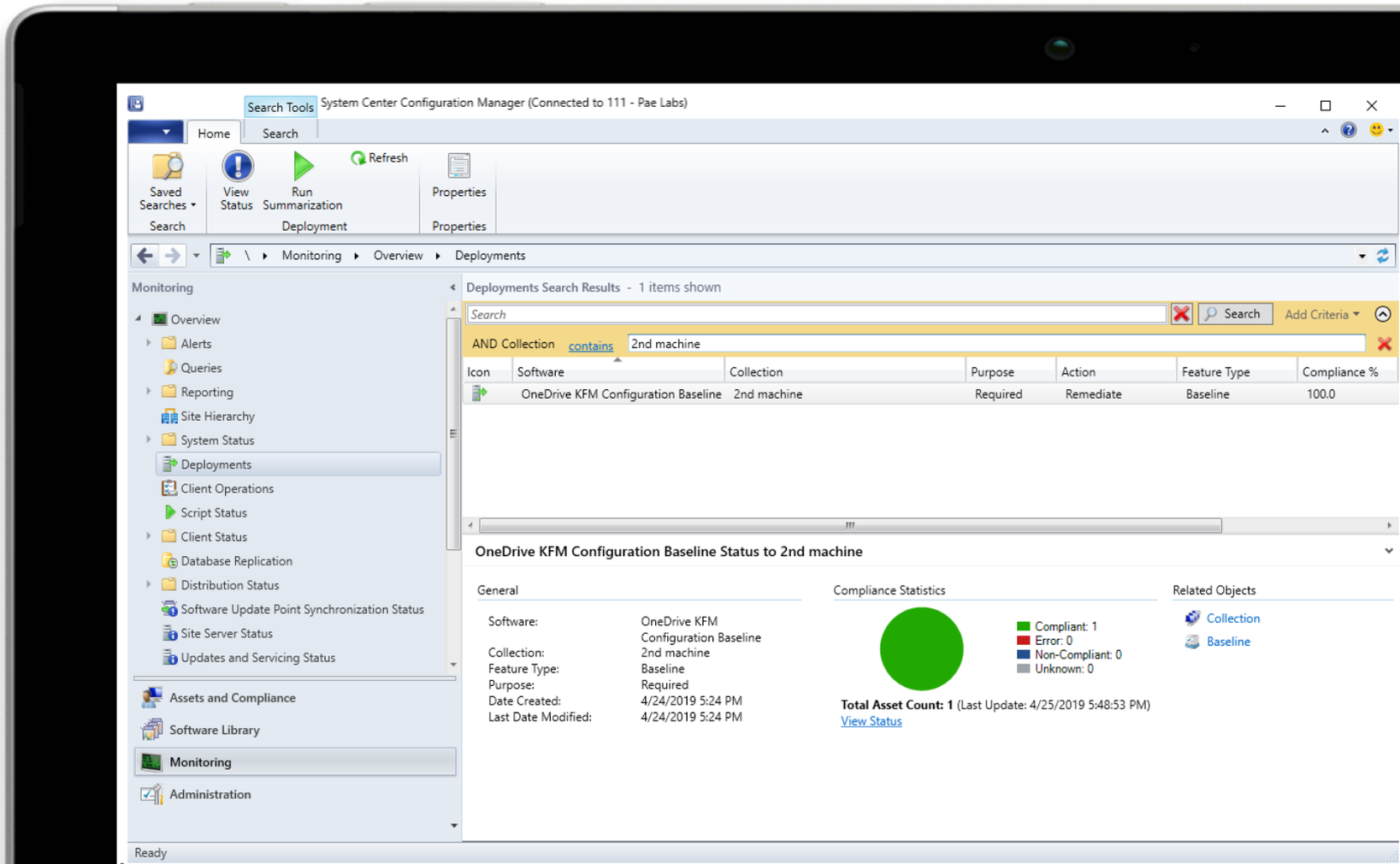




Monitor with SCCM

SSCM will report which devices are compliant/non-compliant

CI scripts can be extended to log to local file or write to Windows event logs



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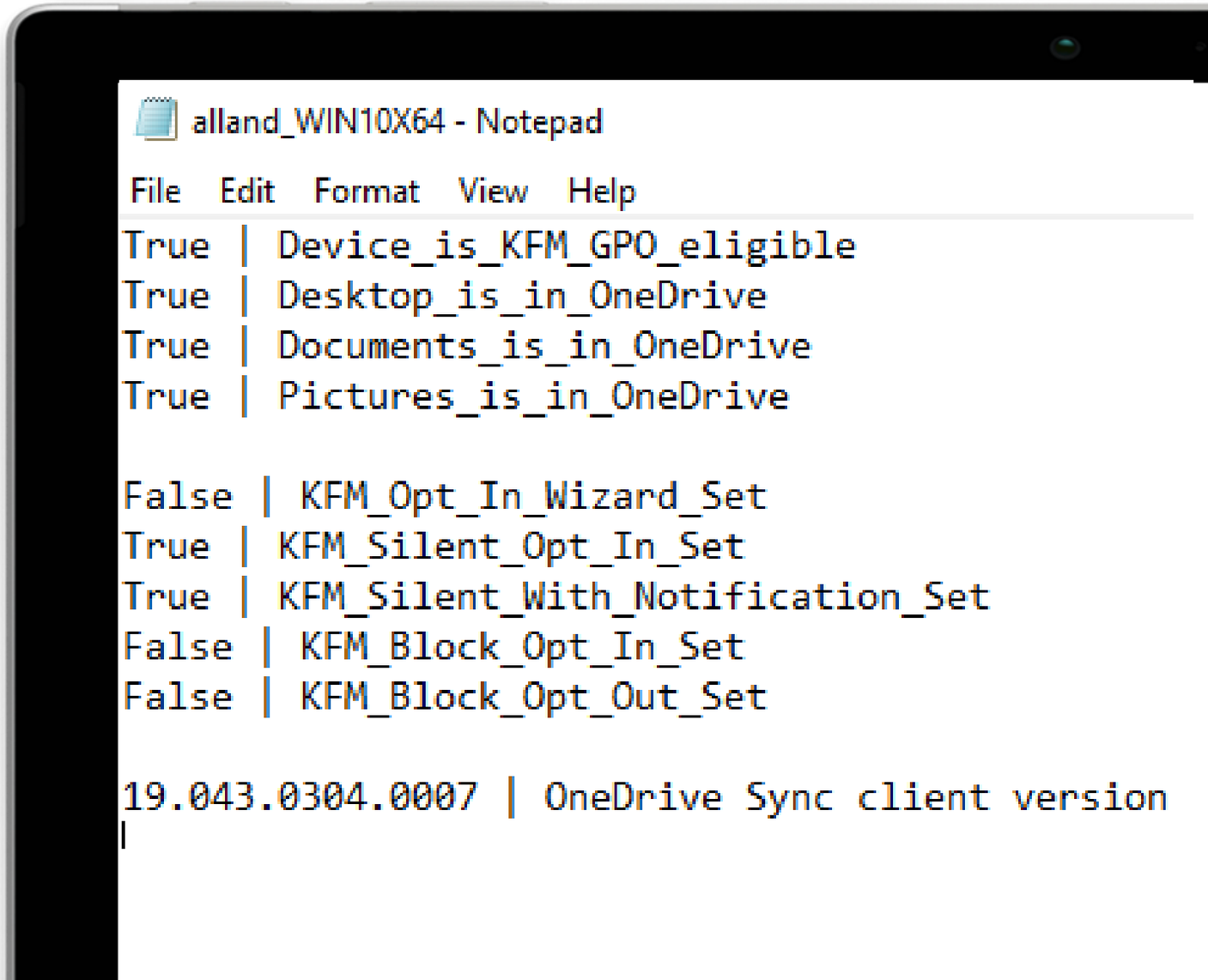
- KFM GPO state (what GPOs have been set)

https://aka.ms/kfmStatus



Deploy KFM using Intune

Option 3

KFM using Intune Requirements

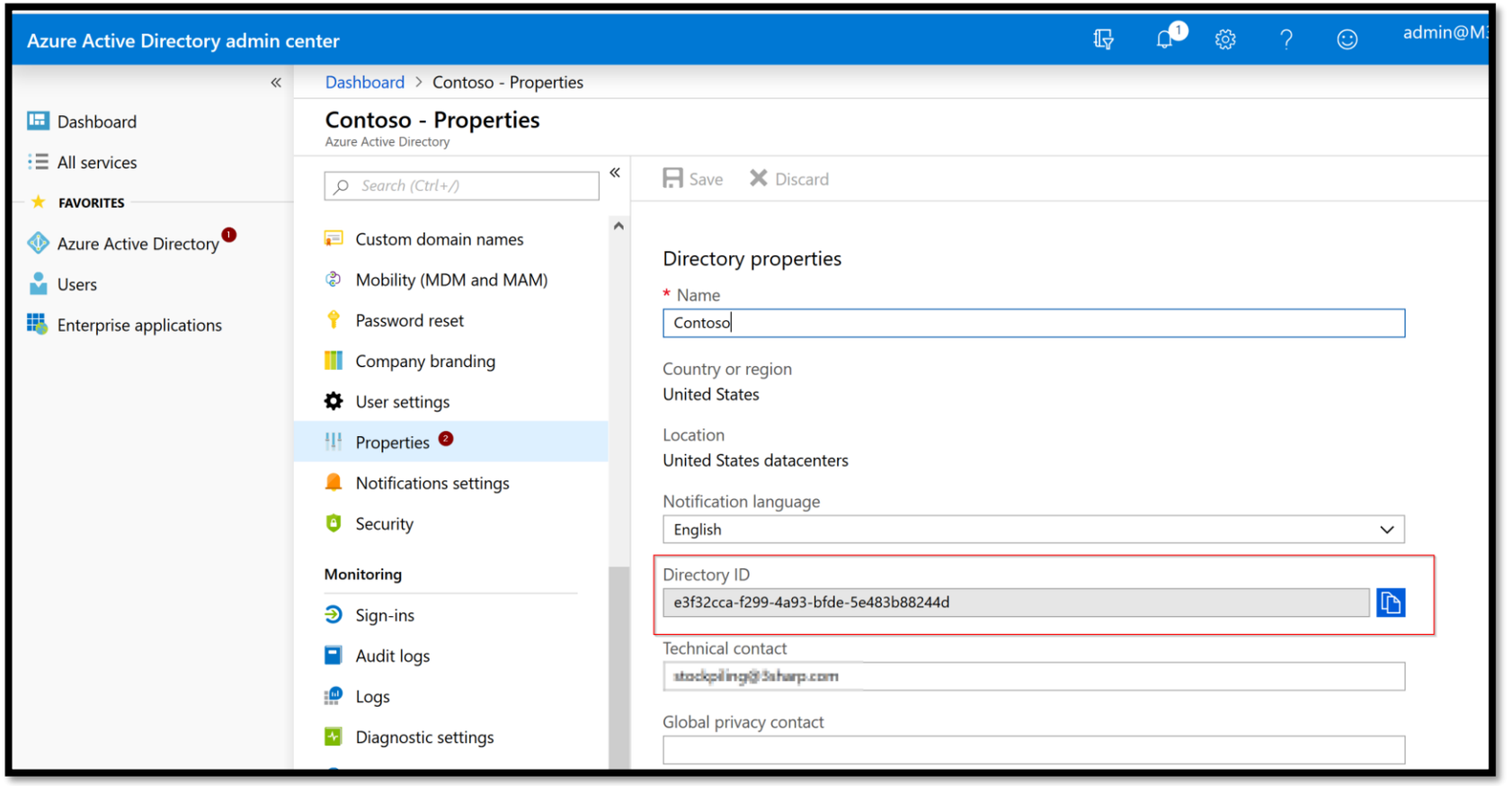
- Licensing:
  - EMS E3/E5
  - M365 E3/E5
  - https://docs.microsoft.com/en-us/intune/licenses
- Pre-requisites
  - Must be joined or registered to Azure AD*
  - Auto-enrollment configured
  - Windows 10 version 1607 or later
  - Intune extension agent is installed

Copy your Azure Tenant ID

Navigate to Azure AD admin center:

https://aad.portal.azure.com

Copy the “Directory Id” value



Setup PowerShell Script

Update $TenantID with the tenant ID you copied earlier:

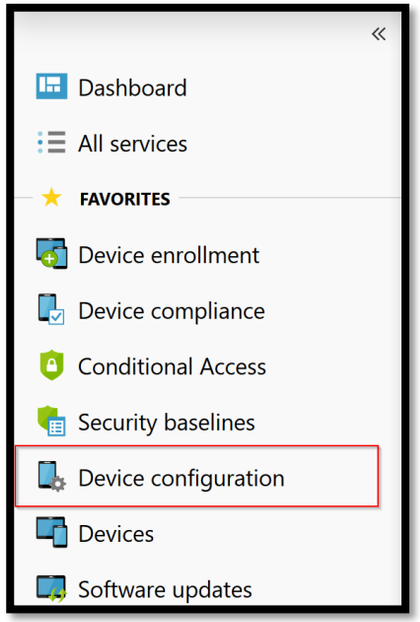
```
$TenantID = "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
$registryPath = 'HKLM:\SOFTWARE\Policies\Microsoft\OneDrive'##Path to HKLM keys

If(!(Test-Path $registryPath))
{New-Item -Path $registryPath -Force}

#Enable silent account configuration
New-ItemProperty -Path $registryPath -Name 'SilentAccountConfig' -Value '1' -PropertyType DWORD -Force | Out-Null
#Enable files on demand
New-ItemProperty -Path $registryPath -Name 'FilesOnDemandEnabled' -Value '1' -PropertyType DWORD -Force | Out-Null
#Prevent users from moving their Windows known folders to OneDrive
New-ItemProperty -Path $registryPath -Name 'KFMBlockOptIn' -Value '1' -PropertyType DWORD -Force | Out-Null
#Silently move Windows known folders to OneDrive
New-ItemProperty -Path $registryPath -Name 'KFMSilentOptIn' -Value $TenantID -PropertyType String -Force | Out-Null
#Setting this value to 1 displays a notification after successful redirection
New-ItemProperty -Path $registryPath -Name 'KFMSilentOptInWithNotification' -Value '0' -PropertyType DWORD -Force | Out-Null
#Prevent users from redirecting their Windows known folders to their PC
New-ItemProperty -Path $registryPath -Name 'KFMBlockOptOut' -Value '1' -PropertyType DWORD -Force | Out-Null
```

Deploy your script

1

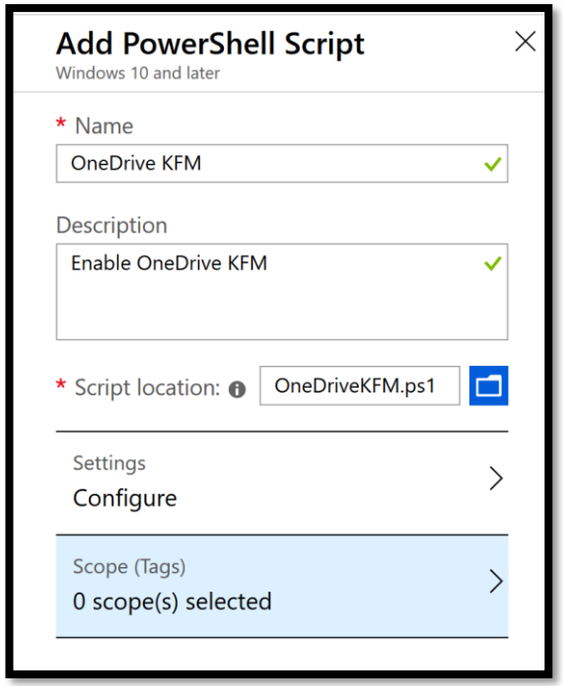
Browse to:

https://devicemanagement.portal.azure.com and click on **Device Configuration**



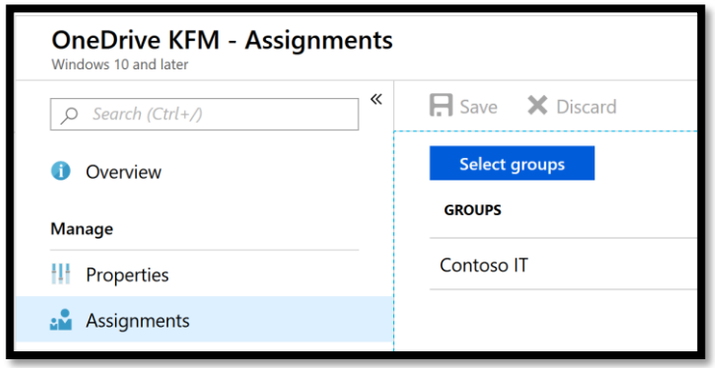
2

Add your powershell script. Settings and Scope can be left as default.

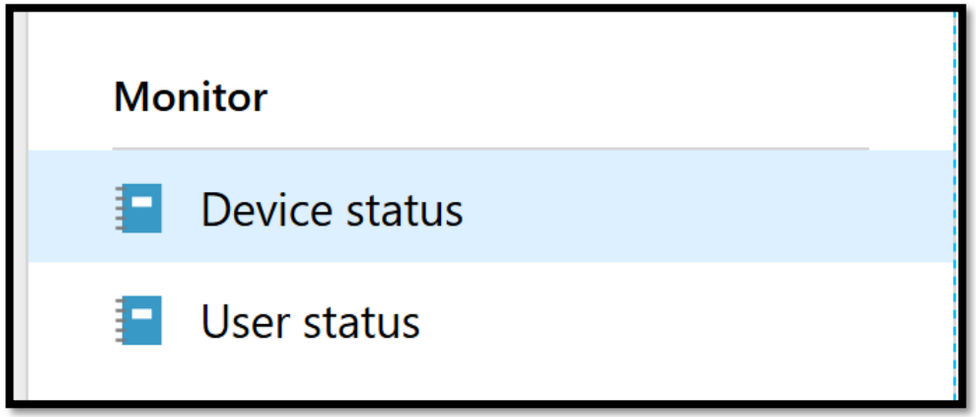


3

Assign your script to a pilot group to test out the behavior.



Monitor and troubleshoot



Monitor run status

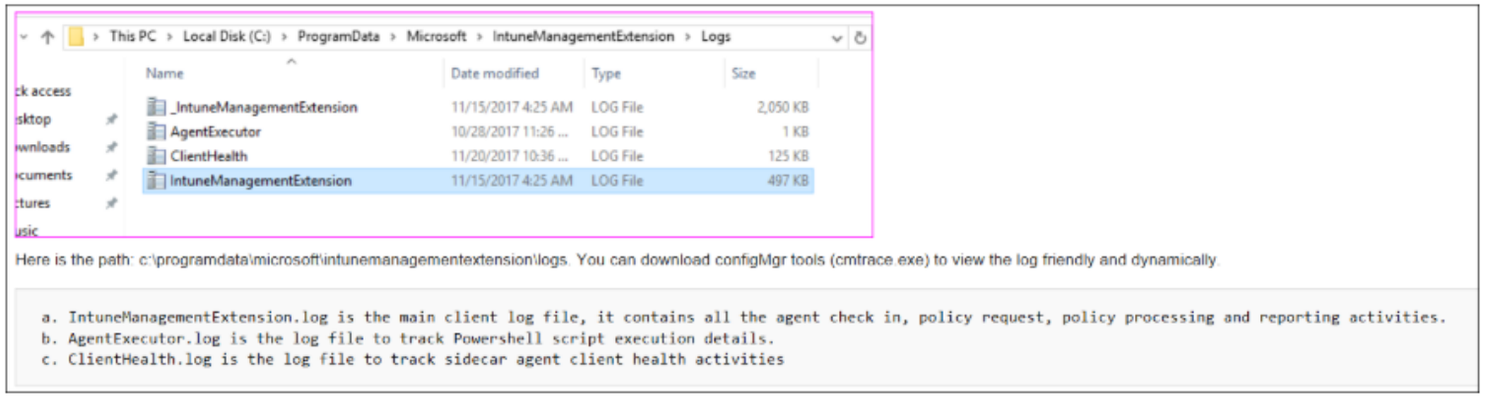
You can monitor the run status of PowerShell scripts for users and devices in the Azure portal.

In **PowerShell scripts**, select the script to monitor, choose **Monitor**, and then choose one of the following reports:

- Device status
- User status

Troubleshoot scripts

Agent logs on the client machine are typically in `\ProgramData\Microsoft\IntuneManagementExtension\Logs`. You can use CMTrace.exe to view these log files.



https://docs.microsoft.com/en-us/intune/intune-management-extension

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