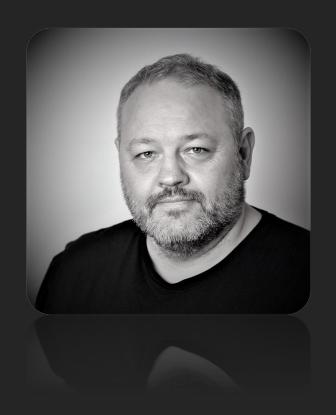
Streamlining Your Update Experience with Windows Update for Business

- Jörgen Nilsson
- Principal Consultant, Onevinn
- Twitter @ccmexec
- MVP / MCT

- Ronni Pedersen
- Cloud Architect, APENTO
- Twitter @ronnipedersen
- MVP / MCT

NORDIC

- VIRTUAL SUMMIT -





Ronni Pedersen

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- Microsoft MVP: Enterprise Mobility
- MCSE/MCSA/MCITP/MCTS
- ITIL Foundation Certified
- Microsoft Certified Trainer (MCT)

Contact Info

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- Microsoft MVP: Enterprise Mobility
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Contact Info

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- Twitter: @ccmexec



Agenda

- Introduction
- Configuration
- Reporting
- Troubleshooting
- BIOS /Firmware





Introduction

Windows Update for Business

Windows Update for Business



- Pros
 - Devices access Windows Update directly for the updates
 - Simple infrastructure and Less work
 - Simple Management
 - Microsoft hold back updates for "bad" devices (Safeguard Hold)
 - Included driver updates
- Cons
 - Limited Control
 - Maximum 1 year postpone
 - Limited Reporting (it's getting better)
 - Included driver updates





Types of updates



- Feature Updates
- Quality Updates
- Driver Updates
- Microsoft Product Updates
 - Other Microsoft products
 - Office that are installed by using Windows Installer (MSI) etc.
 - Office installed by using Click-to-Run can't be updated by using Windows Update for Business.
 - Product updates are off by default.

Requirements Expedite/Feature updates NORDI

- License requirements:
 - Intune + Windows Enterprise E3, VDA or Business Premium
- Windows 10/11 that remains in support
- Hybrid AD joined or Azure AD joined
- Enrolled in Intune MDM
- Telemetry turned on
- Windows 10/11 Enterprise LTSC/LTSB is not supported

Network - Delivery Optimization



- Save bandwidth
- Networks must allow client-to-client traffic port 7680
- Configure Delivery Optimization
- Useful bloggposts to start with:
 - <u>Delivery Optimization Configuration & Monitoring MSEndpointMgr</u>
 - <u>Deep Dive into delivery optimization Modern Device Management</u> (jannikreinhard.com)
 - Configuring Windows Update for Business settings for your Microsoft Endpoint Manager managed Modern Workplace | Modern Workplace Blog (vansurksum.com)



Pre-Requisite & Configuration

Windows Update for Business

Generally Available



Feature Updates and quality updates (expedited updates), are (finally) out of preview and now generally available ©

- Service Release 2212 (December 12^{th,} 2022).
- The UI still says "Preview"



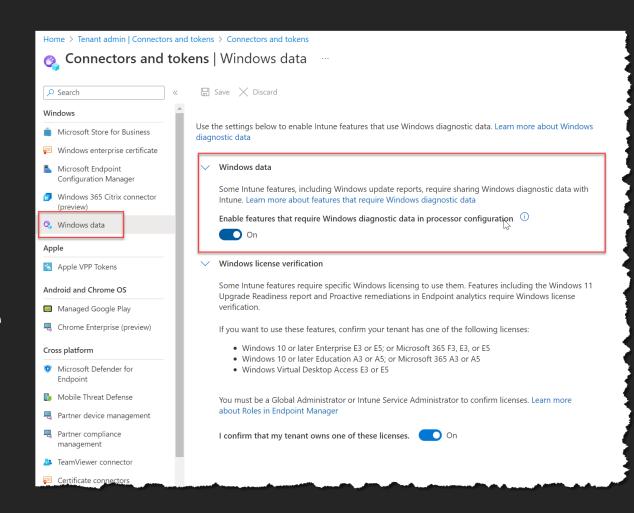
Enable use of Windows diagnostic data



Configure your tenant

- Windows Diagnostic Data
- License Attestation

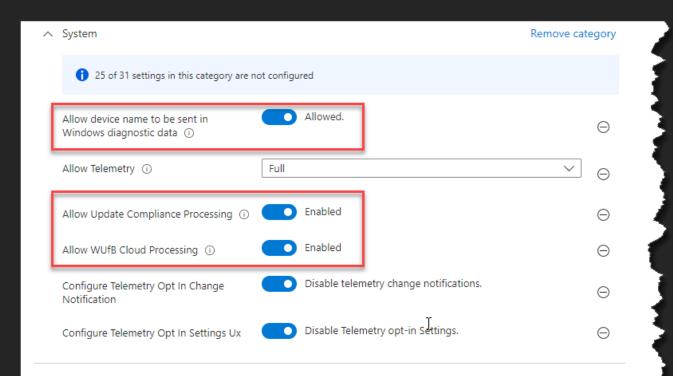
- The following features require you to enable this support:
 - Windows feature update device readiness report
 - Windows feature update compatibility risks report

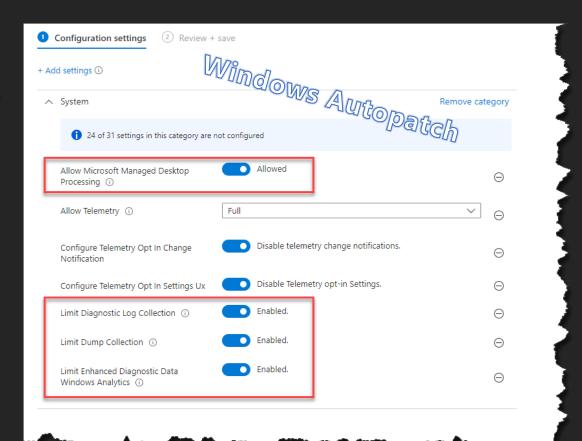


Policy - Data Collection



- Diagnostic Data (Device Name)
- WUfB Processing





Policy - Control Policy Conflict



MDM Wins Over GPO

| dd settings ① | | | |
|------------------------|------|--|-----------------|
| Control Policy Conflic | t | | Remove category |
| MDM Wins Over GP(|) Th | e MDM policy is used and the GP policy is blocked. | ▽ Θ |



Policy – Update Rings



| 1 Update ring settings 2 Review + save | | | - VIRTUAL S |
|---|---|--|-------------|
| Update settings | User experience settings | | |
| Microsoft product updates * ① Allow Block | Automatic update behavior ① | Auto install and restart at maintenance time | ~ |
| Windows drivers * ① Allow Block | Active hours start * ① | 8 AM | V |
| | Active hours end * ① | 5 PM | ~ |
| Quality update deferral period (days) * ① 0 | Restart checks ① | Allow Skip | |
| Feature update deferral period (days) * 0 | Option to pause Windows updates ① | Enable Disable | |
| Upgrade Windows 10 devices to Yes No | Option to check for Windows updates (i) | Enable Disable | |
| Latest Windows 11 release | Change notification update level ① | Use the default Windows Update notifications | ~ |
| | Use deadline settings ① | Allow Not configured | |
| | Deadline for feature updates ① | 2 | |
| | Deadline for quality updates ① | 2 | |
| | Grace period ① | 1 | |
| | Auto reboot before deadline ① | Yes No | |

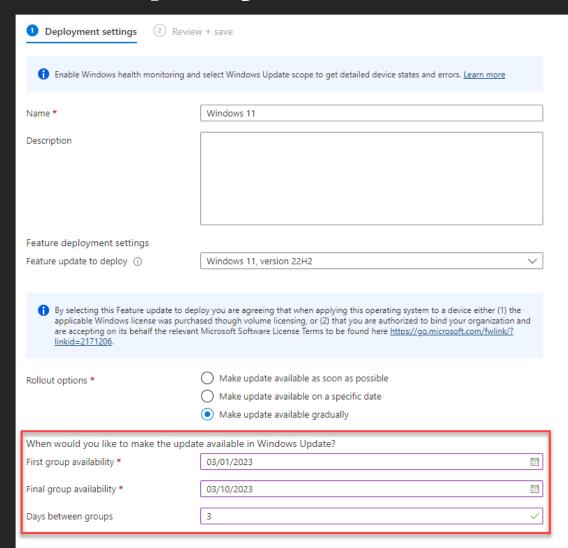
Feature Update Deployment

Rollout Options

- First group availability
- Final group availability
- Days between groups

Example:

- Clients: 400
- First day: 1/3-2023
- Last day: 10/3-2023
- Days between groups: 3
- Result: **4 Rings** x 100 Clients
 - (1/3, 4/3, 7/3, 10/3)





Quality Updates / Expedited Updates

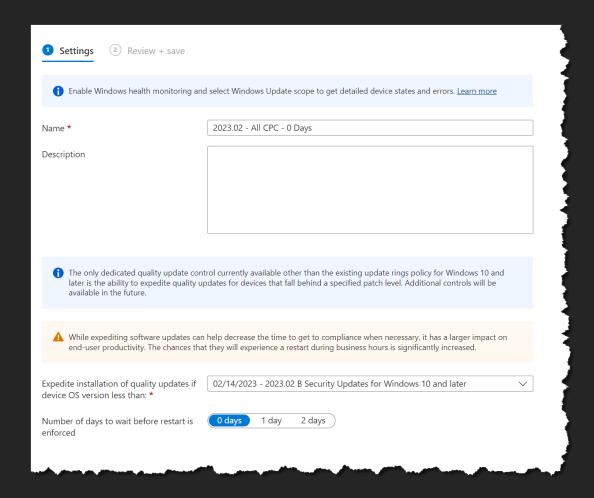


Pros

 Expediting software updates can help decrease the time to get to compliant when necessary!

Cons

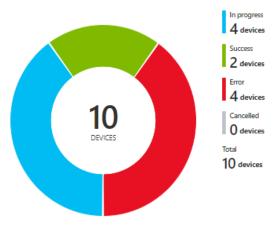
- It has a larger impact on enduser productivity.
- The chances that they will experience a restart during business hours is significantly increased!



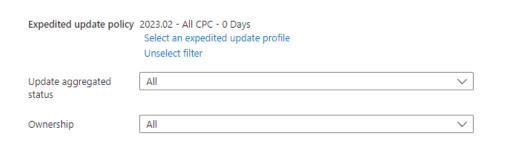
≡≣ Columns ↓ Export

1 Enable Windows health monitoring and select Windows Update scope to get detailed device states and errors. Learn more.

Report generated on: 2/16/2023, 10:15:26 AM



Search by device name, primary UPN, Intune device ID or Azure AD device ID



Generate again



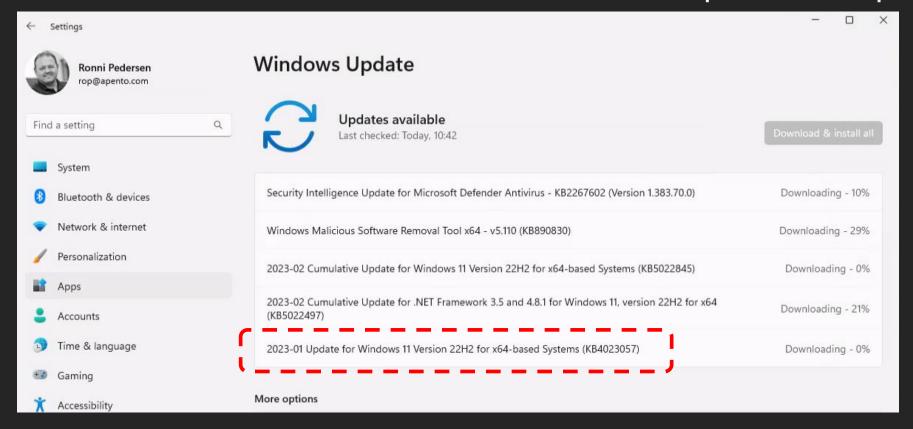
Showing 1 to 10 of 10 records < Previous Page 1 ✓ of 1 Next > Devices ↑↓ UPN ↑↓ Intune Device ID ↑↓ AAD Device ID ↑↓ Last Event Time ↑↓ Update State **Update Substate Update Aggregated State** Alert Type Last Scan Time ↑↓ CPC-hca-L7NPIFN 1499ee07-8485-4151-9bd... ef4d4f76-140e-4af2-a5ed-... 2/15/2023, 9:06:09 PM Scheduled hca@apento.com Pending In progress Not applicable Not scanned yet Expedite client missing CPC-jfb-0F3GA4E jfb@apento.com 4e944d7d-817a-4295-b66... 31cab691-7358-49b5-b2d... 2/15/2023, 9:03:59 PM Needs attention Needs attention Error Not scanned yet CPC-jok-YMMIM9T jok@apento.com 2505394d-eac9-4ce9-958... 7e7544d7-3e0b-4d71-ab9... 2/16/2023, 12:52:09 AM Offering Offer ready In progress Not applicable Not scanned yet CPC-mat-K51PVH9 2850618d-0cd4-4510-958... 310f9e15-cef1-473f-86c3-... 2/15/2023, 9:06:09 PM Needs attention Needs attention Expedite client missing mat@apento.com Error Not scanned yet CPC-mba-47OYESD mba@apento.com 404665e5-4ed1-4a9b-bd2... 4406cf29-f7a3-485d-b7c8... 2/15/2023, 9:01:17 PM Offering Offer ready In progress Not applicable Not scanned yet CPC-mth-CJCKPTK mth@apento.com 51909c6a-d71a-405d-af89... a1640001-e49f-4096-81c5... 2/15/2023, 9:06:10 PM Needs attention Needs attention Error Expedite client missing Not scanned yet CPC-mum-V4PBYLJ mum@apento.com faa56789-dffc-4687-b923-... 313a3732-f129-4df9-acfe-... 2/16/2023, 12:39:02 AM Installed Update installed Success Not applicable 2/16/2023, 12:39:02 AM CPC-psd-5MS9LYD psd@apento.com 82252f31-04d5-4883-9fbc... 26c2c485-c82c-4c9b-a78e... 2/15/2023, 9:26:22 PM Offering Offer ready In progress Not applicable Not scanned yet CPC-rcn-CKW05MD rcn@apento.com 98fb28cf-39d8-4ab1-aff6-... 61393c59-5a39-4531-919... 2/15/2023, 9:04:56 PM Needs attention Needs attention Error Expedite client missing Not scanned yet CPC-rop-I4Q18VL c05260f2-8c78-4ed1-819f... f814e6f7-6a6c-462f-9e6f-... 1/25/2023, 7:51:31 PM Installed Update installed Not applicable 1/25/2023, 7:51:31 PM rop@apento.com Success

Cancel

Update for Windows Update Service components (KB4023057)



All builds of Windows 10 and Windows 11 require this update!



https://support.microsoft.com/en-us/topic/kb4023057-update-for-windows-update-service-components-fccad0ca-dc10-2e46-9ed1-7e392450fb3a

Windows 10 and later Expedited updates ...

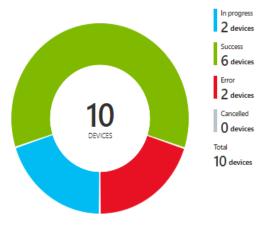
 \times

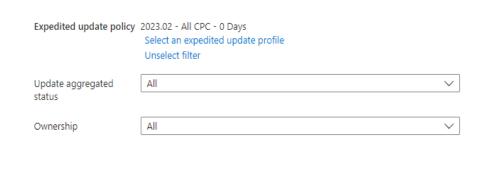
Page 1 V of 1 Next >

Columns
 ✓ Export

1 Enable Windows health monitoring and select Windows Update scope to get detailed device states and errors. Learn more.

Report generated on: 2/16/2023, 6:48:20 PM





Generate again

Status: 24 hours

< Previous

Search by device name, primary UPN, Intune device ID or Azure AD device ID

Showing 1 to 10 of 10 records

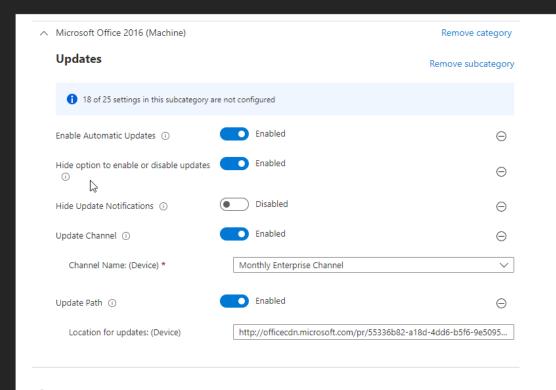
| Devices ↑↓ | UPN ↑↓ | Intune Device ID $\uparrow \downarrow$ | AAD Device ID $\uparrow\downarrow$ | Last Event Time $\uparrow \downarrow$ | Update State | Update Substate | Update Aggregated State | Alert Type | Last Scan Time $\uparrow \downarrow$ |
|-----------------|----------------|--|------------------------------------|---------------------------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------------------|
| CPC-hca-L7NPIFN | hca@apento.com | 1499ee07-8485-4151-9bd3- | ef4d4f76-140e-4af2-a5ed-3e | e 2/16/2023, 7:20:40 AM | Installed | Update installed | Success | Not applicable | 2/16/2023, 7:20:40 AM |
| CPC-jfb-0F3GA4E | jfb@apento.com | 4e944d7d-817a-4295-b667 | 31cab691-7358-49b5-b2d8 | 2/16/2023, 11:35:05 AM | Installed | Update installed | Success | Not applicable | 2/16/2023, 11:35:05 AM |
| CPC-jok-YMMIM9T | jok@apento.com | 2505394d-eac9-4ce9-9584- | 7e7544d7-3e0b-4d71-ab99- | 2/16/2023, 6:21:51 AM | Installed | Update installed | Success | Not applicable | 2/16/2023, 6:21:51 AM |
| CPC-mat-K51PVH9 | mat@apento.com | 2850618d-0cd4-4510-958a- | 310f9e15-cef1-473f-86c3-4d | 2/15/2023, 9:06:09 PM | Needs attention | Needs attention | Error | Expedite client missing | 2/16/2023, 11:42:05 AM |
| CPC-mba-47OYESD | mba@apento.com | 404665e5-4ed1-4a9b-bd24 | 4406cf29-f7a3-485d-b7c8-c | 2/16/2023, 1:16:46 AM | Installed | Update installed | Success | Not applicable | 2/16/2023, 1:16:46 AM |
| CPC-mth-CJCKPTK | mth@apento.com | 51909c6a-d71a-405d-af89- | 3 a1640001-e49f-4096-81c5-6 | 2/16/2023, 12:55:03 PM | Offering | Offer ready | In progress | Not applicable | Not scanned yet |
| CPC-mum-V4PBYLJ | mum@apento.com | faa56789-dffc-4687-b923-c | d 313a3732-f129-4df9-acfe-c1 | 2/16/2023, 12:39:02 AM | Installed | Update installed | Success | Not applicable | 2/16/2023, 12:39:02 AM |
| CPC-psd-5MS9LYD | psd@apento.com | 82252f31-04d5-4883-9fbc-6 | 26c2c485-c82c-4c9b-a78e-f. | 2/16/2023, 5:08:30 AM | Installed | Update installed | Success | Not applicable | 2/16/2023, 5:08:30 AM |
| CPC-rcn-CKW05MD | rcn@apento.com | 98fb28cf-39d8-4ab1-aff6-fe | 61393c59-5a39-4531-9198 | 2/15/2023, 9:04:56 PM | Needs attention | Needs attention | Error | Expedite client missing | Not scanned yet |
| CPC-rop-I4Q18VL | rop@apento.com | c05260f2-8c78-4ed1-819f-6 | f814e6f7-6a6c-462f-9e6f-ab. | 2/16/2023, 12:55:02 PM | Offering | Offer ready | In progress | Not applicable | 1/25/2023, 7:51:31 PM |

Cancel

Office Updates



Office Configuration (All)

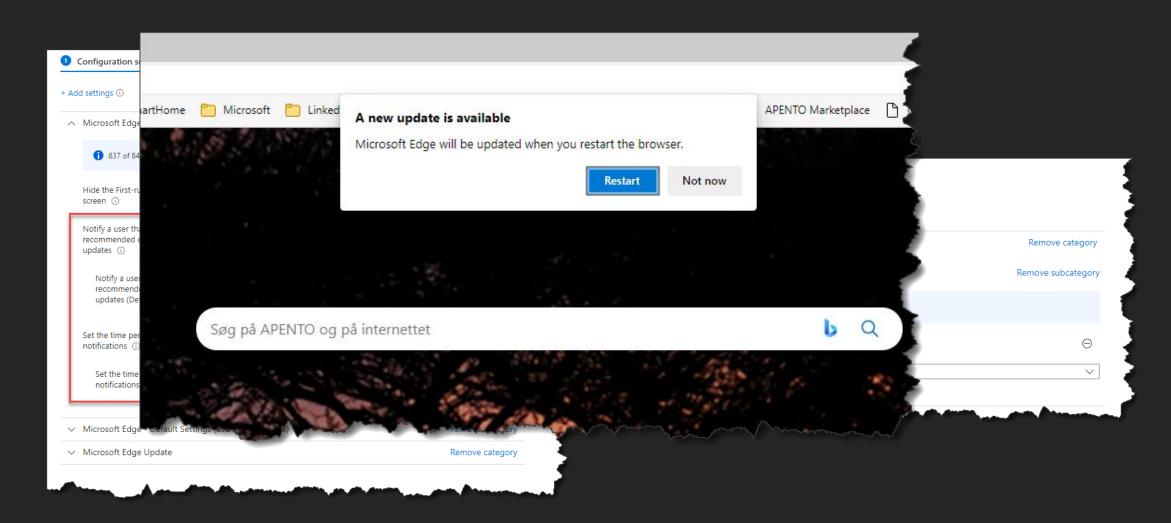


Deployment Rings

| Microsoft Office 2016 (Machine) | | Remove category |
|---|------------------------|--------------------|
| Updates | | Remove subcategory |
| 1 21 of 25 settings in this subcateg | ory are not configured | |
| Delay downloading and installing updates for Office ① | Enabled | Θ |
| Days: (Device) * | 7 | |
| Update Deadline (i) | Enabled | Θ |
| Deadline: (Device) | 7 | |

Microsoft Edge





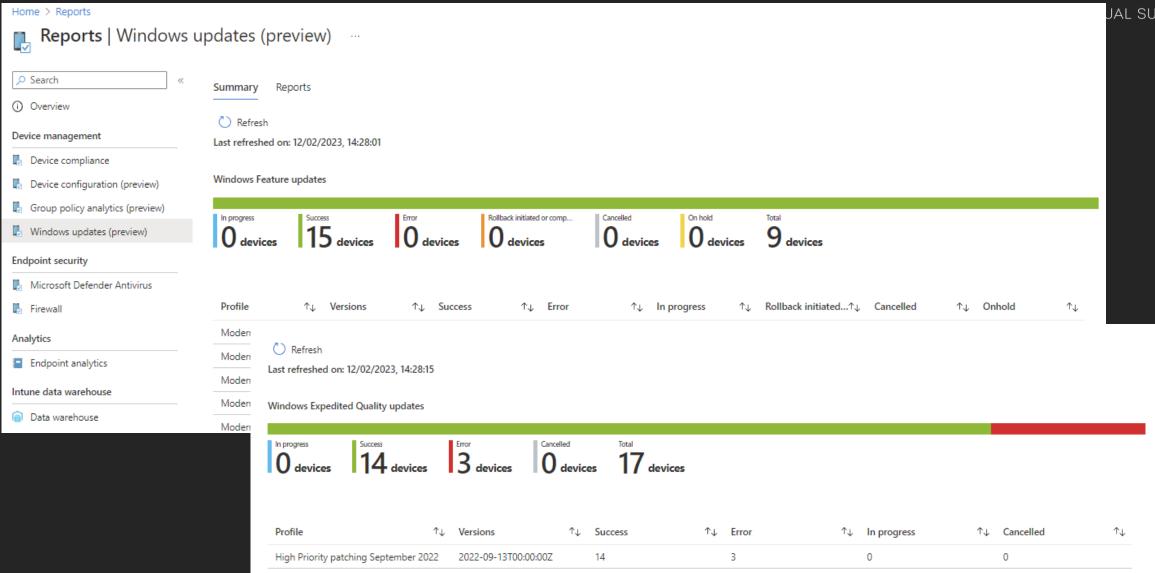


Reporting

Windows Update for Business

Reports: Windows updates





Customer after 60 days (gradually roll-out)



Windows Feature updates

4,043 devices

Success
13,252 devices
135 devices
Rollback initiated or 1 devices

0 devices 17,114 devices

| Profile | ↑↓ Ver | rsions | \uparrow_{\downarrow} | Success | \uparrow_{\downarrow} | Error | \uparrow_{\downarrow} | In progress | \uparrow_{\downarrow} | Rollback initiate↑↓ | Cancelled |
|---|---------|------------------------|-------------------------|---------|-------------------------|-------|-------------------------|-------------|-------------------------|---------------------|-----------|
| Feature Update for devices running old versions of Wind | ows Wir | ndows 10, version 21H2 | | 17 | | 1 | | 112 | | 0 | 0 |
| Feature Updates - Ring 0 (Windows 11 21H2) | Wir | ndows 11, version 21H2 | | 32 | | 1 | | 15 | | 0 | 0 |
| Feature Updates - Ring 1 (Windows 10 21H2) | Wir | ndows 10, version 21H2 | | 448 | | 14 | | 111 | | 0 | 0 |
| Feature Updates - Ring 2 (Windows 10 21H2) | Wir | ndows 10, version 21H2 | | 945 | | 4 | | 189 | | 0 | 0 |
| Feature Updates - Ring 3 (Windows 10 21H2) | Wir | ndows 10, version 21H2 | | 11810 | | 115 | | 3616 | | 1 | 0 |

Update Compliance is retired



- Update Compliance is retiring on March 31st, 2023, enroll in WUfB reports by February 14th.
- No CommercialID needed anymore

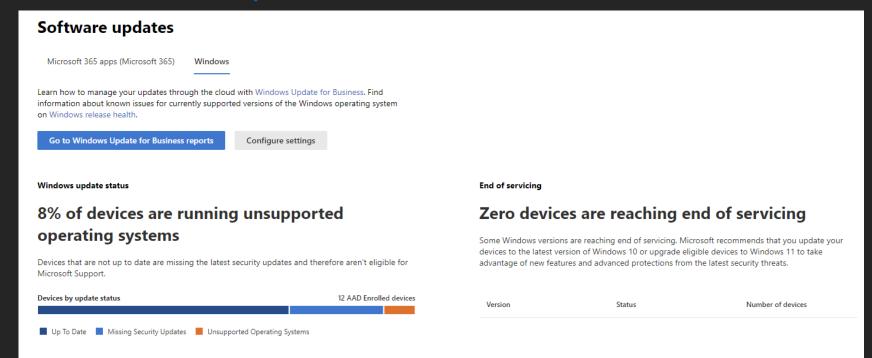
More information: https://aka.ms/wufbreportsGA

Windows Update for Business Reports

NORDIC
- VIRTUAL SUMMIT -

- Microsoft 365 admin center
- The "Gap" challenge
- Requires Azure Subscription

https://aka.ms/wufbreports



MSEndpointMgr – Windows Update compliance Dashboard



- Downloadable Workbook
- More details



Windows Update Compliance Dashboard

An update compliance reporting solution for Windows client devices. Built by Jan Ketil Skanke, Sandy Zeng and Maurice Daly.

The purpose of this dashboard is to give you full oversight of your Windows client device patching health. This includes;

- 1. Patch compliance state over time
- 2. Feature update state, including support
- 3. Patch content source, and download figures per category
- 4. Patching issues reported

Note: Values are based on information obtained from multiple logs. The source date entries are opposite

▲ Important - Onboarding URL Documentation

In order for clients to communicate with Microsoft telemtry services, please ensure that endpoints listed in the following documentation links are avaiable through your firewall / proxy servers;

https://docs.microsoft.com/en-us/windows/privacy/manage-windows-1809-endpoints#windows-update https://docs.microsoft.com/en-us/windows/deployment/update-compliance-configuration-manual#required-endpoints https://docs.microsoft.com/en-us/mem/intune/protect/windows-10-expedite-updates



Time Range: Last 90 days ∨

Update Summary Quality Update History Details by Device Details by Update Update Issues Delivery Optimization Feature Updates Windows 11 Readiness Microsoft Office, Edge & Third Party

● Update Compliance Health

Update compliance is operational on your devices.

④ Active Device Count

14

Intune managed devices (> aqo(90d))

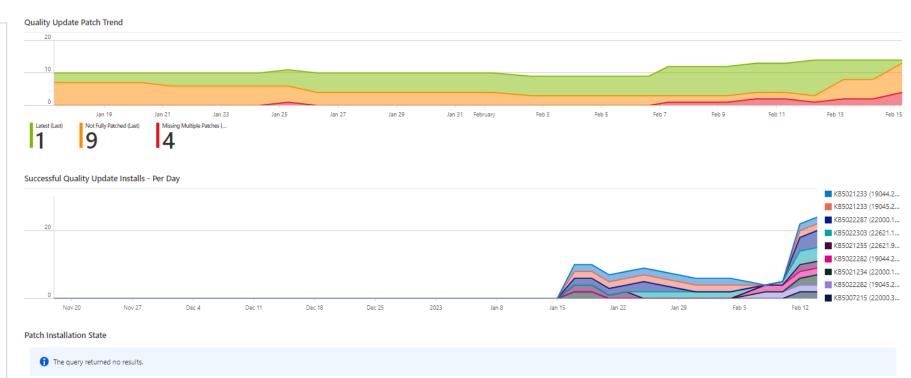
● Windows Update for Business

Windows Update for Business is reporting that not all of your devices are registered. This can be due to your update workload configuration, and/or retired devices in your environment.

♠ WUfB Devices

15

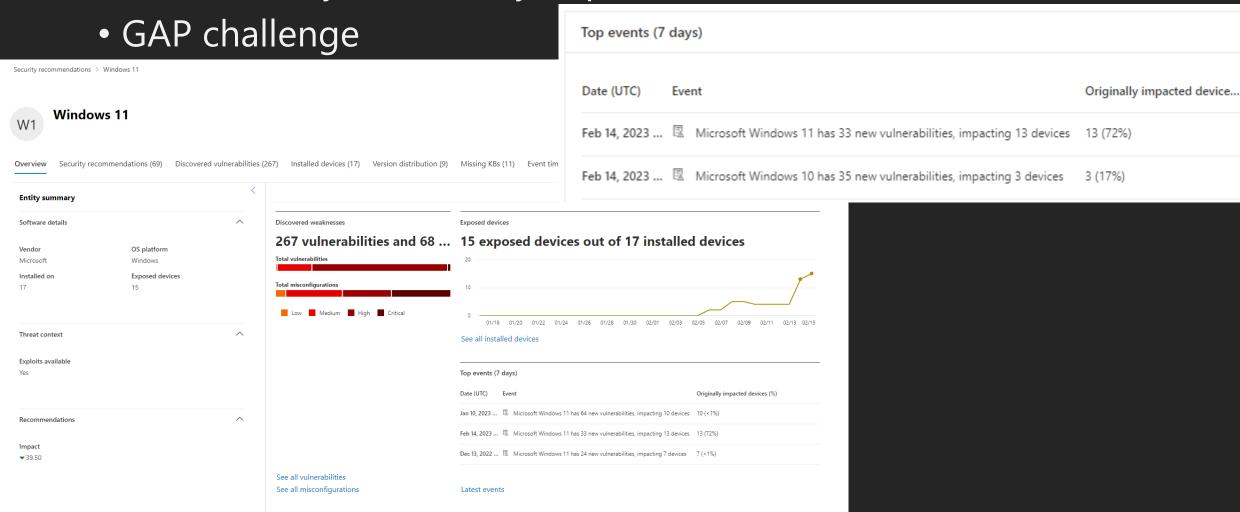
Registered devices (> ago(90d))



Defender for Endpoint



• This is what your security department will use.



Challenges with patching/reporting



- You will never reach 100%
 - Inactive clients
 - Broken clients?!
- Using a different agent or solution to report = "GAP" Challenge
- "GAP" Challenge / update time challenge
 - Intune shows -100 devices / 8 hours
 - Defender for Endpoint 95 device / fast
 - Windows Update for Business reports 90 devices / once a day

Who owns the GAP?

Custom Power BI Reports is key





Monitoring Feature Upgrades





Windows 11 Readiness- Endpoint Analytics



- Easy to start using (Tenant attach, Intune, Co-Management)
 - Requires Windows Enterprise E3 (Microsoft 365 E3, EMS E3 or better).

| Search by device name, manufactu | urer, model or OS version | | | | Dev | vice scope: All Devices |
|----------------------------------|---------------------------------|------------------------------------|-----------------|-----------------|---|-----------------------------|
| Showing 1 to 11 of 11 records | | | | | < Previous | Page 1 V of 1 Next > |
| ⁺ ▽ Add filter | | | | | | |
| Device name ↑↓ | Managed by $\uparrow\downarrow$ | Manufacturer $\uparrow \downarrow$ | Model ↑↓ | OS version ↑↓ | Windows 11 readiness status $\uparrow \downarrow$ | Windows 11 readiness reason |
| W10TEST126 | Co-managed | Microsoft Corporation | Virtual Machine | 10.0.19043.1889 | Capable | |
| W10TEST122 | Co-managed | Microsoft Corporation | Virtual Machine | 10.0.19045.2486 | Capable | |
| DESKTOP-VPOM6H2 | Intune | Microsoft Corporation | Virtual Machine | 10.0.19044.2486 | Not capable | RAM |
| W10AAD10 | Intune | Microsoft Corporation | Virtual Machine | 10.0.22621.1105 | Upgraded | |



Troubleshooting

Windows Update for Business

Safeguard Holds



What is a Safeguard hold?

- Microsoft uses quality and compatibility data to identify issues that might cause a Windows client feature update to fail or roll back.
- When we find such an issue, we might apply safeguard holds to the updating service to prevent affected devices from installing the update in order to safeguard them from these experiences.
- Source: https://learn.microsoft.com/en-us/windows/deployment/update/safequard-holds

Safeguard Holds

 Diagnostic Data is used to determine whether a devices are ready for a feature update...

Goal: To ensure a smooth

■ Logs *

Tables

Search
 S

Favorites LogManagement

> Functions

Update Compliance

LogAnalyticsWorkspaceIntune

LogAnalyticsWorks... Select scope

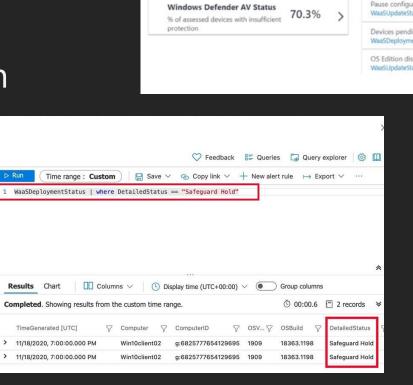
P New Query 1* × +

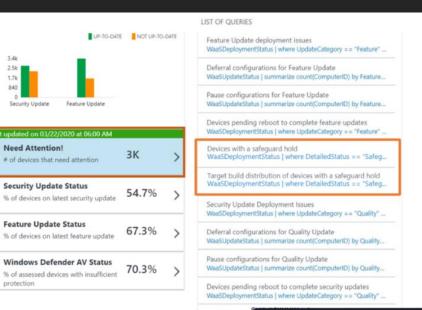
Oueries

▼ Filter | Group by: Solution ∨

TimeGenerated [UTC]

experience!



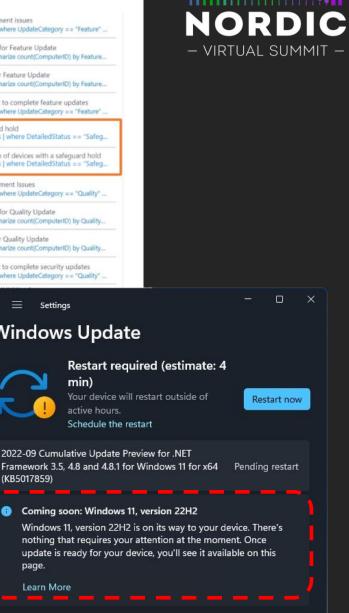


■ Settings

Learn More

Windows Update

active hours.



Get the Blocker ID (Local)



Command:

reg query "HKLM\SOFTWARE\Microsoft\Windows NT\CurrentVersion\AppCompatFlags\TargetVersionUpgradeExperienceIndicators\NI22H2

Output:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\AppCompatFlags\TargetVersionUpgradeExperienceIndicators\NI22H2

DX12 REG_SZ 0

DestBuildNum REG_SZ 22621

DestBuildNumList REG_SZ 22621,22622,22623

GStatus REG_SZ 0

GatedBlockId REG_MULTI_SZ 41928397\041332279

GatedBlockReason REG_MULTI_SZ Other\0Other

GatedFeature REG MULTI SZ None"

SafeGuardHoldLookupSample.ps1



- Author: Gary Blok
- Blog: https://garytown.com/

Script:

• https://githuBb.com/gwblok/garytown/blob/master/Feature-Updates/SafeGuardHolds/SafeGuardHoldLookupSample.ps1

Output (Example)



APP_NAME : Devices with Integrated 4-Channel Mic and have used Voice Recorder app

SafeguardId : 41928397

EXE ID : {8b5f77d7-26d2-4221-8ab0-059f56532d5b}

PICK ONE :

AppName : Devices with Integrated 4-Channel Mic and have used Voice Recorder app

VENDOR : Microsoft

NAME

BlockType : GatedBlock

Fix: Update driver and/or firmware

APP_NAME : Devices with printer using Microsoft IPP Class Driver (Wu Offer Block)

SafeguardId : 41332279

EXE_ID : {cce5bc0a-4441-4c83-9633-a4c1ec4731ff}

PICK ONE :

AppName : Devices with printer using Microsoft IPP Class Driver (Wu Offer Block)

VENDOR : Microsoft

NAME

BlockType : GatedBlock

Fix: Update or remove the printer driver

WUfB-Now.ps1 / PSWindowsUpdate



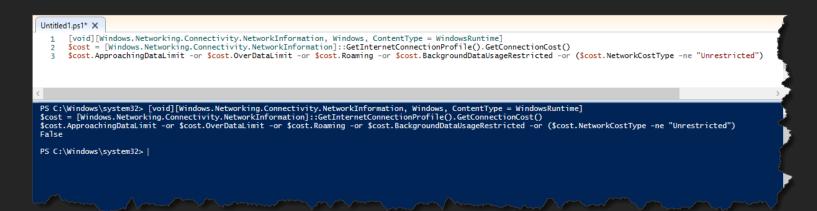
- Total Devices: 23.000
- Devices with older Feature Update: 1.272
- After Script: 307
- Script deployed from
 - SCCM
 - Intune

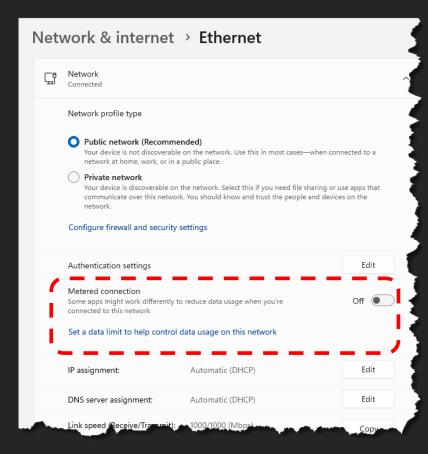
```
Code editor
                                                Language mode: PowerShell . Font: Consolas
                                                                                                     ▼ Size: 10 ▼ Zoom: 100% ▼ @
        # Script: WUfB-Now.ps1
        # Author: Ronni Pedersen, APENTO
        Set-ExecutionPolicy Unrestricted -Force
        Set-PSRepository -InstallationPolicy Trusted -Name PSGallery
        Start-Sleep -Seconds 30
        #Install required modules
11
        Install-PackageProvider -Name NuGet -Force
        Start-Sleep -Seconds 30
        Install-Module PSWindowsUpdate -Force -Verbose
15
        Import-Module PSWindowsUpdate
        #Install all updates from Windows Update (online)
        Get-WindowsUpdate -WindowsUpdate -AcceptAll -Install -IgnoreReboot -ShowPreSearchCriteria -Silent -Verbose
        #Install all updates (not drivers) from Windows Update (online)
21
        #Get-WindowsUpdate -WindowsUpdate -UpdateType Software -AcceptAll -Install -IgnoreReboot -ShowPreSearchCriteria -Silent -Verbose
22
23
        #Collect the WindowsUpdateLog file.
        Get-WindowsUpdateLog -LogPath C:\Logs\WindowsUpdate.log
                          Line: 24 Column: 55 Position: 941
 Lines: 24 Characters: 941
```

Metered Network Issue



- "Metered network" = Enabled
- Result = Not downloading updates
- Impacted Clients: 60-70
- Solution
 - Check if metered network is enabled
 - Run script remotely using PowerShell Remoting

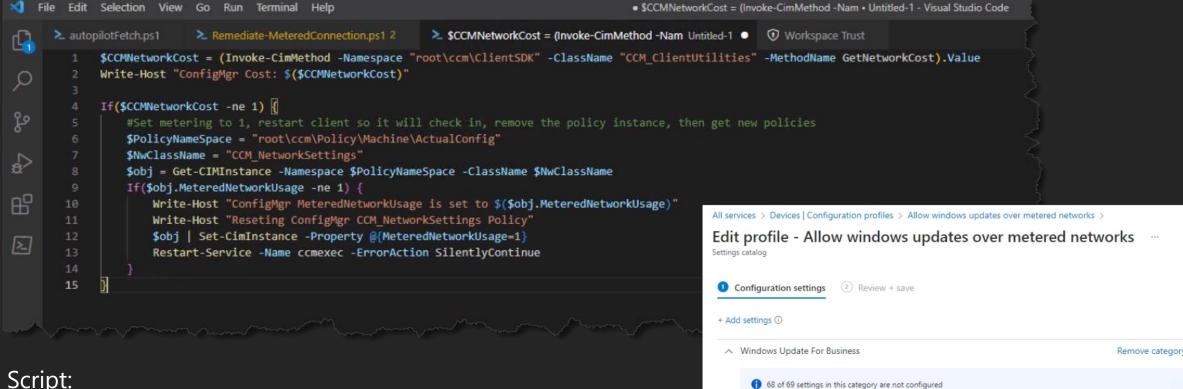




SCCM Clients / Metered Connections



Solution/Fix: SCCM (Script), GPO, Intune Policy



Allow Auto Windows Update Download

Over Metered Network (i)

Allowed

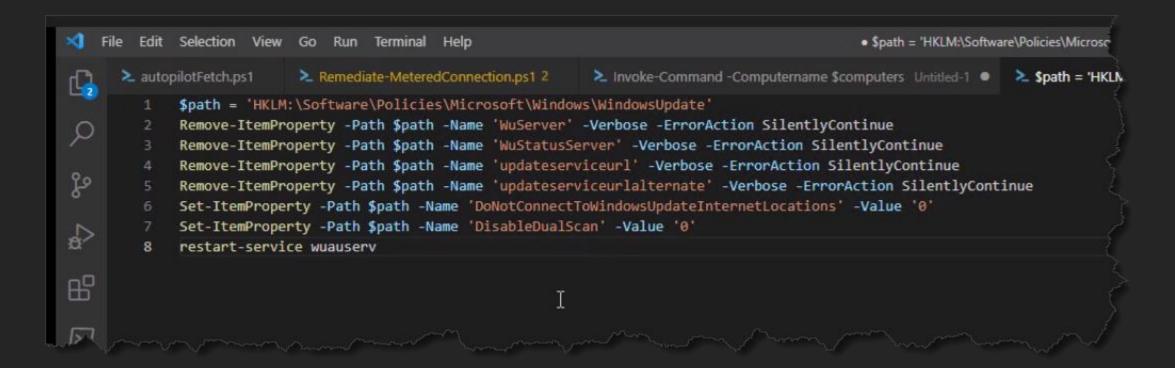
Script:

https://github.com/AdamGrossTX/Toolbox/blob/master/Confi gMgr/Troubleshooting/Remove-NetworkMetering.ps1

Remove legacy policies (GPO)



Quick Fix: A simple script to clean up the registry



Windows Update Assistant

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- Custom Script based on Update Assistant
- Runs 100% silent (System Context)
- Automatic Reboot: 30 mins. Warning (pop-up)





Last Resort Fix



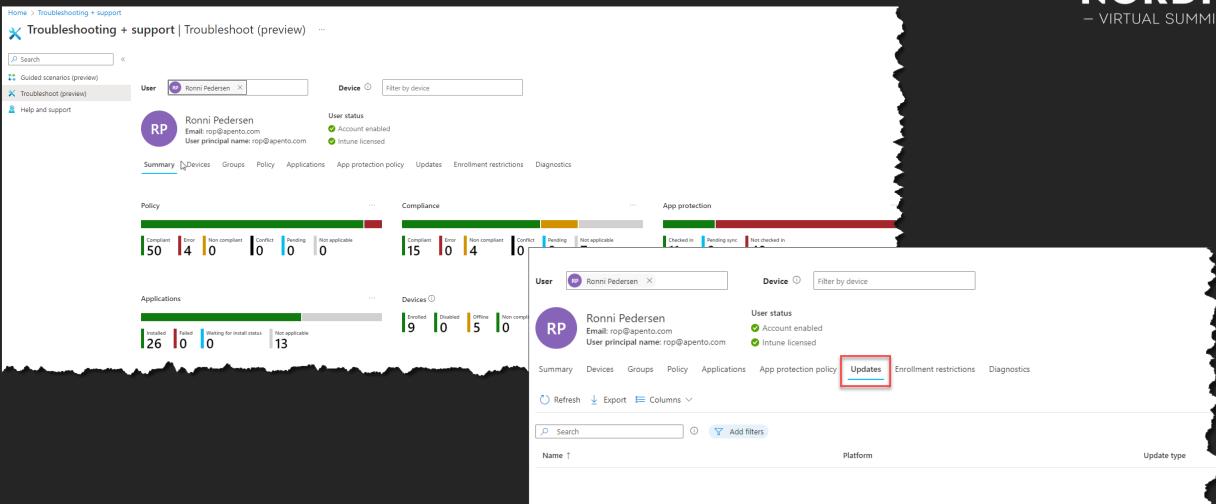
Disclaimer:

- This method is <u>not</u> supported
- I've reconnected multiple devices using this script and it worked great!
- So, if you are at the dead end, it may serve you well! ☺
- Source: <u>https://universecitiz3n.tech/powersh</u> <u>ell/Reenroll/</u>

```
$Global:ErrorActionPreference = 'Stop'
Write-Host "Stopping Intune Service" -ForegroundColor Yellow
Get-Service *intune* | Stop-Service
Write-Host "Check if device is AAD Joined" -ForegroundColor Yellow
$DSREGCMD = dsregcmd /status
$AADJoinCheck = $null
$AADJoinCheck = $DSREGCMD | Select-String -Pattern 'AzureAdJoined : YES'
if ($null -eq $AADJoinCheck) {
        Write-Host "Device is not AAD Joined!!! Stopping!" -ForegroundColor Red
       Break
} else {
        Write-Host "Device is AAD Joined - OK" -ForegroundColor Green
Write-Host "Searching for enrollment ID"
$Tasks = Get-ScheduledTask | Where-Object { $psitem.TaskPath -like "\Microsoft\Windows\EnterpriseMgml
$EnrollId = $Tasks[0].TaskPath.Split('\\')[-2]
if (\$EnrollID -match '\w{8}-\w{4}-\w{4}-\w{4}-\w{12}') {
        Write-Host "Found EnrollID - $EnrollID" -ForegroundColor Green
} else {
        Write-Host "Error parsing EnrollID. Stopping" -ForegroundColor Red
       Break
Write-Host "Removing scheduledTasks" -ForegroundColor Yellow
Try {
        $Tasks | ForEach-Object { Unregister-ScheduledTask -InputObject $psitem -Verbose -Confirm:$fc
} catch {
        Throw $ .Exception.Message
Write-Host "Done" -ForegroundColor Green
Write-Host "Trying to remove tasks folder" -ForegroundColor Yellow
$TaskFolder = Test-Path "C:\windows\System32\Tasks\Microsoft\Windows\EnterpriseMgmt\$EnrollID"
```

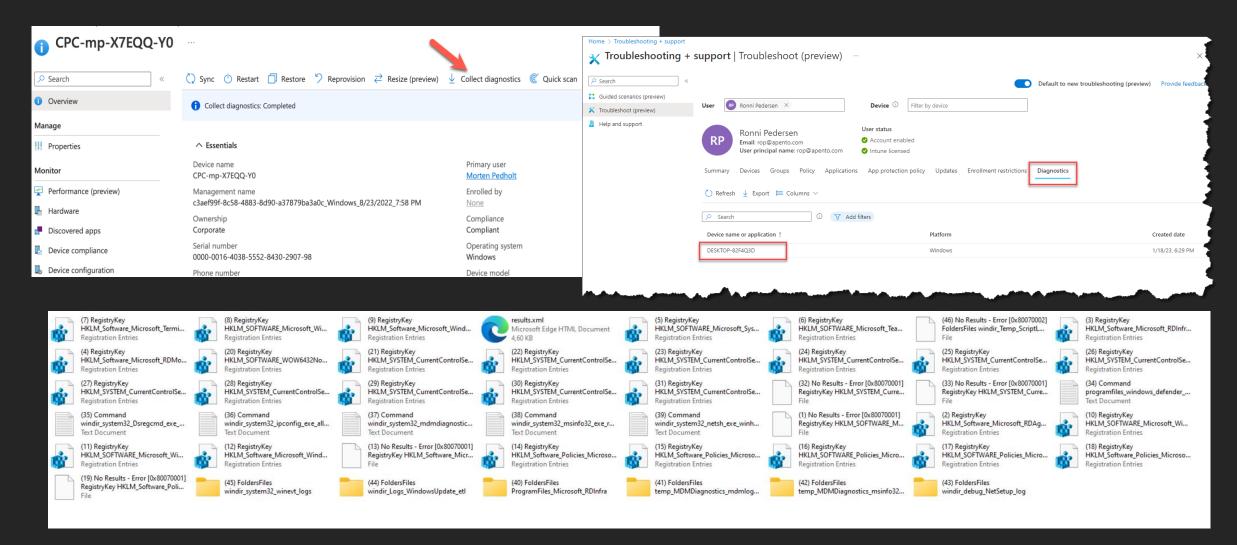
Troubleshooting Preview





Collect Diagnostics





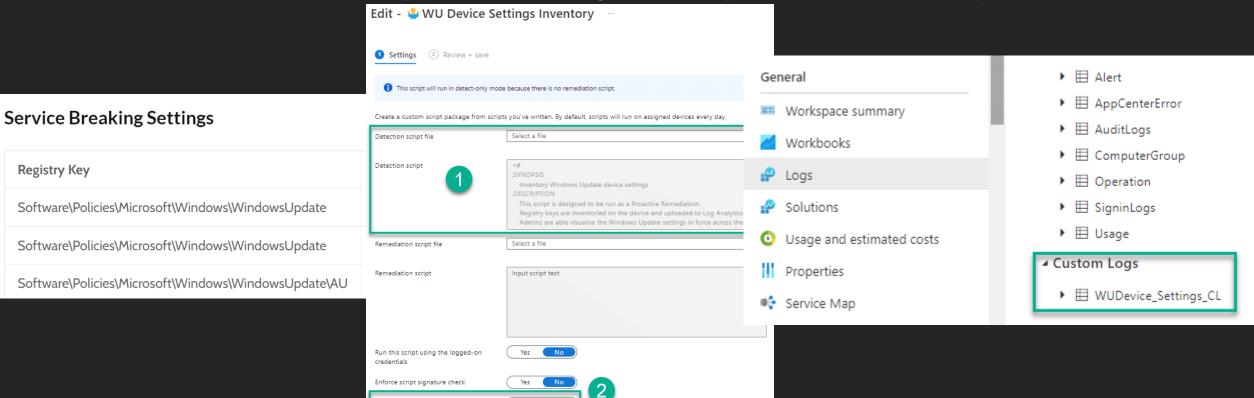
Migrating from other solutions



Using Proactive Remediations and Log Analytics

Run script in 64-bit PowerShell

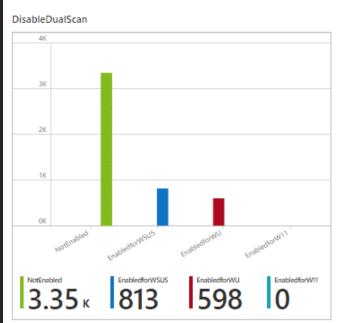
Ensure Windows Update Settings are Optimal and Compliant.

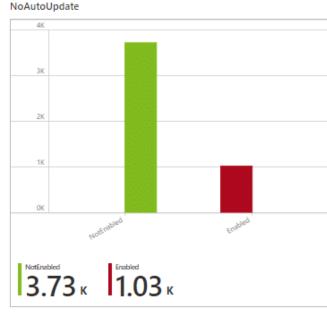


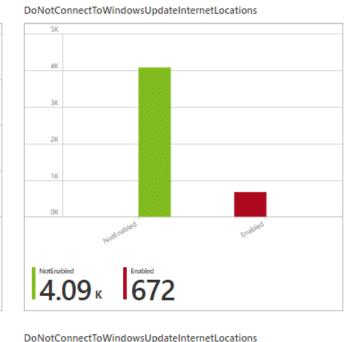
https://msendpointmgr.com/2022/05/13/windows-update-settings-compliance/

Service Break Settings









| Setting | \uparrow_{\downarrow} | Devices↑↓ |
|---------------|-------------------------|-----------|
| NotEnabled | | 3346 |
| Enabled (WU) | | 598 |
| Enabled (WSUS |) | 813 |

| 3729 |
|------|
| 1028 |
| |

NoAutoUpdate

| Setting ↑↓ | Devices↑↓ | |
|------------|-----------|--|
| NotEnabled | 4085 | |
| Enabled | 672 | |



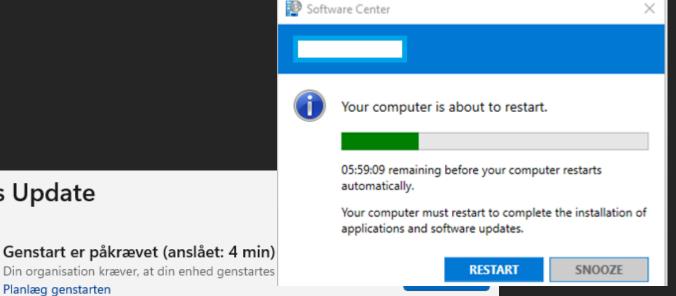
Drivers and Firmware

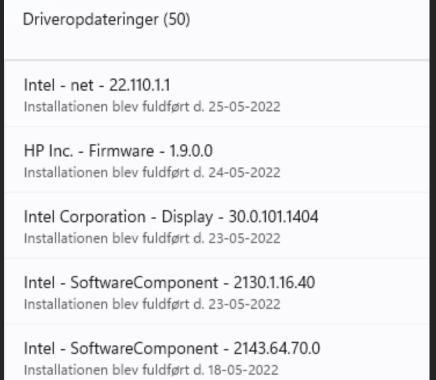
Windows Update for Business

Driver Updates using WUfB



- Drivers updates comes from the vendor
- Can cause many anoying reboots
- "Wrong firmware/drivers" coming down





HP Inc. - Firmware - 1.9.0.0

Planlæg genstarten

Windows Update

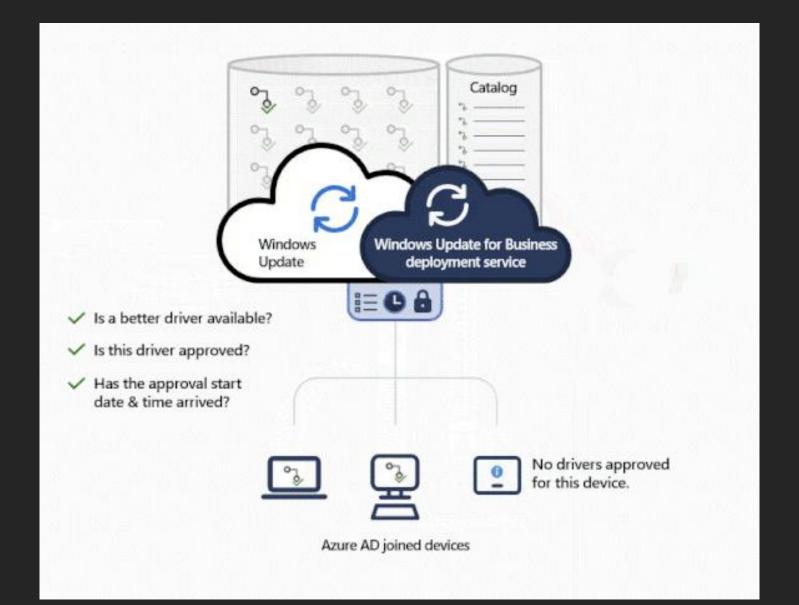
Ventende genstart

Commercial driver and firmware servicing is publicly available!



- Public Preview of commercial controls for driver and firmware servicing in the Windows Update for Business (WUfB) deployment service!
- This platform allows for control of driver deployment from Windows Update (WU) to eligible cloud-attached commercial devices.
 - Which drivers/firmware to install
 - Scheduling
 - Targeting
- License requirements:
 - Windows E3/E5/A3/A5
 - Microsoft 365 Business Premium
- Intune integration to come later...
- Details at the Windows IT Pro blog: <u>Commercial driver and firmware servicing is publicly</u> <u>available!</u> - <u>Microsoft Community Hub</u>

Why are we excited?





How to test it out

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A Authenticated

- Sample Webapp
- Graph

Learn

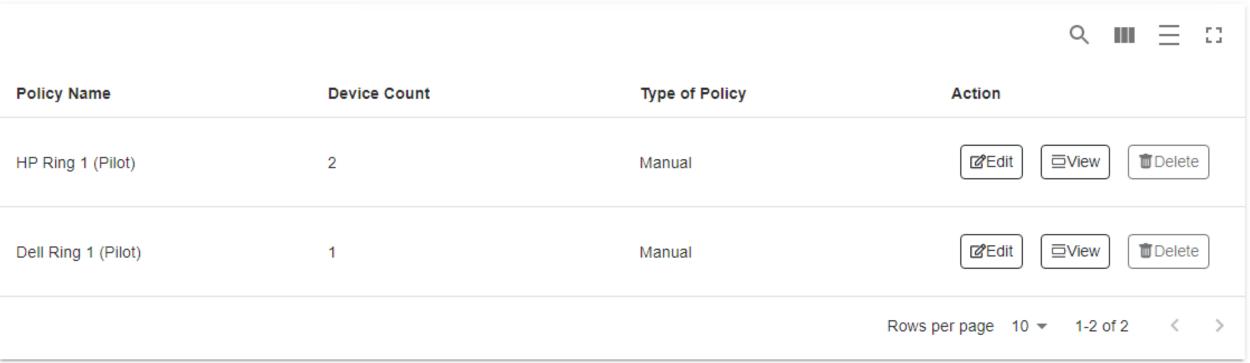
```
update deployment audience for driver update (add members)
                                                                        OK - 200 - 167ms
      update deployment audience for driver update (add exclusions)
                                                                         Response headers
                                                                                                                  update deployment audience for driver update (remove members)
                                                                        V{
      update deployment audience for driver update (remove exclusions)
                                                                               "@odata.context": "https://graph.microsoft.com/beta/$metadata#admin/windows/updates/updatePolicies",
                                                                               "value": [
      create update policy (drivers)
                                                                                      "id": "33dc6126-010c-4d38-a5ae-4aabd3d
                                                                                                                                WUfB DS Application
                                                                                                                                                                      Drivers and Firmware About
                                                                                      "createdDateTime": "2023-02-15T11:58:
      get update policy (drivers)
                                                                                       "autoEnrollmentUpdateCategories": [
      list update policies (drivers)
                                                                                      "complianceChangeRules": [],
                                                                                                                                About
DELETE delete update policy (drivers)
                                                                                       "deploymentSettings": {
                                                                                          "schedule": null.
                                                                                          "monitoring": null,
      inventory of driver updates
                                                                                          "contentApplicability": null,
                                                                                          "userExperience": null,
                                                                                                                                Functionality
      create driver approval
                                                                                          "expedite": null
      get compliance change
                                                                                       "audience": {
                                                                                          "id": "ff09faa9-241b-4dee-ab18-a74
      list compliance changes
                                                                                          "applicableContent": []
DELETE delete compliance changes
```

- Create manual and automatic cloud-managed driver update policies
- Add/remove Azure AD devices to your policies
- Browse driver and firmware updates that are available for your devices
- Approve and schedule driver updates
- Suspensions of approvals
- Unenroll devices from driver management

Export Export

Policies





Updates



Recommended Updates

Other Updates

□ View Metadata

Approve

II Suspend

| Select | Update Name | Release Date | Applicable Devices | Driver Class | Approval Start Date | Suspension Date |
|--------|---|-----------------|--------------------|---------------|---------------------|-----------------|
| 0 | INTEL - System - 1/1/1970 12:00:00 AM - 10.1.1.42 | Fri Aug 24 2018 | 1 | OtherHardware | - | - |
| 0 | Intel - Other hardware - Intel(R) Xeon(R) E3 - 1200 v6/7th Gen Intel(R) Core(TM) Host Bridge/DRAM Registers - 5904 | Sun Aug 26 2018 | 1 | OtherHardware | - | - |
| 0 | INTEL - System - 10/3/2016 12:00:00 AM - 10.1.1.38 | Thu Mar 15 2018 | 1 | OtherHardware | - | - |
| 0 | INTEL - System - 7/12/2016 12:00:00 AM - 10.1.1.33 | Fri Aug 24 2018 | 1 | OtherHardware | - | - |
| 0 | INTEL driver update for Mobile 6th Generation Intel(R) Processor Family I/O PCI Express Root Port #9 - 9D18 | Tue Aug 28 2018 | 1 | OtherHardware | - | - |



Updates



Recommended Updates

Other Updates

INTEL - System - 1/1/1970 12:00:00 AM - 10.1.1.42

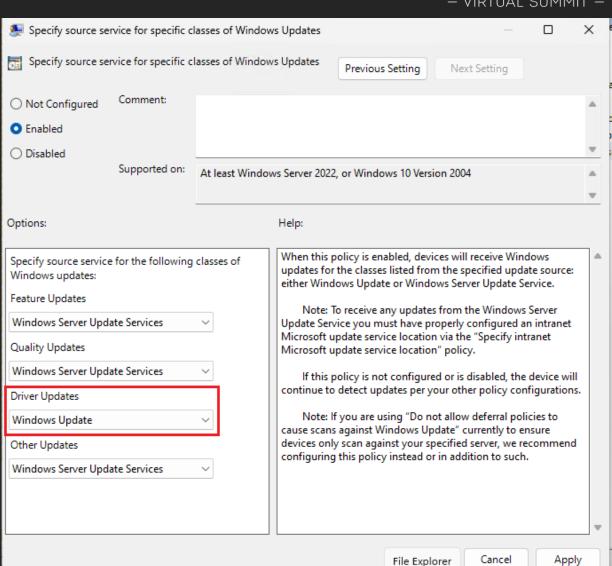
□ View Metadata II Suspend ✓ Approve

| Select | Update Name | Release Date | Applicable Devices | Driver Class | Approval Start Date | Suspension Date |
|--------|--|-----------------|--------------------|---------------|---------------------|-----------------|
| • | INTEL - System - 1/1/1970 12:00:00 AM - 10.1.1.42 | Fri Aug 24 2018 | 1 | OtherHardware | - × | - |
| 0 | Intel - Other ha - Intel(R) Xeon 1200 v6/7th Gallintel(R) Core(Total Bridge/DRAM Registers - 590 | - | | | | |
| 0 | INTEL - Syster 10/3/2016 12:0 - 10.1.1.38 | | | | Submit Approval |]- |
| 0 | INTEL - System - 7/12/2016 12:00:00 AM - 10.1.1.33 | Fri Aug 24 2018 | 1 | OtherHardware | - | - |

What about Hybrid/Co-managed devices?

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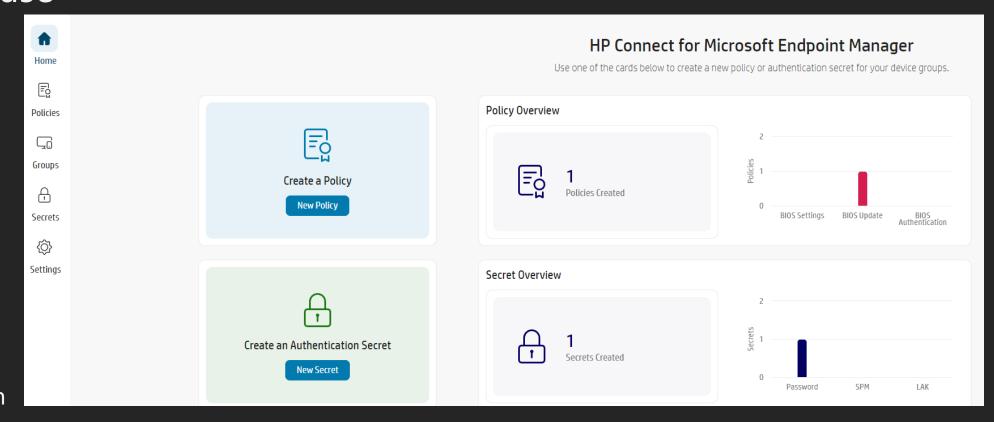
- WufB policies can be configured to allow updates from different sources for updates
- Makes it possible to "cherrypick"



HP Connect for Microsoft Endpoint Manager



- Firmware Update & Config
- Uses Proactive remediation to execute script (content from WU)
- Free to use



https://admin.hp.com



Thank you!