



Workplace Ninja

User Group Finland

Ninja-Level Windows and Intune
Troubleshooting with Petri's and IT Community's
Tools – WPNinjasFI Edition 2025

Petri Paavola, Windows and Intune MVP, Yodamiitti Oy

THANKS FOR THE SPONSORS!



twoday



Petri Paavola

**Microsoft MVP –
Windows and Intune**

Senior Modern Management Principal

Petri.Paavola@yodamiitti.fi

Skills

- › Powershell / Graph API
- › AI
- › Windows Autopilot + Intune + Intune for Education
- › Windows Deployment and Management
- › Traditional on-prem deployment and management
- › Consulting & Training



[@petripaavola](https://github.com/petripaavola)
[@intune.ninja](https://intune.ninja)
<https://github.com/petripaavola>
[Intune.ninja](https://intune.ninja)
[Powershell.ninja](https://powershell.ninja)

Over 25 years of work experience

Current (10+ years):

- › Yodamiitti Oy / Owner
Consulting / Training

Past:

- › Aalto university / IT-services
Responsible for Workstation service





Agenda

wpnijas.fi

Key takeaways:

- New features, tips and tricks
- AI enables you to do more!
- DEMOS, DEMOS, DEMOS!

- Community Tools – New Features
- Use AI in coding
- Use AI in Troubleshooting
- Lot's of DEMOS

Intune Community Tools Updates

Quick overview of tools and new features.



Intune Community Tools

- [ClipboardTools](#)
- [Get-IntuneManagementExtensionDiagnostics](#)
- [Get-IntuneDeviceDetails](#)
- [Get-WindowsTroubleshootingReportCommunity – Updated!](#)
 - It is actually officially out there! 😊
 - I just forgot to tell the world about this :D
- [Get-IntuneAppAssignmentsAndRelationsReport – Updated, New Features!](#)
- [And some smaller one-task tools...](#)



CommandType	Name	Version	Source
Function	ClipboardTools-ConvertFromBase64	1.2	ClipboardTools
Function	ClipboardTools-ConvertHexToString	1.2	ClipboardTools
Function	ClipboardTools-ConvertStringToHex	1.2	ClipboardTools
Function	ClipboardTools-ConvertToBase64	1.2	ClipboardTools
Function	ClipboardTools-CopyPaste	1.2	ClipboardTools
Function	ClipboardTools-CopyPasteUrl	1.2	ClipboardTools
Function	ClipboardTools-EdgeDebuggerMGGraphPowerShellScript	1.2	ClipboardTools
Function	ClipboardTools-JsonCompress	1.2	ClipboardTools
Function	ClipboardTools-JsonUncompress	1.2	ClipboardTools
Function	ClipboardTools-NewGuidToClipboard	1.2	ClipboardTools
Function	ClipboardTools-ObjectifyIntuneJsonReport	1.2	ClipboardTools
Function	ClipboardTools-PasteObjectToExcel	1.2	ClipboardTools
Function	ClipboardTools-SaveImageToFile	1.2	ClipboardTools
Function	ClipboardTools-SaveTextToFile	1.2	ClipboardTools
Function	ClipboardTools-Sort	1.2	ClipboardTools
Function	ClipboardTools-ValidateJson	1.2	ClipboardTools
Function	ClipboardTools-ValidatePowerShellSyntax	1.2	ClipboardTools
Function	ClipboardTools-ValidateXml	1.2	ClipboardTools

ClipboardTools-* PowerShell module updates

Toolset to help analyzing Intune log files manually and create your own Intune scripts easily



ClipboardTools

- ClipboardTools is set of tools which helps you to
 - Extract and convert log entries to human readable format
 - For example: json expansion and base64 conversions
- Updated: Create Intune/Graph API scripts without knowing Powershell or Graph API "at all"
- Other useful little tools to help your everyday life
- New tools to help some troubleshooting tasks
- Easy install from Powershell Gallery:

Install-Module -Name ClipboardTools -Scope CurrentUser





ClipboardTools

wpnijas.fi

```
PS C:\powershell> Get-Command ClipboardTools-*
```

CommandType	Name	Version	Source
Function	ClipboardTools-ConvertFromBase64	1.2	ClipboardTools
Function	ClipboardTools-ConvertHexToString	1.2	ClipboardTools
Function	ClipboardTools-ConvertStringToHex	1.2	ClipboardTools
Function	ClipboardTools-ConvertToBase64	1.2	ClipboardTools
Function	ClipboardTools-CopyPaste	1.2	ClipboardTools
Function	ClipboardTools-CopyPasteUrl	1.2	ClipboardTools
Function	ClipboardTools-EdgeDebuggerMGGraphPowerShellScript	1.2	ClipboardTools
Function	ClipboardTools-JsonCompress	1.2	ClipboardTools
Function	ClipboardTools-JsonUncompress	1.2	ClipboardTools
Function	ClipboardTools-NewGuidToClipboard	1.2	ClipboardTools
Function	ClipboardTools-ObjectifyIntuneJsonReport	1.2	ClipboardTools
Function	ClipboardTools-PasteObjectToExcel	1.2	ClipboardTools
Function	ClipboardTools-SaveImageToFile	1.2	ClipboardTools
Function	ClipboardTools-SaveTextToFile	1.2	ClipboardTools
Function	ClipboardTools-Sort	1.2	ClipboardTools
Function	ClipboardTools-ValidateJson	1.2	ClipboardTools
Function	ClipboardTools-ValidatePowerShellSyntax	1.2	ClipboardTools
Function	ClipboardTools-ValidateXml	1.2	ClipboardTools

```
PS C:\powershell> |
```

<https://github.com/petripaavola/ClipboardTools>

IntuneDeviceDetails GUI

Connected as: **u/pnjinjas@FI** Type: recent last 24 hours / filter from dropdown
 (Quick Filter - Devices Searched: In last 24 hours) [Search devices] Unknown assignments found. Try enabling related cache and run report again
APVM-8726300880 Selected for report Source: 17 devices Basic view only (Skip Apps and Configurations Assignment)
Model: Virtual Machine **Language:** English **Owner:** **pnjinjas** **Group:** **pnjinjas** **Whitelisted:** Yes **Enrollment Restrictions:** Allow Windows MDN Personal devices for Durians.Sakura
Serial: 0000-0000-0000-0000-0000 **Last Sync:** 1 day ago **Grace Period:** AutoSyncM **Enrollment Status Page:** Autopilot Enrollment Status Page for AutopilotM
WiFi MAC: Ethernet MAC: 0C:D7:07:CE:9F:39 **Primary User:** [User pnjinjas@yoda.mil](#) **Autopilot Deployment Rule:** Autopilot

Recent Device Info: Device Group Membership Primary User Group Membership | Checked In On: 2024-09-11 11:32:13

Application Assignments: context Application type displayName Windows Intent IncludeSchedule IncludeState GroupType assignmentGroup Group Members Filter

Configuration Assignments: context Configuration type DisplayName userPrincipalName IncludeSchedule state GroupType assignmentGroup Group Members Filter

Resource Policy Assignments: context Script type Description status remediation stat userPrincipalName remediationGroup Group Members Filter

IntuneDeviceDetailsGUI

<https://github.com/petripaavola/IntuneDeviceDetailsGUI>



IntuneDeviceDetailsGUI

- Graphical Intune report which tells a LOT of information in one view
- This information is not easily available in Intune web console without doing tens of clicks to different pages and remembering everything you have seen in last few minutes of clicking
- Download from Petri's GitHub
 - <https://github.com/petripaavola/IntuneDeviceDetailsGUI>





IntuneDeviceDetailsGUI

wpnijas.fi

Connected as: la@yodamiihti.fi
Showing information from device APVM-8726300880

Type search text or select Quick Filter from dropdown
Quick filter: Devices Synced in last 24 hours (Me) 1. Search devices
Selected device for report Found 13 devices
APVM-8726300880 Last sync 0 days ago 2. Create report
Unknown assignments found. Try enabling Reload cache and run report again
Reload cache Basic info only (Skip Apps and Configurations Assignments)

Manufacturer Microsoft Corporation OS/Version Windows 11 23H2 Ent Compliance compliant Windows Autopilot
Model Virtual Machine Language en-US isEncrypted True enrolled True Enrollment Restrictions Allow Windows MDM Personal devices for Etunimi.Suku
Serial 0858-3566-8785-7423-8726-3 Storage 11GB / 95GB Last Sync 2 hours ago GroupTag AutopilotVM Enrollment Status Page Autopilot Enrollment Status Page for AutopilotVM
WiFi MAC Ethernet MAC 00155D117C7F Primary User etunimi.sukunimi@yodamiihti.fi Autopilot Depl. Profile Autopilot Deployment Profile AutopilotVM

Recent check-ins etunimi.sukunimi@yodamiihti.fi 2024-09-11 11.32.13

Device Group Memberships Primary User Group Memberships Checked-In User Group Memberships (etunimi.sukunimi@yodamiihti.fi)
Display Name Devices Users Group Type Security Membership Type Membership Rule
All Devices 166 0 Security True Dynamic (device.managementType -eq "MDM")
All Devices except test devices 166 0 Security True Dynamic (device.managementType -eq "MDM")
All Mobile Devices - d0d08746-4dbe-4a37-9adf-9e7652c0b4 166 0 Security True Dynamic (device.managementType -eq "MDM")
Comp_APVM-8726300880 1 0 Security True Static
Comp_AutopilotVM_Windows11 1 0 Security True Static
DEMO_Set_Last_Signed-in_user_as_PrimaryUser 3 0 Security True Static
DynDev - All Intune managed Windows Company Devices 147 0 Security True Dynamic (device.deviceOSType -eq "Windows" and (device.managementType -eq "MDM") and (device.deviceOwnership -eq "company"))

Application Assignments
Select user etunimi.sukunimi@yodamiihti.fi (Primary User)
context Application type displayName Version Intent IncludeExclude installState Group Type assignmentGroup Group Members Filter
Device win32LobApp Greenshot 1.2.10.6 1.2.10.6 - 1 Uninstall Included Not installed Static Comp_APVM-8726300880 1 devices
Device winGetApp Company Portal (New Store App runs System) 11.2900.0 Required Included Installed All Devices All Devices Windows Filter with no Targeted Devices
Device win32LobApp Yodamiihti Win32 DemoAppInstall ver 1.0 1.0 Required Included Not applicable All Devices All Devices
Device win32LobApp 7-Zip 23.01 (x64 edition) 23.01.00.0 Required Included Not installed Dynamic DynDev_Autopilot_GroupTag_Equals_Autopilot 4 devices
Device win32LobApp 7-Zip 24.06 (x64 edition) 24.06.00.0 Required Included Installed Dynamic DynDev_Autopilot_GroupTag_Equals_Autopilot 4 devices
Device winGetApp Adobe Acrobat Reader DC (new Store Win32 App) 24.003.201 Required Included Installed Dynamic DynDev_Autopilot_GroupTag_Equals_Autopilot 4 devices
Device winGetApp Adobe Creative Cloud (new Store Win32 App) 6.3.0.207 Required Included Installed Dynamic DynDev_Autopilot_GroupTag_Equals_Autopilot 4 devices

Configurations Assignments
context Configuration type displayName userPrincipalName IncludeExclude state Group Type assignmentGroup Group Members Filter
Device Endpoint Security Administrative Template Conflict Policy 2 etunimi.sukunimi@yodamiihti.fi Not applicable All Devices Windows Model startswith Cloud PC
Device Custom Applocker Policy for AutopilotVM - AuditOnly and AzureAD IAPS etunimi.sukunimi@yodamiihti.fi Included Succeeded Dynamic DynDev_Autopilot_GroupTag_Equals_Autopilot 4 devices
Device Settings Catalog BitLocker new template etunimi.sukunimi@yodamiihti.fi Included Succeeded Static Comp_APVM-8726300880 1 devices
Device Endpoint Security Chrome Administrative Templates etunimi.sukunimi@yodamiihti.fi Included Succeeded Dynamic DynDev_AllAutopilotDevices 16 devices Windows device model equals Surface Laptop
Device SCEP certificate CloudPKI - Device Certificate Yodamiihti etunimi.sukunimi@yodamiihti.fi Included Succeeded Dynamic DynDev_Autopilot_GroupTag_Equals_Autopilot 4 devices
Device SCEP certificate CloudPKI - User Certificate Yodamiihti etunimi.sukunimi@yodamiihti.fi Included Not applicable Dynamic DynDev_Autopilot_GroupTag_Equals_Autopilot 4 devices

Remediation scripts Assignments
context Script type Script Name Detection status Remediation stat userPrincipalName Status updated Group Type assignmentGroup Group Members Filter
Device Remediation Check Autopilot Branding ErrorLogs Not applicable wa.paavola@yodamiihti.fi 21 hours ago Static Comp_APVM-8726300880 1 devices Microsoft Corporation Virtual Machine
Device Remediation Check local Administrators members for non-applicable Without issues Not run 3 days ago Dynamic DynDev - All Microsoft Corporation Virtual Mac 115 devices
Device Remediation Create local admin account - Nordic Virtual Summit Without issues Not run 3 days ago Static Comp_APVM-8726300880 1 devices
Device Remediation CVE-2023-24932 mitigation check 1/3 - Is Windows With issues Not run 3 days ago Dynamic All Devices
Device Remediation CVE-2023-24932 mitigation check 2/3 - Is Windows With issues Not run 3 days ago Dynamic All Devices
Device Remediation CVE-2023-24932 mitigation check 3/3 - Is deprecated With issues Not run 3 days ago Dynamic All Devices
Device Remediation Disable Built-in Administrator account Without issues Not run wa.paavola@yodamiihti.fi 12 days ago

Device details updated 2024-09-14 13.58.10

Intune Device JSON Entra ID Device JSON Primary User JSON
Latest Checked-In User JSON Autopilot Device JSON Autopilot Enrollment Profile JSON
Selected Application JSON Selected Entra ID Group JSON Selected Configuration JSON
Overview **BitLocker Keys** **LAPS Password**
Device Name: VM-8726300880

Primary User: etunimi.sukunimi@yodamiihti.fi

Latest or Selected Checked-in User: etunimi.sukunimi@yodamiihti.fi

Author: Petri.Paavola@yodamiihti.fi - Microsoft MVP
https://github.com/petripaavola/IntuneDeviceDetailsGUI

<https://github.com/petripaavola/IntuneDeviceDetailsGUI>



Get-IntuneManagementExtensionDiagnostics

Famous Intune log events analysis report tool



Get-IntuneManagementExtensionDiagnostics

- **Get-IntuneManagementExtensionDiagnostics** creates report of Intune Management Extension agent events from Intune log files
- Output is easy to read HTML report
- Shows information what happened and why

Version History			
Version	Downloads	Last updated	
3.0 (current version)	102,184	9/17/2024	
2.4	815	8/29/2024	
2.3	4,911	5/9/2024	
2.0	8,426	9/26/2023	
1.1	2,742	3/13/2023	

- **Easy download from Powershell Gallery:**

Save-Script Get-IntuneManagementExtensionDiagnostics -Path ./





Get-IntuneManagementExtensionDiagnostics

wpnijas.fi

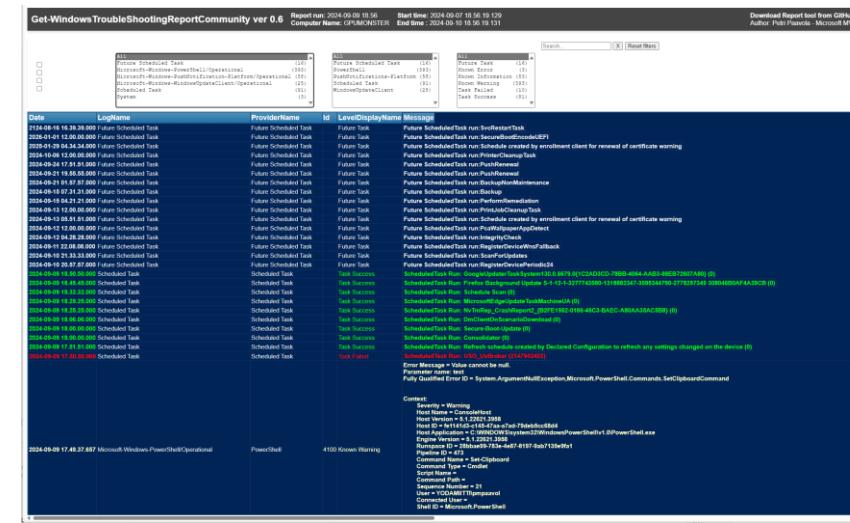
Get-IntuneManagementExtensionDiagnostics ver 2.5 Report run: 2024-06-09 17:25 Computer Name: AutopilotV2

Download Report tool from GitHub
Author: Petri Paavola - Microsoft MVP

Status: All | Detected (11) | Info (9) | Not Detected (8) | Type: All | Intent: All | Search... | X | Reset filters

Date	Status	Type	Intent	Detail	Seconds	LogEntry
1900-01-01 23:59:59.0000000	Info			Possible Microsoft 365 Apps and Intune LOB MSI Apps are not shown in this report	0	Line 0
2024-06-09 05:15:02.9231255	Info			EMS Agent Started	1	Line 1
2024-06-09 05:15:05.0953781	Info			##### Device Preparation mode (APv2) detected #####	112	Line 112
2024-06-09 05:18:08.4663442	Info	User	Logon	AutopilotV2\defaultuser0	151	Line 151
2024-06-09 05:23:16.3307592	Success	Remediation	Detect	Check TPM Exists - Microsoft Custom Compliance Example Script	403	Line 403
2024-06-09 05:23:37.9717876	Not Detected	Remediation	Detect	CVE-2023-24932 mitigation check 3/3 - Is deprecated old Microsoft Windows Production PCA 2011 certificate revoked in UEFI db	415	Line 415
2024-06-09 05:23:53.8784680	Success	Remediation	Detect	Check local Administrators members for non-approved accounts	427	Line 427
2024-06-09 05:24:13.8331996	Not Detected	Remediation	Detect	CVE-2023-24932 mitigation check 2/3 - Is Windows UEFI CA 2023 certificate installed to Windows Boot Manager (bootmgfw.efi)	439	Line 439
2024-06-09 05:24:39.4594677	Not Detected	Remediation	Detect	CVE-2023-24932 mitigation check 1/3 - Is Windows UEFI CA 2023 certificate installed to UEFI db	451	Line 451
2024-06-09 05:31:25.9890139	Info			EMS Agent Stopped	475	Line 475
2024-06-09 05:33:41.6993565	Info			EMS Agent Started	481	Line 481
2024-06-09 05:36:55.5716853	Start	Powershell script	Execute	Powershell script simulate long runtime (180 seconds) for user System	841	Line 841
2024-06-09 05:39:58.9321059	Success	Powershell script	Execute	Powershell script simulate long runtime (180 seconds) for user System	1002	Line 1002
2024-06-09 05:39:58.9321059	Warning	Powershell script	Execute	Long Powershell script runtime found (183 seconds)	1002	Line 1002
2024-06-09 05:39:58.9321059	Start	Powershell script	Execute	Powershell Script Runas System for user System	1005	Line 1005
2024-06-09 05:40:16.5883430	Success	Powershell script	Execute	Powershell Script Runas System for user System	1050	Line 1050
2024-06-09 05:40:25.9164580	Success	Win32App	Required Install	7-Zip 24.06 (x64 edition) (0 Success)	1279	Line 1279
2024-06-09 05:41:00.0900753	Success	Win32App	Required Install	AutopilotBranding Yodamitti v2.2 (0 Success)	1500	Line 1500
2024-06-09 05:42:39.6327556	Success	WinGetApp	Required Install	Company Portal (New Store App runas System) for user	1851	Line 1851
2024-06-09 05:43:06.5202644	Success	Win32App	Required Install	Audacity 3.5.1 64bit (0 Success)	2238	Line 2238
2024-06-09 05:43:33.4590810	Success	Win32App	Required Install	Notepad++ 8.6.8 x64 (0 Success)	2366	Line 2366
2024-06-09 05:44:04.0708195	Info			##### Device Preparation mode (APv2) disabled. #####	2754	Line 2754
2024-06-09 05:44:04.0708195	Info			##### Deployment time 29 Minutes 1739 Seconds #####	2754	Line 2754
2024-06-09 05:44:04.0708195	Info	User	Logon	AzureAD\EtunimiSukunimi	2781	Line 2781
2024-06-09 05:51:54.7882917	Start	Powershell script	Execute	Powershell script simulate long runtime (180 seconds) for user AzureAD\EtunimiSukunimi	2824	Line 2824
2024-06-09 05:54:59.2140933	Success	Powershell script	Execute	Powershell script simulate long runtime (180 seconds) for user AzureAD\EtunimiSukunimi	2868	Line 2868
2024-06-09 05:54:59.2140933	Warning	Powershell script	Execute	Long Powershell script runtime found (184 seconds)	2868	Line 2868
2024-06-09 05:54:59.2297173	Start	Powershell script	Execute	Powershell Script Runas System for user AzureAD\EtunimiSukunimi	2871	Line 2871
2024-06-09 05:55:16.9116425	Success	Powershell script	Execute	Powershell Script Runas System for user AzureAD\EtunimiSukunimi	2915	Line 2915
2024-06-09 05:55:18.7987582	Detected	Win32App	Required Install	7-Zip 24.06 (x64 edition)	3162	Line 3162
2024-06-09 05:55:18.8825014	Not Detected	Win32App	Required Install	7-Zip 23.01 (x64 edition)	3165	Line 3165
2024-06-09 05:55:18.9762539	Detected	Win32App	Required Install	AutopilotBranding Yodamitti v2.2	3201	Line 3201
2024-06-09 05:55:19.5856292	Detected	WinGetApp	Required Install	Company Portal (New Store App runas System) 11.2.448.0	3301	Line 3301
2024-06-09 05:55:31.6410653	Detected	Win32App	Required Install	Audacity 3.5.1 64bit	3465	Line 3465
2024-06-09 05:55:31.7348122	Detected	Win32App	Required Install	Notepad++ 8.6.8 x64	3594	Line 3594
2024-06-09 06:03:09.1225532	Success	WinGetApp	Available Install	Adobe Acrobat Reader DC (new Store Win32 App) for user AzureAD\EtunimiSukunimi	4360	Line 4360
2024-06-09 06:06:52.8935947	Success	Remediation	Detect	Check TPM Exists - Microsoft Custom Compliance Example Script	4305	Line 4305
2024-06-09 06:01:06.8219833	Not Detected	Remediation	Detect	CVE-2023-24932 mitigation check 3/3 - Is deprecated old Microsoft Windows Production PCA 2011 certificate revoked in UEFI db	4317	Line 4317
2024-06-09 06:01:20.0012718	Success	Remediation	Detect	Check local Administrators members for non-approved accounts	4329	Line 4329
2024-06-09 06:01:35.6900148	Not Detected	Remediation	Detect	CVE-2023-24932 mitigation check 2/3 - Is Windows UEFI CA 2023 certificate installed to Windows Boot Manager (bootmgfw.efi)	4341	Line 4341
2024-06-09 06:01:52.9753696	Not Detected	Remediation	Detect	CVE-2023-24932 mitigation check 1/3 - Is Windows UEFI CA 2023 certificate installed to UEFI db	4353	Line 4353
2024-06-09 06:03:10.5917166	Detected	WinGetApp	Available Install	Adobe Acrobat Reader DC (new Store Win32 App) 23.008.20533	4432	Line 4432
2024-06-09 06:03:29.4203553	Detected	WinGetApp	Available Install	Adobe Acrobat Reader DC (new Store Win32 App) 23.008.20533	4667	Line 4667
2024-06-09 06:08:02.2358865	Detected	WinGetApp	Available Install	Adobe Acrobat Reader DC (new Store Win32 App) 23.008.20533	4897	Line 4897
2024-06-09 06:13:14.0662294	Detected	WinGetApp	Available Install	Adobe Acrobat Reader DC (new Store Win32 App) 23.008.20533	5624	Line 5624

<https://github.com/petripaavola/Get-IntuneManagementExtensionDiagnostics>



Released - **Get-WindowsTroubleShootingReportCommunity**



The Ultimate Windows and Intune
Troubleshooting Tool to troubleshoot anything and
you can be part of the Contributing Community!

<https://github.com/petriipaavola/Get-WindowsTroubleShootingReportCommunity>

Get-WindowsTroubleShootingReportCommunity

- **Read Windows Event logs**
 - Online or from saved files (downloaded Diagnostics package)
- **Read any .log file format**
 - No restrictions for log file format as long as there is dateTime and message
 - Intune/ConfigMgr CMTrace the most important ones but others too
- **Show events and logs sorted by dateTime**
 - This gives **timeline** what happened
 - For troubleshooting specific case you can show **ALL** events and logs
- **Detect Known Events and log messages**
 - Create easy to read report with only Known Events and log entries
 - Run report for extended long period (easily 30-365 days)
- **Convert Known GUIDs to real names**
- **Realtime filtering and search by many ways in HTML report**
 - Scenario-based troubleshooting, for example Updates troubleshooting
- **Create (and share) your own Known Event Rules easily for detection**

The screenshot shows the application's main window with two panes. The left pane displays a tree view of 'Known Scheduled Tasks' under 'Known Events'. The right pane is a detailed log viewer with columns for Date, LogName, ProviderName, Id, Level, DisplayName, and Message. It lists numerous scheduled tasks from various providers like Microsoft-Windows-PowerShell-Operational, Future-Scheduled-Tasks, and System. The bottom status bar indicates the report was run on 2024-09-09 at 18:16:16, took 00:00:00, and has a file size of 0.6 MB.



Get-WindowsTroubleShootingReportCommunity

- Scenario based views. For example do you really know exactly
 - When Windows Updates installed in last 30 days, or not installed
 - When updates where actually installed after restart
 - What Firmware updates have been installed during last 365 days
 - Has Defender for Endpoint updated AV signatures and how often it runs
 - When computer restarted and changed to different power modes
 - What and when MSI applications installed and if they succeeded
 - When Store apps updated or failed
 - What PowerShell scripts ran in computer
 - Intune related events (enrollment, sync, MDM setting, app and scripts run)
 - ConfigMgr related events
 - What Errors there are in Event logs for last x minutes/hours/days
 - Did your Intune MDM policies succeeded or failed
 - Device & Application crashes
 - and much more ...
- You can help by creating and sharing more Known Event rules!

The screenshot shows a Windows application window titled "Get-WindowsTroubleShootingReportCommunity ver 0.6". The window has tabs at the top: "Known Events" (selected), "Known Rules", "Known Providers", and "Known LogSources". Below the tabs is a search bar and a "Reset Rules" button. The main area contains two panes. The left pane lists "Known Scheduled Tasks" with columns: Date, LogName, ProviderName, Id, Level, DisplayName, and Message. The right pane displays detailed information for a selected task, including its properties and a large text block of log entries. At the bottom, there's a status bar with the date and time (2024-09-09 17:41:37.857), provider (PowerShell), and a warning message: "4100 Known Warning".



Get-WindowsTroubleShootingReportCommunity

Get-WindowsTroubleShootingReportCommunity

DEMO



Install Printer Valky Musiki 10.30.196.214 Lexmark XC4342	Custom Script	replace	DEPRECATED Install Printer Valky Musiki 10.248.22.253 Lexmark XC4342	Custom Script
Install Printer Valky Ope tyotila 10.30.196.217 Lexmark XC4342	Custom Script	replace	DEPRECATED Install Printer Valky Ope tyotila 10.248.22.247 Lexmark XC4342	Custom Script
Install Printer Valky Pienluotak 10.30.196.215 Lexmark XC4342	Custom Script	replace	DEPRECATED Install Printer Valky Pienluotak 10.248.22.252 Lexmark XC4342	Custom Script
Microsoft Remote Help 5.1.1419.0	5.1.1419.0	Detection Rule	update Microsoft Remote Help 4.0.1.13	4.0.1.13 Detection Rule
Notepad++ 7.9.5 x64	7.9.5	Detection Rule	replace Notepad++ 7.7.1 x64	7.7.1 x64 Detection Rule
Notepad++ 8.5.0 x64	8.5.0	Detection Rule	replace Notepad++ 8.4.9 x64	8.4.9 Detection Rule
Notepad++ 8.5.4 x64	8.5.4.0	Detection Rule	replace Notepad++ 8.5.0 x64	8.5.0 Detection Rule
Notepad++ 8.5.5 x64	8.5.5	Detection Rule	replace Notepad++ 8.5.4 x64	8.5.4.0 Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace Notepad++ 8.4.9 x64	8.4.9 Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace Notepad++ 8.5.0 x64	8.5.0 Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace Notepad++ 8.5.4 x64	8.5.4.0 Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace Notepad++ 8.5.5 x64	8.5.5 Detection Rule
Notepad++ 8.7.5 (x64) (Enterprise App Management)	8.7.5	Detection Rule	replace Notepad++ 8.7 (x64) (Enterprise App Management)	8.7 (x64) (Enterprise App Management) Detection Rule
Verner Graphical Analysis 6.2.1-3963	6.2.1-3963	Detection Rule	replace Verner Graphical Analysis 6.1.0-3750	6.1.0-3750 Detection Rule
Videolan VLC 3.2.0	3.20.0	Detection Rule	replace Videolan VLC 3.0.8	3.0.8 Detection Rule
Videolan VLC 3.2.0	3.20.0	Detection Rule	replace VLC media player 3.0.18 (ms)	3.0.18.0 Detection Rule
Yodamitti DEMO App with RegistryDetectionCheck 2.0	2.0	Detection Rule	replace Yodamitti DEMO App with RegistryDetectionCheck 1.0	1.0 Detection Rule
Yodamitti DEMO2 App with RegistryDetectionCheck 2.0	2.0	Detection Rule	update Yodamitti DEMO2 App with RegistryDetectionCheck 1.0	1.0 Detection Rule
Yodamitti Wh32 DemoAppInstall Ver2.0	2.0	Detection Rule	replace Yodamitti Wh32 DemoAppInstall ver 1.0	1.0 Detection Rule

Released/Updated **Get-IntuneAppAssignmentsAndRelationsReport**



Get Intune Application Assignment and Relationships Report

Detect problematic Detection Rules automatically

<https://github.com/petriipaavola/Get-IntuneAppAssignmentsAndRelationsReport>

Get-IntuneAppAssignmentsAndRelationsReport

- Generates two comprehensive HTML reports from Microsoft Intune:
 - Application Assignments
 - Application Relationships (Supersedence and Dependency)
- Unified view of Entra ID group assignments for Intune apps
- Advanced filtering, impact analysis and interactive HTML reports
- "Visualizes" app supersedence and dependencies, including update chains
- **Hero feature: Automatic detection of problematic detection rules in superseded apps**



Windows App Type All androidManagedStoreApp (46) androidManagedStoreWebApp (4) iosStoreApp (2)

Windows Android iOS macOS

Target Group All

Search...

7-Zip 24.09 arm64

Version: 24.09
Publisher: Igor Pavlov
Description: 7-Zip 24.09 arm64

FileName: 7z2409-arm64.intunewin
Size: 1.45 MB

InstallCommandLine: 7z2409-arm64.exe /S
UninstallCommandLine: "C:\Program Files\7-Zip\Uninstall.exe" /S

RunAsAccount: system

Detection Rules:

- Type: #microsoft.graph.win32LobAppFileSystemDetection
fileOrFolderName: 7z.exe
detectionType: version
detectionValue: 24.9.0.0
path: C:\Program Files\7-Zip
operator: equal
- Type: #microsoft.graph.win32LobAppFileSystemDetection
fileOrFolderName: Uninstall.exe
detectionType: version
detectionValue: 24.9.0.0
path: C:\Program Files\7-Zip
operator: equal

icon	App type	Publisher	Segment	Target Group	devices	users	Filter name	Intent
	win32LobApp	Igor Pavlov	Available	All Users	0	0		
	win32LobApp	Igor Pavlov	Available	All Users	0	0		
	win32LobApp	Igor Pavlov	Required Included	Intune_EnrollmentTimeGrouping_DevicePreparationPolicyForAutomatic	0	0		
	win32LobApp	Igor Pavlov	Required Included	DynDev_Autopilot_GroupTag_Equals_AutopilotVM	4	0		
	win32LobApp	Igor Pavlov	Required Included	Intune_EnrollmentTimeGrouping_DevicePreparationPolicyForYodamiitti	4	0		
	win32LobApp	Igor Pavlov	7-Zip 24.09 arm64	24.09	Available	All Users	0	0
	win32LobApp	Yodamiitti Oy	Abitikku for nonAdminUsers	1.0.2	Required Included	Intune_AbitikkuDualboot_PartitionCompliance_Check	2	0
	win32LobApp	Yodamiitti Oy	Abitikku for nonAdminUsers	1.0.2	Required Included	Comp_JAN-CLIENT01	1	0
	win32LobApp	YTL	Abitiki DualBoot asennus versio 2527F	2527F	Available Included	Etunimi.Sukunimi Group	0	1
	win32LobApp	YTL	Abitiki DualBoot Update to version 2527F	2527F	Available	All Devices	0	0
	win32LobApp	YTL	Abitiki DualBoot Update to version 2527F Yodamiitti Oy	2527F	Available	All Devices	0	0
	win32LobApp	Yliopiston tutkintolautakunta	Abitiki2 AbitikkuCandidate ver 1.0	1.0.0.0	Available	All Devices	0	0
	win32LobApp	Yliopiston tutkintolautakunta	Abitiki2 AbitikkuCandidate ver 1.1.0	1.1.0.0	Available	All Devices	0	0
	win32LobApp	Yliopiston tutkintolautakunta	AbitikiCandidate 1.2.0	1.2.0.0	Available	All Devices	0	0

Install Printer Valkky 3-4 solu 10.30.196.196 Lexmark XC4342		Custom Script	replace	DEPRECATED Install Printer Valkky 3-4 solu 10.248.22.251 Lexmark XC4342		Custom Script
Install Printer Valkky 5-6 solu 10.30.196.195 Lexmark XC4342		Custom Script	replace	DEPRECATED Install Printer Valkky 5-6 solu 10.248.22.249 Lexmark XC4342		Custom Script
Install Printer Valkky Kasityo 10.30.196.216 Lexmark XC4342		<pre>{ "fileOrFolderName": "RemoteHelp.exe", "check32BitOn64System": false, "detectionType": "version", "@odata.type": "#microsoft.graph.win32LobAppFileSystemDetection", "detectionValue": "10.3.10130.1000", "path": "C:\Program Files\Remote Help", "operator": "greaterThanOrEqual" }</pre>	DEPRECATED Install Printer Valkky Kasityo 10.248.22.255 Lexmark	siikki 10.248.22.253 Lexmark	e tyotila 10.248.22.247 Lexmark	Custom Script
Install Printer Valkky Musiikki 10.30.196.214 Lexmark XC4342						
Install Printer Valkky Ope tyotila 10.30.196.217 Lexmark XC4342						
Install Printer Valkky Pienluokat 10.30.196.215 Lexmark XC4342						
Microsoft Remote Help 5.1.1419.0	5.1.1419.0	Detection Rule	update	Microsoft Remote Help 4.0.1.13	4.0.1.13	Detection Rule
Notepad++ 7.9.5 x64	7.9.5	Detection Rule	replace	Notepad 7.7.1 x64		Detection Rule
Notepad++ 8.5.0 x64	8.5.0	Detection Rule	replace	Notepad++ 8.4.9 x64	8.4.9	Detection Rule
Notepad++ 8.5.4 X64	8.5.4.0	Detection Rule	replace	Notepad++ 8.5.0 x64	8.5.0	Detection Rule
Notepad++ 8.5.5 x64	8.5.5	Detection Rule	replace	Notepad++ 8.5.4 X64	8.5.4.0	Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace	Notepad++ 8.4.9 x64	8.4.9	Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace	Notepad++ 8.5.0 x64	8.5.0	Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace	Notepad++ 8.5.4 X64	8.5.4.0	Detection Rule
Notepad++ 8.6.8 x64	8.6.8	Detection Rule	replace	Notepad++ 8.5.5 x64	8.5.5	Detection Rule
Notepad++ 8.7.5 (x64) (Enterprise App Management)	8.7.5		replace	Notepad++ 8.7 (x64) (Enterprise App Management)	8.7	
Vernier Graphical Analysis 6.2.1-3963	6.2.1-3963	Detection Rule	replace	Vernier Graphical Analysis 6.1.0-3750	6.1.0-3750	Detection Rule
Videolan VLC 3.0.20	3.0.20.0	Detection Rule	replace	Videolan VLC 3.0.8	3.0.8	Detection Rule
Videolan VLC 3.0.20	3.0.20.0	Detection Rule	replace	VLC media player 3.0.18 (msi)	3.0.18.0	Detection Rule
Yodamiitti DEMO App with RegistryDetectionCheck 2.0	2.0	Detection Rule	replace	Yodamiitti DEMO App with RegistryDetectionCheck 1.0	1.0	Detection Rule
Yodamiitti DEMO2 App with RegistryDetectionCheck 2.0	2.0	Detection Rule	update	Yodamiitti DEMO2 App with RegistryDetectionCheck 1.0	1.0	Detection Rule
Yodamiitti Win32 DemoAppInstall Ver2.0	2.0	Detection Rule	replace	Yodamiitti Win32 DemoAppInstall ver 1.0	1.0	Detection Rule

Dependencies

Filter dependencies...

Parent App	Parent Detection	Dependency Type	Depends On	Dependency Version	Dependency Detection
Abitti DualBoot Update to version 2442X Yodamiitti Oy	Custom Script	detect	Abitti DualBoot asennus versio 2417D	2417D	Detection Rule
Abitti DualBoot Update to version 2505Q Yodamiitti Oy	Custom Script	detect	Abitti DualBoot asennus versio 2417D	2417D	Detection Rule
Abitti DualBoot Update to version 2517L Yodamiitti Oy	Custom Script	detect	Abitti DualBoot asennus versio 2417D	2417D	Detection Rule

Get-IntuneAppAssignmentsAndRelationsReport

Get-IntuneAppAssignmentsAndRelationsReport

DEMO



AI in Scripting and Coding

Lot has happened in just 1 year



AI in Scripting and Coding

- AI has had bigger and bigger role each year since release of the GTP-4
- This year is no difference **but** we are seeing AI **really** taking it's place in **everything**, especially in coding
- **Visual Studio Code + GitHub Copilot** is way to go
 - **Predictive coding (Next edit suggestions (NES))**
 - **Agentic coding**
- And yes ChatGPT and others work too...
- **We don't need to prompt anymore with AI assisted coding and scripting !!!**
- Seeing is believing...



DEMO – AI in Scripting and Coding

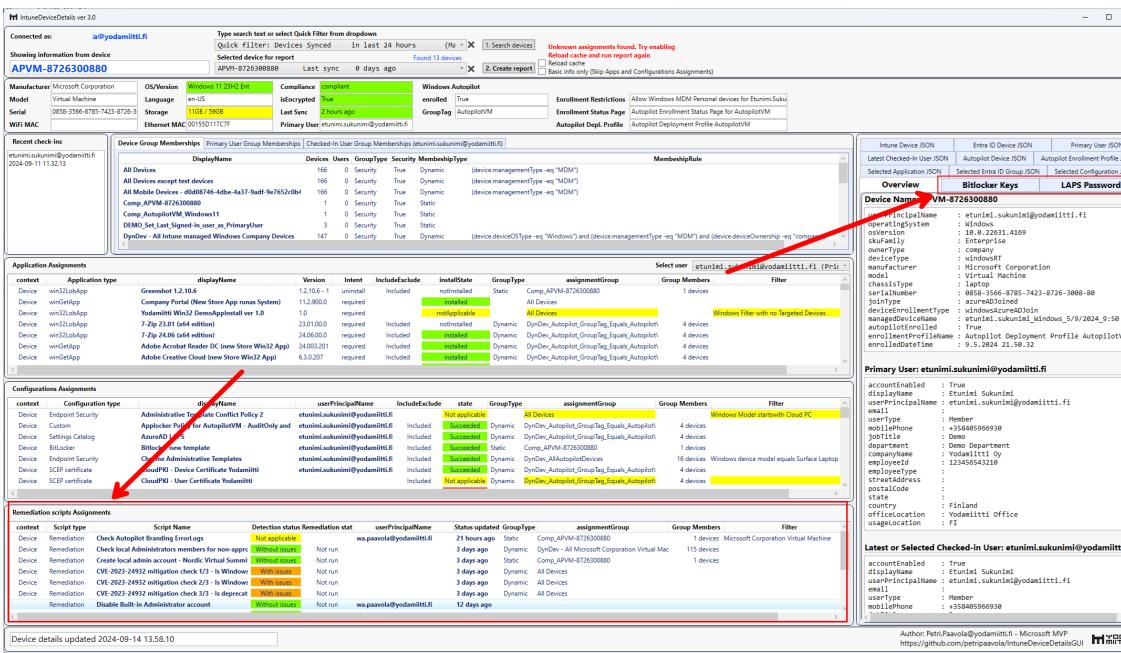
DEMO
Use AI in Scripting and Coding
(without prompting)



DEMO – AI Agent: Case rewrite existing script

- I used Visual Studio Code + GitHub Copilot and **Agentic GPT-5.1-Codex (Preview)** to rewrite existing 7000 lines PowerShell script to change script to create HTML Report instead of original PowerShell+WPF+XAML GUI
- Agent run totally ~3 hours and eventually after few prompts created working HTML report to continue coding with
- This is work in progress and will be continued coding heavily with the help of AI 😊

Powershell Windows Presentation Framework + XAML



HTML Report

The screenshot shows the generated HTML report for device APV-8726300880. It includes the following sections:

- Overview:** Summary of device details (Manufacture: Microsoft Corporation, Model: Virtual Machine, Serial: 0B5B-3566-B785-7423-80E1-976520d, OS Build: Windows 10.0.26200.7093, WiFi MAC: n/a, Ethernet MAC: 0015SD117CF, Storage: n/a, Enrollment Type: windowsAzureADJoin, Ownership: n/a, Compliance: compliant).
- Primary user:** Details for Etunimi.Sukunimi (Primary User, User Principal Name: etunimi.sukunimi@yodamitli.fi, Last Sync: 2025-11-27 12:55, Autopilot Enrollment: Enrolled, Autopilot Profile: AutopilotVMM, Autopilot Group Tag: AutopilotVMM).
- Latest logon:** Details for the latest logon (User: Etunimi.Sukunimi, User Principal Name: etunimi.sukunimi@yodamitli.fi, Demo, Last Logon: 2025-11-27 12:55).
- Quick table search:** A search bar for quickly filtering tables.
- Application assignments:** A table showing application assignments for various devices (e.g., Microsoft Edge, Company Portal, Adobe Acrobat Reader).

AI in Troubleshooting

Do we need Troubleshooting Tools at all?



AI in Troubleshooting

- It is not just using AI to create Troubleshooting tools
- Can we go little up in the Troubleshooting concept and actually **tell AI to Troubleshoot** without us needing to create separate Troubleshooting tools?
- There are many sessions in this conference about this topic too
- So it is reality, I have used it **AND it works!**

- **Let's see how to use AI to do Troubleshooting**



DEMO – AI in Troubleshooting

DEMO

Use AI in Troubleshooting

(Use AI in every step you do!)



DEMO – Case AppDependency Report

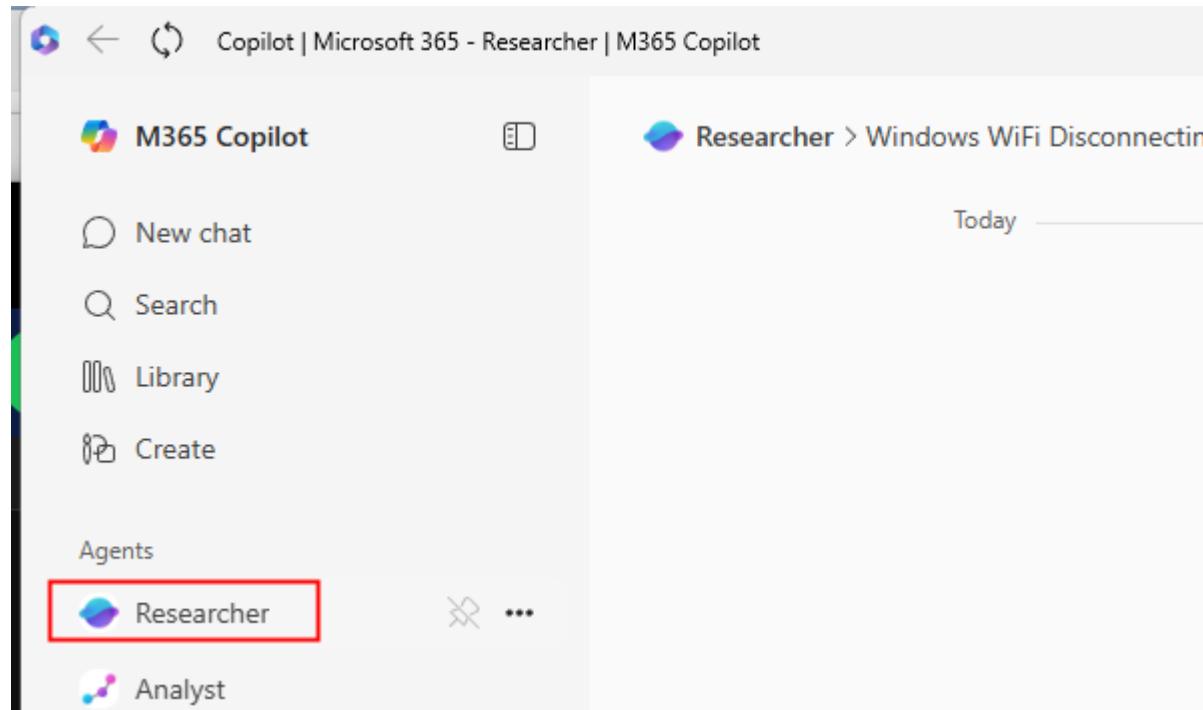
Case:

**Use AI to analyse Intune Applications
Dependency problems**



DEMO – Case AppDependency Report

- Use any Research & Deep Research/Analysis AI from your favore AI
- M365 Copilot **Researcher** is really capable AI which can create amazing results
- I use this a lot because I know customer data is safe in Microsoft environment
- As Ronni mentioned ChatGPT AI can handle bigger file sizes



DEMO – Use AI to create better prompt (Petri's original prompt)

Petri's original prompt.

I'm doing deep analysis with AI. This is my prompt I going to use.

Do you have any suggestions to improve this prompt before I let deep analysis doing the research?

Prompt:

"AllApps.json MobileAppRelationships.json Attached files are Intune Win32 applications and Application relationships downloaded from Intune. Create dependency report which checks which application are superseded or which application supersedes other application. You can forget all other apps which don't have any supercedence information. Create view where I can see how application are superseded. Also for superseded application include detection check rule information. We are especially interested on apps which have same detection rule in different app version. For example detection rule is "file exists" and same file name is used in older and newer app detection check rule. Also we are interested if detection rule is "greater than or equals" version number because in this case older application would be detected when newer application version is installed. Create table from your findings so table have apps which supersedes other apps and apps which are superseded. Also for each app show detection rule and highlight problematic detection rules (same or version greater than type). Table also show supersedence chain for apps so I can understand whole supersedence chain for each application. If you find custom detection scripts (base64) then decode base64 to PowerShell script and analyze what PowerShell script is doing for application detection and then compare if that logic is conflicting in old and new app version as I have described above."



DEMO – AI generated prompt (copy slide to text editor 😊)



DEMO – AppDetection check AI Results

/ checks a registry key id for the app (same both versions)	NotConfigured	(n/a)	Yes	<p>Assumption: Both 1.0 and 2.0 use the same registry key detection (without version), so installing 2.0 doesn't distinguish from 1.0</p> <p>[yodamiitti...epoint.com], [yodamiitti...epoint.com].</p>	<p>1.0 → 2.0 (Registry detection chain)</p> <p>[yodamiitti...epoint.com], [yodamiitti...epoint.com]</p>
ks a registry key or (common for 1.0 and	NotConfigured	(n/a)	Yes	<p>Likely uses a registry flag that doesn't change between versions (thus new triggers old detection)</p> <p>[yodamiitti...epoint.com], [yodamiitti...epoint.com].</p>	<p>1.0 → 2.0 (Registry detection chain)</p> <p>[yodamiitti...epoint.com], [yodamiitti...epoint.com]</p>

Problematic Detection Rule Cases

Out of the above, we identified 7 supersedence links (spanning several chains) with problematic detection configurations:

- **Yodamiitti Demo Apps (RegCheck)** – Both *Demo App 1.0* and *2.0* likely rely on the presence of a specific registry key/value to detect installation. If the registry key name is the same for both versions (and only the value differs or not at all), the newer 2.0 installation can trigger the detection for 1.0. This makes Intune think version 1.0 is installed when 2.0 is present. The **Demo2 App** shows a similar pattern.
[\[yodamiitti...epoint.com\]](#), [\[yodamiitti...epoint.com\]](#) [\[yodamiitti...epoint.com\]](#)

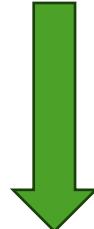
- **Worst offenders:**

- **Yodamiitti Demo App:** The 2.0 version did not introduce a new registry key or value for detection – it likely continued to use the same registry key as 1.0. Thus, Intune cannot distinguish 1.0 from 2.0 via that key. This misconfiguration means supersedence won't behave correctly; the new app might not deploy because the old detection never "turns off." [\[yodamiitti...epoint.com\]](#)



Check out my GitHub for Community Tools downloads and documentation

Powershell.ninja



<https://github.com/petripaavola>



Thank you!

