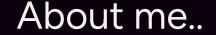


November 13-15, Oslo Spektrum

### Ronni Pedersen & Jörgen Nilsson

10 Intune tips that will make your admin life easier







#### Jörgen Nilsson

- Principal Consultant, Onevinn
- Microsoft MVP: Security
- Microsoft Certified Trainer (MCT)

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- X: @ccmexec







#### About me...

#### **Ronni Pedersen**

- Cloud Architect, APENTO
- Microsoft MVP: Security + Windows
- ITIL Certified
- Microsoft Certified Trainer (MCT)

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Cloud Native...



#### Aim for 100% Cloud Native

#### **Security & Compliance**

- Al and Automation
- Zero Trust
- Secure Device (No identity)

#### Performance / End User Experience

- Fast boot and logon time
- Provision and policy update from anywhere

#### Simple Management

- Cross-platform
- No infrastructure
- Reduced complexity (Conflicts)





# Licensing...



# Licensing

- Let's be honest... You need to buy more than just Intune P1
  - 90% of you needs the full EMS E5 suite if you want to stay secure...
  - And/or buy 3<sup>rd</sup>. party solutions (add-ons)
- Microsoft E5 Security
  - Insights on vulnerabilities
- Microsoft Intune Suite
  - Advanced Insight Analytics
  - Device Query
  - Remote Help
  - New features...





Governance, Standards, Documentation, Process



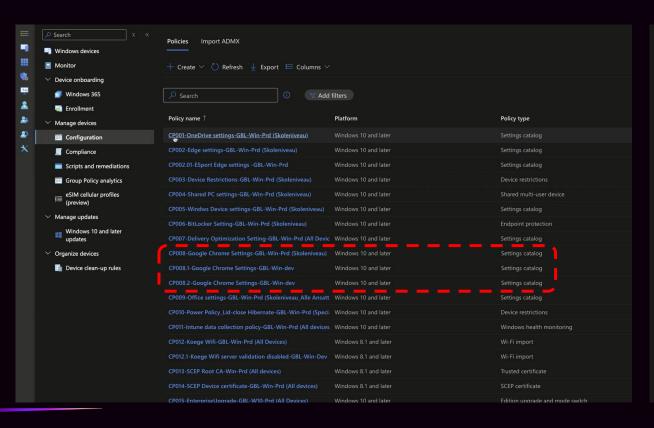
#### Microsoft Intune and Governance

- Well documented processes and standards
- Naming convention/version management
  - Whatever works for you are great!
  - Just make sure everyone is following the same standard!
- Change Management
  - Documentation is key...
  - The "Why" is important





### Naming Standards (examples)



Win - OIB - Credential Management - D - Passwordlesss - v3.1
Win - OIB - Defender Antivirus - D - Additional Configuration - v3.1
Win - OIB - Device Security - D - Audit and Event Logging - v3.1
Win - OIB - Device Security - D - Enhanced Phishing Protection - v3.0
Win - OIB - Device Security - D - Local Security Policies - v3.0
Win - OIB - Device Security - D - Login and Lock Screen - v3.1
Win - OIB - Device Security - D - Remote Desktop Services and RPC - v3.0
Win - OIB - Device Security - D - Security Hardening - v3.1
Win - OIB - Device Security - D - Timezone - v3.1
Win - OIB - Device Security - D - User Rights - v3.1
Win - OIB - Device Security - D - Windows Subsystem for Linux - v3.1
Win - OIB - Device Security - U - Device Guard, Credential Guard and HVCI - v3.1
Win - OIB - Device Security - U - Power and Device Lock - v3.0
Win - OIB - Device Security - U - Windows Spotlight and Org Messages - v3.0
Win - OIB - Google Chrome - D - Security - v3.0
Win - OIB - Google Chrome - U - Experience and Extensions - v3.0
Win - OIB - Google Chrome - U - Profiles, Sign-In and Sync - v3.0
Win - OIB - Health Monitoring - D - Endpoint Analytics and Windows Updates - v3.0
Win - OIB - Internet Explorer (Legacy) - D - Security - v3.1.1
Win - OIB - Microsoft Accounts - U - Configuration - v3.0
Win - OIB - Microsoft Edge - D - Security - v3.0

# Policy Grouping

Policy name ↑	Platform	Policy type
CP001-Windows OS Hardening-Win-GBL-Prd	Windows 10 and later	Settings catalog
CP002-Personal Data Encryption-W11-GBL-Prd	Windows 10 and later	Custom
CP002.1-Disable kernel-mode crash dumps and live dumps-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP002.2-Disable Winlogon automatic restart sign-on-W11-GBL-Prd	Windows 10 and later	Administrative templates
CP002.3-Disable Windows Error Reporting (WER)/Disable user-mode crash dumps-Win-GBL-Prd	Windows 10 and later	Settings catalog
CP002.4-Disable hibernation-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP002.5-Disable password when resuming from connected standby-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP003-Intune data collection policy-Win-GBL-Prd	Windows 10 and later	Windows health monitoring
CP004-Win11 Start Menu customization-W11-GBL-Prd	Windows 10 and later	Custom
CP005-SmartScreen Enhanced Phishing Protection-Win11-GBL-Prd	Windows 10 and later	Settings catalog
CP006-Windows Hello for Business cloud Kerberos trust-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP007-Credentials Delegation, Remote Credential Guard-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP007.1-DISABLE Credentials Delegation, Remote Credential Guard-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP008-Remove Chat Icon-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP009-Onedrive Sign-in and move known folders-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP009.1-Onedrive SharePoint IT-og-Digitaliseringsafdelingen-AFD-W11-GBL-Prd	Windows 10 and later	Settings catalog
CP010-Edge settings-GBL-Win-Prd	Windows 10 and later	Settings catalog



### Intune Naming Convention (Example)

#### 9.1 Intune Naming Convention

To ensure structure in Intune the following Naming Convention will be used for all Profiles.

#### {TYPExxx.y}-{USE}-{Platform}-{Ownership}-{RING}



- Win: Windows 10/11
- W10: Windows 10
- W11: Windows 11
- iOS
- Android

Ownership is important when customers are using RBAC

#### {TYPExxx(.y)}

- Xxx: is a consecutive number for each Type. Numbers can be reused when an old rule is
- (.y) is only added if a given profile is duplicated then.
- AC: Application Control
- AP: Account Protection
- ASR: Attack Surface Reduction
- CA: Conditional Access
- CP: Configuration Profile
- DS:Device Script
- DCP: Device Compliance Policy
- EDR: Endpoint Detection and Response
- DE: Disk Encryption ESP: Enrolment Status Page
- FW: Firewall
- PR: Proactive Remidiation

#### {USE}

Description of the policy i.e (shown with Type)

- DE Default Bitlocker with TPM
- ASR-Block abuse of exploited vulnerable signed drivers (Device)

#### {RING}

- PRD
- DEV

#### Examples:

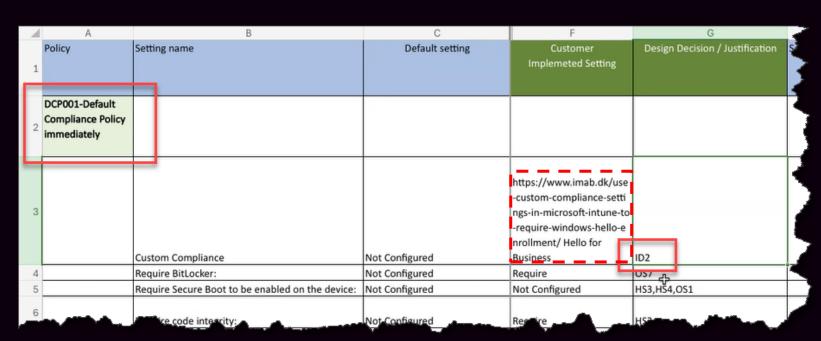
#### {TYPExxx.y}-{USE}-{Platform}-{Ownership}-{RING}

- ASR001-Block abuse of exploited vulnerable signed drivers (Device)-GBL-Win-Prd
- ASR001.1-Block abuse of exploited vulnerable signed drivers (Device)-GBL-Win-DEV
- DP001-Default Compliance-GBL-W11-PRD

+				
	ID Design Decisions			
	#	Decision Point	Decision	Justification
	IDI	Enabling Passwordless sign-in	All Win 1 users will be enabled for Password less sign-in, and Hello for Business will be used to facilitate password less sign-in on Win 1 devices. The end-goal is to completely eliminate passwords from the Identity directories.	Passwords are a primary attack vector. Bad actors use social engineering, phishing, and spray attacks to compromise passwords. A passwordless authentication strategy mitigates the risk of these attacks.
	ID2	Windows Hello for Business	Windows Hello for Business will be required on all Win11 endpoints. Device compliance policies will be used to check that Windows Hello is enabled on all Win11 endpoints.	Windows Hello for Business will ensure that a PIN/biometric is used to log-in to all Winll devices instead of a Password. As the PIN/Biometric is device specific it can't be used without the specific device that it was created for
	ID3	Temporary access pass	Temporary access pass will be used to provide a temporary password that can be used to enabled passwordless phone sign-in.	
J	74	Cloud Trest	Cloud Kerbergs trust will be enabled in	Townsurface of Acre A oined devices

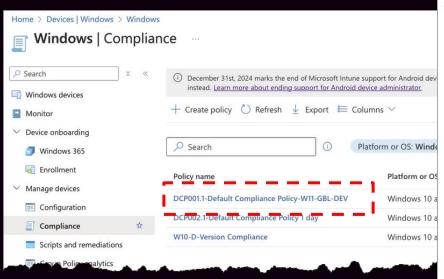


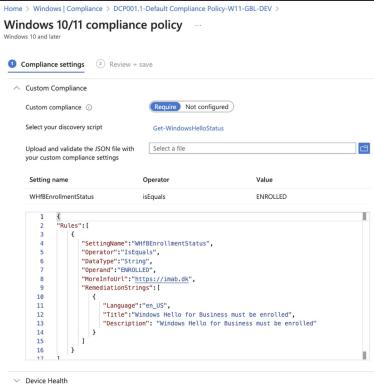
### Policy Design





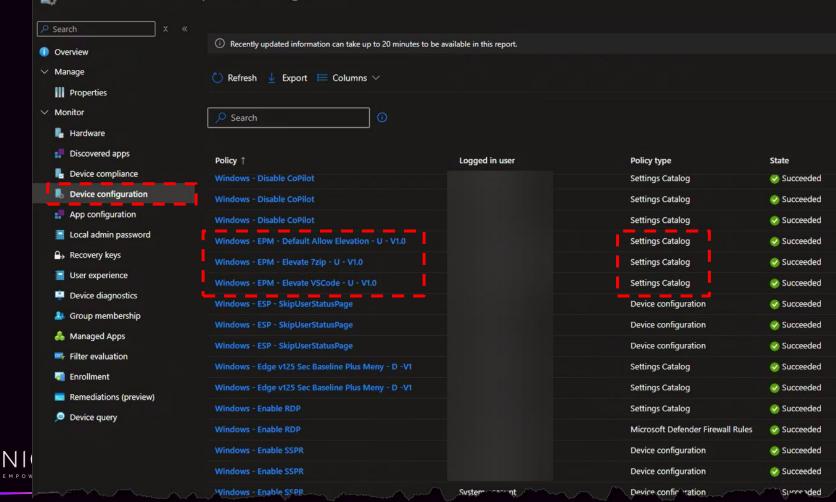
### Policy Deployment







#### **DESKTOP-9SECHR9** | Device configuration



### Adopt Security baselines



### Security Baselines

- Security Baseline for Windows 10 and later
- Security Baseline for Microsoft Edge
- Windows 365 Security Baseline
- Microsoft Defender for Endpoint Security Baseline
- Microsoft 365 Apps for Enterprise Security Baseline

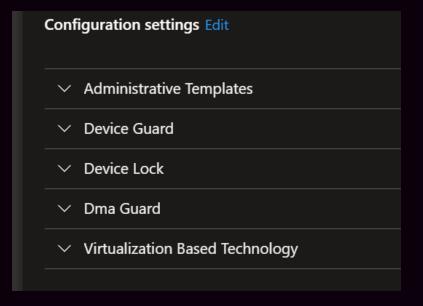
Intune policies are the way to go as we get status back for each setting.

The security baselines have been around for many many years....



### Adopting baselines

- Recommendation: Move settings to dedicated security polices under Endpoint Security
  - BitLocker
  - Defender
  - Firewall
  - ASR rules
- Unexpected reboot during Autopilot
  - Target User or Devices?
  - Move the settings that cause the issue to user targeting:
    - Credential guard
    - Device Lock
    - DMA Guard
    - Lock screen



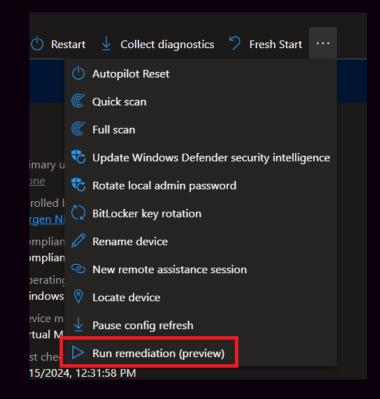


Remediations on demand...



#### Remediations on demand

- Troubleshooting a device in a Zero-trust design is something totally different than traditional support.
- Remediations = modern way of troubleshooting in a Zero-Trust world
- Build your own library of scripts
- Inform/train ServiceDesk
- Naming convention + RBAC
- Community repo: <u>https://github.com/JayRHa/EndpointAnalyt</u> icsRemediationScripts





#### RBAC

Built-in roles are too powerful!

Help Desk Operator

Help Desk Operators perform remote tasks on users and devices and can assign applications or policies to users or devices.

- Roles = What a member of the role can do
- Scope Groups = targeting, which groups including virtual groups

Scope Tags = Which devices are in scope for each role.

#### You must do RBAC!





# 3rd Party Patch Management



### Challenges

- Outdated Third-Party Software is leaving you vulnerable
- Defending Against Software Supply Chain Attacks
  - The United States Cybersecurity and Infrastructure Security Agency recommends applying patches to protect against supply chain attacks and compromises, including in third-party software.





# Patch My PC (The Marketing Slide)

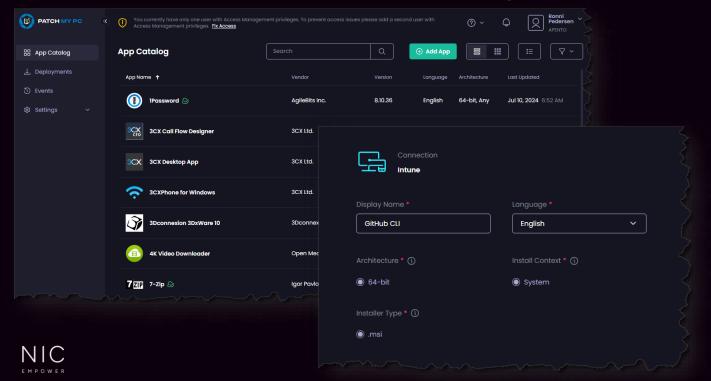
- Automate third-party updates in Intune and ConfigMgr
- Automate packaging of third-party applications
- Advanced customization options
  - 3rd.party updates
  - 3rd. application
- Basic SSRS Reports for ConfigMgr software updates compliance
- Advanced Intune deployment features with filters and dynamic assignments

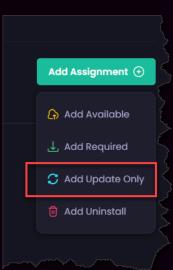




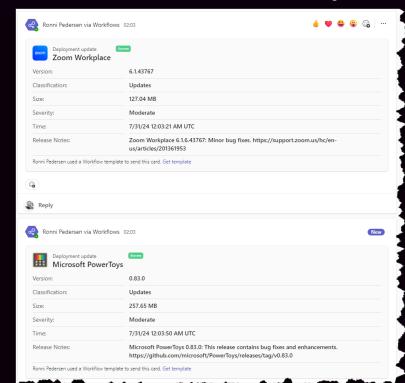
## "Just 4 Clicks" or "Flip the Switch" 😁







### Notifications (Webhook / Email)







# Risk based deployments... (Rings)



# Risk based deployments

#### **Options**

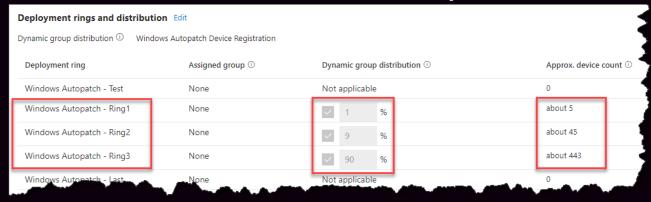
- Don't use rings... (aka The CrowdStrike model 66).
- Built your own model
- Built on top of Windows Autopatch Groups







# Windows Autopatch Groups



Deployment rings and distribution Edit			
Dynamic group distribution ① All Cloud PCs			
Deployment ring	Assigned group ①	Dynamic group distribution ①	Approx. device count $\odot$
Cloud PC - Test	None	Not applicable	_ 0
Cloud PC - Ring1	None	√ 5 %	about 1
Cloud PC - Ring2	None	✓ 20 %	about 3
Cloud PC - Ring3	None	75 %	about 10
Cloud PC - Last	None	Not applicable	0



### Diagnostics settings

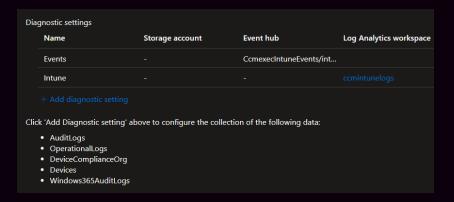


### Intune Tenant Diagnostics settings

- Event Hub = Automation, Send to third party
- Log analytic = Reporting, Alerting
- Azure Storage = Archive
- Send to partner solution

#### Logs:

- AuditLogs
- OperationalLogs
- DeviceComplianceOrg
- Devices
- Windows365AuditLogs





### Event hub cost – Audit Logs

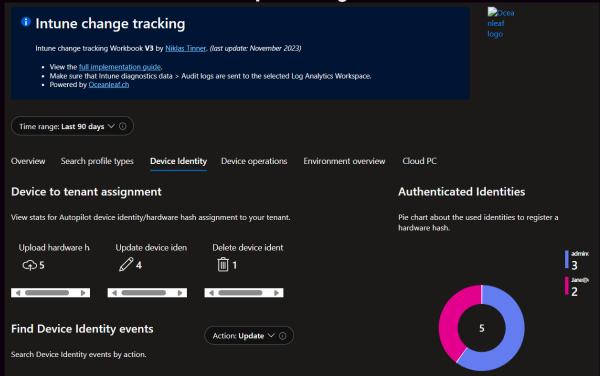
#### 100'000 Users

Category	Value
Events per second	18
Events per five-minute interval	5,400
Volume per interval	10.8 MB
Messages per interval	43
Messages per month	371,520
Estimated cost per month (USD)	\$10.83

#### 1'000 Users

Category	Value
Events per second	0.1
Events per five-minute interval	52
Volume per interval	104 KB
Messages per interval	1
Messages per month	8,640
Estimated cost per month (USD)	\$10.80

### Workbook sample by Niklas Tinner





### Monitor your connectors



#### Certificates and Connectors

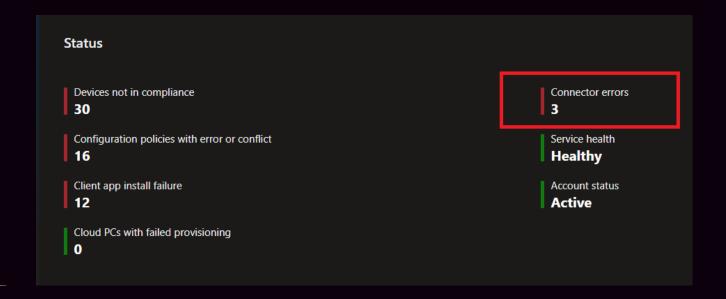
- Monitoring APN certificates and Tokens used is important
- We see way to often that these are expired....

Tena	nt details	Connecto	or status Service health and message center		
3 UNHEALTHY					
	Status	↑↓	Connector	\	Time stamp
	<ul><li>Unhealthy</li></ul>	У	DEP last sync date		8/8/2024, 11:58:03 AM
	Unhealthy	У	VPP expiry date		8/8/2024, 1:32:40 PM
	Unhealthy	У	DEP expiry date		8/8/2024, 1:33:52 PM
	✓ Healthy		Windows 365 Azure network connection		9/15/2024, 4:44:54 PM



#### Intune Home blade

Shows only errors not warnings...

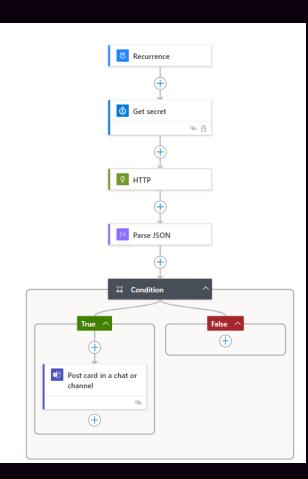




## Logic app

- We can easily monitor this using a logic app!
- A great guide to get you started by Peter van der Woude

Monitoring Apple MDM push certificate with Azure Logic Apps and Adaptive Cards for Teams – All about Microsoft Intune (petervanderwoude.nl)





## Advanced Endpoint Analytics...



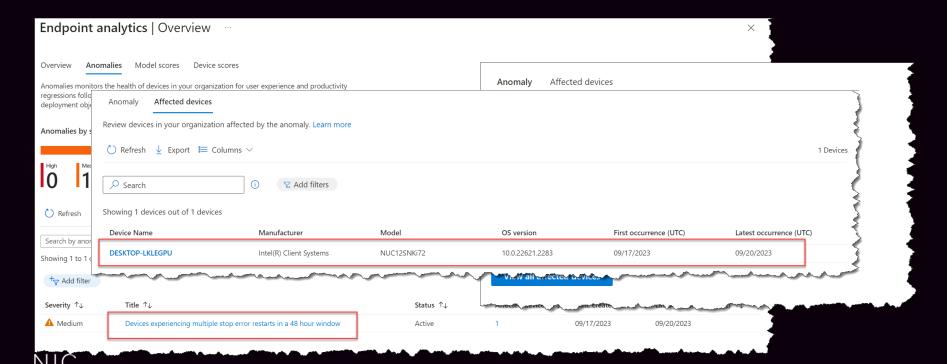
# Advanced Endpoint Analytics

#### **Features**

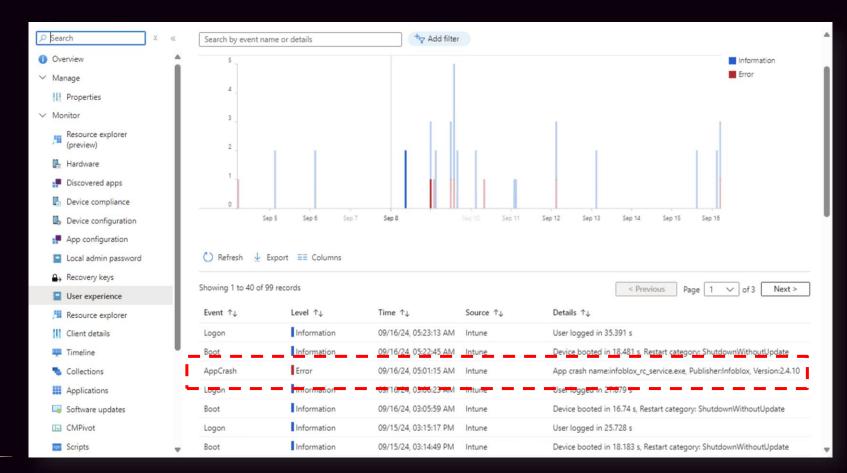
- Anomaly detection
- Device Scopes
- Enhanced device timeline
- Battery health
- Device query
- Resource Performance Report



## Advanced Endpoint Analytics (Anomalies)

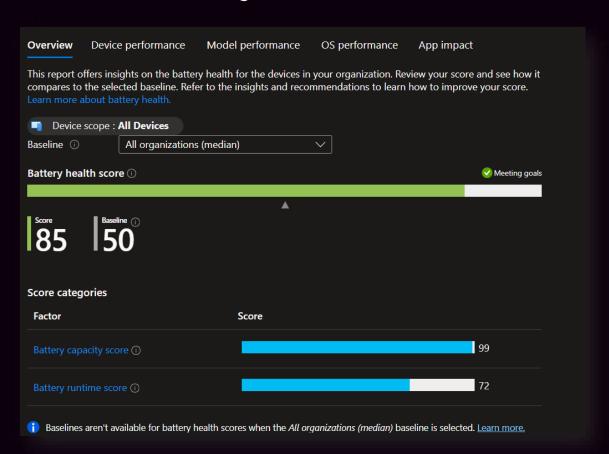


#### **Enhanced Device Timeline**





## Battery Health Score





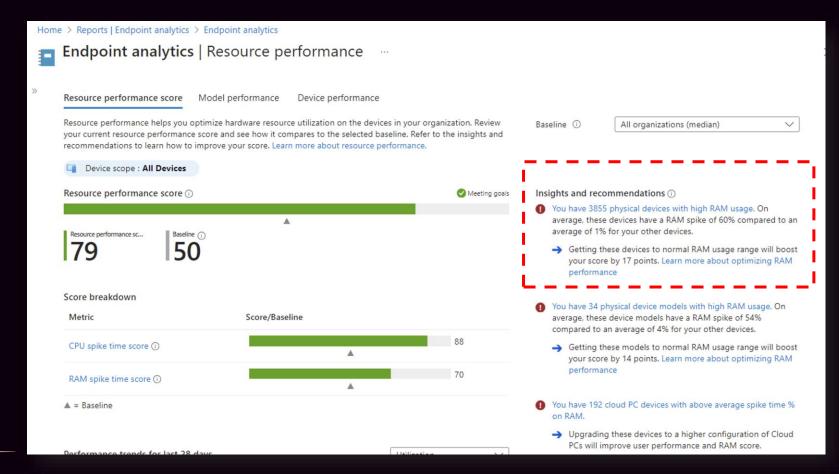
## **Device Query**

```
X Clear input X Cancel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THE PARTY AND ADDRESS OF THE PARTY AND ADDRESS
                     1 WindowsEvent('System', 7d)
                                    where tostring(EventId) == '19'
                                     project EventId, LoggedDateTime, LogName, Message, ProviderName, WindowsUserAccount
  Get started
                                                Results

    □ Columns ∨
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59 items
  EventId
                                                              Message
                                                             Installation Successful: Windows successfully installed the following update: 9NDMT2VKSNL1-Microsoft.LanguageExperiencePackda-DK
   19
    19
                                                              Installation Successful: Windows successfully installed the following update: Security Intelligence Update for Microsoft Defender Antivirus - KB2267602 (Version 1....
                                                              Installation Successful: Windows successfully installed the following update: Security Intelligence Update for Microsoft Defender Antivirus - KB2267602 (Version 1....
  19
                                                              Installation Successful: Windows successfully installed the following update: Security Intelligence Update for Microsoft Defender Antivirus - KB2267602 (Version 1....
   19
                                                              Installation Successful: Windows successfully installed the following undate: Security Intelligence Undate for Microsoft Defender Antivirus - KR2267602 (Version 1
   10
```



## Resource Performance Report



## Keep up with what is going on

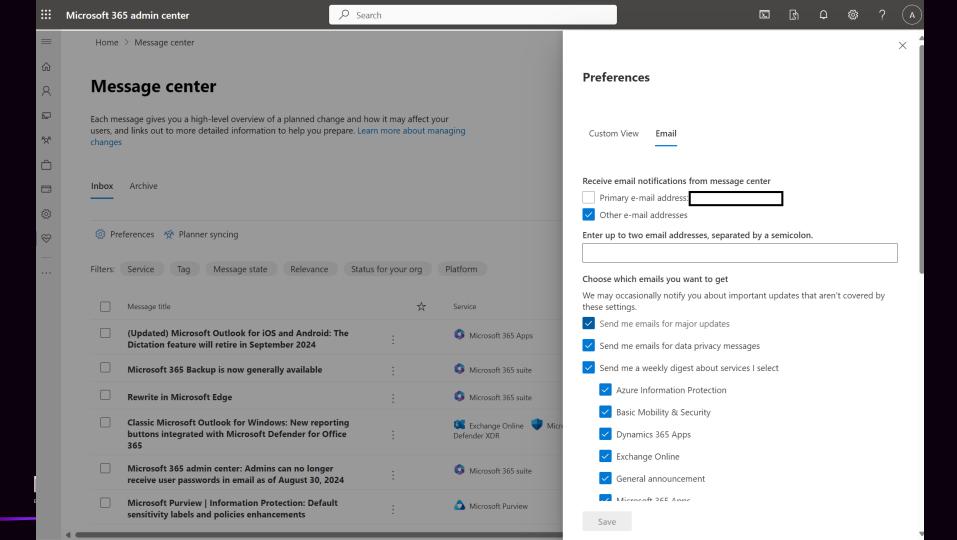


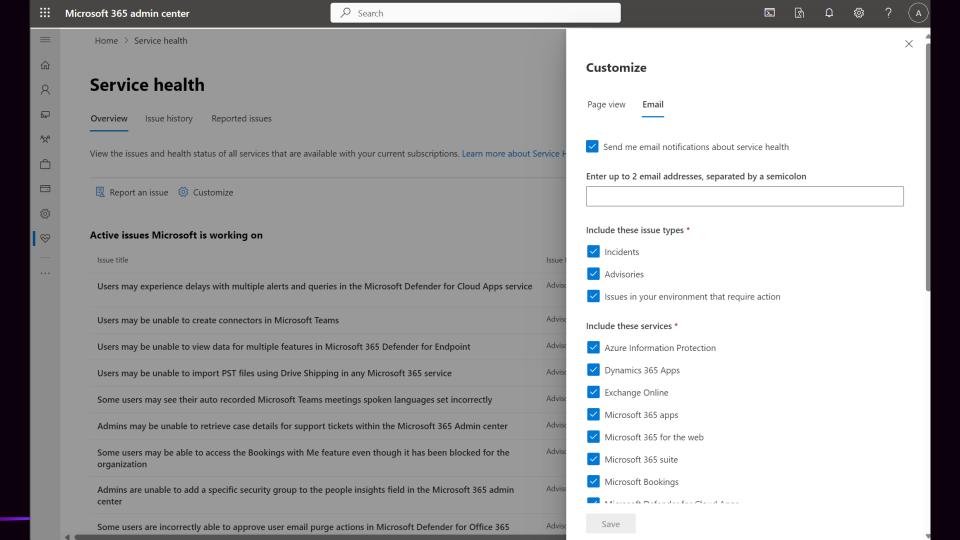
## Keep up with what is going on

- Message center
- Service Health
- Join the Microsoft Management CCP Program
  - https://aka.ms/JoinMMCCP
- X (formerly Twitter)
   Intune Support team
   https://x.com/IntuneSuppTeam









# **Community Tools**



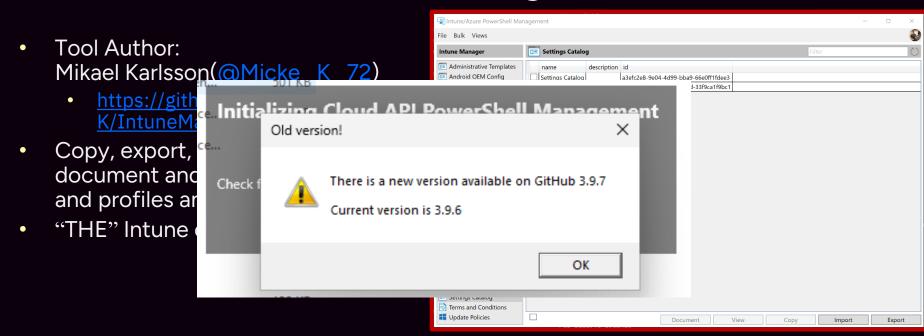
# **Use Community Tools**

- The Intune community is simply amazing!
- Community tools fills gaps in the product
- Follow community tools creators on X, LinkedIn...
- Give them praise for the work they do
- Let them know you are using their tool
- Keep the tools updated





#### Intune Manager







# Thank you!

