May 2023

Getting Started with Intune EPM

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Nick Moseley

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Recast Software creates tools used by hundreds of thousands of enterprise organizations worldwide, impacting millions of devices and (more importantly) the people who use them. Our mission is to be an integral part of how IT teams create highly secure and compliant environments, capable of handling technological change. We do this by integrating with existing IT infrastructure to provide deeper, more actionable insights, improved productivity, and powerful, scalable automation.

ScriptRunner is the #1 platform for IT infrastructure management with PowerShell. Centralizing, standardizing, automating, delegating, monitoring and controlling routine tasks frees up resources in IT operations. Administrators and DevOps teams can use and customize included script libraries or develop their own scripts.

ScriptRunner allows you to securely delegate administrative tasks to users without PowerShell knowledge or appropriate rights. ScriptRunner is used worldwide by IT teams of all sizes and industries.

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Agenda

Getting Started with Intune EPM

Nick Moseley

Announcements

Getting Started with Intune EPM

1. What is Intune EPM?
2. Trial registration and prerequisites.
3. Enrolling users/devices.
4. Basics of EPM rules.

   P'za & Beverage Break
5. Real-world, no cost, no fuss examples.
6. Troubleshooting tips.

Raffle!!

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Upcoming Sponsored Event!!

- Sponsored by ScriptRunner
- Friday July 28th – 9 AM (confirmed) to 2 PM (subject to change)
- Multiple sessions for this extended event focused on AI:
  - Demystifying AI
    Featuring Jennifer Martinez, Strategic Technology Strategist at Microsoft
  - Enhancing Cybersecurity Using AI to Collect, Collate and Curate
    Featuring Rod Trent, Senior Cloud Advocate at Microsoft. and all-around community leader
  - Microsoft 365 Copilot
    Featuring Nick Aquino, Senior Technical Specialist at Microsoft
  - Others…?

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What is Intune EPM?

Endpoint security is like onions, it has rings.

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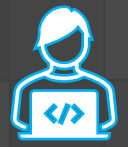
EPM is part of the Intune Suite



Remote Help

Tunnel for Mobile Application Management

Endpoint Privilege Management

Advanced Endpoint Analytics

Advanced application management (roadmap)

Cloud-based certificate management (roadmap)

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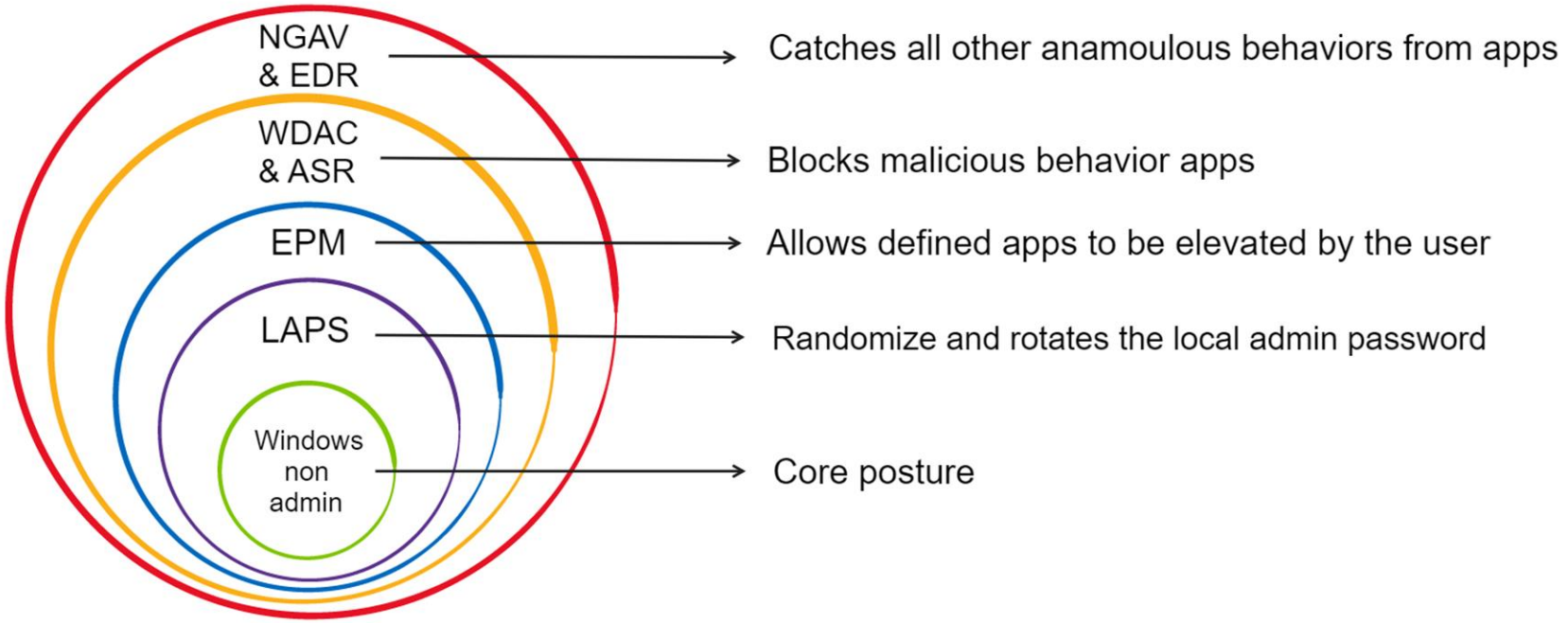
Protecting Endpoints from Malware



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Environment Readiness

Oh yeah…there's also this thing about Intune configurations or something

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Summary of EPM Readiness

Activate EPM trial licenses

- EPM standalone trial or Intune Plan 2
- From the Intune portal or the M365 Admin portal
- Requires Global Admin or Billing Admin

Intune tenant configuration

- Enable use of Windows diagnostic data by Intune
- Create a Windows Health Monitoring profile in Intune

Win10 20H2+ or Win11 21H2+

- Managed by Intune
- April 2023 cumulative update installed
- Azure AD joined or hybrid
- Professional or Enterprise

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Demo

Environment Readiness for EPM

Activate EPM trial licenses

Intune tenant configuration

- Diagnostic Data for Windows
- Windows Health Monitoring

Windows 10/11 (using Client Hyper-V)

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Enrolling Devices

Remember that users need to get on board with this whole thing too

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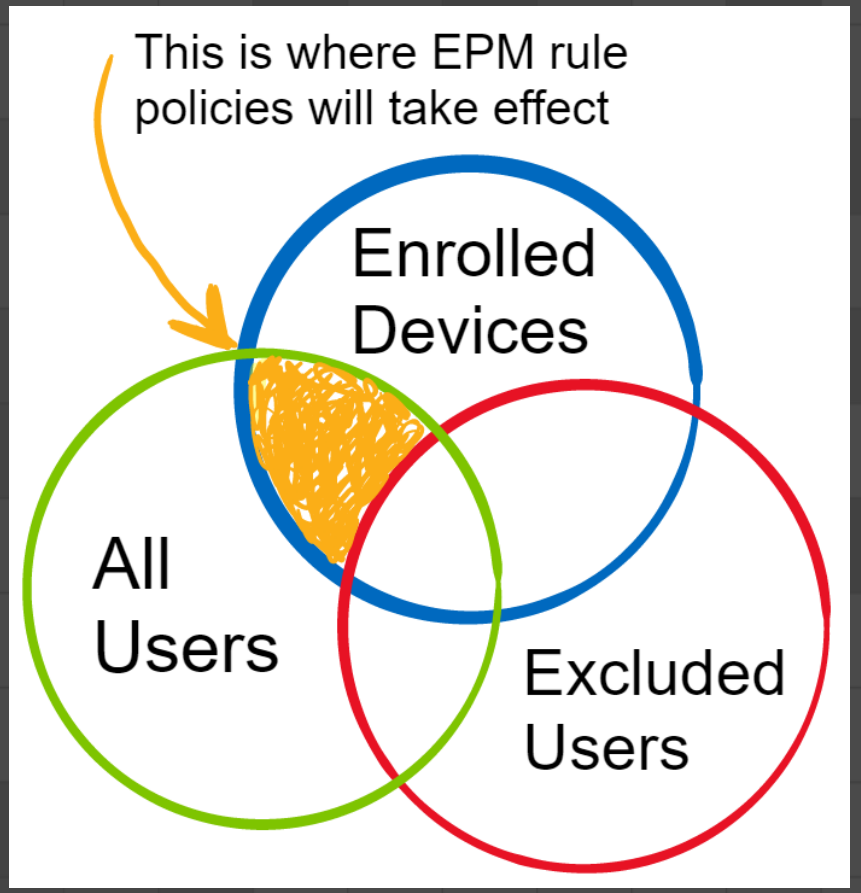
Enroll Devices…or Enroll Users?

Answer: it depends

- Flexibility to target users, devices, or mix of both.

- Approach for a POC is to:
  - Enroll specific devices
  - Target all users with the elevation rule policies
  - Exclude any undesired users, like desktop admins



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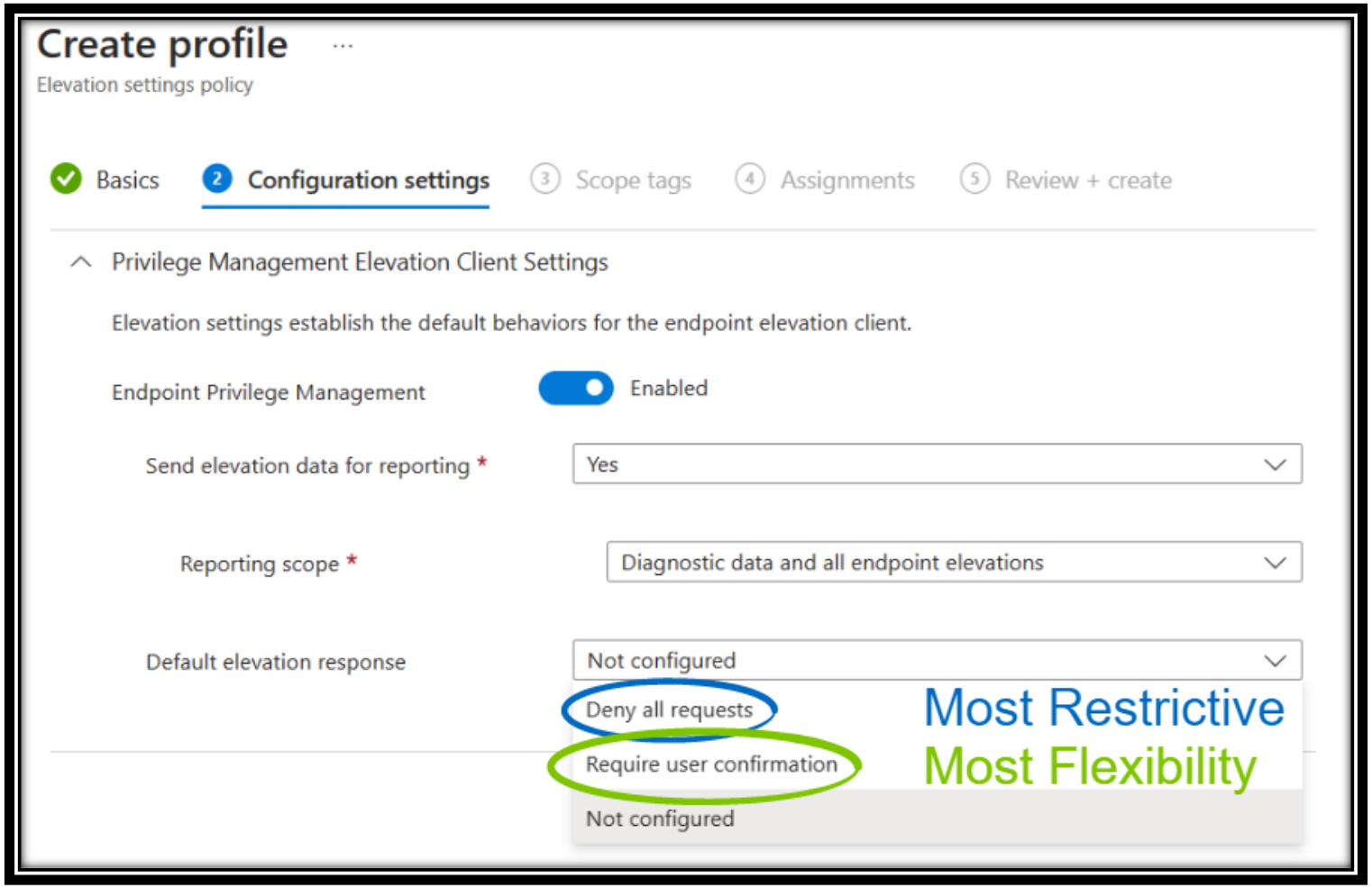
Demo

Creating EPM client settings policies



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Basics of EPM Elevation Rules

It's simple, really simple… seriously, I'm not lying

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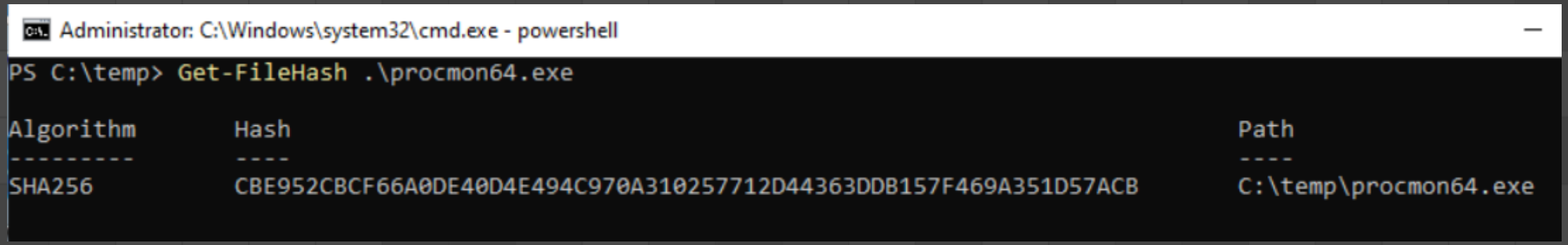
Application Identification Methods

Trust Level	Elevation Rule Type
No bueno	File properties such as name, path, version, etc.
Good	Certificate
Better	Hash
Best	Hash + certificate
Best of the best	Hash + certificate + file properties

Collecting Hashes – pretty easy to do



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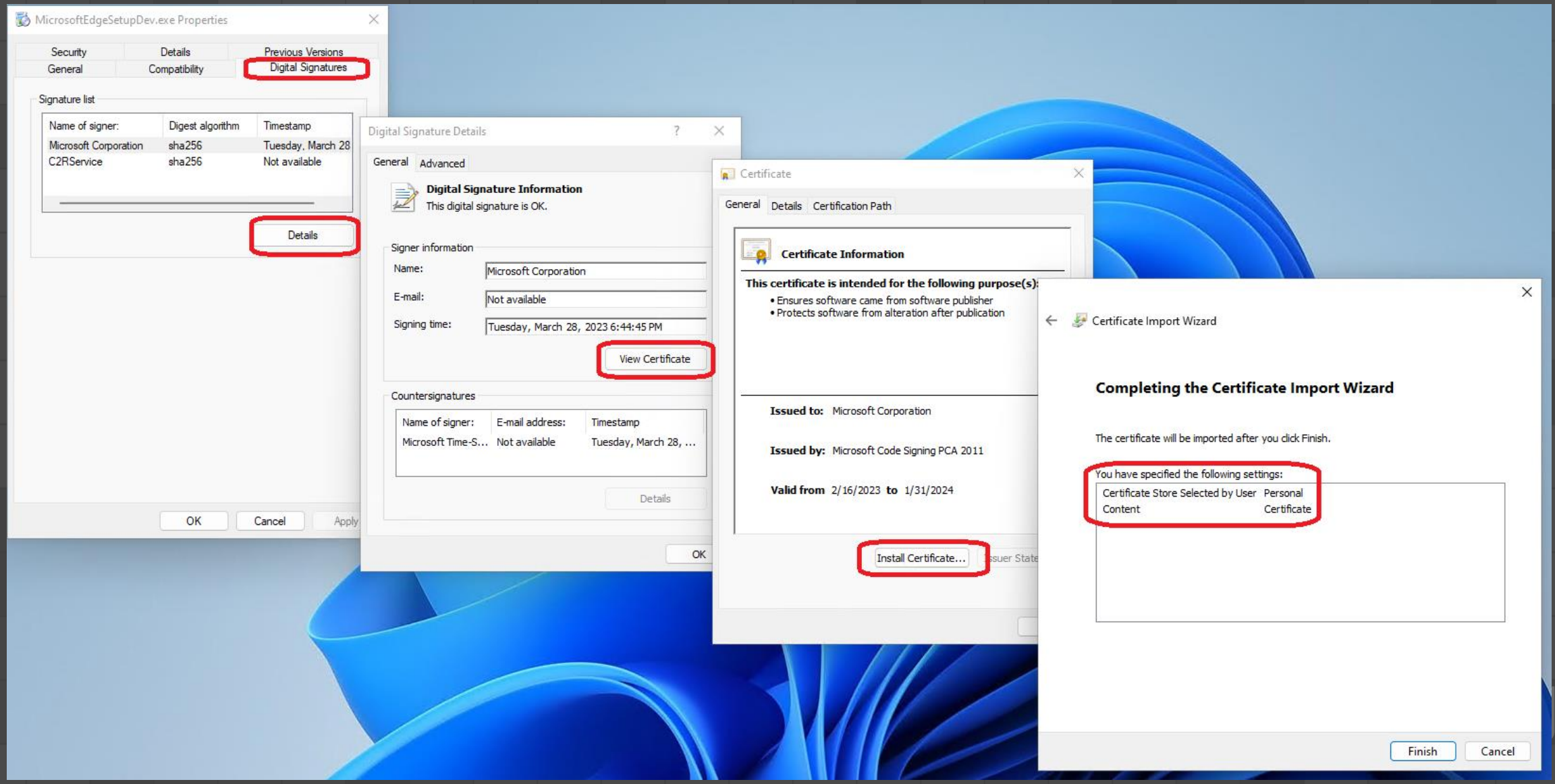
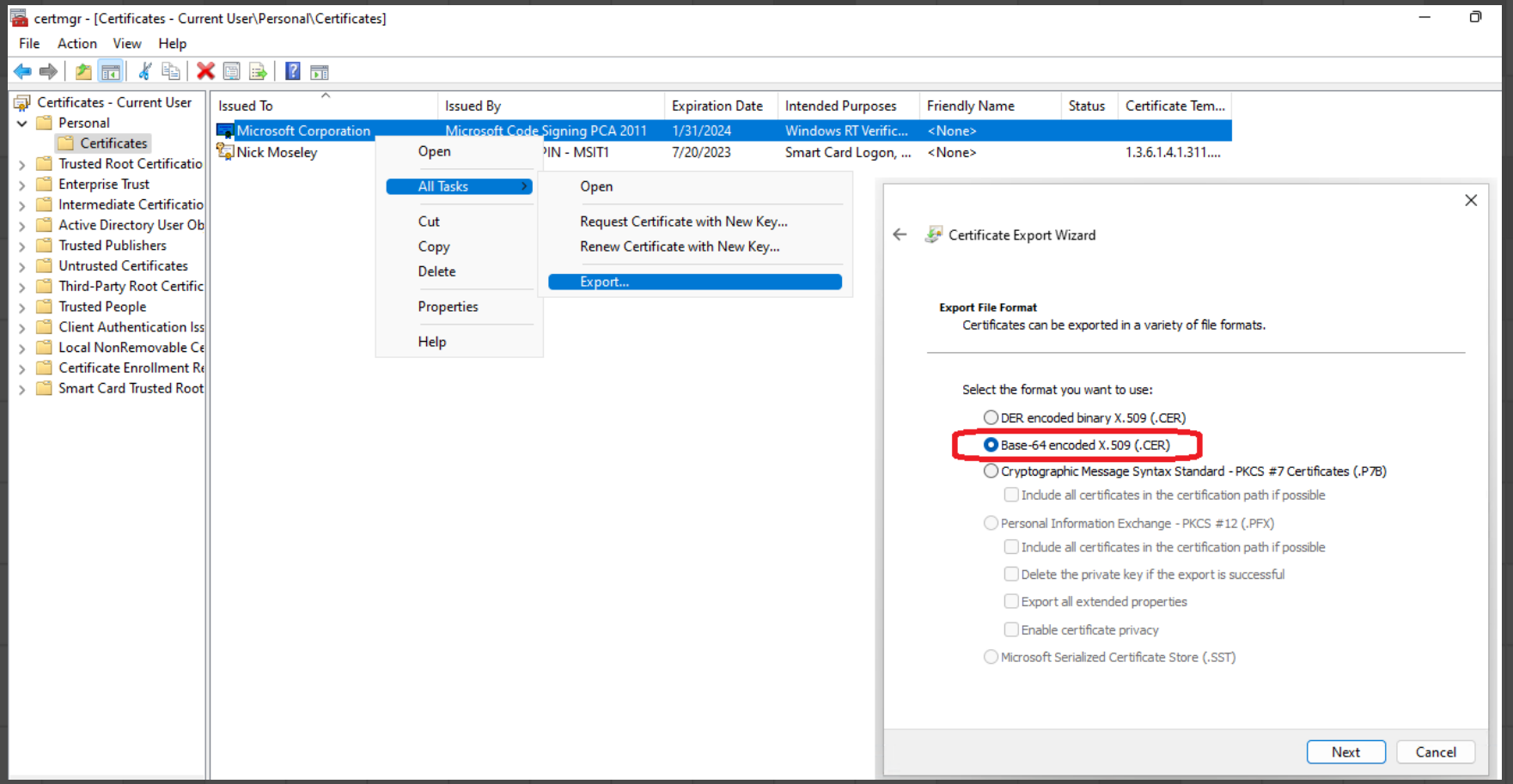
Collecting Certificates – more involved

Step 1 – Import the Certificate into a cert store



Collecting Certificates – more involved

Step 2 – Export the certificate file Base64 encoded



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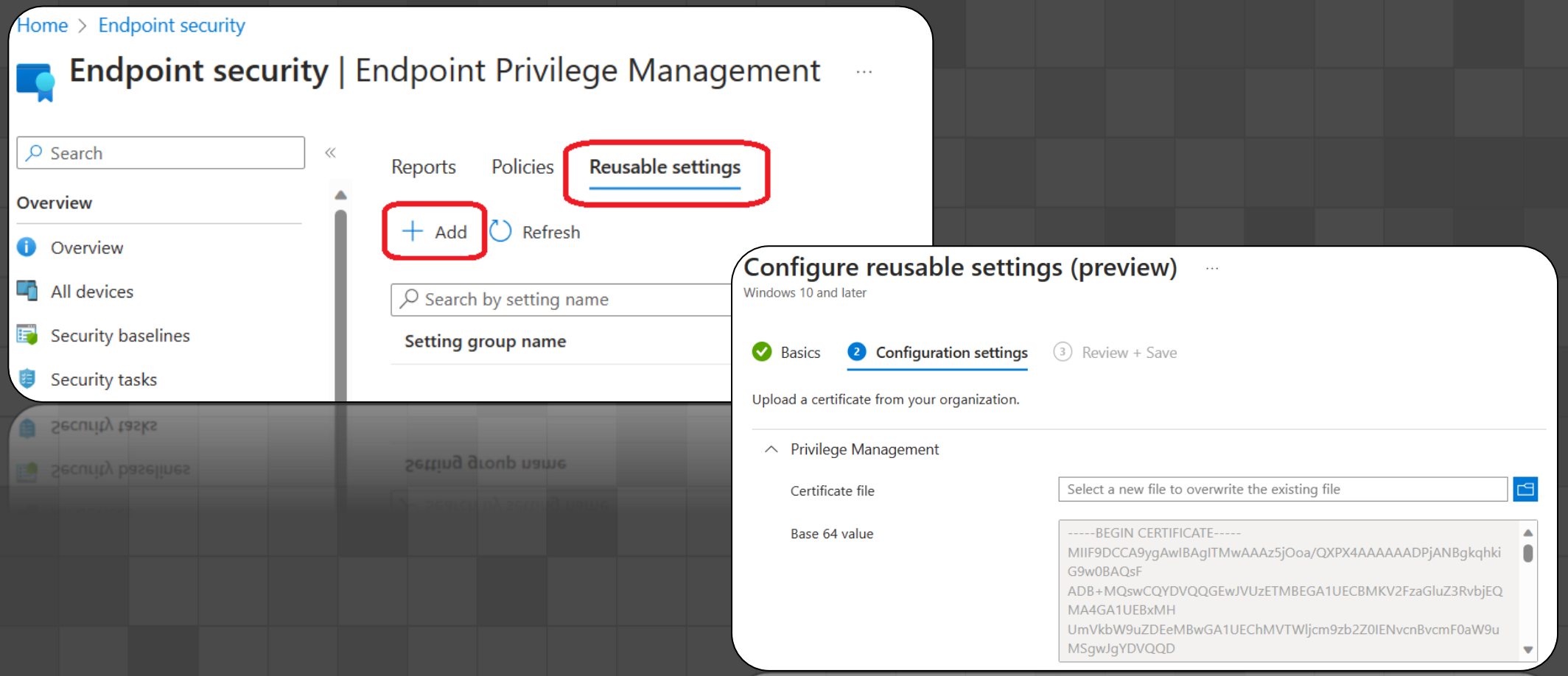
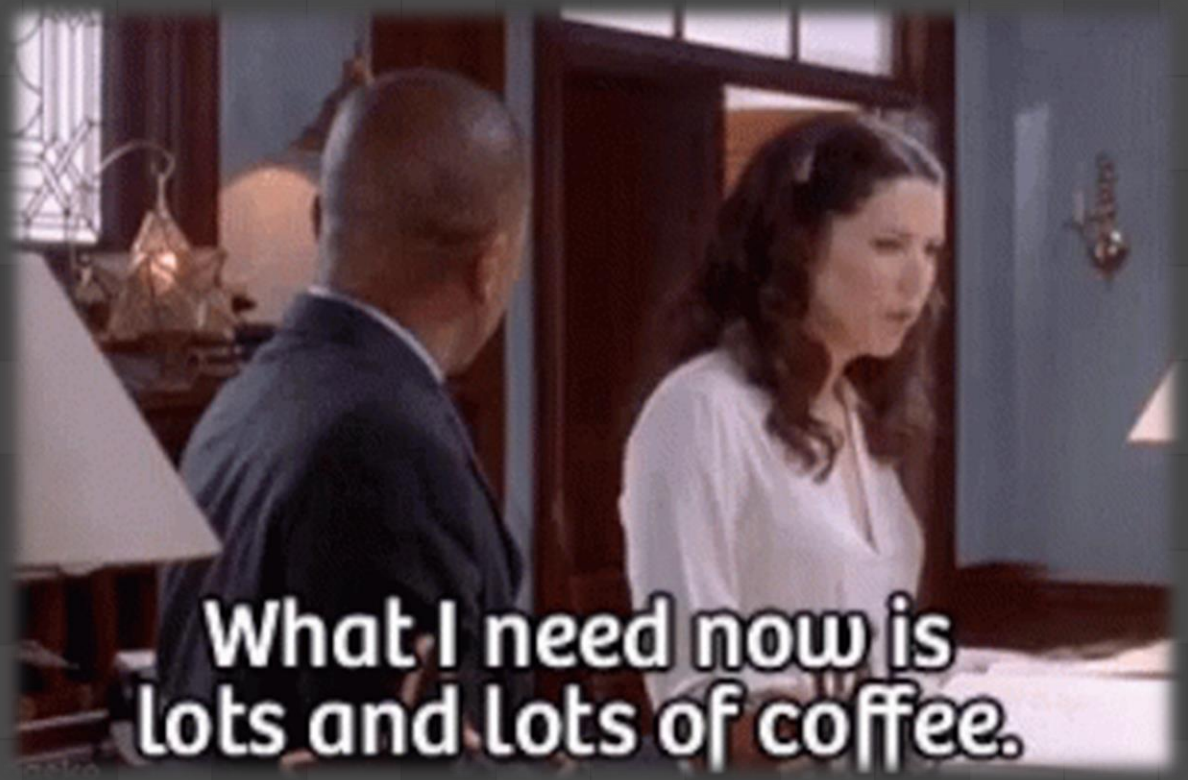
Collecting Certificates – more involved

Step 3 – Upload into EPM as a reusable setting





Example Elevation Rules

Like a cup of coffee in the morning, these example will get you going

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Example Applications

Application	Version	Elevation Behavior	POC Purpose
NotMyFault	4.21	Always	Will not be allowed to run. *(As defined by the client default configuration to Deny All)*
Process Monitor	3.93	Always	Will be automatically elevated without any user interaction necessary.
VMMap	3.32	Partial	Can partially run under user's non-admin rights, but then can be elevated to provide the full application experience with Windows authentication.
Edge Insider	N/A	Partial	Uses the signing certificate to allow any *version of the application* to be elevated. In this case, it represents a vendor's application to be installed by the user.
CMD Shell	Per OS	Partial	Will require business justification and Windows authentication together in order to elevate. Also uses one hash per OS.

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Demo

Creating these real-world examples in real-time!

User experience(s) with the application

Let's hope this works seamlessly!

Application	Rule Type	Outcome
NotMyFault	No rule defined	Will be blocked by both standard user and default EPM settings
CMD Shell	Hash / Windows auth and biz justification	Can run elevated – don't do this in production ;-)
Process Monitor	Hash / Auto-elevate	No explicit user action
VMMap	Hash / Windows auth	Two user experiences
Edge Insider	Cert / Biz Justification	Allowed to install

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Troubleshooting EPM

When your stuck, these tips will help you navigate the darkness

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The Things to Use for Troubleshooting

What	Where	How to Use What
Environment Prereqs	Learn about using EPM with Intune | Prereqs	Do you have the right OS version?
Reporting	Intune portal | EPM	Per-policy reports with info per device.
Client-side log files	C:\Program Files\Microsoft EPM Agent\Logs\	• EPM.Log - Rule Management Library, Extensibility Adapter, Interop Functions, Client Stub • EPMConsentUI.log - UX for EPM • EPMService.log - EPM Service operations • EPMServiceStub.log - Post validation file launch
Registry keys	HKLM:\SOFTWARE\Microsoft\PolicyManager\ current\device\ DeviceHealthMonitoring	"PrivilegeManagement" is set for value DHMScopeValue & ConfigDeviceHealthMonitoringScope
Windows services	• Microsoft EPM Agent Service • Microsoft Intune Management Extension	Ensure they are running and not disabled.

The Things to Use for Troubleshooting

What	Where	How to Use What
Windows events	Application and Service Logs > Microsoft > Windows > DeviceManagement-Enterprise-Diagnostics-Provider	Admin > event 4023 (enrollment)
Task Scheduler	Microsoft > Windows > EnterpriseMgmt	Two entries with GUIDs
PowerShell module	C:\Program Files\Microsoft EPM Agent\EpmTools	Import-Module .\EpmCmdlets.dll • Get-Policies • Get-DeclaredConfiguration • Get-DeclaredConfigurationAnalysis • Get-ElevationRules • Get-ClientSettings

Demo

Troubleshooting EPM

- Intune portal – EPM reporting
- Client-side log files
- PowerShell Module

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Other Training

Today's session is not intended as the "be all, end all" of learning

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More Resources on the Intune Suite

- Intune EPM « t3chn1ck (wordpress.com)
- Microsoft Intune Blog - Microsoft Community Hub
- Tech Accelerator: Microsoft Intune Suite | Digital event, April 2023
- New Microsoft Intune Suite with Privilege Management, Advanced Analytics, Remote Help & App VPN
- The Projected Total Economic Impact™ Of The Microsoft Intune Suite
- Roadmap: https://aka.ms/M365roadmap
- Unpacking Endpoint Management - YouTube

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