



Workplace Ninja

User Group Finland

Complete Device Lifecycle Automation
License Compliance & Device Compliance

Ketan Kamble

THANKS FOR THE SPONSORS!



twoday



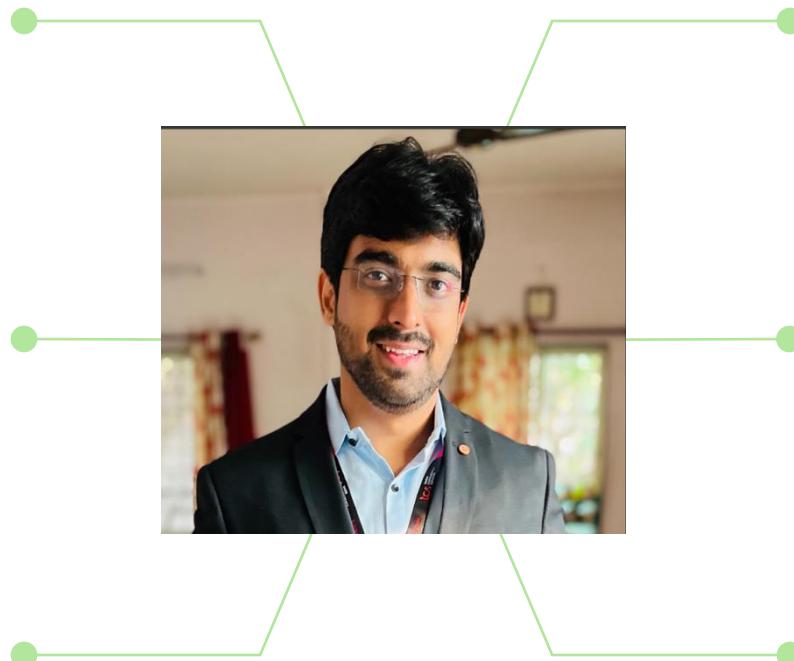


About “Ketan”

Focus
Endpoint Management, Automation

From
India, but lives in Finland

Role
End user computing Enterprise Architect



Certifications

Microsoft 365 Certified: Endpoint Administrator Associate
Microsoft Certified: Identity and Access Administrator Associate

Hobbies

Gaming
Family
Badminton

Contact



[ketan-kamble-012a1582](#)

Connect on LinkedIn →

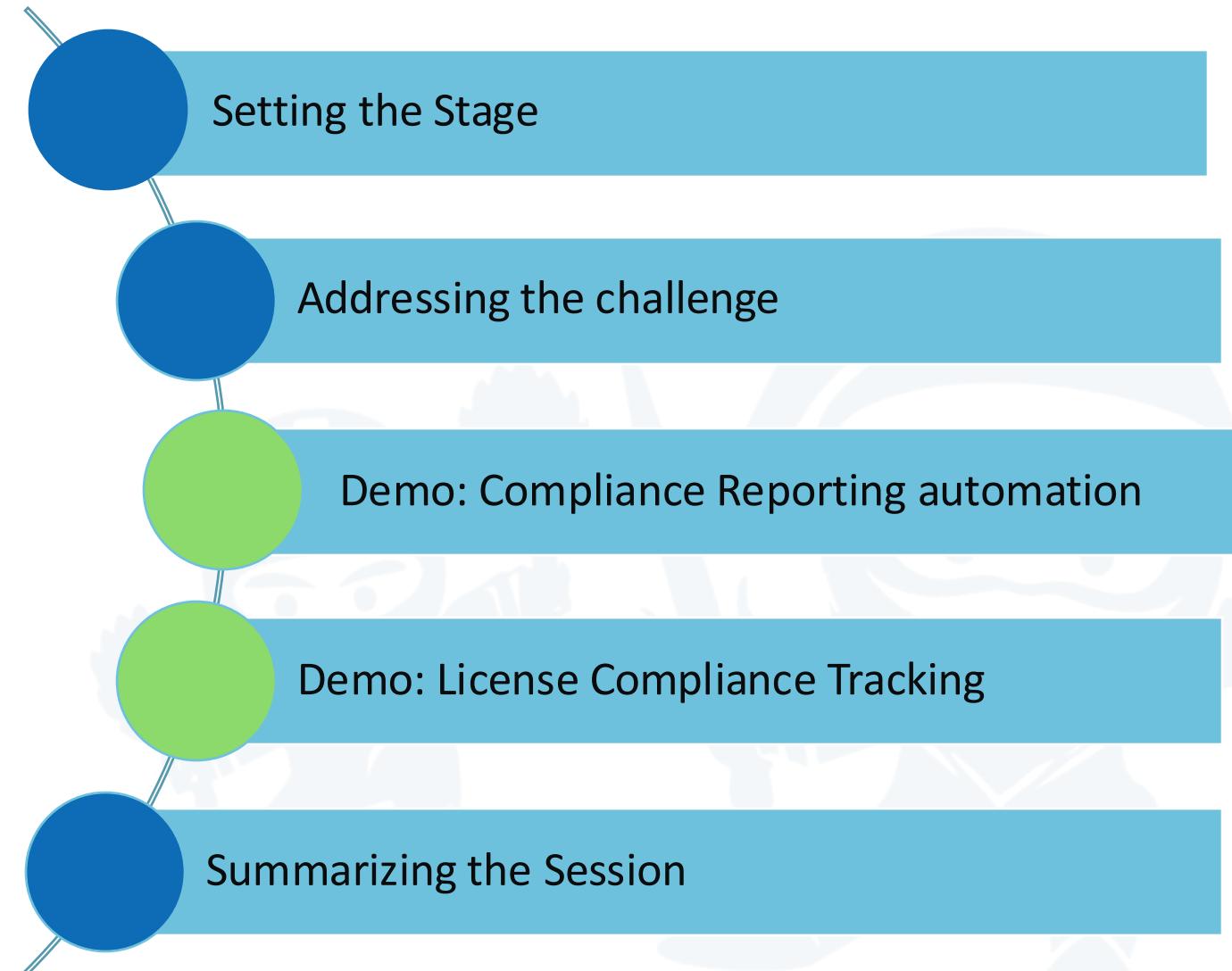


Agenda



Key takeaways:

- Automate compliance reporting with Azure Automation & Graph API
- Eliminate 40-60 hours per week of manual work
- Implement scheduled runbooks for daily insights
- Build Power BI dashboards for real-time visibility



Setting the stage

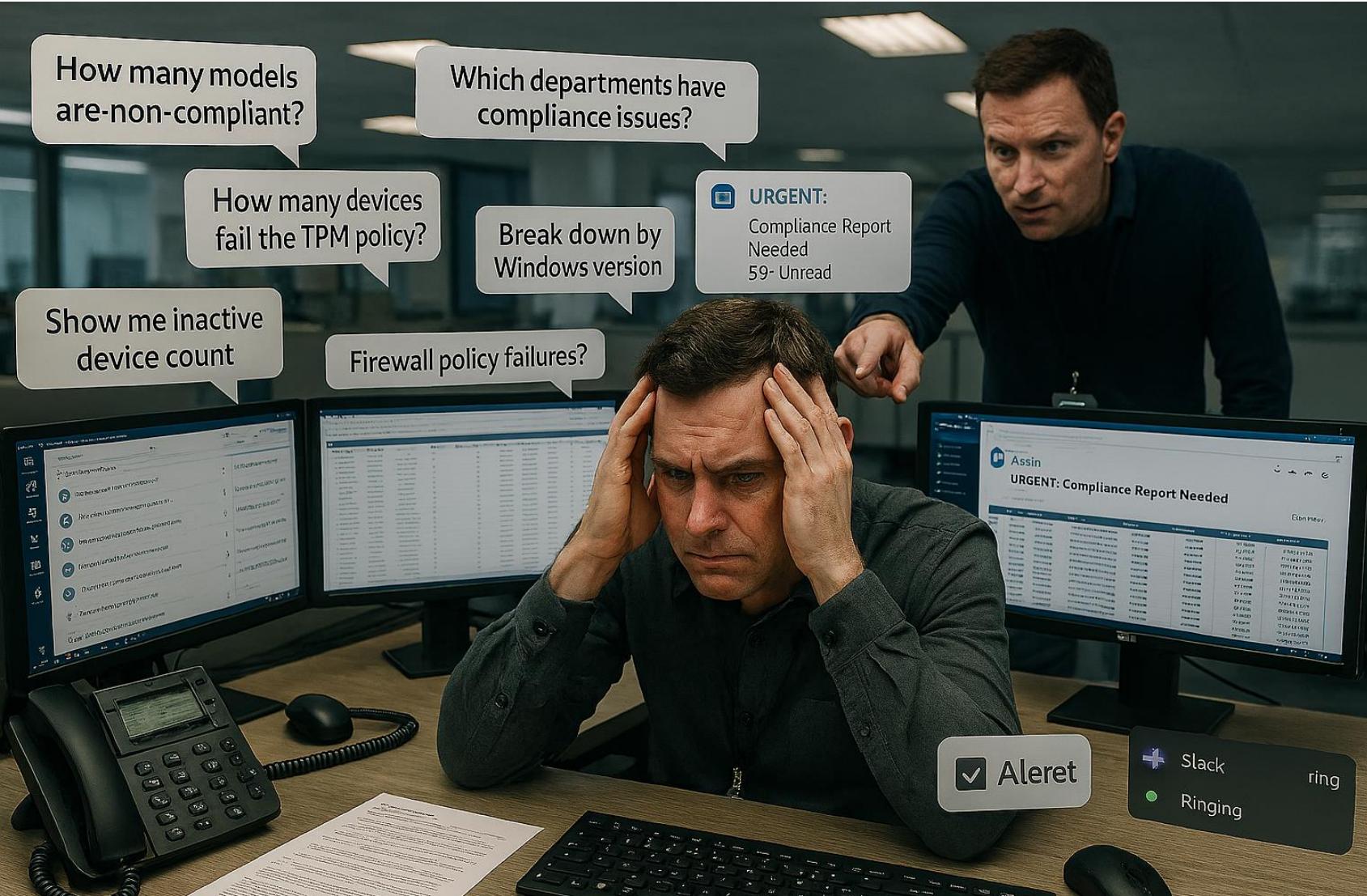


The Automation Evolution: From Ideas to Impact

The Daily Compliance Question Storm

Security teams respond, admins act quickly, and time slips away.

AI
Created
Images ☺

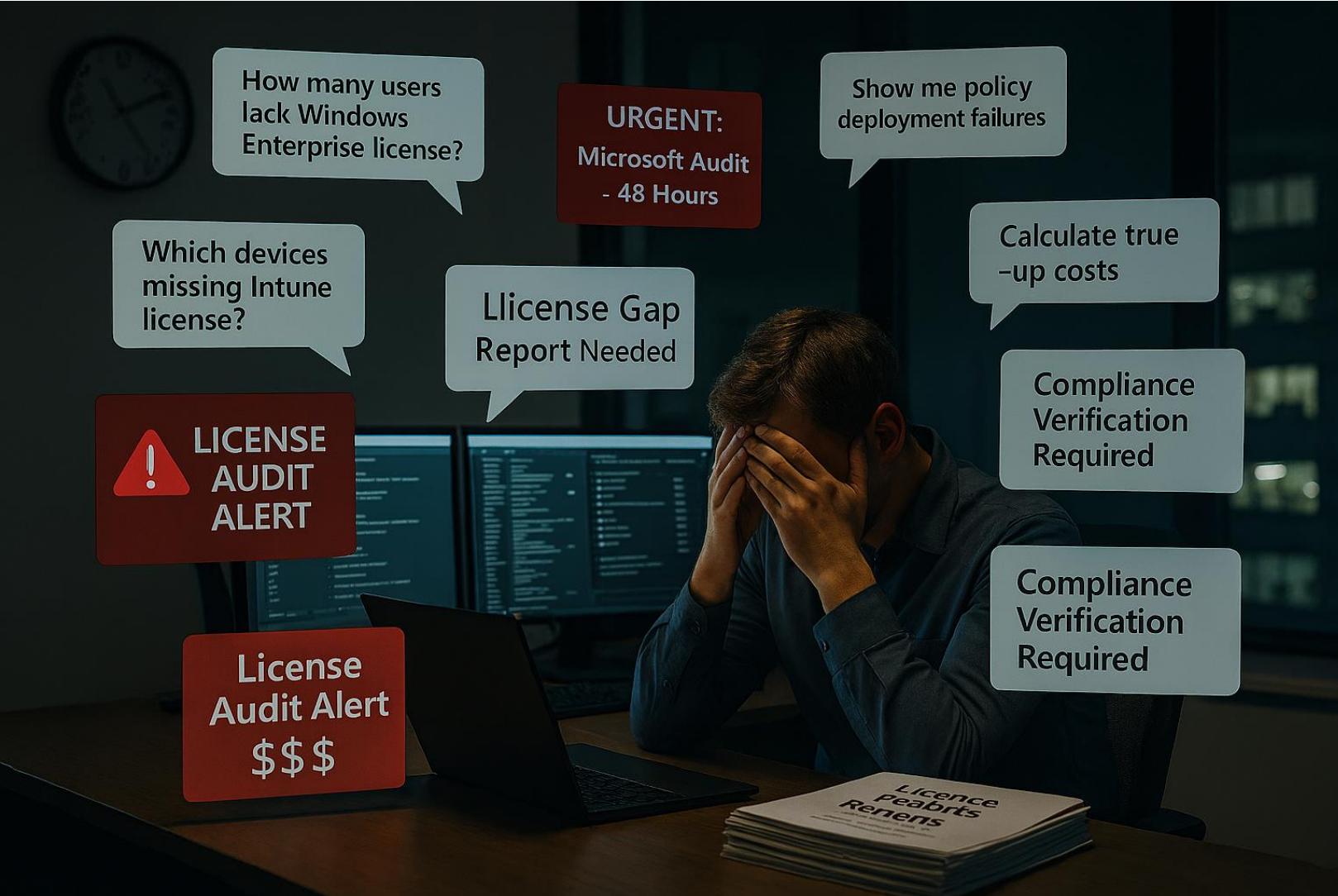


The Microsoft License Audit Reality

AI

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Image ☺

One audit can cost \$250K-\$500K in penalties - without proper tracking, you're flying blind.



WITHOUT INTUNE LICENSE:

- User-based policies fail
- Application deployment blocked
- Compliance tracking impossible
- Conditional Access limited

WITHOUT WINDOWS ENTERPRISE License:

- Cloud KMS activation fails
- "Windows Not Activated" errors
- Advanced security features disabled
- Audit non-compliance
- Immediate true-up required

When Beta Feels Like GA

Microsoft Intune admin center

Home > Devices | Overview > Windows | Windows devices > KETAN-01

KETAN-01 | Device compliance

>> Service menu

Refresh Export Columns ▾ 5 items

Search Add filters

Policy name	Logged in user	State	User email
Default Device Compliance	KetanKamble@puneintun	Compliant	KetanKamble@puneintun
Device Compliance - Wind	KetanKamble@puneintun	Compliant	KetanKamble@puneintun
Device Compliance - Wind	KetanKamble@puneintun	Compliant	KetanKamble@puneintun
Device Compliance - Wind	KetanKamble@puneintun	Error	KetanKamble@puneintun
Device Compliance - Wind	KetanKamble@puneintun	Not compliant	KetanKamble@puneintun

Home > Users >

Ketan Kamble

User

>> Service menu

Edit properties Delete Refresh Reset password ...

Overview Monitoring Properties

Identity

Display name	Ketan Kamble
First name	Ketan
Last name	Kamble
User principal name	KetanKamble@puneintunelab.onmicrosoft.com
Object ID	d44f3288-9863-475d-8a49-089e53476c98
Identities	puneintunelab.onmicrosoft.com
User type	Member

Welcome Elements Console Graph X-Ray +

Microsoft Graph X-Ray

Save script Clear session

Graph Call Stack Trace

Displays the Graph API calls that are being made by the current browser tab. Code conversions are only available for published Graph APIs. Turn on Ultra X-Ray mode to see all API calls (open a [GitHub issue](#) if there are admin portals or blades that are not being captured).

Select language: PowerShell Ultra X-Ray: On

```
> POST https://graph.microsoft.com/beta/deviceManagement/reports/getDevicePoliciesComplianceReport
```

```
Import-Module Microsoft.Graph.Beta.Reports
$params = @{
    select = @(
        )
        skip = 0
        top = 50
        filter = "(DeviceId eq '7084e6c6-b18a-41b0-8316-f8df704bc5af') and ((PolicyPlatformType eq '4') or (PolicyPlatformType eq '5') or (PolicyPlatformType eq '6') or (PolicyPlatformType eq '8'))"
        orderBy = @{
            "PolicyName asc"
        }
        search = ""
    }
Get-MgBetaDeviceManagementReportDevicePolicyComplianceReport -BodyParameter $params
```

Microsoft Graph X-Ray

Save script Clear session

Graph Call Stack Trace

Displays the Graph API calls that are being made by the current browser tab. Code conversions are only available for published Graph APIs. Turn on Ultra X-Ray mode to see all API calls (open a [GitHub issue](#) if there are admin portals or blades that are not being captured).

Select language: PowerShell Ultra X-Ray: Off

```
< GET https://graph.microsoft.com/v1.0/users/d44f3288-9863-475d-8a49-089e53476c98? $select=displayName
```

Response

```
{ "@odata.context": "https://graph.microsoft.com/v1.0/$metadata#users(displayName)/$entity", "displayName": "Ketan Kamble" }
```

Solution for our challenge & Why is this a magical combination?



Azure Managed Identity

Enterprise-grade authentication without stored credentials

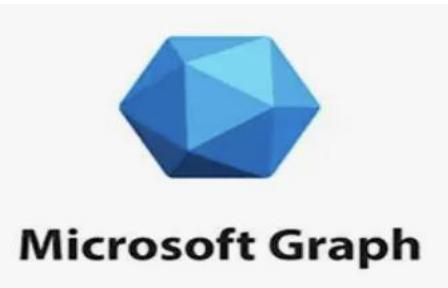
Zero-trust security • Automatic rotation



Azure Automation Runbooks

Scheduled PowerShell execution with comprehensive error handling

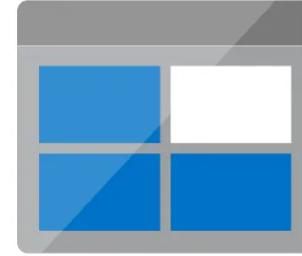
Batch processing • Verbose logging • Retry logic



Microsoft Graph API

Unified endpoint for Intune, Azure AD, and Microsoft 365 data

RESTful API • Pagination support • Rich data mode



Azure Blob Storage

Secure data lake with versioning and historical tracking

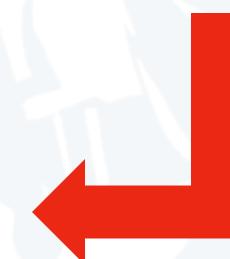
CSV format • Monthly archives • Cost-effective storage



Power BI Premium

Interactive dashboards with real-time refresh and sharing capabilities for executive reporting

Scheduled refresh • Row-level security • Mobile support • Executive dashboards



Demo Prerequisite - Permissions

Home > KetanLab | Enterprise applications > Enterprise applications | All applications > IntuneAutomationAccount

IntuneAutomationAccount | Permissions

Enterprise Application

API name	Claim value
Microsoft Graph (17)	
Microsoft Graph	CloudPC.Read.All
Microsoft Graph	DeviceManagementManagedDevices.Read.All
Microsoft Graph	Device.Read.All
Microsoft Graph	Device.ReadWrite.All
Microsoft Graph	User.ReadWrite.All
Microsoft Graph	Group.Read.All
Microsoft Graph	Directory.ReadWrite.All
Microsoft Graph	User.Read.All
Microsoft Graph	DeviceManagementServiceConfig.ReadWrite.All
Microsoft Graph	GroupMember.Read.All
Microsoft Graph	DeviceManagementRBAC.Read.All
Microsoft Graph	DeviceManagementConfiguration.Read.All
Microsoft Graph	DeviceManagementManagedDevices.ReadWrite.All
Microsoft Graph	AuditLog.Read.All
Microsoft Graph	DeviceManagementConfiguration.ReadWrite.All
Microsoft Graph	DeviceManagementManagedDevices.PrivilegedOperations.All
Microsoft Graph	DeviceManagementApps.ReadWrite.All

Add or remove favorites by pressing Cmd+Shift+F

Home > IntuneAutomationAccount

IntuneAutomationAccount | Identity

Automation Account

Identity

Diagnose and solve problems

Account Settings

Identity

Help

Support + Troubleshooting

System assigned User assigned

A system assigned managed identity is restricted to one per resource and is (Azure RBAC). The managed identity is authenticated with Microsoft Entra ID.

Save Discard Refresh Got feedback?

Status

Off On

Object (principal) ID

b05d8a90-3329-436f-bd93-52e58f6ab37f

intunepowerbireport | Access Control (IAM)

Storage account

Search

Add Download role assignments Edit columns Refresh Delete Feedback

Overview

Check access Role assignments Roles Deny assignments Classic administrators

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Number of role assignments for this subscription

9 4000

Data migration

Search by name or email Type : All Role : Storage Blob Data Contributor

Events

Storage browser

All (1) Job function roles (1) Privileged administrator roles (0)

Storage Mover

Name ↑ Type ↑ Role ↑

Partner solutions

Storage Blob Data Contributor (1)

Resource visualizer

IntuneAutomationAccount Managed identity Storage Blob Data Contributor

Demo Preparation



- Azure Automation
- Managed Identity
- Graph API perms
- Runbooks ready
- Blob Storage
- Power BI

Let's see it in action! →

AI
Created
Image 😊



In the end, we want
Intune admins to be
happy

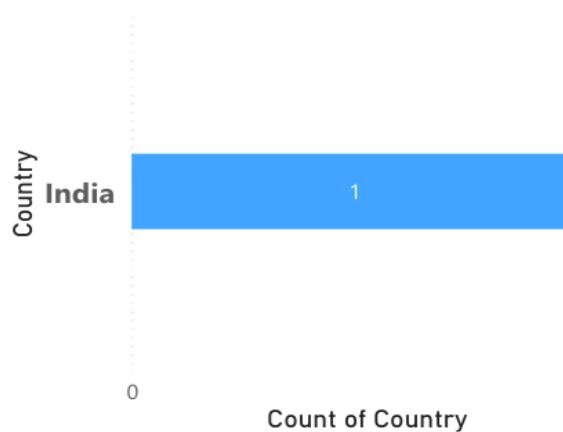
Demo Report – Workstation without license

Report : Workstations in Environment without Intune / Windows Enterprise License

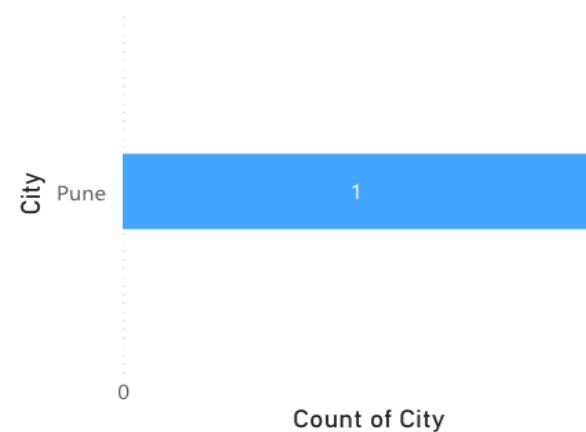
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Devices Count by Country



Devices Count by Office Location



Devices Count by Department



DeviceName

PrimaryUserEmail

1

Unique Email Address

1

Total Devices

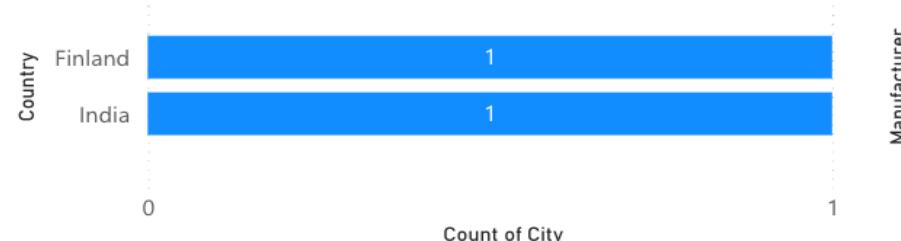
DeviceName	City	Country	PrimaryUserEmail	Department	LastIntuneSync	AssignedLicenses
SpiderBot-03	Pune	India	Peter.Parker@puneintunelab.onmicrosoft.com	IT	11/19/2025 5:30:05 PM	No Licenses Assigned MISSING: Intune license MISSING: Windows 10/11 Enterprise license

Demo Report – Non Compliant Workstations

REPORT : Non Compliant Workstations in the Environment.

Demo Environment | Workplace Ninja Event Finland

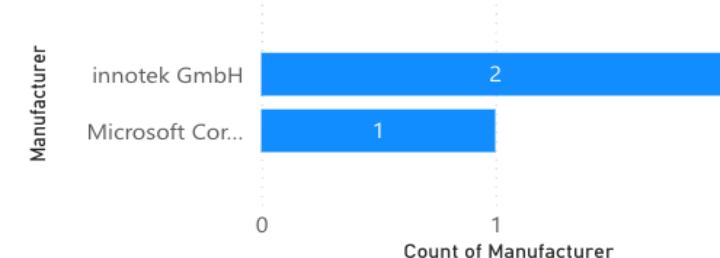
Count of City by Country



DeviceName

🔍

Count of Manufacturer by Manufacturer



Ketan



Intune Compliance Policy Name

Device Compliance - Windows - Device Security - Firewall

Device Compliance - Windows - Device Security - TPM

Sub Setting in Compliance Policy which is non compliant



DeviceName	PrimaryUser	AccountEnabled	City	Country	Department	Manufacturer	CompliancePolicyName
KETAN-01	KetanKamble@puneintunelab.onmicrosoft.com	True	Espoo	Finland	End User Computing	innoteck GmbH	Device Compliance - Windows - Device Security - TPM
KETAN-01	KetanKamble@puneintunelab.onmicrosoft.com	True	Espoo	Finland	End User Computing	innoteck GmbH	Device Compliance - Windows - Device Security - Firewall
SpiderBot-03	Peter.Parker@puneintunelab.onmicrosoft.com	True	Pune	India	Marketing	Microsoft Corporation	Device Compliance - Windows - Device Security - Firewall



Q & A

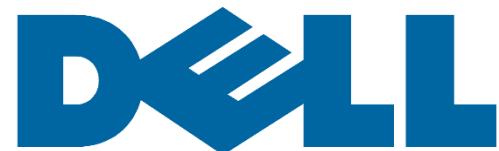


Scripts will be on GitHub in 2–3 weeks with docs. Stay connected on LinkedIn.

THANK YOU ALL AND A SPECIAL THANKS TO OUR SPONSORS!



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Thank you!

