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Getting Started with Microsoft Graph and PowerShell

Aleksandar Nikolić

Microsoft MVP | M.O.3.A.K. IT Consulting | Serbia

PS> whoami

Aleksandar Nikolić

PowerShell and Azure trainer

Microsoft Azure MVP

Cloud and Datacenter Management MVP

Co-founder of PowerShellMagazine.com

@alexandair



Microsoft Graph

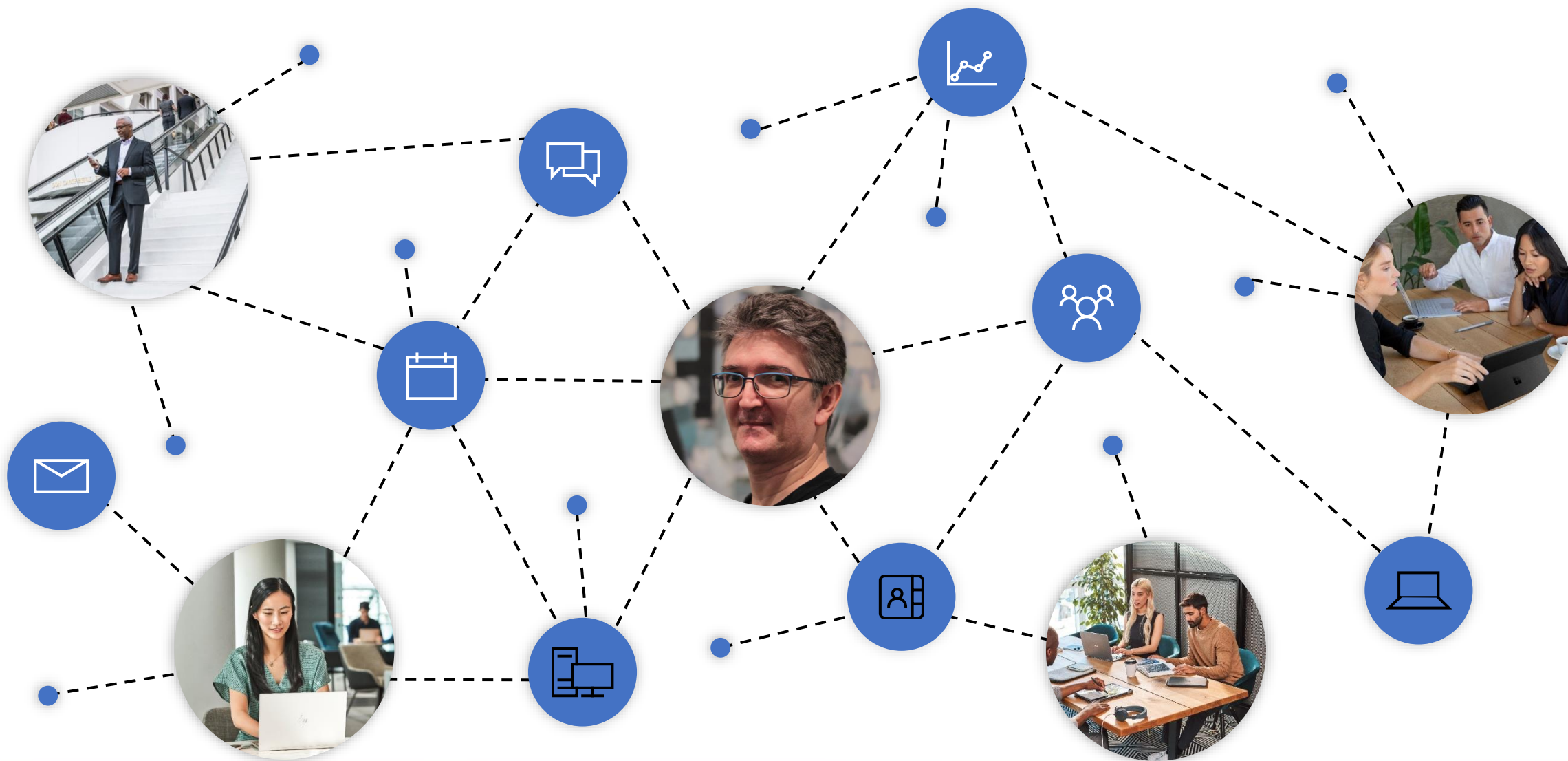
Microsoft Graph is a unified endpoint for accessing data, intelligence, and insights in Microsoft 365.











































For individual users



...and all the organization



2000 APIs in Microsoft Graph, 50 service teams

 Activities	 Education	 Reports
 Attachments	 Events	 Schools
 Audits	 Files	Search
 Calendar	 Financials	 Secure score
 Categories	 Groups	 Security alerts
 Charts	 Identity	 Sites
 Classes	 Lists	 Social
 Contacts	 Mail	 Subscriptions
 Conversations	 Messages	 Tasks
 Cross-device experiences	 Notes	 Teams
 Customer booking	 Notifications	 Threat intelligence
 Device configuration	 Pages	 Users
 Device management	 Places	 Workbooks
 Domains	 Plans	

• • • and many, many more

Another one, but why?

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Microsoft.Graph.Intune

Module

By: intunepsadm | 26,038 downloads | Last Updated: 7/11/2019 | Latest Version: 6.1907.1.0

PowerShell SDK for Microsoft Intune Graph API

Tags Microsoft Graph Intune PowerShell SDK



Az.ResourceGraph

Module

By: azure-sdk | 7,110 downloads | Last Updated: 9/11/2019 | Latest Version: 0.7.6

Microsoft Azure PowerShell - Azure Resource Graph cmdlets in Windows PowerShell and PowerShell Core. Allows querying resources with a powerful query language. For more information on Resource Graph, please visit the following: <https://docs.microsoft.com/azure/governance/resource-graph/>

Tags Azure ResourceManager ARM Provider Resource Graph



PSGraph

Module

By: KevinMarquette | 6,532 downloads | Last Updated: 3/16/2019 | Latest Version: 2.1.38.27

Builds graphs using GraphViz

Tags Graph Visualization DSL



Avanade Azure AD Graph REST Helper

Module

By: cspeers | 2,052 downloads | Last Updated: 8/4/2017 | Latest Version: 1.2.2

Helper functions for working with the Azure Active Directory Graph API

Tags AAD GraphAPI OAuth2



AzureRM.ResourceGraph

Module

By: azure-sdk | 1,209 downloads | Last Updated: 10/1/2018 | Latest Version: 0.1.1-preview

Microsoft Azure PowerShell - Azure Resource Graph cmdlets. Allows querying resources with a powerful query language.

Tags Azure ResourceManager ARM Provider Resource Graph



psmsgraph

Module

By: MarkEKraus | 5,184 downloads | Last Updated: 5/6/2019 | Latest Version: 1.0.27.60

Provides Connectivity and access to Microsoft Graph API

Tags Graph GraphAPI MSGraph MSGraphAPI PSMSGraph PSMSGraphAPI +6 More



AzureGraphCmdlets

Module

By: alexmarshall | 1,392 downloads | Last Updated: 7/27/2016 | Latest Version: 1.0.727.1

Cmdlets for performing operations against Azure Graph that are not otherwise provided by Microsoft



MicrosoftGraphAPI

Module

By: JakobGSvendsen | 1,149 downloads | Last Updated: 2/28/2018 | Latest Version: 0.2.0

Module for accessing Microsoft Graph API



Cayosoft.Graph

Module

By: Andy-Cayosoft GeorgeS-Cayosoft | 298 downloads | Last Updated: 7/18/2019 | Latest Version: 6.2.0.84

The Cayosoft Graph (cGraph) Module for Microsoft PowerShell is a FREE SOLUTION that allows administrators to use PowerShell to call the Microsoft Graph API to manage any Graph accessible resource such as, Azure AD, Office 365, Outlook, OneDrive, Intune and more...

Tags Azure AzureAD AAD ActiveDirectory AD AzureGraph Graph O365 +9 More



Office365GraphAPI

Module

By: chenxizhang | 518 downloads | Last Updated: 6/12/2017 | Latest Version: 1.0.5

Office 365 Graph API Module (Both support WW AND Gallatin)



PSQuickGraph

Module

By: Andrey.Vernigora | 453 downloads | Last Updated: 8/7/2017 | Latest Version: 1.1

This module is a wrapper for QuickGraph library.



MsftGraph

Module

By: jamesone | 388 downloads | Last Updated: 7/30/2019 | Latest Version: 1.0.1

Module to work the Microsoft Graph API with both Office 365 and Microsoft accounts it contains over 80 functions to * Navigate, upload to and download from OneDrive * Navigate, manipulate pages and sections in OneNote Notebooks * Create and manage groups and teams, and Post to Teams and their channels * Create, read and write plans... [More info](#)

Tags MicrosoftGraph MSGraph Office365 AzureAD OneNote OneDrive +3 More



MicrosoftGraph

Module

By: remcovi | 213 downloads | Last Updated: 7/5/2019 | Latest Version: 1.1.3

A PowerShell wrapper around commonly used Microsoft Graph API calls.

Tags Office365 MSGraph Graph



MSGraphFunctions

Module

By: jseerden | 842 downloads | Last Updated: 6/29/2019 | Latest Version: 2.4.1

PowerShell Functions to query the Microsoft Graph API

Tags Graph Intune PowerShell



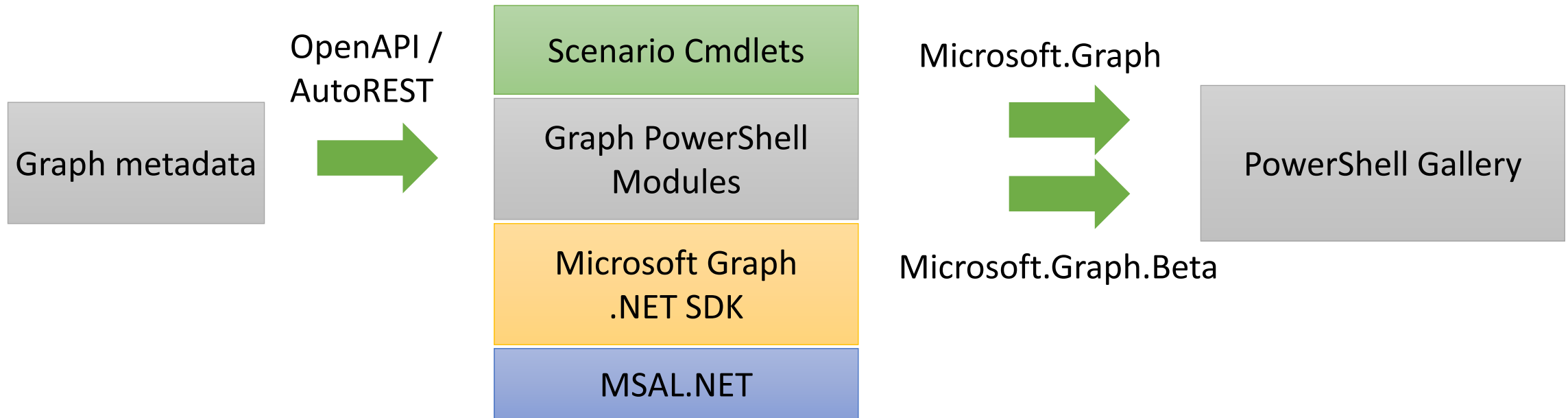
MicrosoftGraphSecurity

Module

By: ani6gup | 356 downloads | Last Updated: 4/3/2019 | Latest Version: 1.0.0

Powershell interface for Microsoft Graph Security API

Microsoft Graph PowerShell



Supported PowerShell versions

- PowerShell 7 and later is the recommended PowerShell version for use with the Microsoft Graph PowerShell SDK on all platforms.
- There are no additional prerequisites to use the SDK with PowerShell 7 or later.
- The following prerequisites must be met to use the Microsoft Graph PowerShell SDK with Windows PowerShell.
 - Upgrade to PowerShell 5.1 or later
 - Install .NET Framework 4.7.2 or later
 - Update PowerShellGet to the latest version using `Install-Module PowerShellGet -Force`

Authentication

- The PowerShell SDK supports two types of authentication: delegated access and app-only access.
- Delegated access: Log in as a user, grant consent to the SDK to act on our behalf, and call the Microsoft Graph.
- App-only access: Grants permissions directly to an application, and requires an administrator to consent to the required permission scopes.

Configuration of app-only access

- Before you can use app-only access with the SDK, you need the following:
- A certificate to use as a credential for the application.
- This can be a self-signed certificate or a certificate from an authority.
- Register an application in Azure AD, configure it with the permission scopes your scenario requires, and share the public key for your certificate.

DEMO:

Microsoft Graph and PowerShell

Thank you.

Ukova

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