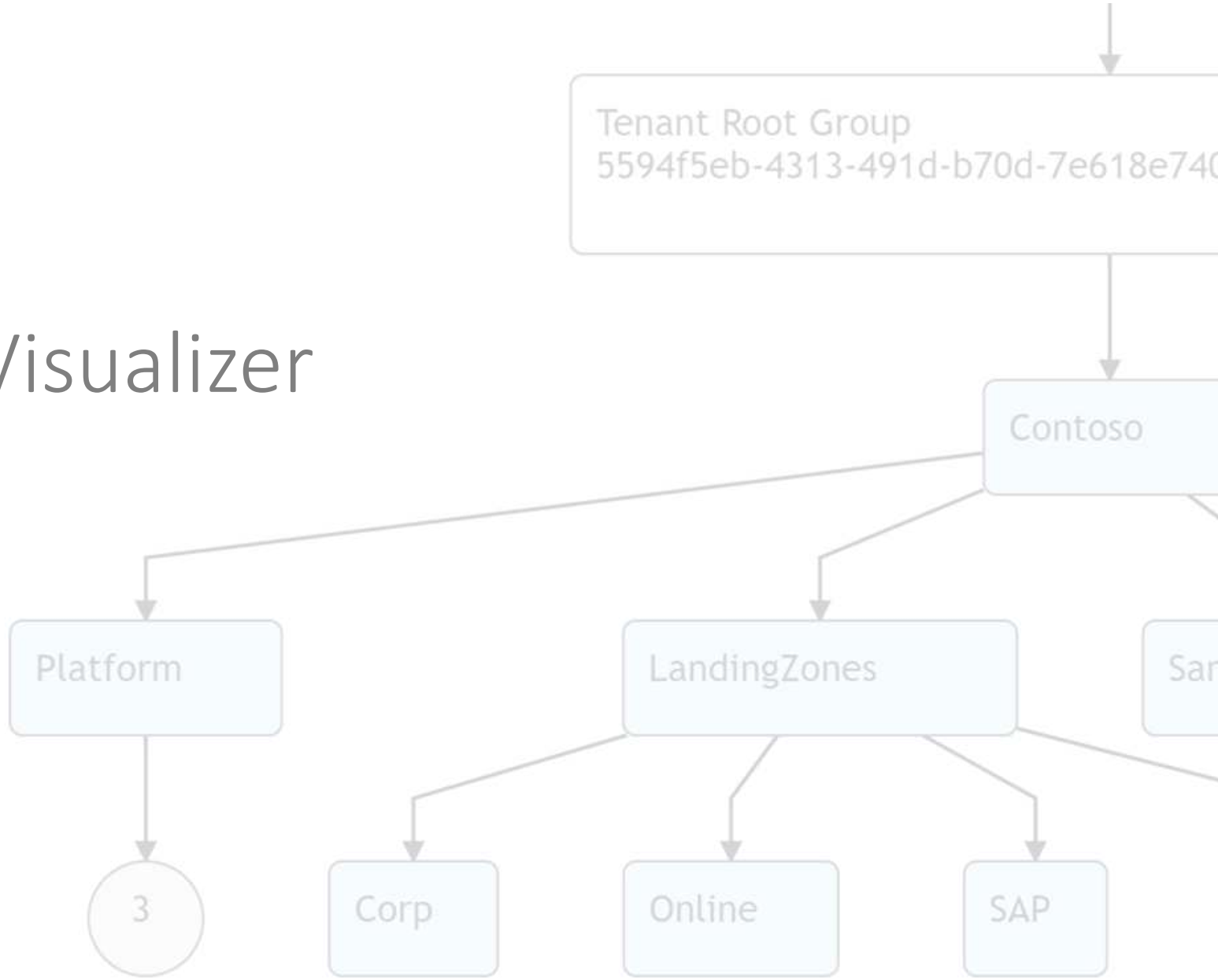
AzGovViz

Azure Governance Visualizer



aka.ms/AzGovViz

AzGovViz

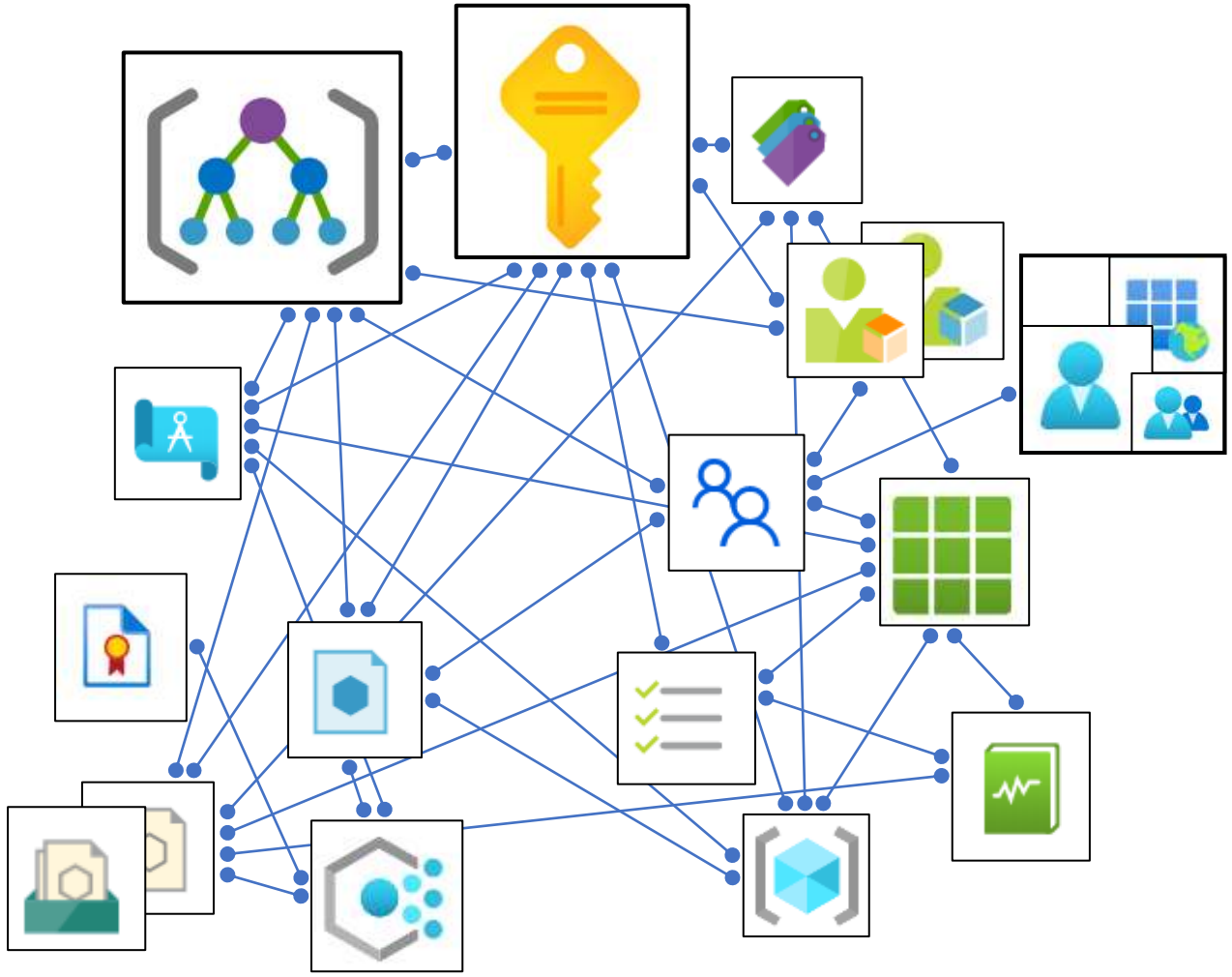
Azure Governance Visualizer

‘Azure Governance can be a complex thing.‘

Challenging

- Holistic overview on technical Azure Governance implementation
- Connecting the dots

AzGovViz is intended to help you to get a holistic overview on your technical Azure Governance implementation by connecting the dots.



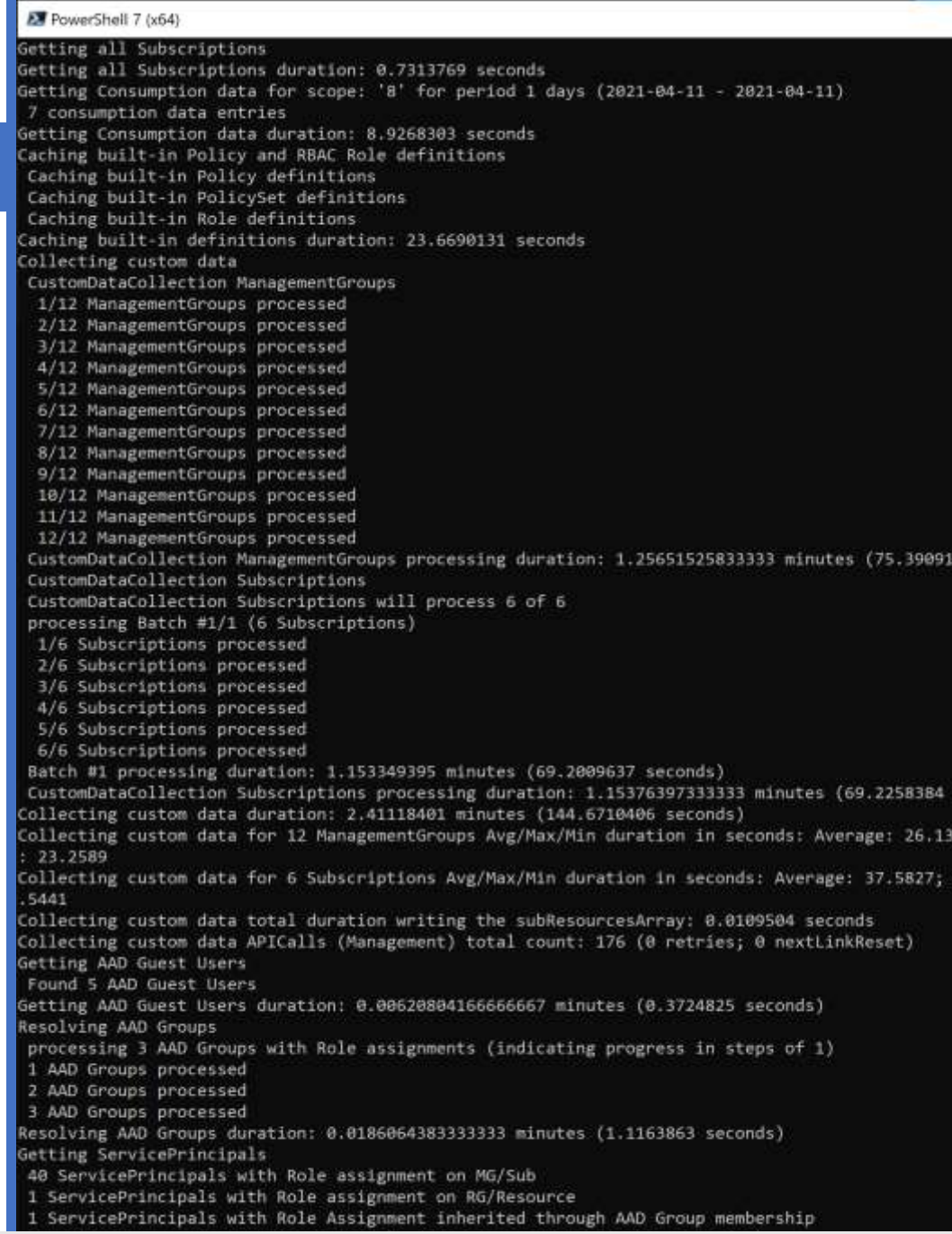
AzGovViz

Azure Governance Visualizer

AzGovViz is a PowerShell script that captures Azure Governance related information such as Azure Policy, RBAC (a lot more) by polling Azure ARM and Microsoft Graph APIs.

AzGovViz leverages from the PowerShell Core parallelization feature.

The technical requirements as well as the required permissions are minimal.




```
PS C:\>.\AzGovViz.ps1 -ManagementGroupId <your-Management-Group-Id>
```

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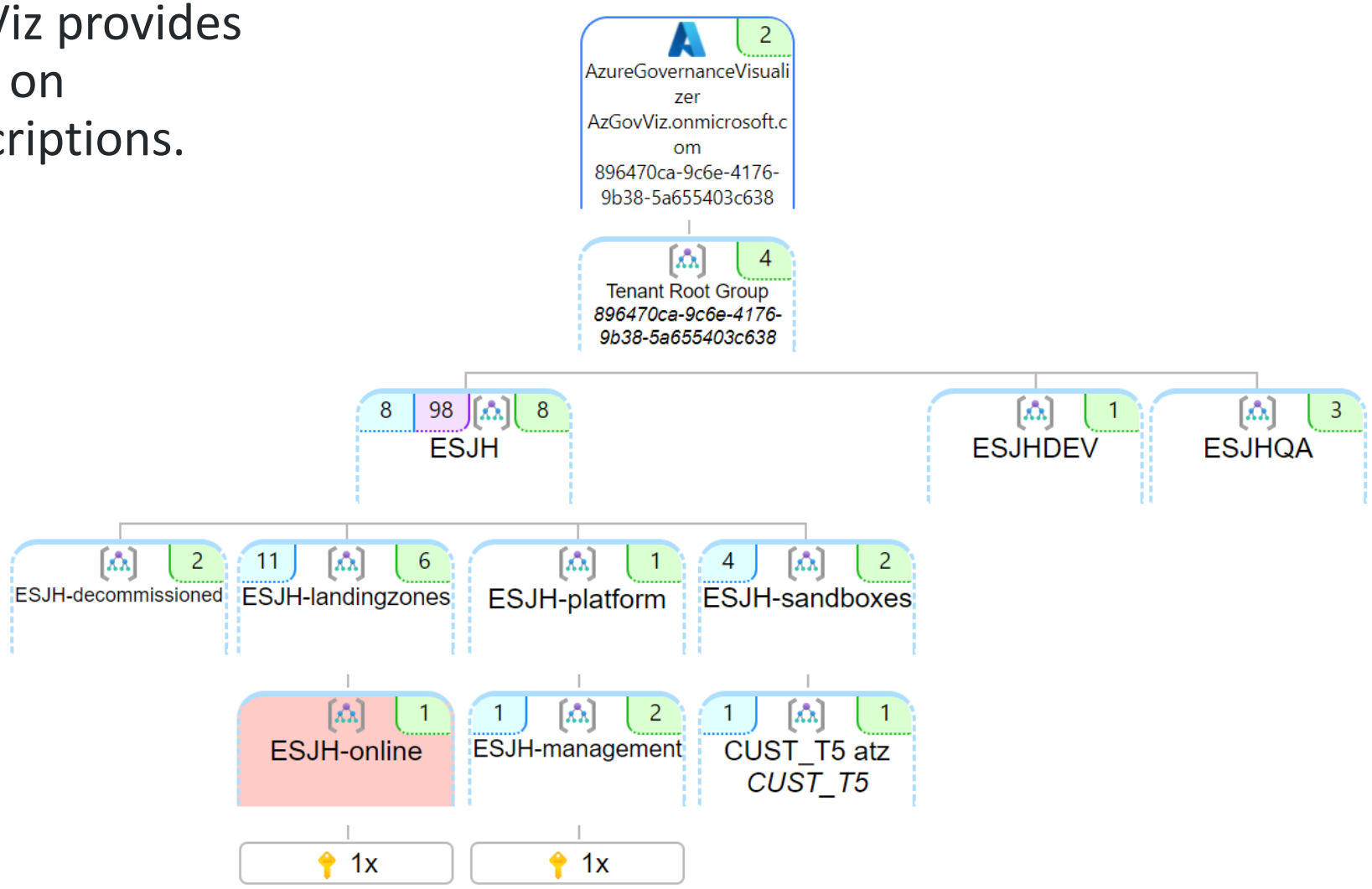
From the collected data AzGovViz provides visibility on your **HierarchyMap** on Management Groups and Subscriptions.



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Azure Governance Visualizer

From the collected data AzGovViz provides visibility on your **HierarchyMap**, creates a **TenantSummary** on Management Groups and Subscriptions.

- Policy
- RBAC
- Blueprints
- Management Groups
- Subscriptions & Resources
- Diagnostics
- Limits
- Azure Active Directory
- Consumption
- Change tracking

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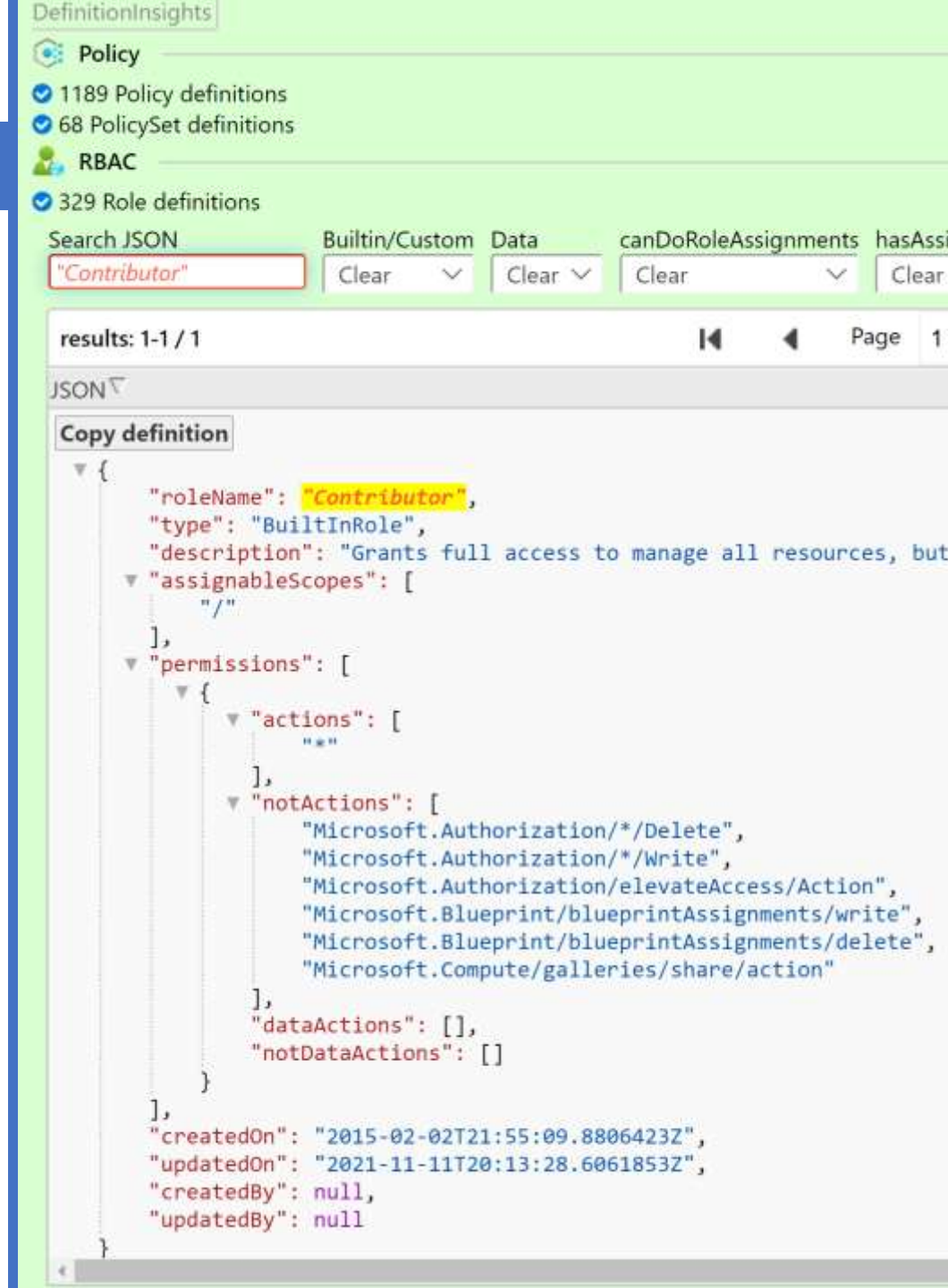
Azure Governance Visualizer

From the collected data AzGovViz provides visibility on your **HierarchyMap**, creates a **TenantSummary** on Management Groups and Subscriptions and creates **DefinitionInsights** for Policy and RBAC.

- Policy
  - Policy definitions
  - PolicySet definitions
- RBAC Role definitions



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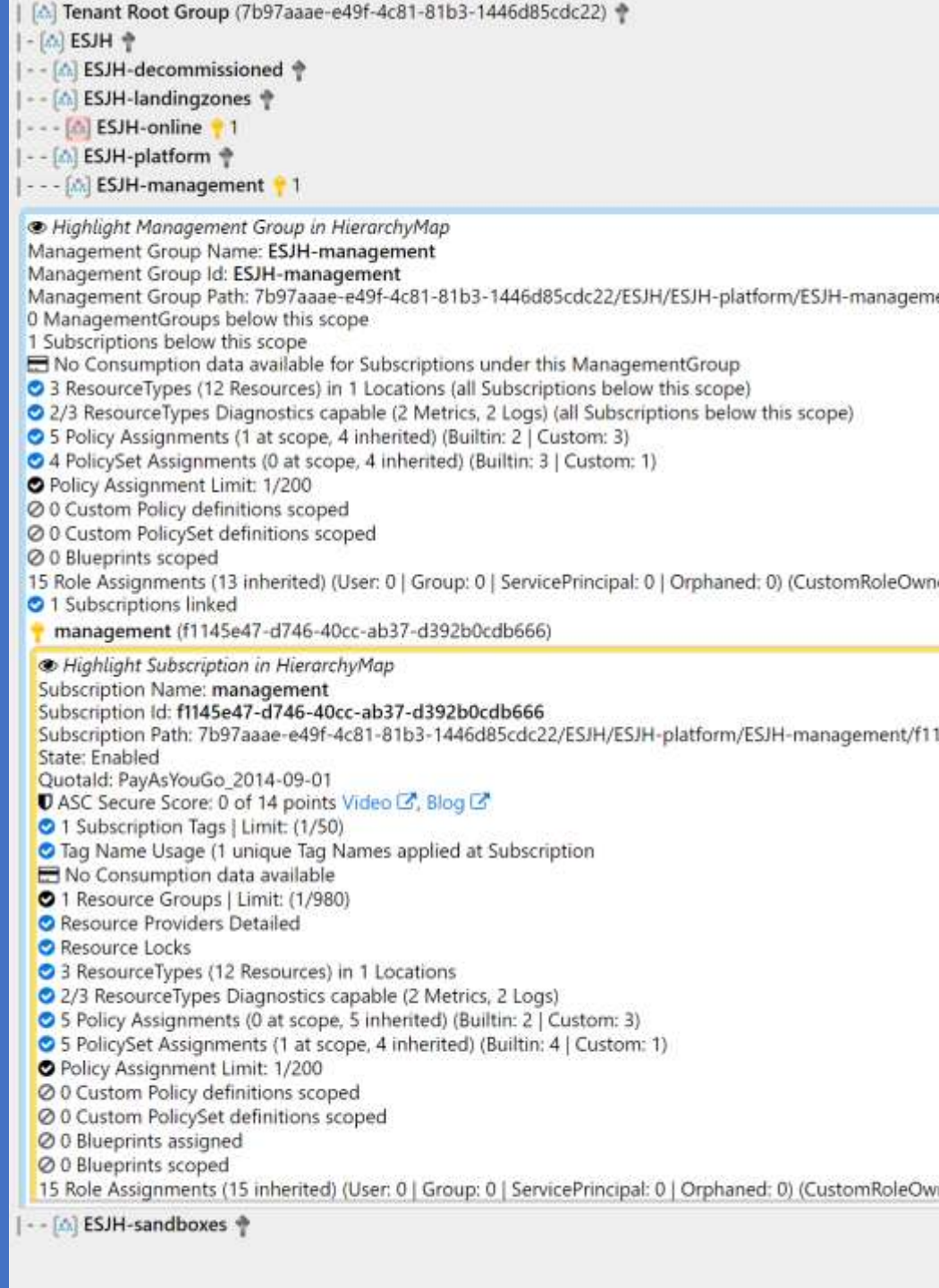
Azure Governance Visualizer

From the collected data AzGovViz provides visibility on your **HierarchyMap**, creates a **TenantSummary** on Management Groups and Subscriptions, creates **DefinitionInsights** for Policy and RBAC and builds granular **ScopeInsights** on Management Groups and Subscriptions.

- Management Groups
- Subscriptions



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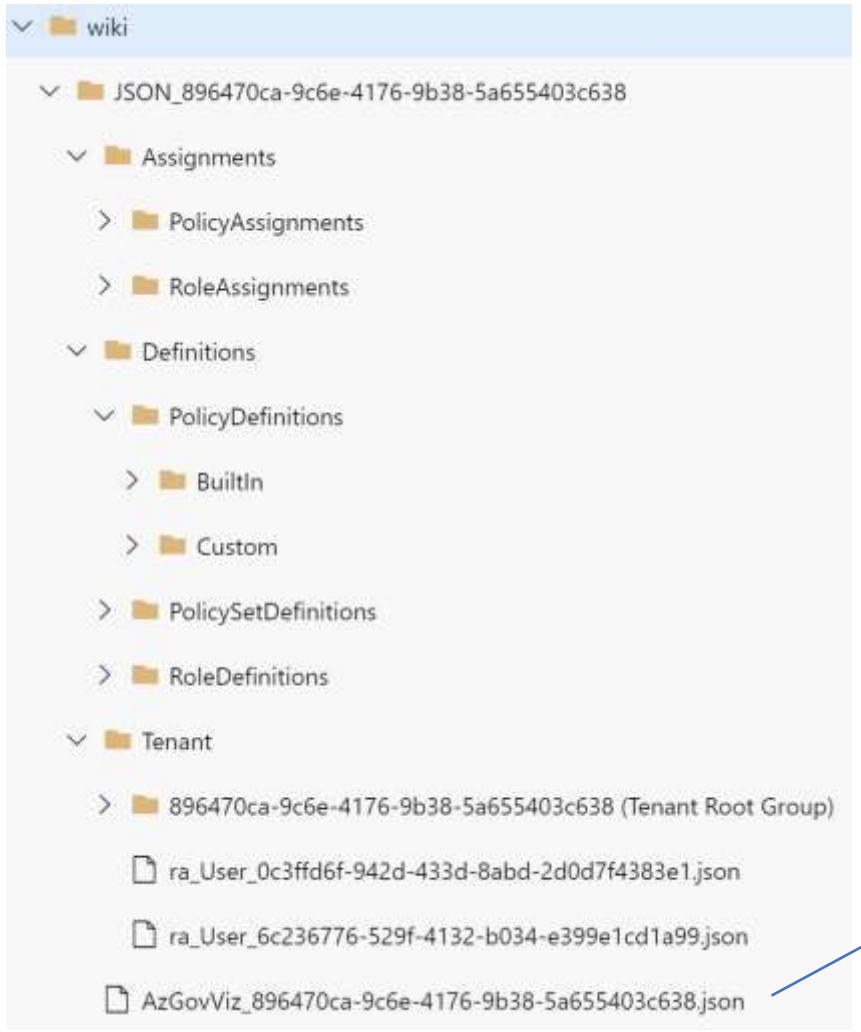
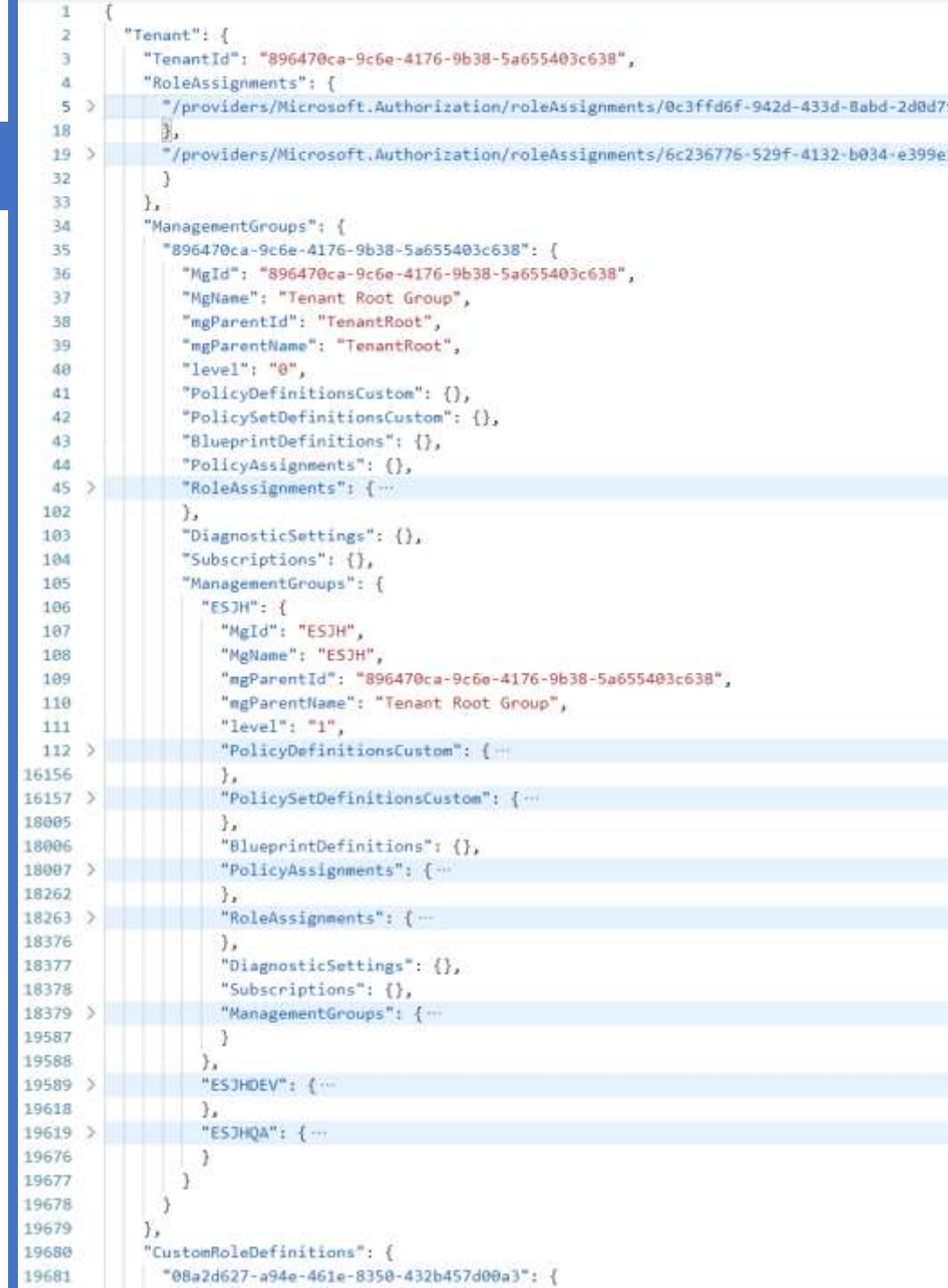
Your Tenant in JSON





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Azure Governance Visualizer

data ➡ output

- Hierarchy Settings
- Policy Definitions, Assignments, Compliance
- RBAC Definitions, Assignments
- Blueprints Definitions, Assignments
- Resource Groups
- Resource Providers
- Resource Types
- Resources
- Resources leveraging UAMI / vice versa
- Microsoft Defender for Cloud plan insights
- Locks usage
- Tags usage
- Approaching ARM Limits
- Management Group & Subscription diagnostic settings
- Resource diagnostics capability
- ServicePrincipal/Application insights
- Consumption information
- Security
- Change Tracking (RBAC, Policy, Resources)

CSV file(s)

- Collected data available in CSV file

HTML file

- Connects the dots by providing insights on **HierarchyMap**, **TenantSummary**, **DefinitionInsights** and **ScopeInsights** on Management Groups and Subscriptions
- Single HTML file **ScopeInsights** per Subscription

Azure DevOps Wiki ‘Mermaid plugin‘ ready markdown file

- Limited to hierarchy and list of Management Groups / Subscriptions plus a short summary

JSON file(s)

- Export of Management Group Hierarchy including all MG/Sub Policy/RBAC definitions, Policy/RBAC assignments and some more relevant information to JSON
- All Policy and RBAC definitions

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Azure Governance Visualizer

Parameters

`-DoManagementGroupsOnly`
Collect data only for Management Groups
Subscription data such as e.g. Policy assignments etc. will not be collected

`-HierarchyMapOnly`
Only create the Hierarchy Map

`-DoNotShowRoleAssignmentsUserData`
Scrub pii data such as user names and E-Mail address information

`-ChangeTrackingDays`
Define the period for change tracking on RBAC, Policy and Resources

`-DoAzureConsumption`
Collect comsumption information (aggregation for Management Group scopes; by ResourceType)

```
.\pwsh\AzGovVizParallel.ps1 -DoAzureConsumption
```

.. and a lot more parameters are available to adjust AzGovViz data return to your needs.
aka.ms/AzGovViz#Parameters

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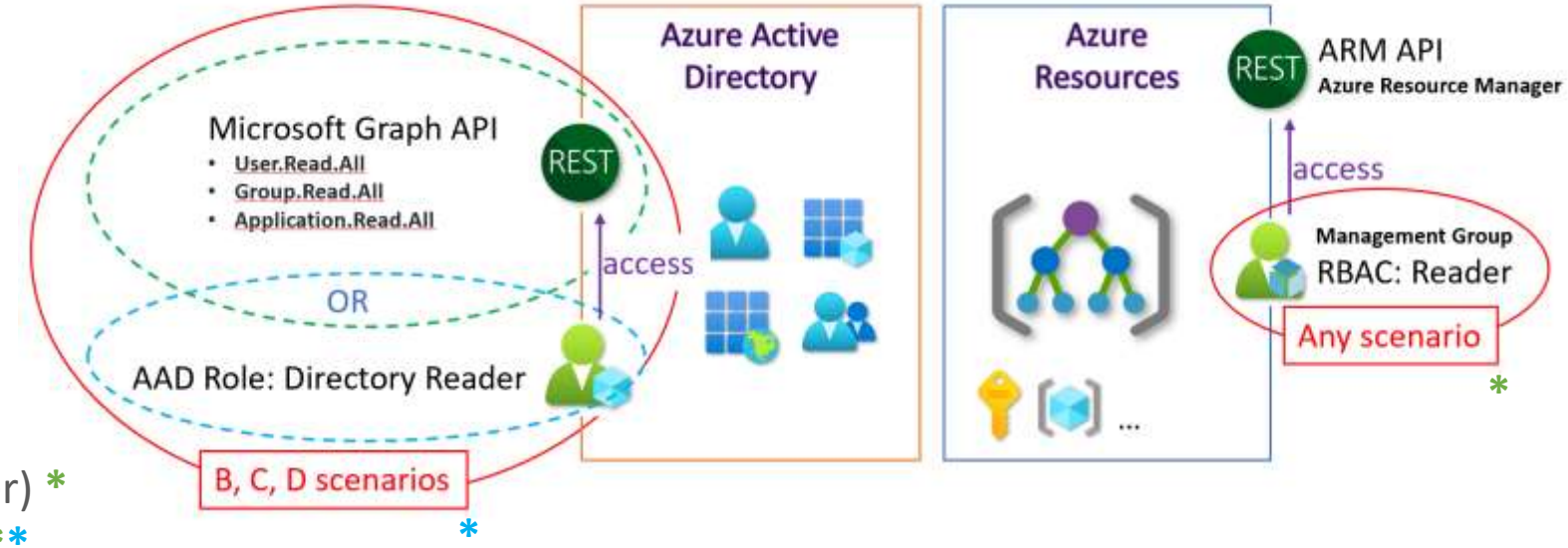
Azure Governance Visualizer

Scenarios / requirements

Requirements for all scenarios

- PowerShell Core (7.0.3)
- PowerShell Az Modules
  - Az.Accounts
  - ~~Az.Resources~~
  - ~~Az.ResourceGraph~~
- RBAC: **Reader** on Management Group



Scenario **A**: Console - User (userType=member) *
Scenario **B**: Console - User (userType=guest) **
Scenario **C**: Console - ServicePrincipal **
Scenario **D**: Azure DevOps, GitHub Actions - ServicePrincipal **

*API permissions: *http://aka.ms/AzGovViz#azgovviz-technical-documentation*

Azure Environments: AzGovViz is designed to support all Azure Clouds. By today it is verified working on AzureCloud, AzureUSGovernment and AzureChinaCloud (China Billing not supported)

Run AzGovViz in Azure DevOps | Azure CloudShell | GitHub Actions | GitHub Codespaces | Any PowerShell console

AzGovViz DEMO

Enterprise-Scale Landing Zones (WingTip)

RoadMap

- Option to ingest data to Log Analytics
- Option to publish HTML output to Azure Static Web App

Confidentiality of information

!

AzGovViz creates very detailed information on your Azure Governance setup.
In your organizations best interest, the **outputs should be protected from non-authorized access!**

AzGovViz

Azure Governance Visualizer

Your contribution welcome!

AzGovViz GitHub repositories

- Project Repository
  https://github.com/JulianHayward/Azure-MG-Sub-Governance-Reporting (aka.ms/AzGovViz)
- Microsoft CAF (Cloud Adoption Framework) Repository
  https://github.com/microsoft/CloudAdoptionFramework/tree/master/govern/AzureGovernanceVisualizer

Also checkout AzAdvertizer
.. helps you to keep up with the pace by providing overview and insights on new releases and changes/updates for Azure Governance capabilities such as Azure Policy's policy definitions, initiatives (set definitions), aliases and Azure RBAC's role definitions and resource provider operations. aka.ms/AzAdvertizer