Data on Demand Addendum Management Pack for Windows Computers

Introduction

The MP named Windows.Computer.DataOnDemand.Addendum provides different kinds of Agent Tasks for direct use in the SCOM console or in a Dashboard Tool.

Tasks

- Get-ComputerDescription
 - Retrieves the computer's local description and the one from the Active Directory computer object.
- Get-ComputerLastChanges
 - Displays the computers' last changes; last installed software, interactive logged on user, last boot, etc.
- Get-RemoteSOAPServiceInfo
 - Queries a remote web service via SOAP / XML displays its data.
 - Before RESTful became standard, web services could be consumed via SOAP.
- Get-SCOMNotificationConfig
 - Displays the SCOM's notification configuration incl. subscription, subscribers, channel, etc. → Tasks works only if selecting a Management Server!
- Get-MSGraphData
 - Queries Microsoft's Graph API by extending given OData functions
- Get-MSGraphBetaData
 - As Get-MSGraph Data, but targeting the beta version of the API.
- Get-MSO365MgmtData
 - Queries Microsoft's O365 Management API to get retrieve Service Health, Incidents and other information

Change History

Date	Build No.	Changes
2020-01-28	1.0.0.93	Initial upload to GitHub
2020-07-22	1.0.0.166	Added tasks for Graph API
2020-08-17	1.0.0.181	Added task for O365 Management API
2020-10-18	1.0.0.195	Support for pagination in Graph API
		Adding CPU & RAM info to Get-ComputerDescription

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Overview

This Management Pack does not require a new MP for storing overrides.

Tasks

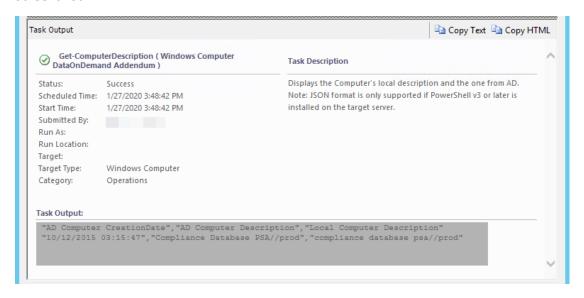
Get-ComputerDescription

Description:

Retrieves the computer's local description and the one from the Active Directory computer object.

Possible overrides:

- Output format: CSV, JSON, Text. Default is CSV
- Script timeout in seconds. Default is 180.



Get- ComputerLastChanges

Description:

Displays the computers' last changes; last installed software, interactive logged on user, last boot, etc.

Possible overrides:

- Output format: CSV, JSON, Text. Default is CSV
- Script timeout in seconds. Default is 180.



Get-SCOMNotificationConfig

Description:

Displays the SCOM's notification configuration incl. subscription, subscribers, channel, etc.

→ Task works only if selecting a SCOM Management Server!

Possible overrides:

Output format CSV, JSON, Text. Default is CSV

TimeOut Script timeout in seconds. Default is 180.

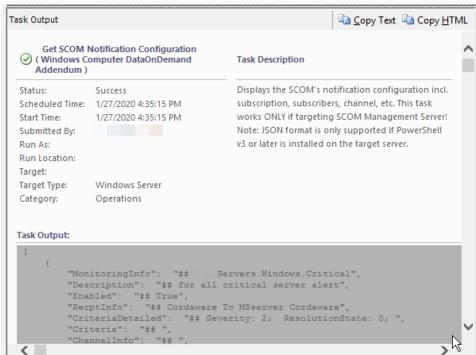
HideDisabled Hides disabled subscriptions [true|false] (default = true)
HideChannelInfo Hides Channel Information [true|false] (default = true)

SortedByColumn Sorts according to the field specified. (E.g. Description, DisplayName,

RecptInfo, Criteria, Enabled

AddVisualizationFlag Adds a ## (double hashtag) at the beginning of every 2nd entry so that

nice formatting can be performed



Get-RemoteSOAPServiceInfo

Description:

Queries a remote web service via SOAP / XML displays it's data.

Possible overrides:

Output format JSON, Text, List, default: JSON TimeoutSeconds Script timeout, default: 180

WebServiceURL e.g.: https://webserver.domain.com/apipoint

ContentType Default: application/soap+xml

XMLNodeName Name of the single node (e.g. unit or item or ...)
UserName UserName in clear text, used for basic authentication
PassWord Password in clear text, used for basic authentication

SortedByXMLNode Filter a Node with PowerShell syntax. E.g. Element -notLike "*off*"

Headers Request headers; presently only automatic via UserName and PassWord AddVisualizationFlag Adds a ## (double hashtag) at the beginning of every 2nd entry so that

nice formatting can be performed. Default is: True

```
Task Output

□ Copy Text □ Copy HTML

       Get-RemoteSOAPServiceInfo (Windows Computer
  DataOnDemand Addendum )
                                                          Task Description
                                                          Queries a remote SOAP service (XML) displays it's data. Note:
 Status:
                  Success
 Scheduled Time: 1/27/2020 4:23:26 PM
                                                          JSON format is only supported if PowerShell v3 or later is
 Start Time:
                  1/27/2020 4:23:26 PM
                                                          installed on the target server. Information for Headers are not
 Submitted By:
                                                          yet considered. Support will come in a later version.
 Run As:
 Run Location:
 Target Type:
                Windows Computer
 Category:
                 Operations
 Task Output:
            "ChannelName": "## cc_dubai_ftp",
           "ShortLog": "## ShortLog",
"Counter": "## 0",
"Direction": "## OUTBOUND",
            "AdapterType": "## File",
                        "## CBOB"
            "Party":
            "ChannelID": "## e93f90e224733f36bec9e8cf31ab46d0",
            "ActivationState": "## STOPPED",
            "Control": "## MANUAL",
            "Service": "## dubai ftp"
```

Get-MSGraphData / Get-MSGraphBetaData

Description:

Queries Microsoft's Graph API by extending given OData functions

Possible overrides:

Output format JSON, Text, List, default: JSON TimeoutSeconds Script timeout, default: 180

WebServiceURL Used for current Graph API Urls, overridable if MS changes.

ClientSecret Retrieved from the Azure Portal / App Registration
ClientId Retrieved from the Azure Portal / App Registration
TenantId Retrieved from the Azure Portal / App Registration

FilteredBy Filtering query result by PowerShell syntax

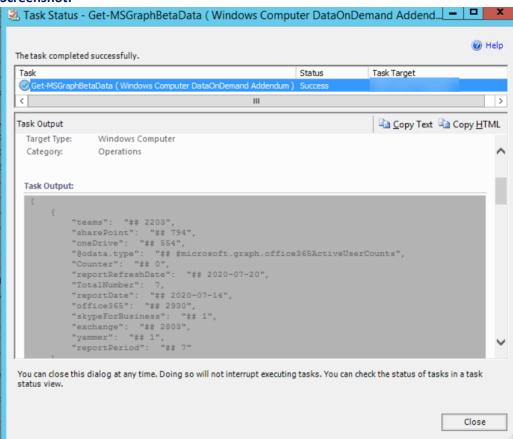
SortedBy Property of the query that is used to sort the result SortDescending Flag to decide if result is sorted from Top to Bottom

DisplayItemNumber Limits the items to be shown as the result

GraphQry Query for the Graph API

AddVisualizationFlag Adds a ## (double hashtag) at the beginning of every 2nd entry so that

nice formatting can be performed. Default is: True



Description:

Queries Microsoft's O365 Management API

Possible overrides:

Output format JSON, Text, List, default: JSON TimeoutSeconds Script timeout, default: 180

WebServiceURL Used for current API Urls, overridable if MS changes.
ClientSecret Retrieved from the Azure Portal / App Registration
ClientId Retrieved from the Azure Portal / App Registration
TenantId Retrieved from the Azure Portal / App Registration

FilteredBy Filtering query result by PowerShell syntax

SortedBy Property of the query that is used to sort the result SortDescending Flag to decide if result is sorted from Top to Bottom

DisplayItemNumber Limits the items to be shown as the result

GraphQry Query for the Graph API

AddVisualizationFlag Adds a ## (double hashtag) at the beginning of every 2nd entry so that

nice formatting can be performed. Default is: True

```
The task completed successfully.
Task
                                                                           Task Target
                                                            Status
Get-MSO365MgmtData (Windows Computer DataOnDemand Addendum) Success
Task Output
                                                                       Copy Text Copy HTML
           "Classification": "## Advisory",
           "FeatureDisplayName": "## Management and Provisioning",
           "Messages": "##
"Severity": "## Sev2",
           "Title": "## Any user with end-user spam notification (ESN) policies using
           "AffectedUserCount": "## "
           "MessageType": "## Incident",
           "ImpactDescription": "## Users with an ESN policy scoped by a rule using spe
           "TenantParams": "## ",
"WorkloadDisplayName": "## Exchange Online",
           "Feature": "## Provisioning",
"Workload": "## Exchange",
           "AdditionalDetails": "## "
           "Status": "## Extended recovery",
           "Id": "## EX213379",
           "UserFunctionalImpact": "## ",
           "AffectedTenantCount": "## 0",
           "EndTime": "## ",
           "AffectedWorkloadNames": "## ",
           "LastUpdatedTime": "## 2020-08-14T20:46:55.05Z",
           "FilteredNumber": 0,
           "StartTime": "## 2020-05-15T18:00:32
```

Preparation

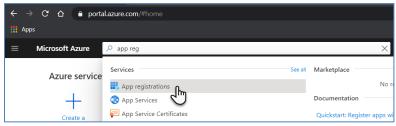
This Management Pack does not require a new MP for storing overrides.

Retrieve data from MS Graph API Before MS Graph API can be queried, permissions in Azure must be set.

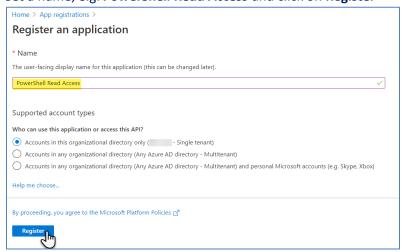
A step by step instruction can be found on: https://www.lee-ford.co.uk/getting-started-with-microsoft-graph-with-powershell/

In short.

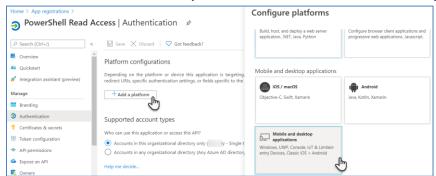
- 1. Navigate to portal.azure.com
- 2. Search for app registrations and click on it



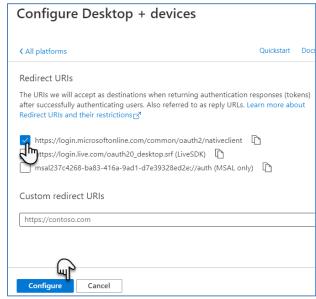
- 3. Click on new registration
- 4. Set a name, e.g. PowerShell Read Access and click on Register



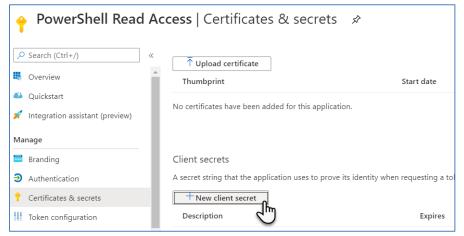
5. In Authentication select Add a platform and choose Mobile and desktop applications



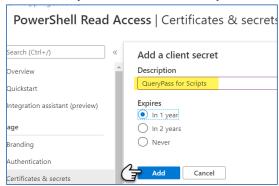
6. Tick the first option "login.. /oauht2/nativeclient" and confirm with configure



7. In Certificates & secrets choose New client secret



8. Add a description and choose an expiration time and proceed with Add.

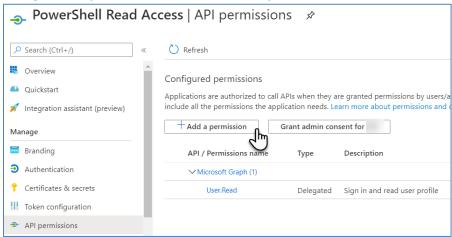


9. Copy the password to the clipboard and store it into a Password-Safe!

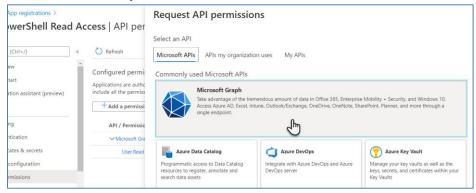


This password is the **clientSecret** and required when connecting with SCOM Task.

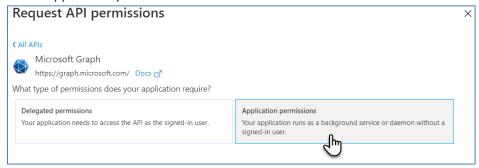
10. Change to API permissions and click on Add permissions



11. Select Microsoft Graph



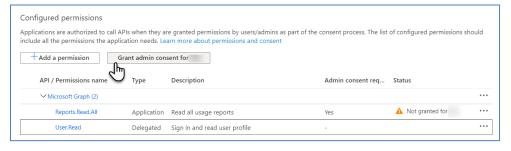
12. Select Application permissions



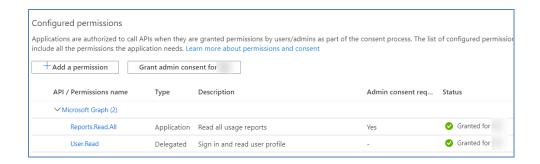
13. Search for reports and select Reports.Read.All and others if required.



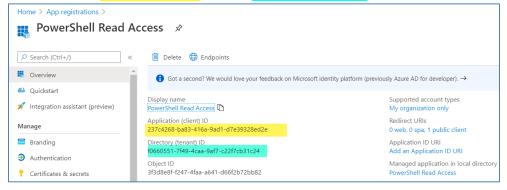
14. Click on Grant admin consent for ...



afterwards it should look as below:



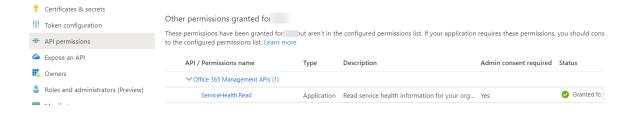
15. Note down the client ID (yellow) and the tenant ID (blue-ish) for usage.



Retrieve data from MS 0365 Management API

Based on the steps above, add the following API permissions:

Office 365 Management API, Application Permission, ServiceHealth READ and grant Admin consent. The result shall look like similar the screenshot below.



For additional information about Groups and SharePoint sites, consider these permissions, too:

API / Permissions name	Туре	Description	Admin consent req	Stat
✓ Microsoft Graph (12)				
AuditLog.Read.All	Application	Read all audit log data	Yes	②
Directory.Read.All	Application	Read directory data	Yes	②
Files.Read.All	Application	Read files in all site collections	Yes	②
Group.Read.All	Application	Read all groups	Yes	②
Organization.Read.All	Application	Read organization information	Yes	②
Reports.Read.All	Application	Read all usage reports	Yes	②
Sites.Read.All	Application	Read items in all site collections (preview)	Yes	②
User.Read	Delegated	Sign in and read user profile	-	②
✓ Office 365 Management APIs (1)				
ServiceHealth.Read	Application	Read service health information for your organization	Yes	②