

# Graph API Handling via PowerShell

Requirements: An App Registration with the appropriate permissions and a ClientSecret.

## Graph API Authentication

First, the authentication header must be compiled in the script. With this header (here the variable `$Header`) the authentication at the Graph API can be executed. The top three variables now contain the values, which were compiled in an upper point.

```
$TenantID = "<tenantid>"
$ClientId = "<cliendid>"
$ClientSecret = "<clientsecret>"

$Body = @{
    "tenant" = $TenantId
    "client_id" = $ClientId
    "scope" = "https://graph.microsoft.com/.default"
    "client_secret" = $ClientSecret
    "grant_type" = "client_credentials"
}

$params = @{
    "Uri" = "https://login.microsoftonline.com/$TenantId/oauth2/v2.0/token"
    "Method" = "Post"
    "Body" = $Body
    "ContentType" = "application/x-www-form-urlencoded"
}

$Global:MicrosoftEntraIDAccessToken = (Invoke-RestMethod @Params).access_token
```

# Graph API Resources - Getting Information

This is a simple example query to get information. This only reads out. By the method "GET" this can be recognized on the second line.

```
$Email = "<youremailaddress>"
$User = Invoke-RestMethod -Method GET -Uri "https://graph.microsoft.com/v1.0/users/$Email" -
ContentType "Application/Json" -Header @{Authorization = "Bearer
$Global:MicrosoftEntraIDAccessToken" }
```

The following is the output from the \$User variable, which has been populated in the top line with information from the Graph API.

```
@odata.context      : https://graph.microsoft.com/v1.0/$metadata#users/$entity
businessPhones      : <yourbusinessphones>
displayName          : <yourdisplayname>
givenName           : <yourforename>
jobTitle            : <yourjobtitle>
mail                : <youremailaddress>
mobilePhone         : <yourmobilephonenumber>
officeLocation      : <yourofficelocation>
preferredLanguage   : <yourpreferredlanguage>
surname             : <yoursurname>
userPrincipalName   : <yourupn>
id                  : <youruserid>
```

# Graph API Resources - Create information

In the following example, an entity is created via the Graph API in Intune. Here, the necessary information is now also transmitted, using JSON Body.

```
$KGTAG = "TST"
$scopeTagProdName = "SCT-INT-$KGTAG-INTUNE-KGObjects-PROD"
$scopeTagProdBody = @"
{
```

```

    "displayName": "$ScopeTagProdName",
    "description": "ScopeTag for Company $KGTAG"
}
"@
$global:ScopeTagProd = Invoke-RestMethod -Method POST -Uri
"https://graph.microsoft.com/beta/deviceManagement/roleScopeTags" -ContentType
"Application/Json" -Header @{Authorization = "Bearer $Global:MicrosoftEntraIDAccessToken" } -
body $ScopeTagProdBODY

```

\$global:ScopeTagProd is a global variable which has been populated with the return of the graph query above. The content of the variable is as follows:

id	displayName	description	isBuiltIn
45	SCT-INT-TST-INTUNE-KGObjects-PROD	ScopeTag for Company TST	False

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