

Basics

Expanding objects

Much of the data we receive from cmdlets are objects that require further manipulation to get to the data we're looking for.

```
# Connect to Microsoft Graph
Connect-MgGraph -Scopes "Mail.Read"

# Define the user and folder details
$userId = "user@domain.com"
$mailFolderId = "folder-id-here"

# Get the messages in the specified folder
$messages = Get-MgUserMailFolderMessage -UserId $userId -MailFolderId $mailFolderId

# Format the output to expand sender, from, and include subject
$messages | Select-Object -Property Id,ReceivedDateTime,From,Sender,Subject | Format-List
```

Below is example output of the above script:

```
# example output without object expansion
# note the un-expanded values for From and Sender
Id           : [REDACTED_GUID]
ReceivedDateTime : MM/DD/YYYY 2:52:35 AM
Subject      : [REDACTED_SUBJECT]
From         : Microsoft.Graph.PowerShell.Models.MicrosoftGraphRecipient
Sender      : Microsoft.Graph.PowerShell.Models.MicrosoftGraphRecipient
```

The actual data we're looking for related to From and Sender is in the following expansions:

```
From.EmailAddress.Name
From.EmailAddress.Address
Sender.EmailAddress.Name
Sender.EmailAddress.Address
```

Below is an example of how to accomplish that in the Select-Object statement:

```
# Connect to Microsoft Graph
Connect-MgGraph -Scopes "Mail.Read"

# Define the user and folder details
$userId = "user@domain.com"
$mailFolderId = "folder-id-here"

# Get the messages in the specified folder
$messages = Get-MgUserMailFolderMessage -UserId $userId -MailFolderId $mailFolderId

# Format the output to expand sender, from, and include subject
$messages | Select-Object -Property Subject,
    @{Name="SenderName";Expression={$_.Sender.EmailAddress.Name}},
    @{Name="SenderEmail";Expression={$_.Sender.EmailAddress.Address}},
    @{Name="FromName";Expression={$_.From.EmailAddress.Name}},
    @{Name="FromEmail";Expression={$_.From.EmailAddress.Address}} |
    Format-List
```

The output is not actual useful data, rather than the name of the object type that was returned:

```
Id           : [REDACTED_GUID]
ReceivedDateTime : MM/DD/YYYY 2:52:35 AM
Subject       : Weekly Duo Report
SenderName    : Security Team
SenderEmail   : security@domain.com
FromName      : Security Team
FromEmail     : security@domain.com
```

Revision #3

Created 8 November 2023 14:51:43 by bluecrow76

Updated 22 October 2024 16:54:05 by bluecrow76