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Read Emails and Attachment from Office 365 using IDMC (CAI)

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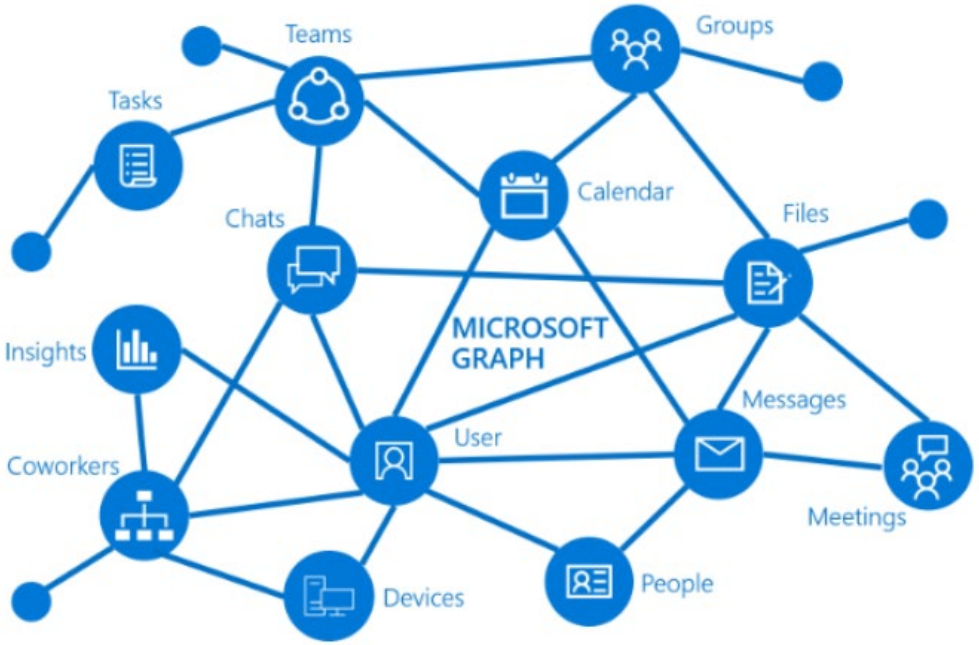
Agenda

- Microsoft Graph API Overview
- Microsoft Graph API Integration with IDMC
- Prerequisites: Azure Portal Setup in office 365 sandbox
- Prerequisites: Token Generation
- Connection setup within CAI
- Defining Input Parameters for the custom API
- Demo
- Q&A

Microsoft Graph API Overview

The Microsoft Graph API offers a single endpoint, https://graph.microsoft.com, to provide access to rich, people-centric data and insights in the Microsoft cloud, including Microsoft 365, Windows, and Enterprise Mobility + Security. One can use REST APIs or SDKs to access the endpoint and build apps that support Microsoft 365 scenarios, spanning across productivity, collaboration, education, people, and workplace intelligence, and more.

Microsoft Graph exposes REST APIs and client libraries to access data on the following Microsoft cloud services:



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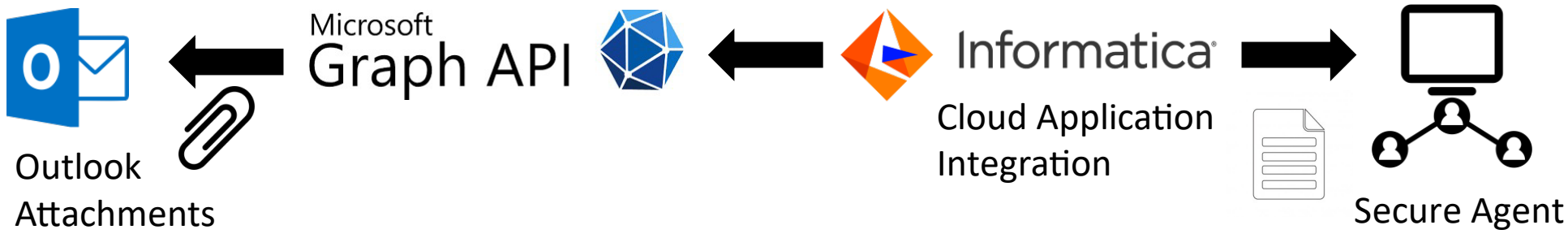
Microsoft Graph API Integration with IDMC

- Cloud Application Integration (CAI) service offers a single, trusted solution to support any integration pattern, data set, user-type, or endpoint to automate business processes, expedite transactions and enable real-time analytics.

- The utility developed on CAI will handle all the complexity of traversing multiple Microsoft Graph APIs in the backend and presents the user with some basic Input requests with which an attachment from an email can be fetched and copied over to the Secure Agent server directory.



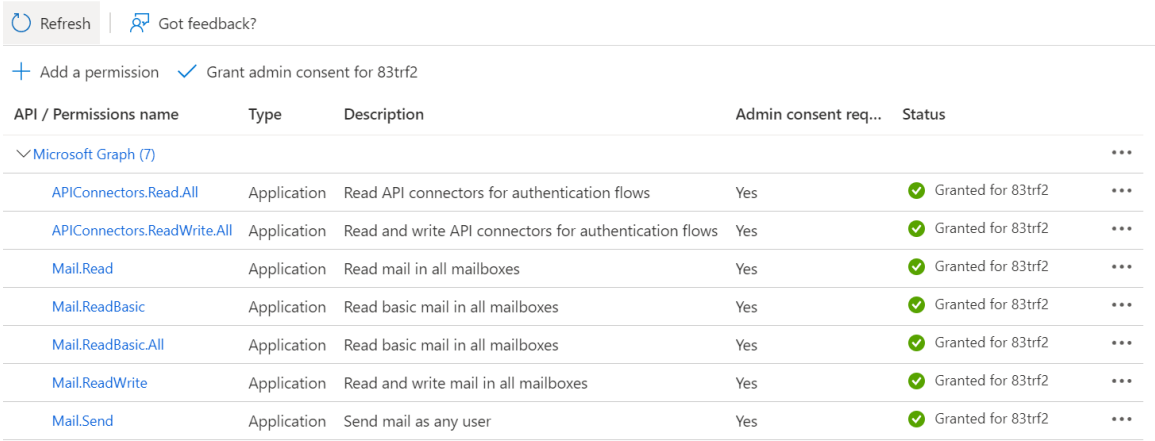
Prerequisites: Azure Portal Setup in office 365 sandbox

Microsoft Graph API requires certain permissions to be given to it on Azure portal and requires some additional steps to ensure safety and adherences to security. The article below covers everything about authorization and security in details.

https://learn.microsoft.com/en-us/graph/auth/auth-concepts?view=graph-rest-1.0

Registration to Azure Portal: Azure portal registration is an important step as it integrates your application with Azure. Link: https://portal.azure.com/

API Permissions: Once registered it is critical to provide Microsoft Graph API some permissions. Read Permissions are a must and write permissions can be skipped if there is no plan to customize the API further for specific needs.



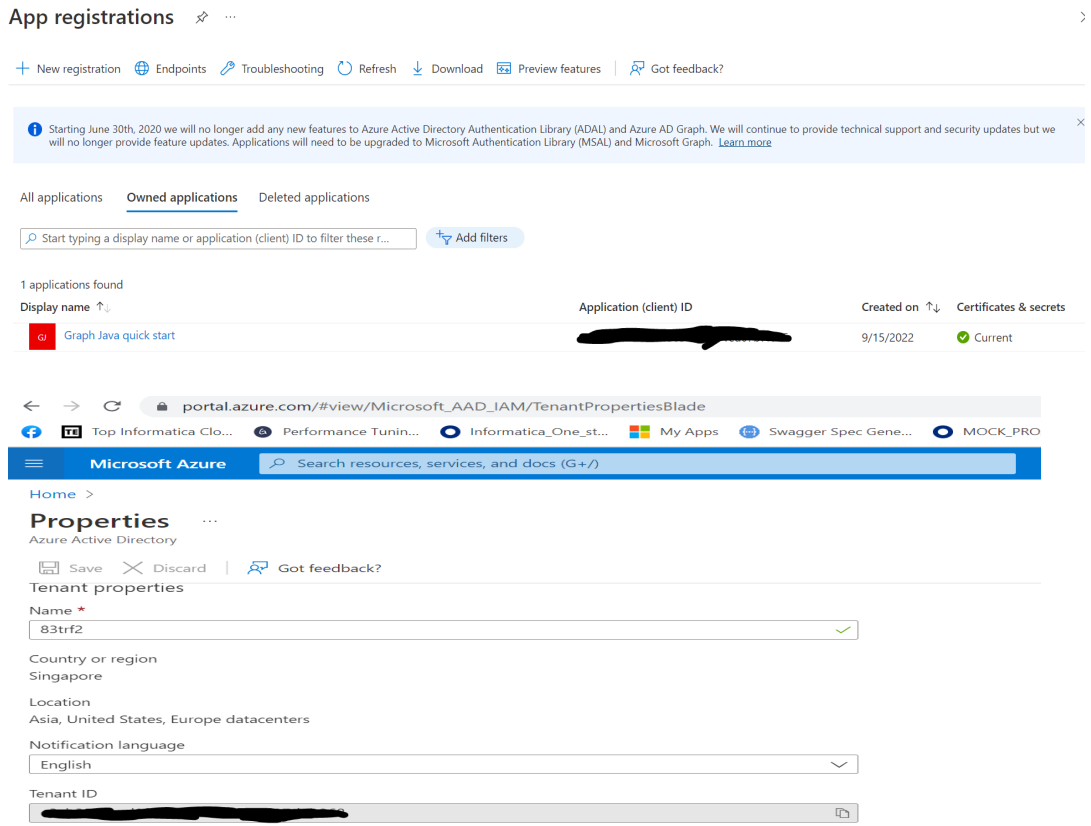
API / Permissions name	Type	Description	Admin consent req...	Status
Microsoft Graph (7)				
APIConnectors.Read.All	Application	Read API connectors for authentication flows	Yes	Granted for 83trf2
APIConnectors.ReadWrite.All	Application	Read and write API connectors for authentication flows	Yes	Granted for 83trf2
Mail.Read	Application	Read mail in all mailboxes	Yes	Granted for 83trf2
Mail.ReadBasic	Application	Read basic mail in all mailboxes	Yes	Granted for 83trf2
Mail.ReadBasic.All	Application	Read basic mail in all mailboxes	Yes	Granted for 83trf2
Mail.ReadWrite	Application	Read and write mail in all mailboxes	Yes	Granted for 83trf2
Mail.Send	Application	Send mail as any user	Yes	Granted for 83trf2

Prerequisites: Token Generation

Token Generation is required to ensure adherence to security protocols and to ensure no unauthorized access takes place. The utility can generate token if it is provided with the necessary keys as an encrypted value at the connections level.

Client ID: It is the application ID that registration portal has assigned the app. Can be checked in following link: https://go.microsoft.com/fwlink/?linkid=2083908

Tenant ID: It can be located by searching for tenant properties in Azure and then scrolling down to locate tenant ID. https://portal.azure.com/#view/Microsoft_AAD_IAM/TenantPropertiesBlade



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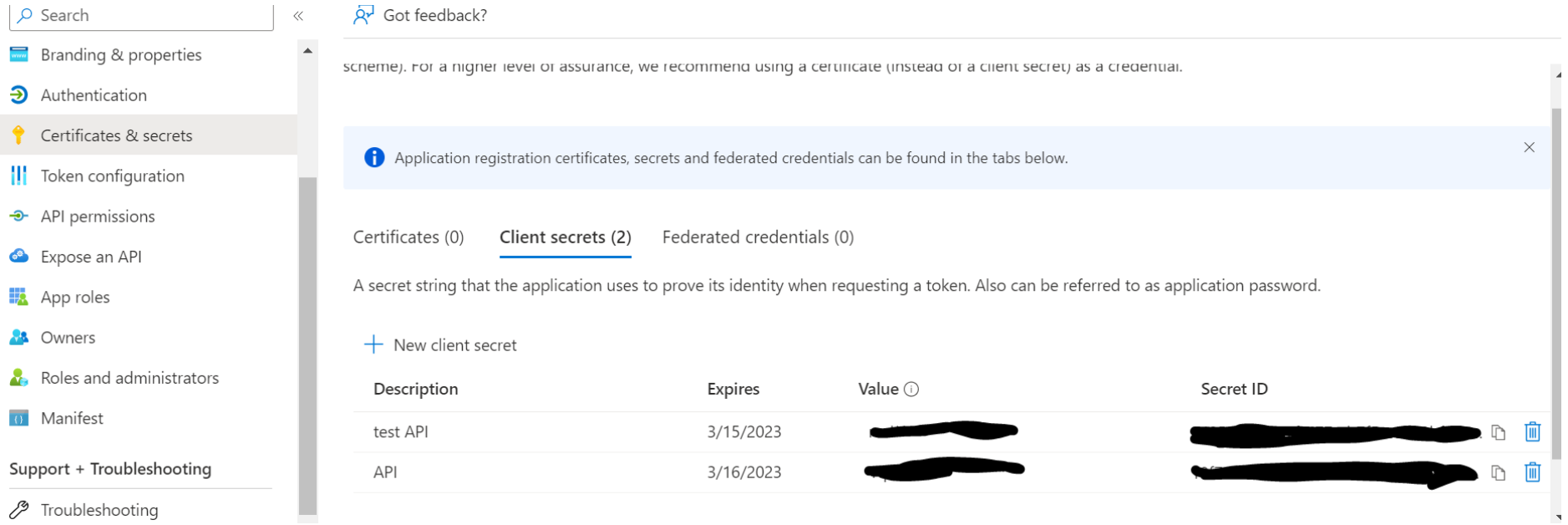
Prerequisites: Automating Token Generation

Client Secret: Client Secret key can be created under Certificates & Secrets tab in Azure directory. The 'value' field defined is the actual key which should be used to generate token.

Except for Client Secret all other are static values. Client Secret should be newly created every few months as a best practice to ensure security adherence.



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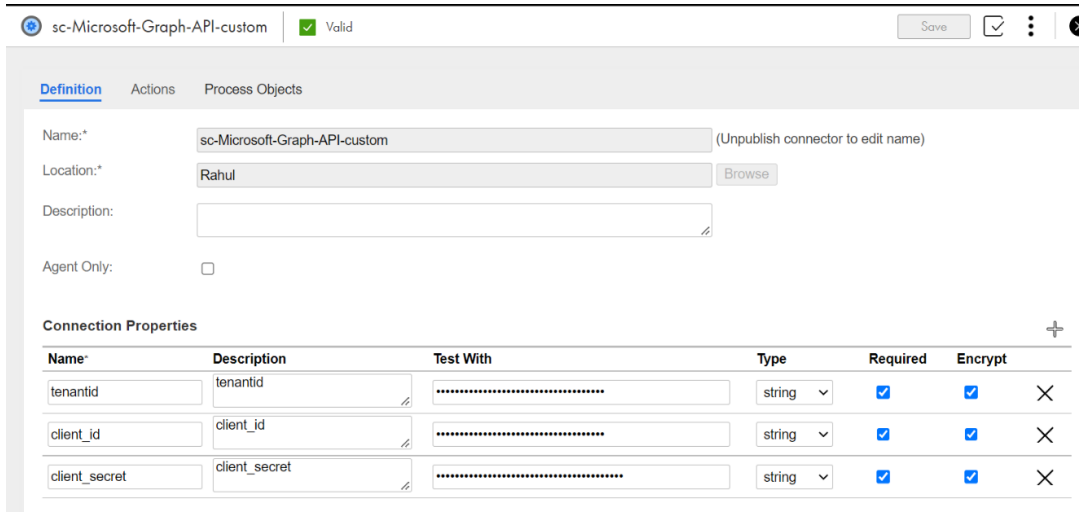
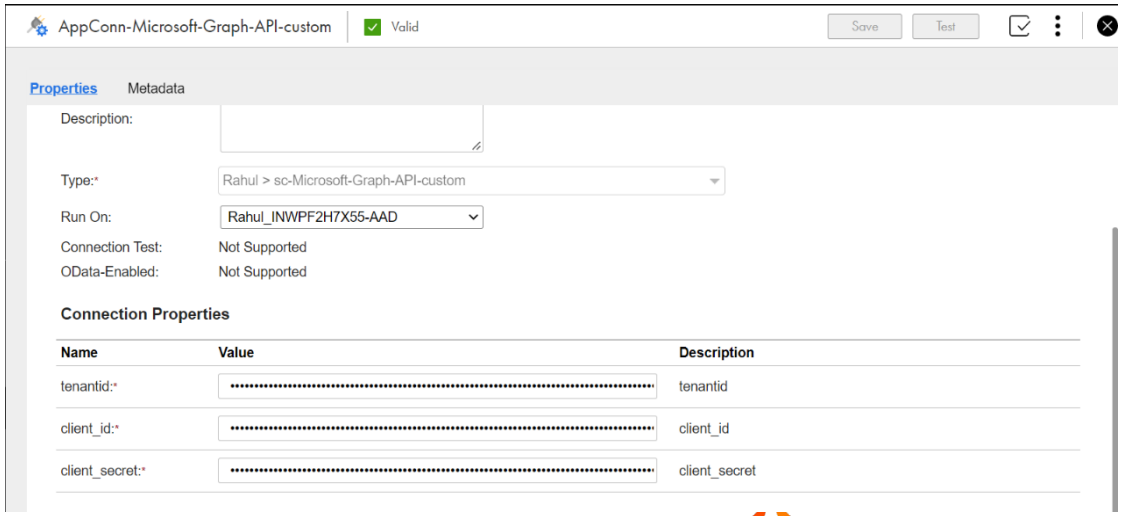
Connection setup within CAI

To use the utility, one needs to import it within Informatica Cloud Application Integration and update the connections within it.

Update of App Connection: The App connection will require the values of Client ID, Tenant ID and Client Secret to generate the token and call the Microsoft Graph API as required. Once it is updated alongside repointing of Secure Agent then Publish the connection.





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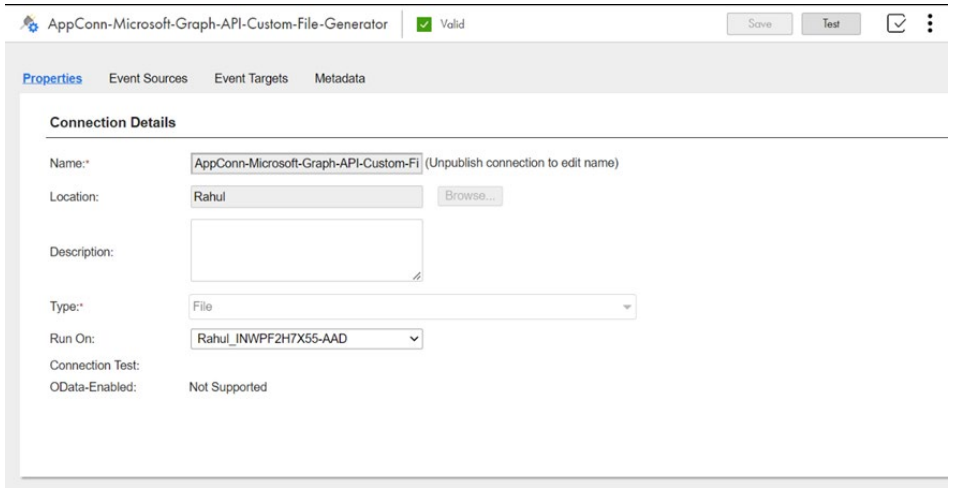
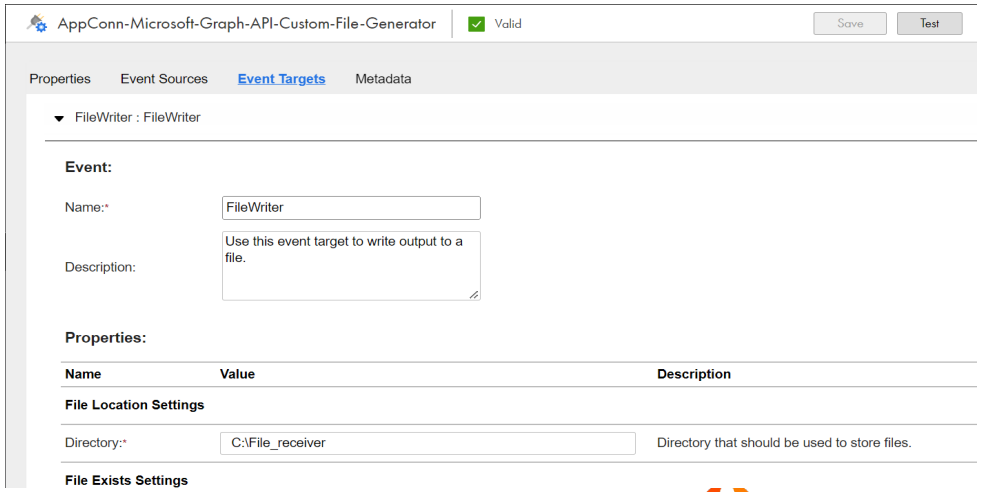
Connection setup within CAI

Update of File Connection: Two files are generated as part of the process; one being the data file and other being the Delta Key file. One needs to repoint the Secure Agent and update the Target Directory for file generation under Event Target tab.

- Delta key file stores the key using which Delta Detection is done on emails and only the latest emails are processed. This ensures processing of only latest files during every run.
- Data file from email attachment is recreated on Secure Agent server if the previous file is not present and is appended to existing file if a file is already present on Secure Agent server. This solution is used to handle multiple attachment files within one single email.





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Defining Input Parameters for the custom API

userID: Should be the email/user id of the receiver.

SearchFolder: Pass a search string to locate the email in a particular folder

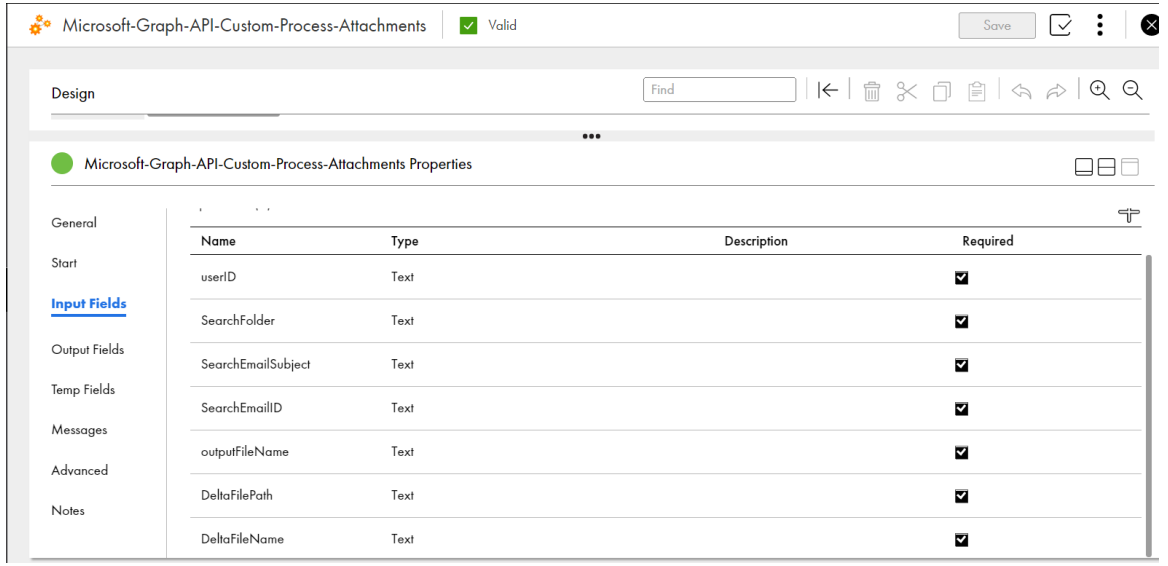
SearchEmailSubject: Pass the email subject as a search string with which the folder is searched for

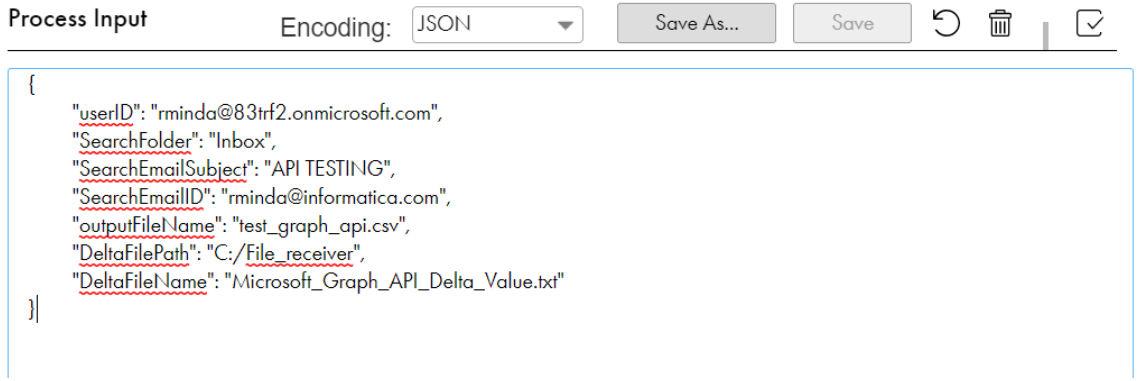
SearchEmailID: Pass the sender email ID which would contain the data file

outputFileName: To provide the file name which would be generated with data from attachments in email

DeltaFilePath: To provide the file path which you would have specified in the Delta file connection

DeltaFileName: To pass the file name which would have the delta key stored for next run.





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Q&A

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