

Send-Read Mail from Microsoft Graph API

Version 1.0

Date : 24th Jul 2025



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| Current TD Version: | 1.0 |

Usage guidelines and Specific Instructions:

- **Document Flow-** The flow of the document is generic. Specific changes to the flow will be required to be made by the client team to suit the client context.
- **Document Content-** The content explains the technical specification in a generic manner. Specific changes are required to be made to meet client requirements.
- **Section 1 -** The overall requirement summary, General technical Information, assumptions, dependencies, and messages volume details need to be documented as a part of this section.
- **Section 2 –** This section caters to the detailed functional requirement. The technical flow diagram and description are to be compulsorily designed and documented here. This should also include each processing step details, Exception handling, Message transformation and value mapping details.
- **Section 3 –** Finer details like Tenant Database area requirement like Data Store, variables and JMS queues requirement and specify the transport details.
- **Section 4 -** The section needs to cover all the key business test conditions and assembly test conditions that the enhancement must satisfy.
- **Section 5 –** All issues that have cropped up so far and their present status are to be highlighted in this section.

Revision History

| Version No. | Change Date | Author | Revision Short Description | ITSM Ticket No |
|-------------|---------------------------|----------------|----------------------------|----------------|
| 1.0 | 24 th Jul 2025 | Yogesh Wadakar | Document prepared | |
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Other Related Documents

| Related Document | Comment |
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Document Approvals for all changes

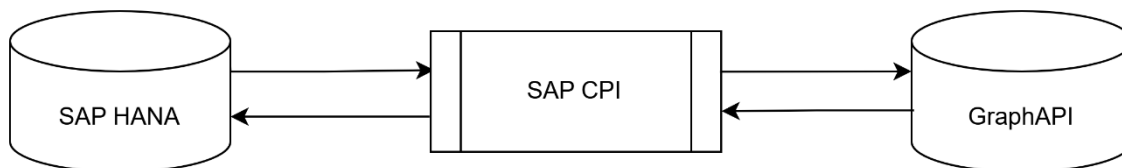
| Version No. | Author Name | Approver Name | Approver Role | Approve Date |
|-------------|----------------|---------------|---------------|---------------------------|
| 1.0 | Yogesh Wadakar | Krishna Kumar | Delivery Lead | 25 th Jul 2025 |
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1. Development Overview

1.1 Requirements Summary with Process flow diagram



Using this integration, we are sending and retrieving mails.

1.2 Cloud Integration – General Technical Details

| Parameter | Description |
|---|--|
| Integration Scenario Technical Description | This integration used to send and retrieve message from Microsoft teams to SAP HANA. |
| Business Benefits | Help to communicate through teams. |
| Process Owner | Krishna Kumar |
| Technical Owner | Krishna Kumar |
| Systems/Applications Involved | HANA 2.0 |
| Integration Package Technical Name | MicrosoftMailIntegrationwithSAPHANA |
| Integration Package Name | Microsoft Mail Integration with SAP HANA |
| Integration Flow Technical name | MicrosoftMailIntegrationwithSAPHANA |
| Integration Flow Name | Send-Read Mail from Microsoft Graph API |

1.3 Assumptions

The sender will send the correct JSON Body to send the mail.

1.4 Messages Volume

| Parameter | Description |
|--|-------------------|
| Total Number of Messages per day | As per requested. |
| No of Messages per single Iflow/Process model execution | Single |
| Per message size in Bytes | As per body |

1.5 Messages Archival requirement

1. Messages Archival required? YES No

2. If YES to question 1:

a. How long messages to be save in Archived area? _____ days

b. Please specify reason / explain the need for these data required? Please check all that applies.

Legal requirement:
Explain: _____

Business
Explain: _____

Tax
Explain: _____

Audit
Explain: _____

Others: Specify _____
Explain: _____

1.6 Integration Flow /process model Execution Details

| | |
|---|---|
| Data Source/sender System: | Microsoft Teams |
| Data Target /Receiver System: | SAP HANA 2.0 |
| Reference system for Direction below | Either sender or Receiver system mentioned above |
| Direction (With respect to Source/sender system) | <input checked="" type="checkbox"/> Inbound Interface data flows inbound to Reference system <input checked="" type="checkbox"/> Outbound Interface data flows outbound from Reference system <input type="checkbox"/> Other Specify: <input type="text"/> |
| Interface Type | <input type="checkbox"/> Batch <input type="checkbox"/> Near Real-Time <input checked="" type="checkbox"/> Real-Time <input type="checkbox"/> File Upload <input type="checkbox"/> Other |
| Interface Frequency | <input type="checkbox"/> Hourly Details: <input type="text"/> <input type="checkbox"/> Daily Details: <input type="text"/> <input type="checkbox"/> Weekly Details: <input type="text"/> <input type="checkbox"/> Monthly Details: <input type="text"/> <input type="checkbox"/> Quarterly Details: <input type="text"/> <input type="checkbox"/> Yearly Details: <input type="text"/> <input checked="" type="checkbox"/> On-Demand How often: As per request. <input type="checkbox"/> Other Specify: <input type="text"/> |
| Type of Records Sent | <input type="checkbox"/> Full record load Send all records every time interface is executed <input type="checkbox"/> Delta full records Only send records where one or more fields have changed since previous execution <input checked="" type="checkbox"/> Delta records Only send fields (and keys) that changed since previous interface execution <input type="checkbox"/> Other Specify: <input type="text"/> |

| | |
|----------------------------------|---|
| Quality of Legacy Data | <input checked="" type="checkbox"/> Good <input type="checkbox"/> Average <input type="checkbox"/> Poor |
| Complexity of Legacy Data | <input checked="" type="checkbox"/> Good <input type="checkbox"/> Average <input type="checkbox"/> Poor |
| Attachments | <input type="checkbox"/> YES Specify: type and number of attachments <input checked="" type="checkbox"/> NO <input type="checkbox"/> Other Specify: |

1.7 Naming Convention Guidelines Details

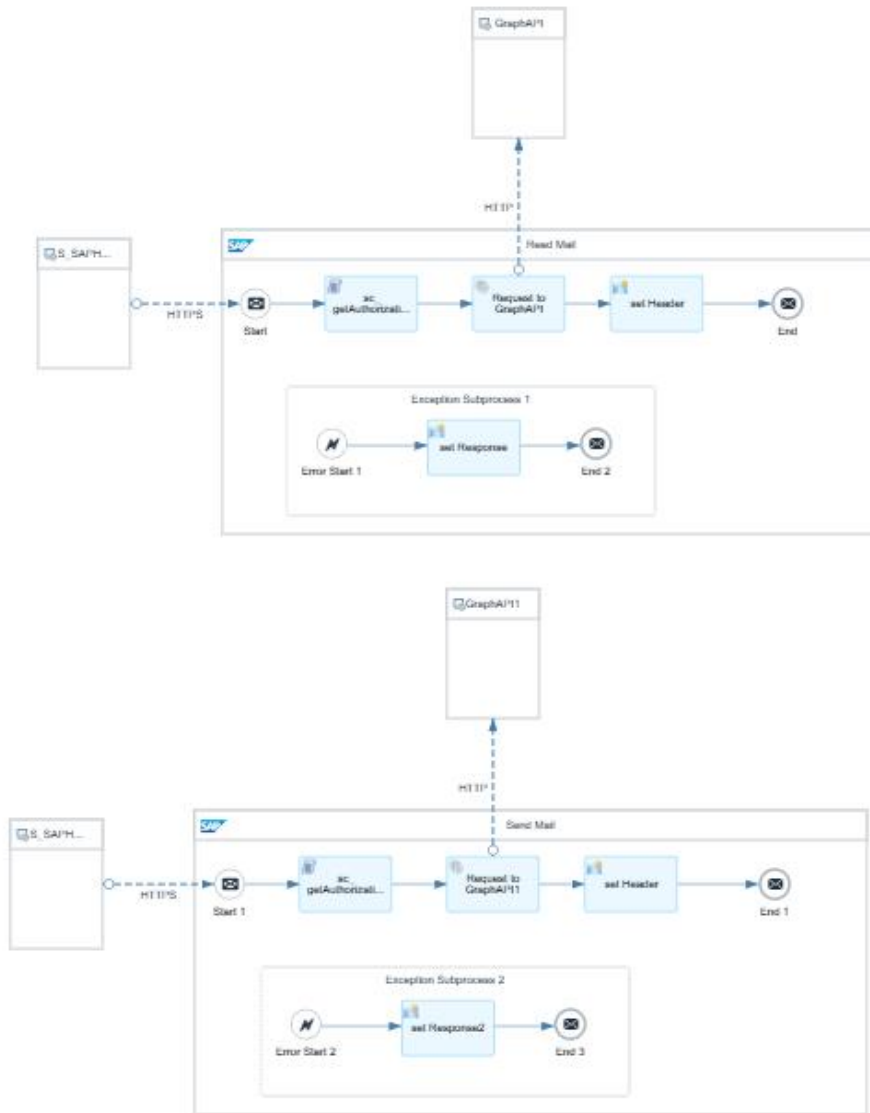
- a. Name of the package – 120 characters (Flexible based the involved product names)
- b. short text of the package – 120 characters
- c. Description of the package – 1-3 paragraphs
- d. Name of the Artifact – 80 characters
- e. Integration Flow (Artifact) Description (Short Text): 120 Characters

1.8 Security, Integrity, and Controls (systems Authentication details)

| System | Authentication Method | Cloud Integration (Security Artifact) | Type of Security Artifact | Version No | Created By | Status |
|-----------|-----------------------|---|---|------------|------------|----------|
| Graph API | OAuth2 Authorization | AzureCerdential with scope of https://graph.microsoft.com /Mail.Read https://graph.microsoft.com /Mail.ReadBasic https://graph.microsoft.com /Mail.ReadWrite https://graph.microsoft.com /Mail.Send | OAuth2 Authorization Code (Microsoft 365) | 1.0 | - | Deployed |

2 Detailed Technical Specifications

2.1 Integration Flow/Process Model Flow Diagram including all sub processes and dependent Integration Flows



2.2 Technical Flow Description for each Integration Process model wise

To send an email, the sender provides the message body in JSON format. Using OAuth credentials, a Groovy script retrieves the token, adds it to the Authorization header, and sends the request to the Microsoft Graph API.

To read an email, the sender sends a request. Using OAuth credentials, a Groovy script retrieves the token, adds it to the Authorization header, and sends the request to the Microsoft Graph API.

2.3 Channels Configurations

| Step ID | request system | Adapter Type | Security Artifact/Authentication | Trigger details (End points, HTTP method, file name, etc..) |
|----------|----------------|--------------|---|---|
| Sender | SAP HANA | HTTPS | Bearer Token | Get/Post <Endpoint Address> |
| Receiver | Microsoft | HTTP | OAuth2 Authorization Code (Microsoft 365) | Get/Post <graphAPI> |

2.4 Externalization (Configuration)

| Parameter | Value |
|--------------|--|
| Endpoint URL | Enter endpoint address as per naming convention. |
| graphAPI | Graph API. |
| | |

3 Testing Requirements

3.1 Test Body

Retrieve Mail message: Get - /ms/getEmail/<folder-id>/messages

Send Mail message: Post - /ms/sendEmail

```
{ "message": {
  "subject": "test email config.",
  "body": {
    "contentType": "text/html",
    "content": "email body"
  },
  "toRecipients": [
    {
      "emailAddress": {
        "address": "test1@sample.com"
      }
    }
  ],
  "ccRecipients": [
    {
      "emailAddress": {
        "address": "test2@sample.com"
      }
    }
  ],
  "attachments": [
    {
      "@odata.type": "#microsoft.graph.fileAttachment",
      "name": "attachment.txt",
      "contentType": "text/plain",
      "contentBytes": "SGVsbG8gV29ybGQh"
    }
  ]
}}
```

3.2 Key Unit/Assembly Test Conditions

| Unit Test Log | | | | | | |
|----------------|---------------------------|------------------------------|--------------------------|-------------------------|----------------|----------------------|
| Test Objective | | | | | | |
| Step No. | Date | Description | Expected Output/Results | Actual Output/Results | Requirement ID | Sign-off |
| 1 | 24 th Jul 2025 | Send a mail to recipient. | Recipient will get mail. | Recipient got the mail. | | Tested successfully. |
| 2 | 24 th Jul 2025 | Send a request to read mail. | Sender will get mail. | Sender got mail. | | Test Successfully. |
| Notes | | | | | | |