

Task1

Technical Specification Document

Author	
Date	2025-12-23
Version	1.0.0

1.1 Purpose

The purpose of this integration flow is to facilitate the automated exchange of email messages between a sender and a receiver using the SMTP and IMAP protocols. This integration flow is designed to handle the sending of emails with dynamic content and the retrieval of unread emails from a specified inbox. It leverages Groovy scripts for processing and content modification, ensuring that the integration is both flexible and efficient. The flow is structured to allow for easy maintenance and scalability, accommodating future enhancements or changes in business requirements.

1.2 Scope

This integration flow encompasses the following key functionalities:

- Sending emails through an SMTP server, with support for dynamic subject lines and body content.
- Retrieving unread emails from an IMAP server, with options for processing and archiving.
- Utilizing Groovy scripts for custom processing logic, allowing for complex transformations and data manipulations.
- Implementing error handling and logging mechanisms to ensure reliability and traceability of email transactions.
- Providing configuration options for email server settings, including authentication methods and security protocols.

The integration flow is intended for use in environments where automated email communication is required, such as notifications, alerts, or data exchange between systems.

2.2 Integration Components

Component	Description
SMTP Server	

	Used for sending emails. Configured with server address, port, and authentication details.
IMAP Server	Used for retrieving emails. Configured with server address, port, and authentication details.
Groovy Script	Custom script for processing email content and headers before sending or after receiving.
Content Modifier	Modifies the email content and headers based on dynamic values from the integration flow.
Logging Mechanism	Captures and logs events and errors for monitoring and troubleshooting purposes.

3.3 Security Requirements

Requirement	Description
Authentication	Basic authentication is used for both SMTP and IMAP servers to ensure secure access.
Encryption	Support for SSL/TLS encryption for secure transmission of email data.
Access Control	Configuration of allowed origins and headers to prevent unauthorized access.
Logging	

	All events are logged for auditing and monitoring purposes, ensuring traceability of actions.
Error Handling	Mechanisms in place to handle exceptions and return appropriate responses to the sender.