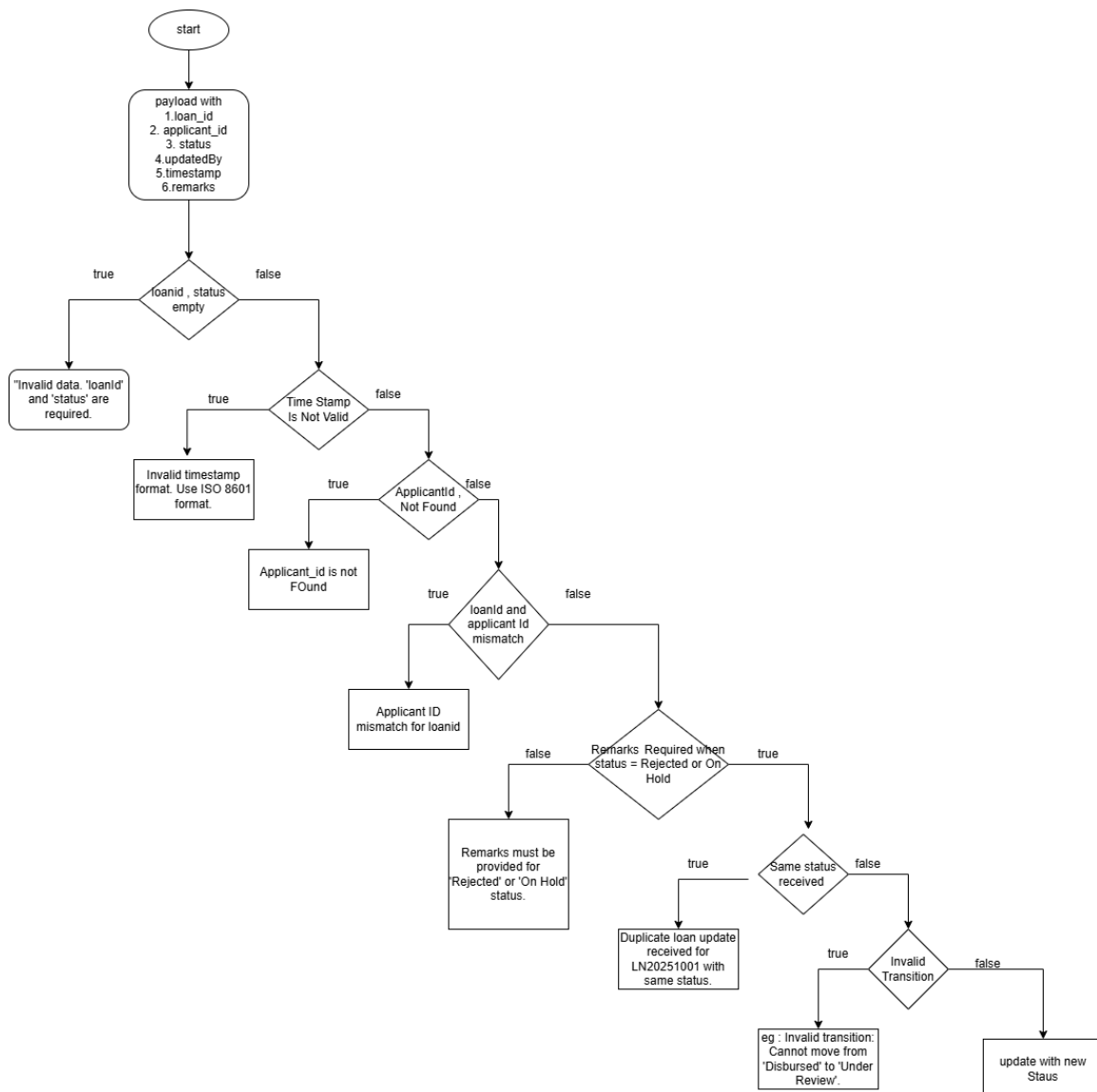


1. loan-application-status-p-api (Process API)

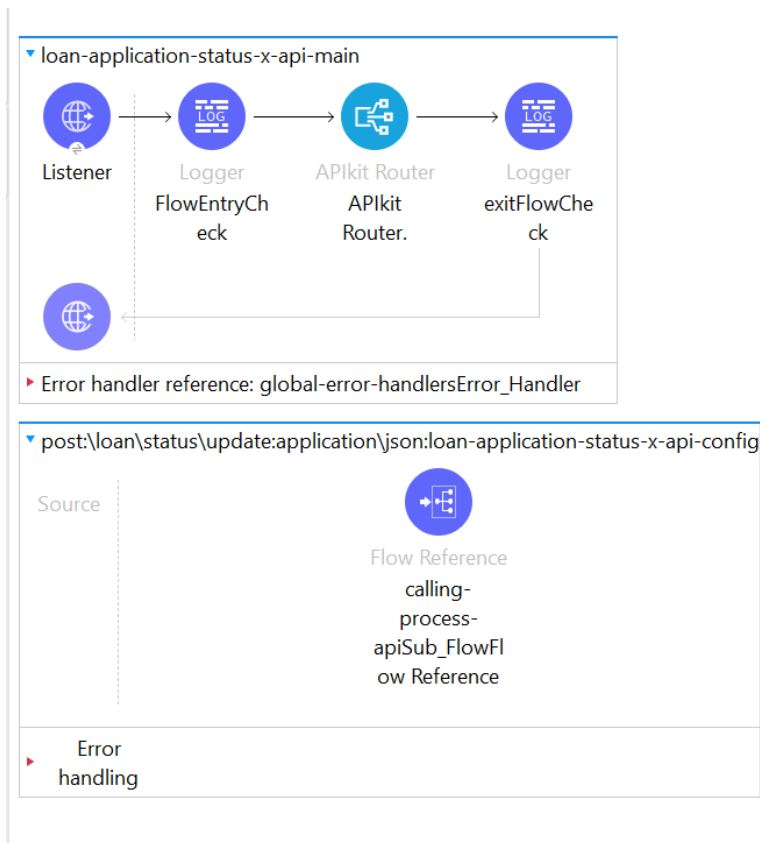
Purpose:

Acts as the **middle orchestration layer** between the Experience layer (like REST API clients / frontend) and the System API (db-s-api).

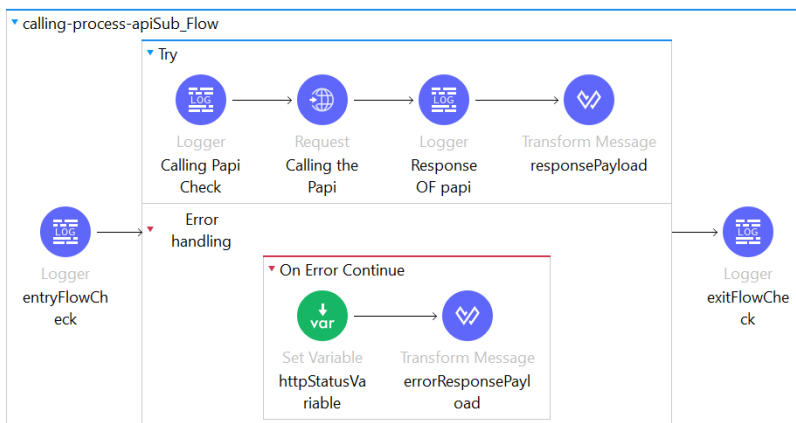
It handles data validation, transformation, and routing logic.



Loan-application-staus-x-api :
mainflow :



Subflows :



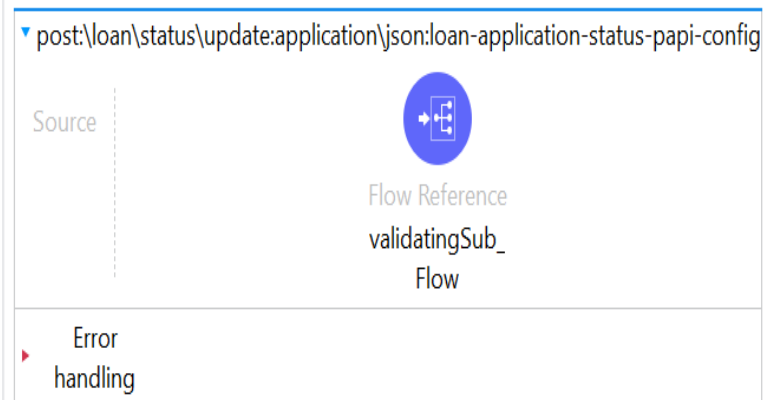
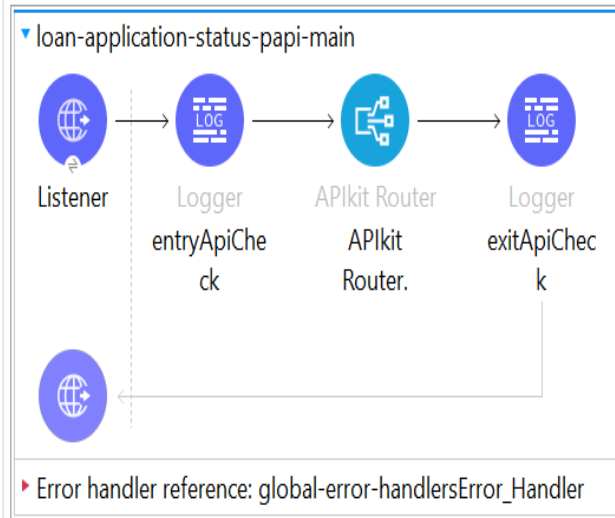
Loan-application-status-papi :

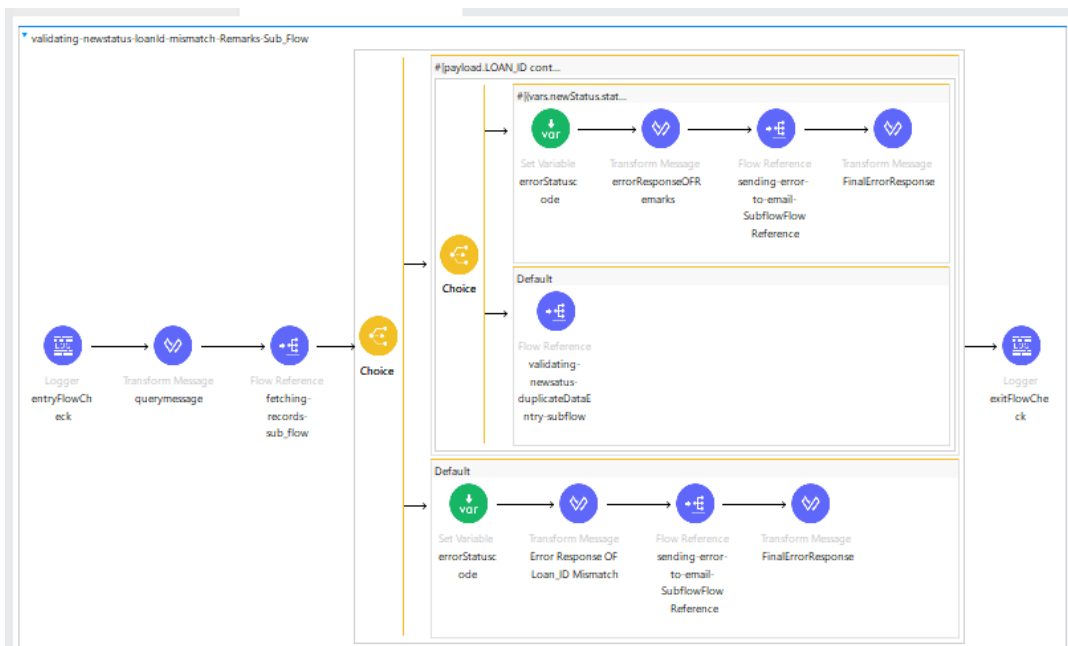
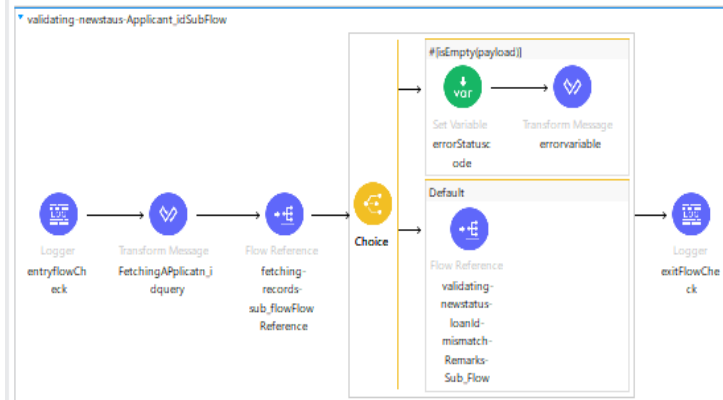
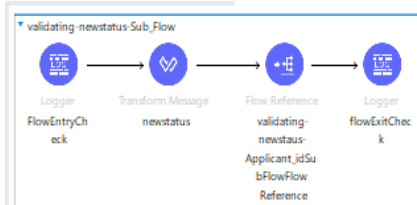
Main Flows:

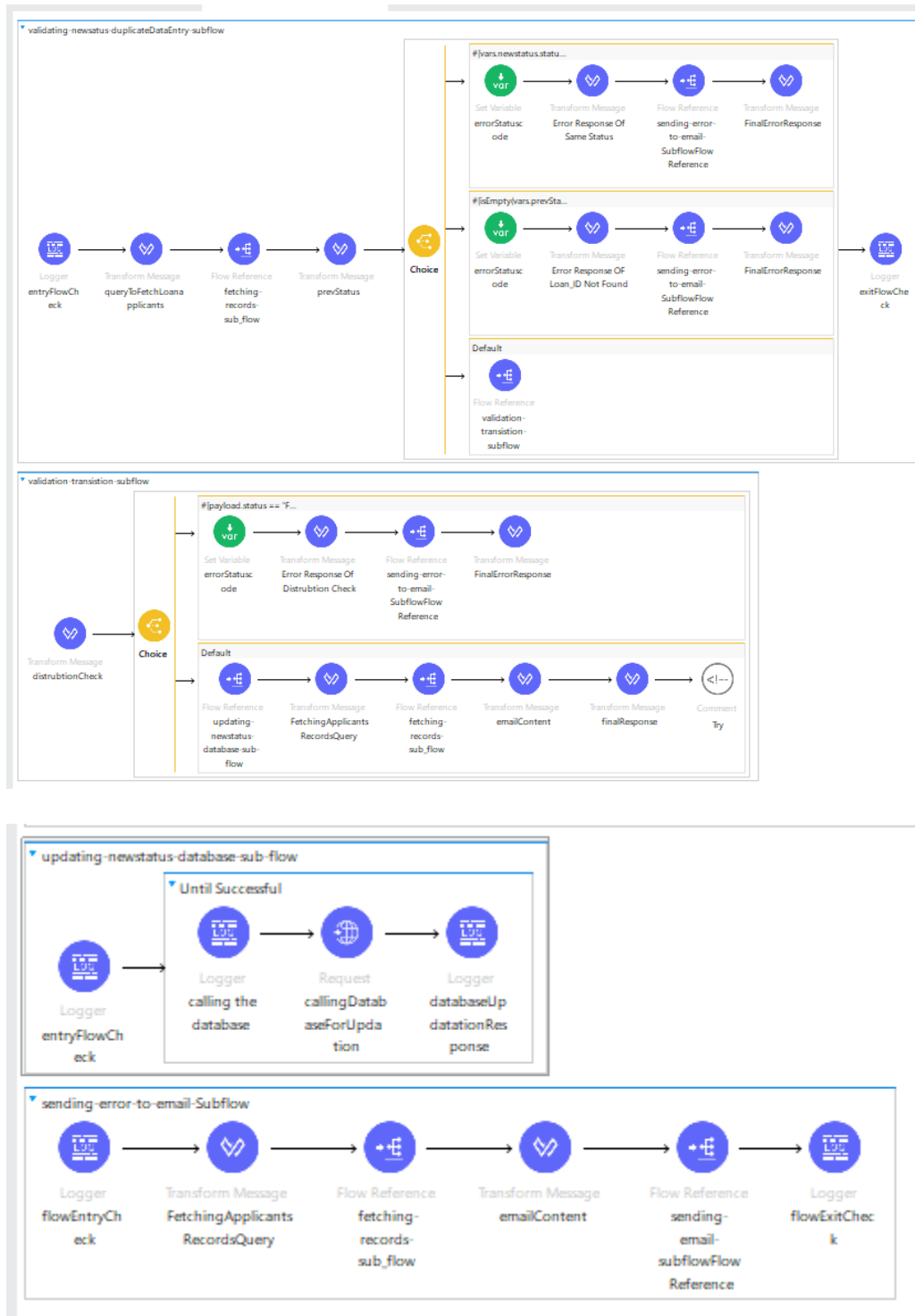
1. main-flow / loan-status-process-flow

- Triggered by HTTP Listener (/loanStatus or /status endpoint).
- Accepts loan application ID or customer info as query/JSON input.

- c. Validates mandatory parameters.
- d. Calls the System API (db-s-api) using HTTP Request or Flow Reference.
- e. Transforms and enriches response before returning to the client.



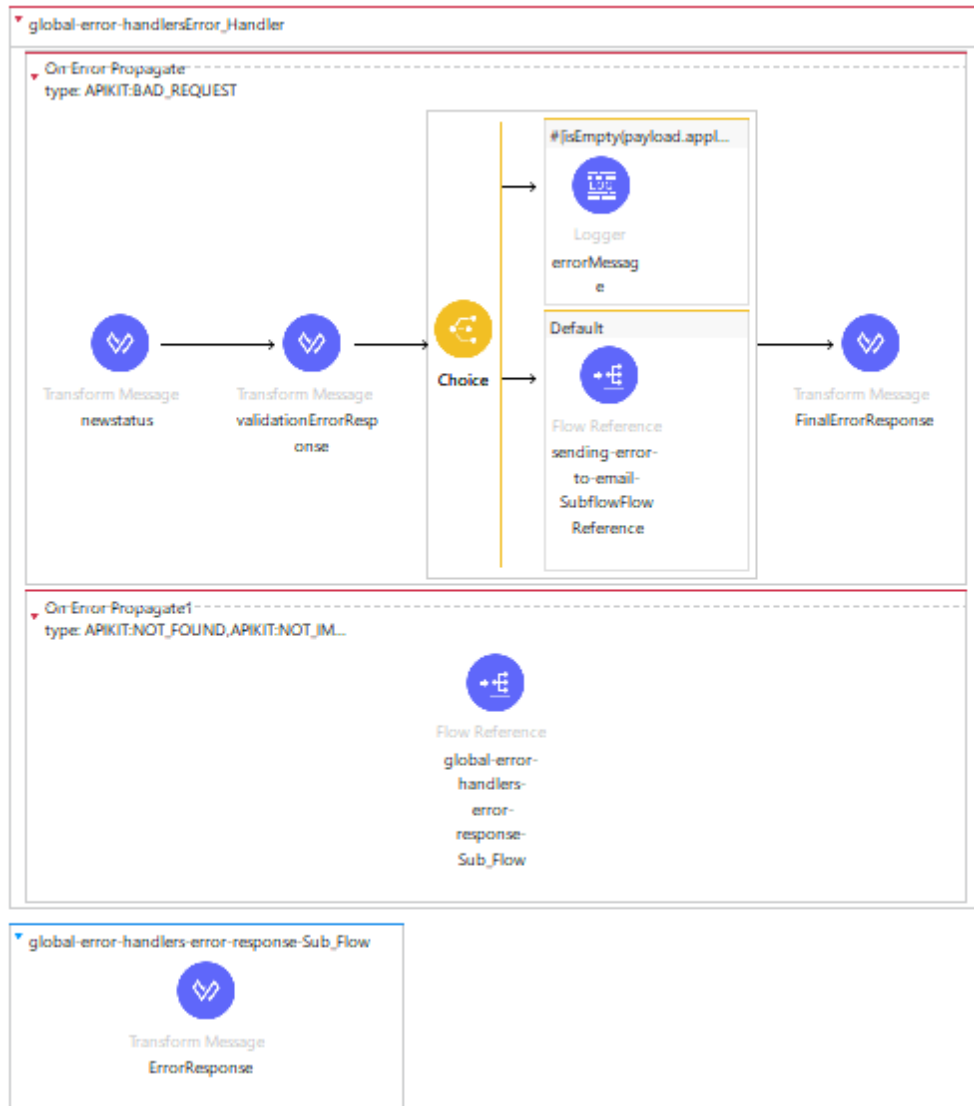




2.error-handler-subflow

a.Centralized error handling.

- b. Maps Mule errors to business error structure (code, message, timestamp).
- c. Logs errors with trace ID and flow info.



2. logger-start / logger-end

- a. Logs start and end of transaction with correlationId, timestamp, and payload snapshot.

Configurations:

1. config.yaml

- a. Holds environment-specific configs such as:
- b. Includes log levels and traceId format.

2. mule-artifact.json

- a. Declares app name and secure properties placeholder.

3. **global-config.xml**

- a. HTTP Listener config
- b. Global error handler.
- c. Secure property placeholder.

MUnit Tests:

- **loan-status-process-test-suite.xml**
 - Tests happy path → API returns valid status.
 - Tests invalid input → triggers validation error.
 - Tests backend failure → mocked System API response (500).
- Uses **Mock When** for the System API calls.
- Achieves ~85% test coverage.

2. loan-application-status-db-s-api (System API)

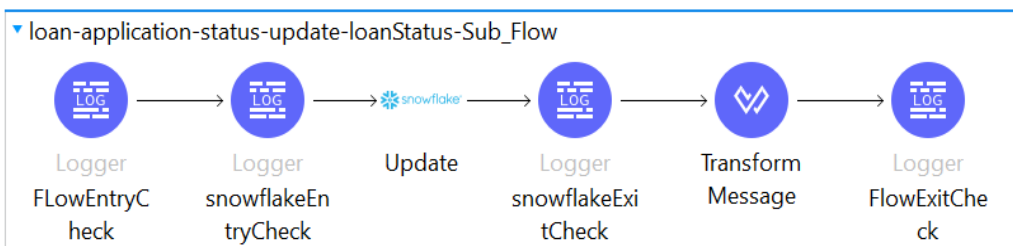
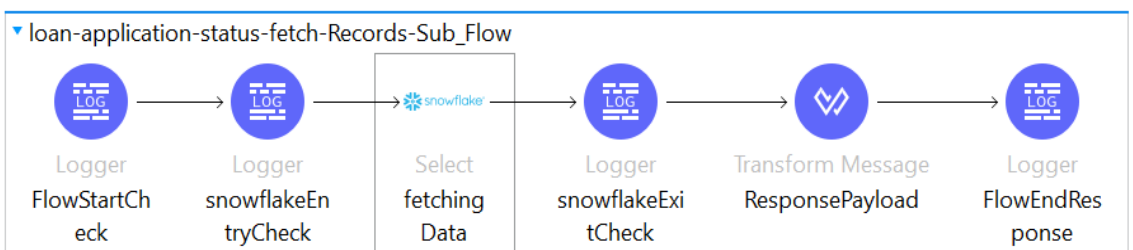
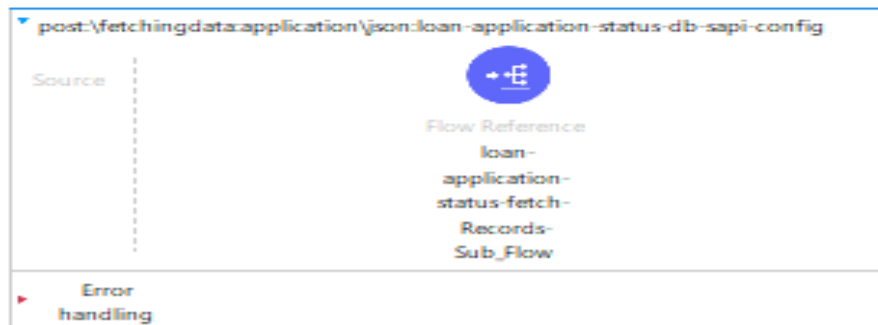
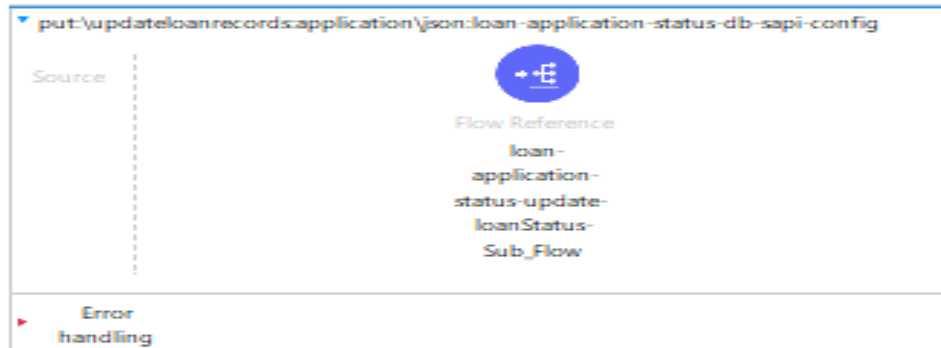
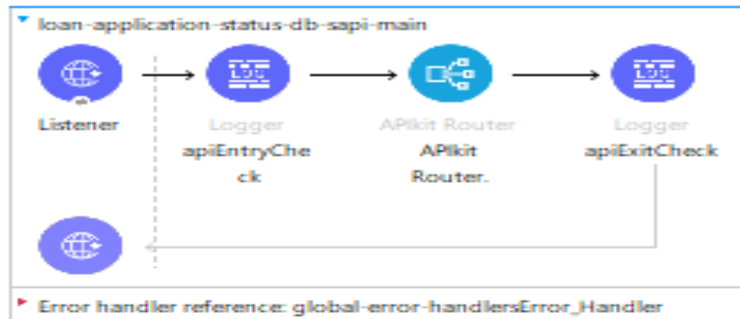
Purpose:

Handles direct **database interaction** to retrieve or update loan application details.

Main Flows:

1. get-loan-status-flow

- a. Triggered by HTTP Listener (/loanStatus/{loanId}).
- b. Fetches loan record from DB using **Database Select** connector.
- c. Transforms DB row → JSON response structure.
- d. Returns loanId, applicantName, status, remarks.

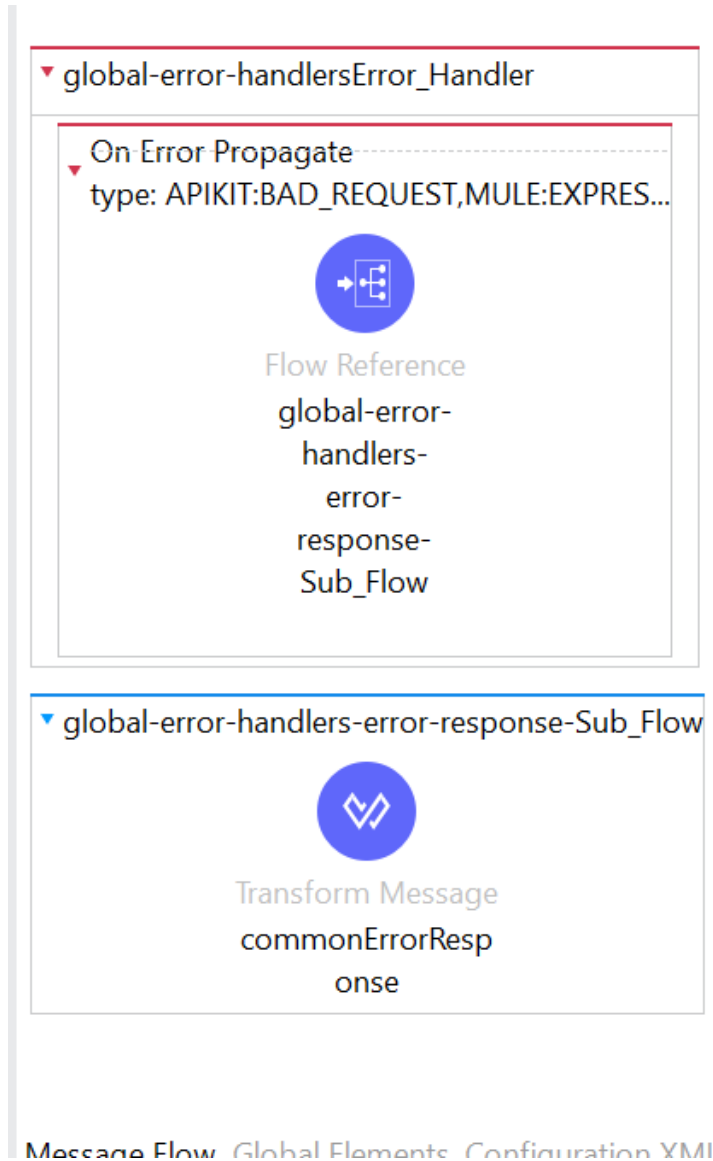


2. insert-loan-status-flow

- a. Accepts JSON with new application info.
- b. Performs DB Insert.
- c. Returns success message and generated ID.

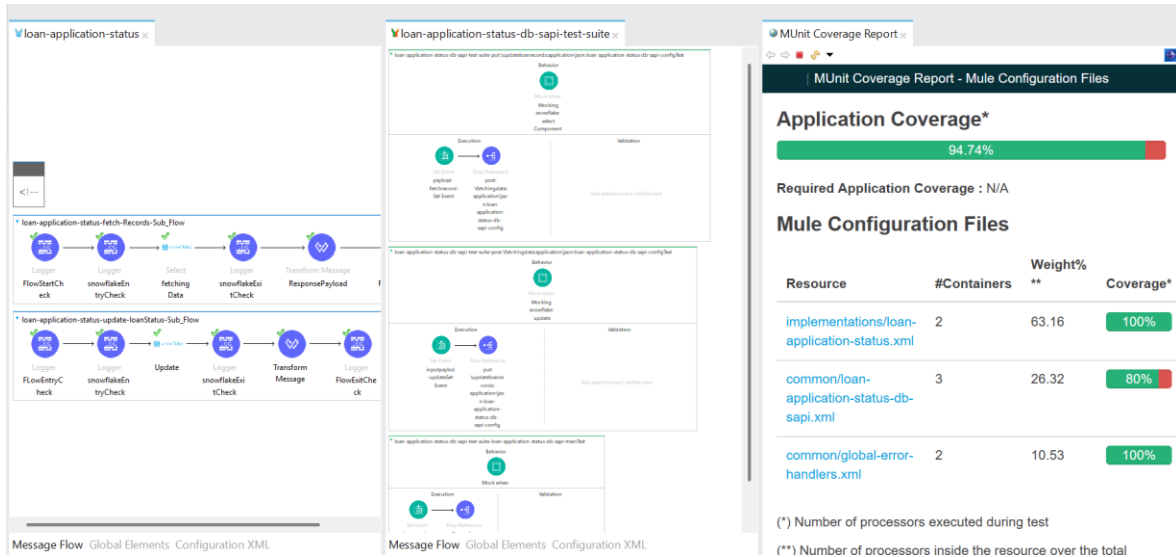
3. error-handler-subflow

- a. Catches DB errors (like SQLSyntaxError, Connection issues).
- b. Returns standard API error structure.

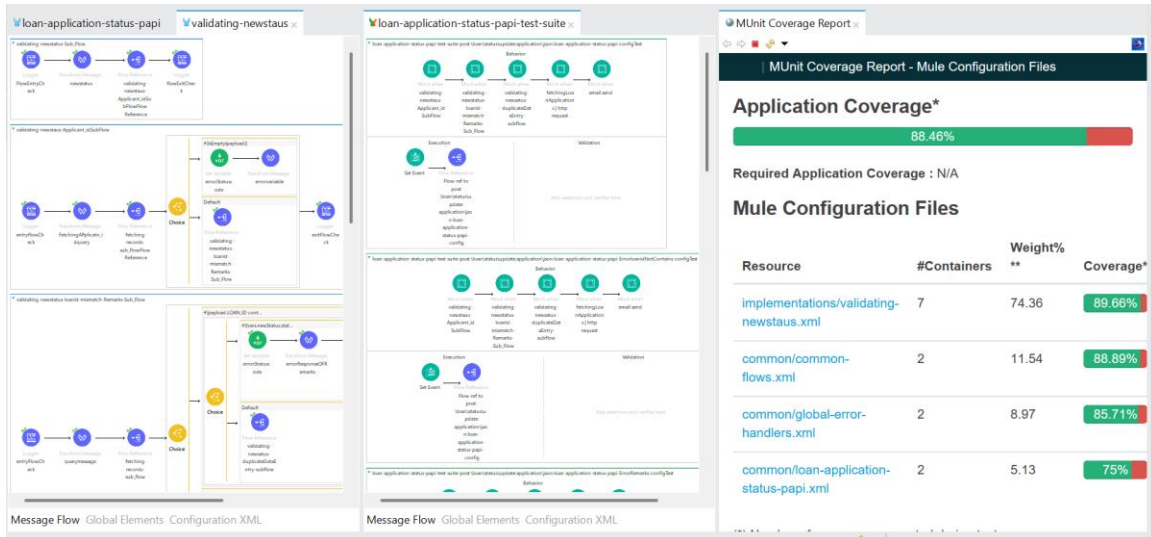


MUnit Tests:

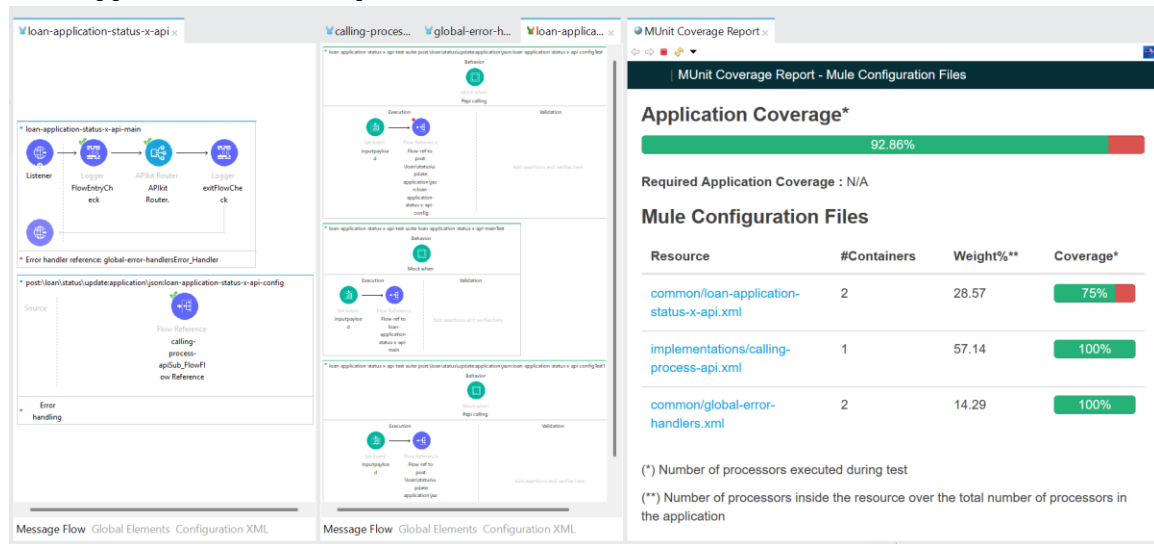
-> loan-application-db-sapi :



Loan-application-status-papi :



Loan-application-status-x-api :



Final Output :

1. Loanid or status not found :

The screenshot shows a REST client interface with a collection of endpoints. The selected endpoint is 'POST cloud/x-api/inputrequest'. The request body is as follows:

```

1 {
2   "applicantId": "APP1005",
3   "updatedBy": "CreditOfficer01",
4   "timestamp": "2025-10-28T19:00:00Z",
5   "remarks": "Application received and logged in system"
6 }
7

```

The response is a '400 Bad Request' with the following JSON body:

```

1 {
2   "status": "failed",
3   "reason": "required key [status] not found , required key [loanId] not found"
4 }

```

Timestamp invalid Output :

The screenshot shows a Postman interface with a collection named 'loan-application-status-papi-and-xapi'. The selected request is 'POST cloud/x-api/inputRequest'. The URL is 'https://loan-application-x-api-zr9fp9.5sc6y6-1.usa-e2.cloudhub.io/api/loan/status/update'. The request body is a JSON object:

```
1 {
2   "loanId": "LN20251005",
3   "applicantId": "APP1005",
4   "status": "Received",
5   "updatedBy": "CreditOfficer01",
6   "timestamp": "2025-10-28T19:00:00",
7   "remarks": "Application received and logged in system"
8 }
```

The response is a '400 Bad Request' with a status of 6.40 s and 519 B. The response body is a JSON object:

```
1 {
2   "status": "failed",
3   "reason": "/timestamp [2025-10-28T19:00:00] is not a valid date-time. Expected [yyyy-MM-dd'T'HH:mm:ssZ"
4 }
```

ApplicationId not Found :

The screenshot shows the same Postman interface as above, but the request body is modified to use 'APP100' as the applicant ID:

```
1 {
2   "loanId": "LN20251005",
3   "applicantId": "APP100",
4   "status": "Received",
5   "updatedBy": "CreditOfficer01",
6   "timestamp": "2025-10-28T19:00:00Z",
7   "remarks": "Application received and logged in system"
8 }
```

The response is a '400 Bad Request' with a status of 4.56 s and 356 B. The response body is a JSON object:

```
1 {
2   "status": "Failure",
3   "response": "given ApplicantId APP100 is Not Found"
4 }
```

Applicantid and Loanid Mismatch output :

The screenshot shows a Postman interface with a collection named 'pplcation-status'. The selected request is 'POST cloud/x-api/inputrequest' with the URL 'https://loan-application-x-api-zr9fp9.5sc6y6-1.usa-e2.cloudhub.io/api/loan/status/update'. The request body is a JSON object:

```
1 {
2   "loanId": "LN2025100",
3   "applicantId": "APP1005",
4   "status": "Received",
5   "updatedBy": "CreditOfficer01",
6   "timestamp": "2025-10-28T19:00:00Z",
7   "remarks": "Application received and logged in system"
8 }
```

The response is a '400 Bad Request' with the following JSON body:

```
1 {
2   "status": "FAILED",
3   "reason": "Loan ID LN2025100doesnot match with the APP1005"
4 }
```

Invalid Transistion output :

The screenshot shows the same Postman interface as above, but the request body has been updated to set the status to 'Rejected':

```
1 {
2   "loanId": "LN20251005",
3   "applicantId": "APP1005",
4   "status": "Rejected",
5   "updatedBy": "CreditOfficer01",
6   "timestamp": "2025-10-28T19:00:00Z",
7   "remarks": "Application received and logged in system"
8 }
```

The response is a '400 Bad Request' with the following JSON body:

```
1 {
2   "status": "FAILED",
3   "reason": "Invalid Transistion: cannot move from Received to Rejected"
4 }
```

Remarks Not Found output :

loan-application-status-papi-and-xapi / loan / status / cloud/x-api/inputrequest

POST https://loan-application-x-api-zr9fp9.5sc6y6-1.usa-e2.cloudhub.io/api/loan/status/update

Params Authorization Headers (11) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Schema Beautify

```
1 {
2   "loanId": "LN20251005",
3   "applicantId": "APP1005",
4   "status": "Rejected",
5   "updatedBy": "CreditOfficer01",
6   "timestamp": "2025-10-28T19:00:00Z"
7 }
```

Body Cookies Headers (6) Test Results 400 Bad Request 4.75 s 348 B Save Response

```
1 {
2   "status": "failed",
3   "reason": "required key [remarks] not found"
4 }
```

Find and replace Console Postbot Runner Start Proxy Cookies Vault Trash

Duplicate status output :

application-status New Import

loan-application-status-papi-and-xapi / loan / status / cloud/x-api/inputrequest

POST https://loan-application-x-api-zr9fp9.5sc6y6-1.usa-e2.cloudhub.io/api/loan/status/update

Params Authorization Headers (11) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "loanId": "LN20251005",
3   "applicantId": "APP1005",
4   "status": "Received",
5   "updatedBy": "CreditOfficer01",
6   "timestamp": "2025-10-28T19:00:00Z",
7   "remarks": "Application received and logged in system"
8 }
```

Body Cookies Headers (6) Test Results 400 Bad Request 10.61 s 381 B

```
1 {
2   "status": "IGNORED",
3   "reason": "Duplicate loan update received for LN20251001 with same status."
4 }
```

Success update output :

an-application-status New Import

loan-application-status-papi-and-xapi / loan / status / cloud/x-api/inputrequest

POST https://loan-application-x-api-zr9fp9.5sc6y6-1.usa-e2.cloudhub.io/api/loan/status/update

Params Authorization Headers (11) Body Scripts Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON Schema Beautify

```

2  "loanId": "LN20251005",
3  "applicantId": "APP1005",
4  "status": "Under Review",
5  "updatedBy": "CreditOfficer01",
6  "timestamp": "2025-10-28T19:00:00Z",
7  "remarks": "Application received and logged in system"
8  }

```

Body Cookies Headers (6) Test Results 200 OK 11.21 s 377 B Save Response

```

1  {
2  |   "status": "SUCCESS",
3  |   "message": "Loan LN20251005 status updated and applicant notified successfully."
4  }

```

Email Output :

gopivarri1@gmail.com
10:54 AM (59 minutes ago) ☆

"Dear nitish, your loan application not provided the loanId also has been failed due to Loan ID LN2025100doesnot match with the APP1005"

gopivarri1@gmail.com
10:55 AM (58 minutes ago) ☆

"Dear nitish, your loan application not provided the loanId also has been failed due to /status on hold is not a valid enum value"

gopivarri1@gmail.com
10:56 AM (57 minutes ago) ☆

"Dear nitish, your loan application not provided the loanId also has been failed due to Invalid Transition: cannot move from Received to Rejected"

gopivarri1@gmail.com
10:57 AM (57 minutes ago) ☆

"Dear nitish, your loan application not provided the loanId also has been failed due to required key [remarks] not found"

gopivarri1@gmail.com
to me ▼
10:57 AM (56 minutes ago) ☆ 😊 ↩️ ⋮

"Dear nitish, your loan application not provided the loanId also has been failed due to Duplicate loan update received for LN20251001 with same status."

gopivarri1@gmail.com
to me ▼
11:37 AM (16 minutes ago) ☆ 😊 ↩️ ⋮

"Dear nitish , your loan application LN20251005 has been moved from Received to Under ReviewRemarks: Under Review"