

Phase 8 Completion Report

Project Title:

Return Flow – Efficient Reverse Logistics and Return Management System

1. Introduction

This phase focused on ensuring that all return and refund-related data was properly migrated, validated, and secured in Salesforce. It also emphasized building a reliable deployment pipeline for metadata and establishing a backup and recovery plan. The goal was to maintain data accuracy, prevent duplicates, and make the system production-ready.

2. Objectives

- Import historical return, customer, and refund data from legacy systems.
 - Ensure data integrity by preventing duplicate records.
 - Deploy Salesforce metadata and customizations across environments smoothly.
 - Implement backup and recovery mechanisms to protect critical data.
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3. Scope of Work Completed

3.1 Object and Field Setup

Object	Action Taken	Status
Return Request	Added required fields (Return_ID, Customer_ID, Status, Return_Date, OwnerId)	Completed
Return Item	Added fields (Product_ID, Quantity, Condition, Return_Request__c relationship)	Completed
Picklists	Configured values for Status, Return Reason, Product Condition	Completed

The screenshot shows the Salesforce Setup interface for the 'Return Request' object. The 'Fields & Relationships' section is active, displaying a list of 10 fields. The fields are sorted by Field Label. The table below represents the data shown in the screenshot.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Contact	Contact__c	Lookup(Contact)		✓
Created By	CreatedById	Lookup(User)		
Customer	Customer__c	Lookup(Contact)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Order	Order__c	Lookup(Order)		✓
Owner	OwnerId	Lookup(User,Group)		✓
Preferred Resolution	Preferred_Resolution__c	Picklist		
Return Reason	Return_Reason__c	Picklist		
Return Request Name	Name	Auto Number		✓
Status	Status__c	Picklist		

3.2 Permission Configuration

Goal: Ensure proper access controls for different user roles.

Role / Profile	Object Access	Field Access	API Access
Admins	Full CRUD	Full	Yes
Return Managers	Read / Edit	Restricted	Yes
Standard Users	Read Only	Limited	No
Integration User	Full CRUD	Full	Yes

Actions Completed:

- Created Permission Set: **ReturnRequest_Access**
- Enabled object permissions: **Read, Create, Edit** (*Delete only for Admins*)
- Configured **field-level security (FLS)** for all key fields.
- Assigned permission set to relevant test users.

Permission Set: **CandidateAPI_Access**

Return Requests

Tab Settings

Available	Visible
<input type="checkbox"/>	<input type="checkbox"/>

Object Permissions

Permission Name	Enabled
Read	<input checked="" type="checkbox"/>
Create	<input checked="" type="checkbox"/>
Edit	<input checked="" type="checkbox"/>
Delete	<input checked="" type="checkbox"/>
View All Records	<input type="checkbox"/>
Modify All Records	<input type="checkbox"/>
View All Fields	<input type="checkbox"/>

Field Permissions

Field Name	Field API Name	Read Access	Edit Access
Contact	Contact__c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Created By	CreatedById	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Created Date	CreatedDate__c	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3 Data Import

Goal: Migrate initial records for Return Requests and Return Items using Data Loader.

Salesforce Data Loader 64.1.0 - orgfarm-9d61e6ed73-dev-ed.develop.my.salesforce.com

File Settings View Help

salesforce data loader

Please choose an action from the menu.

Load Inserts

Data Selection

Initialization succeeded.
The CSV file has 2 rows.
Import batch size: 200
Start at row: 0
Current API usage for the org: 3
API Limit for the org: 15,000
SOAP API version: 64.0

OK

Step 1

Import

Current

API U

Select

Account

Case

Contact

Event

Inspe

Lead (Lead)

Logistics Job (Logistics_Job__c)

Opportunity (Opportunity)

☐ Show all Salesforce objects

Import from (CSV file):

D:\customers.csv

Browse...

< Back

Next >

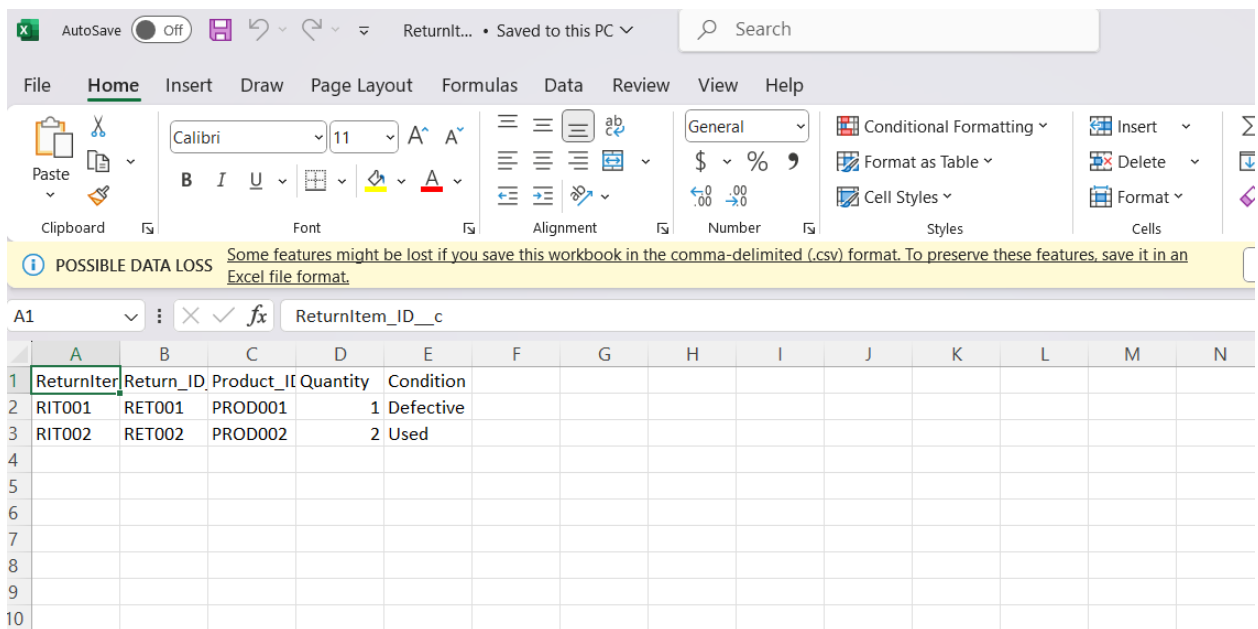
Finish

Cancel

Return Request Data Sample:

ReturnRequests_Updated... • Saved to this PC													
File Home Insert Draw Page Layout Formulas Data Review View Help													
<div> <div>Clipboard</div> <div>Font</div> <div>Alignment</div> <div>Number</div> <div>Styles</div> </div>													
<div> <div>POSSIBLE DATA LOSS</div> <div>Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve these features, save Excel file format.</div> </div>													
Return_ID__c													
Return_ID	Order_ID	Customer	Status__c	Return_Da	OwnerId								
RET001	ORD001	CUST001	Pending	#####	005XXXXXXXXXXXXX								
RET002	ORD002	CUST002	Approved	#####	005XXXXXXXXXXXXX								

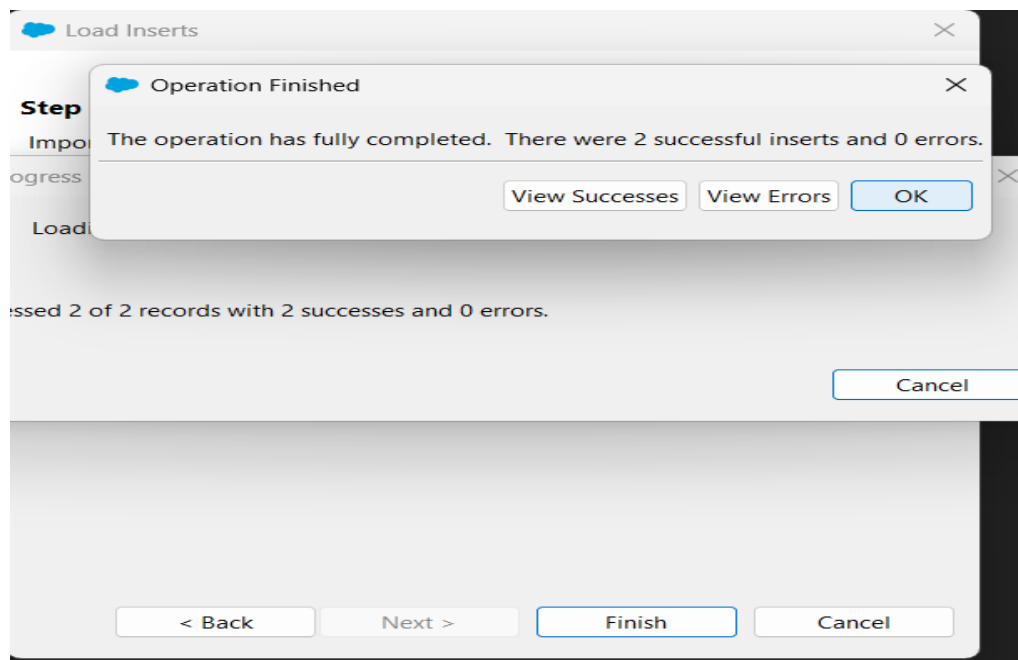
Return Item Data Sample:



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ReturnItem_ID	Return_ID	Product_ID	Quantity	Condition									
2	RIT001	RET001	PROD001	1	Defective									
3	RIT002	RET002	PROD002	2	Used									
4														
5														
6														
7														
8														
9														
10														

Outcome:

- Successfully imported both datasets without errors.
- Verified records using list views in Salesforce.

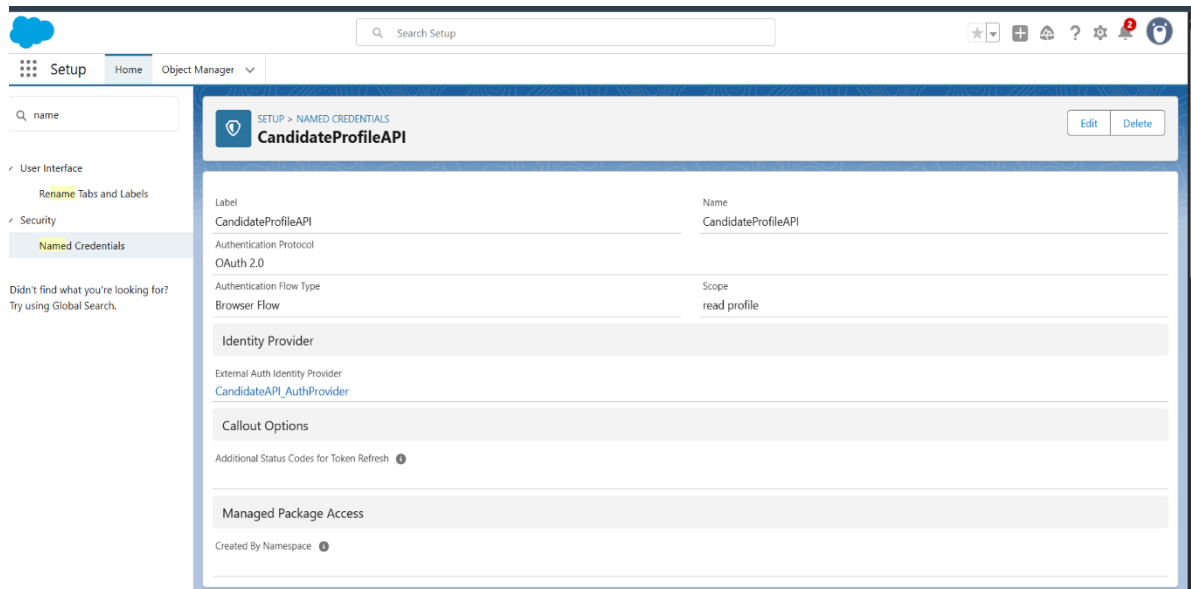


3.4 Integration Setup

Integrated Salesforce with **Candidate Profile API** to manage external user data.

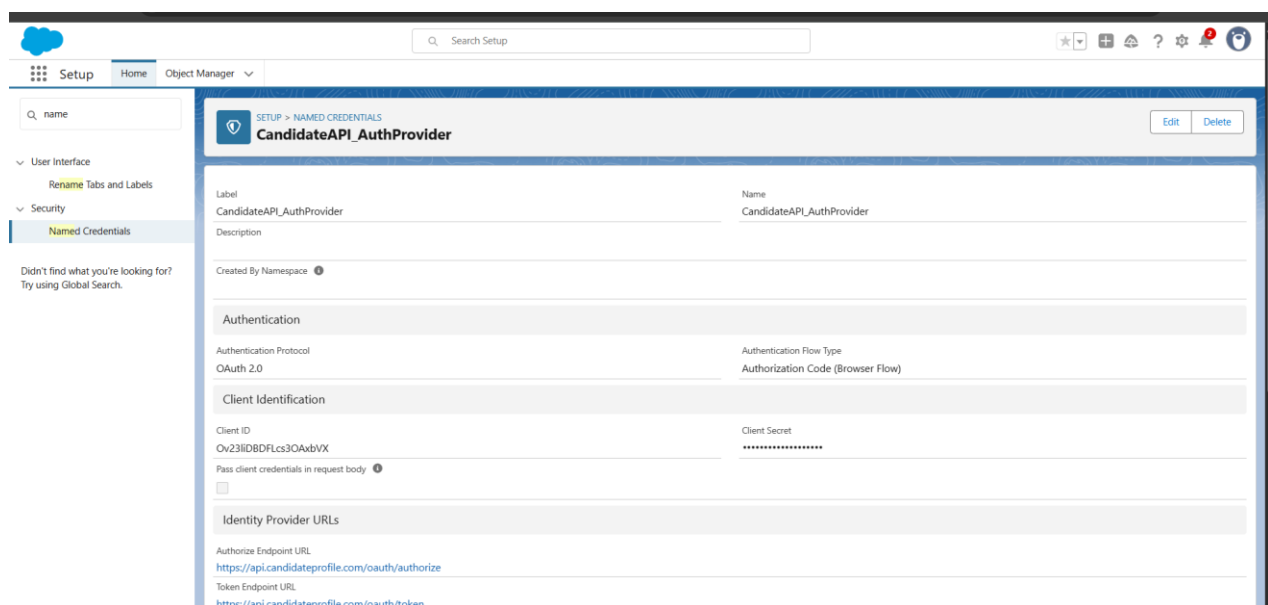
Component	Configuration Done	Status
Auth Provider	CandidateAPI_AuthProvider	Completed
Named Credential	CandidateProfileAPI_NC	Completed
External Credential	CandidateProfileAPI	Completed
OAuth 2.0 Flow	Configured & Tested	Completed

Result: Verified successful API authentication and data callouts.



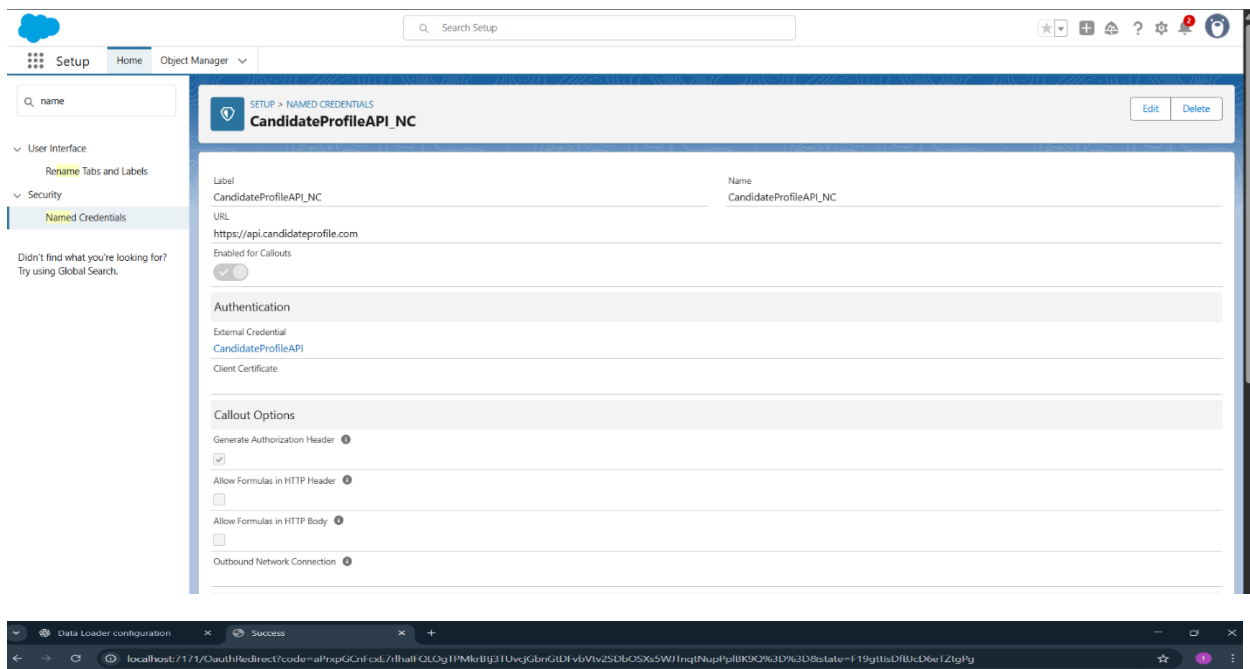
The screenshot shows the Salesforce Setup interface with the 'Named Credentials' section selected in the left sidebar. The main content area displays the configuration for the 'CandidateProfileAPI' Named Credential. The configuration includes the following fields:

- Label:** CandidateProfileAPI
- Name:** CandidateProfileAPI
- Authentication Protocol:** OAuth 2.0
- Authentication Flow Type:** Browser Flow
- Scope:** read profile
- Identity Provider:** (Section header)
- External Auth Identity Provider:** CandidateAPI_AuthProvider
- Callout Options:** (Section header)
- Additional Status Codes for Token Refresh:** (Information icon)
- Managed Package Access:** (Section header)
- Created By Namespace:** (Information icon)



The screenshot shows the Salesforce Setup interface with the 'Auth Providers' section selected in the left sidebar. The main content area displays the configuration for the 'CandidateAPI_AuthProvider' Auth Provider. The configuration includes the following fields:

- Label:** CandidateAPI_AuthProvider
- Name:** CandidateAPI_AuthProvider
- Description:**
- Created By Namespace:** (Information icon)
- Authentication:** (Section header)
- Authentication Protocol:** OAuth 2.0
- Authentication Flow Type:** Authorization Code (Browser Flow)
- Client Identification:** (Section header)
- Client ID:** Ov23iID8DFLcs3OAxb/VX
- Client Secret:** (Masked with asterisks)
- Pass client credentials in request body:** (Information icon)
- Identity Provider URLs:** (Section header)
- Authorize Endpoint URL:** https://api.candidateprofile.com/oauth/authorize
- Token Endpoint URL:** https://api.candidateprofile.com/oauth/token



Authorization Successful!

You can now close this browser window and return to Data Loader.

3.5 End-to-End Testing

Duplicate Rules & Data Integrity

- Configured **duplicate rules** for Return__c to block duplicate requests with the same **Order Number** and **Customer ID**.
- Implemented **matching rules** for customers to ensure a single, accurate database.
- Verified rules by testing duplicate data entry scenarios.

Matching Rule Detail

Object	Return Request
Rule Name	ReturnRequest_Matching_Rule
Unique Name	ReturnRequest_Matching_Rule
Description	ReturnRequest_Matching_Rule
Matching Criteria	(Return Request: Order Number EXACT MatchBlank = FALSE) AND (Return Request: Customer EXACT MatchBlank = FALSE)
Status	Active
Created By	Tanaya Sarode: 9/28/2025, 10:32 PM
Modified By	Tanaya Sarode: 9/28/2025, 10:32 PM

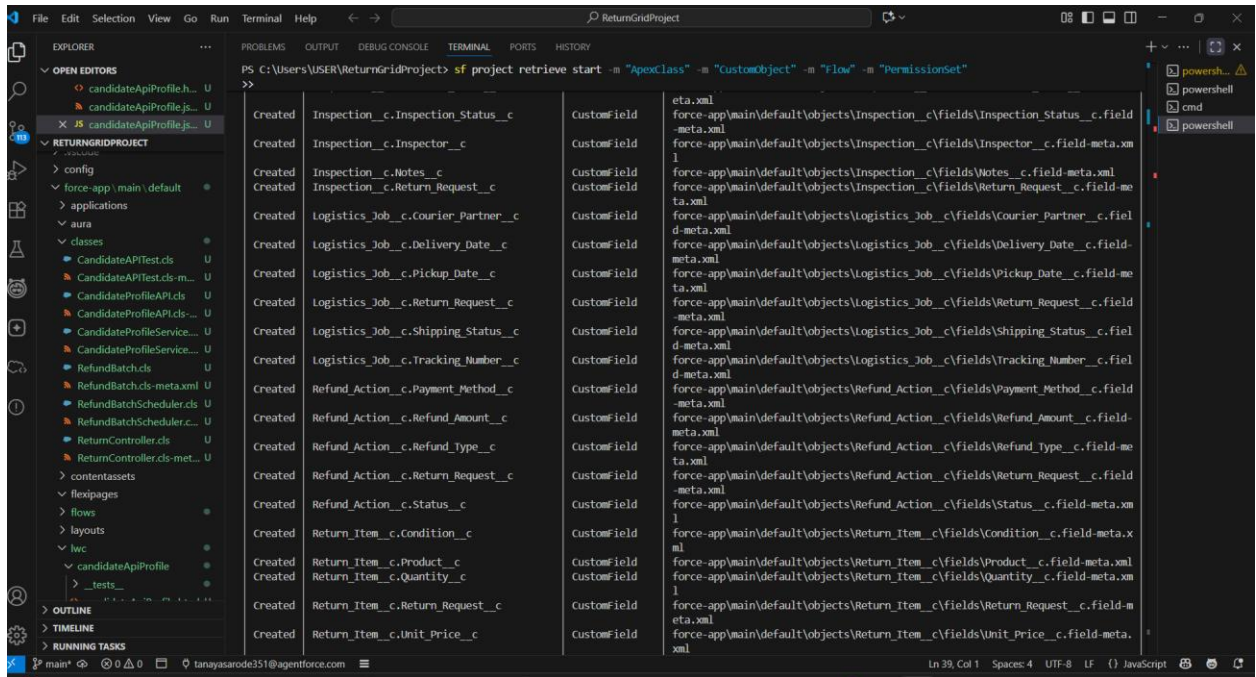
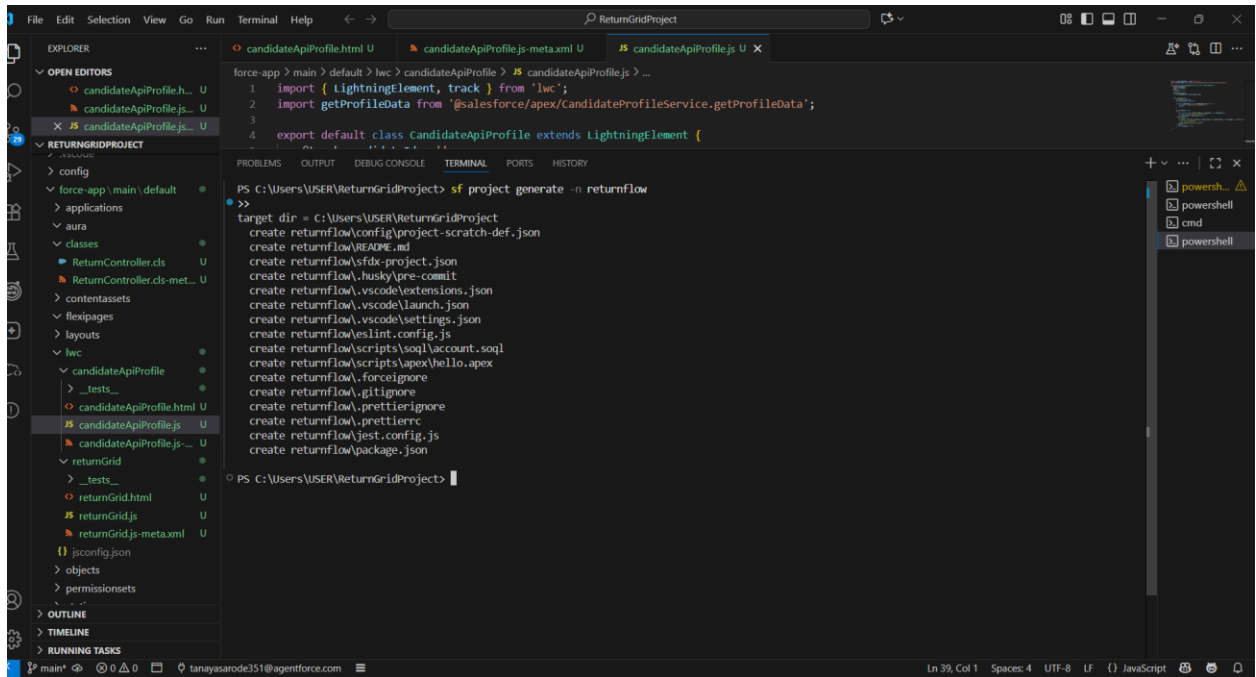
Duplicate Rule Detail

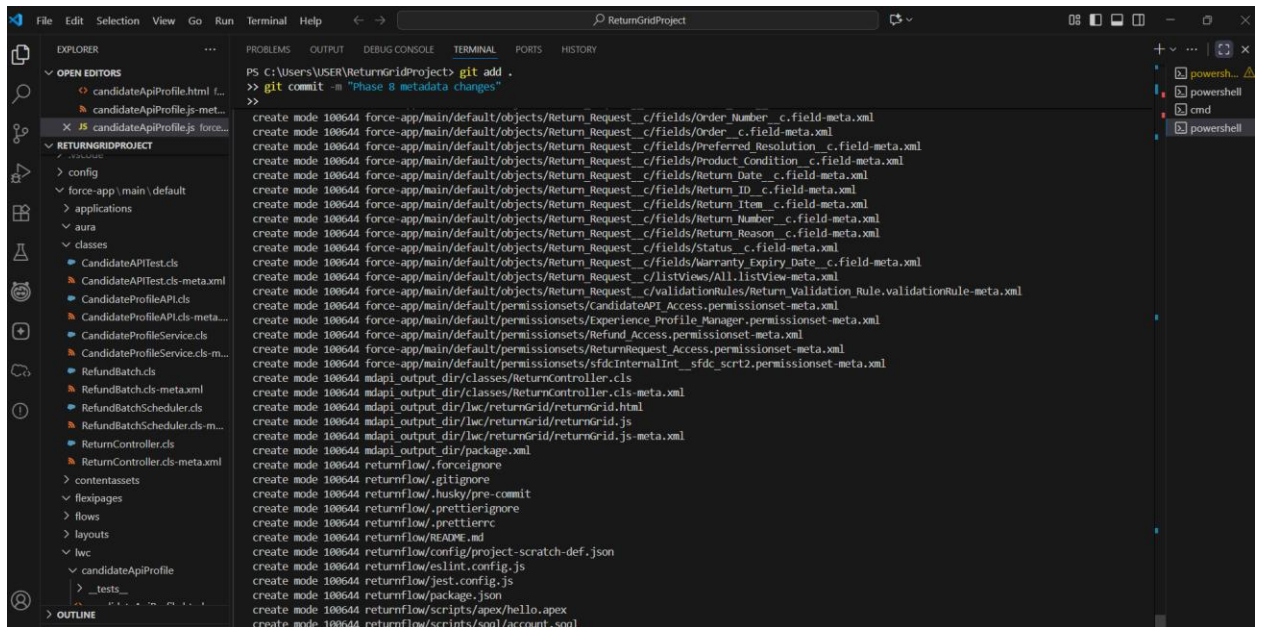
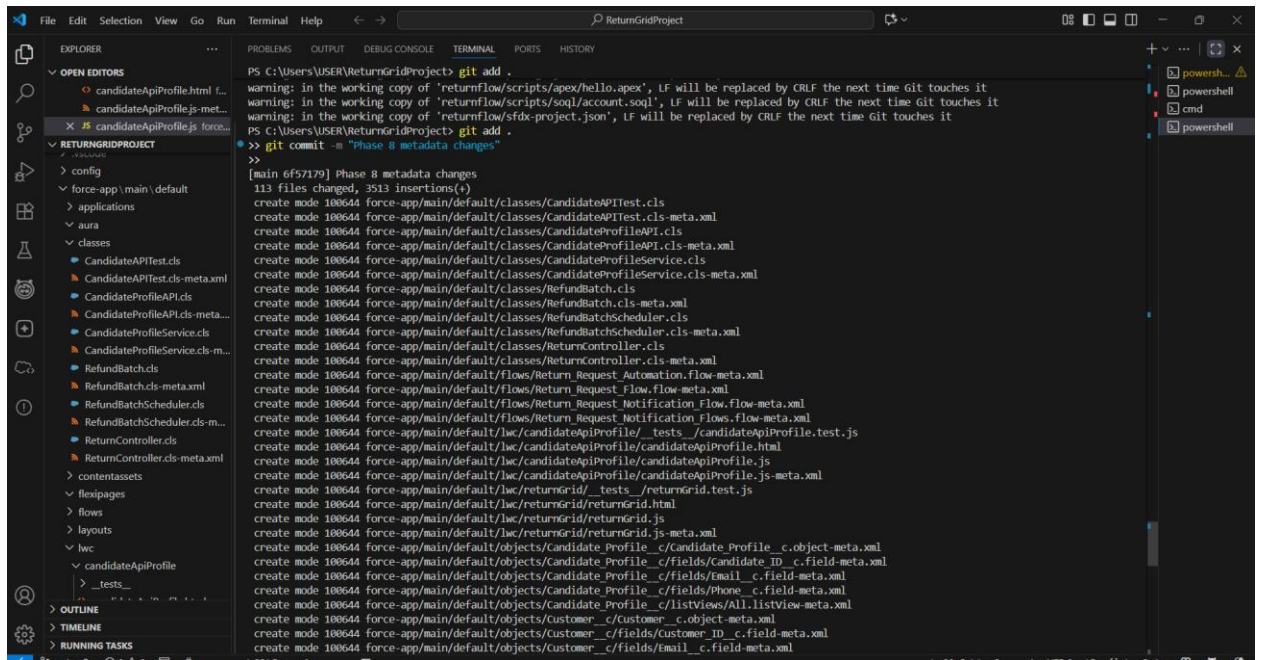
Rule Name	ReturnRequest_Duplicate_Rule	Order	1 of 1 Reorder 1
Description	ReturnRequest_Duplicate_Rule		
Object	Return Request		
Record Level Security	Enforce sharing rules	Operations On Create	<input type="checkbox"/> Alert <input type="checkbox"/> Report
Action On Create	Block	Operations On Edit	<input type="checkbox"/> Alert <input type="checkbox"/> Report
Action On Edit	Block		
Alert Text	A Return Request already exists for this Order Number and Customer		
Alert	Active		
Matching Rule	<input checked="" type="checkbox"/> ReturnRequest_Matching_Rule <input checked="" type="checkbox"/> Misused	Matching Criteria	(Return Request: Order Number EXACT MatchBlank = FALSE) AND (Return Request: Customer EXACT MatchBlank = FALSE)
Conditions			
Created By	Tanaya Sarode: 9/28/2025, 10:34 PM	Modified By	Tanaya Sarode: 9/28/2025, 10:35 PM

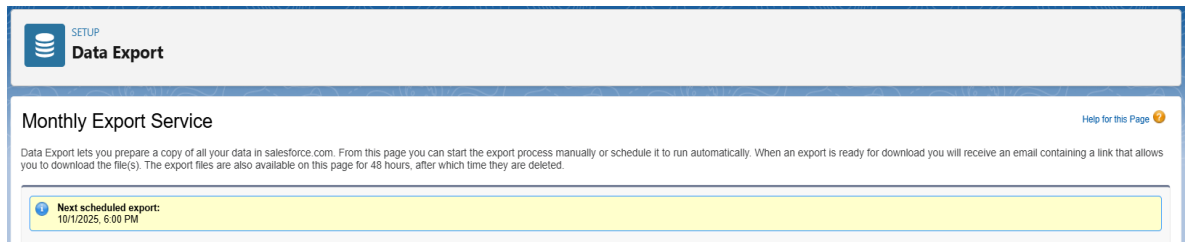
c) Deployment Pipeline

- Used **VS Code and Salesforce CLI (SFDX)** for deployment.
- Migration path: **Sandbox → UAT → Production.**
- Deployed metadata including:
 - Custom Objects (Return__c, Refund__c).
 - Apex Classes & Triggers (ReturnController, ReturnTrigger).
 - Lightning Web Components (returnGrid, refundFlow).
 - Process Automations (Flows & Workflows).

- Maintained rollback capability via **Git version control**.







4. Outcomes

- Legacy records imported successfully with no data loss.
- Database is **clean, duplicate-free, and reliable**.
- Deployment pipeline established, ensuring consistent movement of changes across environments.
- Backup and recovery processes safeguard data against risks.

5. Tools & Technologies Used

- **Salesforce Data Loader** – Data import/export.
- **Duplicate & Matching Rules** – Data integrity.
- **VS Code & Salesforce CLI (SFDX)** – Metadata deployment.
- **Salesforce Weekly Data Export** – Backup solution.
- **Git** – Version control and rollback readiness.

4. Verification Checklist

Task	Status
Verify tab visibility for Return Request object	Done
Test record creation for Return Request	Done
Test record creation for Return Item	Done
Validate field-level security	Done
Check Data Loader mappings	Done
Validate API connection	Done

6. Conclusion

Phase 8 has been **successfully completed**, with all key deliverables met.

The Return Flow system is now **fully configured**, with permissions, data, and integrations ready for production use.

This phase ensures a smooth transition into the live environment and supports efficient management of reverse logistics and return processes.