

# MACK Stores Salesforce CRM Project

## Phase 8: Data Management & Deployment

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### Objective:

To ensure accurate, secure, and seamless handling of data across Salesforce environments while establishing reliable deployment strategies. This phase focuses on efficient **data import/export**, maintaining **data quality**, preventing duplication, and setting up **scalable deployment pipelines** for future releases.

- Data Import Wizard
  - Data Loader
  - Duplicate Rules
  - Data Export & Backup
  - Change Sets
  - Unmanaged vs Managed Packages
  - ANT Migration Tool
  - VS Code & SFDX
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## 1. Data Import Wizard

### Steps:

- Navigated to Setup → Data Import Wizard.
- Selected **Custom Object** → **Products**.
- Imported small volumes of data from **MACK Stores.csv**.
- Matched by **Name** to avoid duplicates.
- Field mapping example:

**Import your Data into Salesforce**  
You can import up to 50,000 records at a time.

What kind of data are you importing?

Standard objects	Custom objects
Inventories	
Loyalty Programs	
Order Line Items	
<b>Products</b>	
Relief Cases	
Sale Orders	

What do you want to do?

- Add new records
- Update existing records
- Add new and update existing records**

Match by: Name

Which User field in your file designates record owners? --None--

Trigger workflow rules and processes? ☐ Trigger workflow rules and processes for new and updated records

Where is your data located?

File: MACK Stores.csv

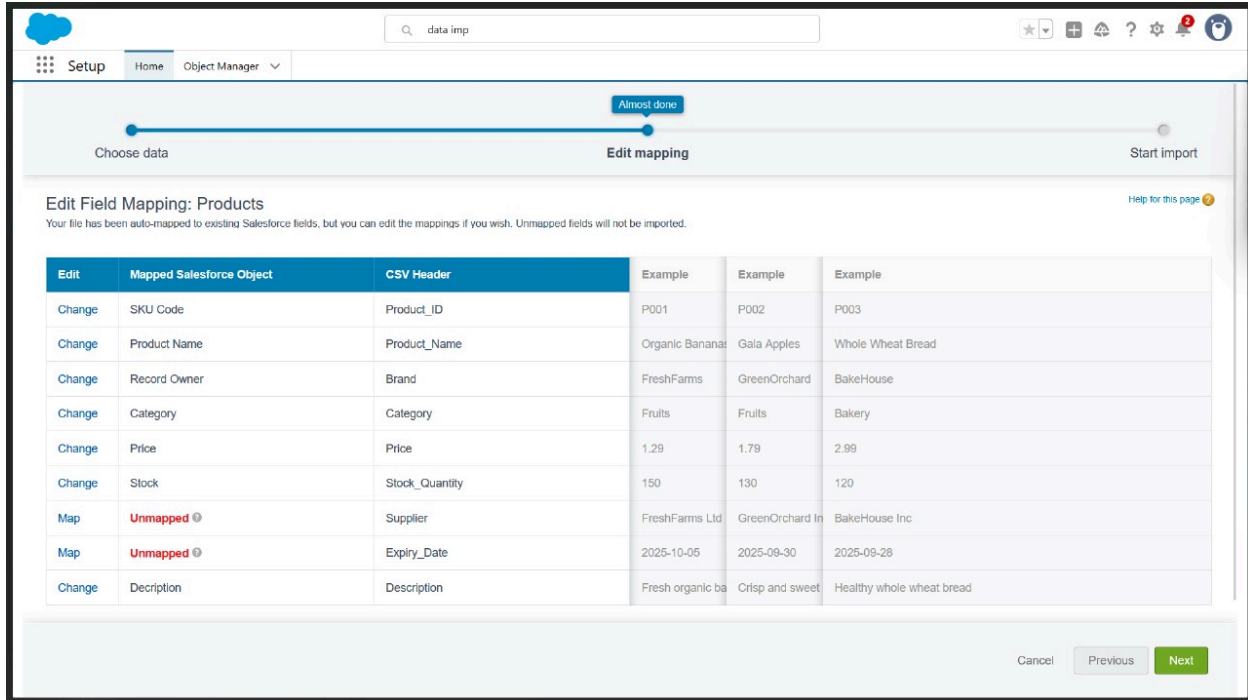
Character Code: ISO-8859-1 (General US & Western European, ISO-LATIN-1)

Values Separated By: Comma

CSV

Cancel Previous **Next**

CSV Header	Salesforce Object Field	Example
Product_ID	SKU Code	P001
Brand	Record Owner	FreshFarms
Product_Name	Product Name	Organic Bananas
Category	Category	Fruits
Price	Price	1.29
Stock_Quantity	Stock	150
Description	Description	Fresh organic bananas



- Benefits: Easy UI, quick import, prevents duplicate records.

## 2. Data Loader

### Steps:

- Installed Salesforce Data Loader (GUI + CLI).
- Used for **bulk operations** (10,000+ records).
- Example:
  - Inserted 50,000+ **Sales\_Order\_\_c** records for UAT testing.
  - Exported historical transactions for backup.
- Command-line automation:

```
sfdx force:data:tree:import --plan salesOrders-plan.json
```

View the details of a bulk data load job.

[Back to List: Bulk Data Load Jobs](#)

**Bulk Data Load Job Detail** [Reload](#)

Job ID	750gl00000E731B	Job Type	Bulk V1	Status	Closed
Submitted by	Abdulia Shaik Mahammad	Operation	Insert	Total Processing Time (ms)	194
Start Time	9/25/2025, 10:45 AM PST	Queued Batches	0	API Active Processing Time (ms)	109
End Time	9/25/2025, 10:45 AM PST	In Progress Batches	0	Apex Processing Time (ms)	1
Time to Complete (hh:mm:ss)	00:01	Completed Batches	1		
Object	Product	Failed Batches	0		
External ID Field		Progress	100%		
Content Type	CSV	Records Processed	60		
Concurrency Mode	Parallel	Records Failed	49		
API Version	64.0	Retries	0		

[Reload](#)

**Batches**

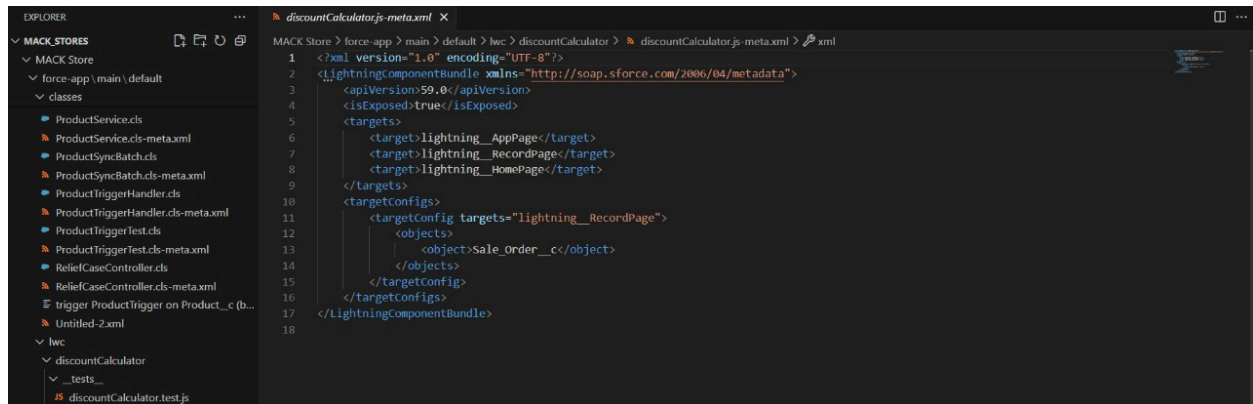
View Request	View Result	Batch ID	Start Time	End Time	Total Processing Time (ms)	API Active Processing Time (ms)	Apex Processing Time (ms)	Records Processed	Records Failed	Retry Count	State Message	Status
<a href="#">View Request</a>	<a href="#">View Result</a>	751gl00000B72F	9/25/2025, 10:45 AM	9/25/2025, 10:45 AM	194	109	1	60	49	0		Completed

- Benefits: Fast, scalable, supports automation for scheduled imports.

### 3. Duplicate Rules

#### Steps:

- Created **Matching Rules** for **Contact** and **Account**.
- Duplicate Rules example:
  - Block duplicate Contacts based on Email + Phone.
  - Alert Admin if duplicates exist for Accounts.
- LWCs like **DiscountCalculator** validate against duplicates during order creation.



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## 4. Data Export & Backup

### Steps:

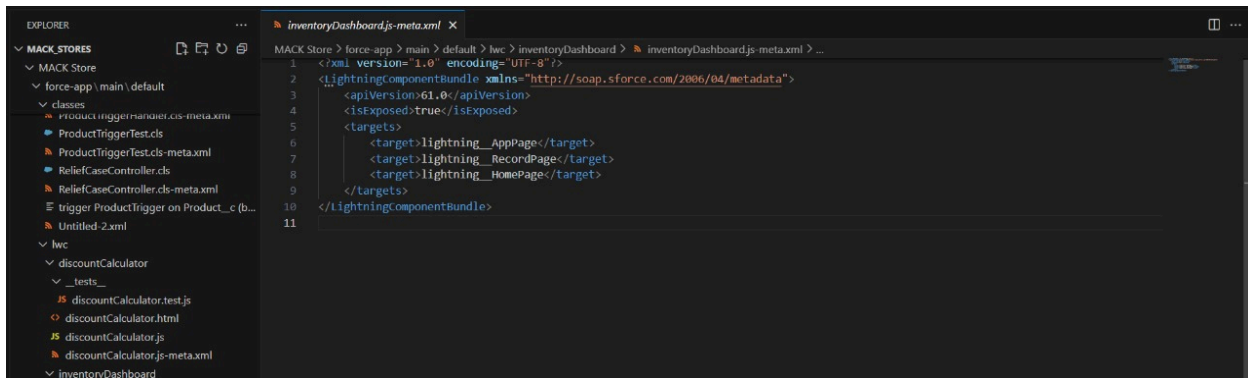
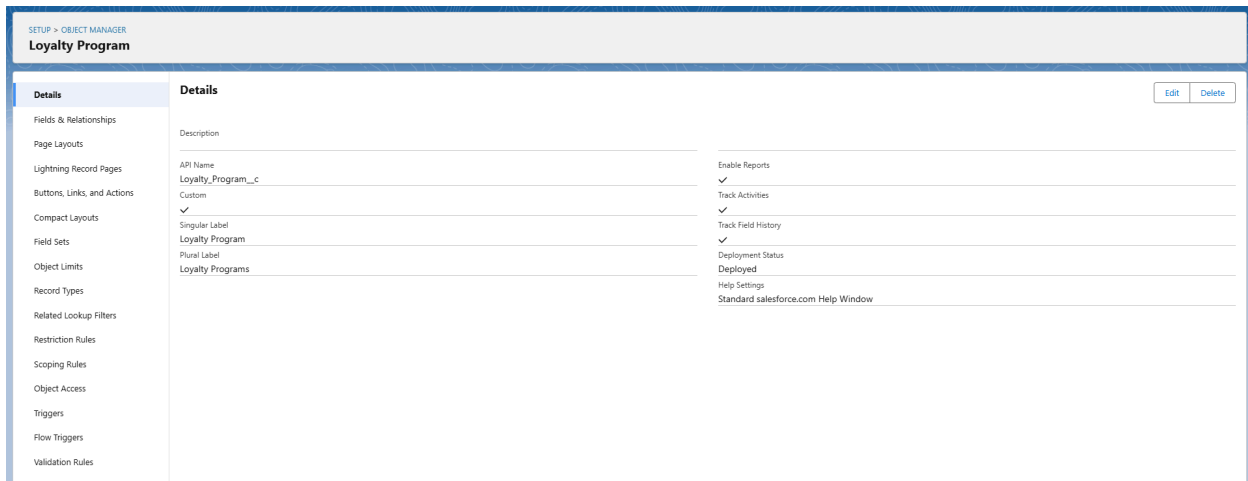
- Scheduled **Weekly Data Export** in Salesforce Setup (CSV + Attachments).
- Configured **Data Loader export jobs** for incremental backups of Products, Orders.
- Backup files stored securely (e.g., AWS S3).
- Ensured **business continuity** and compliance.

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## 5. Change Sets

### Steps:

- Used **Outbound Change Sets** to deploy metadata from Sandbox → UAT → Production.
- Deployed:
  - Custom Objects (**Sales\_Order\_\_c**, **Loyalty\_Program\_\_c**)
  - LWCs (**DiscountCalculator**, **InventoryDashboard**)
  - Apex Classes & Triggers
- Validated deployments using “Run Specified Tests” for code coverage.
- Ran smoke tests post-deployment on record pages and home pages.



## 6. Unmanaged vs Managed Packages

### Steps:

- Created **Unmanaged Package** for internal testing.
- Created **Managed Package** for partner rollout:
  - Namespace: **MACK Stores**
  - Locked core components for IP protection.
  - Versioned updates for partner orgs.

## 7. ANT Migration Tool

### Steps:

- Configured `build.properties` and `package.xml`.
- Used ANT for **scripted deployments**:

`ant retrieveCode`

`ant deployCode`

- Integrated into CI/CD pipeline (Jenkins) for automated deployments.
  - Benefits: Faster, repeatable, and reliable deployment compared to manual change sets.
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## 8. VS Code & Salesforce DX (SFDX)

### Steps:

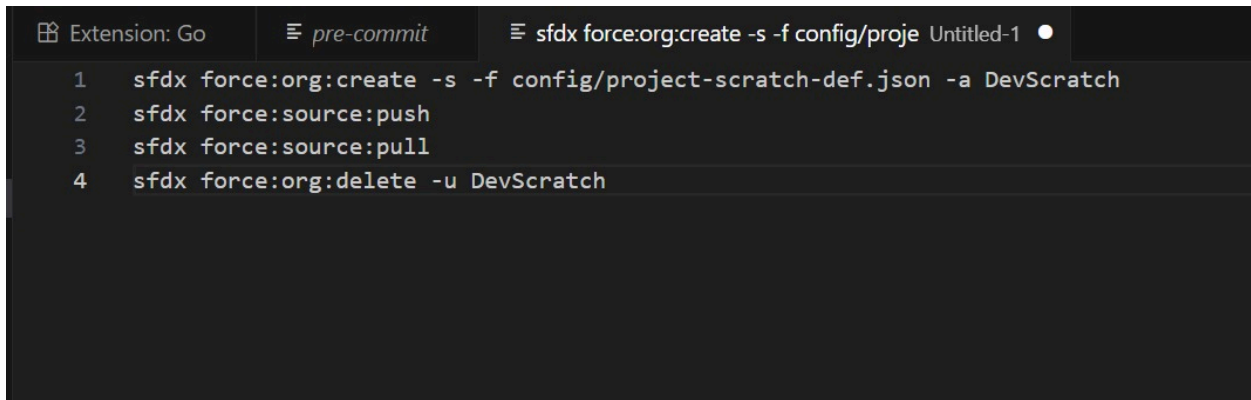
- Configured **VS Code** with Salesforce CLI and Git.
- Source-tracked development in **scratch orgs**.
- Commands:

`sfdx force:org:create -s -f config/project-scratch-def.json -a DevScratch`

`sfdx force:source:push`

`sfdx force:source:pull`

`sfdx force:org:delete -u DevScratch`

A screenshot of a VS Code editor window. The top bar shows the 'Extension: Go' tab, a 'pre-commit' hook, and the file name 'Untitled-1'. The editor content displays a list of four SFDX commands, each preceded by a line number (1-4).

```
1 sfdx force:org:create -s -f config/project-scratch-def.json -a DevScratch
2 sfdx force:source:push
3 sfdx force:source:pull
4 sfdx force:org:delete -u DevScratch
```

- Branch-based development:
  - `dev` → feature scratch orgs
  - `uat` → UAT testing
  - `main` → Production releases

- Benefits: Version-controlled, automated, and modern deployment process.
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## Outcome of Phase 8

- MACK Stores CRM now has **robust data management** ensuring data integrity, deduplication, and compliance.
  - Backup policies guarantee business continuity.
  - Deployments are **streamlined** via Change Sets, ANT, and SFDX pipelines.
  - Managed Packages enable **secure distribution** to partner organizations.
  - The system is ready for **scalable growth** with minimal risk.
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