

Phase 8: Data Management & Deployment

Objective:

Ensure accurate and secure handling of customer data in Salesforce, while deploying configurations and code safely from sandbox to production environments.

1. Data Import Wizard

- **Purpose:** Simple tool for importing small to medium data sets.
- **Usage:**
 1. Navigate to Setup → Data Import Wizard.
 2. Choose the object (Leads, Accounts, Contacts, Custom Objects).
 3. Upload CSV file.
 4. Map fields (CSV → Salesforce fields).
 5. Start import.
- **Outcome:** Quick import of customer data without coding.

The screenshot displays the Salesforce Data Import Wizard interface. At the top, a progress bar indicates the current step is 'Edit mapping', with 'Choose data' and 'Start import' as previous and next steps respectively. Below the progress bar, there is a 'Show errors' link. The main area contains a table for mapping CSV headers to Salesforce fields. The table has five columns: 'Edit', 'Mapped Salesforce Object', 'CSV Header', 'Example', and 'Example'. The rows show mappings for 'First Name', 'Last Name', 'Email', and 'Phone'. The 'Phone' row has a warning icon (yellow triangle) next to the 'Mapped Salesforce Object' field. At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons. The browser's address bar shows the URL: <https://smartbridge-7bd-dev-ed.develop.lightning.force.com/lightning/setup/DataManagementDataImporter/home>. The Windows taskbar at the bottom shows the date and time as 15:09 on 25-09-2025.

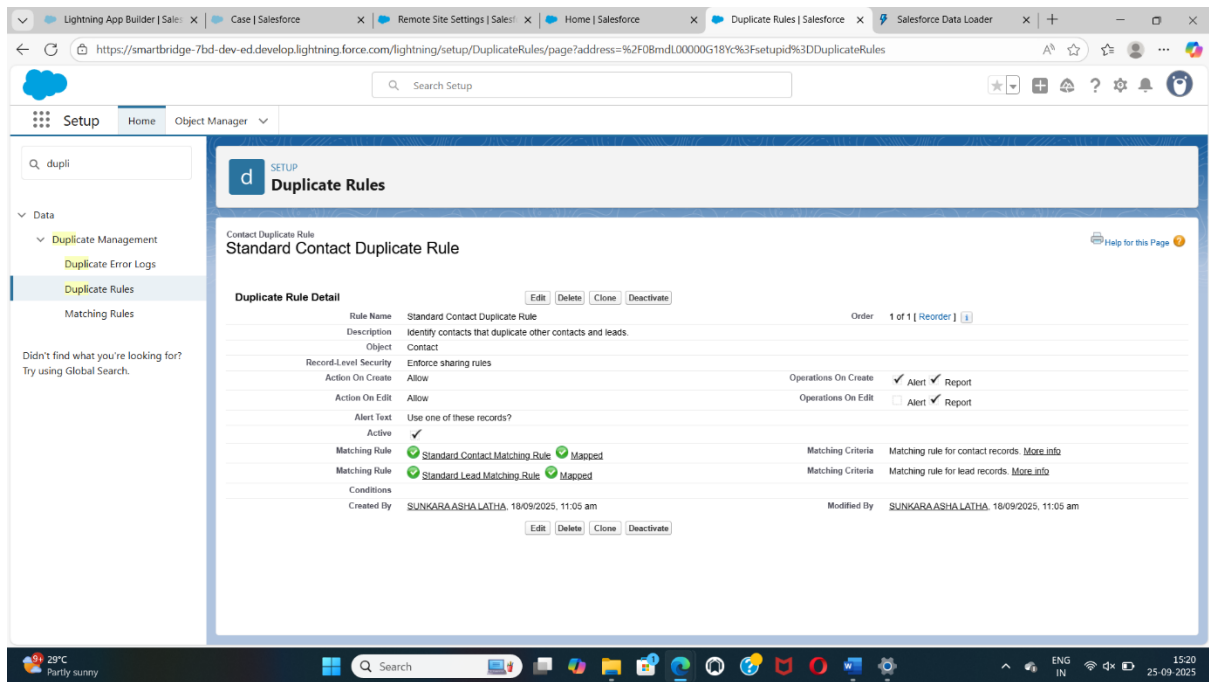
Edit	Mapped Salesforce Object	CSV Header	Example	Example
Change	Contact: First Name	First Name	Neelu	Asha
Change	Contact: Last Name	Last Name	Sharma	sunkara
Change	Contact: Email	Email	neelu@email.com	asha@email.com
Change	Account: Phone, Contact: Phone	Phone	987643210	8776432109

2. Data Loader

- **Purpose:** Advanced tool for handling large data volumes (50,000 – 5 million records).
- **Usage:**
 - Install Salesforce Data Loader on desktop.
 - Choose operation: Insert, Update, Upsert, Delete, Export.
 - Provide login credentials.
 - Upload CSV and map fields.
- **Outcome:** Bulk data operations for cases, contacts, and historical customer records.

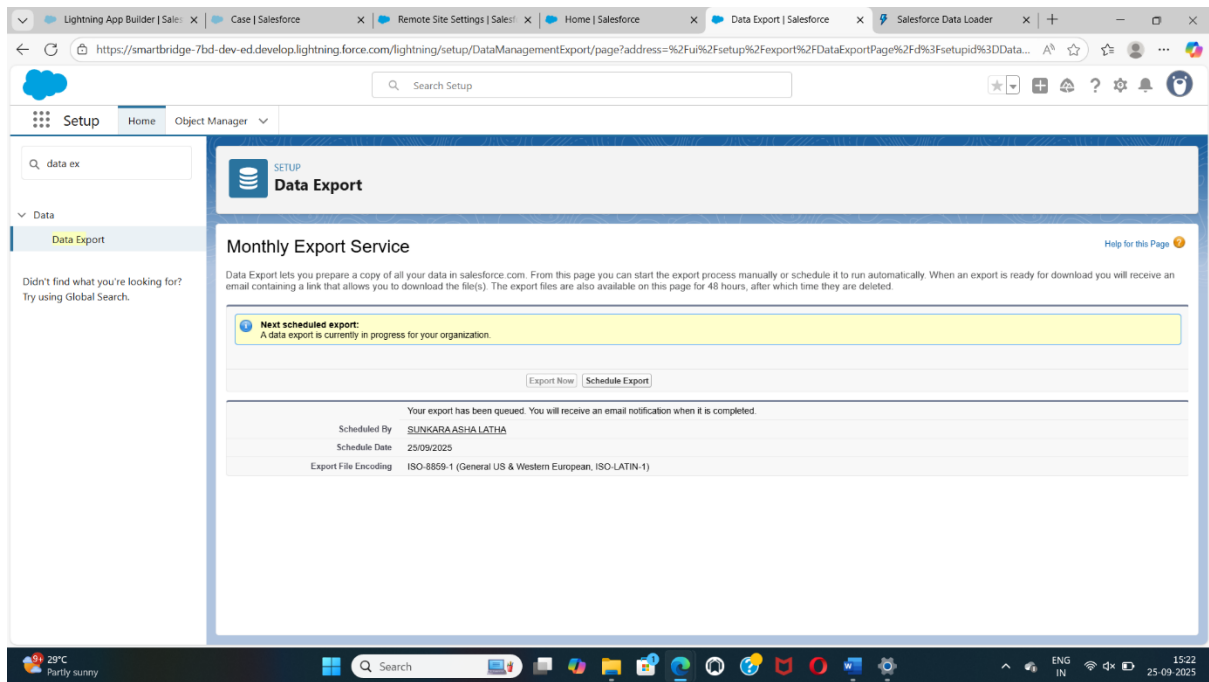
3. Duplicate Rules

- **Purpose:** Prevent duplicate records in Salesforce.
- **Setup Steps:**
 1. Go to Setup → Duplicate Rules.
 2. Select object (e.g., Contact).
 3. Define matching criteria (e.g., same Email).
 4. Choose action: Block or Allow with Alert.
- **Outcome:** Ensures clean, duplicate-free customer database.



4. Data Export & Backup

- **Purpose:** Protect data by scheduling regular backups.
- **Steps:**
 1. Setup → Data Export.
 2. Choose objects (Cases, Contacts, Custom Objects).
 3. Schedule weekly/monthly export.
 4. Download the zip file.
- **Outcome:** Secured backup of support data for compliance and disaster recovery.



5. Change Sets

- **Purpose:** Deploy metadata (objects, fields, flows, Apex, LWCs) between Sandbox and Production.
- **Steps:**
 1. In Sandbox → Outbound Change Set → New.
 2. Add components (Objects, Apex Classes, Flows, Reports, etc.).
 3. Upload to target org (Production).
 4. In Production → Inbound Change Set → Deploy.
- **Outcome:** Safely deploy customizations without affecting live data.

6. Unmanaged vs Managed Packages

- **Unmanaged Packages:**
 - Used for open-source or internal deployment.
 - Full access to code & customization.
- **Managed Packages:**
 - Used for AppExchange apps.
 - Code is locked for IP protection.

- **Outcome:** Helps decide packaging strategy if building reusable solutions.

7. ANT Migration Tool

- **Purpose:** Command-line tool for scripted deployments.
- **Usage:**
 - Install Apache ANT.
 - Configure build.xml and package.xml.
 - Run commands (ant retrieve, ant deploy).
- **Outcome:** Automates deployment for large projects.

8. VS Code & SFDX

- **Purpose:** Modern developer tool for Salesforce.
- **Steps:**
 1. Install Visual Studio Code.
 2. Install Salesforce CLI (SFDX).
 3. Connect org: sfdx force:auth:web:login.
 4. Retrieve or deploy metadata:
 5. sfdx force:source:pull
 6. sfdx force:source:deploy -m ApexClass:MyClass
- **Outcome:** Enables source-driven development, version control, and CI/CD pipeline setup.

Expected Outputs / Results

- Clean and duplicate-free data imported into Salesforce.
- Secure weekly/monthly backups for compliance.
- Metadata deployed from Sandbox → Production using Change Sets or SFDX.
- Bulk data operations handled via Data Loader.
- Developers manage deployments with VS Code & SFDX, ensuring version control and automation.

