

# Phase 8: Data Management & Deployment

This phase focuses on Salesforce data management and deployment strategies.

The **primary emphasis is on the Data Import Wizard**, which we used to upload **Doctor records** for your project.

Other data tools are summarized for awareness.

## 1 Data Import Wizard (Main Focus)

### Purpose:

Import data into Salesforce using a guided interface—ideal for uploading your **Doctor records CSV file** for custom objects referencing the Doctor object.

### Steps to Import Doctor Records:

1. Navigate to **Setup → Data Import Wizard**
2. Select your **Doctor custom object**
3. Click **Upload CSV** and select the file (`doctor_records_updated.csv`)
4. **Map CSV fields** to Salesforce fields
  - a. *Example:* Doctor Name → `Doctor_Name__c`
5. Click **Start Import** and monitor progress until complete

### Supported Fields in Your Doctor Object

CSV Header	Salesforce Field (example)
Availability Status	<code>Availability_Status__c</code>
Consultation Fee	<code>Consultation_Fee__c</code>
Doctor Name	<code>Doctor_Name__c</code>
Experience (Years)	<code>Experience_Years__c</code>
Phone Number	<code>Phone_Number__c</code>
Specialization	<code>Specialization__c</code>

## Notes

- Supports both **standard and custom objects**
- Best suited for **small-to-medium data volumes**
- Provides **automatic field matching** when headers are correct
- Can **prevent duplicate uploads** when duplicate rules are active

The screenshot shows the Salesforce Bulk Data Load interface. At the top, there's a navigation bar with tabs for Setup, Home, and Object Manager. A progress bar at the top indicates the process flow from 'Choose data' to 'Edit mapping' to 'Start import'. A blue button labeled 'Great job!' is visible. Below the progress bar, the 'Review & Start Import' section displays the following information:

- Your selections:
  - Doctors ✓
  - Add new records ✓
- Your import will include:
  - Mapped fields: 6
  - Unmapped fields: 0
- Your import will not include: (empty)

At the bottom of this section are 'Cancel', 'Previous', and 'Start Import' buttons. The 'Start Import' button is highlighted in green.

Below this, the 'Bulk Data Load Jobs' page is shown. It features a header with a gear icon and the title 'Bulk Data Load Jobs'. A sub-header shows a job ID: 750gL00000LSqVp. The page displays details for this specific job, including:

Job ID	750gL00000LSqVp	Job Type	Bulk V1	Status	Closed
Submitted By	Altamash Faruqui	Operation	Insert	Total Processing Time (ms)	159
Start Time	12/26/2025, 7:51 PM IST	Queued Batches	0	API Active Processing Time (ms)	71
End Time	12/26/2025, 7:51 PM IST	In Progress Batches	0	Apex Processing Time (ms)	0
Time to Complete ([hh:]mm:ss)	00:01	Completed Batches	1		
Object	Doctor	Failed Batches	0		
External ID Field		Progress	100%		
Content Type	CSV	Records Processed	50		
Concurrency Mode	Parallel	Records Failed	0		
API Version	65.0	Retries	0		

A 'Reload' button is located at the bottom of the table.

## Data Loader

### Purpose:

Bulk data import/export tool for **large data volumes**

### Quick Points

- Requires **installation** and Salesforce login
- Operations: **Insert, Update, Upsert, Delete, Export**
- Supports **millions of records**
- Requires **API access** and correct CSV mappings

## Duplicate Rules

### Purpose:

Prevent duplicate records—important when importing Doctors to avoid duplicate entries

### Quick Points

- Setup path: **Duplicate Management → Duplicate Rules**
- Define **object, matching fields, and actions (Alert/Block)**
- Can use **custom Matching Rules**
- Maintains **clean, high-quality data**

## Data Export & Backup

### Purpose:

Backup Salesforce data regularly

## Quick Points

- Go to **Setup → Data Export**
- Schedule backups **weekly or monthly**
- Downloads provided as **ZIP files containing CSV data**
- Third-party automation tools available

## 5 Change Sets

### Purpose:

Deploy metadata between orgs (e.g., Sandbox → Production)

## Quick Points

- Add components to **Outbound Change Set**
- Upload to target org → deploy via **Inbound Change Set**
- **Validate before activation**
- Works only between **connected orgs**

## 6 Unmanaged vs Managed Packages

### Purpose:

Package and distribute Salesforce metadata

## Quick Points

Unmanaged Package	Managed Package
Code editable	Code protected
One-time deployment	Designed for distribution
Not updateable	Updateable & versioned
Not AppExchange friendly	Required for AppExchange

## ANT Migration Tool

### Purpose:

Command-line utility for metadata deployment/retrieval

### Quick Points

- Requires **build.xml + package.xml**
- Commands: ant retrieve, ant deploy
- Logs help troubleshoot success/failure
- Useful in **automation / CI-CD**

## VS Code & SFDX

### Purpose:

Salesforce development & deployment via **VS Code + CLI**

### Quick Points

- Install **VS Code + Salesforce Extension Pack**
- Authenticate orgs via **SFDX CLI**
- Execute metadata commands using **SFDX**
- Supports **Apex, LWC, version control, and automation**