Phase 8: Data Management & Deployment

Project:Visitor CheckIn System for Offices

1. Data Import Wizard

Use Case:
The Data Import Wizard is used for simple imports (up to 50,000 records) such as Contacts, Leads, Accounts, or custom objects. In our Visitor Management project, we can use the wizard to import bulk **Visitor__c** records from a CSV file instead of manually creating each one.

Steps Done:

- Opened Setup → Quick Find → **Data Import Wizard**.

- Selected **Custom Object: Visitor__c**.

- Uploaded a CSV file containing visitor names, emails, and purposes.

- Mapped fields (CSV column → Salesforce field).

- Imported successfully.

Data Import Wizard

Help for this page

Recent Import Jobs

Status	Object	Records Created	Records Updated	Records Failed	Start Date	Processing Time (ms)
Closed	Visitor	0	0	10	09-25-2025 06:31	74
Closed	Visitor	10	0	0	09-25-2025 06:20	226

No records to display.

Completed last 7 days

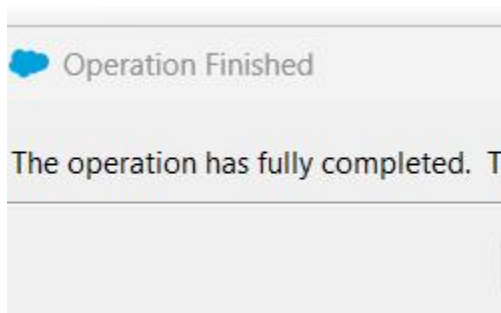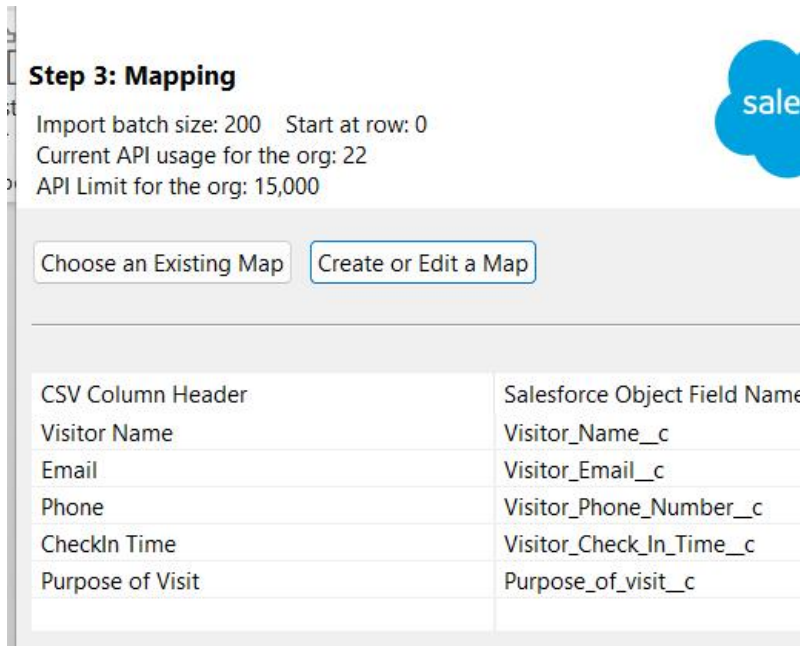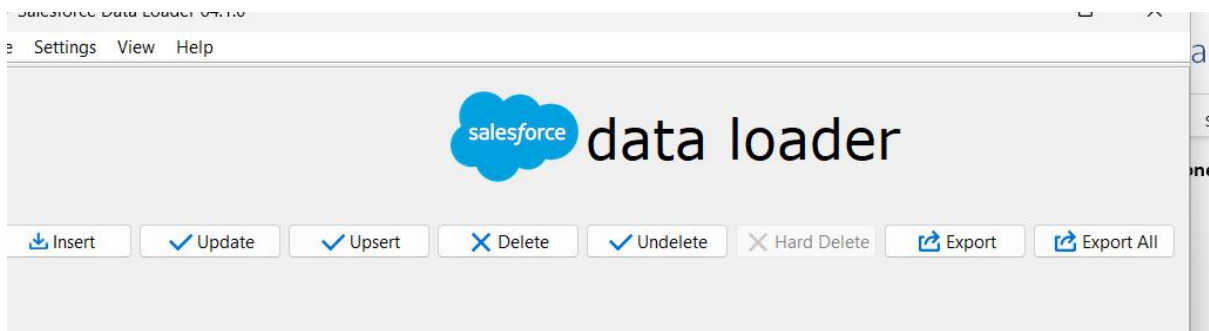| Job ID	Submitted By	Start Time	End Time ↓	Status	Job Type	Operation	Object	Records Processed	Records Failed	Time to Complete ([hh:]mm:ss)
750gK00000DI1M9	ASWARTHAGARI, HARATHI	9/24/2025, 11:20 PM	9/24/2025, 11:20 PM	Closed	Bulk V1	Insert	Visitor	10	0	00:01

2. Data Loader

Use Case:
Data Loader is used for large-scale imports/exports (up to 5 million records). It supports insert, update, upsert, delete, and export operations. For this project, we used it to bulk export all **Visitor__c** records for reporting and re-import updated records if needed.

Steps Done:

- Installed **Data Loader**.

- Logged in with Salesforce credentials.

- Selected **Export** operation → chose Visitor__c object.

- Saved CSV file locally.

- Used **Insert** operation later to upload new test visitor records.

Step 3: Mapping

Import batch size: 200   Start at row: 0
Current API usage for the org: 22
API Limit for the org: 15,000

| Choose an Existing Map | Create or Edit a Map |

CSV Column Header	Salesforce Object Field Name
Visitor Name	Visitor_Name__c
Email	Visitor_Email__c
Phone	Visitor_Phone_Number__c
CheckIn Time	Visitor_Check_In_Time__c
Purpose of Visit	Purpose_of_visit__c

Operation Finished

The operation has fully completed. T

3. Duplicate Rules

Use Case:
Duplicate Rules prevent users from creating records that already exist in Salesforce (based on matching fields). For visitors, we want to stop duplicates based on **Visitor Email**.

Steps Done:

- Setup → Duplicate Rules → New Rule.

- Object: **Visitor__c**.

- Matching Rule: **Visitor_Email__c**.

- Action: Allow, but show warning when a duplicate email is found.

mployee email duplicate check

Help for this Page

Duplicate Rule Detail

Edit | Delete | Clone | Deactivate

Rule Name	Employee email duplicate check	Order	1 of 1 [Reorder]
Description			
Object	Visitor		
Record-Level Security	Enforce sharing rules		
Action On Create	Allow	Operations On Create	✓ Alert ✓ Report
Action On Edit	Allow	Operations On Edit	✓ Alert ☐ Report
Alert Text	Use one of these records?		
Active	✓		
Matching Rule	✅ Email equals email ✅ Mapped	Matching Criteria	Visitor: Visitor_Email EXACT MatchBlank = FALSE
Conditions			
Created By	HARATHI ASWARTHAGARI, 9/25/2025, 2:07 AM	Modified By	HARATHI ASWARTHAGARI, 9/25/2025, 2:09 AM

Edit | Delete | Clone | Deactivate

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4. Data Export & Backup

Use Case:
Regular backups are necessary for data recovery and compliance. Salesforce provides **Data Export** to download all records as CSV/ZIP files.

Steps Done:

- Setup → Data Export.

- Selected Visitor__c and related objects.

- Scheduled weekly export to maintain a backup.

SETUP
Data Export

Monthly Export Service

Data Export lets you prepare a copy of all your data in salesforce.com. From this page you can start the export process manually or schedule it to run automatically. When an export is ready for do on this page for 48 hours, after which time they are deleted.

> ℹ **Next scheduled export:**
> None

[Export Now] [Schedule Export]

Scheduled By	HARATHI ASWARTHAGARI
Schedule Date	9/25/2025
Export File Encoding	ISO-8859-1 (General US & Western European, ISO-LATIN-1)

Action	File Name
download	WE_00DgK00000BMLyrUAH_1.ZIP

5. Change Sets

Use Case:
Change Sets are used to deploy metadata (custom objects, fields, flows, apex classes, etc.) from one Salesforce org (sandbox) to another (production).

Steps Done:

- Created an **Outbound Change Set** in Sandbox.

- Added **Visitor__c object, Apex class (VisitorController), Aura component**.

- Uploaded Change Set to Production.

- In Production, deployed the Change Set.

6. Unmanaged vs Managed Packages

Use Case:
Packages bundle Salesforce metadata for sharing or deployment.

- **Unmanaged:** Editable after installation, best for internal use or sample apps.

- **Managed:** Locked and versioned, used for commercial distribution on AppExchange.

Steps Done:

- Created an **Unmanaged Package** containing Visitor Management components.

- Tested installation in another dev org.

7. ANT Migration Tool

Use Case:
ANT Migration Tool is a command-line tool for retrieving/deploying metadata between orgs using XML. Useful for version control integration.

Steps Done:

- Installed Apache ANT.

- Configured **build.properties** with Salesforce credentials.

- Created **package.xml** to retrieve Visitor__c, Apex classes, and Aura component.

- Deployed to target org using ant deploy.

8. VS Code & SFDX

Use Case:
Salesforce DX (SFDX) with VS Code is the modern way to develop and deploy Salesforce applications. It integrates with Git for version control.

Steps Done:

- Installed **Salesforce Extensions for VS Code**.

- Authorized Dev Hub org (sfdx auth:web:login).

- Pulled Visitor Management metadata (sfdx force:source:pull).

- Made edits locally and deployed using (sfdx force:source:push).