

Phase 8: Data Management & Deployment

PROJECT TITLE:-

Expense On a Page: An expense approval & insight system.

Industry: Finance / Corporate Expense Management.

Target User: Employees, Managers, and Finance Teams.

DATA IMPORT WIZARD:-

Data Import Wizard is a simple UI tool to import data that is up to 50,000 records

Importing Data for Expense__c Object:

1. Creating a CSV File for the Expense__c Object that will be Imported to the Salesforce.

A	B	C	D
Status__c	Total_Amc	Expense_Detail__c	
Submitted	500	Hotel Stay	
Submitted	250	Office Supplies	
Draft	100	Meal Claim	

2. Importing the made csv file just made with the help of the Data Import Wizard.

Going to setup> Data import wizard> Launch Wizard

Object: Expense__c

What do you want to do: Add new Record

Upload the CSV file: Expense_c.csv

Import your Data into Salesforce

You can import up to 50,000 records at a time.

[Help for this page](#)

What kind of data are you importing?

Standard objects

Custom objects

Expense_Lines

Expenses

Mentors

What do you want to do?

Add new records

Match by:

--None--

Which User field in your file designates record owners?

--None--

Which User field in your file do you want to match against to set the User lookup field?

Where is your data located?

Drag CSV file here to upload

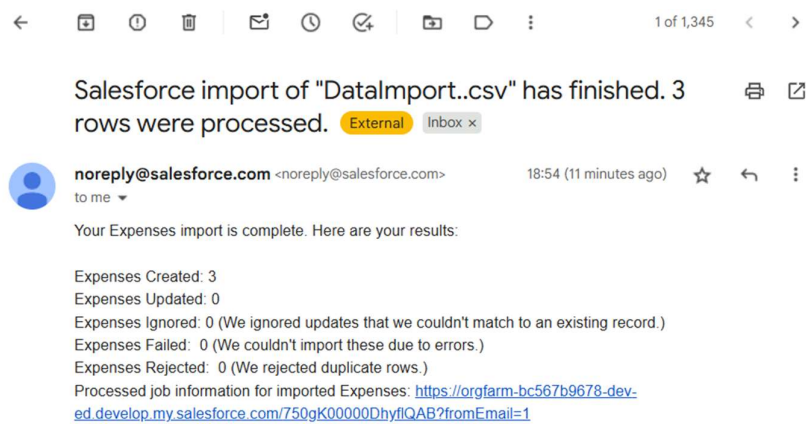
CSV

mapping the fields Accordingly.

Edit	Mapped Salesforce Object	CSV Header
Change	Status	Status__c
Change	Total Amount	Total_Amount__c
Change	Expense Detail	Expense_Detail__c

Start Import-> import completed.

Process Completed:



Importing Data for Expense_Line__c Object:

1. Creating a CSV File for the Expense_Line__c Object that will be Imported to the Salesforce.

	A	B	C	D	E
1	Expense__c	Category__c	Amount__c	Receipt_ID__c	Receipt_URL__c
2	a02gK000005Sc13QAC	Travel	300	R-1001	http something
3	a02gK000005Sc13QAC	Meals	200	R-1002	hbkbjnkn
4	a02gK000005kziOQAQ	Office	250	R-1003	bbnlniluh
5					

2. Importing the made csv file just made with the help of the Data Import Wizard.
Going to setup> Data import wizard> Launch Wizard
Object: Expense_Line__c
What do you want do: Add new Record
Upload the CSV file: Expense_Line.csv

Getting closer...

Choose data Edit mapping Start import

Import your Data into Salesforce

You can import up to 50,000 records at a time. [Help for this page](#)

What kind of data are you importing? What do you want to do? Where is your data located?

Standard objects

Custom objects

Expense_Lines ✓

Expenses >

Mentors >

Students >

Add new records ✓

Match by: --None--

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

Which Expense field in your file specifies the Master/Detail relationship? Salesforce.com ID

Trigger workflow rules and processes? ☐

Trigger workflow rules and processes for new and updated records

Drag CSV file here to upload

CSV

File: Choose File ExpenseLine.csv

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


Values Separated By: Comma

Mapping the fields accordingly

Edit	Mapped Salesforce Object	CSV Header
Change	Expense	Expense__c
Change	Category	Category__c
Change	Amount	Amount__c
Change	Receipt ID	Receipt_ID__c
Change	Receipt URL	Receipt_URL__c

Start Import-> import completed.

Process Completed:

 **noreply@salesforce.com** <noreply@salesforce.com> 23:00 (6 minutes ago) ☆ ↶ ⋮
to me ▾

Your Expense_Lines import is complete. Here are your results:

Expense_Lines Created: 3
Expense_Lines Updated: 0
Expense_Lines Ignored: 0 (We ignored updates that we couldn't match to an existing record.)
Expense_Lines Failed: 0 (We couldn't import these due to errors.)
Expense_Lines Rejected: 0 (We rejected duplicate rows.)

Processed job information for imported Expense_Lines: <https://orgfarm-bc567b9678-dev-ed.develop.my.salesforce.com/750gK00000DiP88QAF?fromEmail=1>

DATA LOADER:-

Data Loader is an externally used app that is used fir bulk data import/export that can be used to handle up to 5M records.

Using it to export data of Expense object for backup:

Google search -> salesforce dataloader -> signing in with salesforce credential.

New Task -> Export ->

Object: Expense__c

Field: Record ID

Created Date

Expense ID

Status

Submission Date

Total Amount

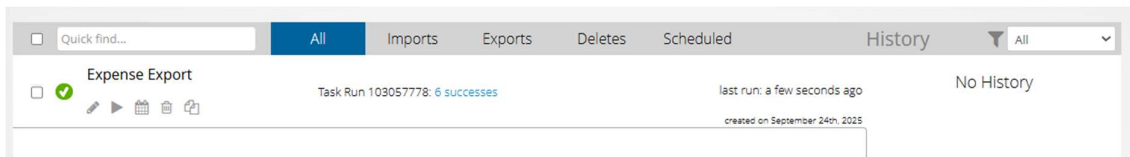
User

The screenshot shows the 'Expense' object selected in the Data Loader. A list of fields is displayed with checkboxes for selection. The following fields are checked: Record ID, Created Date, Expense ID, Status, Submission Date, Total Amount, and User. Other fields like Created By ID, Deleted, Expense Detail, Last Activity Date, Last Modified By ID, Last Modified Date, Last Referenced Date, Last Viewed Date, Owner ID, Record Type ID, and System Modstamp are unchecked.

Saving and running it

	A	B	C	D	E	F	G	H
1	Record ID	Created Date	Expense ID	Status	Submission Date	Total Amount	User	
2	a02gK000005MUqzQAG	09/16/2025T17:23:20.000Z	E-0000001	Submitted	09/24/2025	1470	005gK000005CX5NQAV	
3	a02gK000005Sc13QAC	09/18/2025T18:49:56.000Z	E-0000006	Approved	09/18/2025	500	005gK000005eL1FQAU	
4	a02gK000005XfbYQAS	09/20/2025T11:46:33.000Z	E-0000007	Pending Approval	09/20/2025	0	005gK000005CX5NQAV	
5	a02gK000005kziMQAQ	09/24/2025T13:16:53.000Z	E-0000008	Submitted		500		
6	a02gK000005kziMQAQ	09/24/2025T13:16:53.000Z	E-0000009	Submitted		250		
7	a02gK000005kziMQAQ	09/24/2025T13:16:53.000Z	E-0000010	Draft		250		

(the exported data)



(Export Success notification from the data loader)

DUPLICATE RULE:-

This is the feature in salesforce that prevent you from making duplicate records in the object

Creating a Matching Rule for the expense Object:

Object: Expense

Rule Name: Expense - Receipt ID Exact

Unique Name: Expense_Receipt_ID_Exact

Matching Criteria: Expense Detail -> Exact

Matching Rule

Expense - Receipt ID Exact

[Help for this Page](#) ?

Matching Rule Detail		<div><div>Edit</div><div>Delete</div><div>Clone</div><div>Activate</div></div>	
Object	Expense		
Rule Name	Expense - Receipt ID Exact		
Unique Name	Expense_Receipt_ID_Exact		
Description			
Matching Criteria	Expense: Expense_Detail EXACT MatchBlank = FALSE		
Status	Inactive		
Created By	Anisha Lamba, 9/24/2025, 11:43 AM	Modified By	Anisha Lamba, 9/24/2025, 11:43 AM

Creating a Duplicate Rule for the Expense Object:

Object: Expense

Rule Name: Expense Duplicate Detail

Record-Level Security: Enforce Sharing Rule

Action On Create: Allow with alert and report

Action On Edit: Allow

Matching Rule: Expense - Receipt ID Exact

Save

Duplicate Rule Detail

Edit

Delete

Clone

Activate

Rule Name	Expense Duplicate Detail	Order	1 of 1 [Reorder]	
Description				
Object	Expense			
Record-Level Security	Enforce sharing rules			
Action On Create	Allow	Operations On Create	<input checked="" type="checkbox"/> Alert <input checked="" type="checkbox"/> Report	
Action On Edit	Allow	Operations On Edit	<input type="checkbox"/> Alert <input type="checkbox"/> Report	
Alert Text	Use one of these records?			
Active	<input type="checkbox"/>			
Matching Rule	<div> <div>Expense - Receipt ID</div> <div>Exact <input checked="" type="checkbox"/> Mapped</div> </div>	Matching Criteria	Expense: Expense_Detail EXACT MatchBlank = FALSE	
Conditions				
Created By	Anisha Lamba, 9/24/2025, 11:55 AM	Modified By	Anisha Lamba, 9/24/2025, 11:55 AM	

Edit

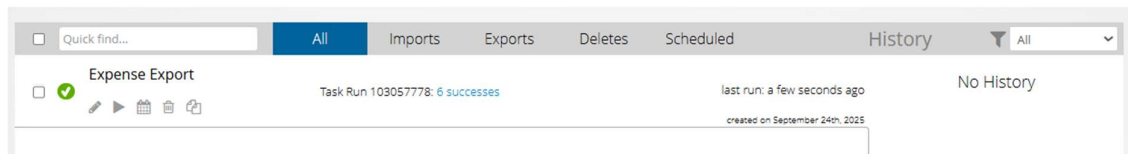
Delete

Clone

Activate

DATA EXPORT AND BACKUP:-

Previously in the Phase we did the export of the data of *the Expense object using the the Data Loader*



And we saved the exported data as the form of backup in our system.

	A	B	C	D	E	F	G	H
1	Record ID	Created Date	Expense ID	Status	Submission Date	Total Amount	User	
2	a02gk000005MUqzQAG	09/16/2025T17:23:20.000Z	E-0000001	Submitted	09/24/2025	1470	005gK000005CX5NQAV	
3	a02gk000005Sc13QAC	09/18/2025T18:49:56.000Z	E-0000006	Approved	09/18/2025	500	005gK000005eL1FQAU	
4	a02gk000005XfbYQAS	09/20/2025T11:46:33.000Z	E-0000007	Pending Approval	09/20/2025	0	005gK000005CX5NQAV	
5	a02gk000005kziMQAQ	09/24/2025T13:16:53.000Z	E-0000008	Submitted		500		
6	a02gk000005kziNQAQ	09/24/2025T13:16:53.000Z	E-0000009	Submitted		250		
7	a02gk000005kziOQAQ	09/24/2025T13:16:53.000Z	E-0000010	Draft		250		

CHANGE SET:-

It is used for the one click deployment of the project from the sandbox to Production which we will not be needing now.

UNMANAGED VS MANAGED PACKAGES:-

Managed: This is used for AppExchange, versioning, locked Components.

Unmanaged: For internal projects to share the whole project with other team to get through.

Let's make a sample package for the project:

Package -> New

Package Name: Expense on page

Configure Custom Link: None

Component: Adding the Expense Management App

The screenshot shows the Salesforce Package Manager interface for a package named "Expense on page". The package is of type "Unmanaged". The "Package Detail" section shows the package name, language (English), and creation/modification details by Anisha Lamba on 9/24/2025. The "Components" tab is active, showing a table of components included in the package.

Action	Component Name	Parent Object	Type	Included By
All		Expense_Line	List View	Expense_Line
All		Expense	List View	Expense Expense_Manager_F
All		Mentor	List View	Mentor
	Amount	Expense_Line	Custom Field	Expense_Line No_Zero_Amount need_for_URL ExpenseAmount Expense_Line_Phone
	Category	Expense_Line	Custom Field	Expense_Line Expense_Line_Phone ExpenseAnalyticsCor

ANT MIGRATION TOOL:-

Not needed for now

VS CODE & SFDX

Setting Up the VS code for the Salesforce:

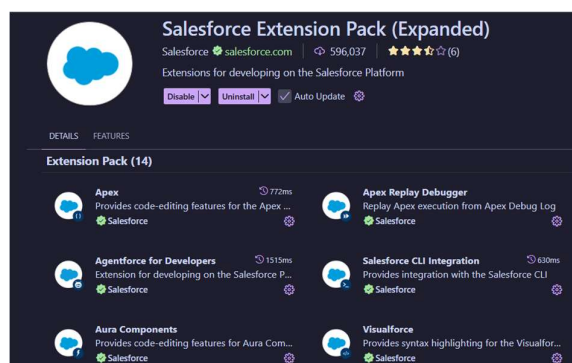
1. Installing JDK (Java Development Kit)

Linux	macOS	Windows
Product/file description	File size	Download
x64 Compressed Archive	204.30 MB	https://download.25_windows-x64_
x64 Installer	182.25 MB	https://download.25_windows-x64_
x64 MSI Installer	181.02 MB	https://download.25_windows-x64_

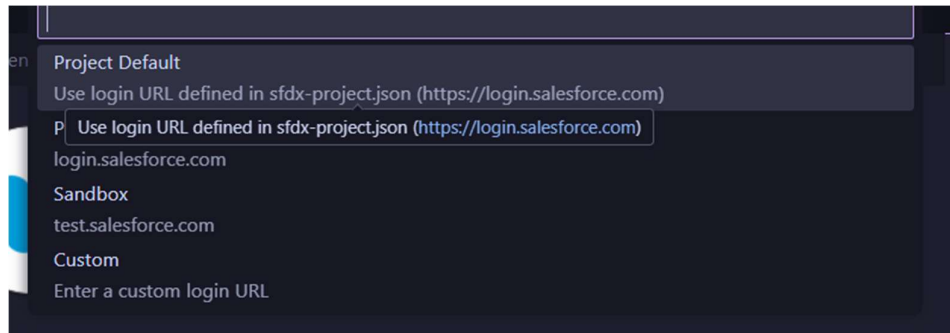
2. Installing Salesforce CLI for integration



3. Installing the necessary extensions in VS Code:



4. Authorizing the salesforce org with vs code



5. Creating a new project SBTCS

