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Loading Data in Salesforce: Data Wizard and Data Loader

January 6th, 2025

Loading Data in Salesforce

Data Wizard and Data Loader

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- Part 1:Preparing Data for Loading to Salesforce
- Part 2: Uploading Using Data Wizard
- Part 3: Uploading Using Data Loader
- Part 4: Tips for Success

This training will help you answer the following questions:

- How important is Data Cleansing?
- Are there Data Standardization rules we should be aware of?
- Who decides the data requirements and standards?
- How do we resolve instances of duplication should one occur?
- What is Data Wizard? What is Data Loader? Which do I use and when?
- Who do I talk to if things don't go as planned?

Part 1:
Preparing Data For Loading to Salesforce

Clean Data Starts with Data Governance!

The role of Data Governance in a Coordinated Model

Salesforce is a Shared Database so Data Governance is Key!

- Sets required fields for shared data like Accounts and Contacts
- Recommends naming conventions and validation rules for standardization
- Defines global picklist options
- Defines rules for identifying duplicate records
- Creates shared processes around how data is created, updated, used, and deactivated
- Identifies what data should live in what technology

Ask Questions

- What requirements are there for my data?
- What Best Practices have been set up for me to follow?
- Do new picklist values need to be approved before import?
- Is Salesforce the best place for this data?

Keeping Your Salesforce Data Clean:
Data Governance Best Practices to Prevent Bad Data

- Understand required data to create a record
- Utilize Data Validation rules
- Match existing data to Uniform Picklist Values
- Use Lookup fields for Reference Data
- Avoid text fields where possible
- Proper use of formula fields
- Understand Record types and page layouts
- Use External Identifiers if needed
- Use Automations

Data Cleaning Before Import

What should we look out for?

Clean your data before importing into Salesforce

- Check your requirements: Each Salesforce object has a set of required fields to ensure data integrity
- Cross Reference: Verify if records in your data file already exist in Salesforce
- De-Duplicate: Remove duplicate records from the file
- Misprints & Misspells: Correct spelling and punctuation errors
- Standardize: Enforce naming conventions
- Completeness: Fill in incomplete records

Tips for Cleaning Data:

Save the original data file as a copy to work on

Data Cleaning and Prepare Data Before Import

It's as easy as 1, 2, 3……

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1 Format First

- Always use the most current import template
- Apply naming conventions
- Locate blanks & incomplete records
- Ensure all required fields have data
- Use only approved picklist values
- Use external identifiers
- Always use a .CSV file format

2 Standardize Process

- Assign ownership of records using Salesforce ID
- Add a column for the parent record for related object
- Include the SF Id for corresponding objects
- Upload following correct order of operations
- Upload new Contacts first, then use the new Contact ID to upload additional Account Relationships

3 Validate Data

- Search to see if there are duplicates within your file
- Do a comparison of what is in Salesforce to avoid duplication
- Update the data if a record is found, don't import new
- Get a 2nd pair of eyes to review file before import

TIP: Use Tools below for Data Cleaning

Excel **Sort and Filter Vlookup** SQL python

TIP: Data Templates are available on the Salesforce Support Portal

Current Duplication Rules

Accounts and Contacts

Salesforce currently includes some rules for duplicate detection on upload, they are designed to provide a "failed" file to be reviewed instead of uploading the suspected data.

- Rules for each imported data set may be slightly different depending on the business and data source. Consult your Project Team, Supervisor, and/or Salesforce Support for possible data idiosyncrasies.
- De-Duplication of Data should always be done before an upload attempt
- While we are mostly focusing on Accounts and Contacts today, this idea persists with other Salesforce objects
- Reminder to Check for Existing Accounts/Contacts using their uniqueness criteria
- Our Salesforce environment is unique to IPRO, so our rules might be slightly unique as well

Data Management: Salesforce Data Prioritization

Salesforce Order of Operations

All Salesforce records are assigned a unique ID when the record is created, below is the order of operations for creating new records using provided data templates:

1. Data Load Accounts and get the Account ID assigned to each Account
2. Add the Account ID to each Contact that should have a Direct association with the account to the Contact Data Load template and load the Contacts
3. Get the Contact ID and all Account IDs for each contact that have both Direct and Indirect Account relationships, populate the Account-Contact Relationship template using those IDs and assign departmental Contact Roles for each association, then load the ACR into Salesforce.

Tips for Account and Contact Data Best Practices:

- An Account must exist in Salesforce before Contacts can be associated with the Account.
- Before adding roles to a Contact, the Contact must already exist inside of Salesforce.
- The Account that is listed in the Contact Record is what Salesforce calls the direct relationship. This is the Primary Account for the Contact. A contact can have only ONE direct account relationship.
- Any additional Account that a Contact is associated with, known as the Account-Contact Relationship, is considered an Indirect Relationship. A Contact can have many Indirect Account-Contact Relationships

Account Contact Relationship

How to upload the right way: Who/What/Where/How Many

Your Account Contact Relationship file will contain all the important ways to categorize your Contact, their Role(s), and affiliations.

- **WHO:** Identify the Person using the Contact Name and the Salesforce Generated Contact ID
- **WHAT**: Provide a Contact Role that the person fulfills for your department
- **WHERE:** Use the Account Name and Salesforce generated Account ID to identify where is the Relationship
- **HOW MANY:** Each Contact can have multiple Account Relationships, so you need to identify if the Account and Role are for the Direct (Primary) or Indirect (other associated) account

AccountId	Account Name	ContactId	Contact Name	IsDirect	ExternalID__c	IsActive	HQICTitles__c	X13th_SOW_Roles__c
0014x00001rizVZAAY	Corina Testing Account LLC	0034x00001gF0cvAAC	Corina Downey-Konkus	TRUE		TRUE		Administrator;Compliance
0017y00000PUJLOAA5	Task 3 Production Testing Account	0034x00001gF0cvAAC	Corina Downey-Konkus	FALSE		TRUE		Administrator

Final Preparation Checks

Ask yourself these questions before you import data

- Do you have any External Identifiers?
- Do you need to use the External Identifiers to integrate with other systems?
- Do new picklist values need to be created in Salesforce before import?
- Did you confirm the record does not exist?
- Do you have all required fields completed?
- Are you Creating New or Updating?
- Do other departments need to review the update?

Keep the data clean in Salesforce, the journey starts before any data imports

Data Wizard Vs. Data Loader

Selecting the right tool for the right job

While Salesforce Users may create records manually, select Data Pros can utilize one of two Salesforce tools to upload large amounts of data.

Data Wizard

- Data Wizard is the default tool being used by all Data Pros
- Used for uploading Accounts, Contacts, Payments, and future custom objects; No access to upload Salesforce Cases or Account/Contact Relationship
- Narrow permissions clearance
- Does not allow for deletion of existing records
- Has less potential to overwrite existing data and eliminate previous rows from the systems

Data Loader

- Access to Data Loader is Limited to select Data Pros.
- Ability to upload to all Objects, including standard objects like Cases and IPRO Custom Objects
- Robust permissions clearance
- Allows for deletion and overwrite of existing records
- Existing data can be overwritten or eliminated from the system using this tool

Part 2: Uploading Using Data Wizard

Data Wizard

Select the environment you are working in

If you are loading data to support user acceptance testing for a new build

Click the “Launch Wizard” button on that landing page

If you are performing ongoing data refreshes for an existing project

User Acceptance Testing

https://ipro3--uat.sandbox.lightning.force.com/lightning/setup/DataManagementDataImporter/home

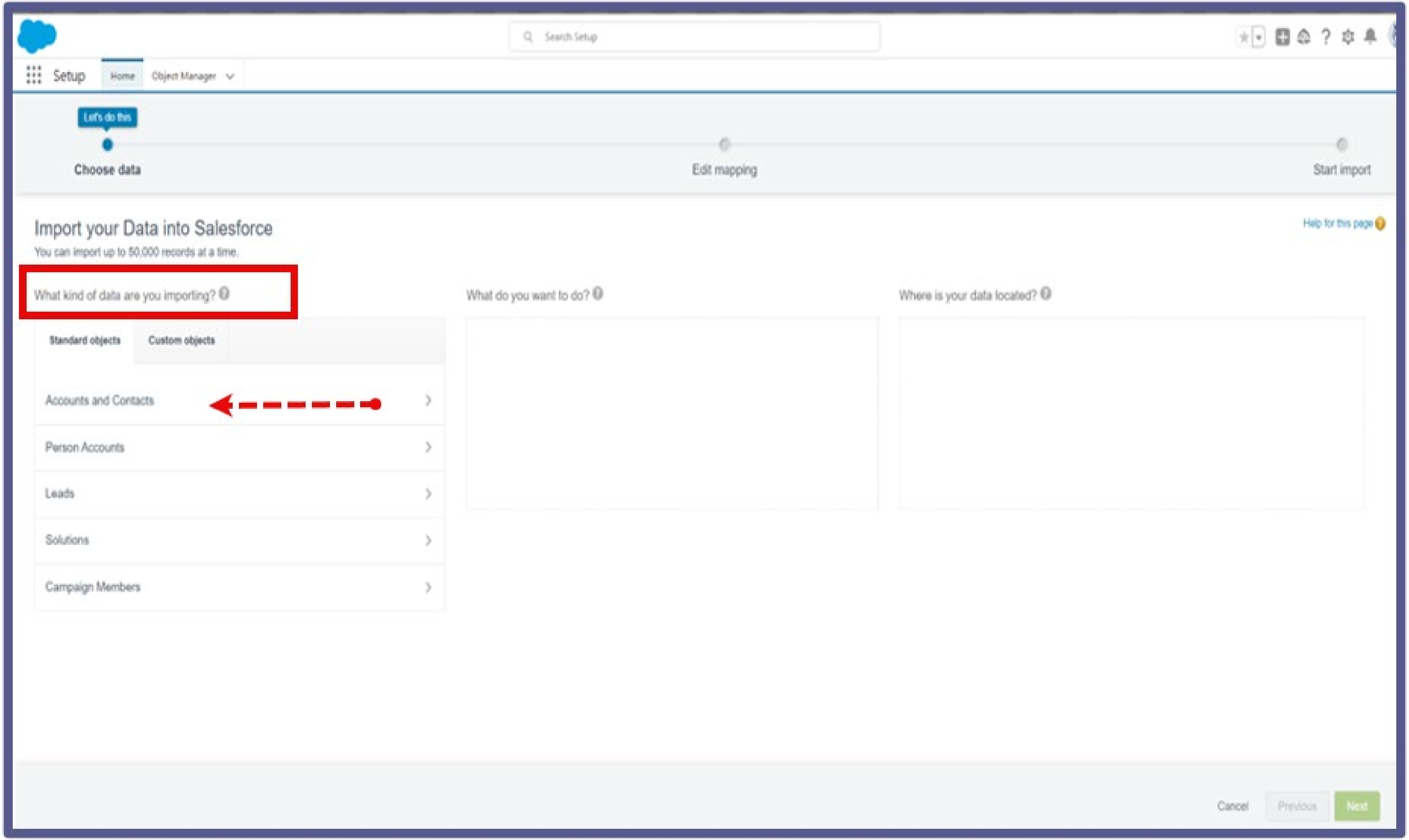
Production

https://ipro3.lightning.force.com/lightning/setup/DataManagementDataImporter/home

Data Wizard Import

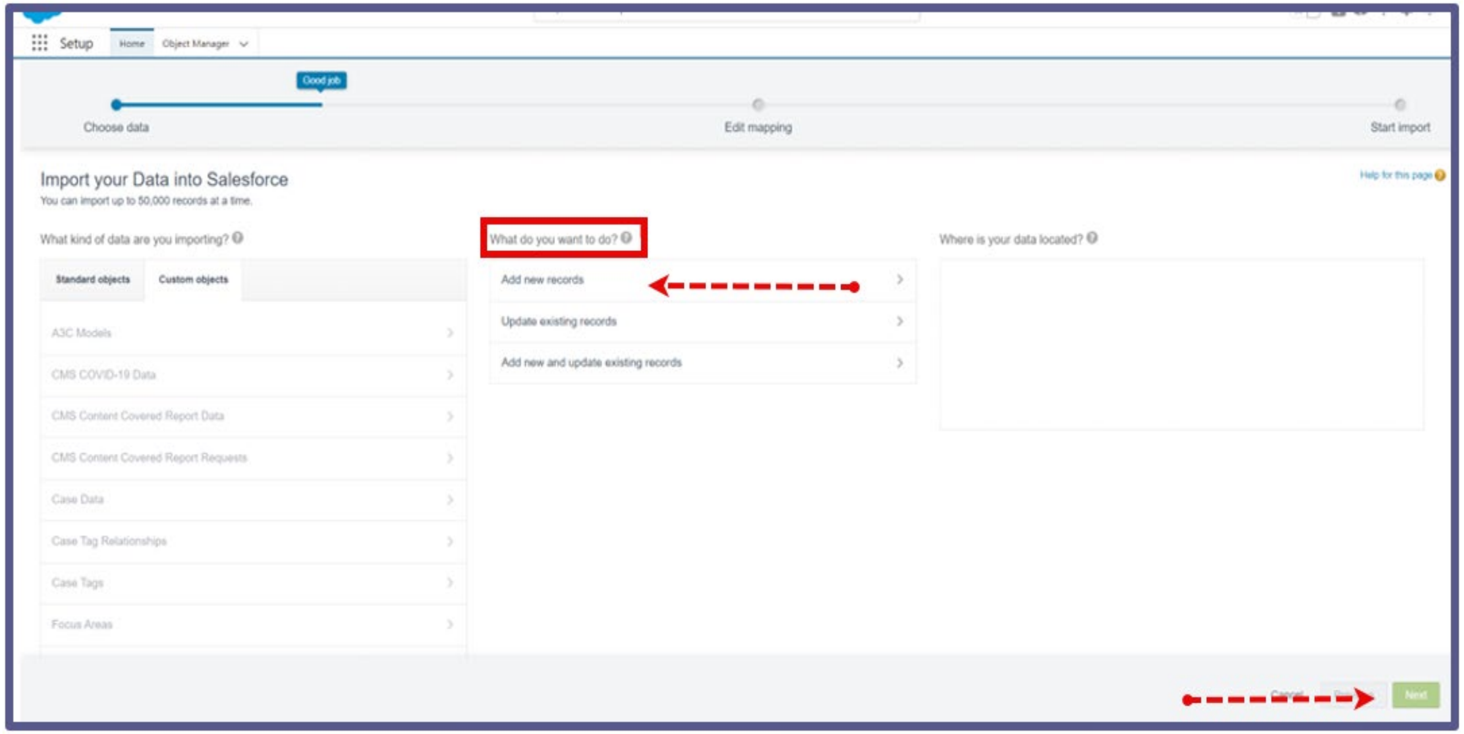
What kind of data are you importing?

- Select the kind of data you will be importing.
- For this example, click on “Accounts and Contacts” and click Next.



Data Wizard

What do you want to do with the data?



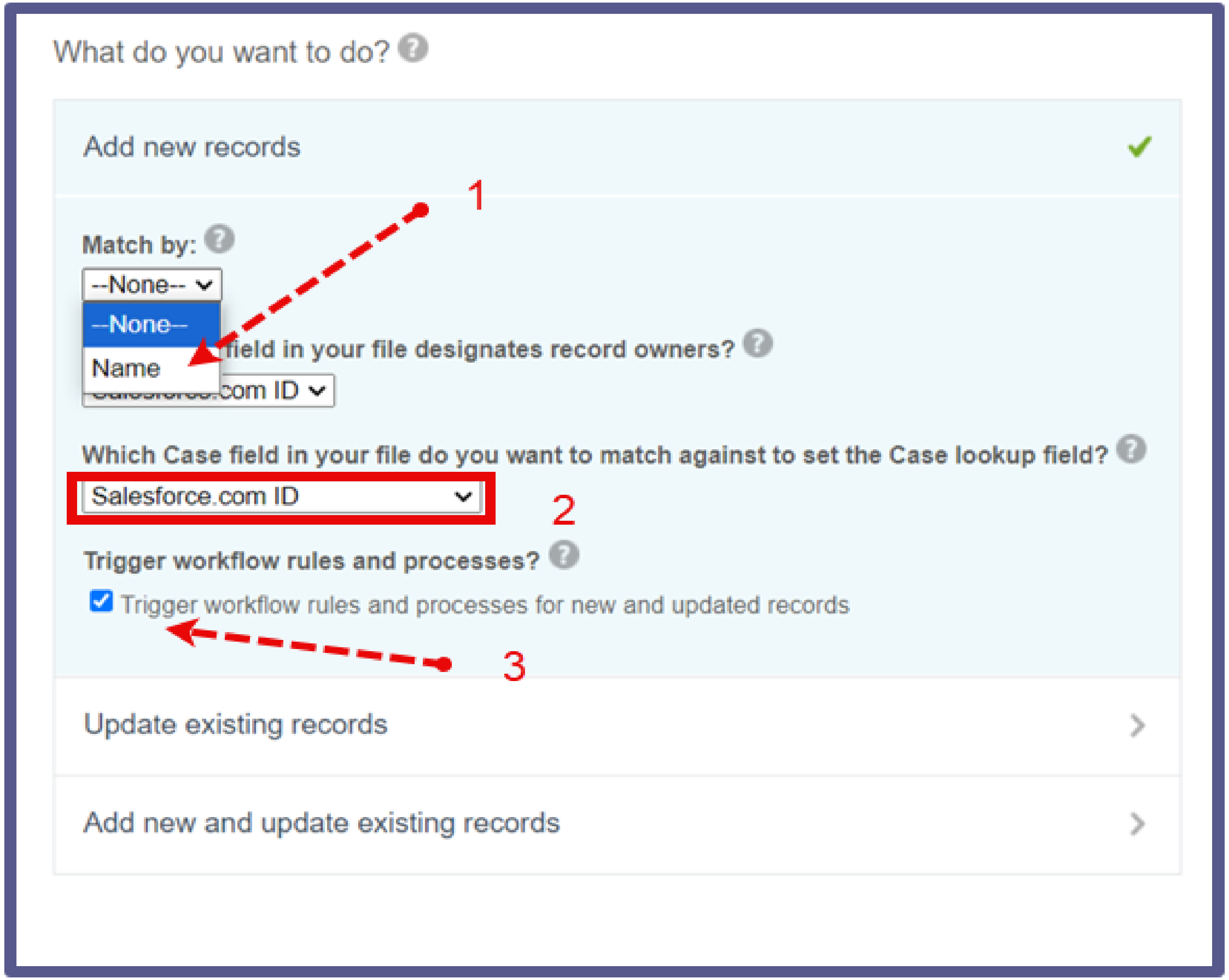
- In the "What do you want to do?" section, select one of the following:
  - Add new records
  - Update existing records
  - Add new and update existing records

Tip: Add new records is typically used when you are initially loading new data. Add new and update existing records is a best practice to use when you are refreshing data for an existing business area

What do you want to do with the data?

Adding New Records

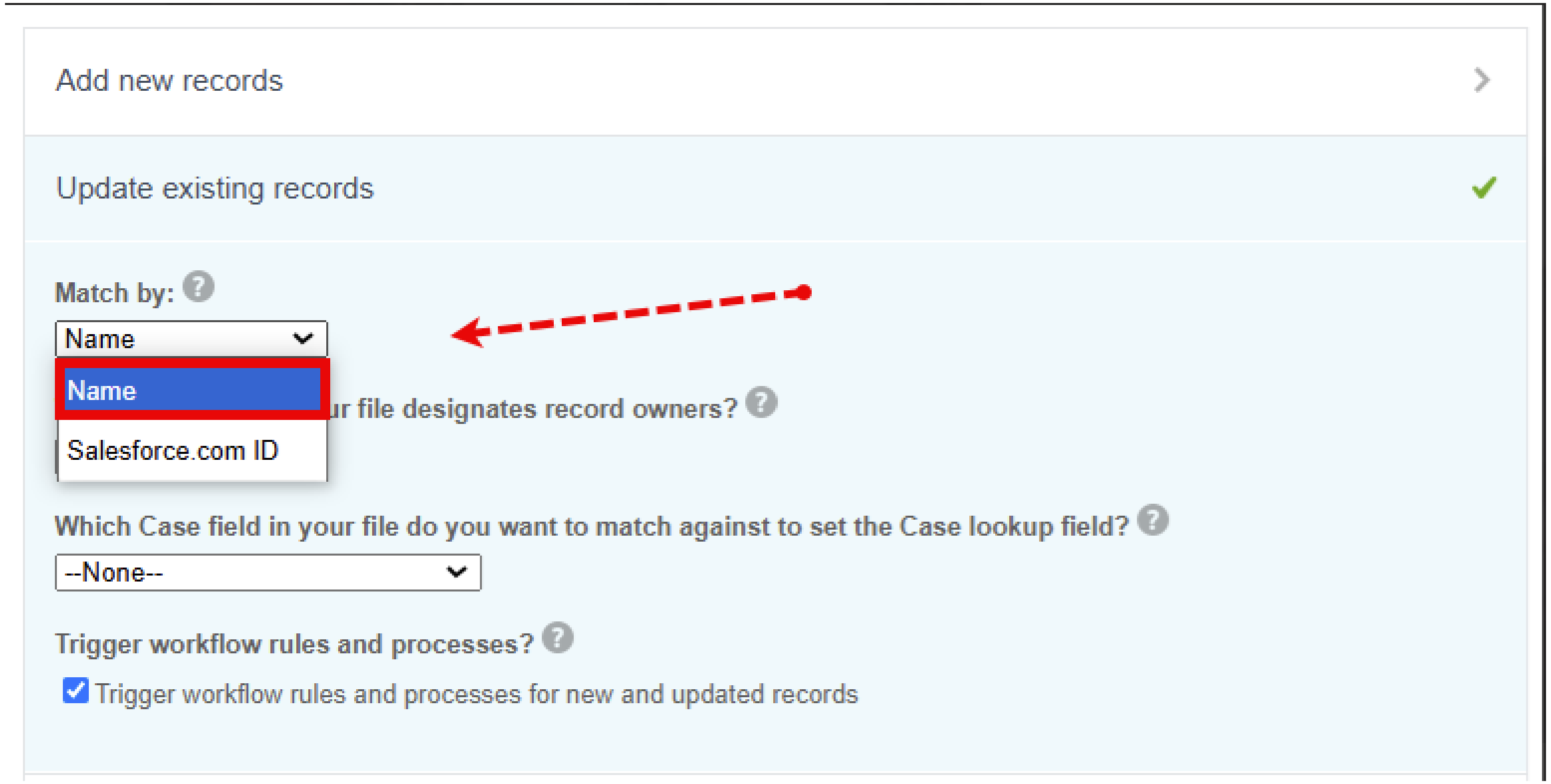
- In the “match by” drop down, select “Name” (Note: this selection will allow the wizard to check for potential duplicate rows
- For Record Owners Select “Salesforce.com ID” to relate records on creation, otherwise select “None”. A selection of None will default to you
- Finally, click on the Checkbox for “Trigger workflow”



What do you want to do with the data?

Updating existing records

- When Updating existing records for an object, “Match by” will have a new value available: “Salesforce.com ID”
- "Name" maybe selected when selecting the "Match By" criteria.

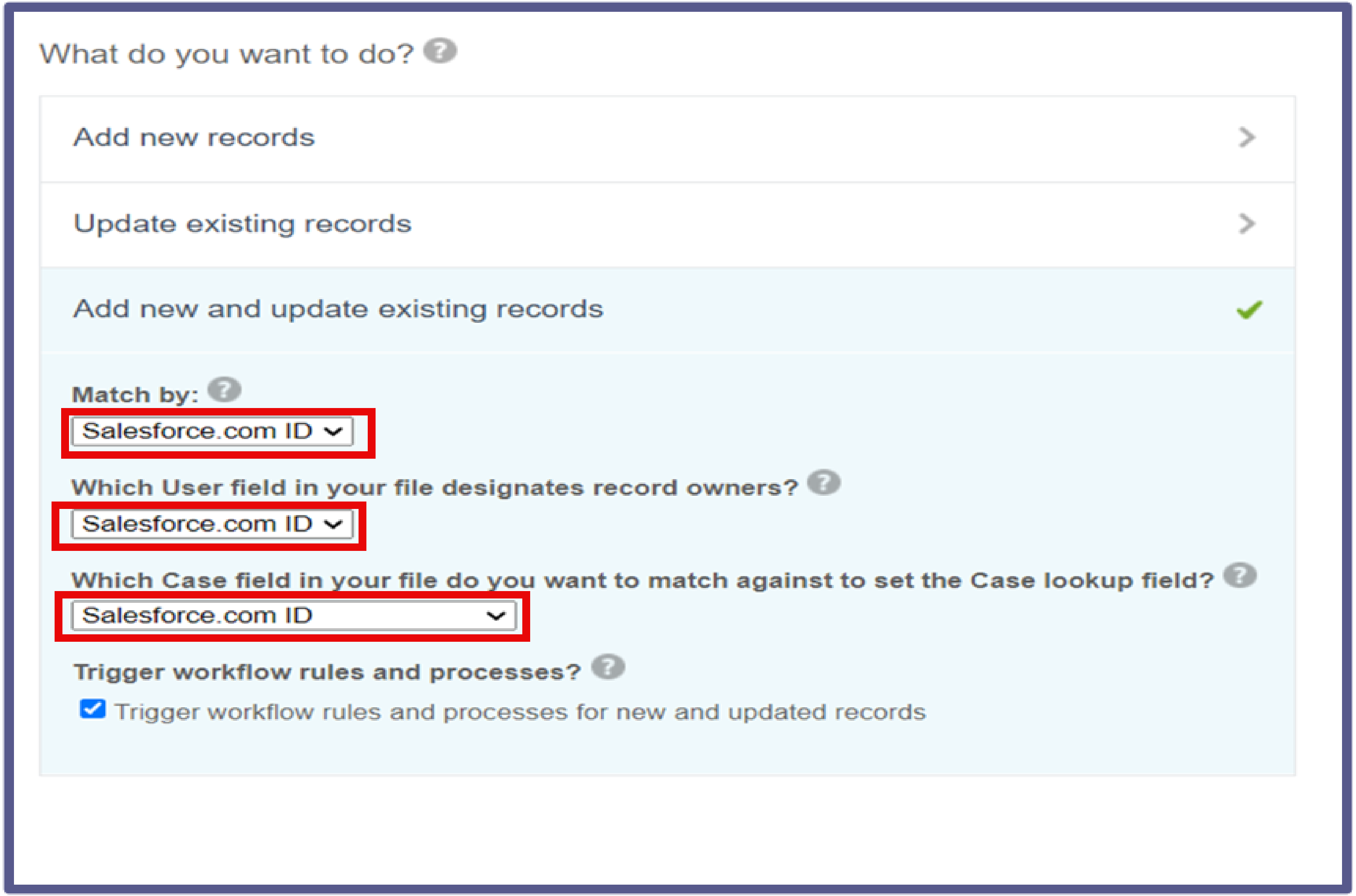


What do you want to do with the data?

Adding new and update existing records

- When utilizing the add new and update existing records, also known as “Upsert” function, continue to select the “Salesforce.com ID”

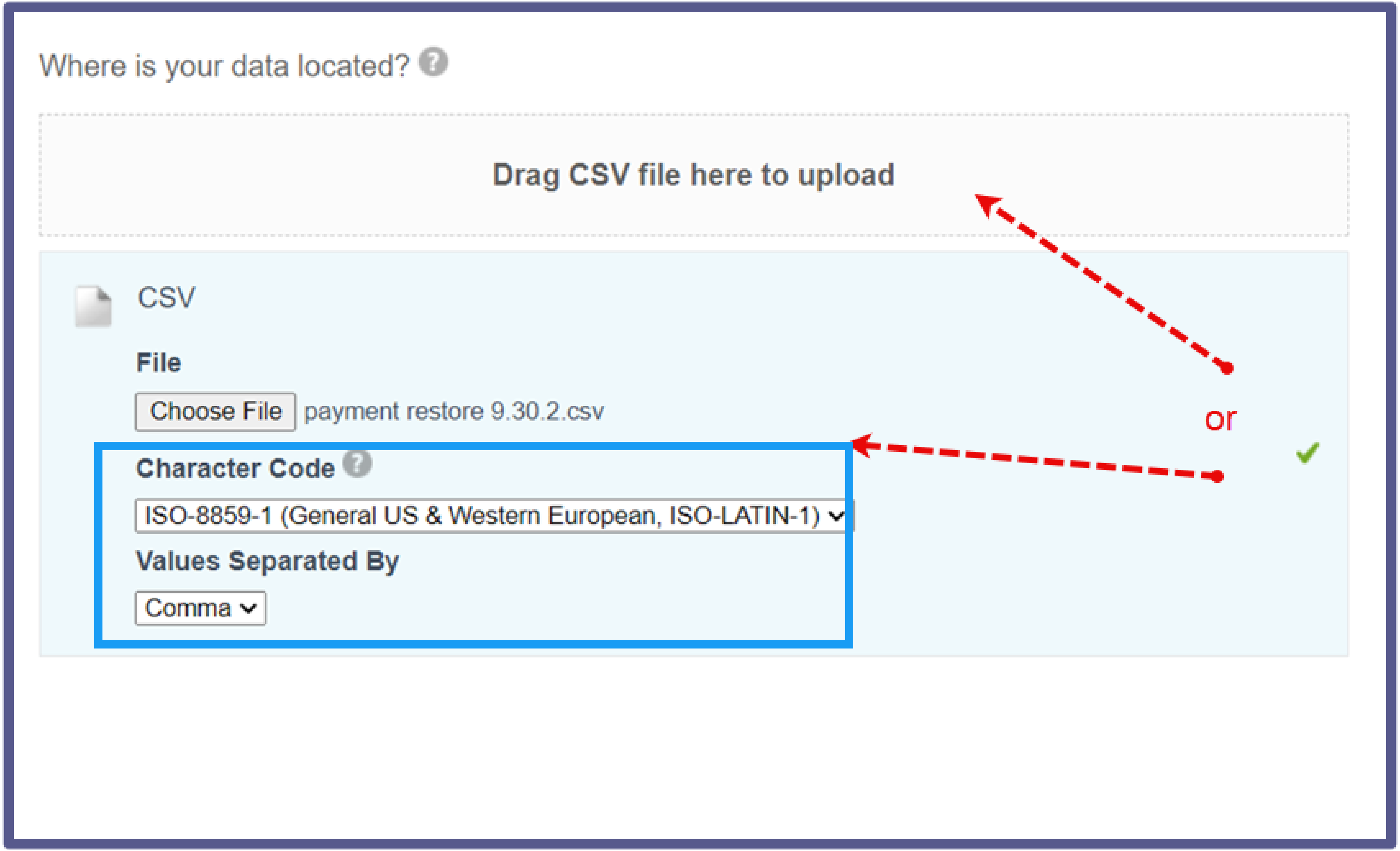
Note: In the source file for the record Id, rows that need to be ‘inserted’ would have NULL values in the ID column, and rows that need to be “updated” would have Salesforce.com Ids in the column.



Where is your data located?

File Selection

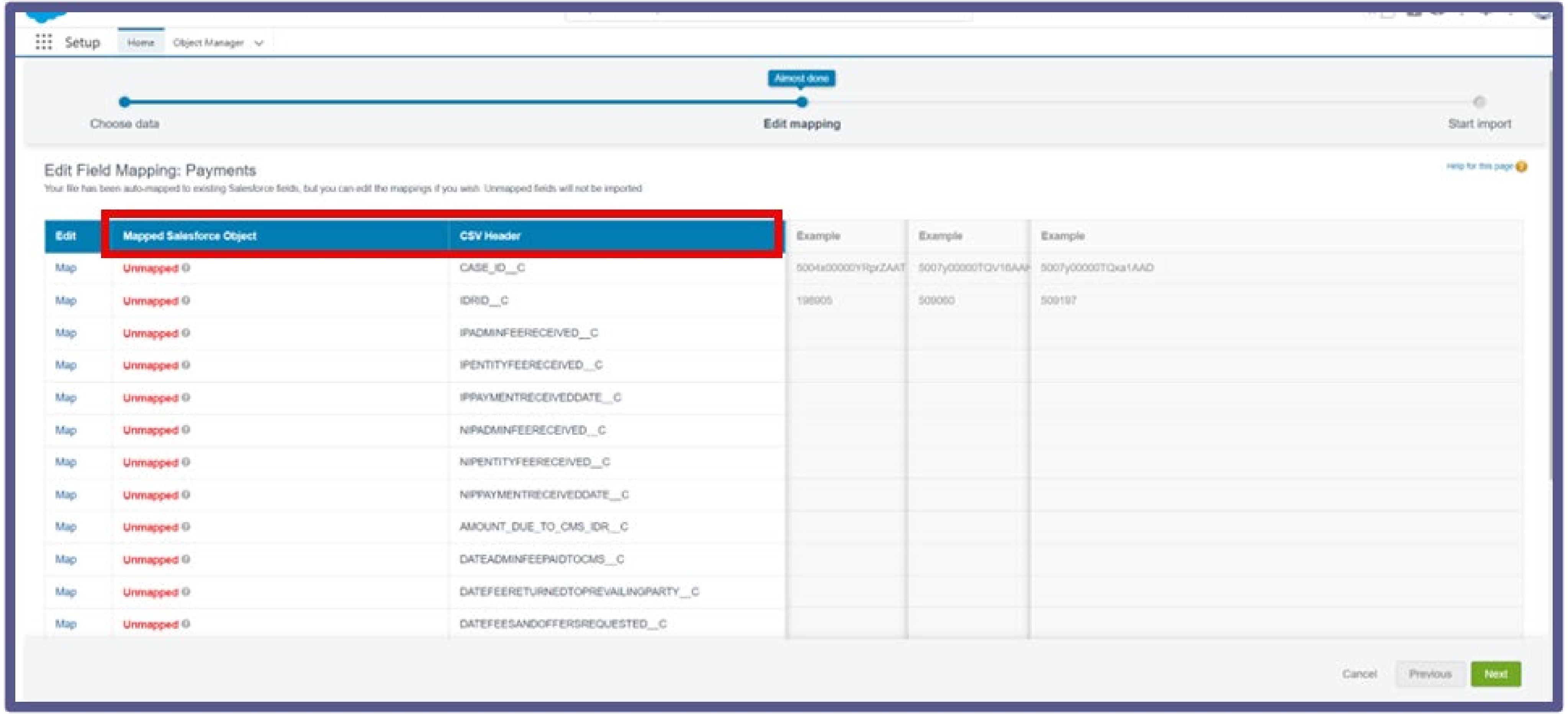
- There are two ways to upload a file, either Drag and Drop your '.csv' file in the appropriate section or, click on the "Choose File" option to select the proper file from your computer
- "Character code" and "Values Separated By" should default to the correct selections



Where is your data located?

File Mapping

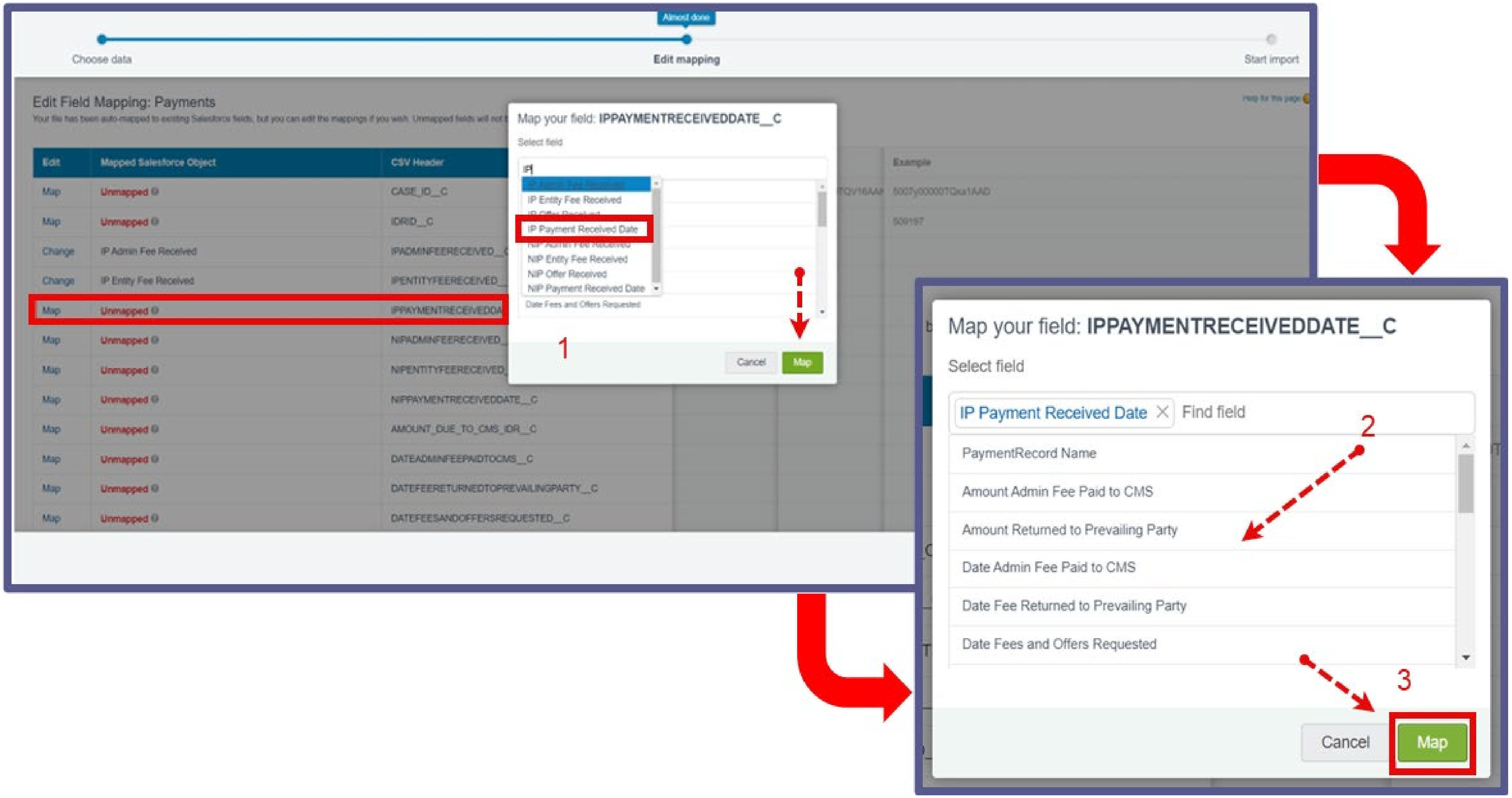
The below landing page now displays the .csv column headers and buttons for the Salesforce mapping



Where is your data located?

File Mapping

- In the “Edit Field Mapping” page, select the field you would like to map
- Map your field in exhibit 2
- Click on “Map” to complete the process

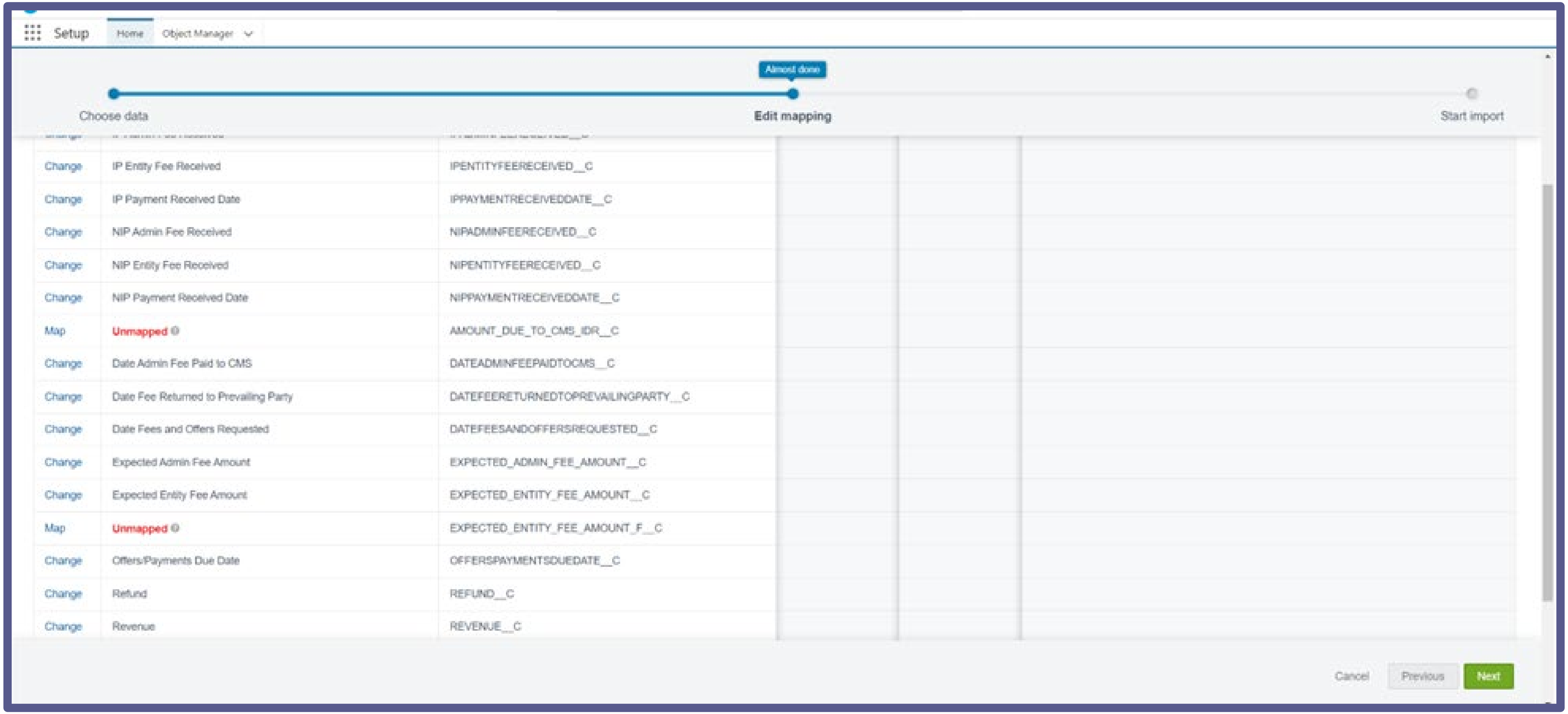


Where is your data located?

File Mapping

Completing “Mapping” for every Column or field that is needed for your business unit.

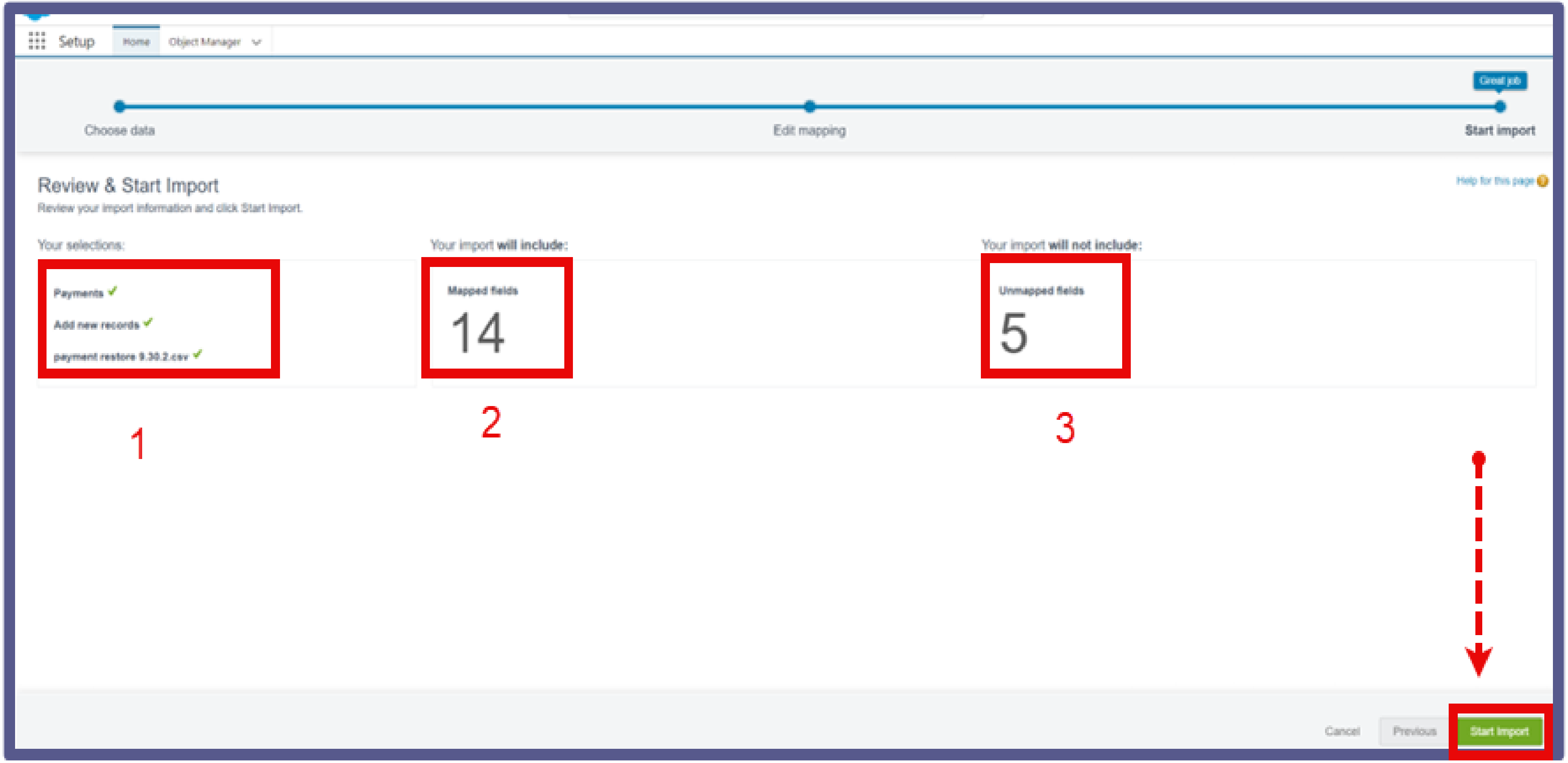
Fields not used by your business unit are not required.



Where is your data located?

File Mapping

- Upon completing mapping, the displayed summary screen summarizes your:
  - Object selections
  - Mapped Fields
  - Unmapped Fields
- Click on “Start Import”

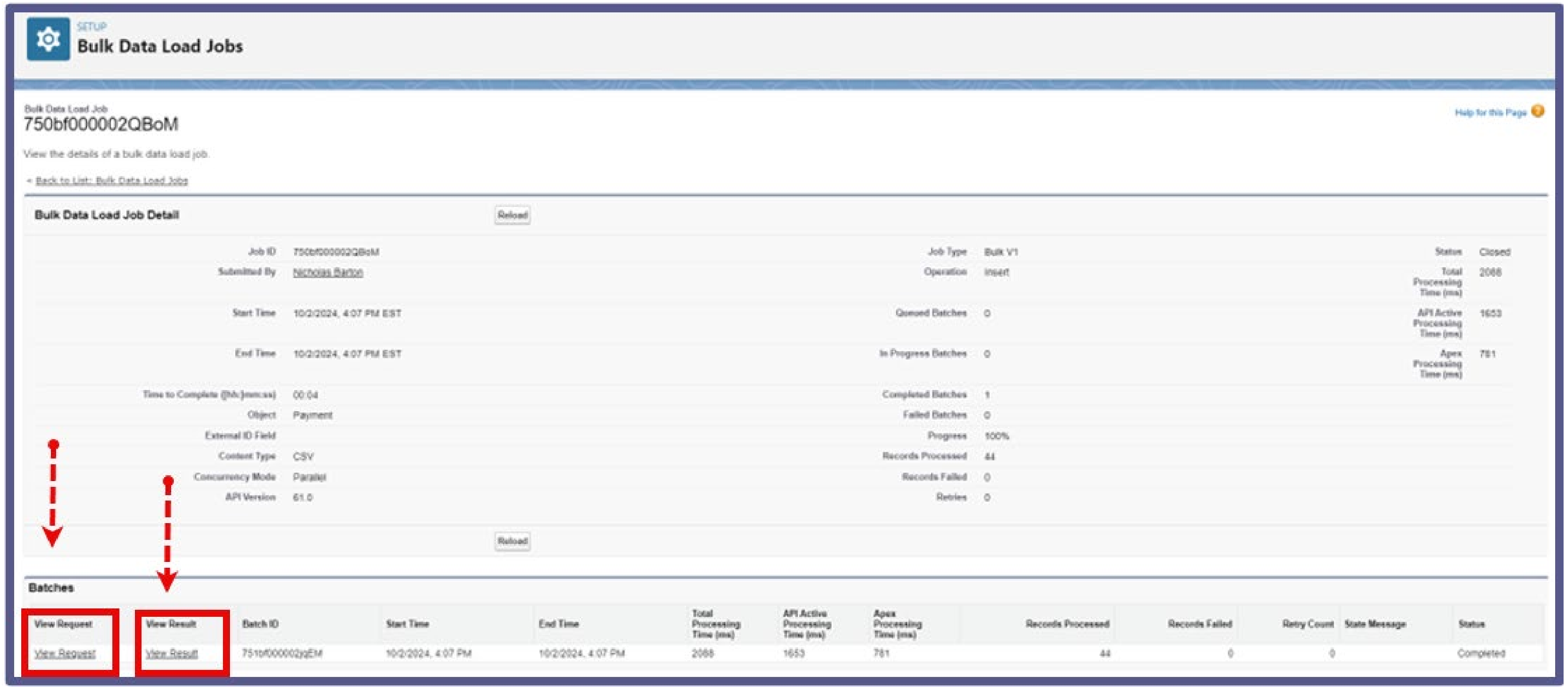


Tip: Review the mapped vs unmapped fields. Confirm the number of mapped fields matches the number of fields imported for your business area. If there is a difference investigate the reason.

Bulk Data Load Jobs

Viewing the results

- Under “Batches” Click on “View Request” to view a copy of the import file you’ve selected
- Click on “View Results” to view .csv file that contains the IDs for the newly inserted records, Status of the import and Error messages (if errors).



- If you have error messages, review and fix the errors
- Re-upload the file
- Additional error messages may be shown after additional import, review and fix the errors
- Re-upload the file
- Continue this cycle until your upload is error free

Part 3: Uploading Using Data Loader

Data Loader

A More Powerful Tool, With More Risk

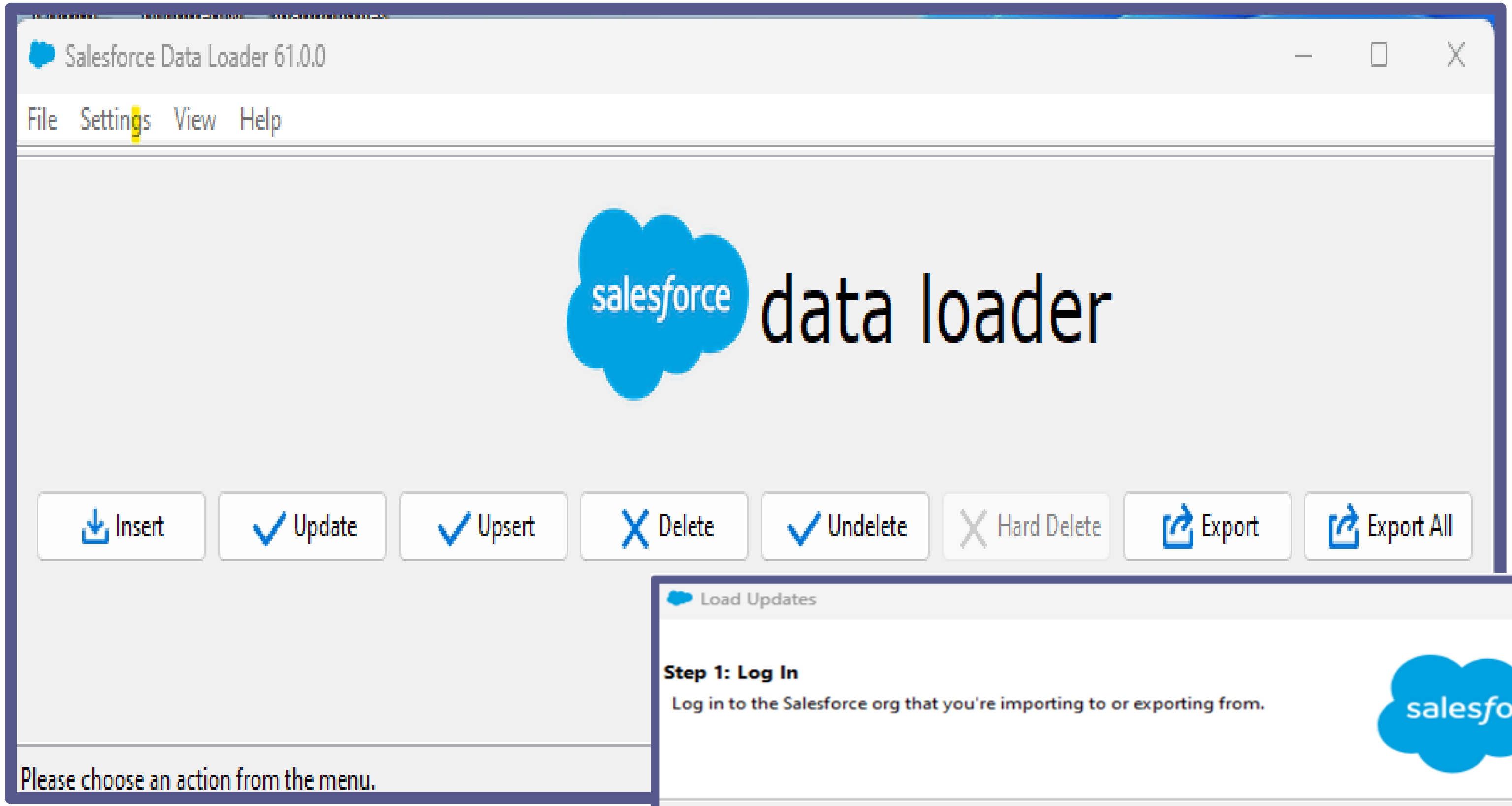
Uploading Data to All Objects

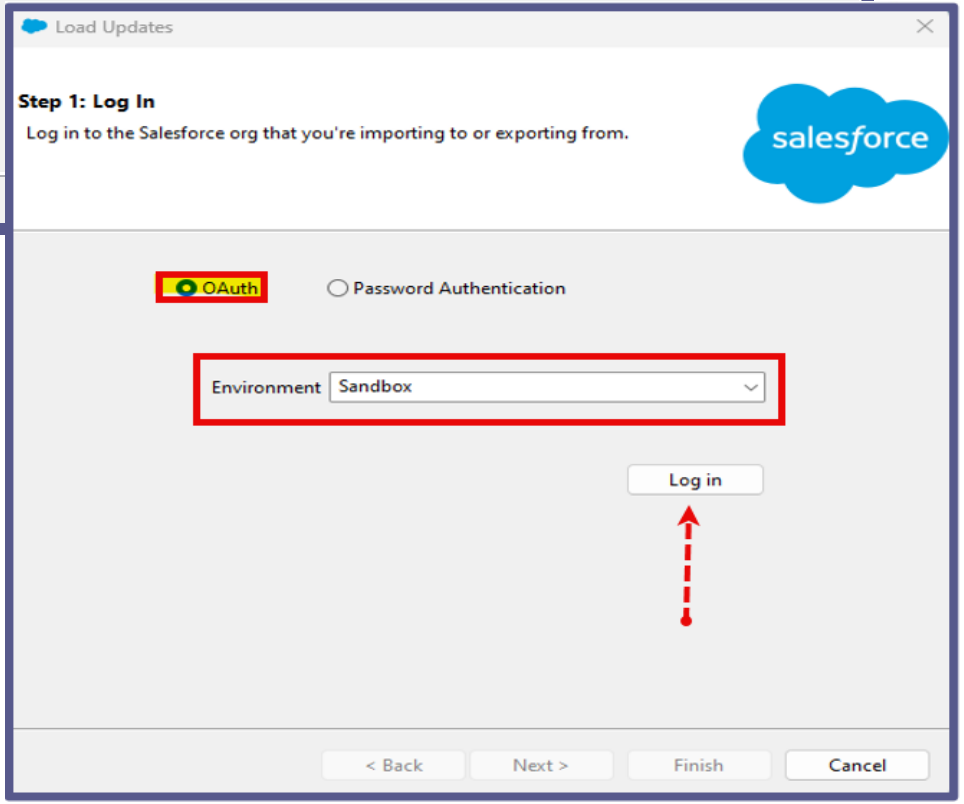
- Intended for High Complexity situations and users with specific needs and significant data experience
- File Field Mappings Need to be one to one with intended fields

- Has the potential to overwrite existing data and eliminate previous rows from the systems
- Passing rows get created as overwrites, failure rows are output to a file for review
- Edit the failing rows and reupload. If failure persists, work with SF admin

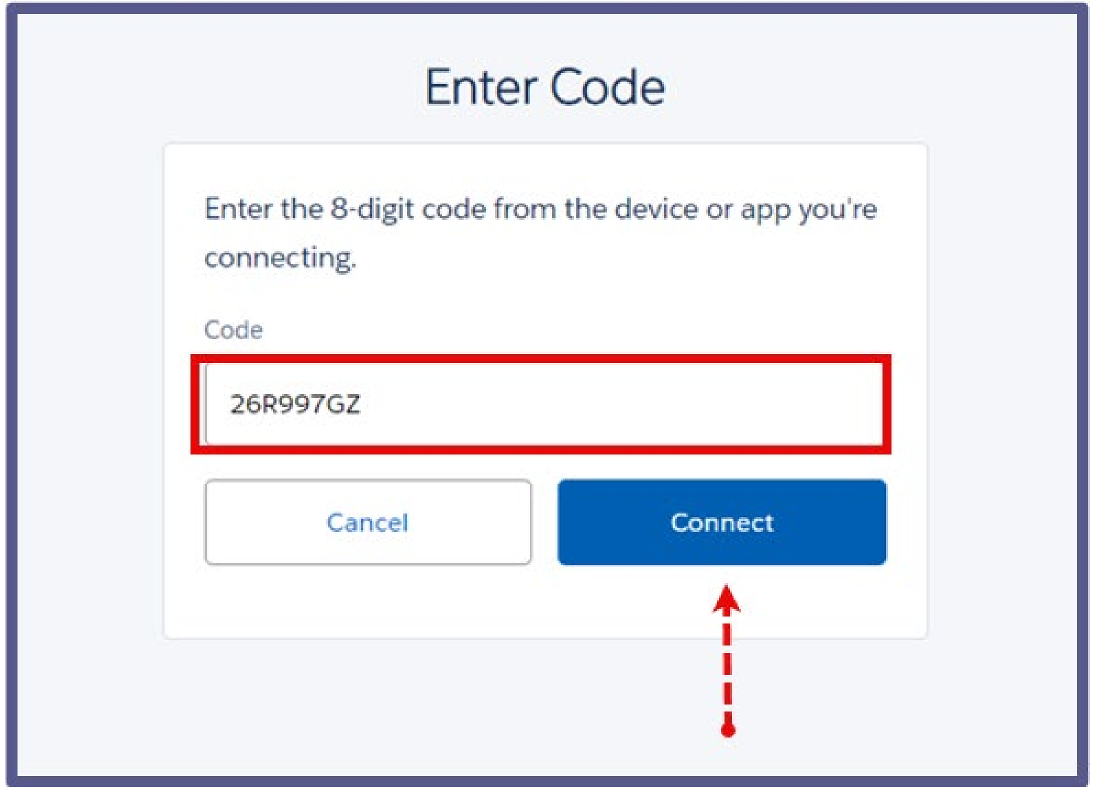
Data Loader
Getting Started

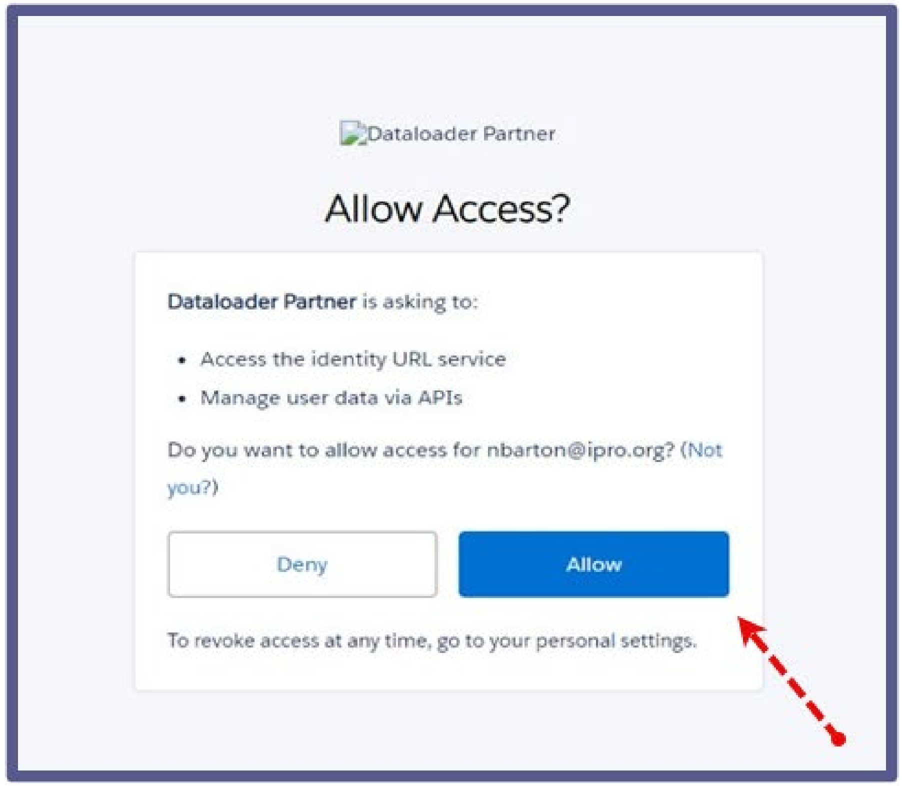
- The Data Loader Tool Interface will present you with loading ‘actions’ to select
- After selecting an action, you will be prompted to ‘Login’ to the Salesforce environment
- Select the ‘OAuth’ Log in Setting
- Select your environment that you need for the data load, this could be a Sandbox or Production environment.
- Click the ‘Log in’ button.





Data Loader
Getting Started



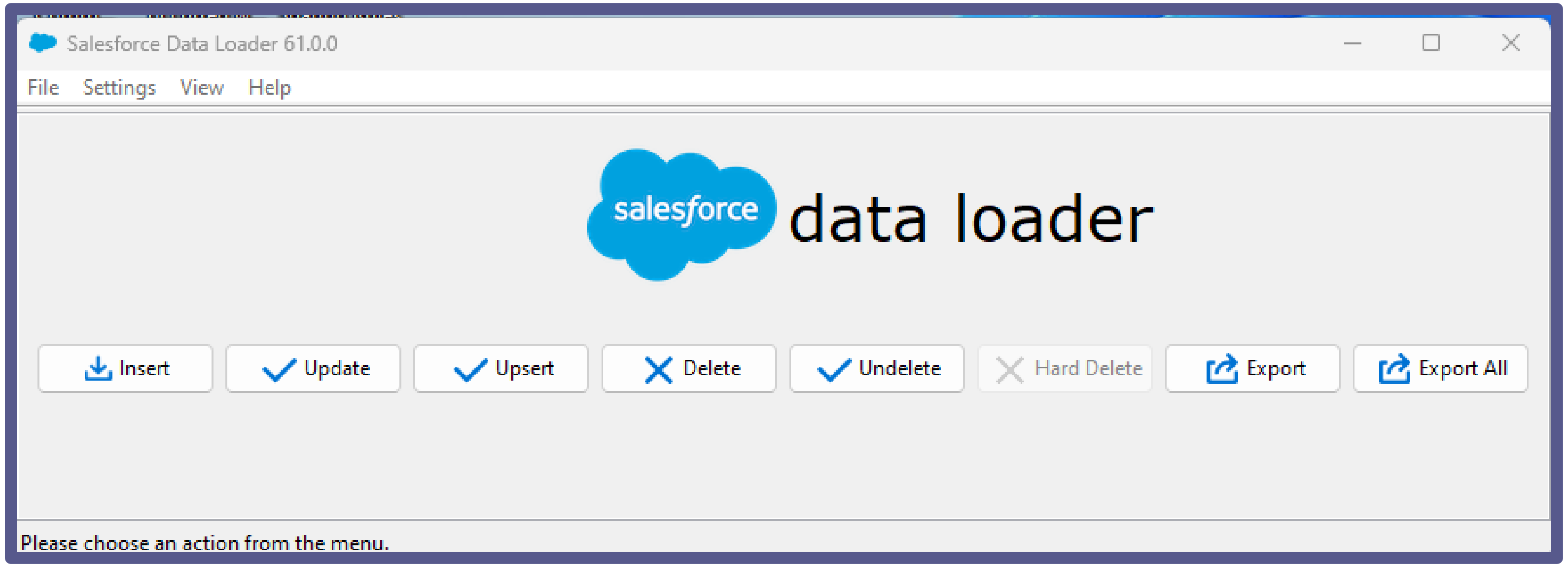


- A new browser window prompt to log into salesforce appears (This requires IPRO's standard 2-factor login for Salesforce with your Microsoft credentials.
- Enter your credentials. You will be prompted to connect by entering a code. The Code will autogenerate. Click “Connect” and then “Allow”

Data Loader
Insert, Update, Upsert or Delete Actions

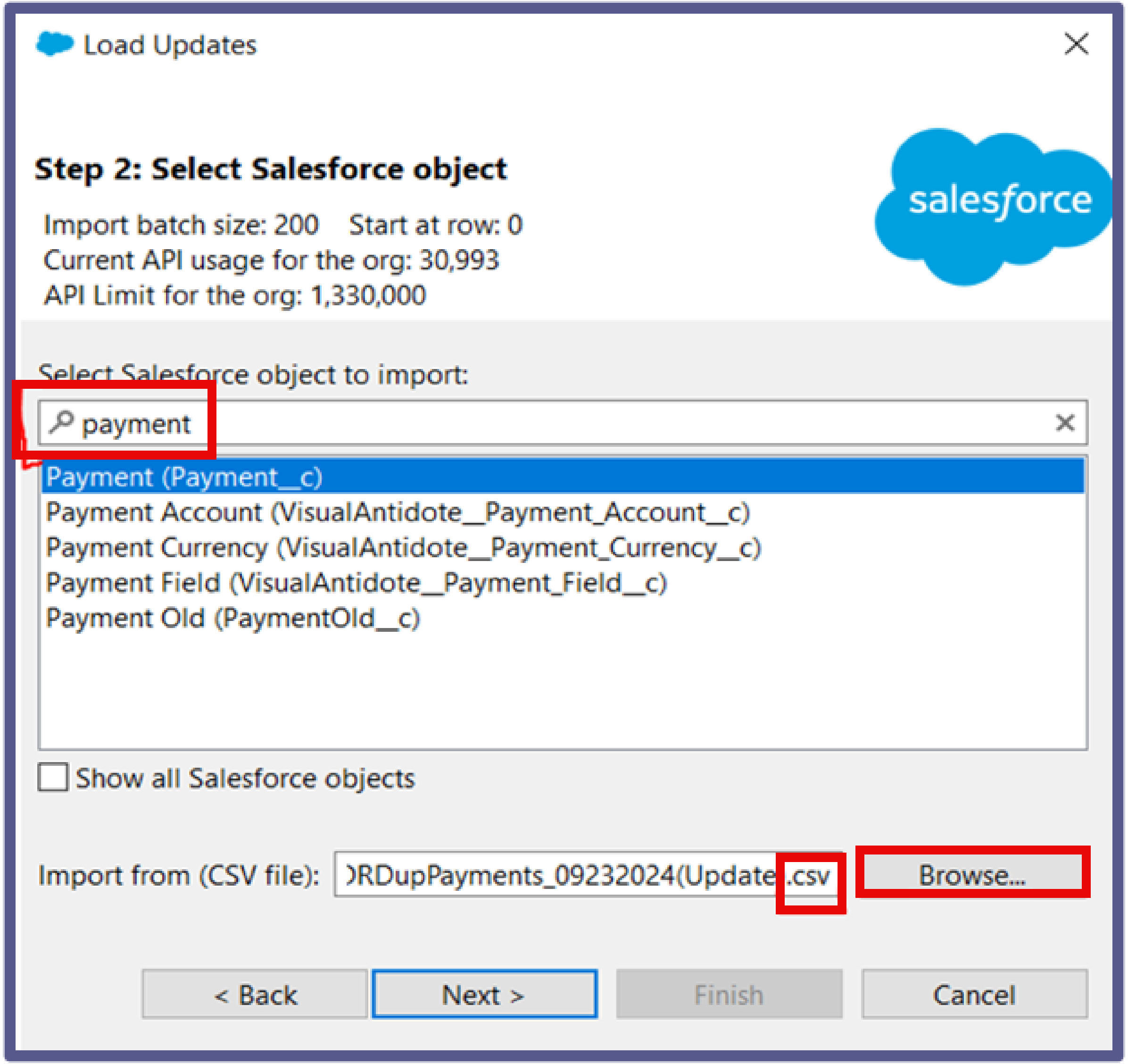
When Data Loader is fully connected to your environment, you will need to select the action you want to take to start the loading process:

- Insert – Adds new data
- Update – Updates existing data
- Upsert - Updates existing data and adds new data
- Delete action - DO NOT USE THIS! Deleted data cannot be recovered. If you need to delete data, discuss it with your Salesforce team FIRST!



Data Loader

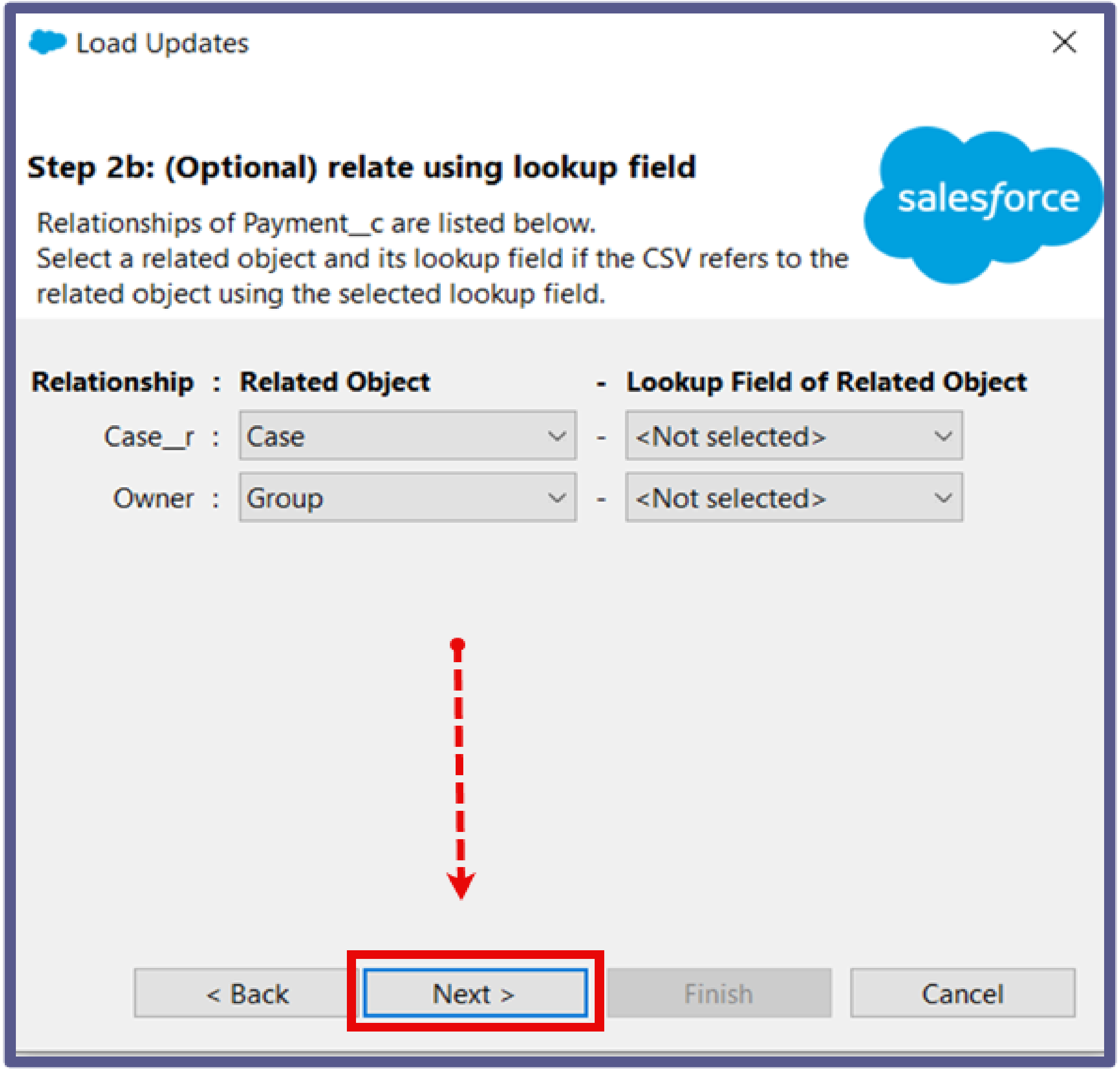
Select the Salesforce Object to Modify



- You will be prompted to select your Salesforce Object (Data Table) that you would like to modify.
- Use the Search box to find the correct Object.
- Use the 'Browse' button to select your .csv file for the Data Load process.

Tip: Data Loader accepts '.csv' files only**

Data Loader
Load Updates



- After Loading your file, you will be prompted with an Optional Step.
- Click “Next” to Skip this ‘Optional’ step for relating objects, as it is not needed at this time.

Data Loader

A More Powerful Tool, With More Risk

Uploading Data to All Objects

File Field Mappings should be specific one to one with intended fields

	A	B	C	D
1	Account Name	Account Site		
2	Burlington Textiles Corp of America	US-East		
3	Dickenson plc	US-Midwest		
4	Edge Communications	US-South		
5	Express Logistics and Transport	US-West		
6	GenePoint	US-West		
7	Grand Hotels & Resorts Ltd	US-Midwest		
8	Pyramid Construction Inc.	EMEA		
9	United Oil & Gas Corp.	US-East		
10	United Oil & Gas, Singapore	APAC		
11	United Oil & Gas, UK	EMEA		
12	University of Arizona	US-West		
13				

account-site

	A	B	C
1	Id	Name	Site
2	0013t00001YG11eAAD	Burlington Textiles Corp of America	
3	0013t00001YG11gAAD	Dickenson plc	
4	0013t00001YG11dAAD	Edge Communications	
5	0013t00001YG11jAAD	Express Logistics and Transport	
6	0013t00001YG11nAAD	GenePoint	
7	0013t00001YG11hAAD	Grand Hotels & Resorts Ltd	
8	0013t00001YG11fAAD	Pyramid Construction Inc.	
9	0013t00001YG11iAAD	United Oil & Gas Corp.	
10	0013t00001YG11mAAD	United Oil & Gas, Singapore	
11	0013t00001YG11lAAD	United Oil & Gas, UK	
12	0013t00001YG11kAAD	University of Arizona	
13			

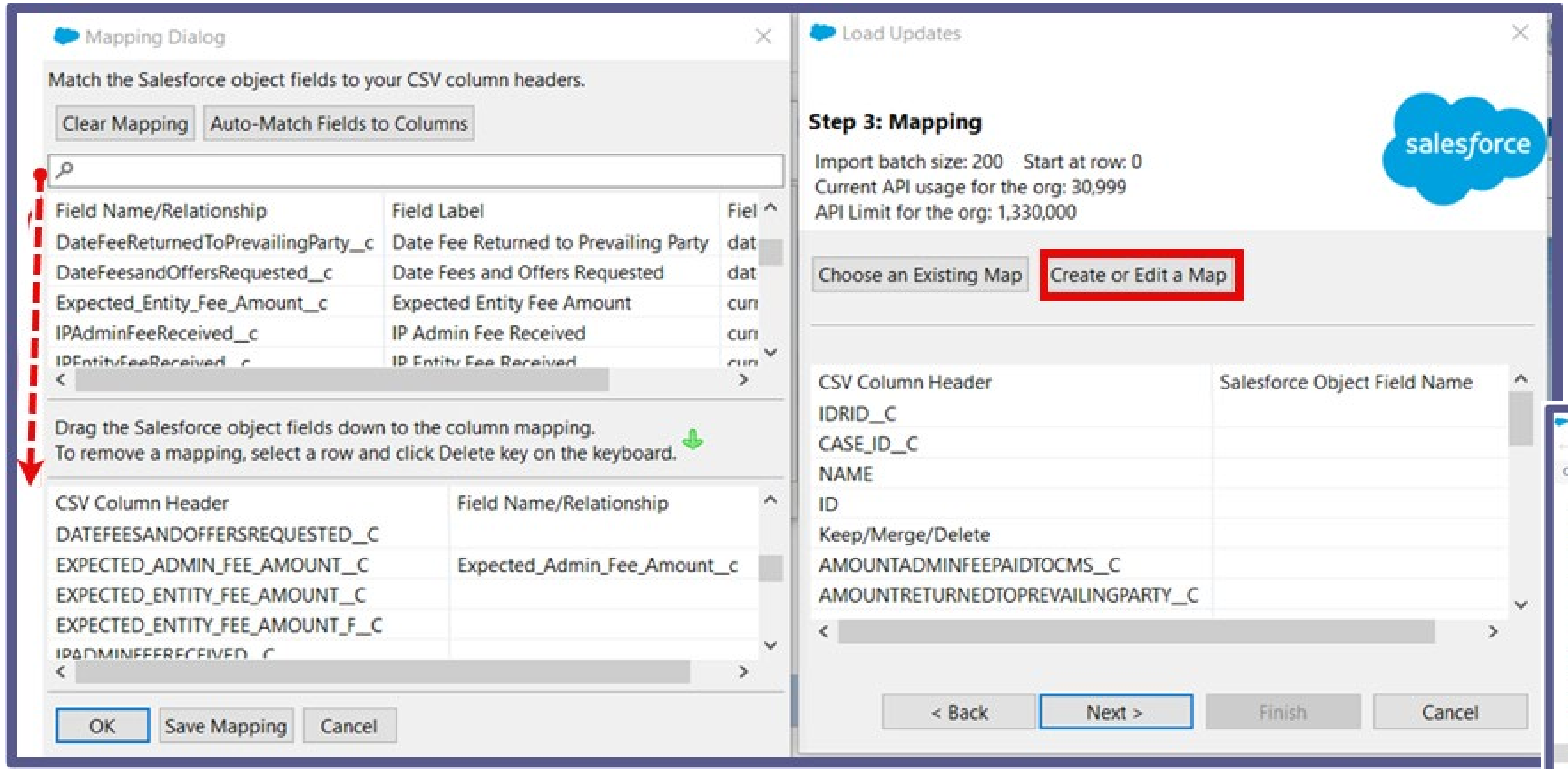
Account Exports

- In this example, the exhibit on the left displays the business file "Account Site", and on the right-hand side exhibit, Data Loader would use "site".

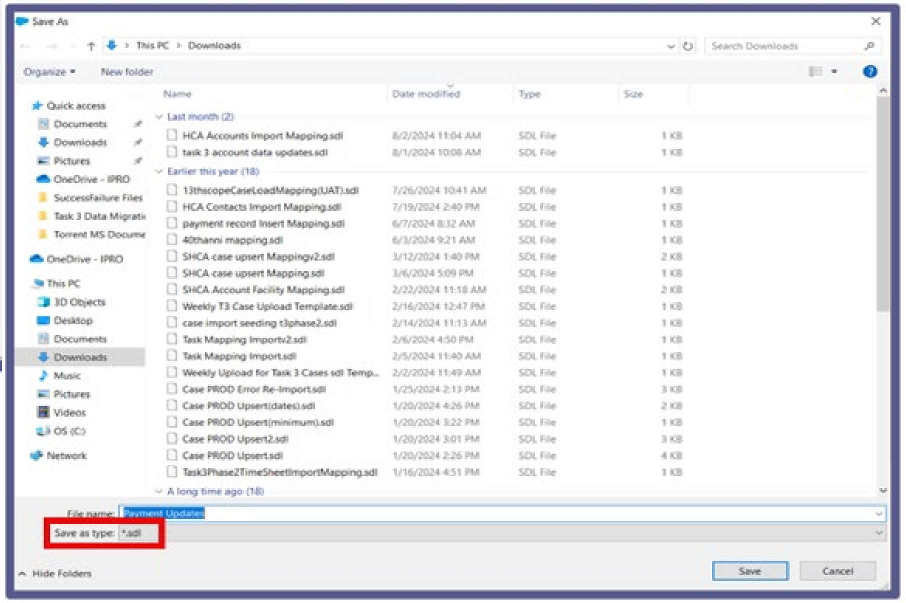
Tip: Column headers matter when mapping.
Mapping Null values in data loader will overwrite Data in the system

Data Loader
Creating a Data Map

For first time users, create a Data Map by mapping your Column Headers in your .csv file to the Salesforce Object



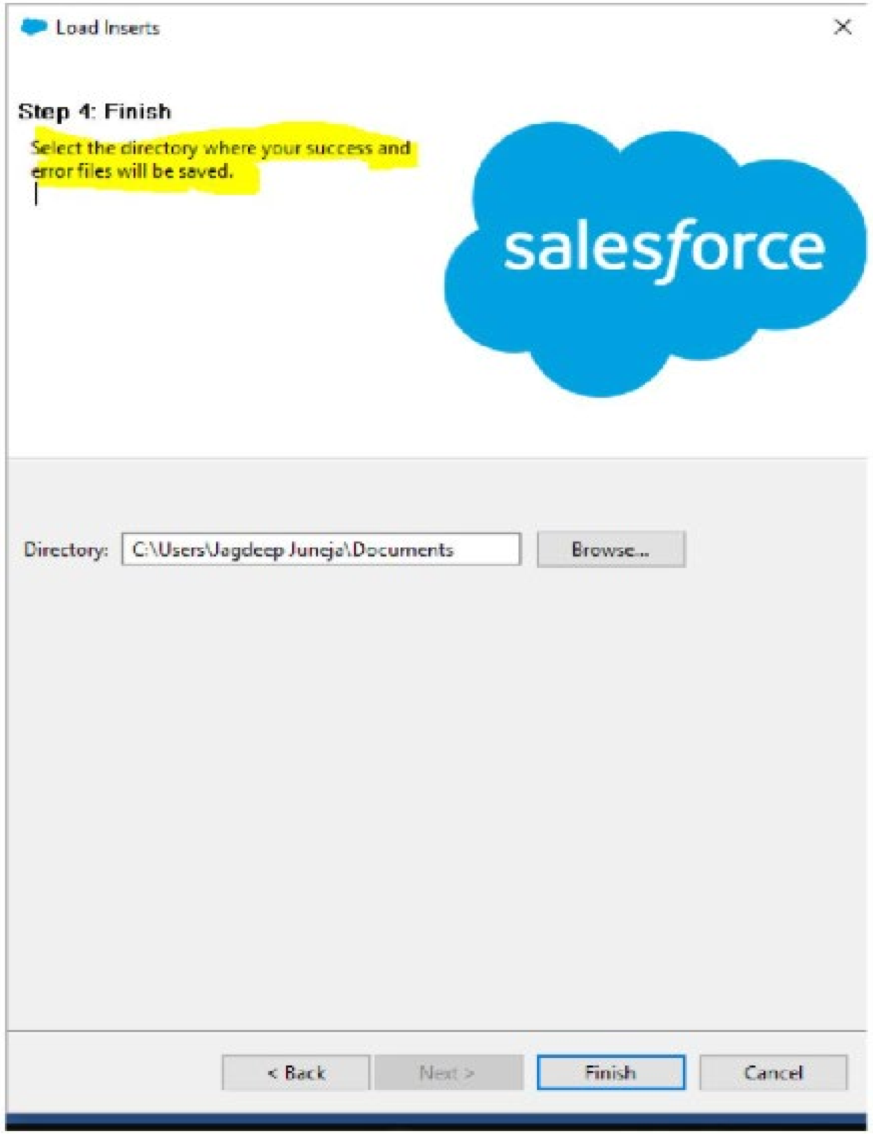
- Data Maps can be saved for future use for recurring data loader work.
- Select “Create or Edit a Map” to Save your new Map.
- These Data Map Files are known as ‘.sdl’ files or ‘Salesforce Data Load’ file.
- Reuse these .sdl files by clicking ‘Choose an Existing Map’



Bulk Data Load Jobs

Viewing the results

- Before running your Data Loader job, you are given the option to select where you would like your "Success" and "Error" files to be stored. Use the Browse button to select your preferred location.
- Once Data Loader completes the job, you will need to open this location to view your Error files to make any necessary adjustments prior to re-upload.



- If you have error messages, review and fix the errors
- Re-upload the file
- Additional error messages may be shown, review and fix the errors
- Re-upload the file
- Continue this cycle until your upload is error free

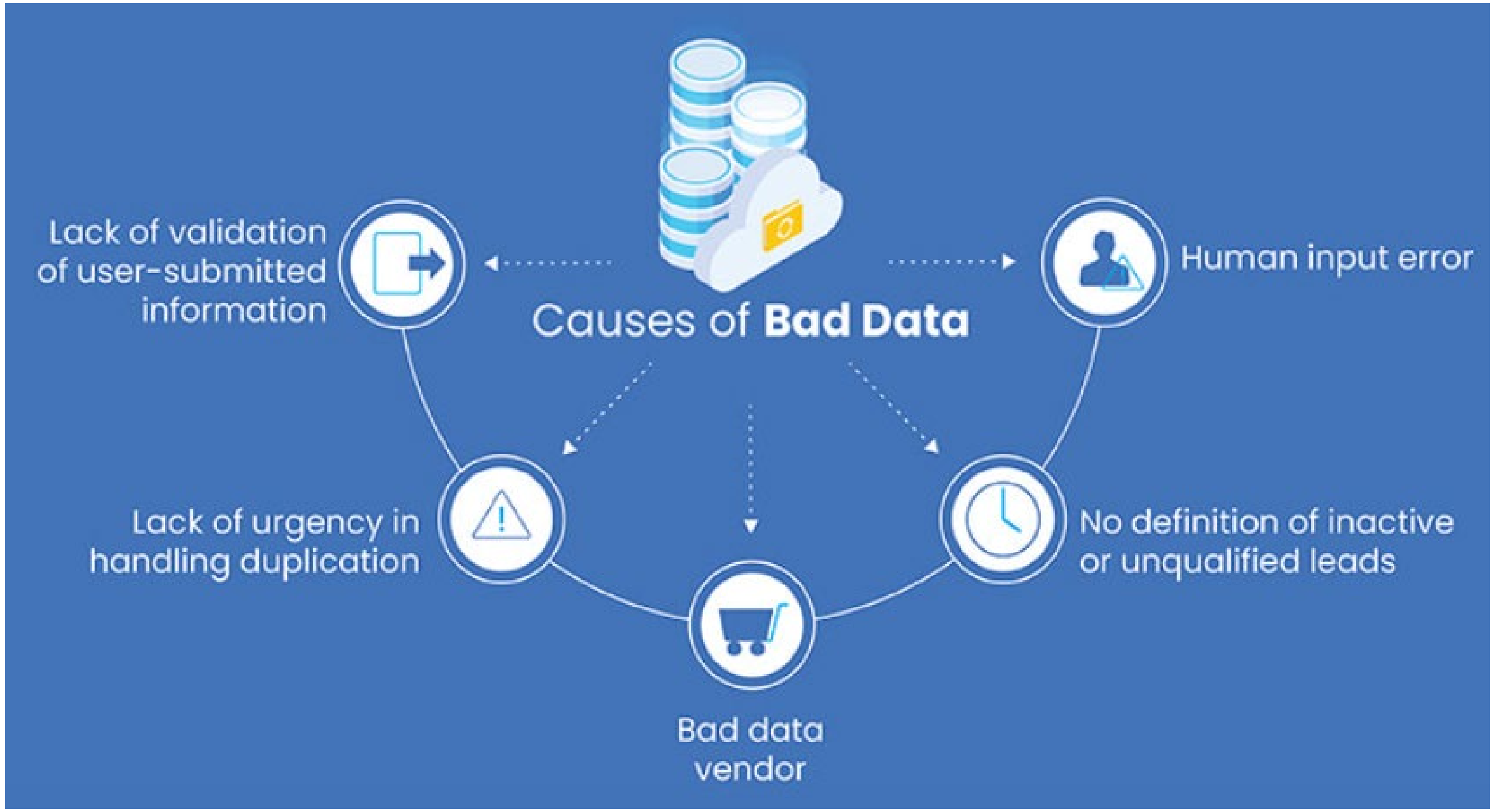
Part 4:
Tips for Success

Data Cleaning Before Import

Why it is important?

Benefits of Salesforce Data Hygiene:

- Accuracy: No need to question if you have the "right" data
- Usability: Dirty data makes the existing data unusable
- Credibility: Data Integrity drives user adoption
- Reporting: Accurate assessment leads to better business decisions
- Productivity: Clean data allows for time saving automation
- Single source of truth: Less fragmentation, more organization

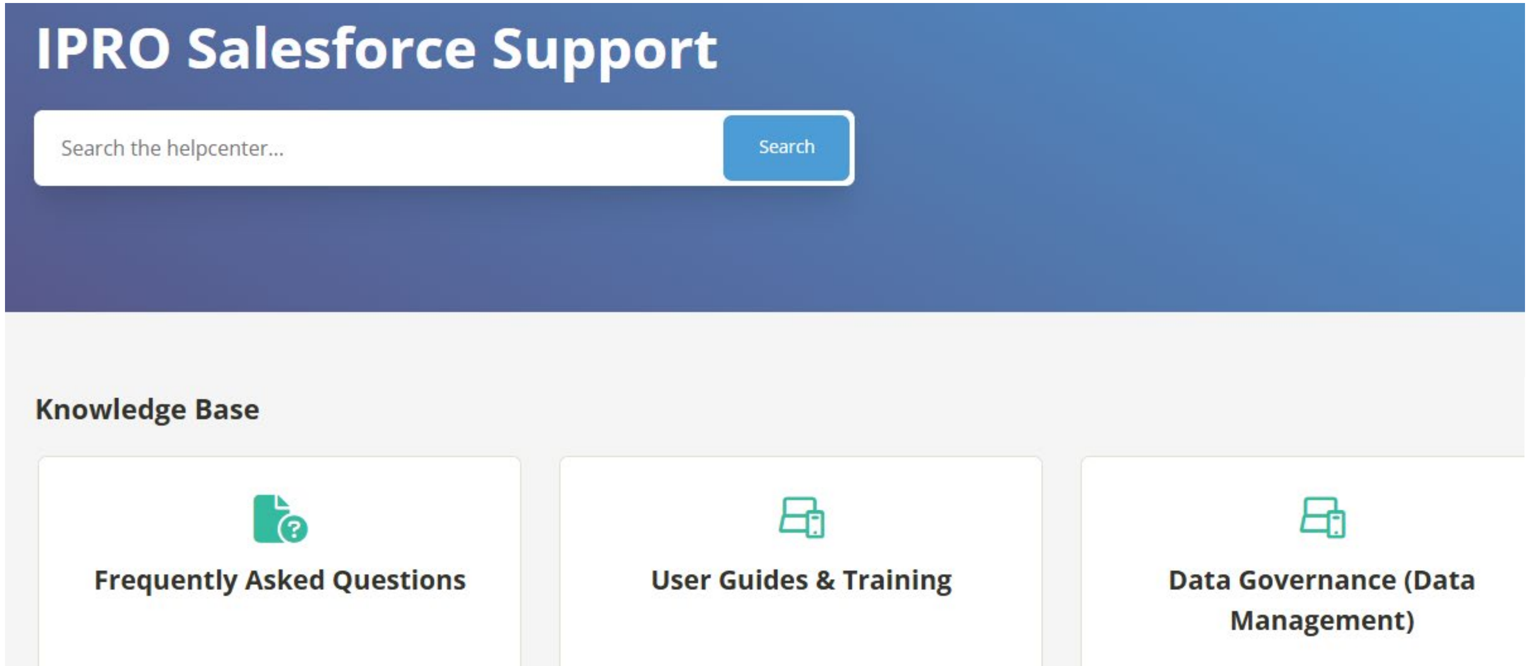


Let's take action to clean up data!

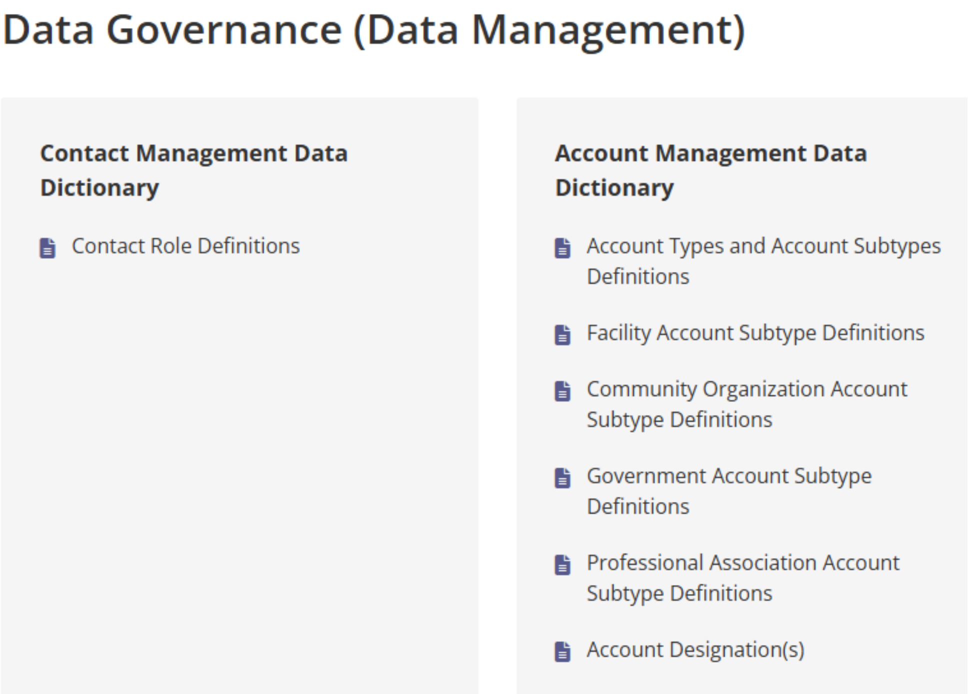
Familiarize yourself with Data Governance Standards

Review Data Dictionaries on the IPRO Salesforce Support Portal

https://salesforce.ipro.help/hc/en-us



- Review the Picklist definitions on the Salesforce Support Portal
- Match your business area data to these picklist definitions

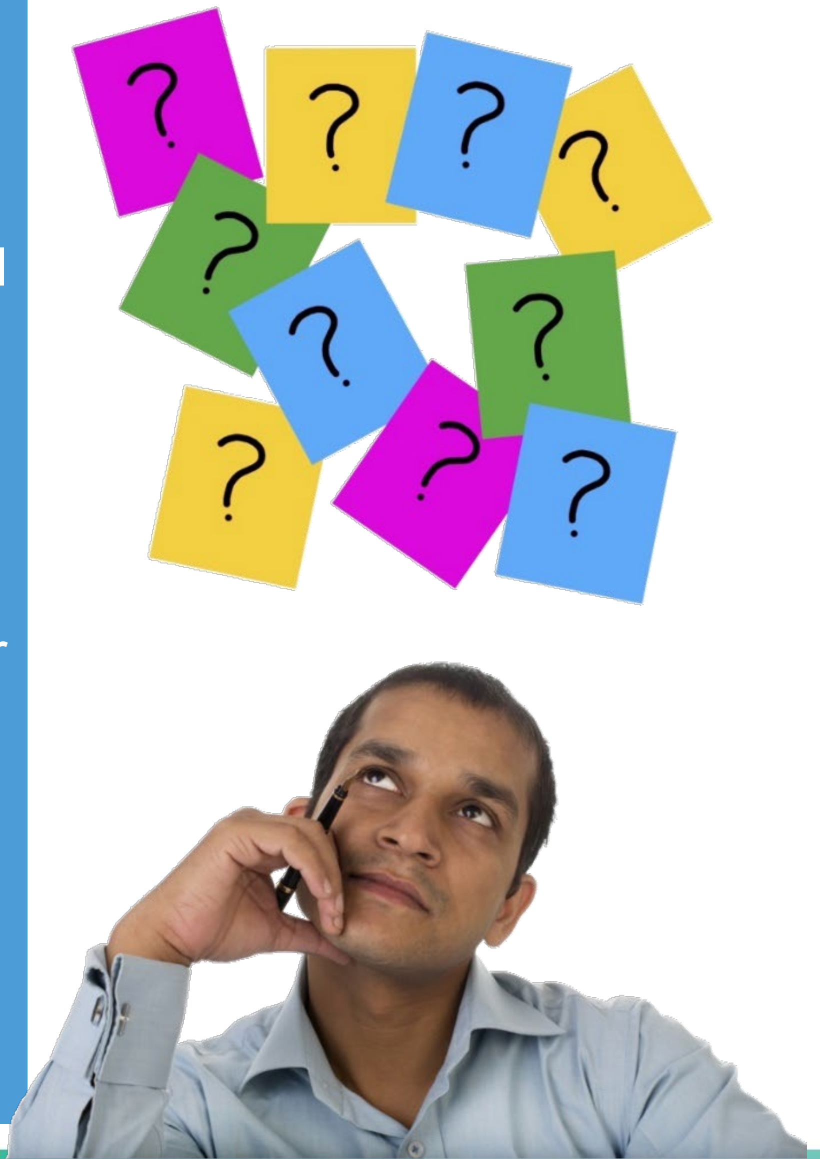


- Submit a request to add to existing picklist by submitting a support request for Data Governance review

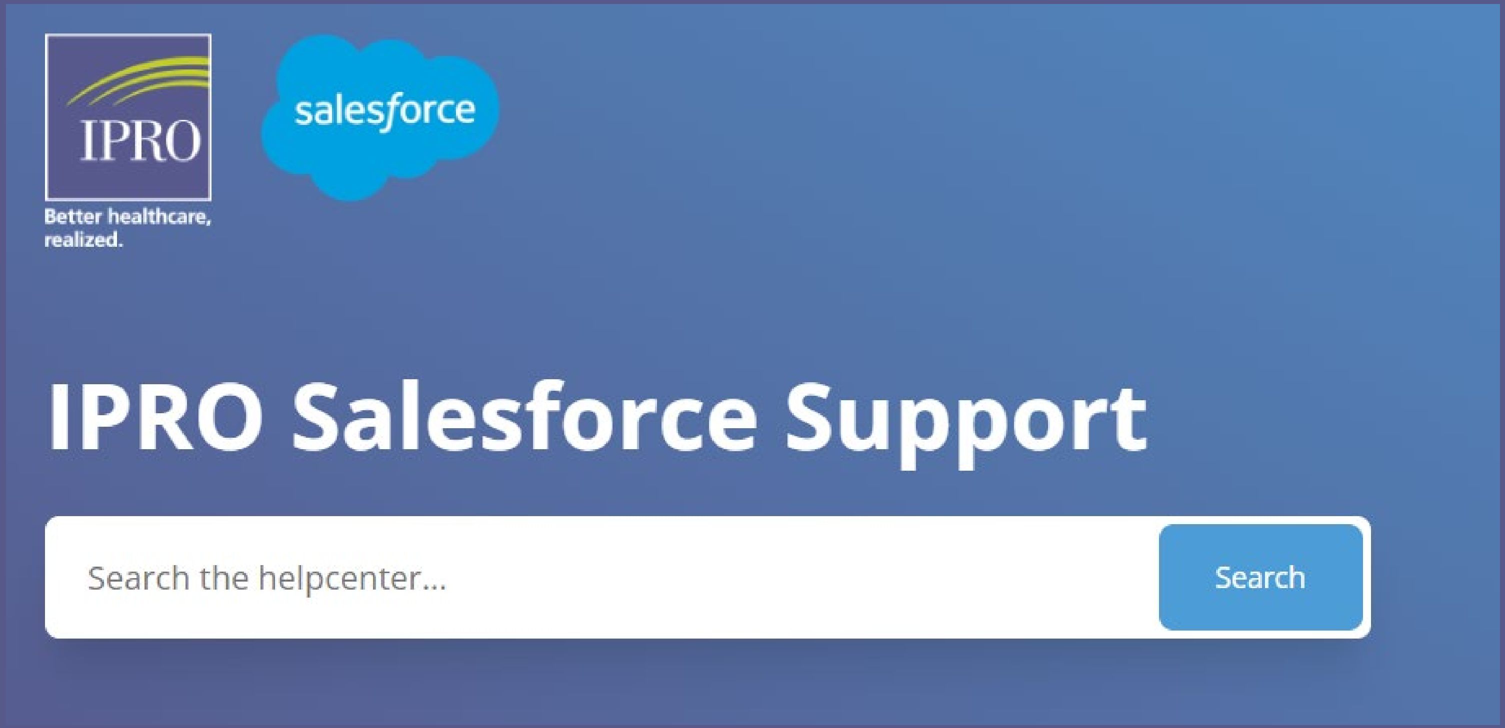
Final Preparation Checks

Ask yourself these questions before you import data

- Do you need to use the external identifiers to integrate with other systems?
- Do you have all required fields populated for your business area?
- Are you creating new records only or updating existing records and creation new records?
- Do other departments need to review the update (account identifiers should be reviewed by other departments and data governance)?
- Do you know where the success and errors files are stored on your computer?
- Did you review the success and error files and address any errors that require correction?
- If you aren't sure, ASK! Your Salesforce support team is here to help!



Questions?



Better healthcare, realized.

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http://ipro.org

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