

**SESSION 16**

**Why do we go for import and export data from Salesforce?**

1. Testing
2. Data from external system manually needs to be imported to Production Org
3. To test the sandbox with production data
4. To share salesforce data with external System.

**Tools available in Salesforce**

1. Data Loader
2. Import Wizard

**Acceptable File Format** -> Comma Separated files (CSV).

**Preparation of file or best practices**

1. **The first row should have the labels of the field.**
2. The field labels in the file and Object field label can be same to avoid manual field mapping.
3. Sort the file data and remove the duplicates
4. Keep the required field (for new record creation)
5. Keep the data with respect to validations
6. Process the data part by part if there is a bigger file to be processed.

**Example below:**

```
Account Name,Account Phone,Industry,AnnualRevenue
ABC,9840409999,Energy,
CBD,9840409991,Technology,
ERD,9840409997,500
```

**DataLoader :**

This is a client application tool provided by salesforce to perform insert ,update,upsert,delete, export the data from salesforce to external system or external system to salesforce

**1. How to download the dataloader ?**

Setup -> Administer -> DataManagement -> DataLoader -> Download dataloader for windows

**2. Steps to install Data Loader**

- a. Install Zulu OpenJDK version 11 for Windows in below url  
[https://cdn.azul.com/zulu/bin/zulu11.33.15-ca-jdk11.0.4-win\\_x64.msi](https://cdn.azul.com/zulu/bin/zulu11.33.15-ca-jdk11.0.4-win_x64.msi)  
Then install.
- b. From Setup, download the Data Loader installation file.  
The client application must be downloaded from  
**Setup --> Administer --> Security Controls -> Data Management -> Data Loader**
- c. Right-click the .zip file and select Extract All.
- d. In the Data Loader folder, double-click the install.bat file. If you get an unknown publisher error message, you can ignore it and run the file.
- e. Specify where to install Data Loader, and select whether to overwrite an existing Data Loader installation
- f. Specify whether to create a Data Loader launch icon on your desktop or a start menu shortcut. Data Loader completes the installation.

**3. How to login to dataloader?**

ANS: There are two ways to login to dataloader

- 1.Using OAuth
- 2.Using password

**1. Using OAuth :**

- a. Choose the environment type as (Production or Sandbox )

- b. Provide salesforce credential of user who want to login to dataloader
- c. Verification code will be sent to email
- d. Enter the verification code and click on Allow Access

**2. Using Password**

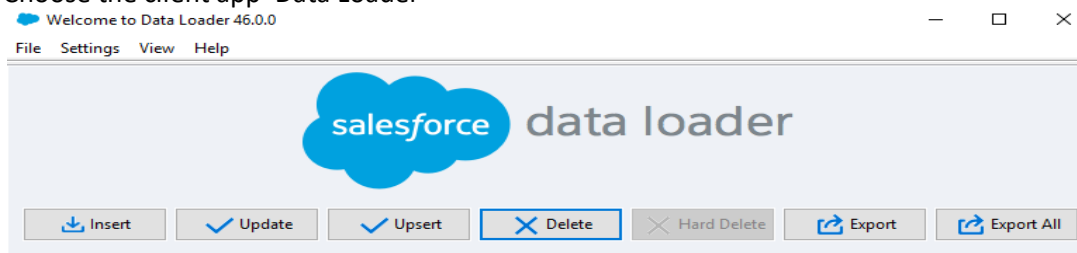
- a. Generate security token  
 UserName -> My Settings -> Personal -> Reset My security Token -> Reset SecurityToken  
**Note** : Security token will be sent to registered email id of user
- b. Open the dataloader and choose password format
- c. UserName : salesforce username  
 Password : salesforcepassword+securityToken

**Operations that can be performed in Data Loader**

SNo	Operation	Purpose
1	Insert	To insert new records into an object
2	Update	To update existing records
3	Upsert	To insert new record and update existing data in the same operations
4	Delete	To delete existing data <b>Note:</b> Deleted data will stay in recycle bin for 15 days
5	Hard Delete	To delete the data permanently without moving to recycle bin
6	Export	To export data from an object into an CSV file.
7	Export All	To export data from an object and its records from recycle bin (if exists) s into an CSV file.

**Steps involved in import process**

Choose the client app 'Data Loader'



**Step 1:** Choose the operation (shown above) that you may need to perform

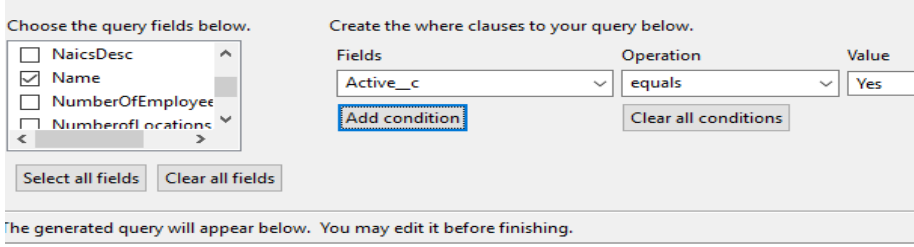
Choose the Login Method (OAuth or Password Authentication)

Steps	If insert	If Update	If Upsert	If Delete
<b>Step 2</b>	Select Object and the source CSV file	Select Object and the source CSV file	Select Object and the source CSV file	Select Object and the source CSV file
<b>Step 3</b>	Field Mapping between CSV file columns and the object fields	Choose existing map file if any or auto-map or manual mapping	Choose existing map file if any or auto-map or manual mapping	Choose existing map file if any or auto-map or manual mapping
<b>Step 4</b>	Choose file location to store the success and error log files	Choose file location to store the success and error log files	Choose file location to store the success and error log files	Choose file location to store the success and error log files
<b>Step 4</b>	Click Finish	Click Finish	Click Finish	Click Finish
<b>Content of Source CSV</b>	Fields to be inserted	Record Id / External ID and fields to be updated	Record Id / External ID and fields to be updated. New records to be updated.	Only record Id or external id of the records to be deleted

**Steps involved in export process**

**Step 1:** Choose the operation that you may need to perform

Steps	Export / Export All
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<b>Step 2</b>	Select Object and the target location to save the export data in CSV file
<b>Step 3</b>	<p>Select the fields to be exported in CSV file and include filter conditions using 'Add Condition' button.</p> <p><b>Example:</b></p>  <p>The generated query will appear below. You may edit it before finishing. Select AccountNumber, AccountSource, Name FROM Account WHERE Active__c = 'Yes'</p>
<b>Step 4</b>	Click Finish
<b>Content of Export file</b>	<p><b>If Export:</b> The file will have data ONLY from the object.</p> <p><b>If Export All:</b> The file will have the data from the selected object and recycle bin if contains deleted records of the same object.</p>

**Note :** All the Validations rules and required fields are respected while we insert the data  
If there are any lookup field or master-detail field provide 18 character record id in the csv

**Data Import Wizard:**

- Data import wizard can be used to insert, update or upsert the data using built in Declarative wizard.
- It will support all the Custom objects.
- It will support import on following standard object (Account, Contact, Lead , Solution & Campaign Members).
- It can support up to **50,000 records**.
- It can avoid duplicate records while insert.
- Navigation:**  
Setup -> Administer -> Data Management -> Import Wizard  
Step 1: Choose the object.  
Step 2: Choose the operation type as Insert ,Update,Upsert  
Step 3: Choose the source file  
Step 4: Map the fields  
Step 5: Save
- It is a queue based operation.

	Import Wizard	Data Loader
1. Need to process more than 50,000 at a time	No	Yes
2. Need to insert unique leads	Yes	No
3. To avoid duplicated records based on standard field name	Yes	No
4. Object Supported	Account, Contact, Lead Solution and Campaign Members & Custom Object	All Standard & Custom Objects
5. Operations Supported	Insert, Update and Upsert	Insert, Update, Upsert, Delete, Hard Delete, Export & Export All
6. max records	50,000	5 Million

**Data Export Wizard:**

- Navigation:** Setup -> Administer -> Data Management -> Data Export
- We can export the data using the export wizard.
  - We don't have choice to choose which fields we want to export.
  - We don't have choice to apply the filter condition.