Phase 8 - Data Management & Deployment

This document provides a detailed, step-by-step summary of all data management and deployment concepts covered in Phase 8 of the Salon Management System project. The objective of this phase was to learn the tools and strategies for managing an application's data and deploying metadata changes.

1. Data Import Wizard

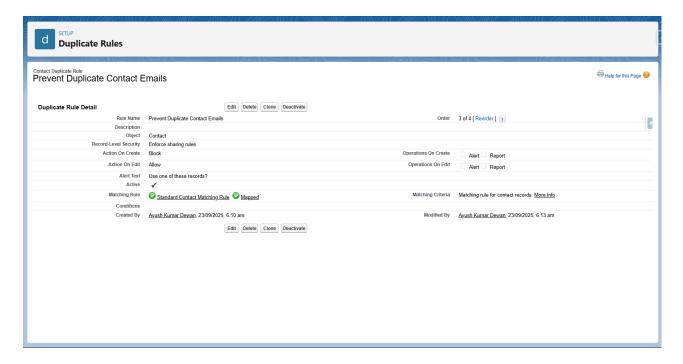
• **Purpose:** To provide a simple, user-friendly, web-based tool for importing small to medium amounts of data (up to 50,000 records) into Salesforce. This is often used by administrators or end-users for tasks like importing a list of new clients from a spreadsheet.

• Steps Followed:

- 1. A sample CSV (Comma Separated Values) spreadsheet file was created with columns for FirstName, LastName, and Email. It was populated with three new sample clients.
- 2. Navigated to **Setup > Data Import Wizard**.
- 3. Clicked the "Launch Wizard!" button.
- 4. Selected Contacts, then Add New Records.
- 5. The sample CSV file was uploaded, and the columns in the file were mapped to the corresponding fields on the Contact object.
- 6. The import was started, and the new client records were successfully created in the system.

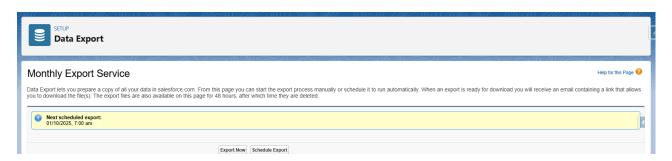
2. Duplicate Rules

- **Purpose:** To maintain data quality by preventing users from creating duplicate records. This is a critical feature to avoid having multiple records for the same client.
- Steps Followed:
 - 1. Navigated to **Setup > Duplicate Rules**.
 - 2. Clicked **New Rule** and selected the **contact** object.
 - 3. Rule Name: Block Duplicate Contacts by Email.
 - 4. **Matching Rule:** A new matching rule was created that compares the Email field on a new record with existing records, using an **Exact** match.
 - 5. **Action:** The rule was configured to **Block** the user from creating the new record if a duplicate email is found, displaying a standard alert message.
 - 6. The rule was **Activated**.



3. Data Loader

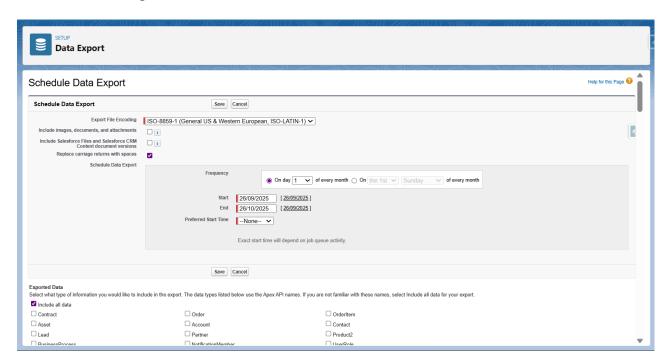
- **Purpose:** To understand the use of Data Loader, a powerful, separate application provided by Salesforce for bulk data operations (insert, update, upsert, delete, export). It is used for large data volumes (over 50,000 records) and is the preferred tool for developers and administrators for complex data migrations.
- **Steps Followed:** The concept was reviewed. For this project, Data Loader would be the tool of choice for a large-scale data migration, such as importing 100,000 client records from the salon's old system. As our data needs were small, the Data Import Wizard was sufficient.



4. Data Export & Backup

- **Purpose:** To create a secure backup of the organization's data for archival and disaster recovery purposes.
- Steps Followed:
 - 1. Navigated to **Setup > Data Export**.
 - 2. Clicked the **Schedule Export** button.
 - 3. A Weekly export was scheduled.
 - 4. All data was selected for inclusion in the export.

5. The schedule was saved. It was noted that Salesforce will send an email with a link to download a .zip file containing all the data in CSV format when the export is complete.



5. Change Sets, Managed/Unmanaged Packages, & ANT Migration Tool

- **Purpose:** To understand the different methods for deploying metadata (the "blueprints" of your application) from one Salesforce org to another (e.g., from a testing sandbox to the live production org).
- **Steps Followed:** These concepts were reviewed:
 - Change Sets: A UI-based tool for moving metadata between orgs that are connected (like a sandbox and production).
 - **Packages:** Containers for distributing apps. Unmanaged are simple templates; Managed are locked-down, professional apps for the AppExchange.
 - o **ANT Migration Tool:** An older command-line tool for deploying metadata.

6. VS Code & SFDX

- **Purpose:** To recognize and confirm that the development methodology used throughout this entire project is the **modern, professional standard** for Salesforce deployment.
- Steps Followed:
 - 1. It was confirmed that the use of a local **VS Code** project is the foundation of the Salesforce DX (SFDX) methodology.
 - 2. It was noted that every time the sf project retrieve start and sf project deploy start commands were used, we were performing a professional deployment of metadata between our local project and the Salesforce org. This source-driven development workflow is the current industry best practice.