

# **Lab Exercise 6 – Harmonization & Unification**

## **(Identity Resolution)**

This lab helps learners understand how Salesforce Data Cloud unifies fragmented customer data across multiple sources into a **single “golden profile.”**

### **Objective**

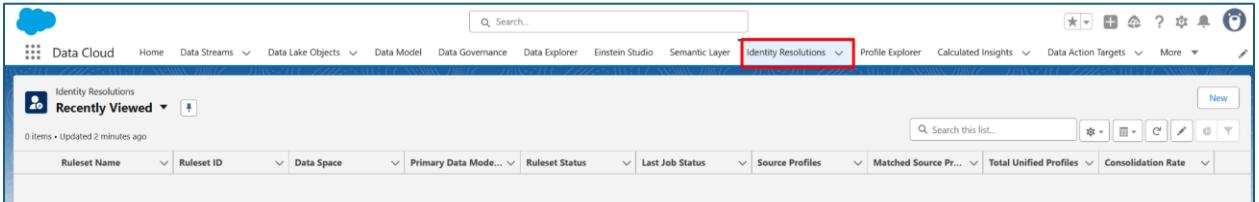
By the end of this lab, learners will be able to:

- Create and configure an **Identity Resolution Ruleset** in Salesforce Data Cloud.
- Apply **Exact**, **Normalized**, and **Fuzzy** match rules.
- Configure **Reconciliation Rules** to determine which data wins during merging.
- Run and preview ruleset results.
- Analyze the **Resolution Summary** and verify unified profiles using **Profile Explorer**.

### **Hands-on: Create and Test an Identity Resolution Ruleset**

#### **Step 1: Navigate to the Identity Resolution Workspace**

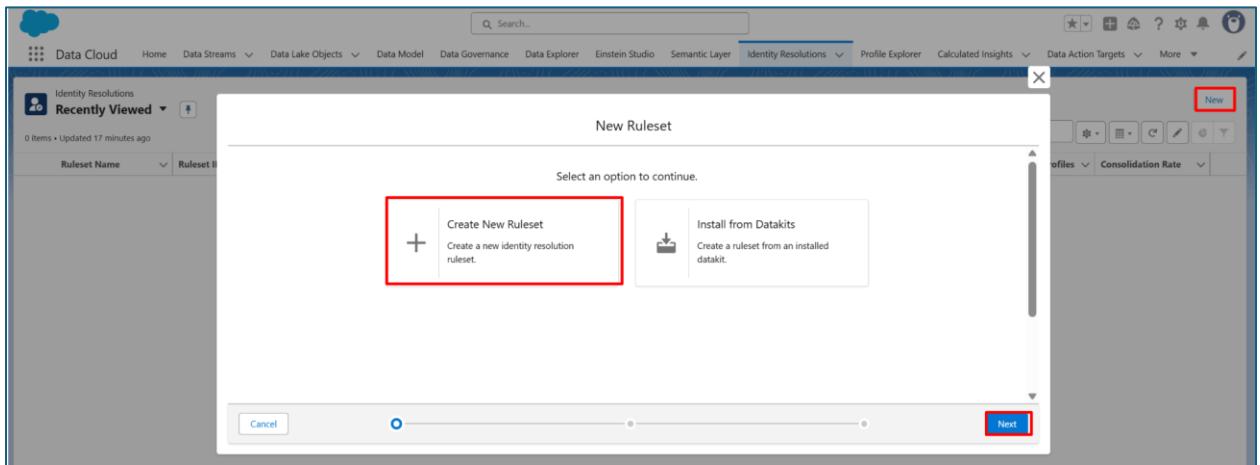
1. Log in to your **Salesforce Data Cloud Developer Edition**.
2. From the **App Launcher (grid icon)**, search for and open the **Data Cloud** app.
3. In the left-hand navigation pane, select **Identity Resolution**.



4. You'll land on the **Rulesets** page — this lists any existing or sample rulesets.

## Step 2: Create a New Ruleset

1. Click the **New Ruleset** button (top-right corner).



2. In the **Ruleset Properties** window:

- **Label:** Customer Unification Ruleset
- **API Name:** auto-fills

- **Data Model Object (DMO):** Select Individual (or your Customer Profile DMO).
  - **Description:** *Unify customer records from CRM and Web Engagement based on name, email, and phone.*
3. Click **Save & Next**.

### **Step 3: Define Match Rules**

You'll now configure how the system identifies matching records across sources.

#### **3.1 Add Exact Match Rule**

1. Click **Add Rule**.
2. Set:
  - **Rule Name:** Exact Email Match
  - **Match Type:** Exact
  - **Fields:** Email
  - **Active:** Checked

3. Click **Save Rule**.

💡 Use exact match for unique, structured fields like Email or Customer ID.

### **3.2 Add Normalized Match Rule**

1. Click **Add Rule** again.

2. Set:

- **Rule Name:** Normalized Phone Match
- **Match Type:** Normalized
- **Fields:** MobilePhone
- **Active:** Checked

3. Click **Save Rule**.

💡 Normalization removes special characters, spaces, and formatting differences (e.g., +91-999 vs. 0999).

### **3.3 Add Fuzzy Match Rule**

1. Click **Add Rule** again.

2. Set:

- **Rule Name:** Fuzzy Name Match
- **Match Type:** Fuzzy
- **Fields:** FirstName, LastName
- **Active:** Checked

3. Click **Save Rule.**

*Fuzzy matching uses phonetic similarity – it can catch “Jon” vs “John.”*

#### **Step 4: Configure Reconciliation Rules**

After defining how to match, you must define how Salesforce decides which field values to keep in the unified profile.

1. Click the **Reconciliation Rules** tab (next to Match Rules).
2. For each field group (e.g., Email, Phone, Address, Name), choose:
  - **Rule Type:**

- Most Recent → Keeps data from the latest updated record.
- Most Frequent → Uses the value that appears most often.
- Source Priority → Prefers a specific data source.

3. Example configuration:

Field	Rule Type	Notes
Email	Most Frequent	Avoids one-off email typos
Phone	Most Recent	Keeps freshest phone number
Address	Source Priority	Prefer CRM over Engagement

4. Click **Save**.

## Step 5: Run the Ruleset

1. From the top-right, click **Run**.

2. In the pop-up:

- Choose **Preview Mode** if you want to see results without committing.
- Or select **Full Run** to actually consolidate data.

3. Click **Run Ruleset**.

## Step 6: View the Resolution Summary

Once the run completes (can take 1–3 minutes for sample data):

1. Open your **Ruleset Details Page** → select the **Resolution Summary** tab.

2. Review key metrics:
  - **Records Processed:** Total profiles checked.
  - **Matched Pairs:** Number of detected duplicates.
  - **Unified Profiles Created:** How many golden profiles were built.
  - **Average Match Confidence:** (Higher % = better rule accuracy)
3. Click **View Details** to expand results and see which rule contributed most to matching (Exact / Fuzzy / Normalized).

*If match rates seem low, experiment by adjusting field combinations or match types.*

### **Step 7: Iterate and Improve**

1. Click **Clone Ruleset** (from top-right) to make a copy for testing.
2. Add another field — for example, City or PostalCode — to improve confidence.
3. Run again and compare **Resolution Summary** results.
4. Note the difference in Match Rate and Unified Profiles.

### **Step 8: Validate Unified Profiles**

1. In the Data Cloud navigation, click **Profile Explorer**.

2. Search for a customer by **Email** or **Full Name**.
3. Open one of the unified profiles.
4. In the **Identity Resolution panel**, you'll see:
  - Linked source records (CRM + Engagement).
  - Which fields were reconciled (highlighted with “winning” data).
  - Data provenance (source object name).
5. Expand the record to view **Engagement Events**, **Purchases**, or other linked datasets.

**You've now validated your unified “Golden Record” profile successfully!**