

Salesforce Data Cloud Hands-On Project

End-to-End Implementation Documentation

1. Purpose and Scope

This document outlines the step-by-step implementation of an end-to-end Salesforce **Data Cloud** solution. The project demonstrates ingestion, data modeling, identity resolution, analytics, segmentation, transformation, and activation using standard Salesforce Data Cloud capabilities.

Key Objectives:

- Ingest Salesforce core objects into Data Cloud
 - Establish standardized data models and relationships
 - Perform identity resolution and unification
 - Generate actionable insights using Calculated Insights and Segments
 - Activate results via Data Actions and Platform Events
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2. Data Ingestion

2.1 Create Data Streams

Data Streams are configured to ingest data from Salesforce Core CRM objects.

Objects Ingested:

- Account
- Contact
- Order

Steps:

1. Navigate to **Data Cloud Setup** → **Data Streams**
 2. Create individual data streams for:
 - Account object
 - Contact object
 - Order object
 3. Validate successful ingestion and Data Lake Object (DLO) creation for each source
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3. Data Modeling and Mapping

3.1 Contact Data Mapping

The **Contact DLO** is mapped to the following **Standard Data Model Objects (DMOs)**:

Source DLO	Target DMO
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Source DLO	Target DMO
Contact	Individual (Standard)
Contact	ContactPointEmail (Standard)
Contact	ContactPointPhone (Standard)
Contact	ContactPointAddress (Standard)

Purpose:

- Enables individual-centric identity resolution
- Standardizes contact channels (email, phone, address)

3.2 Order Data Mapping

The **Order DLO** is mapped to:

Source DLO	Target DMO
Order	SalesOrder (Standard)

4. Data Relationships

4.1 SalesOrder to Individual Relationship

A **N:1 relationship** is created between:

- **SalesOrder** → **Individual**

Relationship Configuration:

- **Relationship Type:** N:1
- **Join Field:**
 - SalesOrder.Bill_To_Contact
 - Individual.Individual_Id

Purpose:

- Associates multiple orders to a single individual
- Enables transaction-level analytics at the individual level

5. Identity Resolution

5.1 Identity Resolution Ruleset Creation

An **Identity Resolution Ruleset** is created with the following matching criteria:

```
(Fuzzy Name AND Normalized Email)
OR
(Fuzzy Name AND Normalized Phone)
```

Configuration Highlights:

- Uses probabilistic matching for name
 - Uses normalized formats for email and phone
 - Logical OR enables flexible matching across channels
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5.2 Identity Resolution Execution

The ruleset is executed to generate unified profiles.

Generated Objects Include:

- UnifiedIndividual
 - UnifiedIndividualLink
 - Identity Resolution Result objects
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5.3 Consolidation Review and Optimization

- Review **consolidation rate** post-resolution
 - Adjust matching thresholds if over- or under-consolidation occurs
 - Modify **reconciliation rules** when attribute conflicts arise
 - Re-run the ruleset after adjustments
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6. Calculated Insights

6.1 Calculated Insights Creation

A Calculated Insight is created using:

DMOs Selected:

- UnifiedIndividual
- SalesOrder

Automatic Join Behavior:

- Data Cloud automatically derives joins using defined relationships

Filters Applied:

- Orders placed in the **last 30 days**

Aggregations (Grouped by UnifiedIndividual):

- **Average Purchase Value**
 - **Grand Total Amount**
 - **Total Orders**
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7. Segmentation

7.1 Segment: High-Value Loyal

A segment named **High-Value Loyal** is created based on the Calculated Insights.

Segment Criteria:

- Average Purchase Value > **150**

Purpose:

- Identifies high-spending, loyal customers
 - Enables targeted engagement and activation
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8. Data Transformation

8.1 Order Summary Data Transform

A **Data Transform** is created to generate an aggregated order summary.

Source DMO:

- SalesOrder

Joins:

- SalesOrder → UnifiedIndividual
- UnifiedIndividual → Individual

Derived and Aggregated Metrics:

- Number of days since last order
- Grand Total Amount
- Order Count
- Average Order Value

Grouping:

- Grouped by UnifiedIndividual

Output:

- Persisted into a new custom DMO:
Order_Summary
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9. Data Activation

9.1 Data Action Target

A **Data Action Target** is configured:

- **Target Type:** Salesforce Platform Event
 - **Event Name:** High-Value Loyal
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9.2 Data Action Creation

A Data Action is created using the **Order_Summary** DMO.

Trigger Condition:

- Average Order Value \geq **200**

Outcome:

- Publishes records meeting the criteria to the **High-Value Loyal** Platform Event
 - Enables real-time downstream integrations or automations
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