

# Running and Previewing a Ruleset

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## 1. Introduction

In Salesforce Data Cloud, the **Identity Resolution process** is where multiple records that represent the same person or entity are identified, matched, and merged into a **unified profile**.

Once **match and reconciliation rules** are defined, you must:

1. **Run or preview the ruleset** to evaluate its accuracy.
2. **Review the Resolution Summary** to understand how well the system identified duplicates.
3. **Iterate and fine-tune the rules** for better consolidation.
4. **Validate unified profiles** using **Profile Explorer** to ensure they accurately represent real individuals.

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## 2. The Identity Resolution Lifecycle

Stage	Description	Tools Used
<b>1. Define Ruleset</b>	Configure match & reconciliation logic	Identity Resolution Setup
<b>2. Run or Preview Ruleset</b>	Test the rules without merging data	Ruleset Runner / Preview
<b>3. Review Resolution Summary</b>	Analyze match results & success rate	Resolution Summary Dashboard
<b>4. Iterate to Improve</b>	Adjust rules for accuracy	Ruleset Editor

Stage	Description	Tools Used
<b>5. Validate Unified Profiles</b>	Check merged profiles visually	Profile Explorer

### 3. Example Dataset

Source	First Name	Last Name	Email	Phone	City	Updated Date
CRM	John	Smith	john.smith@email.com	9876543210	New York	2025-10-15
Web	Jonathan	Smith	john.s@email.com	(987) 654-3210	NY	2025-10-14
Support	Jon	S.	john.smith@email.com	9876543210	New York City	2025-10-15
Mobile App	J.	Smith	john.smith@email.com	+1-987-654-3210	NYC	2025-10-16

All these represent the same person but appear slightly different across systems.

### 4. Running or Previewing the Ruleset

After defining your **Match Rules** (Exact, Normalized, Fuzzy) and **Reconciliation Rules**, you can **run** or **preview** the ruleset to simulate unification.

#### Step-by-Step Process

1. **Go to Data Cloud → Identity Resolution → Rulesets.**
2. Select your **ruleset** (e.g., “Customer\_Identity\_Ruleset”).
3. Click **Preview Run** to test without committing unification.
  - This generates simulated unified profiles.
4. Review the **Resolution Summary** generated from the preview.

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## Preview vs Full Run

Mode	Purpose	Impact
Preview	Simulates unification to test accuracy	No permanent merge
Full Run	Performs actual unification	Updates unified profiles

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## What the Preview Shows

Metric	Description
Number of Source Records	Total records considered for matching
Potential Matches Found	Records identified as duplicates
Unified Profiles Generated	Unique, consolidated profiles created
Match Confidence Levels	Match strength (High, Medium, Low)
Unmatched Records	Records not linked to any unified profile

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## 5. Reading the Resolution Summary

Once the preview or run completes, Data Cloud produces a **Resolution Summary Report**, which helps you measure how well your rules performed.

### Example Summary Table

Metric	Value	Description
Total Input Records	20,000	Number of raw customer records
Matched Records	16,000	Records linked to at least one match
Unified Profiles Created	4,500	Final unique profiles after unification

Metric	Value	Description
Average Matches per Profile	3.5	On average, 3.5 duplicates per customer
Match Confidence	92%	Average similarity score across rules
Unmatched Records	4,000	Distinct customers not yet merged

## Insights You Can Derive

Observation	Interpretation	Action
High unmatched rate (>20%)	Rules too strict	Add more fuzzy matching fields
Low match confidence (<80%)	Data inconsistencies	Improve harmonization / normalization
Too few unified profiles	Rules too narrow	Relax Exact → Normalized
Too many false matches	Rules too loose	Add Exact + Fuzzy combination

## 6. Iterating to Improve Consolidation

Identity Resolution is not one-time — it's an **iterative process**. After reviewing the Resolution Summary, adjust your rules to balance **precision** (accuracy) and **recall** (coverage).

### Example Adjustments

Issue	Observation	Improvement
Missed duplicates	"John Smith" ≠ "Jon Smith"	Add <b>Fuzzy Match</b> on first name
False merges	"John Smith" ≠ "John Smythe"	Require <b>Exact Email</b> in addition

Issue	Observation	Improvement
Mismatched phones	“(987)654-3210” ≠ “9876543210”	Apply <b>Normalized Match</b> for phone
Old data overriding new	Outdated address persists	Change <b>Reconciliation</b> to <b>Most Recent</b>
Untrusted source dominating	Web data overwriting CRM	Adjust <b>Source Priority</b> (CRM first)

## Iteration Cycle

Step	Action	Tool
1	Run/Preview ruleset	Ruleset Manager
2	Review Resolution Summary	Resolution Dashboard
3	Modify Match/Reconciliation Rules	Ruleset Editor
4	Run again	Ruleset Runner
5	Validate unified profiles	Profile Explorer

Repeat until match accuracy and confidence are acceptable (typically 90–95%).

## 7. Validating Unified Profiles in Profile Explorer

Once the unification run completes, use **Profile Explorer** to visually inspect the final **Unified Profiles**.

### Accessing Profile Explorer

1. Navigate to **Data Cloud** → **Data Manager** → **Profile Explorer**.
2. Select **Unified Individual** (or relevant unified object).
3. Search by **email, name, or unified ID**.

What Profile Explorer Displays

Section	Description
Unified Attributes	Consolidated field values (from reconciliation rules)
Identity Graph	Visualization of linked identifiers (emails, phones, IDs)
Linked Records	Source records merged into this profile
Activity History	Interactions such as purchases or support cases
Segment Membership	Marketing or audience groups the profile belongs to

Example Unified Profile View

Unified Profile ID: U1001

Primary Source: CRM

Attribute	Value	Source	Reconciliation Rule
Name	John Smith	Most Frequent	Frequency
Email	john.smith@email.com	Source Priority (CRM)	Priority
Phone	9876543210	Normalized	Exact
City	New York	Most Frequent	Frequency
Last Purchase Date	2025-10-15	Most Recent	Recency

Checklist for Profile Validation

Validation Area	Check	Action
Attributes	Are unified fields correct?	Compare with source data
Source Links	Are all expected records merged?	Check linked records

Validation Area	Check	Action
Reconciliation	Are chosen values logical?	Verify rule logic
Identity Graph	Are relationships correct?	Review linked IDs
Segment Membership	Is the customer assigned correctly?	Verify activation readiness

## 8. Example Use Case: Banking Identity Resolution

### Background

A financial institution collects data from multiple systems — account, credit card, and customer service.

### Problem

Duplicate customer records cause compliance and marketing challenges.

### Solution Using Salesforce Data Cloud

Step	Action
Harmonization	Standardized names, phone numbers, and SSNs
Match Rules	Fuzzy match on name + normalized phone + exact SSN
Reconciliation	Source priority = core banking system
Resolution Summary	Match rate improved from 78% → 96%
Profile Explorer Validation	Verified unified profiles accurately reflect single customers

### Result

- Duplicate accounts reduced by 85%.
- Improved KYC compliance.
- Personalized customer communication.

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## 9. Common Pitfalls and Fixes

Issue	Cause	Fix
Too few unified profiles	Match rules too strict	Add fuzzy/normalized match
Too many merges	Rules too lenient	Add unique identifiers
Wrong data winning	Incorrect source priority	Adjust reconciliation
Missing records	Schema mismatch	Recheck DLO → DMO mapping
Incomplete unified view	Unlinked objects	Verify graph relationships

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## 10. Best Practices

Area	Practice	Why It Matters
Ruleset Design	Start with small data samples	Easier debugging
Preview Mode	Always test before full run	Prevents unwanted merges
Rule Diversity	Combine multiple identifiers	Improves accuracy
Logging	Review Resolution Summary after every change	Ensures transparency
Validation	Use Profile Explorer regularly	Confirms correctness
Documentation	Track all rule versions	Aids governance & reproducibility

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## 11. Summary

Step	Purpose	Key Tool
Run/Preview Ruleset	Test match and reconciliation logic	Identity Resolution Ruleset
Review Resolution Summary	Measure match performance	Resolution Dashboard
Iterate and Refine	Improve accuracy	Ruleset Editor
Validate Unified Profiles	Confirm results visually	Profile Explorer

### Key Takeaway

Identity Resolution in Salesforce Data Cloud is an **iterative data refinement process**.

Running and previewing rulesets, analyzing the Resolution Summary, and refining match/reconciliation logic ensure **accurate, deduplicated, and trusted unified profiles**.

Finally, **Profile Explorer** provides the visual confirmation that your unified profiles truly represent real-world individuals — clean, connected, and ready for activation.