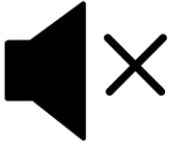


26 Sep, 2024

How to Achieve External and Null Matching in MDM SaaS

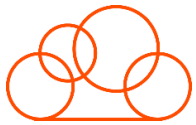
- Namratha B C, Principal Tech Support Engineer, GCS
- Bhavana Kothapalli, Sr. Tech Support Engineer, GCS

Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available on our [Success Portal](#) - where you can download the **slide deck** for the presentation. The link to the recording will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

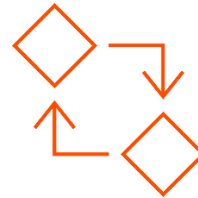
Feature Rich Success Portal



**Bootstrap trial and
POC Customers**



**Enriched Customer
Onboarding
experience**



**Product
Learning Paths
and Weekly
Expert Sessions**



**Informatica
Concierge**



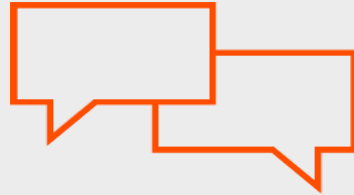
**Tailored training
and content
recommendations**

More Information



Success Portal

<https://success.informatica.com>



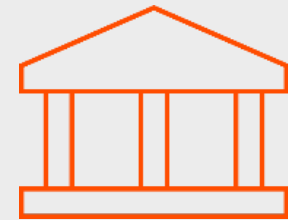
Communities & Support

<https://network.informatica.com>



Documentation

<https://docs.informatica.com>



University

<https://www.informatica.com/in/services-and-training/informatica-university.html>



How to Achieve External and Null Matching in MDM SaaS



Namratha B C

Principal Technical Support Engineer



Bhavana Kothapalli

Senior Technical Support Engineer

Where data & AI come to **LIFE**

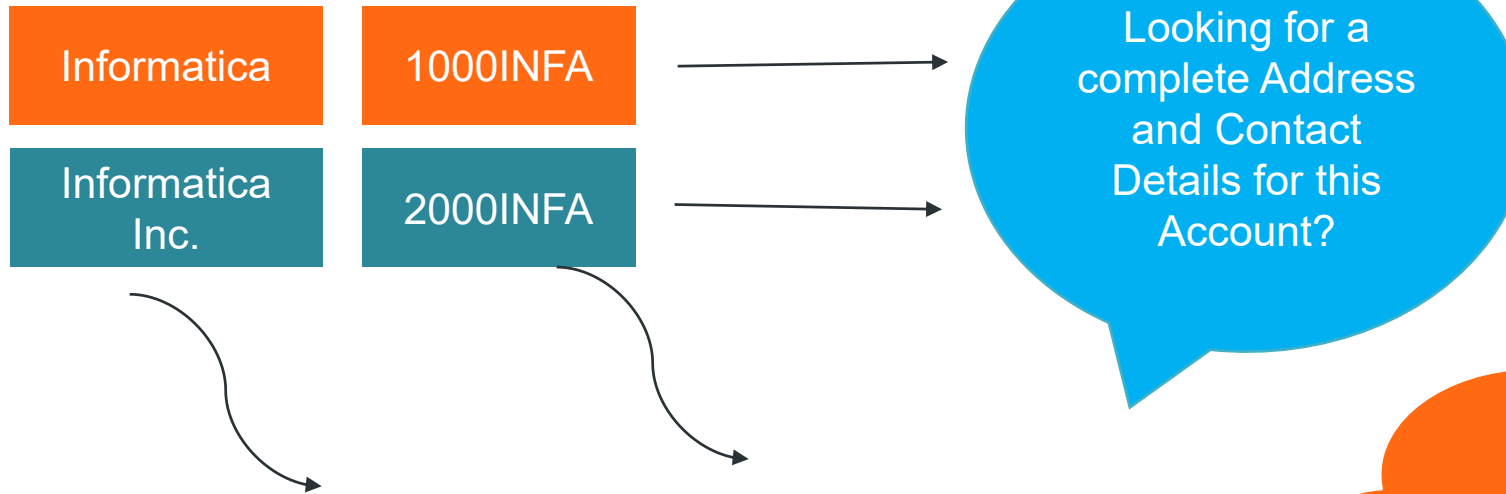
Disclaimer

The information being provided herein is for informational purposes only. The development, release and timing of any Informatica product, service or functionality described herein remain at the sole discretion of Informatica and should not be relied upon in making a purchasing decision. Statements made herein are based on information currently available, which is subject to change. Such statements should not be relied upon as a representation, warranty or commitment to deliver specific products, services or functionality in the future.

Agenda

- 1 Overview of External Matching
- 2 Importance and Use Cases
- 3 Demo
- 4 How Null Values are handled in matching?
- 5 Null Matching Types and various scenarios
- 6 Q&A?

Why External Matching???

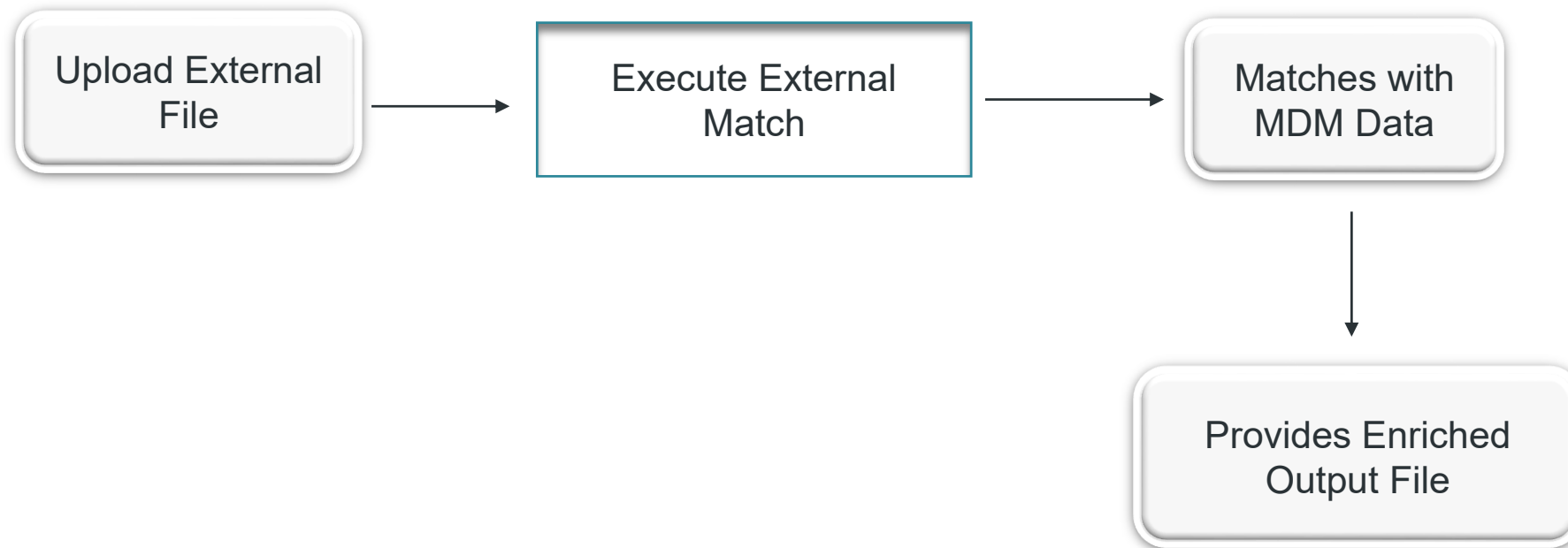


Is your marketing team looking for enriched customer data for a marketing campaign ??

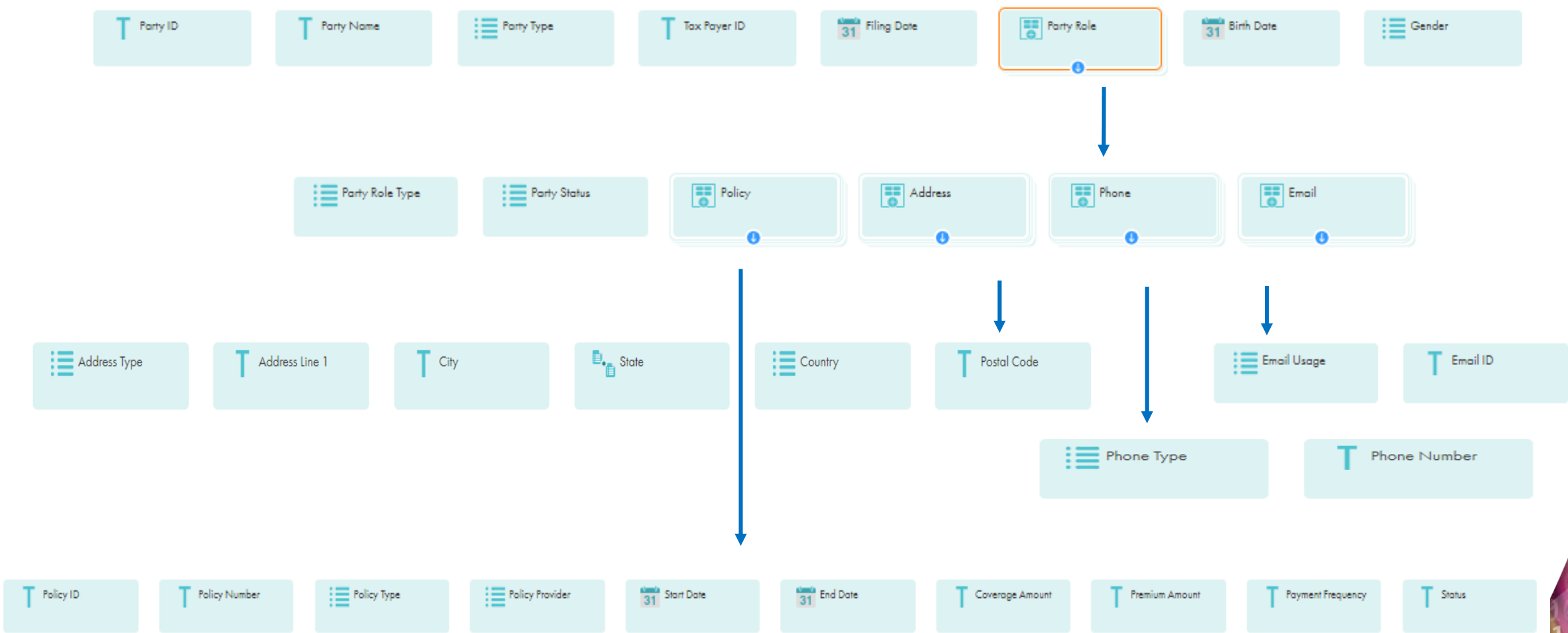
Want to Enrich the external file with additional cleansed data from MDM ?

Why Master Match?

To match data from an external file and enrich it with MDM data, we need to match it against the golden or master record. This cannot be done using individual XREFs before the merge and survivorship process, as we require a single, consolidated value for each field based on the Best Version of Truth calculations.



Data model used as an example



Match Model Configuration

Model Configuration

Model Name: * **Party_Person**

Model ID: **17468f8f-b398-41ba-aa33-249029572ea6**

Model Description:

Model Objective: * **Resolve Duplicates**

Default Population ? : * **Usa**

About Population: Created by: (c)2000-2021 Informatica LLC. All rights reserved. Last change: 28 Jul 2021 USA Standard - v10.2.0HF1-28Jul21 This population uses a character set that supports ISO-LATIN-1 The population rules support the typical identity data found in the United States.

Candidate Selection Criteria

Field Name	Field Type	Filter Candidates By	Key Generation Level	Candidate Search Level
party_name	Person_Name		Standard	Typical

Declarative Rule

Configure Properties and Thresholds [Add Required Fields](#) Add Optional Fields Configure Exact Match Field Properties

Exact Match Fields (5) ?

Field Name	Comparison Outcome
party_role >...> emailid	Identical
party_role >...> email_usage	Identical
party_role >...> address_line_1	Identical
party_role > party_role_type	Identical
party_type	Identical

Fuzzy Match - Required Fields (1)

Field Type	Field Name	Comparison Outcome
Person_Name	party_name	Identical

account >...> email_usage Properties

Segment Matching

☐ Match segment data with other data ?

Segment Values ? : *

Personal

account > party_role_type Properties

Segment Matching

☐ Match segment data with other data ?

Segment Values ? : *

Patient

Standardizing Source data before External Match

Case1 : If Master data is been standardized through DQ rules for example Concatenated Value

- Consider a scenario where Source consist of FirstName and LastName, Whereas In MDM SaaS its Concatenated Full Name configured in Match Rule

Model Configuration

Declarative Rules

Machine Learning Model

Model Configuration

Model Name:*

Party_Person

Model ID:

17468f8f-b398-41ba-aa33-249029572ea6

Model Description:

Model Objective:*

Resolve Duplicates

Default Population

Usa

About Population:

Created by: [c]2000-2021 Informatica LLC. All rights reserved. Last change: 28 Jul 2021 USA Standard - v10.2.0HF1-28Jul21 This population uses a character set that supports ISO-LATIN-1 The population rules support the typical identity data found in the United States.

Candidate Selection Criteria

Field Name	Field Type	Filter Candidates By	Key Generation Level	Candidate Search Level
party_name	Person_Name		Standard	Typical

Source Data

Source ID	First Name	Last Name
S1	John	Doe
S2	Jane	Smith
S3	Robert	Johnson
S4	Emily	Davis

MDM Data

PartyID	PartyName
P01	John Doe
P02	Jane Smith
P03	Robert Johnson
P04	Emily Davis

Note: Standardize the source data for Match Attributes as per MDM before External Match

Case 2 : If Match Rule contains Date field

- In a scenario where the match rule includes a date field, if the source file has a date field called 'Tax_Filing_date' in the format dd-MM-yyyy, make sure to specify this format in the file settings before executing the external match job.

Match and Export Data

File settings updated successfully. X

1 Upload File

2 Select Match Model

3 Map Fields

4 Select Values to Export

5 Preview and Export

< Back

Next >

Preview: ExternalMatch.csv

Change I

Dataset (first 10 rows)

PartyPkey	PartyID	PartyName	TaxID	Filling_date
S1	P01	John Doe	T1234	30-03-2024
S2	P02	Jane Smith	T1235	02-02-2024
S3	P03	Robert Johnson	T1236	21-02-2023
S4	P04	Emily Davis	T1237	05-05-2024

File Settings

Use the system generated file settings or modify as required.

Delimiter:

Comma

Text Qualifier:

Double Quotes

Encoding Type:

UTF-8

Use Data Starting from Line:

2

☒ Contains column headers

Column Header Row:

1

☒ Regional settings

Date Pattern:

dd-MM-yyyy

Date Time Pattern:

dd-MM-yyyy HH:mm:ss

Decimal Separator:

.


Thousand Separator:

.

Source Data

PartyPkey	PartyName	TaxID	Filling_date
S1	John Doe	T1234	30-03-2024
S2	Jane Smith	T1235	02-02-2024
S3	Robert Johnson	T1236	21-02-2023
S4	Emily Davis	T1237	05-05-2024

Note: Specify the date or datetime format in the file settings according to your Source file format

 Informatica

© Informatica. Proprietary and Confidential.

13

Case 3 :If Picklist Data in Source is different vs MDM SaaS

- Consider a scenario where we have segment Matching on Policy Type where source consists of different value than that of MDM

Configure Properties and Thresholds

Add Required Fields

Add Optional Fields

Configure Exact Match Field Properties

Exact Match Field Properties

Field Name	Field Properties
account >...> policy_type	Segment matching
account >...> email_id	None
account >...> address_line_1	None
account >...> email_usage	Segment matching
account > party_role_type	Segment matching
party_type	Segment matching

account >...> policy_type Properties

Segment Matching

☐ Match segment data with other data

Segment Values

Health Life

Source Data

PartyPkey	PartyName	TaxID	Filling_date	PolicyNumber	PolicyType
S1	John Doe	T1234	30-03-2024	PN1234567	Health Insurance
S2	Jane Smith	T1235	02-02-2024	PN1234568	Health Insurance
S3	Robert Johnson	T1236	21-02-2023	PN1234569	Life Insurance
S4	Emily Davis	T1237	05-05-2024	PN1234570	Life Insurance

MDM Data

PartyID	PartyName	TaxID	PolicyID	PolicyNumber	PolicyType	PolicyProvider
P01	John Doe	T1234	Policy1	PN1234567	Health	HealthCo
P02	Jane Smith	T1235	Policy2	PN1234568	Health	HealthCo
P03	Robert Johnson	T1236	Policy3	PN1234569	Life	MediLife
P04	Emily Davis	T1237	Policy4	PN1234570	Life	MediLife

Note: CrossWalk will be considered only during the Ingress, During external Match one should manually ensure to send Enterprise code(which is persisted) and not the actual source picklist code

External Match Outcome

How external match considers which is a best matching master record in following scenarios?



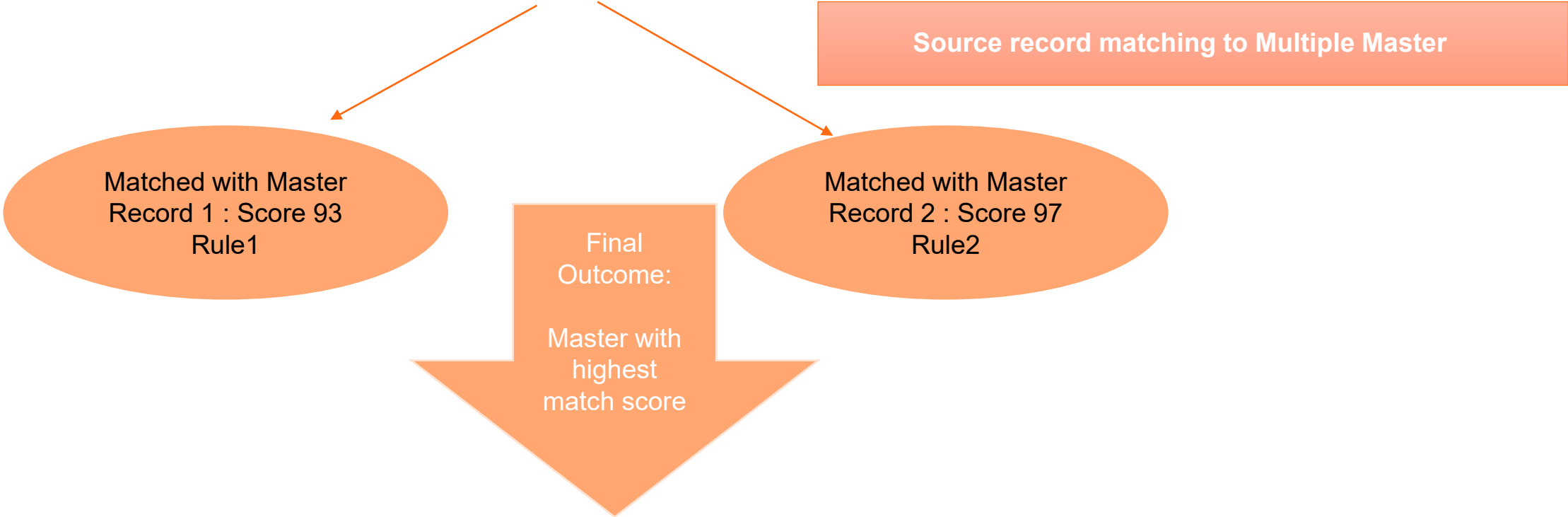
Scenario 1: When a record matches to multiple Master



Scenario 2: When a record matches to multiple rules within Match Model

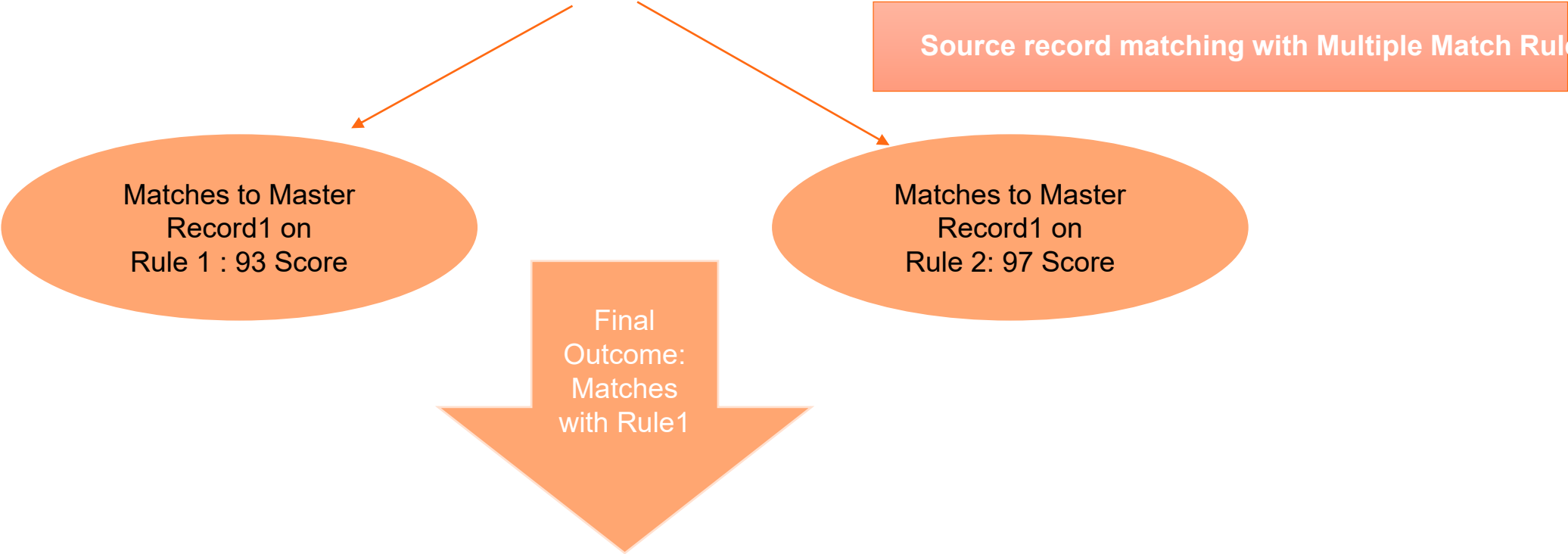
Scenario1: When a record matches to multiple Master

Source	PartyPkey	PartyName	Party_Type	Party_Role_key	Party_RoleType	Address_role_Pkey	Address_Line1	Email_Pkey	Email_Usage	Email_ID
S1		Michael Brawn	Person	S1PR1	Patient	S1A2	654 Cedar Street	S1E1	Personal	michael.brown@example.com



Scenario 2: When a record matches to multiple rules within Match Model

Source	PartyPkey	PartyName	Party_Type	Party_Role_key	Party_RoleType	Address_role_Pkey	Address_Line1	Email_Pkey	Email_Usage	Email_ID
S1		Michael Brawn	Person	S1PR1	Patient	S1A2	654 Cedar Street	S1E1	Personal	michael.brown@example.com



When multiple rules are configured, the system will exit after a match is found with the first rule and will not evaluate subsequent rules. Therefore, match rules should be arranged so that those with the highest scores are listed first in descending order.

Use Case 1:

- **Problem Statement:** An insurance company aims to cross-sell term life insurance plan to current policyholders who already have a health insurance plan. They have a list of individuals with their addresses and contact details. The company needs to review the existing policies held by these individuals and tailor offers to encourage them to purchase a term insurance plan.



Initial Data Collection:

- The company has client details which includes their names, Taxpayer Identification, addresses, Contact details. This data is sourced from their Source System say 'Salesforce'.

Customer ID	Name	TIN	Address	Contact Details	Date of Birth	Gender
C001	John Smith	T123	123 Elm St, Springfield	(555) 123-4567	1/15/1980	Male
C002	Paul Doe		456 Oak Ave, Rivertown	(555) 987-6543	5/22/1990	Female
C003	Michael Brown		Cedar Street		9/2/1990	Male

Perform External Match:

Using the Name, TIN, Address, Contact Details create a comprehensive matching rule for records.

1. Exact Match for TIN Records:

- For records that have a Tax Identification Number (TIN), establish an exact match rule to achieve the highest accuracy in identifying matches.

2. Records Without TIN:

- For records lacking TIN details, apply a matching process based on names (using fuzzy matching), and use exact matches for addresses and contact details, including handling cases with null values.

3. Fuzzy Match for Address:

- For records where addresses need further validation, perform a fuzzy match on the address field to find additional possible matches.

Based on the requirements, establish match rules to enhance the effectiveness of identifying and linking records.

Perform External Match and Enrich Customer Profiles:

- After identifying matches in MDM, Enrich the external file with additional cleansed data to include Clients demographic details, Contact Details and Policy Details to understand the Coverage Amount, Policy validity and provider

Match Status	Match Score	Source PKey	Name.file	MasterID	Party Name	TIN	Address	Contact Details	Date of Birth	Policy Number	Policy Type	Start Date	End Date	Coverage Amount	Premium Amount	Payment Frequency	Status	Policy Provider
MATCHED	100	C001	John Smith	66d864ad4b38ab0765e4896b	John Smith	T123	123 Elm St, Springfield	(555) 123-4567	1/15/1980	PN1234568	Health	1/1/2024	1/1/2025	\$50,000	\$200	Monthly	Active	HealthCo
UNMATCHED		C002	Paul Doe															
MATCHED	97	C003	Michael Brown	66d864ad4b38ab0765e4896f	Michael Brawn	T1238	Cedar Street 654	555-9876	9/2/1990	PN1234571	Health	1/1/2024	1/1/2034	\$100,000	\$150	Annual	Active	HealthCo



Note: If there are multiple values for the field group, all values will be separated by commas.

Policy Number	Policy Type
123456789,T1234	Health,TermLife

Benefits :

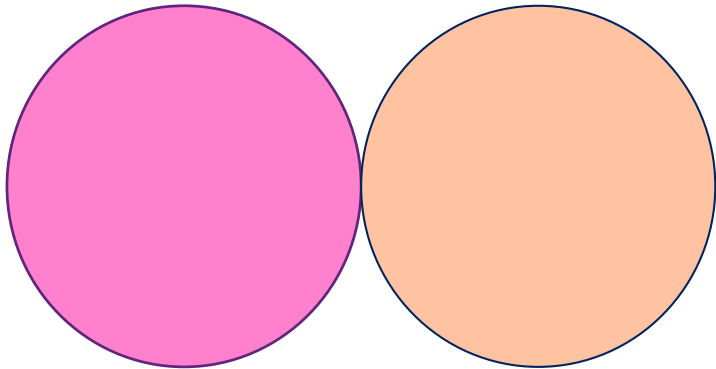
- **Data-Driven Decision Making:** External matching provides valuable data that can inform broader business strategies and decision-making. Analyzing the effectiveness of cross-selling efforts helps refine future approaches and improve overall sales strategies.
- **Improved Targeting:** By using external data to segment customers more accurately, insurers can target individuals who are more likely to be interested in additional products. This leads to higher engagement rates and better conversion outcomes.
- **Increased Sales Opportunities:** External matching can reveal gaps in coverage or potential needs. This opens up new opportunities for offering relevant insurance products that align with their current situation or future plans.

Use Case 2: When Introducing new source to MDM

- **Problem Statement:** For an Insurance Provider the new source 'SAP', is providing the latest updated addresses and contact details for policyholders. The system must first assess whether the information from this source aligns with the existing records. If the evaluation reveals discrepancies or outdated information in the existing records, the system may need to Import Data from SAP' to ensure the data remains accurate and up-to-date.

Source Data

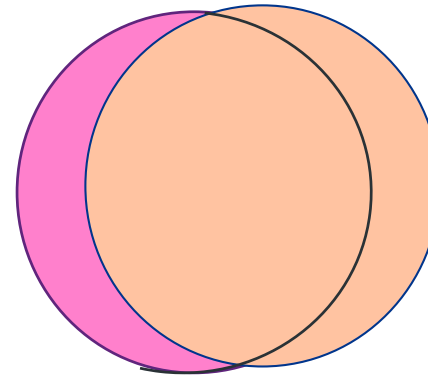
MDM Data



No Match, Create New Source in MDM and bring in all data

Source Data

MDM Data



80% of the data Matched, Then Load unmatched records to MDM

Data can be matched for subset of Source records, Max number supported is 10k

Initial Data Collection:

- The Source 'SAP' has Policy holder's latest details which includes Names, DOB, Address , Phone and Email.

Customer ID	Name	Date of Birth	Address_Type	Address_Line1	Contact_type	Contact Details	Email
xyz001	John Smith	1/15/1980	Located_at	123 Elm St, Springfield	Phone	(555) 123-4567	johnsmith@example.com
xyz002	Paul Doe	5/22/1990	Located_at	456 Oak Ave, Rivertown	Phone	(555) 987-6543	pauldoe@example.com
xyz003	Michael Brown	9/2/1990	Located_at	Cedar Street 654	Phone	555-9876	michaelbrown@example.com

Perform External Match:

Using the Name, Address, Contact and Email Details create a comprehensive matching rule for records.

1. Exact Match on Contact, Email , Address and Fuzzy match on Name
 - For records having exact contact and Address details establish an exact match rule to achieve the highest accuracy in identifying matches based on Names
2. Exact Match on Email and Fuzzy match on Address and Name
 - For records having Email details perform Fuzzy match on Address and Name
3. Exact Match on Contact and Fuzzy match on Address and Name
 - For records having Contact details perform Fuzzy match on Address and Name.

Configure Null matching Null or Non-null based on the requirements, establish match rules to enhance the effectiveness of identifying and linking records.

Perform External match:

- If the match score indicates that the source aligns with the existing MDM records, there is no need to update those records. However, if there is a discrepancy, introduce this new source system to update the records accordingly.

Match Status	Match Score	Source PKey	Name.file	Address_Line1.file	Contact Details.file	MasterID	Party Name	TIN	Address	Contact Details
MATCHED	100	xyz001	John Smith	123 Elm St, Springfield	(555) 123-4567	66d864ad4b38ab0765e4896b	John Smith	T123	123 Elm St, Springfield	(555) 123-4567
UNMATCHED		xyz002	Paul Doe	456 Oak Ave, Rivertown	(555) 987-6543					
MATCHED	97	xyz003	Michael Brown	Cedar Street 654	555-9876	66d864ad4b38ab0765e4896f	Michael Brawn	T234	Cedar Street 654	555-9876

Source

MDM

Benefits :

- **Improved Decision-Making:** With match scores, process becomes more informed and effective.
- **Comprehensive Information:** External data can provide additional context or details that might not be present in your existing records, leading to a complete and more robust dataset.

Pre-requisites

- **Generate match keys for Master records** : This is one time execution and not required to run before every external Match job as master data will be indexed from July release onwards for every creates and Updates

PartyMatchTokens

Process: *

MDMMatchReIndex

Description:

Generates match keys to identify candidates for matching.

Business Entity: *

Party

Record Type: *

☒ Source

☒ Master

- **Published Match model**

Match Models (2) + ↓

Name	Version	Objective	Updated On	Status	Model Description
Party_Person	2	Resolve Duplicates	Aug 12, 2024	● Published	
Party_Organization	1	Resolve Duplicates	Aug 12, 2024	● Published	

- **Predefined CAI MDMEExternalMatch process is required**

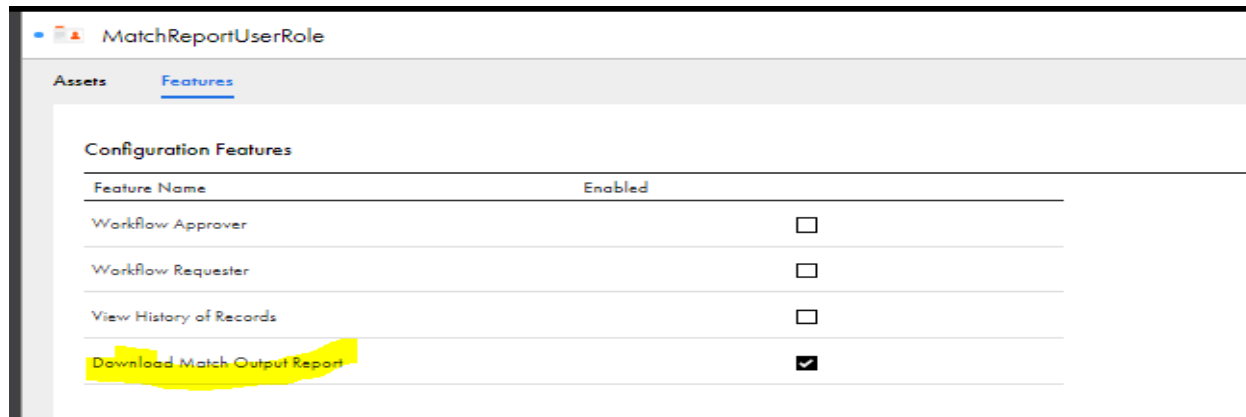
☐

MDMEExternalMatch

Process

Cont..

- Only 3 OOTB roles can access external match, as of today
 - Admin
 - C360 Data Steward
 - S360 Data Steward
- Add a privilege for downloading external match file (just like Match report), in the RBAC screen

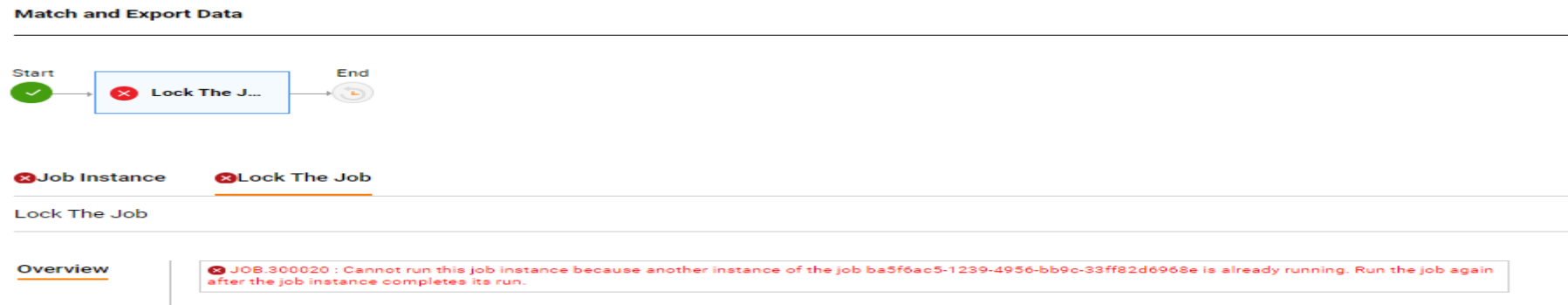


The screenshot shows the 'MatchReportUserRole' configuration page. It has a sidebar with 'Assets' and 'Features' tabs. The 'Features' tab is active, displaying a table of configuration features. The table has two columns: 'Feature Name' and 'Enabled'. The 'Download Match Output Report' feature is highlighted in yellow and is currently enabled, indicated by a checked checkbox.

Configuration Features	
Feature Name	Enabled
Workflow Approver	<input type="checkbox"/>
Workflow Requester	<input type="checkbox"/>
View History of Records	<input type="checkbox"/>
Download Match Output Report	<input checked="" type="checkbox"/>

Additional Considerations :

- **Threshold for Matching:** The system is set to handle up to 10k pairs for matching.
- **Job Execution Restriction:** External match jobs are designed to run sequentially, meaning only one external match job can be executed at a time. Concurrent execution of these jobs is not allowed just like Match job.



- **Handling Multiple Master Matches:** When multiple master records are identified, the one with the highest match score will be chosen. If scores are identical, the record with the most recent Last Updated Date (LUD) will be preferred. If there is still a tie, the business ID ranking will be used to determine the final record

How Are Nulls Handled In The Match Process?

1

Null Values In Keys

2

How Do Nulls Work For Partition Column Used In Candidate Selection Criteria

3

Nulls In Deduplication

4

Nulls In Fuzzy Match Column

5

Null To Null matching And Null To Non-Null Matching Scenarios

6

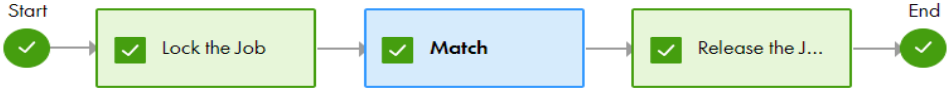
Demo

How Are Null Keys Handled?

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension
pkey1	E-commerce	--	--	909
pkey2	Customer Support	--	--	909

Input Data

Match and Merge



Job Instance

Lock the Job

Match

Release the Job

Overview

Runtime Param...

Metrics

Output

Status

Success

Instance ID

1021443434180825088_MATCH-PAIR-GEN

Start Time

Sep 19, 2024, 10:31:32 AM

End Time

Sep 19, 2024, 10:36:42 AM

Duration

00 hours 05 mins 10 secs

Log Directory

Reject Directory

Step Metrics

Overview

Declarative Rules Match

Total Records0

Skipped Records0

Failed Records0

Record Pairs for Automatic Merge0

Nonmatching Record Pairs0

Record Pairs for Manual Review0

Copy JSON

Records Will Remain In MATCH_INDEXED State

```
"_cm": {  
  "match": [  
    {  
      "version": 1,  
      "indexId": "IDX01",  
      "keys": []  
    },  
    {  
      "version": 1,  
      "indexId": "84ccbcad-155c-4eda-922d-e42198ddbda0",  
      "keys": []  
    },  
    {  
      "version": 1,  
      "indexId": "37ff242d-d03f-4e4f-a577-c9d53b5b3089",  
      "keys": []  
    }  
  ],  
  "srcLudOfRoot": null  
}
```

Since the keys are NULL, records will not participate in match and will remain in MATCH_INDEXED state.

Ensure that you use a column that is non-nullable for candidate selection criteria or add multiple candidate selection criteria so that records participate in matching in such cases.

Master

```
"state": "ACTIVE",  
"validation": "PASSED",  
"consolidation": "MATCH_INDEXED",  
"createdBy": "pkothapalli_p01",  
"creationDate": 1726722310241,  
"updatedBy": "pkothapalli_p01",  
"lastUpdateDate": 1726722310241
```

Xref

```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "MATCH_INDEXED",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING",  
  "xref_consolidation": "MATCH_DIRTY"
```

How Do Nulls Work For Partition Column If Used In Candidate Selection Criteria

Candidate Selection Criteria

Field Name	Field Type	Filter Candidates By	Key Generation Level	Candidate Search Level
fullName	Person_Name	maritalStatus	Standard	Typical

- “Filter Candidates By” allows you to filter the candidates based on the values of configured picklist field.
- With the above configuration, the candidate selection process filters match candidates with similar full names for their marital status rather than matching it with all records.

Cont..

Input Data

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Marital Status ("Filter candidates by" configured picklist)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field)
pkey1	E-commerce	Harvey Specter	--	8454435336	--
pkey2	E-commerce	Harvey Specter	--	8454435336	--
pkey3	Customer Support	Harvey Specter	Single	8454435336	--
pkey4	Loyalty	Harvey Specter	Single	8454435336	--
pkey5	Loyalty	Donna Scott	Married	9374563357	
pkey6	Loyalty	Donna Scott	Married	9374563357	--

RecordID	Record Source	Matched Record ID	Matched Record Source
pkey3	Customer Support	pkey4	Loyalty
pkey4	Loyalty	pkey3	Customer Support
pkey5	Loyalty	pkey6	Loyalty
pkey6	Loyalty	pkey5	Loyalty

The candidate selection process filters match candidates with similar full names for their marital status rather than matching it with all records. pkey1 and pkey2 with NULL marital status will not match with each other.

Pairs In Report

How Do Nulls Work For Deduplication?

We will use Address Line 1 as the criteria for deduplicating the address field group entries.

Field Group Selected : Address

ApplyDiscardClear

▼Deduplication?

Address Line 2

▼Rule

RuleSummary

Nothing to display.

▼Source Ranking

Rank 21

?

Rank:

Show:


All

RankSource System

1sap

2Salesforce_Crm

Remove

 Informatica

© Informatica. Proprietary and Confidential.

36

Cont..

Input Data

Address Field Group ID	AddressType	AddrLine2	City
SAP123_id	Billing	10800 MAIN ST	New York
SAP432_id	Mailing	--	Chicago
SAP567_id	Billing	10800 main st	New York
SAP789_id	Mailing	--	Chicago

Identification of duplicate values is case – insensitive. The two records with AddressLine1 “10800 MAIN ST” and “10800 main st” will be merged

Result After

RecordID	AddressType	AddrLine2	City
SAP123_id	Billing	10800 MAIN ST	New York
SAP432_id	Mailing	--	Chicago

The two records with null values in AddrLine1 will be merged.

How Do Nulls Work For Fuzzy Match Field?

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	AddressLine1 (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field)
pkey1	E-commerce	Harvey Specter	123 Main St	8454435336	909
pkey2	Customer Support	Harve Specter	123 Main St	8454435336	909
pkey3	Loyalty	Harvey Specter	--	8454435336	--
pkey4	Loyalty	Harvey Specter	--	8454435336	--

Input Data

Pairs In Report

RecordID	Record Source	Matched Record ID	Matched Record Source
pkey1	E-commerce	pkey2	Customer Support
pkey2	Canopy	pkey1	E-commerce
pkey3	Loyalty	pkey4	Loyalty
pkey4	Loyalty	pkey3	Loyalty

Why Null Matching?

Use Case: Consider Customer Information is been sourced by two different Source systems "E-commerce" and "Customer Support System"


Customer ID: 111
Name: Harvey
Specter
Phone: 8454435336
Phone Ext: 909

E-commerce
Platform

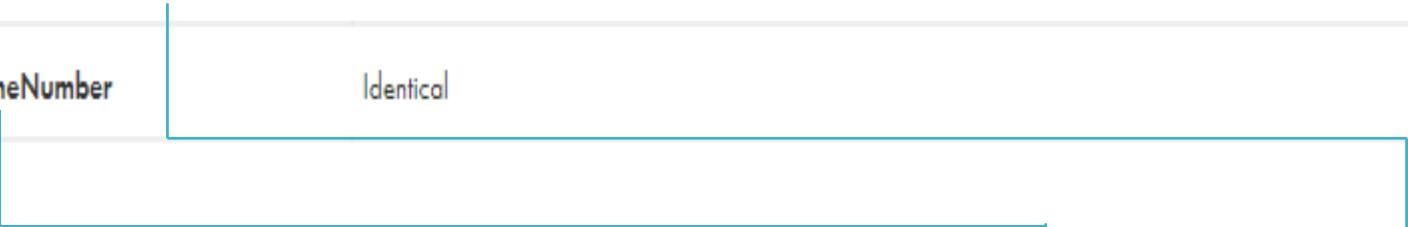
Customer ID: 111
Name: Harve
Specters
Phone: 8454435336
Phone Ext: 909

Customer Support
System

Exact Match Fields

Exact Match Fields (2) 

Field Name	Comparison Outcome	
Phone > phoneNumberExtension	Identical	
Phone > phoneNumber	Identical	



Existing Person Records

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field)
pkey1	E-commerce	Harvey Specter	8454435336	909
pkey2	Customer Support	Harve Specters	8454435336	909

Match Pairs Generated On Exact Rules

Input Data

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field)
pkey1	E-commerce	Harvey Specter	8454435336	909
pkey2	Customer Support	Harve Specters	8454435336	909

Pairs In Report

RecordID	Record Source	Matched Record ID	Matched Record Source
pkey2	Customer Support	pkey1	E-commerce
pkey1	E-commerce	pkey2	Customer Support

Loyalty Source System Bringing In Null Values

Customer ID: 111
Name: Harvey Specter
Phone: 8454435336
Phone Ext: (Missing)

Loyalty Program
Database

Source Loyalty Ingressed Null Values

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field)
pkey1	E-commerce	Harvey Specter	8454435336	909
pkey2	Customer Support	Harve Specters	8454435336	909
pkey3	Loyalty	Harvey Specter	8454435336	-
pkey4	Loyalty	Harvey Specter	8454435336	-

How do we make the fields with Null values participate in matching?

Null Matching

- ❑ Use null matching to enable the exact match fields that have no values to participate in the match process.
- ❑ You can configure null values to match other null values or non-null values.
- ❑ If you don't use null matching, the fields with null values don't participate in the match process.
- ❑ You can configure the following types of null matching:
 - Null matched null
 - Null matches non-null

Null Matches Non-Null Configuration

Declarative Rule

Configure Properties and Thresholds

Add Required Fields

Configure Exact Match Field Properties

Exact Match Field Properties

Field Name	Field Properties
Phone > phoneNumberExtension	Null matching, Null matches non-null
Phone > phoneNumber	None

Phone > **phoneNumberExtension** Properties

Null Matching

Null Matching Types ⓘ :*

☐ Null matches null

☒ Null matches non-null

- ☐ The match process matches a null value with a non-null value.
- ☐ When a record with null values matches with multiple records with non-null values, the match process considers the record pair that has the highest match score.
- ☐ If multiple record pairs have the same match score, the match process considers the last updated record to form a match pair.

Scenario 1: Match Pairs With Null Matches Non-Null Configuration On Exact Field

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field with Null Matches Non-Null Configuration)
pkey1	E-commerce	Harvey Specter	8454435336	909
pkey2	Customer Support	Harve Specters	8454435336	909
pkey3	Loyalty	Harvey Specter	8454435336	--
pkey4	Loyalty	Harvey Specter	8454435336	--

Input Data

Pairs In Report

RecordID	Record Source	Matched Record ID	Matched Record Source
pkey1	E-commerce	pkey2	Customer Support
pkey3	Loyalty	pkey1	E-commerce
pkey4	Loyalty	pkey1	E-commerce

Null Matches Null Configuration – Highest Pair

Add Declarative Rule

1 Configure Properties and Thresholds

2 Add Required Fields

3 Configure Exact Match Field Properties

Exact Match Field Properties

Field Name	Field Properties
Phone > phoneNumberExtension	Null matching, Null matches null

Phone > phoneNumberExtension Properties

Null Matching

Null Matching Types ? :*

☒ Null matches null

☐ Null matches non-null

Match Pairs to Retain ? :

☒ Match pair with the highest score

☐ All match pairs

Note: New match model needs to be created for Null Matches Null Configuration as shown above, the existing match model for Null Matches Non Null cannot be modified to change the null matching configuration after it is published.

Scenario 2: Match Pairs With Null Matches Null Configuration – Highest Pair

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field with Null Matched Null Configuration)
pkey1	E-commerce	Harvey Specter	8454435336	909
pkey2	Customer Support	Harve Specters	8454435336	909
pkey3	Loyalty	Harvey Specter	8454435336	--
pkey4	Loyalty	Harvey Specter	8454435336	--

Input Data

Pairs In Report

RecordID	Record Source	Matched Record ID	Matched Record Source
pkey4	Loyalty	pkey3	Loyalty

Null Matches Null Configuration - All Match Pairs

Add Declarative Rule

1 Configure Properties and Thresholds

2 Add Required Fields

3 Configure Exact Match Field Properties

Exact Match Field Properties

Field Name	Field Properties
Phone > phoneNumberExtension	Null matching, Null matches null

Phone > phoneNumberExtension Properties

Null Matching

Null Matching Types ? :*

☒ Null matches null

☐ Null matches non-null

Match Pairs to Retain ? :

☐ Match pair with the highest score

☒ All match pairs

Add Declarative Rule

1 Configure Properties and Thresholds

2 Add Required Fields

3 Configure Exact Match Field Properties

Exact Match Field Properties

✖ Can't retain all match pairs for all the exact match fields. Retain match pair with the highest score for at least one exact match field to avoid overmatching.

Field Name	Field Properties
Phone > phoneNumber	Null matching, Null matches null
Phone > phoneNumberExtension	Null matching, Null matches null

Phone > phoneNumberExtension Properties

Null Matching

Null Matching Types ? :*

☒ Null matches null

☐ Null matches non-null

Match Pairs to Retain ? :

☐ Match pair with the highest score

☒ All match pairs

Scenario 3: Match Pairs With Null Matches Null Configuration – All Match Pairs

SourcePkey	Source System	Person Full Name (Fuzzy Match Field)	Phone Number (Exact Match Field)	Phone Extension (Exact Match Field with Null Matches Null Configuration)
pkey1	E-commerce	Harvey Specter	8454435336	909
pkey2	Customer Support	Harve Specters	8454435336	909
pkey3	Loyalty	Harvey Specter	8454435336	--
pkey4	Loyalty	Harvey Specter	8454435336	--

Input Data

RecordID	Record Source	Matched Record ID	Matched Record Source
pkey1	E-commerce	pkey2	Customer Support
pkey2	Canopy	pkey1	E-commerce
pkey3	Loyalty	pkey4	Loyalty
pkey4	Loyalty	pkey3	Loyalty

Points To Be Noted

- ☐ Null matching will be disabled by default.
- ☐ Null matching can be enabled for any of the exact match fields in the match model.
- ☐ The Null matching enable/disable option is present for all the exact match fields in the declarative rules.
- ☐ Once Null matching is enabled on an exact field and match model is published, you will not be able to edit the existing match model, a new match model needs to be created.
- ☐ Null matching and segment matching are mutually exclusive.
- ☐ With October release, match and merge job excludes reverse match pairs to prevent the export of a large number of match pairs.

Thank You

Where data & AI come to



Informatica