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# Design and Development: Business 360 Console – Part 2

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Where data & AI come to 

# 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.

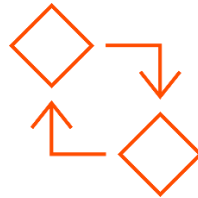
# Feature Rich Success Portal



**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>

# Safe Harbor

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# Recap

**Business  
360 Data  
Model**

**Pre-Defined  
Assets**

**OOTB-  
Business  
Applications**

**Create Entity,  
Field Group  
and Smart  
Field**

**Data Quality**

**Role Based  
Access  
Control**

# Agenda

- 1 Match Process Overview
- 2 Configuring Survivorship and Ranking
- 3 Ingress Process
- 4 Egress Job
- 5 Business Event
- 6 Defining Job
- 7 Operations Insights

# Match Process Overview

# Purpose of match process

Identifying Duplicate Records

Achieving a Single Source of Truth

Improving Data Quality

Enhancing Data Integration

Optimizing Business

Supporting Compliance

# Business Use case

## Problem Statement:

### Organizations struggle with:

- Duplicate customer/vendor/product records.
- Inconsistent and conflicting data across systems.
- Time-intensive manual data cleaning processes.

## Impact:

- Inefficient operations and poor customer experiences.
- Inaccurate reporting and decision-making.
- Return on Investment

# Deduplication Solution

Record ID	Name	Email	Address
Record 1	John Doe	john.d@example.com	123 Elm St
Record 2	Jonathan Doe	john.d@example.com	123 Elm Street
Record 3	Jane Smith	jane.smith@example.com	456 Oak Ave
Record 4	Jane . Smith	jane.smith@example.com	456 Oak Avenue
Record 5	Alice Johnson	Alice@example.com	789 Pine Blvd

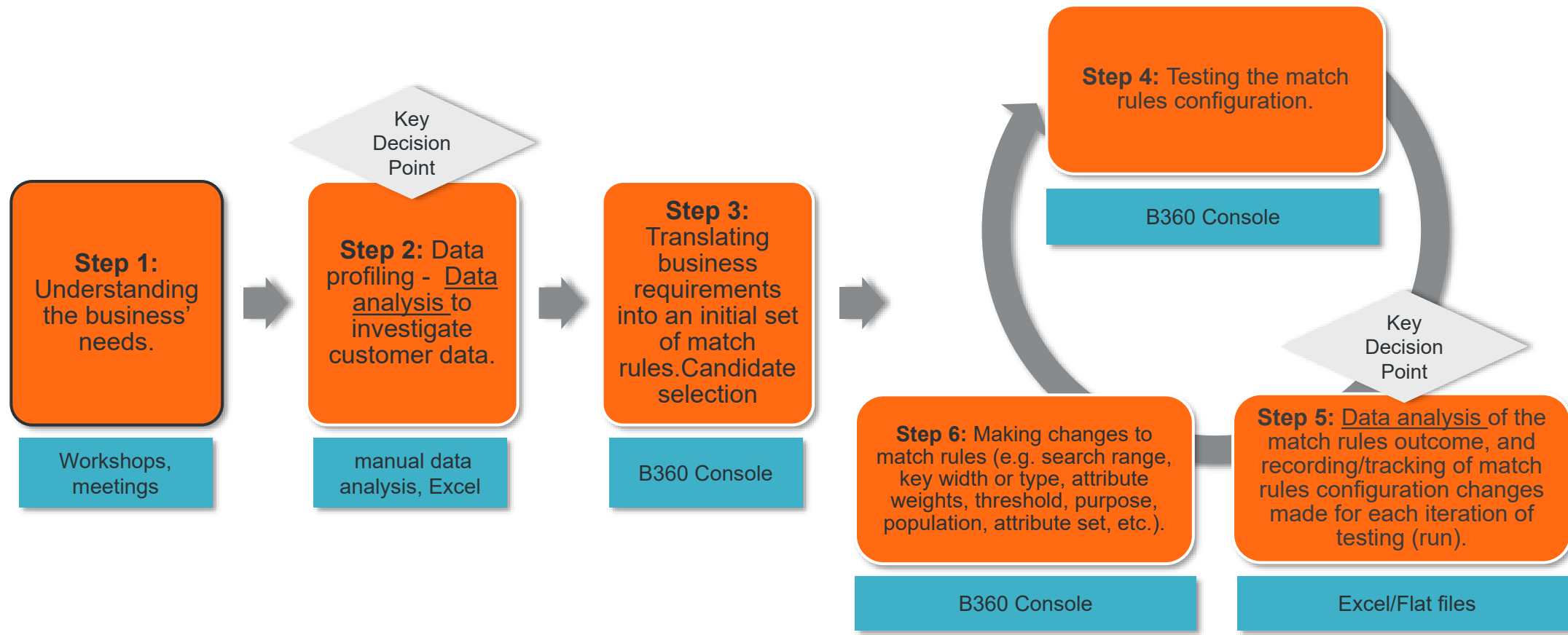
Step	Process	Example
Step 1: Exact Match	Match records by identical email	"john.d@example.com" "=" "john.d@example.com"
Step 2: Fuzzy Match	Apply fuzzy logic on names	"John Doe" ~ "Jonathan Doe" (85% match score)
Step 3: Fuzzy Match	Apply fuzzy logic on addresses	"123 Elm St" ~ "123 Elm Street" (90% match score)
Step4 : Deduplication	Apply Deduplication logic on Address	Same Address type will consolidate into single address

## Golden Record after Match & Merge

Record ID	Name	Email	Address	Source Records	Action Taken
1	Jonathan Doe	john.d@example.com	123 Elm Street	Record 1, Record 2	Merged: Based on exact email + fuzzy name + fuzzy address+ FG Dedupe.
2	Jane Smith	jane.smith@example.com	456 Oak Avenue	Record 3, Record 4	Merged: Based on exact email + fuzzy name + fuzzy address+ FG Dedupe
3	Alice Johnson	alice.j@example.com	789 Pine Blvd	Record 5	Retained as is: No matches with other records.

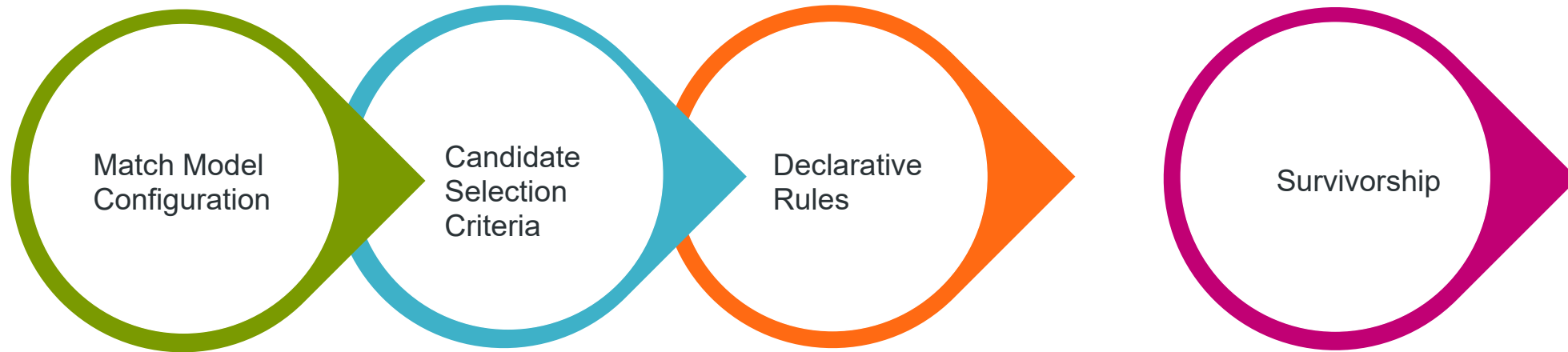
# Overview: Declarative Match Configurations

- Goal: to find the optimal match rules configuration that uses the least number of rules, of which most are auto match-merge, requiring the fewest manual inspections possible.



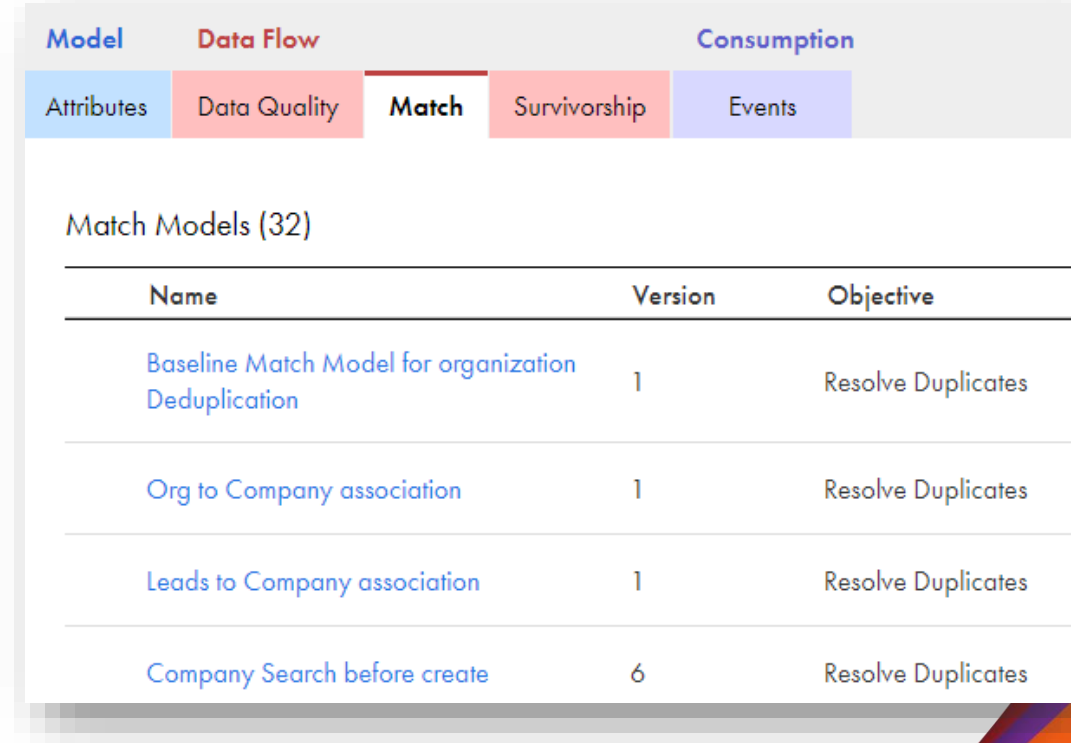
# Match Configuration Steps

## Master data identification



# Match Model Key Points

- Configuration that determines how your data is matched
- Use a Meaningful model name
- You cannot change the model's name after the model is published
- A match model can be cloned.
- Predefined models can't be deleted
- Before deleting the match model, remove it from its dependencies (ex. Job, Search Match API)
- Maximum 25 Match models can be created.







The screenshot shows a web interface with a navigation bar at the top containing tabs for 'Model', 'Data Flow', and 'Consumption'. Under 'Data Flow', there are sub-tabs for 'Attributes', 'Data Quality', 'Match', 'Survivorship', and 'Events'. The 'Match' tab is selected. Below the navigation, the text 'Match Models (32)' is displayed above a table. The table has three columns: 'Name', 'Version', and 'Objective'. It lists four match models, all with the objective 'Resolve Duplicates'.

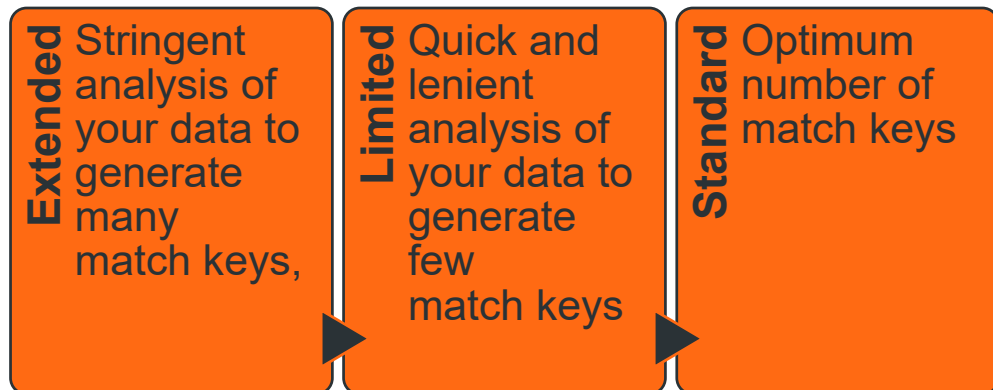
Name	Version	Objective
<a href="#">Baseline Match Model for organization Deduplication</a>	1	Resolve Duplicates
<a href="#">Org to Company association</a>	1	Resolve Duplicates
<a href="#">Leads to Company association</a>	1	Resolve Duplicates
<a href="#">Company Search before create</a>	6	Resolve Duplicates

# Candidate Selection & Search Levels

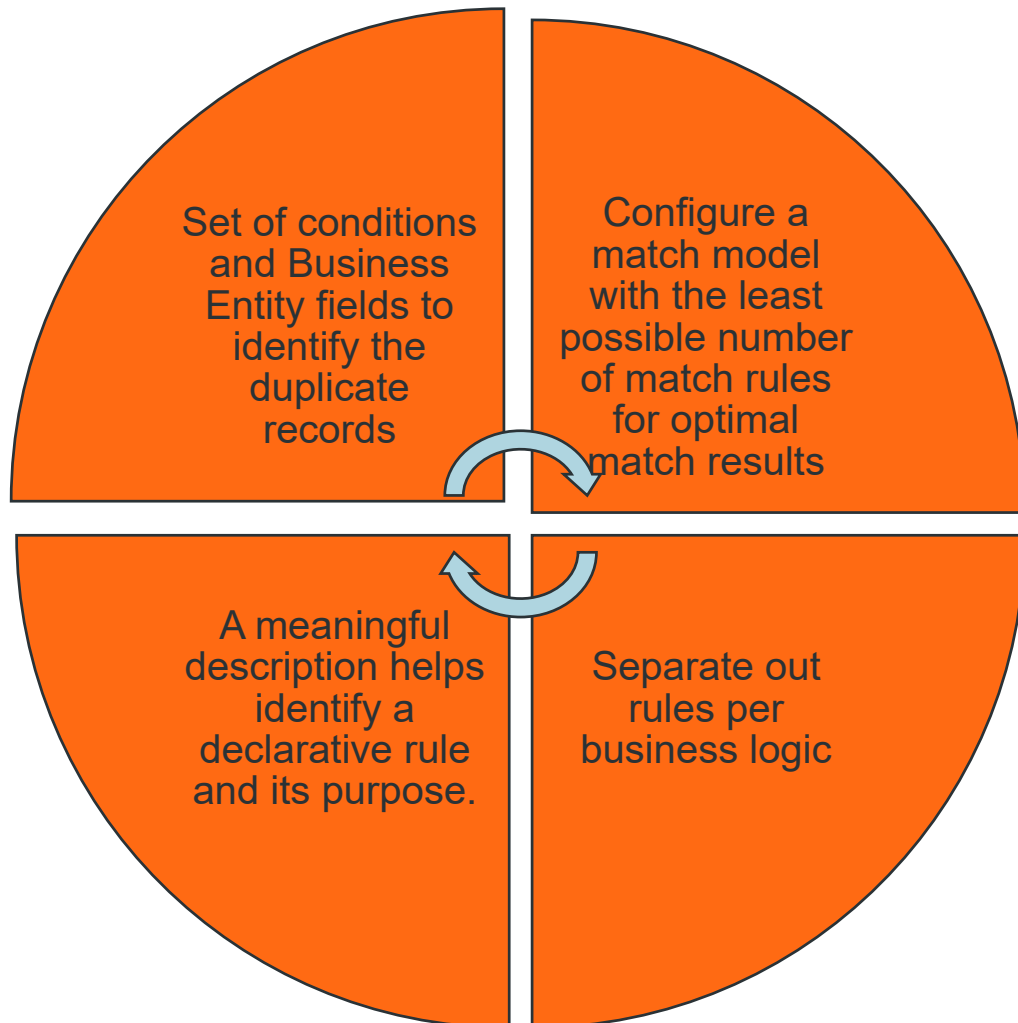
- Candidate selection criteria determine which data objects (records or datasets) should be included in the MDM system. Ex: Person, Address, Organization
- Candidate selection criteria uses one or more fields to generate match keys to identify candidates for matching
- Have a minimum one and analyze the data to have more to work in union. Start with a single key and add more keys only if necessary. For example, you may want to add an SSN as an index in addition to Full Name to capture entities that changed their last names. Note that every additional index will potentially generate more candidates and thus impact performance
- Search Levels; how stringently and thoroughly to search for match candidates
- Decide on a candidate search level based on the following considerations:
  - Size and quality of the data

## Candidate Search Level

	Candidates	Data Volume / Criticality / Time
 Extreme	The most	Small / Very High / Takes the most time
 Exhaustive	Many	Small / High / Lots of time
 Typical	Moderate	Medium to Large / Moderate / Moderate
 Narrow	Few	Very Large / Low / Very fast



# Declarative Rules Key Points



Person > Baseline Match Model for person Deduplication

Model Configuration **Declarative Rules** Machine Learning Model

Declarative Rules (4)

Rank	Merge Strategy	Match Strategy	Match Criterion	Match Level	Description
1	Automated	FUZZY	Person_Name	Typical	Strongly similar name and exactly matching identifier
2	Automated	FUZZY	Resident	Typical	Strongly similar name, address and exactly matching birth date
-	Threshold-based	FUZZY	Person_Name	Typical	Similar name and same email
-	Threshold-based	FUZZY	Person_Name	Typical	Similar name and same phone number

# Match Operation Key Points



Matching happens at Source Records level and not on Master level

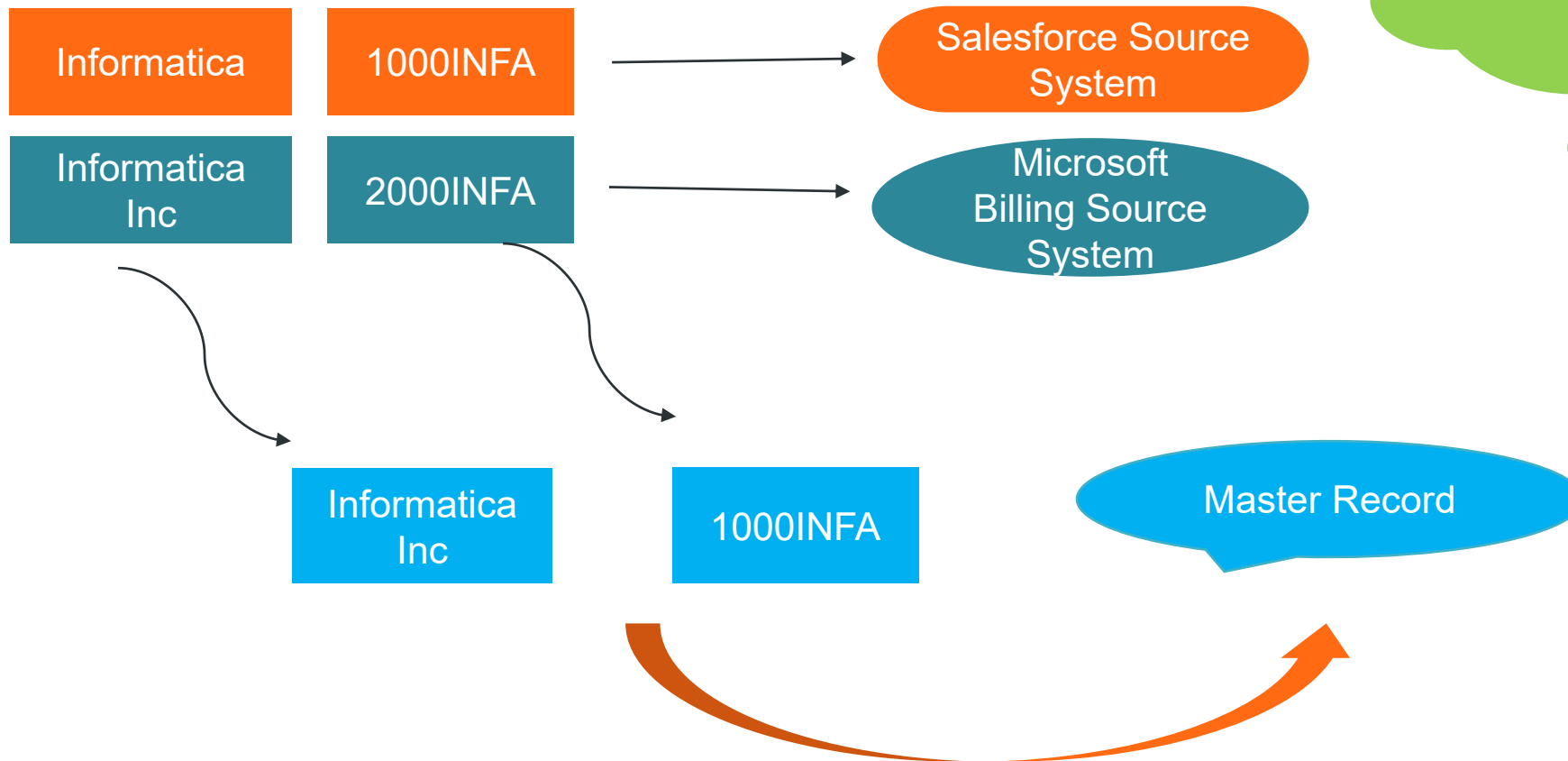
Record pair meets the conditions then it doesn't process further.

By default, the match process uses up to first 10,000 candidates

After the Match and Merge master record cluster can have maximum of 1000 Source record members.

# Configuring Survivorship and Ranking

# Why Survivorship???



- Which record to survive?
- Which source system are most trusted?
- If records are not valid, how do we downgrade the trust score?

# Types of Survivorship

- Field level survivorship
  - Compete by each entry

Field	Xref1	Xref2	Master M1 (Xref1 wins for partyID XRef2 wins for Tax payer id)
PartyID	Informatica	Informatica Inc	Informatica
Tax Payer ID	2000INFA	1000INFA	1000INFA

- Block level survivorship
  - Compete the whole underlying group

Block	Xref1	Xref2	Master M1(Xref2 block wins)
PartyID	Informatica	Informatica Inc	Informatica Inc
Tax Payer ID	2000INFA	1000INFA	1000INFA

# Key Features of Survivorship Configuration

## Rule-Based Survivorship

- Defines conditions (e.g., decay, max/min) for field or field group survival.

## Rank-Based Survivorship :

- Assign ranks to source systems based on data accuracy and credibility.
- Higher ranks indicate more reliable data.

## Source Last Update Date:

- If trust score and source ranking are the same, the last update date determines the survivorship.

## Deduplication

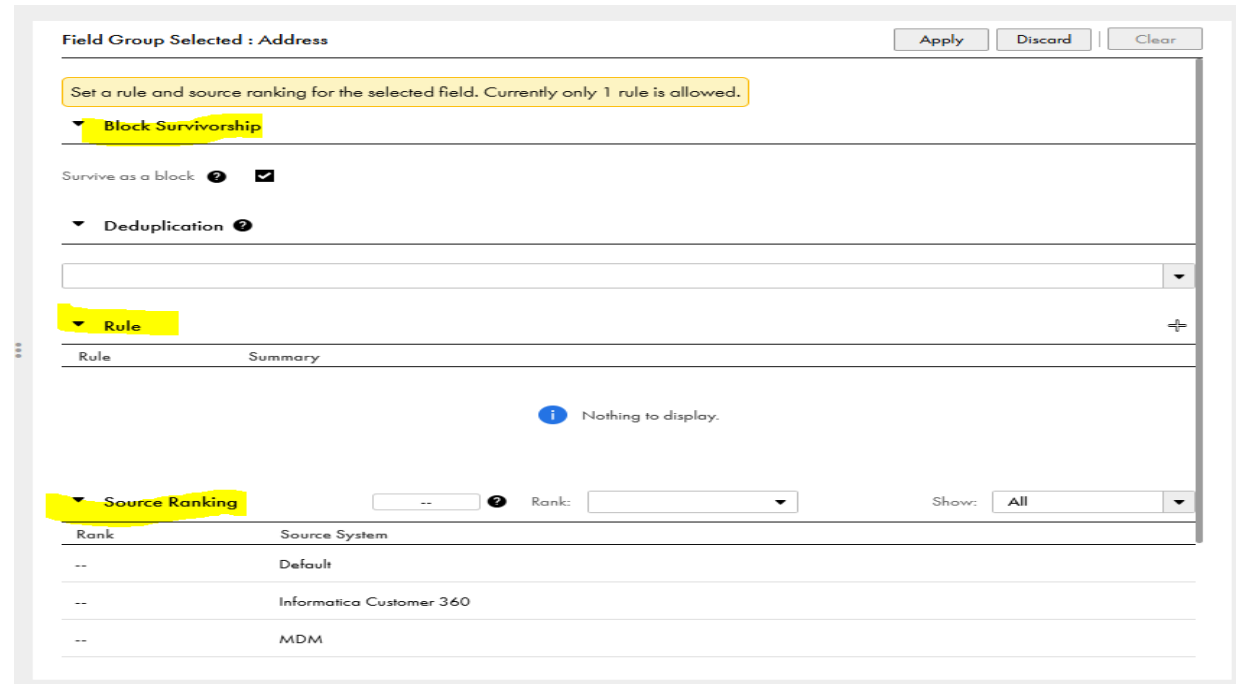
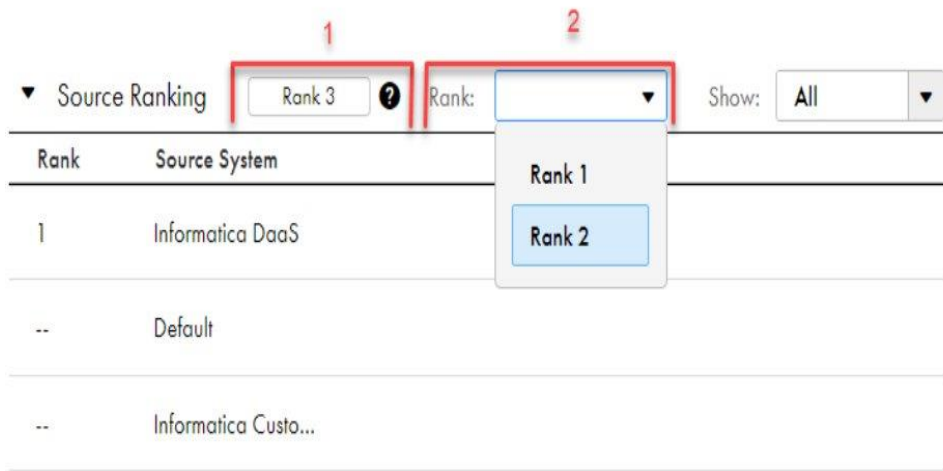
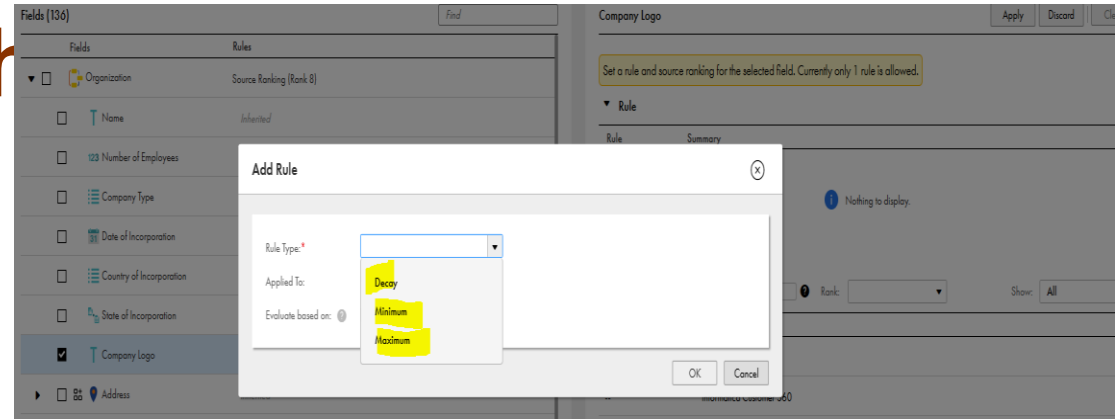
- To identify and merge field group values that are duplicates

## Block Survivorship :

- Treats nested fields/field groups as a single unit.
- Applies survivorship rules to all fields within the block.

# Configuring Survivorship

- Step1:- Select Object
- Step2:- Rank Source System
- Step 3:- Configure survivorship rules



# Tie Handling

- The source ranking will act as a tie break rule in case of the multiple records different source system with same trust score.
- In case of multiple XREFs with the same trust score from the same source system the value from the XREF with the newer LUD will survive.
- In the case there are multiple Xrefs with the same trust score from the same source system with the same LUD, the record with the highest internal id (`_id`) will survive
- There can be a tie in the internal id. This can happen when picking a winning element in a multivalued field, the highest 'element\_id' will be the one that will survive for this case.

## Order of Survivorship Rules :

**Decay (if set) -> Source Ranking -> Last Updated Date -> Highest InternalID**

# Salient Points

Maximum 500 unique FGs can be deduplicated.

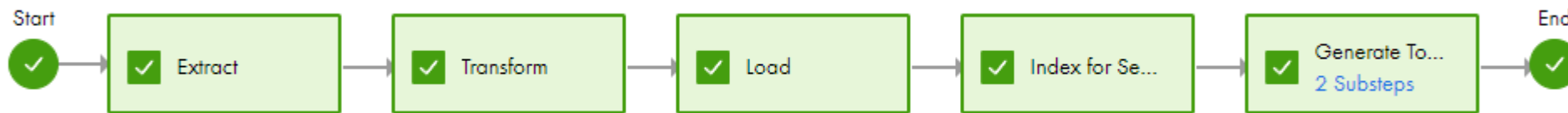
Max. 40 FG can be shown on UI side by side

Deduplication does a union of the field group Id and the field configured for deduplication

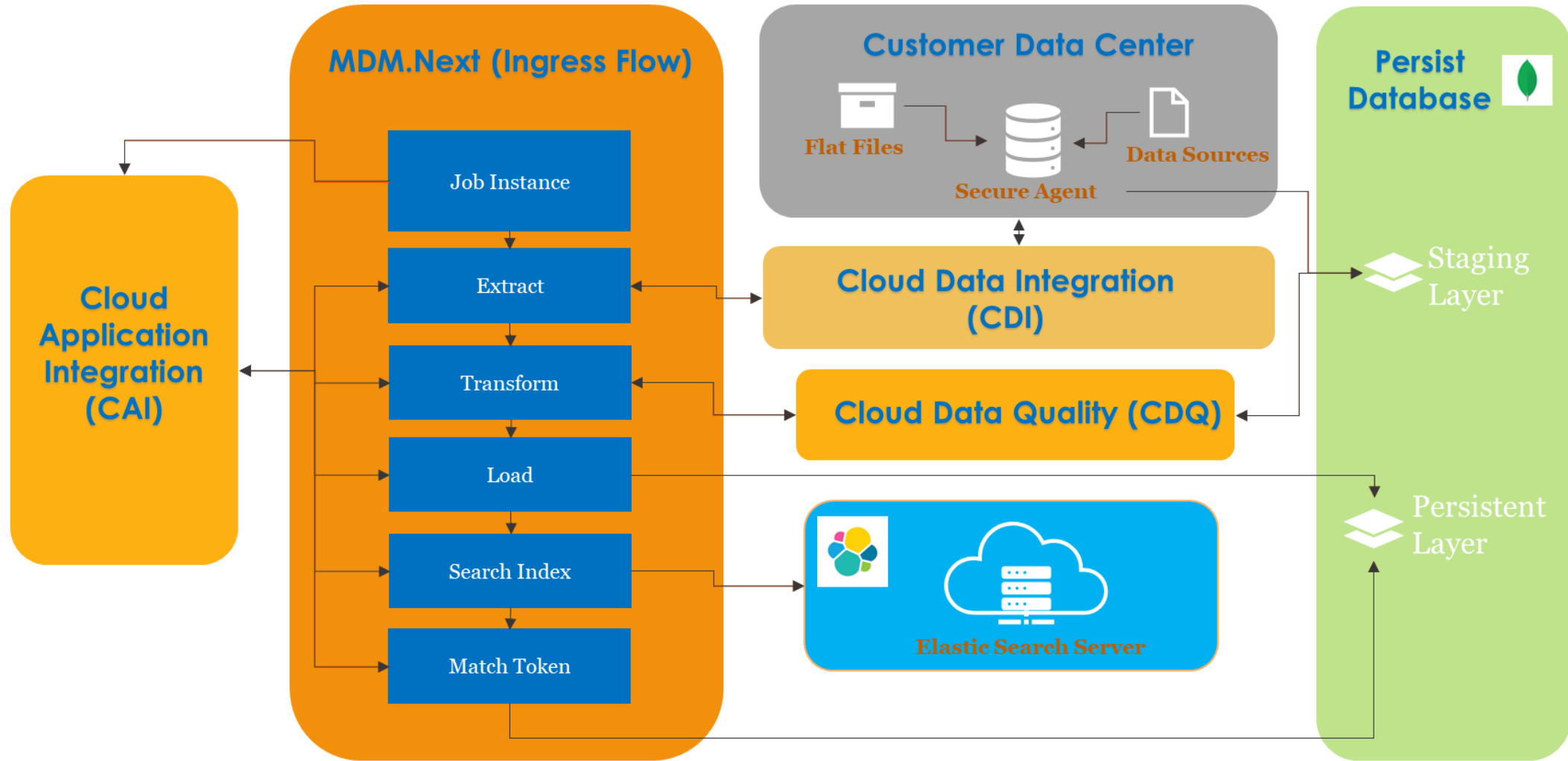
# Ingress Process

# What is Ingress Job?

- Ingress Job is used to load data from various source systems on customer's network to MDM SAAS It supports to load business entity data, hierarchies and relationships.
- Data is extracted from configured source systems, enriched, tokenized and search indexed as part of the job.
- Once the job completes successfully, the data is ready to view in respective MDM SAAS applications say Customer, Supplier and Product etc...



# Ingress Flow



# Pre-requisites of Ingress Job

**Secure Agent** : Lightweight runtime engine

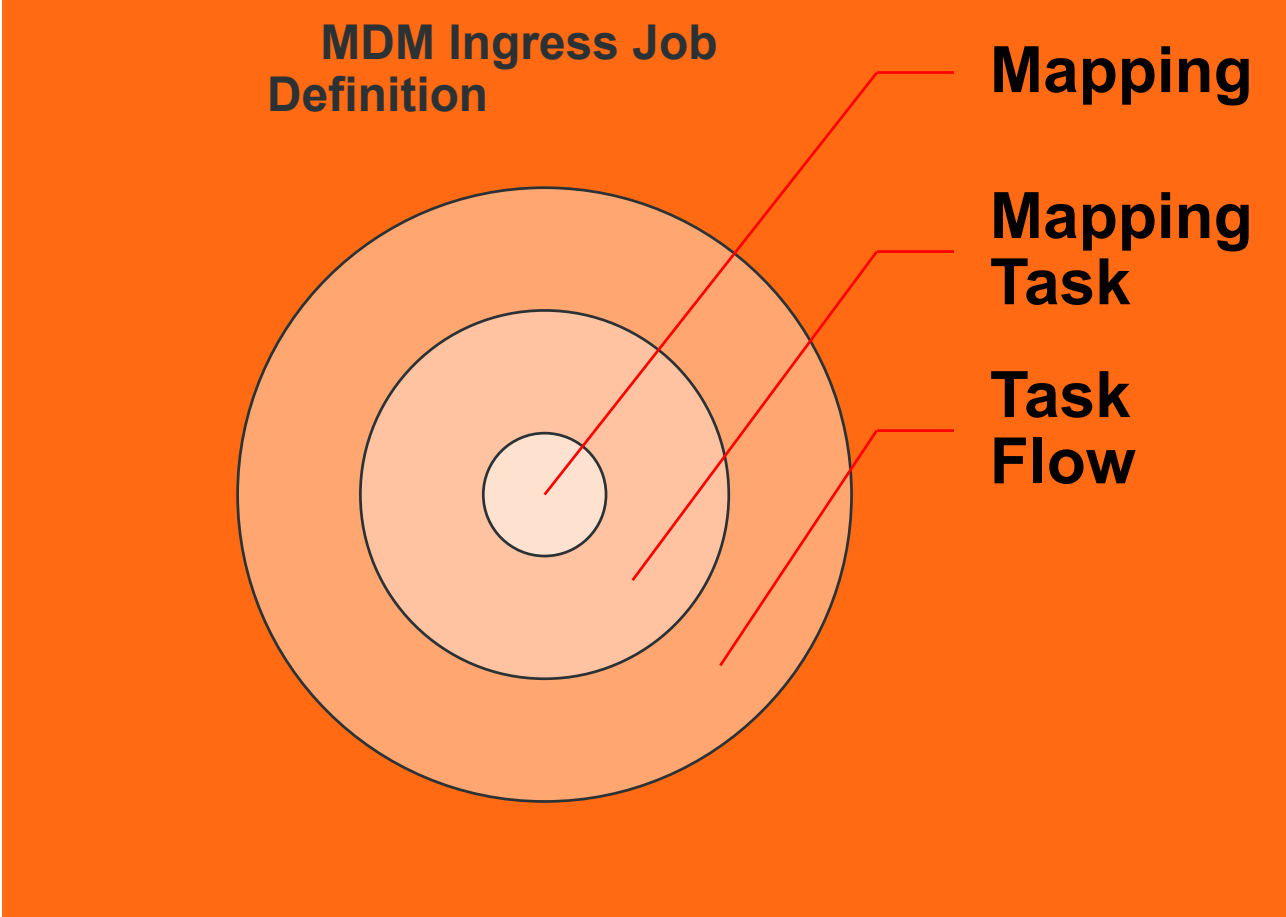
**SAAS Connectors** : B360 Connector, B360 FEP Connector

**Connections** : Source and Target Connection

**Roles** : *To Create: Designer, MDM Designer, Business 360 Process Executor*

*To Run: Business360ProcessExecutor Anyone of the Customer 360 Analyst, Customer 360 Data Steward, Customer 360 Manager, Admin*

# Development of Ingress Job with Business 360/FEP Connector



# Ingress Recommendations

Sourcekey length  
 $\leq 255$

Use Internal GUID  
of the system  
name

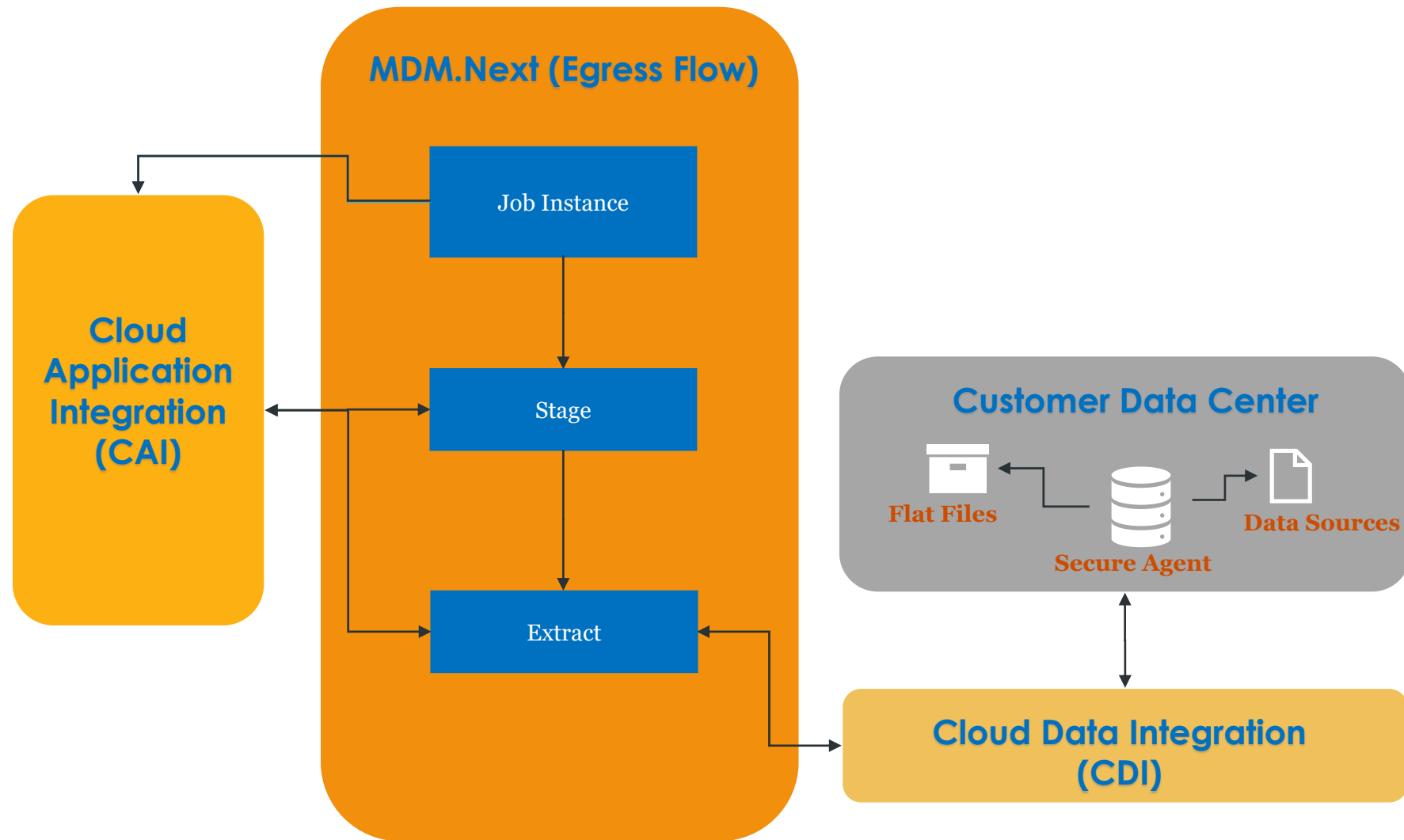
Simple DQ rules

SRC LUD  
Condition

25 to 50 million  
records per  
ingress job

# Egress Job

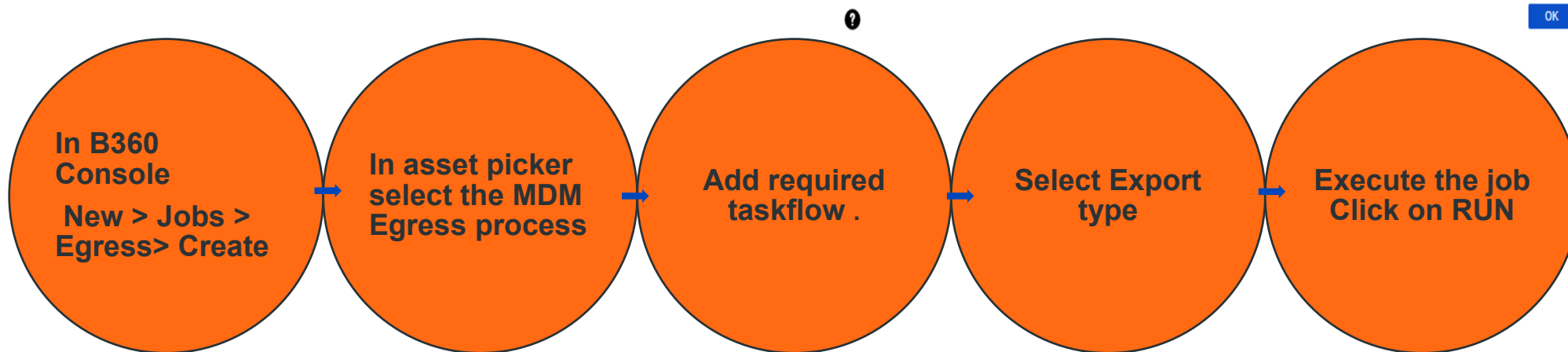
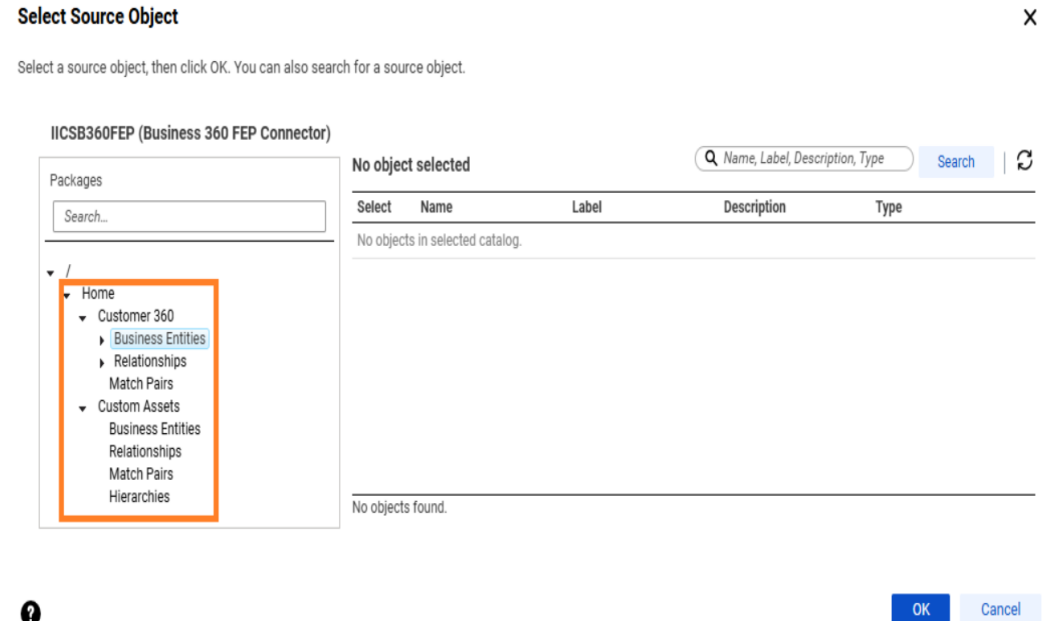
# Egress Flow



# What is egress job?

Egress job export data from the Business 360 data store to an external data source. Types of data we can egress:

- Master Record
- Source Record
- Hierarchy Record
- Relationship Record
- Match Pair record



# Why Egress Job ???

Egress facilitates data analysis across various scenarios. Examples of analysis could include:

- Purchasing trends
- Customer segmentation
- Sales Performance Analysis

# Pre-requisites of Egress Job

**Secure Agent** : lightweight runtime engine

**SAAS Connectors** : B360 Connector, B360 FEP Connector

**Connections** : Source and Target Connection

**Roles : To Create:** *Designer, MDM Designer, Business 360 Process Executor*

**To Run:** Business360ProcessExecutor Anyone of the Customer 360 Analyst, Customer 360 Data Steward, Customer 360 Manager, Admin

# Egress Job Types

Standard export ?  
 Custom export ?  
 Export all ?

## Standard Export

- Export all records during the initial run.
- Perform incremental exports based on record creation and updates.

Standard export ?  
 Custom export ?  
 Export all ?

## Custom Export

- Export all records created or modified after the initial run.
- Export records added or updated after the initial run.

Standard export ?  
 Custom export ?  
 Export all ?

## Export All

- Exports all the records in each run of the job.

# Egress With Business 360 FEP Connector

We can export master record, and also identifier details of their source record using xref links

- Root Record
- Field groups
- XrefLinks

**Select Source Object**

Select a source object, then click OK. You can also search for a source object.

IICSB360FEP (Business 360 FEP Connector)

Packages

Search...

- /
- Home
  - Customer 360
    - Business Entities
      - Organization**
      - Person
      - Relationships
      - Match Pairs
      - Custom Assets

xrefLinks(Home/Customer 360/Business Entities/Or...  Search | Refresh

Select	Name	Label	Description	Type
<input type="radio"/>	c360.organization...	c360.organization.X_inf...		flatmdmentity
<input type="radio"/>	c360.organization...	c360.organization.X_inf...		flatmdmentity
<input type="radio"/>	c360.organization...	c360.organization.X_inf...		flatmdmentity
<input type="radio"/>	c360.organization...	c360.organization.X_inf...		flatmdmentity
<input type="radio"/>	c360.organization...	c360.organization.X_inf...		flatmdmentity
<input checked="" type="radio"/>	xrefLinks	xrefLinks		flatmdmentity

Displaying all 30 objects.

OK Cancel

# Egress With Business 360 Connector

We can egress Master record, Xref Links and corresponding Field Group via B360 connector

The screenshot shows the Informatica Field Mapping interface. At the top, there are tabs for 'Properties', 'Preview', and 'Source'. Below the tabs, a message reads: 'Select elements of Response to be mapped to Output Fields. Output groups and keys will be automatically generated.' The main area is titled 'Response Structure (0 of 1219 mapped)'. On the right side of this area, there is a 'Show Fields:' dropdown menu set to 'All' and a 'Find' input field. Below this is a table with two columns: 'Element Name' and 'Cardinality'. The table lists various fields with checkboxes for selection. The 'states' and 'xrefLinksArray' fields are expanded, showing their sub-elements. On the far right, there are icons for 'Output' and 'Field'.

Element Name	Cardinality
<input type="checkbox"/> lastUpdateDate	U-1
<input type="checkbox"/> state	0-1
<input type="checkbox"/> createdBy	0-1
<input type="checkbox"/> updatedBy	0-1
<input type="checkbox"/> originalBusinessId	0-1
<input type="checkbox"/> mergedBusinessId	0-1
> <input checked="" type="checkbox"/> states	0-1
<input type="checkbox"/> validationStatus	0-1
<input type="checkbox"/> matchMergeState	0-1
<input type="checkbox"/> populationName	0-1
<input type="checkbox"/> notReadyForMatch	0-1
> <input checked="" type="checkbox"/> xrefLinksArray	0-1
> <input checked="" type="checkbox"/> Organization	0-1

# Recommendations

- Need to take care of space problem in customer secure agent drive
- Recommended to have Sorter before every Joiner and Aggregator
- Increase buffer pool size when we hit - TM\_6351 WARNING: Insufficient number of data blocks for adequate performance
- Tune “Lookup Data and Index cache size” for the Lookup Transformation
- Tune “Joiner Data and Index cache size” for the Joiner Transformation
- Tune “Aggregator Data and Index cache size” for the Aggregator Transformation
- While designing data model be cognizant of the length of the field names. They will add up to the overall json size of the document.

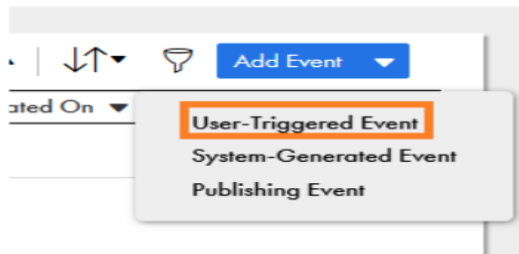
# Business Events

# Why Business Events??

Business events track actions on business entity records (create, update, delete, merge), trigger workflow or Publish event to the external source. Types of Business Events:

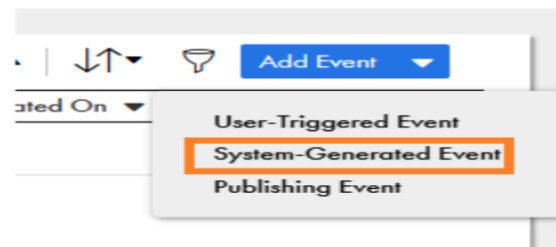
## User Triggered Event

- Creating, updating or unmerging records
- Creating or updating hierarchies



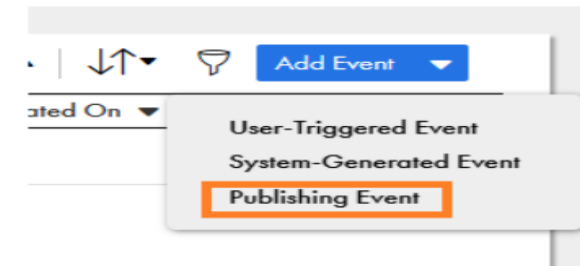
## System Generated Event

- Actions performed by the system identifying matches requiring manual review



## Publish Event

- The publish step publishes events from business applications to external targets that Cloud Data Integration supports.



# User Triggered Event

- When business users create or update a business entity record or hierarchy, workflows can be triggered.

## Create

Creates a record or hierarchy.

Sets values for specific fields or field groups.

## Update

Updates a record or hierarchy.

Modifies values for specific fields or field groups.

## Delete

User deletes a record or hierarchy.

## Unmerge

User unmerges a record

## Manual Merge

User merges a record.

# System-generated event

System-generated events are actions that the system performs. For example, system identifies potential matches that require review.

• ⚡ Demosystem

1 Event 2 Workflow Tasks 3 Workflow Properties

Define the event details and the scenarios for which the event is published to targets.

## Event Details

Event Type: System-Generated Event

Display Name: \* Demosystem

Internal ID: \* ? demosystem

## Event Scenarios

Asset Name *	Asset Type *	Actions *
Organization	Business Entity	Resolve Potential Matches

Action	Description
Resolve Potential Matches	System suggests potential matches.

# Publish Event

- Details of Event
- Expires in
- Payload version

## Event Details

Event Type: Publishing Event

Display Name: Publish event

Internal ID: publish\_event

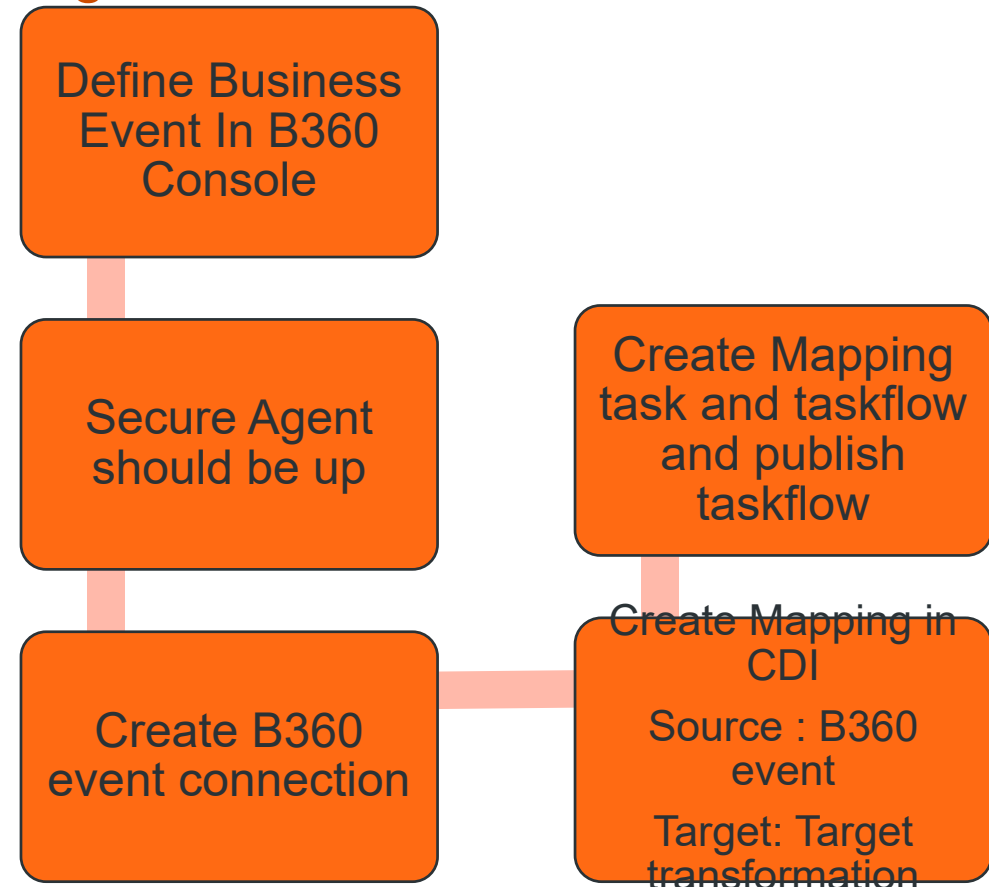
Expires In: 7 days

Payload Version: v2

## Event Scenarios

Asset Name	Asset Type	Actions
Organization	Business Entity	Create, Update, Delete, Merged, Unmerged, Purged, Restored

## Prerequisites



# Event Response Payload (V2)

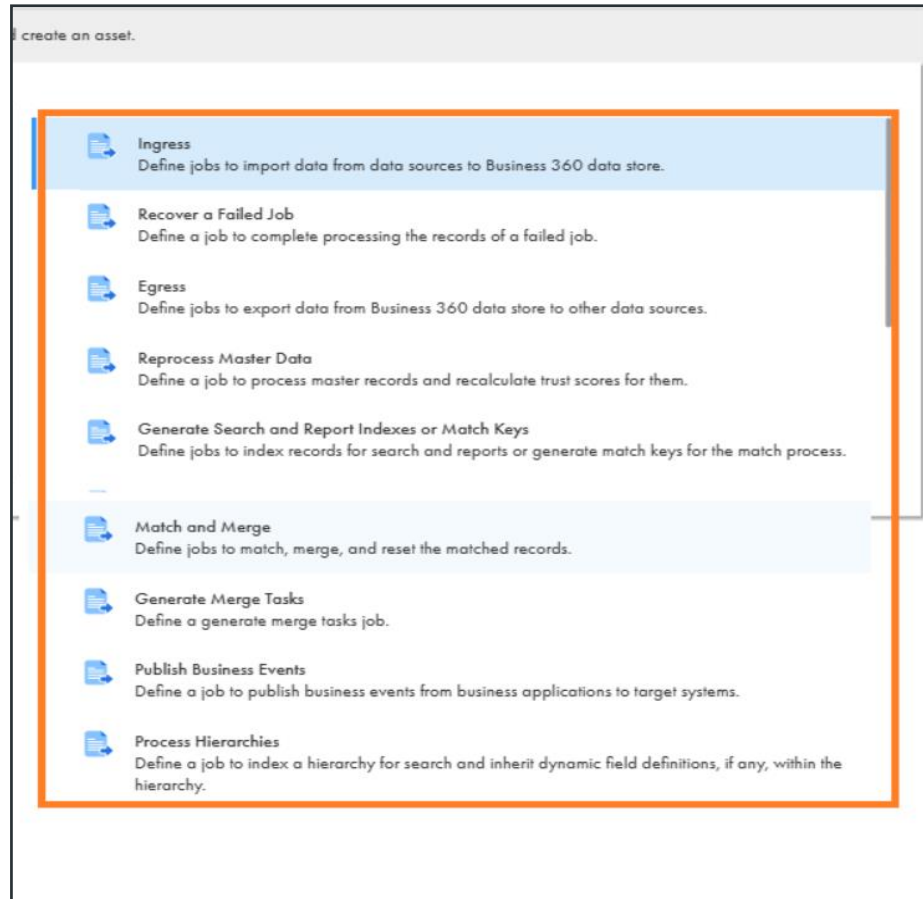
The event payloads contain parameters that represent information related to the business events.

Parameter Name	JSON Property Name	Description
Active Business ID	activeBusinessId	Unique identifier of the master record.
Affected XREFs	affectedXrefs	Object that contains details about the source records that the event affects.
Asset Type	assetType	Unique identifier of an asset.(eg: c360.organization)
Date of Change	dateOfChange	Date when the record was updated. The date is in epoch format, such as 1648498462137.
Event Type	eventType	Type of event, such as create, update, delete, and merge
Record States	states	Object that contains details about the state of the record after the event.
Implied Operation	impliedOperation	Original event that a user triggers.

# Defining Jobs

# Jobs :

- A job is an executable instance of a task or process that uses one or more steps. Some jobs can perform different processes, and we can select the process that we want to perform.



Ingress

Egress

Generate search indexes  
or match keys

Match and merge

Generate merge tasks

Recover a failed job

Publish business events

Process hierarchies

### Egress Job

Process:

Description: Exports data from the Business 360 applications, such as Customer 360, and loads the data to a target data source.

Record State Indicator:

Export Type:  Standard export  Custom export  Export all

Validation Status:

#### Taskflows

Name	Location
Taskflow2	//Person_job

- New...
- Home
- Explore
- My Import/Exp...
- Business Events
- Localization
- My Jobs
- Security
- Global Settings
- Ingress Job

### Ingress Job

Process:

Description: Extracts data from a source, validates and loads to Business 360 data store.

Source System:

Force Record Update:

#### Taskflows

Name	Folder	Status
Personingresstaskflow	//amanoj	Published

# Match and Merge Jobs

- Configure the match model, can define a job to match records and another job to merge records or a single job to match and merge records.

## Match and Merge

- Identifies matching records.
- Creates record pairs.
- Merges records based on configuration.
  1. Automatically merges records.
  2. Queues records for manual review.
  3. Skips records not suitable for merging.

## Match Only

- Match Only View and analyze record pairs.
- Identify pairs that auto-merge or require manual review.

## Merge Only

- Merges record pairs that are identified by the match process for automated merge

## Reset Match

- Resets the matched records that are not yet merged and makes the records available for matching again

# Generate merge task jobs

- Group the pairs or records and generate review tasks

Generate merge task

Process:

Description: Groups potential matches and generates tasks for groups that require a review.

Task Limit:

Assets

Name	Type
NewBE	Business Entity

# Publish business events jobs

- Publish events from business applications to external targets that Cloud Data Integration
- Publish event related to actions on business entity records, such as create, update, and delete.

Publish event

Process:

Description: Publishes business events to a target system.

Publish Type:  Standard publish  Custom publish

Select a start date  Select an end date

Taskflows

Name	Location
Taskflow2	Person_job

# Recover a failed job

Failed job identify records that were not processed and process them

Eg: If some records are not processed in match and merge job we can run recover failed Job to re-process them

Failed Job

Business Entity: \* Organization

Match Model Name: \* Baseline Match Model for organization Deduplication

Match Model Version: \* Latest version

# Generate search indexes or match keys job

- Indexes records for Search requests.
- Generates match keys for the match process.
- Must run this job after:
  1. Search configuration updates.
  2. Match model configuration updates.

Select a process

Find

Name	Folder	Description
MDMMatchReIndex	Business360	
MDMSearchIndex	Business360	

Select Cancel

# Reprocess master data jobs

We can define a job to recalculate the trust scores of the active and deleted master records based on the survivorship configuration.

- Run the Reprocess Master Data job after updating survivorship configuration.
- For deleted master records:
  1. If active source records exist → Trust scores are calculated from active source records.
  2. If no active source records exist → Trust scores are calculated from deleted source

The screenshot shows the configuration for a job named 'Reprocess Master Data'. The 'Process Type' is set to 'Recalculate Trust Score' and the 'Record State Indicator' is set to 'Active'. The description states: 'Recalculates trust scores of master records based on the survivorship configuration.' Below this, there is a table for 'Assets (1)\*' with one entry for 'Organization' located at 'Customer360'.

Name	Location
Organization	Customer360

# Operational Insight

# Why Operational Insight

- We can use Operational Insights to view data processing analytics and monitoring statistics for MDM SaaS

## Use of Operational insight

- Source Records
- Master Records
- Users Summary of Jobs
- Job instance and job schedules
- Key Metrics of each job
- Job performance
- Can export list of Jobs and details of those jobs
- Can compare two to five jobs

The screenshot displays the 'Egress' tab in the Operational Insights interface. On the left, there are filter controls for Status (set to 'Completed'), Asset Type (set to 'All'), Asset Name (set to 'All Assets'), and Date and Time Range (set to 'Last 30 Days'). An 'Apply' button is located below these filters. The main area shows a table of 11 job instances, all of which are 'Regress' jobs. The table includes columns for Name, Job ID, Status, and Duration (mins). One job instance is marked as 'Failed' with a red 'X' icon, while the others are marked as 'Success' with green checkmarks.

<input type="checkbox"/>	Name	Job ID	Status	Duration (mins)
<input type="checkbox"/>	Regress	1054337564862898176	Success	0.95
<input type="checkbox"/>	Regress	1054307994394746880	Success	0.89
<input type="checkbox"/>	Regress	1054307398652579840	Success	0.97
<input type="checkbox"/>	Regress	1054306410378092544	Success	1.13
<input type="checkbox"/>	Regress	1054305892956168192	Success	1.13
<input type="checkbox"/>	Regress	1054304521850769408	Failed	4.8
<input type="checkbox"/>	Regress	1054304395350560768	Success	1.74
<input type="checkbox"/>	Regress	1053206459292110848	Success	0.94
<input type="checkbox"/>	Regress	1053205600877465600	Success	0.9
<input type="checkbox"/>	Regress	1053201673498972160	Success	0.94

1 - 10 of 11 Items

# Monitor usage statistics for MDM SaaS

Usage Statistic	Description
Source Records	The number of source records. The source records contribute to the master records. The number doesn't include the records that the ingress job rejects.
Master Records	The number of master records. A master record is the consolidated version of source records from multiple external systems.
Users	The number of users in the organization that you are monitoring.

## MDM SaaS jobs

- View a summary of jobs
- View all job instances and job schedules.

## Compare Jobs

- Compare two to five jobs and view their key metrics in a bar chart, line chart, or table

# Job Summaries

Filter	Description
Job Type	Filters job details based on the selected job type.
Business Application	Filters job details based on the selected business application.
Asset Type	Filters job details based on the selected asset type.

## Job instances and schedules

- View a list of job instances and job schedules on the Jobs tab

## Job Performance

- Can view the performance of a job in the Job Instances panel.

