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18 Feb, 2025

MDM Modernization: Transitioning from On-Premises to SaaS

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- All dial-in participants will be muted to enable the speakers to present without interruption
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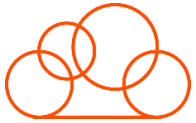

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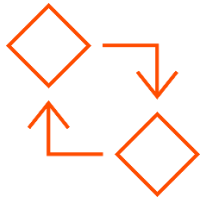

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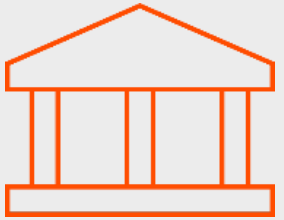

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MDM SaaS Modernization

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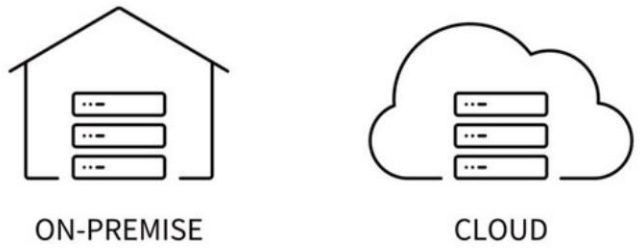
Agenda

1. Benefits of modernizing MDM on-prem solutions
2. Planning & Strategies for MDM Modernization
3. Environment Assessment and Readiness
4. Methodologies of Modernization
5. Data migration & validation
6. Questions and Answers

MDM Modernization

- MDM has evolved from traditional on-premises systems to modern, cloud-native solutions.
- Modern MDM offers a unified, secure approach for managing master data.
- MDM SaaS is a leap forward, built on microservices architecture.
- It goes beyond recreating legacy systems, delivering a comprehensive solution to enable IDMC's full potential.



MDM Modernization (cont.)

	Single Tenant/On-Premises	Multi Tenant SaaS
Architecture	3(N)-Tier Architecture	IICS Microservices Architecture
Data Persistence	Relational Database	NoSQL Document Store
Ingress/Egress	External to MDM	CDI/CDQ Services
Standardization	"Siperian Cleanse Functions"	CDQ Services
Workflow/Orchestration	Informatica BPM (ActiveVOS)	CAI Services
Scaling	Add hardware (requires downtime)	Dynamically scale without downtime
High Availability	Additional hardware	Redundant PODs

Note : "NoSQL Document Store" will not be accessible by customers

Benefits of Modernizing MDM On-Prem solutions

Agility and faster time to value

One data platform with shared services

Collaboration, sharing and easy to measure ROI

Faster access to innovation

Cost saving on hardware, infrastructure and operations

Managed updates and maintenance

Planning & Strategies for MDM Modernization

There are three approaches for Modernization:

- **Lift-and-Shift**

  Features/functions are mapped one-to-one to the SaaS MDM Solution.

- **Refactor**

  Business functionality is retained in SaaS MDM but implemented using SaaS functionality and best practices.

- **Redesign**

  Solution is completely redesigned for the SaaS implementation.

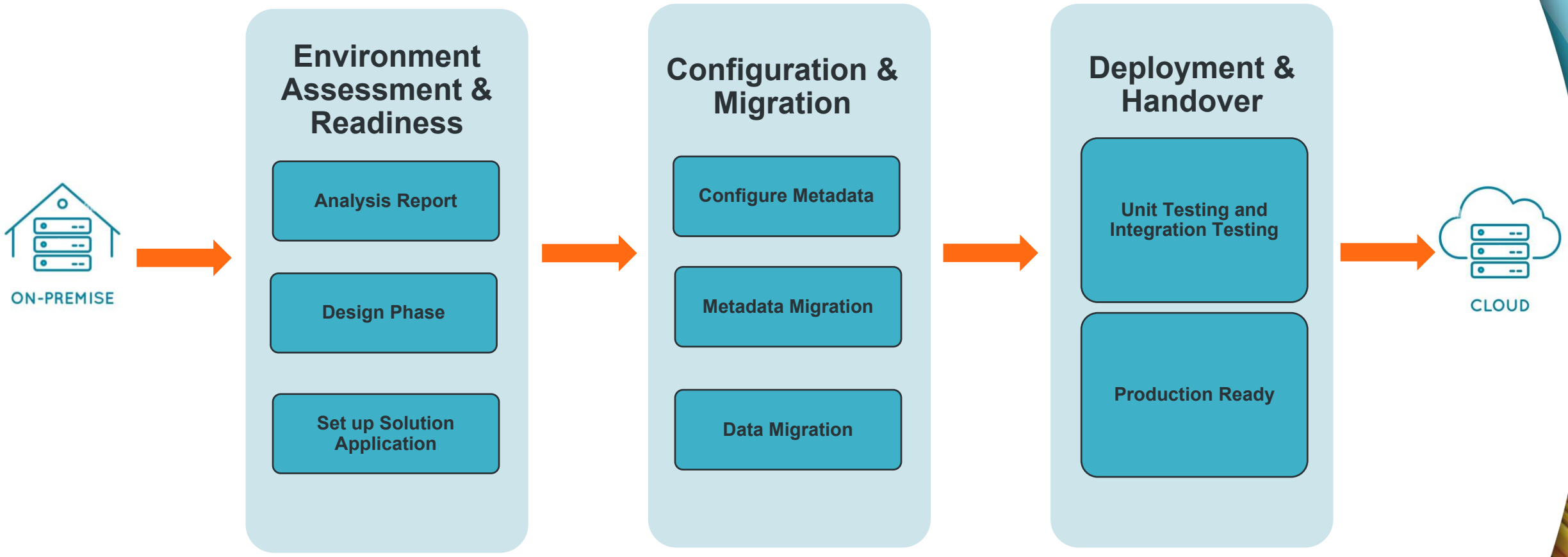
Planning & Strategies for MDM Modernization (cont.)

- The business needs to decide which parts of the solution will be retained (lift-and-shift), which will be refactored, and which will be redesigned.
- In many cases, the **modernization effort involves a combination of all three approaches**.

Considerations during Strategies adoption

- Opportunity to leverage new SaaS-specific features and best practices.
- Increased complexity due to the need for deep understanding of both systems.
- Integration challenges requiring additional tools, middleware, or API work.
- Time-Consuming and Higher Costs Redesigning a solution from scratch.

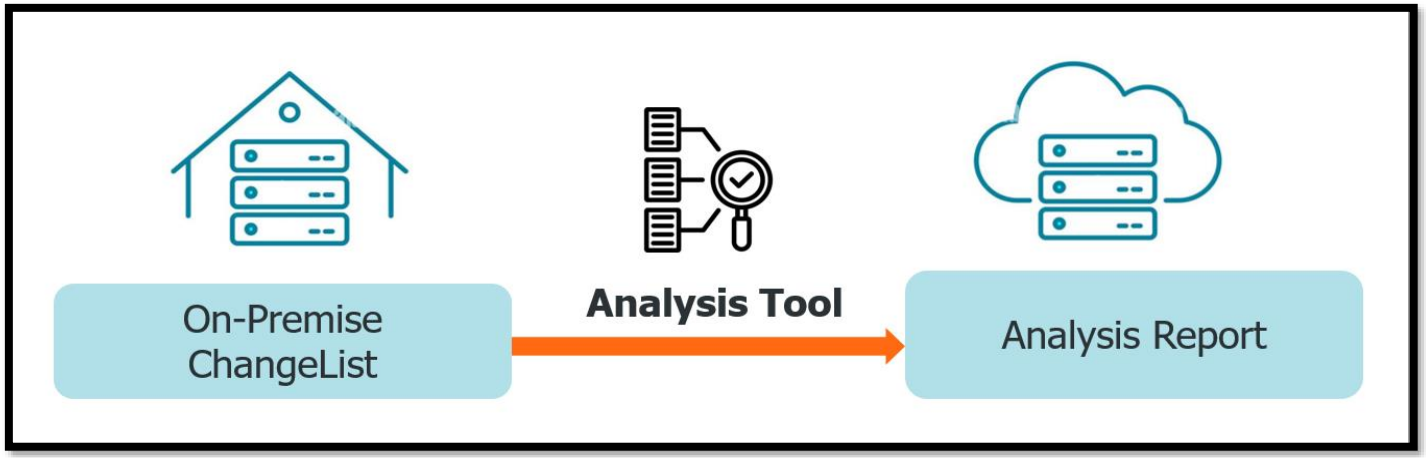
Planning & Strategies for MDM Modernization (cont.)



Note : Deployment and handover processes are not covered in this presentation. These aspects are specific to respective business implementation, corresponding QA plannings and sign offs.

Modernization Environment Assessment & Readiness

- From Informatica side, we will provide an Analysis Report based on the On-premise Change list.
- The report will evaluate the On-premise Change list against SaaS capabilities.
- This document will be useful during the Design Phase.



Please reach out to Informatica Sales team to initiate the Modernization process

Analysis Tool Report

Evaluation for SaaS

rework 1 External Calls have been found in your code. This will involve rework for SaaS

rework Custom Tasks are being used in your current System. Custom tasks can be configured in SaaS using CAI this may mean rework

rework 1 Message triggers are being used in your current System. This will involve rework for SaaS

rework There are 1 IDD Apps. If more than one SaaS app is needed this will involve rework

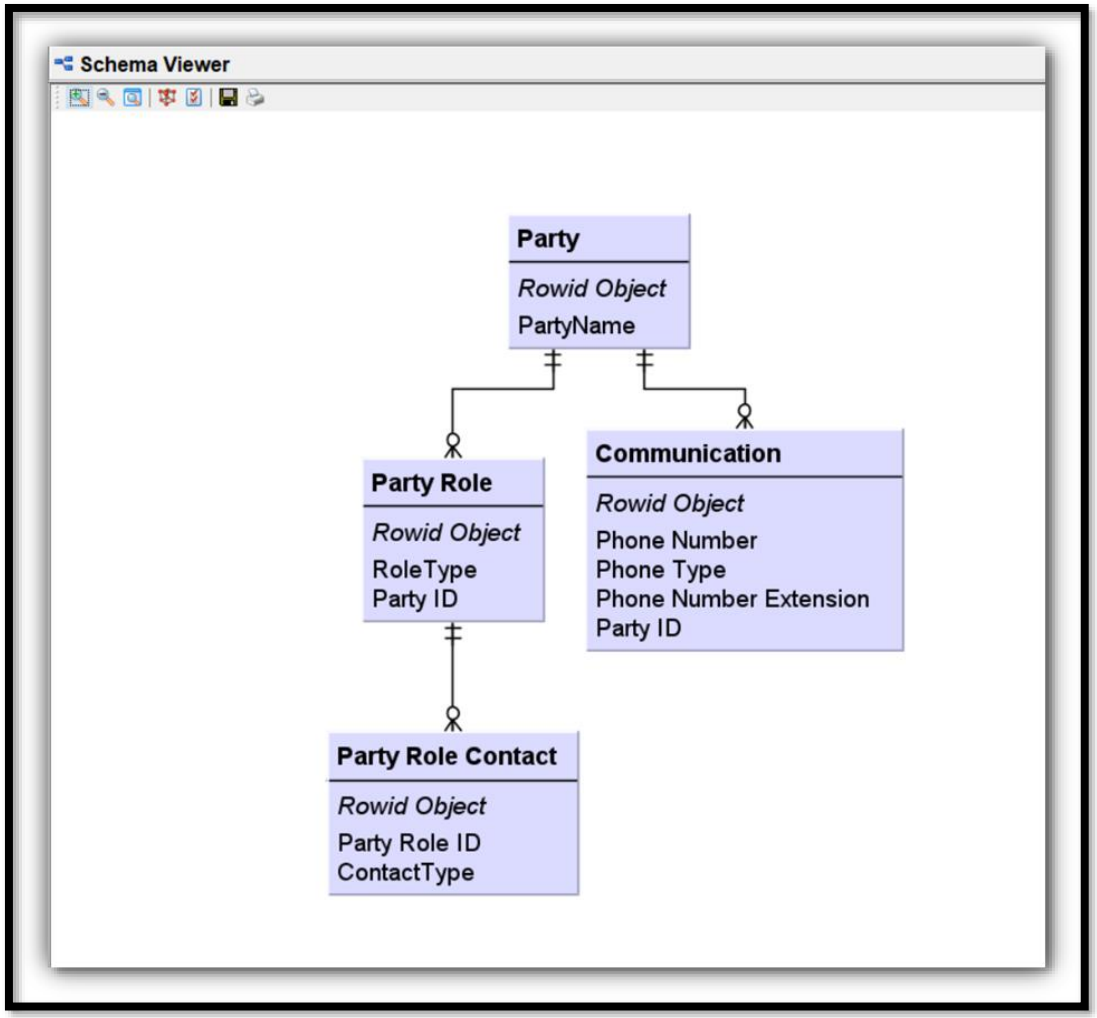
rework You Have 98 searchable fields. Too many searchable fields can affect performance. Add analysis of searchable fields to your project plan

rework You Have 33 searchable fields for one CustomerOrg. Too many searchable fields can affect performance. Add analysis of searchable fields to your project plan

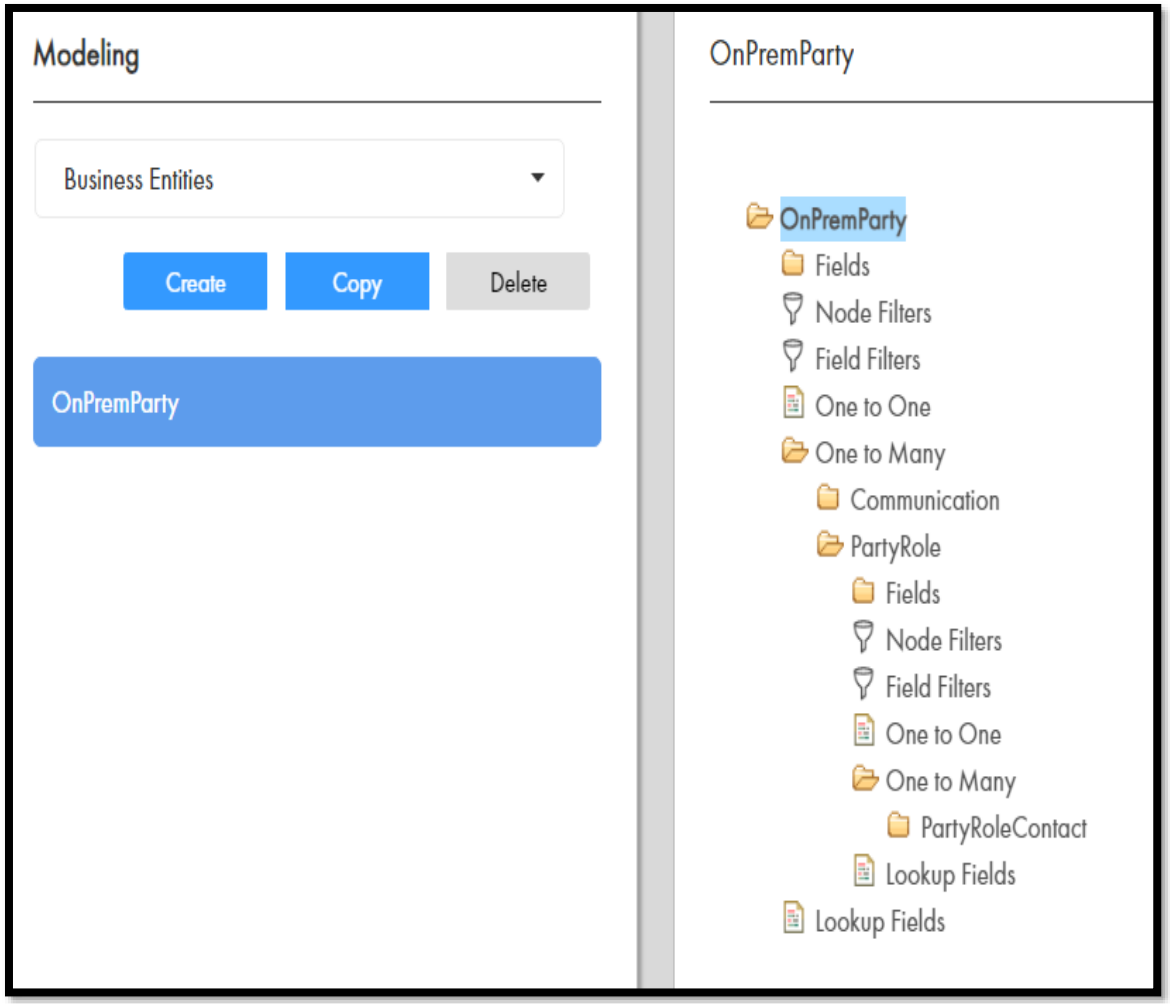
skill Custom Tasks are being used in your current System. CAI Skills are needed

skill 24 External Links are being used in your current System. CAI Skills are Needed including Guide development

On-Prem Hub Data Model



On-Prem Provisioning Business Entity Model

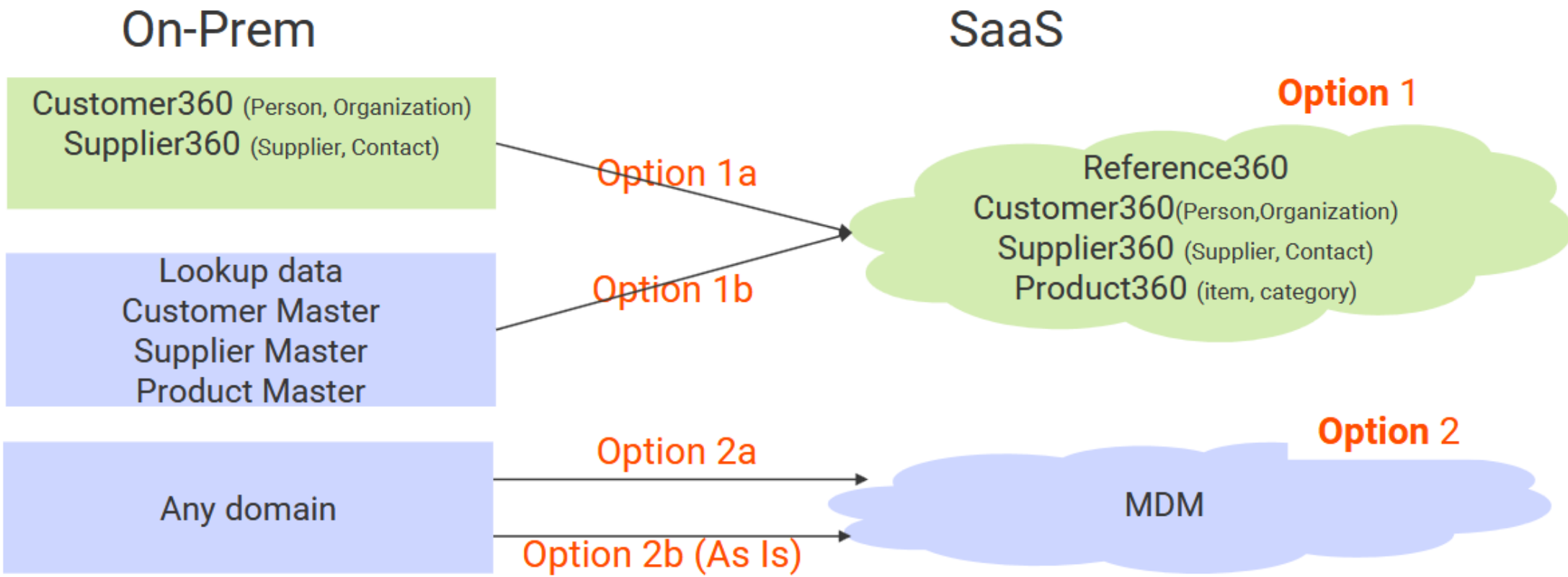


Design Phase

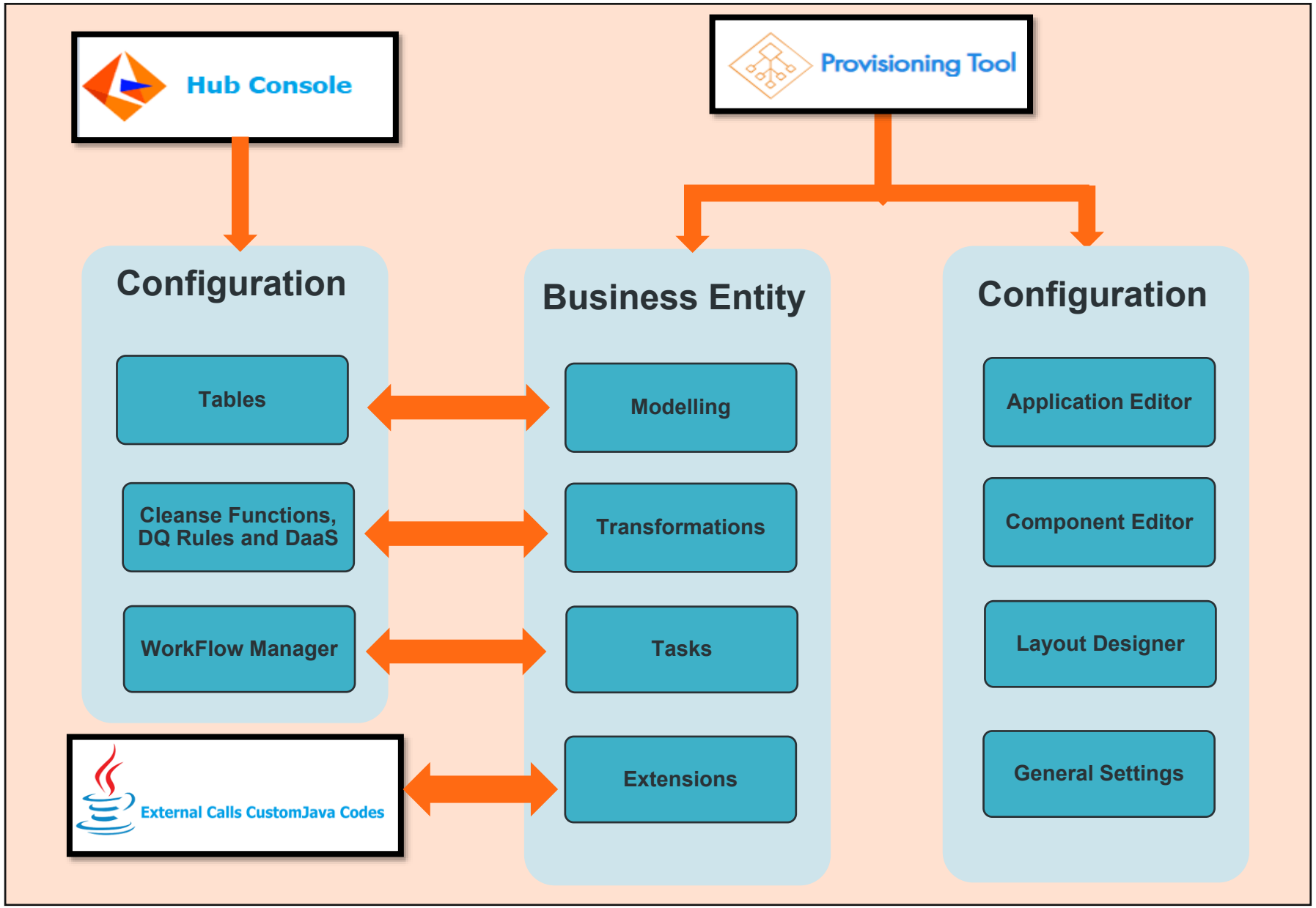
Task Name
Assess
Design Solution
Design Data Model
Design mapping to OOB Entities and/or custom entities
Design Match
Design Trust
Design Validation
Design Data Security
Design Standardization/Enrichment Design
Design Siperian Cleanse Mapping Alternatives
Design Siperian Cleanse Function Alternatives
Design Mapping Alternatives
Design Additional Data Quality Rules
Design modernization of BES Based and/or SIF Based Applications
Design User Exit Alternatives
Design Hub User Exit Alternatives
Design IDD User Exit Alternatives
Design External Call Alternatives
Design Integration Interfaces
Design Ingress - Short term
Design Ingress - Long Term
Design Egress - Short Term
Design Egress - Long Term
Design Real-time Integration - Short Term
Design Real-time Integration - Long Term
Design Message Integration - Short Term
Design Messager Integration - Long Term
Design User Interface
Design Workflow Solution
Design Customer DevOps
Design Initial Customer DevOps Approach
Refine DevOps approach
Configure SaaS Solution
Migrate Data
Testing
Deployment
Cut-Over

Design Phase - Focus on configuring new setups and identifying components that can be set up directly.

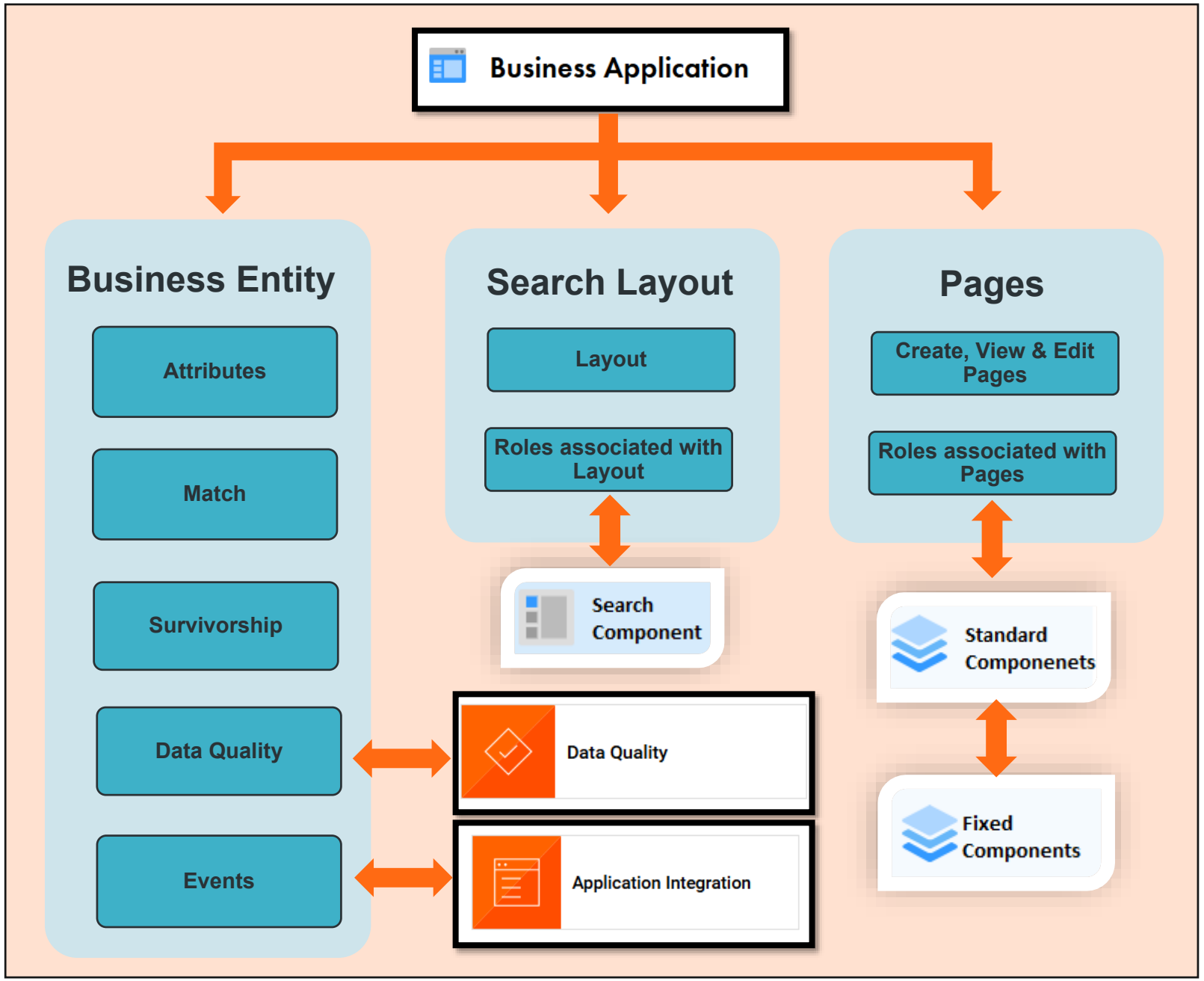
Design Phase (cont.)



On-Prem Modelling



SaaS Modelling



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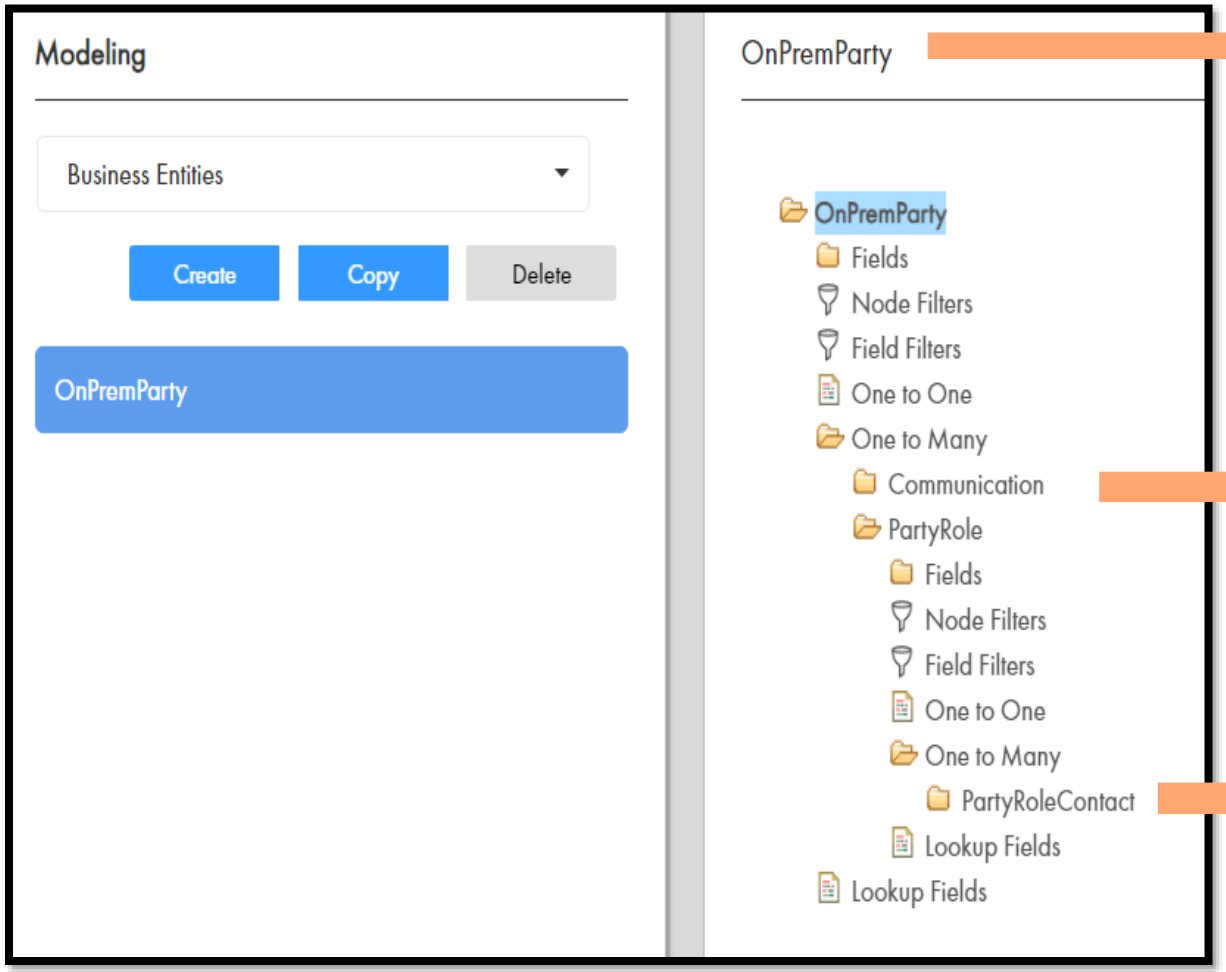
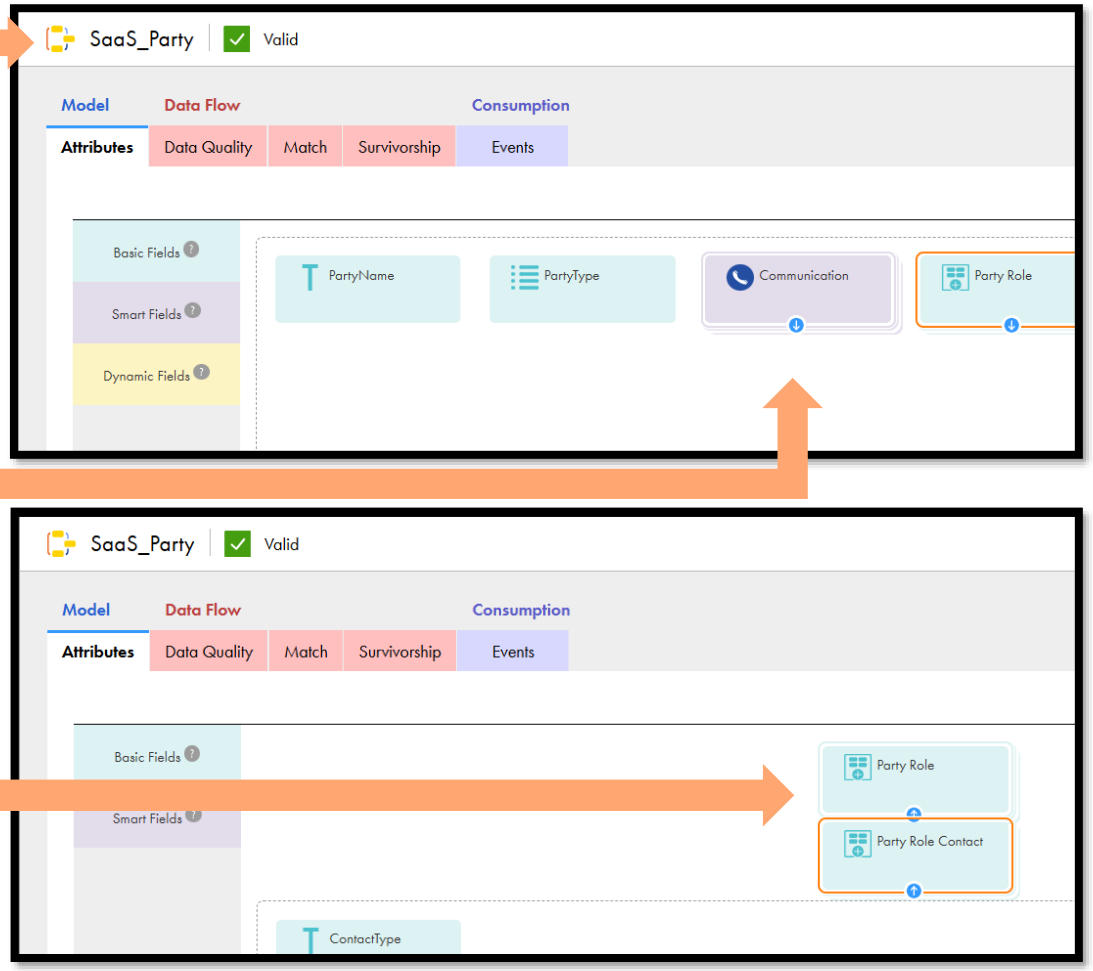
On-Prem Provisioning Business Entity Model UI



SaaS Business Entity Model UI



Metadata Migration (cont.)

- OOTB Solution Data Model and Custom Solution Model

  - Option 1: Use existing out-of-the-box entities and extend them

On-Prem	SaaS	Approach
Customer 360 Application Person Organization	Out-of-the-box Customer 360 Solution, Reference 360	Lift-and-Shift and Refactor

  - Option 2: Create new custom entities

On-Prem	SaaS	Approach
Any Domain	Multi-Domain MDM, Reference 360	Refactor and Redesign

Metadata Migration (cont.)

- Data Model (Lookup, BE, hierarchy, relationship)

On-Prem	SaaS	Approach
Business Entity	Configure Business entity using the Business 360 Application	Lift-and-Shift and Refactor
Reference Entity (Lookups)	Reference 360 – Reference Data Set, Codelists.	Lift-and-Shift and Refactor
Hierarchies	Configure Hierarchy model using the Business 360 Application	Lift-and-Shift and Refactor
Network Relationship	Configure Relationship model using the Business 360 Application	Lift-and-Shift and Refactor

Metadata Migration (cont.)

- Match, Trust, and Validation Rules

On-Prem	SaaS	Approach
Match Rule and Survivorship Setup	Configured on the business entity using the Business 360 Application	Refactor and Redesign
Validation Rules Setup	Configured on the business entity in Business 360 application through Basic DQ Rules, Advanced rules in Cloud Data Quality	Refactor and Redesign

- Hub User Exits and External Calls

On-Prem	SaaS	Approach
Hub and IDD User Exits	Cloud Data Quality, Cloud Application Integration and Cloud Data Integration	Redesign
External Calls	Cloud Data Quality, Cloud Application Integration and Cloud Data Integration	Redesign

Metadata Migration (cont.)

- Standardization and Enrichment

On-Prem	SaaS	Approach
IDQ Rules	Basic DQ Rules, Advanced DQ Rules (Cloud Data Quality)	Redesign
Siperian Cleanse function	Basic DQ Rules, Advanced DQ Rules (Cloud Data Quality)	Redesign
Address Doctor on premise with MDM – Batch	DaaS for Address Verifier	Lift-and-Shift and Refactor
DaaS for Address Validation Realtime	DaaS for Address Validation	Lift-and-Shift and Refactor
DaaS for Email Validation	DaaS for Email Validation	Lift-and-Shift and Refactor
DaaS for Phone Validation	DaaS for Phone Validation	Lift-and-Shift and Refactor
DaaS Providers	Objective Group Enrichments Vader 2.0 (Cloud Application Integration)	Redesign

Metadata Migration (cont.)

- Workflow

On-Prem	SaaS	Approach
Siperian Workflow	Out-of-the-box workflow events for one-step and two-step approvals based on Cloud Application Integration can be configured.	Lift-and-Shift and Refactor
ActiveVOS Workflow	Out-of-the-box workflow events for one-step and two-step approvals based on Cloud Application Integration can be configured.	Lift-and-Shift and Refactor
Custom Workflow	Cloud Application Integration (With Human Task)	Redesign

- BES and SIF-based Applications

On-Prem	SaaS	Approach
Services Integration Framework API	Business Entity Services REST APIs	Refactor and Redesign
Business Entity Services	Business Entity Services REST APIs	Lift-and-Shift and Refactor

Metadata Migration (cont.)

- Message Queue

On-Prem	SaaS	Approach
Outbound JMS Message Queues	Publish Business events (Batch and Real time) For Realtime, we use Streaming Ingestion in Cloud Data Integration	Refactor and Redesign

- Batch Jobs

On-Prem	SaaS	Approach
Stage and Load Jobs	Ingress Jobs using Cloud Data Integration Taskflows	Refactor and Redesign
Index Jobs, Match&Merge Jobs, Generate Token, Match Reset Jobs	Business 360 Console Job Definitions	Refactor

Metadata Migration (cont.)

- User Management

On-Prem	SaaS	Approach
User Management and SSO	Configured through Administrator Services in IDMC	Lift-and-Shift and Refactor

- Job Orchestration

On-Prem	SaaS	Approach
Batch Group/CommandLineUtility	REST APIs through Cloud Application Integration	Refactor and Redesign

Data Migration

Data migration from on-premise to SaaS is the process of transferring an organization's data from local servers and storage to a cloud-based SaaS platform.

Features

- **Scalability** – Expand storage and processing power as needed.
- **Cost Efficiency** – No need for expensive on-premise infrastructure.
- **Security & Compliance** – SaaS providers offer built-in security and regulatory compliance.
- **Accessibility & Collaboration** – Access data from anywhere with an internet connection.

Prerequisites

1. Data Consistency Check

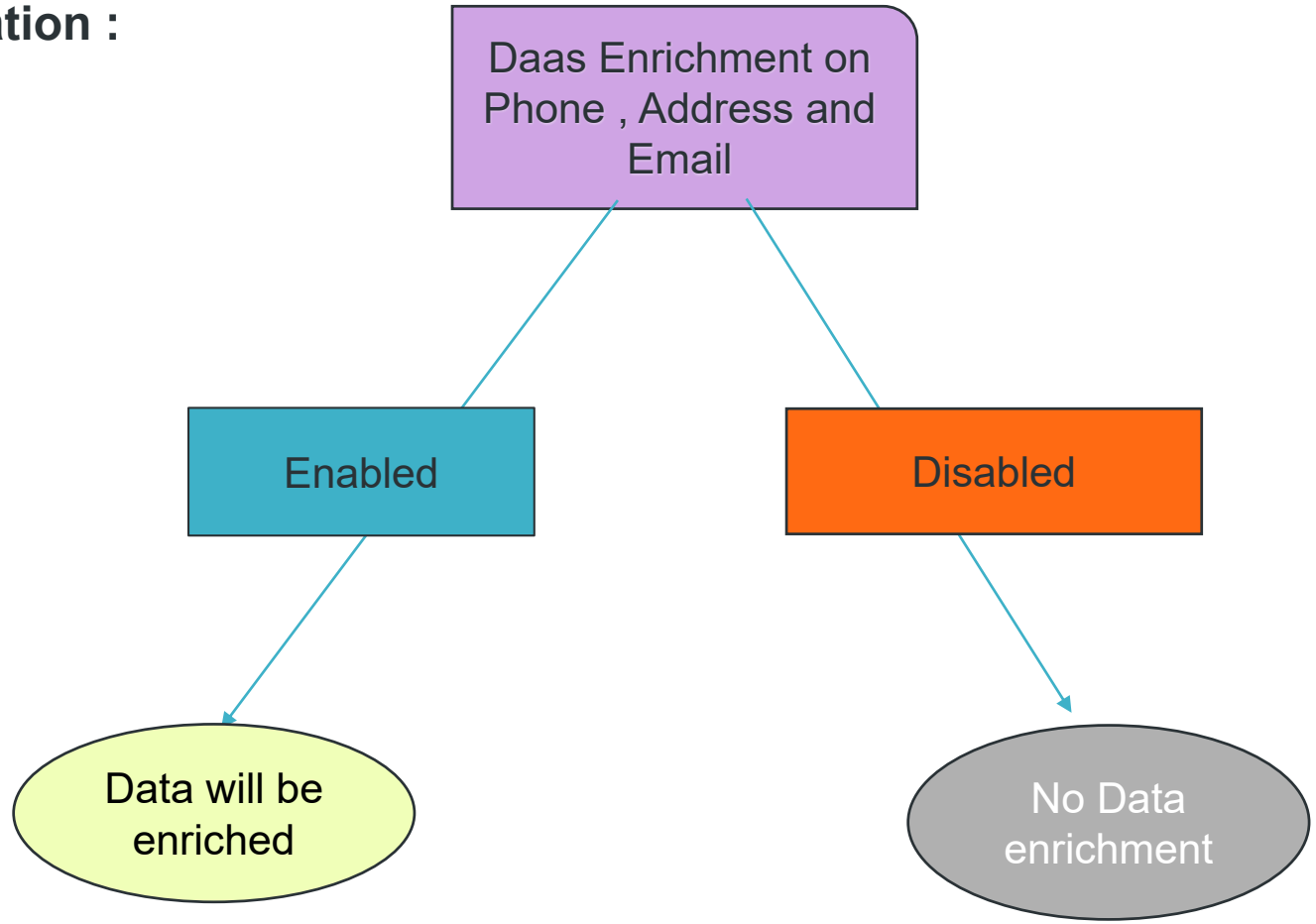
- Rowid present in BO but not in XREF.
- Orphan Child data : Data present in Child but no data in Parent table

2. Data Model Configuration

- The MDM SaaS Business Entities (BE) data model required to support the MDM implementation in SaaS must be fully completed.
- Logical attribute creation to map the field for the data load.

Key Considerations

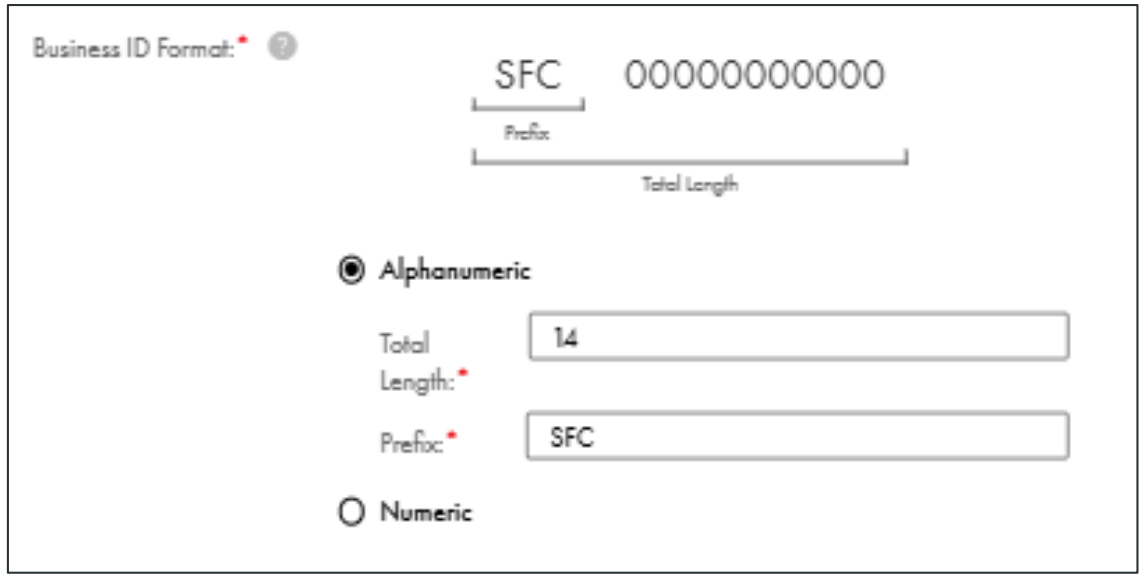
Data Standardization :



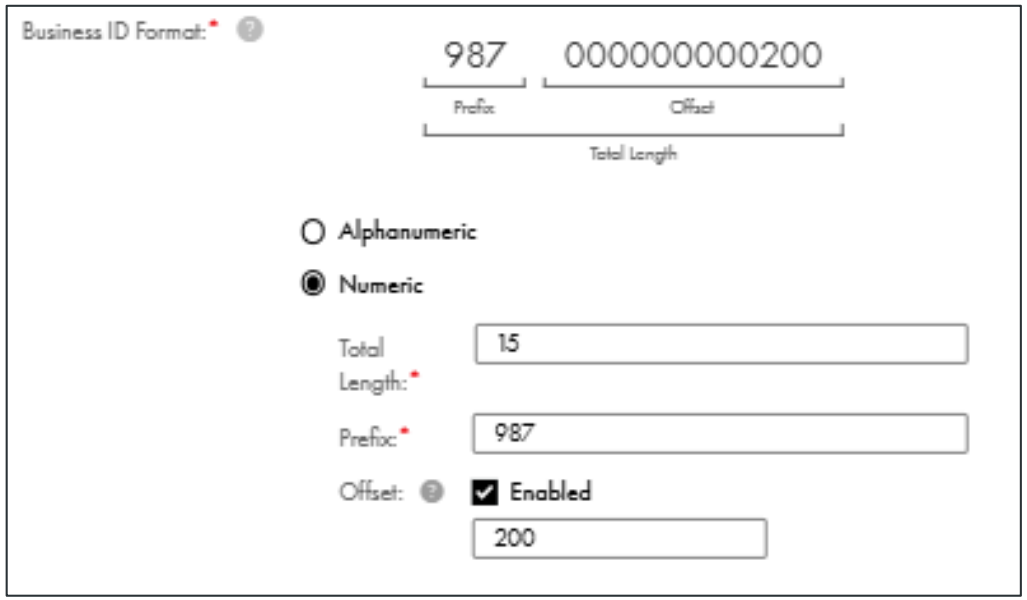
Key Considerations

SaaS Business ID Downstream Consumption :

Alphanumeric



Numeric



- **Input Business ID does not exist :** If an input record's Business ID **does not exist**, it is treated as a **new record** .
- **Input Business Id exist :** If an input record's Business ID matches an existing **Business Id** , it is **merged** with it, skipping the match process.

Example :

Master

Business ID	First Name	Last Name	Gender	Birth Date
MDM000000000890	Fred	Weasley	M	2/2/1987

Source

Business ID	Source System	First Name	Last Name	Gender	Birth Date
MDM000000000890	Billing	Fred	Weasley	M	2/2/1987

Business ID	Source System	First Name	Last Name	Gender	Birth Date
MDM000000000890	CRM	Fred	W	M	2/2/1987

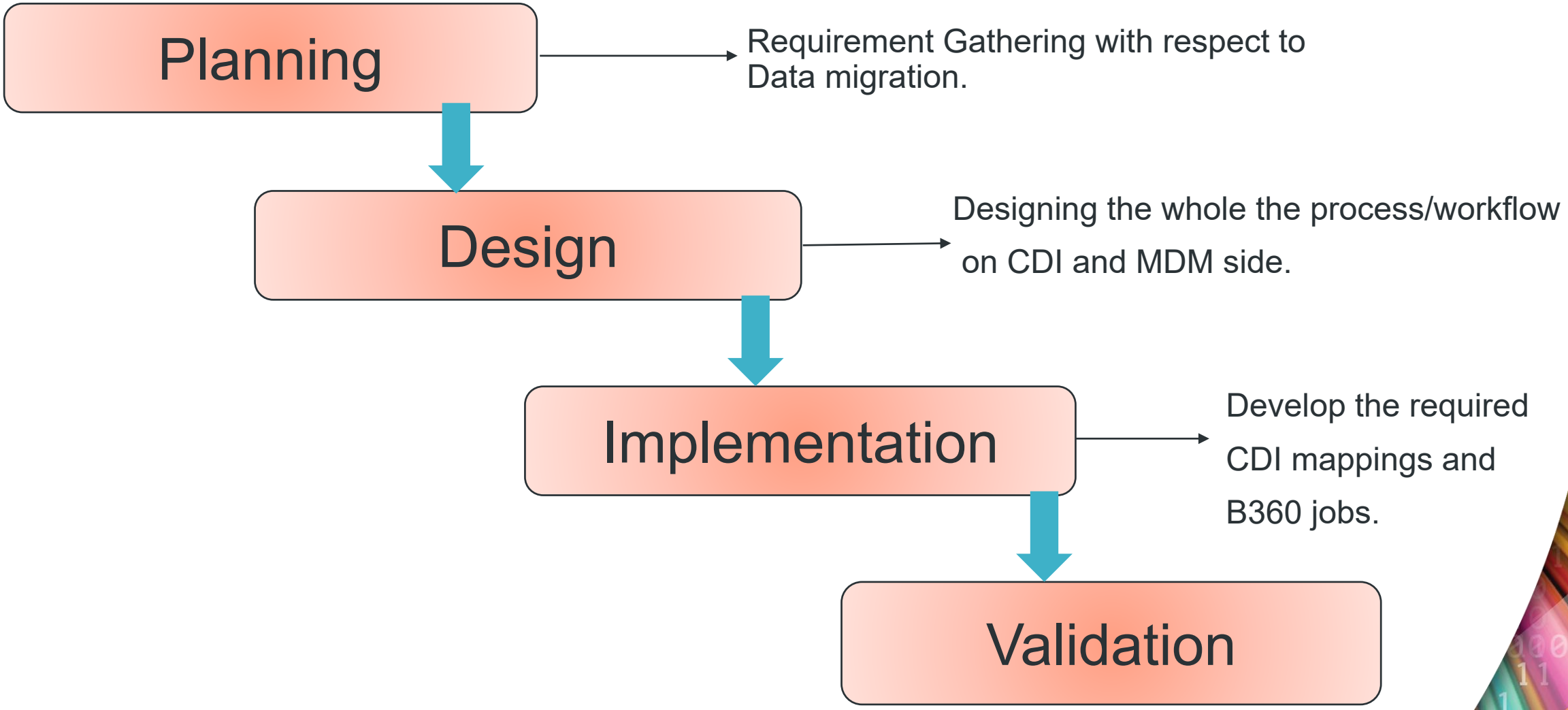
Master

Business ID	Source System	First Name	Last Name	Gender	Birth Date
MDM000000000890	CRM	Fred	W	M	2/2/1987

Source

Business ID	Source System	First Name	Last Name	Gender	Birth Date
MDM000000000890	Billing	Fred	Weasley	M	2/2/1987
MDM000000000911 (Autogenerated business ID)	CRM	Fred	W	M	2/2/1987

Different phases of Data Migration



Sample Requirement for one of the Business use-case

Requirements :

- Maintain Cluster
- Cluster Source Record Limit
- Rowid_object persistence
- Business ID Generation [Incremental Load]

Data Migration from On-Premise to SaaS

Key Supporting table on On-Premise

Table Name	Specification	SAAS [Collections]
BO	Contains the surviving record[Golden Copy]	Master collection
HIST	History of BO	Master history collection
XREF	Contains Cross-reference [Lineage]	XREF collection
HXRF	History of XREF	NA
HMRG	History of Merges	NA
CTL	Contains information used to calculate trust	Entity master Content metadata
HCTL	History of CTL Table	NA
VXR	Contains Validation rule details [if validation rules are setup]	Entity XREF Content metadata
HVXR	History of VXR	NA

Migrating the Lookup Values

Options for Migration :

- Ingress
- File Import(UI/API)

Below is an example of File Import:

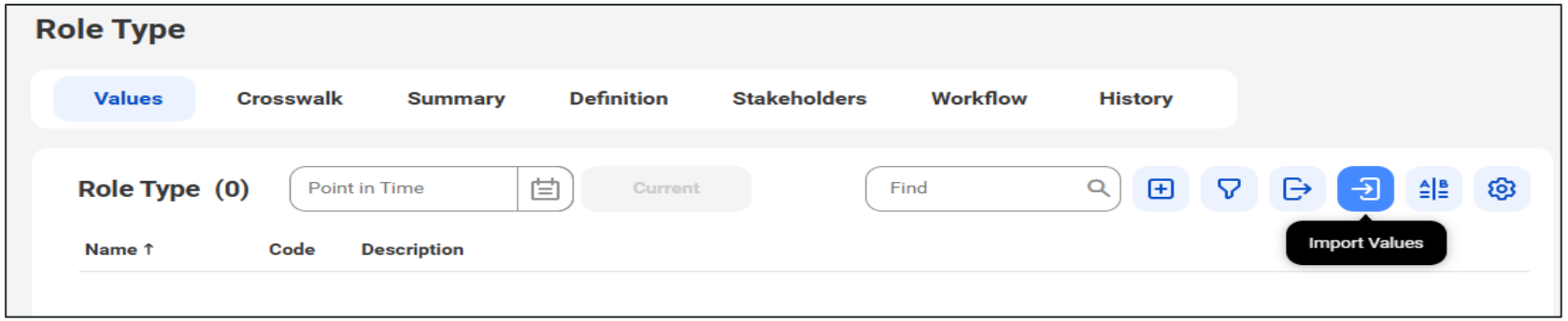
Step1 : Configure the RDS and code list in Reference 360.

Below 2 code lists as example:

- Role Type
- Contract Types

Step2 : Export lookup data in a csv file.

Step3 : Import the csv in Code list.



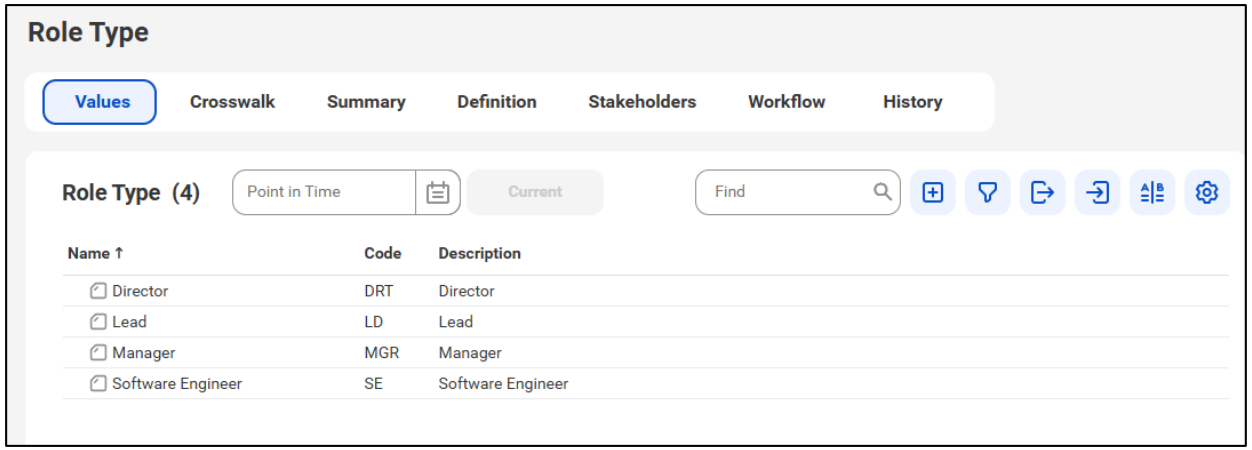
On- Premise to SaaS Lookup Data

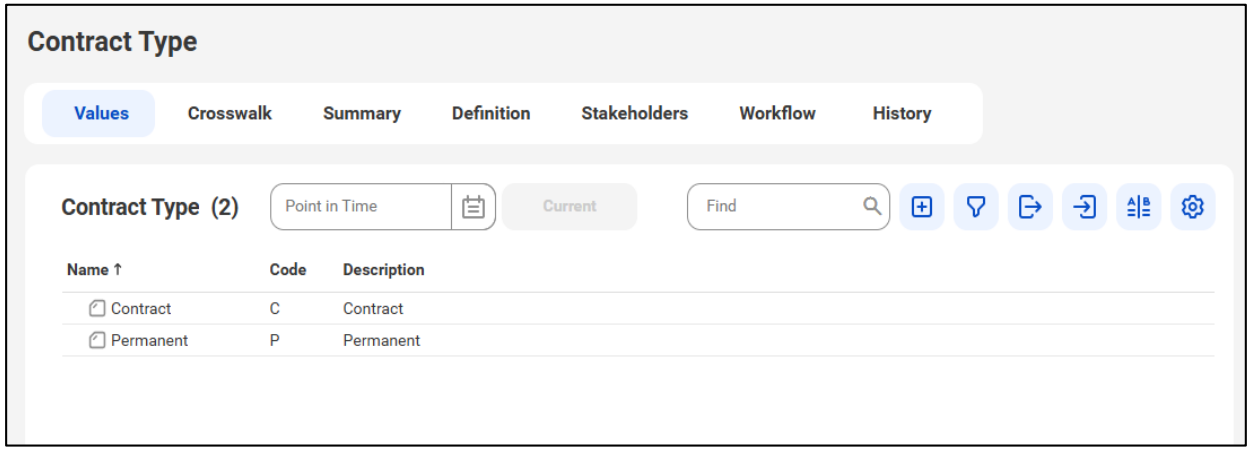
LOOKUP ROLE TYPE

Role Type	Role Type Description
DRT	Director
LD	Lead
MGR	Manager
SE	Software Engineer

LOOKUP CONTRACT TYPE

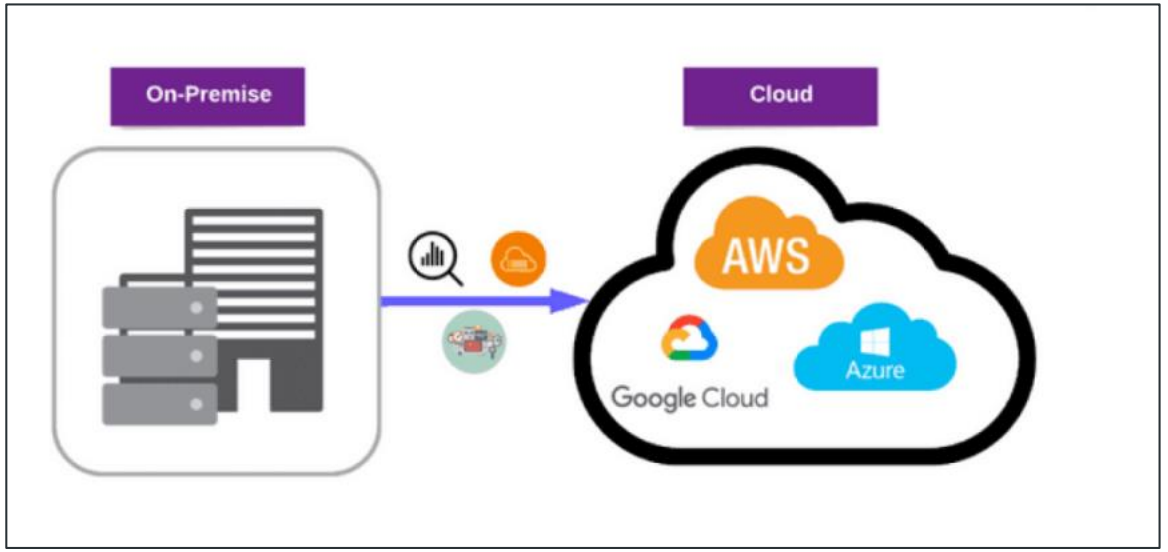
Contract Type	Contract Type Description
P	Permanent
C	Contract





Data Migration Approach

- General Approach:
  - Involves Extracting data from on-prem XREF.
  - Begin from Root Business entity.
  - Further extracting the child, grandchild etc.
  - Ingress the records in the order(root, child, grandchild) into MDM SaaS.
- On Prem XREF as Source, MDM SaaS Business entity as Target



On Prem Sample Data

Following are the two key tables which will utilized for the data migration.

Party

ROWID_OBJECT	PARTY_TYPE	FIRST_NAME	LAST_NAME	DISPLAY_NAME	GENDER_CD
1329	Person	AARON	BENNETT	AARON BENNETT	M

PARTY XREF

ROWID_XREF	ROWID_OBJECT	ROWID_SYSTEM	FIRST_NAME	LAST_NAME	DISPLAY_NAME	GENDER_CD
1095	1329	SFA	AARON	BENNETT	AARON BENNETT	
401942	1329	LEG	ARONN	BENNETT	AARONN BENNETT	M

On Prem Sample Data (cont.)

Following tables can be referred for validation purposes only. They will not be participating in data migration.

PARTY_ CTL

ROWID_OBJECT	FIRST_NAME_LRS	FIRST_NAME_LUD	FIRST_NAME_OTS	FIRST_NAME_SRX
1329	SFA	30-JUL-06 08.00.00.0000	NULL	1095

PARTY VXR

ROWID_XREF	FIRST_NAME_RMT	FIRST_NAME_VOK	FIRST_NAME_VPC	FIRST_NAME_VPC_1
1095	1	1	0	0
401942	1	1	0	0

PARTY HMRG

HIST_CREATE_DATE	SRC_ROWID_OBJECT	TGT_ROWID_OBJECT	AUTOMERGE_IND	ROWID_MATCH_RULE	MERGE_DATE
05-JUN-24 08.27.51.00	1329	1887	1	SVR1.R1B	05-JUN-24 08.27.51.000000000 AM

Note : Currently we cannot migrate the History data.

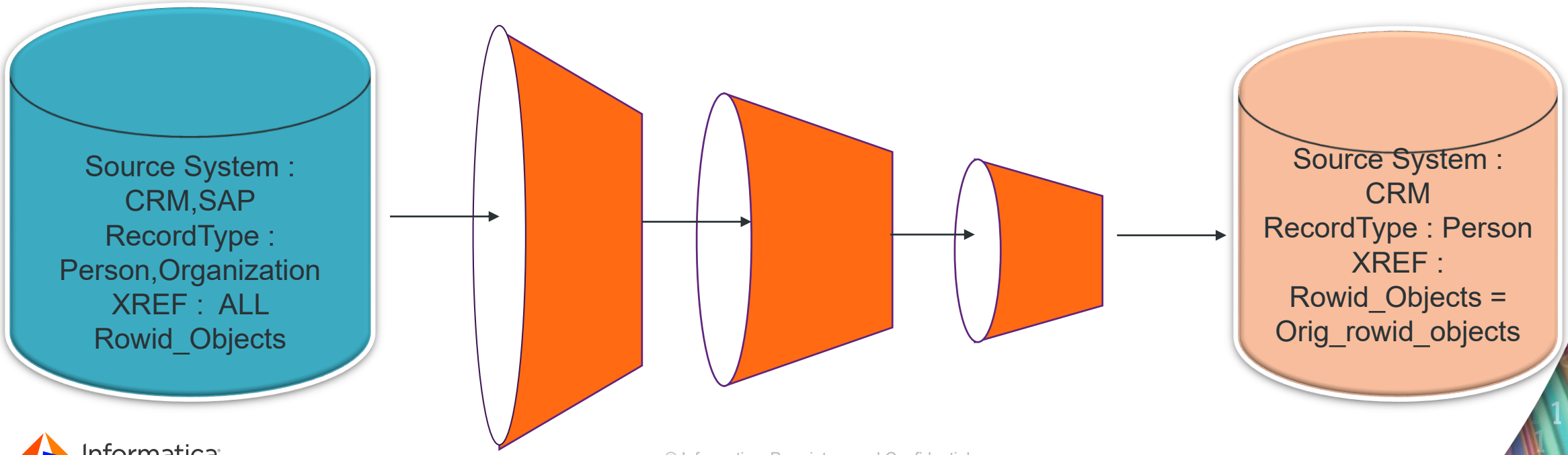
Recommended to store the History data in data lake.

Logical Approach :

Step 1 :

Migrate Winning Rowid data. Criteria for the same :

- Source System name
- Record Type (Party Type), example: Organization, Person etc.
- Where ROWID_OBJECT = ORIG_ROWID_OBJECT

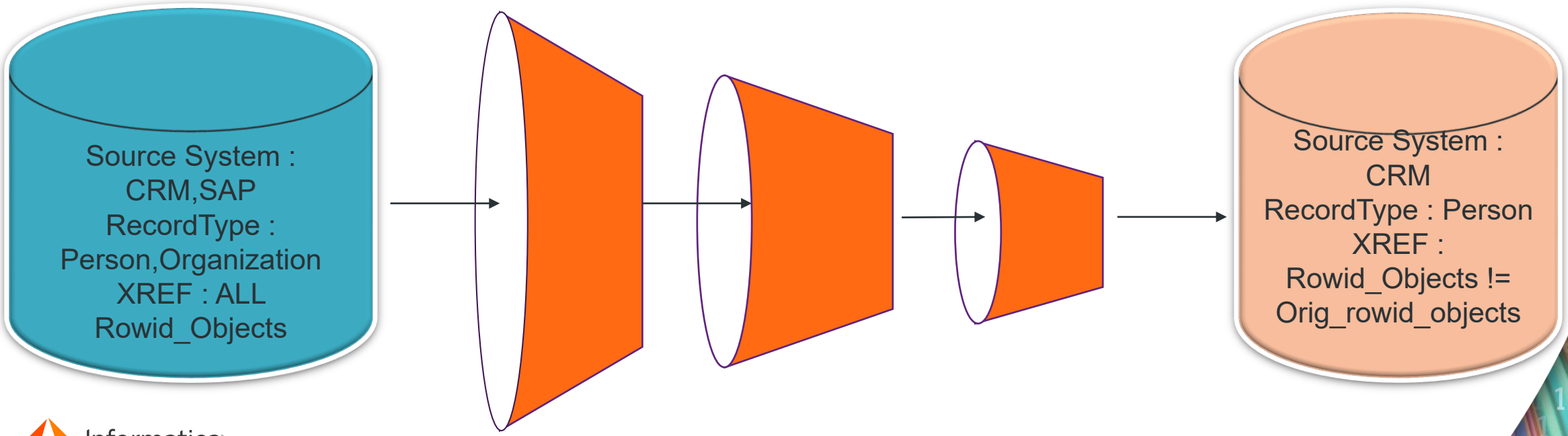


Logical Approach :

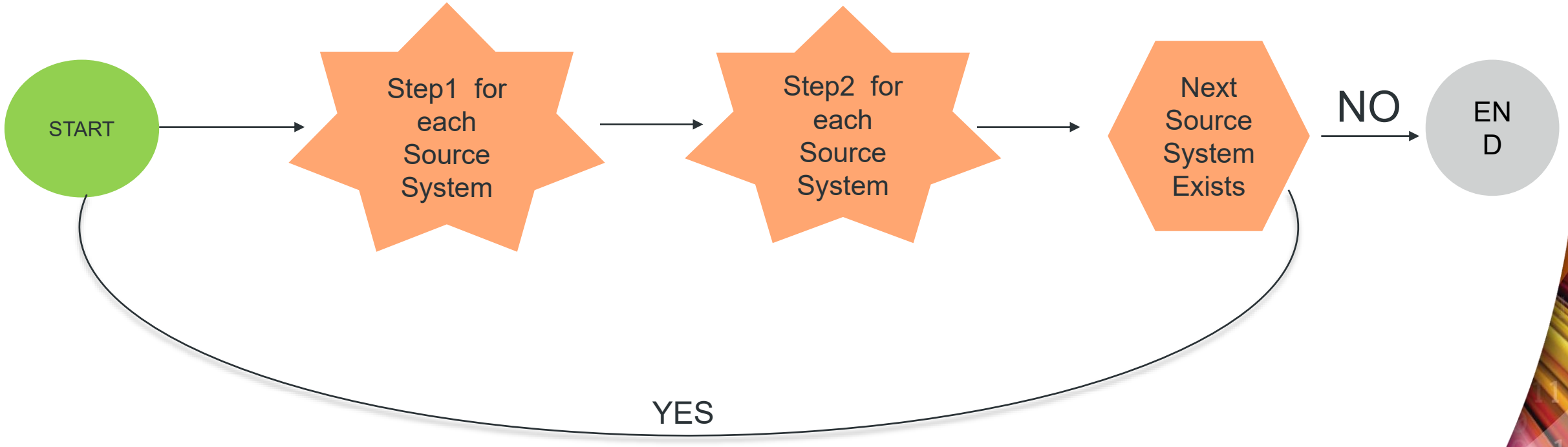
Step 2 :

Criteria for migrating remaining source system loosing xref

- Source System name
- Record Type (Party Type), example: Organization, Person and other record types.
- Where column ROWID_OBJECT != (not equal) ORIG_ROWID_OBJECT
  and HUB_STATE_IND = 1

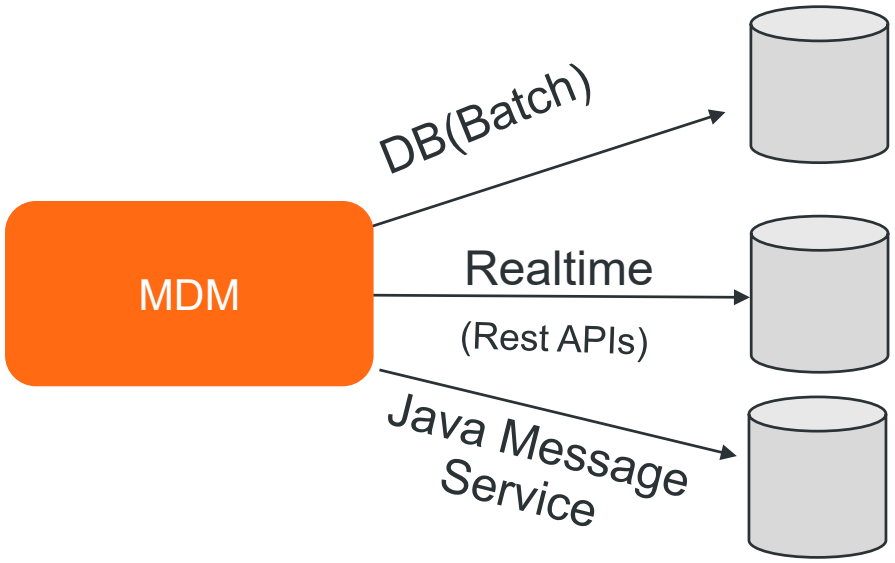


Overall Cycle

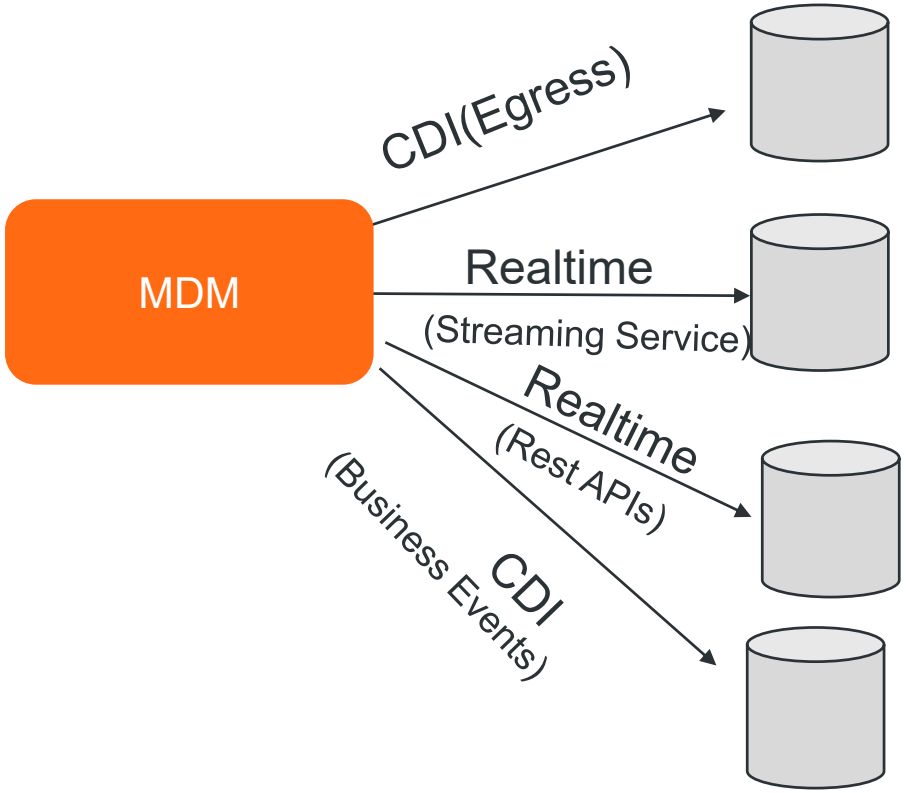


DATA CONSUMPTION

On-Premise



SaaS



Final Thoughts

We have covered the general approach,
but each project will have its unique requirements.

We hope this helps to kick-start
your modernization journey!

Thank You

Where data & AI come to LIFE

Questions?