

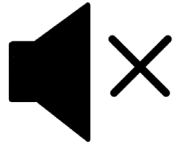
Aug 29, 2023

# Customer 360 Best Implementation Practices

- Matt Boardman, Principal Solution Architect, IPS
- Deepak Khetan, Solution Architect, IPS
- Emily Sabanegh, Senior Consultant, IPS



# 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 also 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

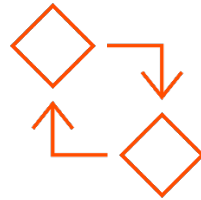
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Bootstrap trial and  
POC Customers



Enriched Customer  
Onboarding  
experience



Product Learning  
Paths and Weekly  
Expert Sessions

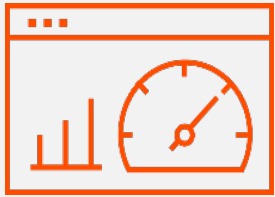


Informatica  
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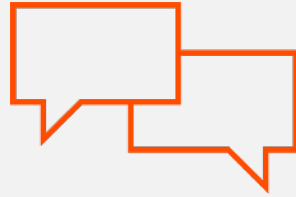
Tailored training and  
content  
recommendations

# More Information



## Success Portal

<https://success.informatica.com>



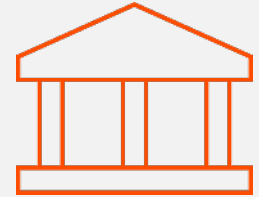
## Communities & Support

<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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8.29.2023

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# Customer 360: MarTech Best Practices

Matt Boardman  
*Principal Solution  
Architect*

Deepak Khetan  
*Solution Architect*

Emily Sabanegh  
*Senior Consultant*

# Agenda

1

Introduction

2

Business Problem

3

Implementation  
Architecture

4

Integration  
Patterns

5

Data Model +  
Matching

6

Q&A

# Today's Presenters



**Matthew Boardman**

Principal Solution Architect



**Deepak Khetan**

Solution Architect



**Emily Sabanegh**

Senior Consultant



# Customer 360 SaaS

Prepackaged SaaS offering built cloud-native data management platform for greater productivity

## FLEXIBLE & MODULAR

Modular, API-driven, shared microservices on market leading scalable IPaaS architecture

## NEW USER EXPERIENCE

New, brighter, sleeker visual design preconfigured for simplicity

## SIMPLIFIED PRICING AND PACKAGING

Transparency and ease of transactions

## SIGNIFICANT INVESTMENTS IN DEVOPS

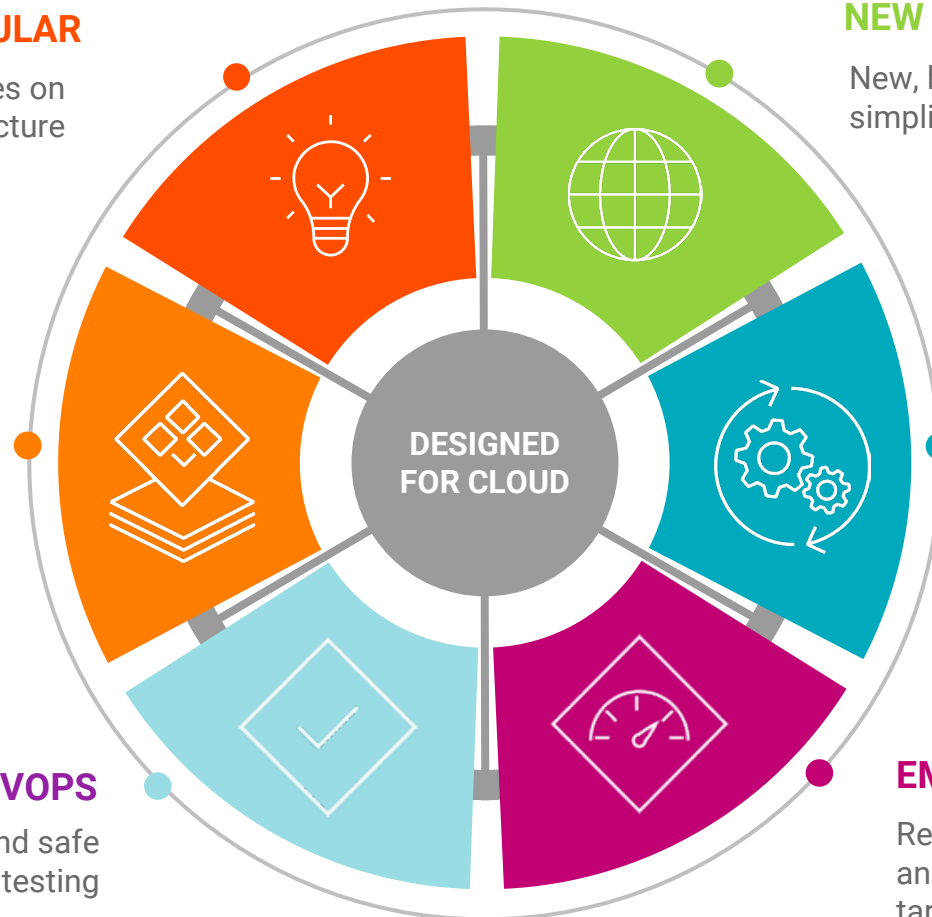
Continuous innovation, monthly releases and safe upgrades, backed by rigorous automated testing

## EMBEDDED DATA INTEGRATION AT ANY LATENCY

Real-time, streaming and batch integration, with drag and drop workflows and data flows for sources and targets

## BUILT-IN SMARTS & ORCHESTRATION

AI training, content aware data types, orchestrated tasks across MDM, DQ and Data Governance, pre-integrated DaaS



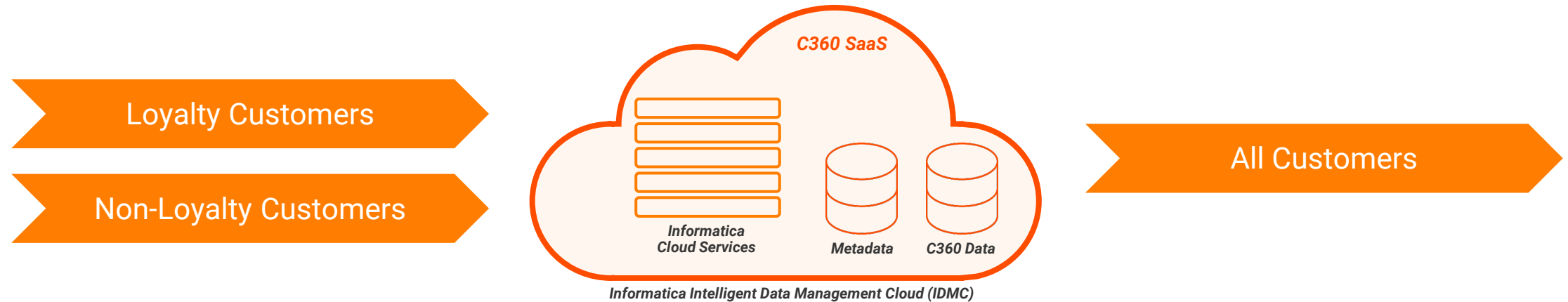
# Business Problem

Use Case: Large Customer Volume

Customer: Global Fortune 500 Company



# Business Problem – Identity Resolution for Individuals



## Large Customer Volume (100s of millions)

- Loyalty Program – de-dupe multiple accounts
- Non-Loyalty – identify unique individuals
- High rate of change: 5M – 10M records per day
- High initial load volume: 300M – 400M records
- Each incoming record **matches** against 500M+
- Applications: **Get** vs. **Search** vs. **Search Match**

## Implications

- Near **Real-time** response returning customer identifier
- Daily **match & merge** – results within 12 hours
- High degree of **automation** – "Low Touch"
- **Data Profiling** → Unique Customer Scenarios
- **Cleanse** noise words, Address Validation, Standardization
- "Chunking Process" breaks up initial load

# Implementation Architecture

Informatica MDM SaaS (C360)

Informatica CAI

Informatica CDI

Informatica CDQ

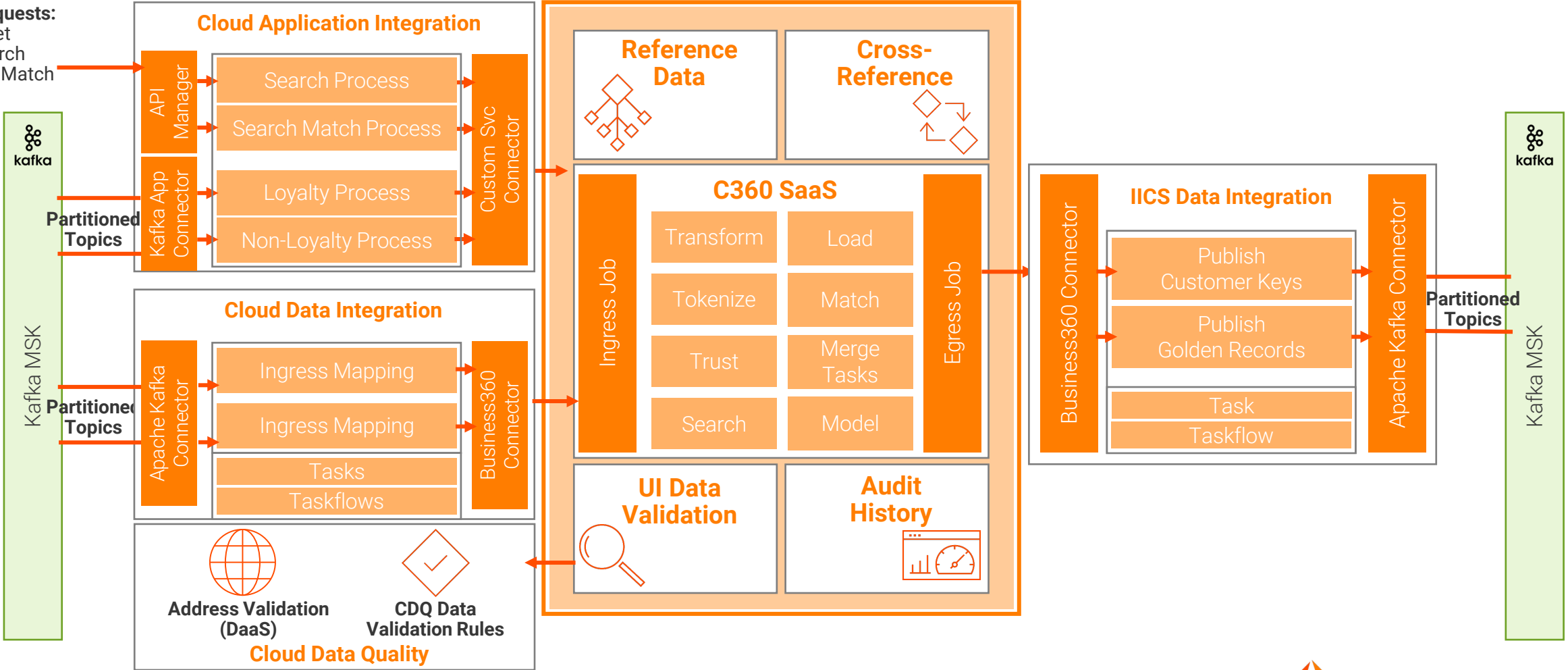
# MDM View of MarTech Ecosystem

## Data Ingestion from Sources

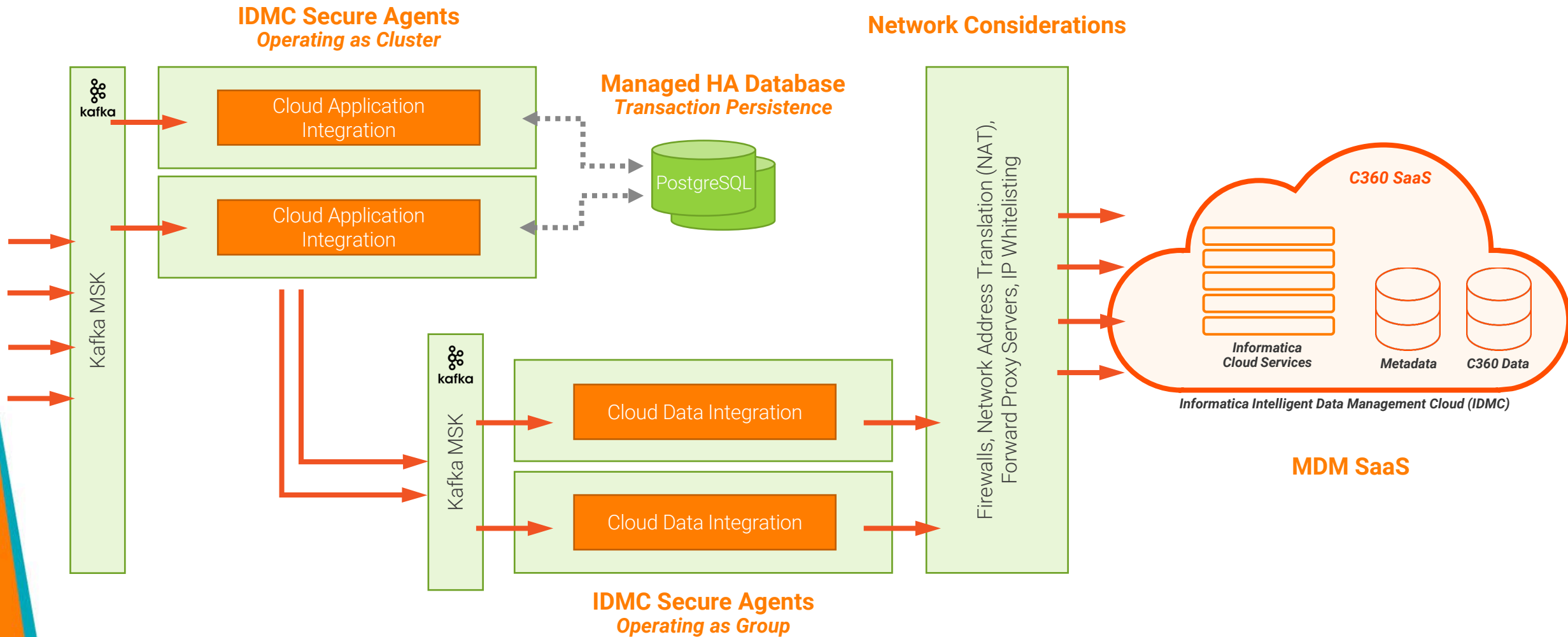
## Data Publishing to Consumers

API Requests:  
Get  
Search  
Search Match

### Informatica Intelligent Data Management Cloud (IDMC)



# C360 Supporting Infrastructure

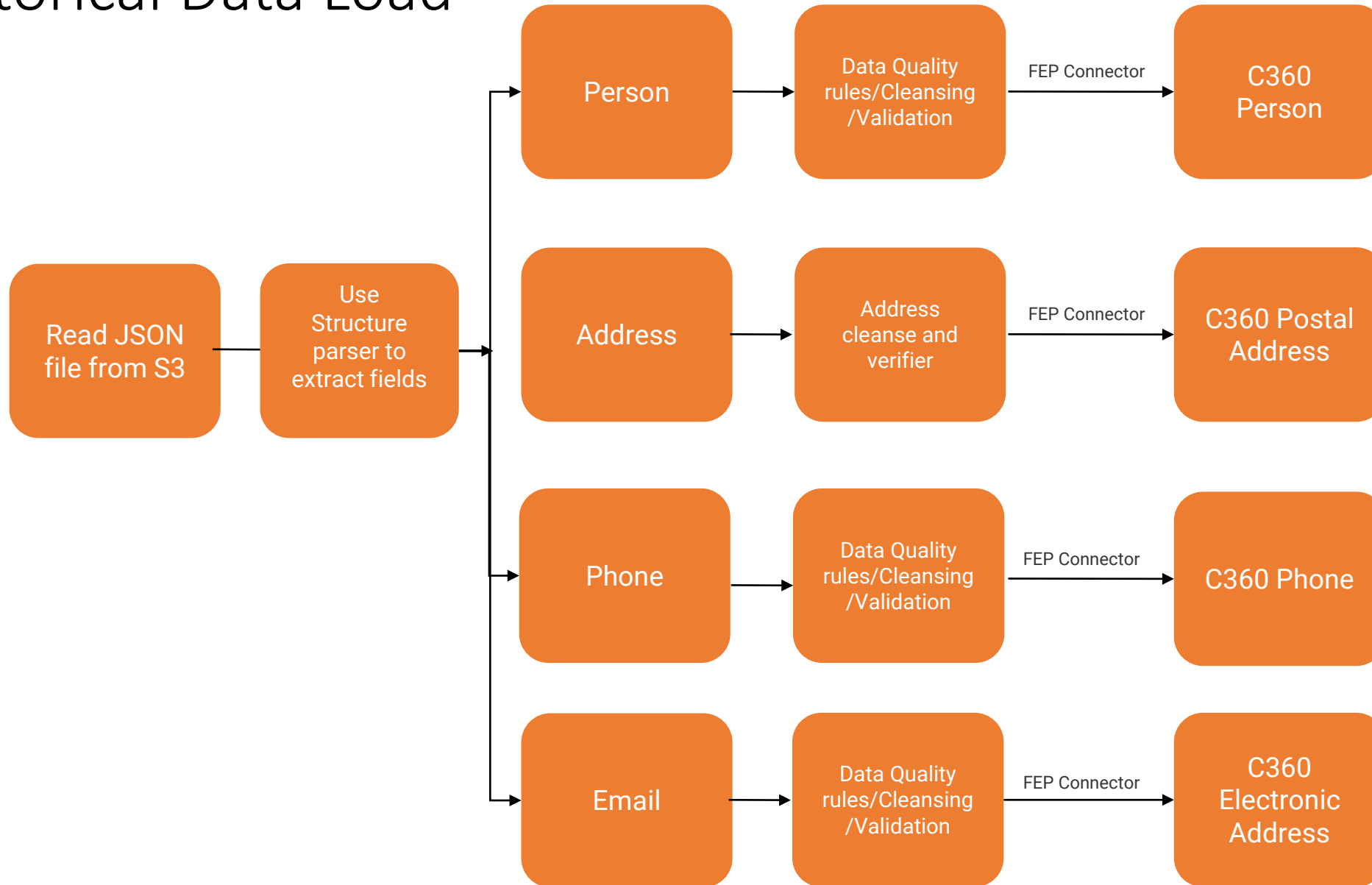


# Integration Patterns

Historical Load

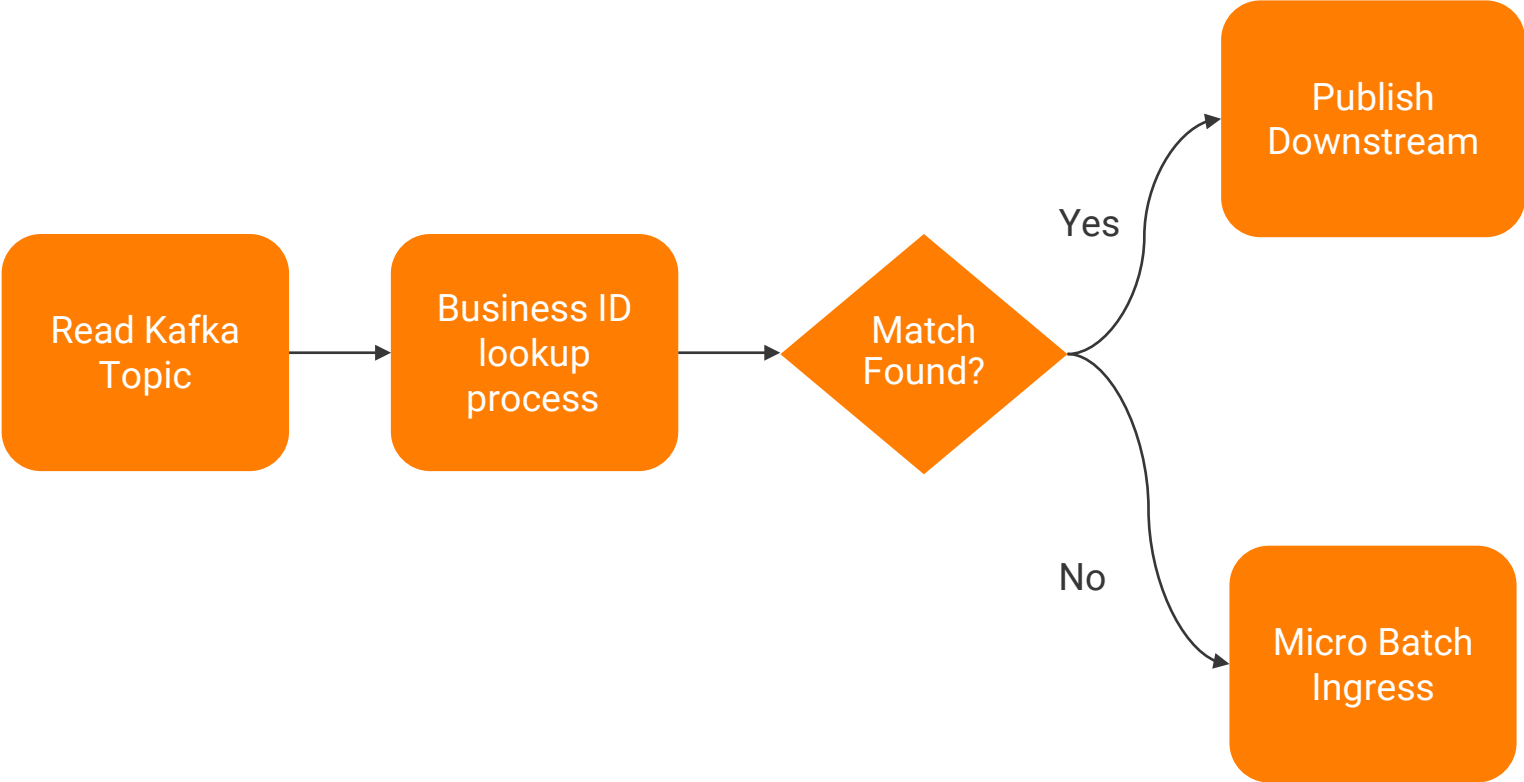
Incremental Near Real-Time Load

# Historical Data Load

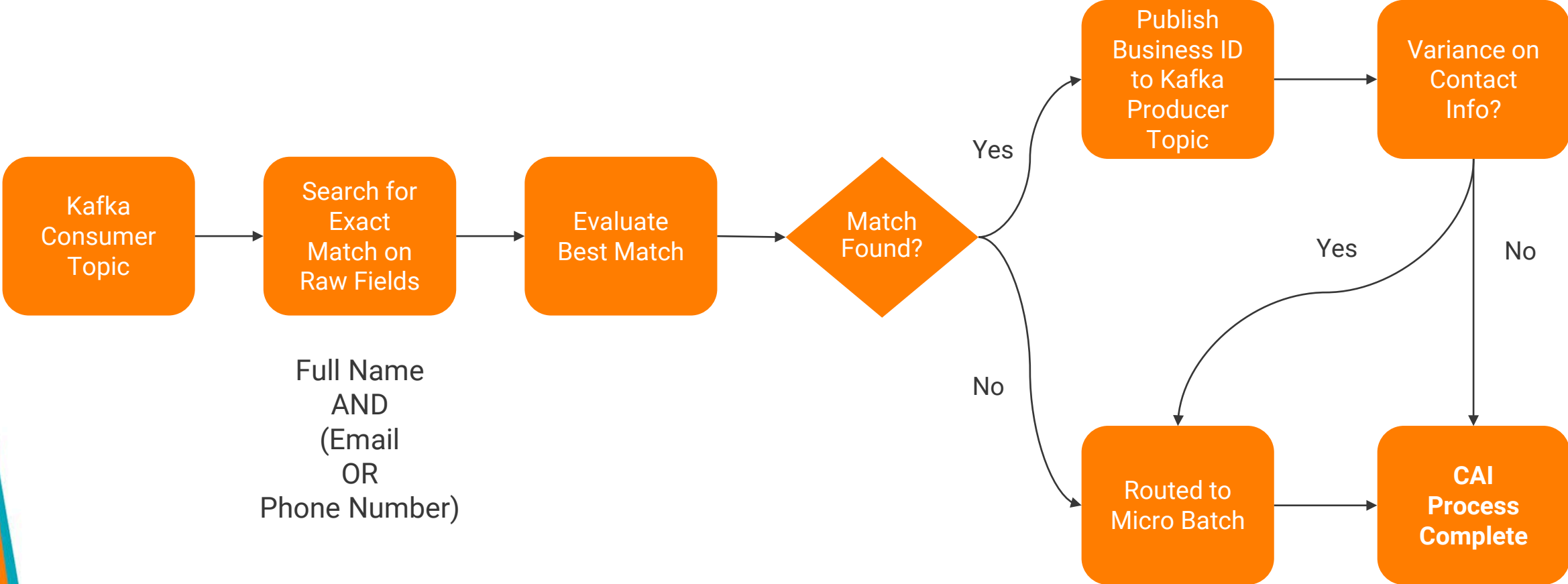




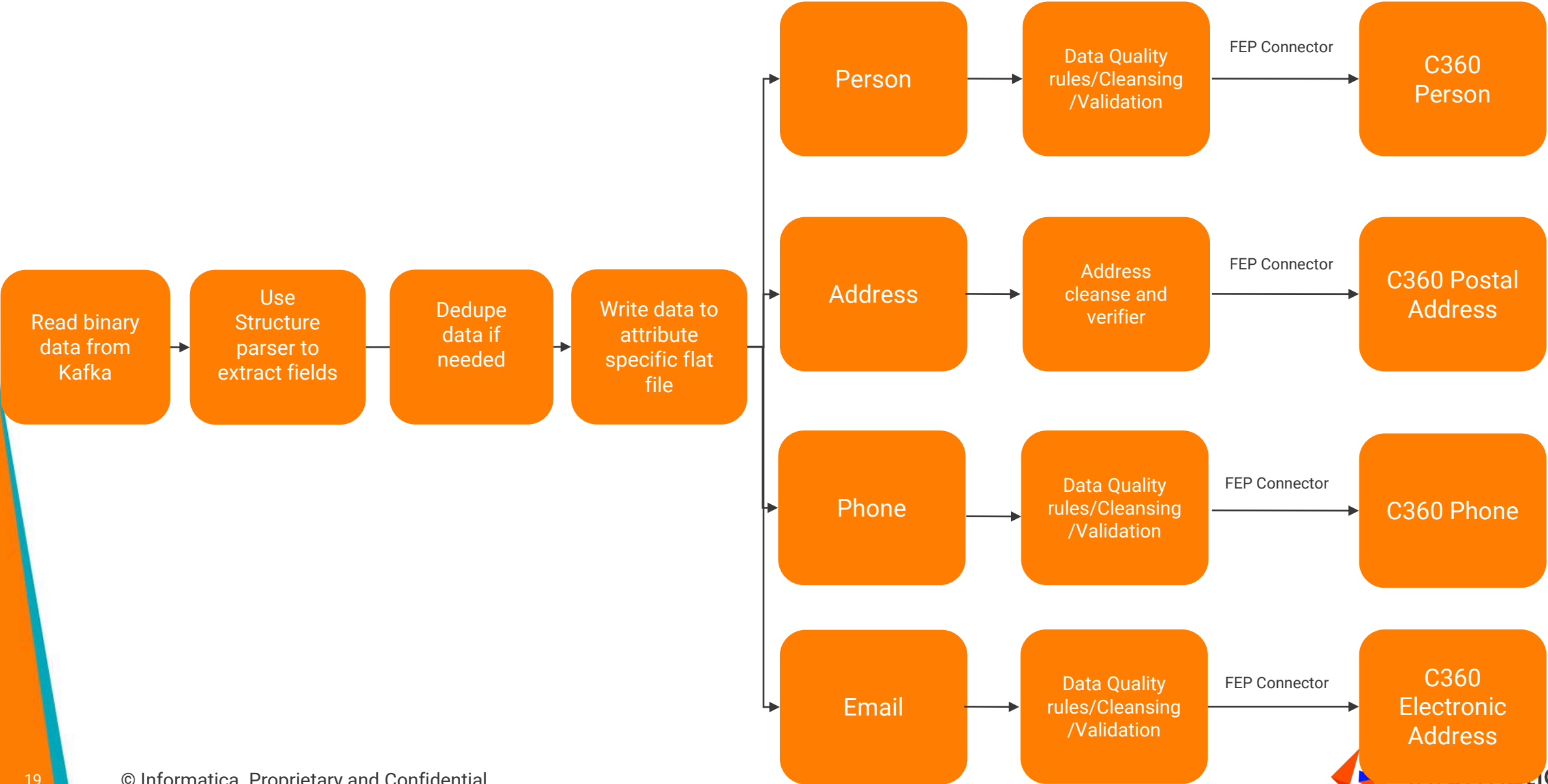
# Incremental Data Load Overview



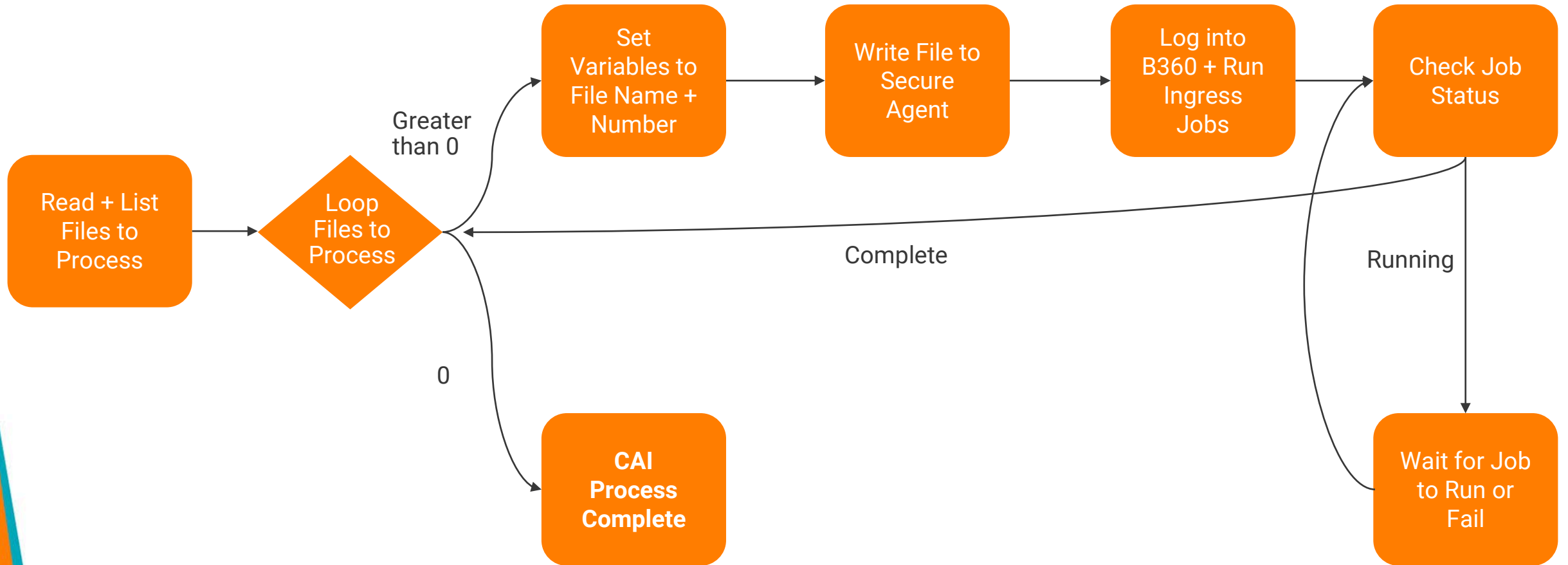
# Business ID Lookup – Cloud Application Integration



# Incremental Micro Batch



# Chunking Process – Cloud Application Integration



# Data Modeling and Matching

Data Models

Match & Merge



# Data Modeling in C360 SaaS



## Data Model

- **Business Entity** – Person or Organization
- **Child Field Groups** – Address, Phone, Email, Loyalty Account, Payment Type, Segmentation, Status, Demographics
- **C360 Extensions** – Healthcare, Insurance, others

## Other Considerations

- **Data Quality Rules** – character lengths, allowed values, noise words, capitalization, date ranges, advanced CDQ rules
- **Survivorship** – most trusted source systems
- **Match Rules** – same algorithm, different implementation
- **Code Value translation** – Reference 360 code lists, cross-walks
- **Hierarchies** – consider enrichment, e.g. Dunn & Bradstreet, LexisNexis, Bloomberg, Statistica, Informatica DaaS
- **Relationships** – householding, personal / work accounts

# Matching in C360 SaaS



## Considerations

- Match Partitions – Partition by Country, State
- Multiple Rulesets – Daily, Weekends, Real-Time
- Match Rules – Exact before Fuzzy, High Hits First
- Exact Field Segmentation – Act as Filters
- Null Matching (*New!*) – Null-Null, Null-Not Null
- Globalization: Phone, Address standardization

## Informatica Assistance

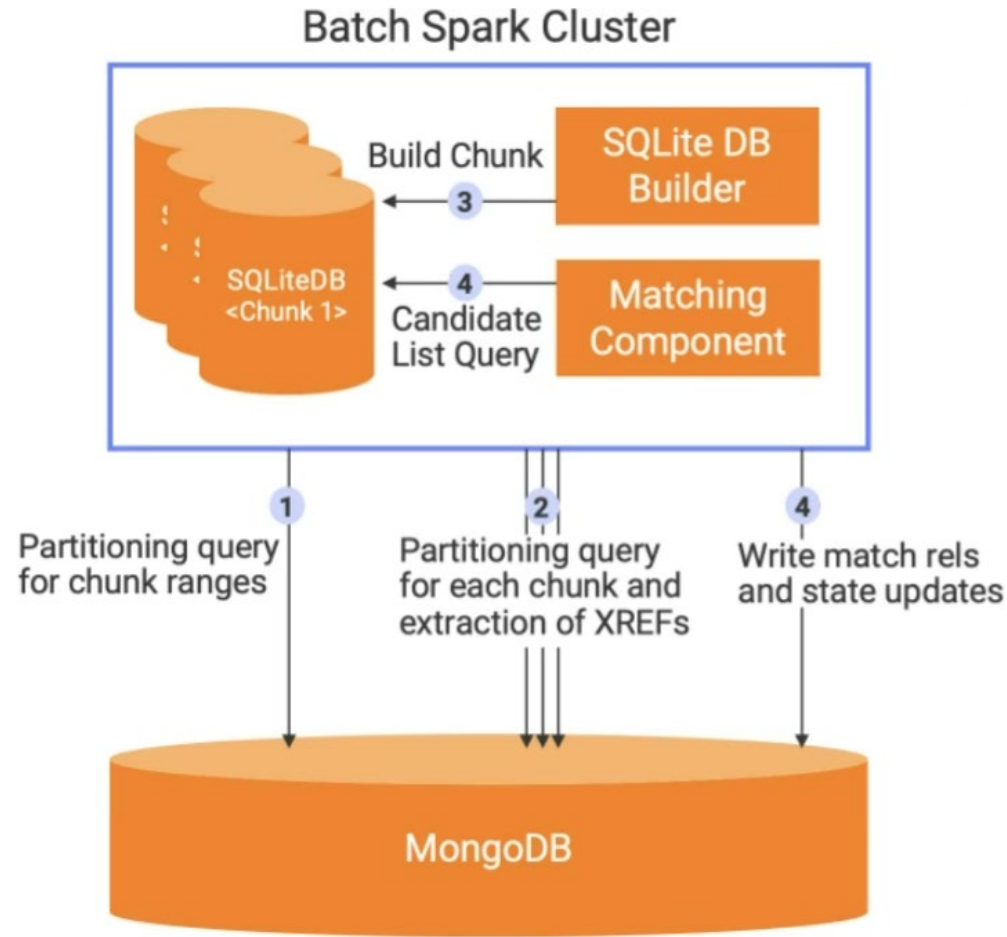
- Match report is limited to 100K pairs, but GCS can extract a high-volume **match report**
- CSM can provide specialists: “Ask an Expert”
- IPS can help with **full life-cycle**: user requirements, data profiling, determining match rules, testing through multiple iterations, tuning & optimization

# Example Match Ruleset

Attribute		Rule 1	Rule 2	Rule 3	Rule 4
Match Criterion		Person_Name	Person_Name	Person_Name	Resident
Merge Strategy		Automated	Automated	Automated	Automated
Match Level		(Typical)	(Conservative)	(Conservative)	(Conservative)
Threshold		95-100	97-100	97-100	97-100
		Strongly similar name and exactly matching identifier	Similar name and same email	Similar name and same phone number	Strongly similar name, address
Person	First Name				
	Last Name				
Alternative Identifier	Full Name	Fuzzy	Fuzzy	Fuzzy	Fuzzy
	Date of Birth				
	Alt Identifier Type	Exact			
	Alt Identifier Value	Exact			
Address	Address Type				
	Address Line 1				Fuzzy
	Address Line 2				Optional (Fuzzy)
	City				
	State				Exact (Null-Null)
	Postal Code				Optional (Fuzzy)
	Country Code				Exact
Phone	Phone Type			Exact	
	Phone Num			Exact	
Email	Email Type				
	Email Address		Exact		



# Example: Analyzing Match Performance



Step	Time	Opportunity
1 - Partitioning Query	60 mins	Reduce to ~10 mins
Match Chunk "C1" - Match C1 to C1		
Spark Job Setup	15 mins	
2 - Partitioning Query	70 mins	Reduce to ~10 mins
2 - Data Extract	10 mins	
3 - SQLite DB Building	45 mins	Can optimize further, benefit TBD
4 - Matching	15 mins	
Match Chunk "C2" - Match C2 to C2		
Spark Job Setup	15 mins	
2 - Partitioning Query	15 mins	Reduce to ~10 mins
2 - Data Extract	10 mins	
3 - SQLite DB Building	45 mins	Can optimize further, benefit TBD
4 - Matching	15 mins	
Match Chunk "C3" - Match C3 to C3		
Spark Job Setup	15 mins	
2 - Partitioning Query	30 mins	Reduce to ~10 mins.
2 - Data Extract	10 mins	
3 - SQLite DB Building	45 mins	
4 - Matching	30 mins	
Match C1 to C2, C1 to C3, C2 to C1, C2 to C3, C3 to C1, C3 to C2		
Spark Job Setup	65 mins	
4 - Matching	100 mins	Reduce by 60 minutes
<b>Total</b>	<b>10.5 hours</b>	<b>7.5 hours</b>

# Engineering Roadmap



## Near-Term Roadmap

- Incremental Match Support
- Support for Extra-Large Chunks
- Near Real-Time Load, Merge API Optimizations
- Error reporting, Match reporting
- Radius matching

## Strategic Roadmap

- Match Tokenization during Source XRef creation
- Batch and Near Real-Time Data Quality
- Offload transient Data to Apache Iceberg
- AI-driven Indexing and Blocking

# Thank you

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# Appendix