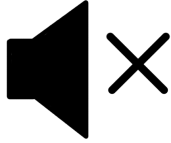


Aug 24, 2021

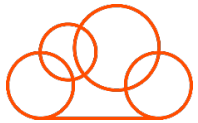
# C360 & IICS for Global Customer Solution

Jaimin Patel, Solution Architect, IPS

# Housekeeping Tips



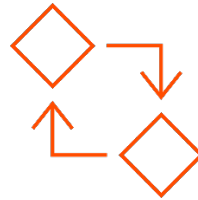
- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" 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 **INFASupport YouTube channel** and **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.



Bootstrap trial and  
POC Customers



Enriched Customer  
Onboarding  
experience



Product Learning  
Paths and Weekly  
Expert Sessions



Informatica  
Concierge



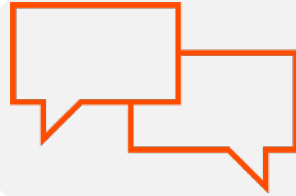
Tailored training and  
content  
recommendations

# More Information



## Success Portal

<https://success.informatica.com>



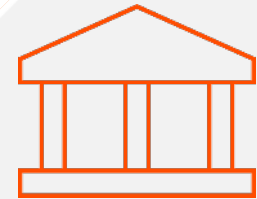
## Communities & Support

<https://network.informatica.com>



## Documentation

<https://docs.informatica.com>



## University

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

# Safe Harbor

The information being provided today is for informational purposes only. The development, release, and timing of any Informatica product or functionality described today remain at the sole discretion of Informatica and should not be relied upon in making a purchasing decision.

Statements made today are based on currently available information, which is subject to change. Such statements should not be relied upon as a representation, warranty or commitment to deliver specific products or functionality in the future.

08.24.2021

# MDM & IICS for Global MDM Solution

*Webinar Series*

Jaimin Patel, Resident Architect, IPS



Informatica™

# Agenda

**1**

Use Cases/Business Drivers

**2**

Global Hub considerations

**3**

MDM Architectural options

**4**

Leveraging IICS for complex integrations – CAI briefing

**5**

Centralized Supplier data Maintenance example

**6**

Q&A

# Challenges for a Global company

No single  
version of  
truth

- Disparate data sources , multiple versions

Missing  
360 view

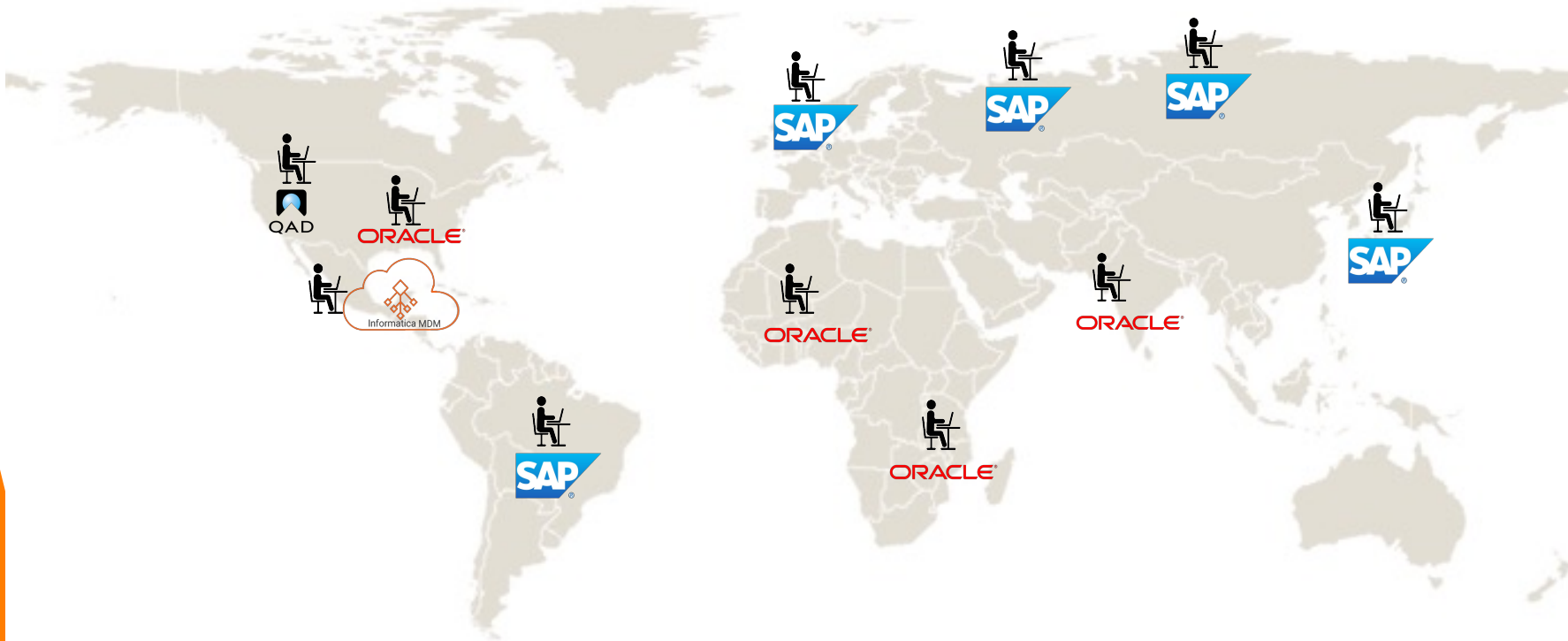
- Missing consolidated view and relationships

Duplicate  
data

- Multiple systems per BU/country

Enforcing  
Data  
Governance  
rules

- Difficult to enforce processes, quality rules



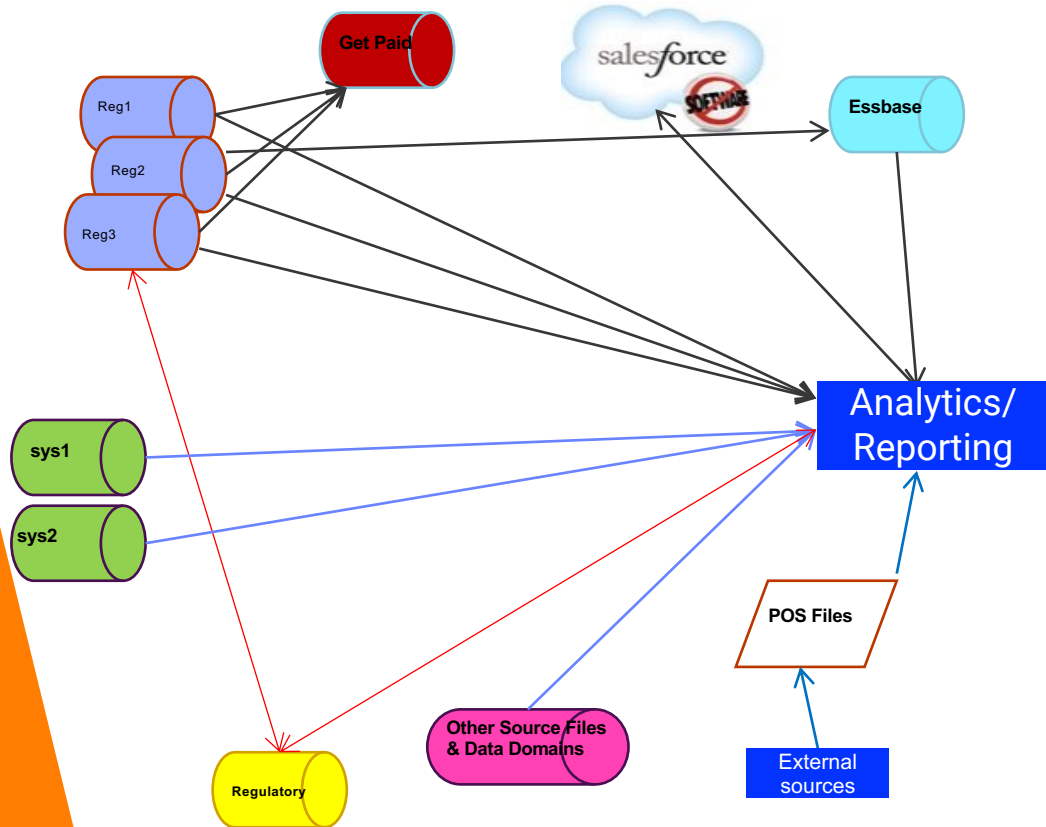
# Business problem – Well-known Manufacturer

*Our buying power was limited by the age and quality of available vendor and raw-materials data. That meant that our raw materials portfolio was proliferating, as was our vendor portfolio.*

*So when a chemist was starting work on a the formulation for a new product, for example, he wouldn't necessarily choose the black pigment that we already use on a regular basis, from a trusted vendor. He might instead on-board a new black pigment and, in many cases, on-board a new supplier too. In this way, we were missing opportunities to increase our buying power, leverage global contracts and get the best volume discounts.*

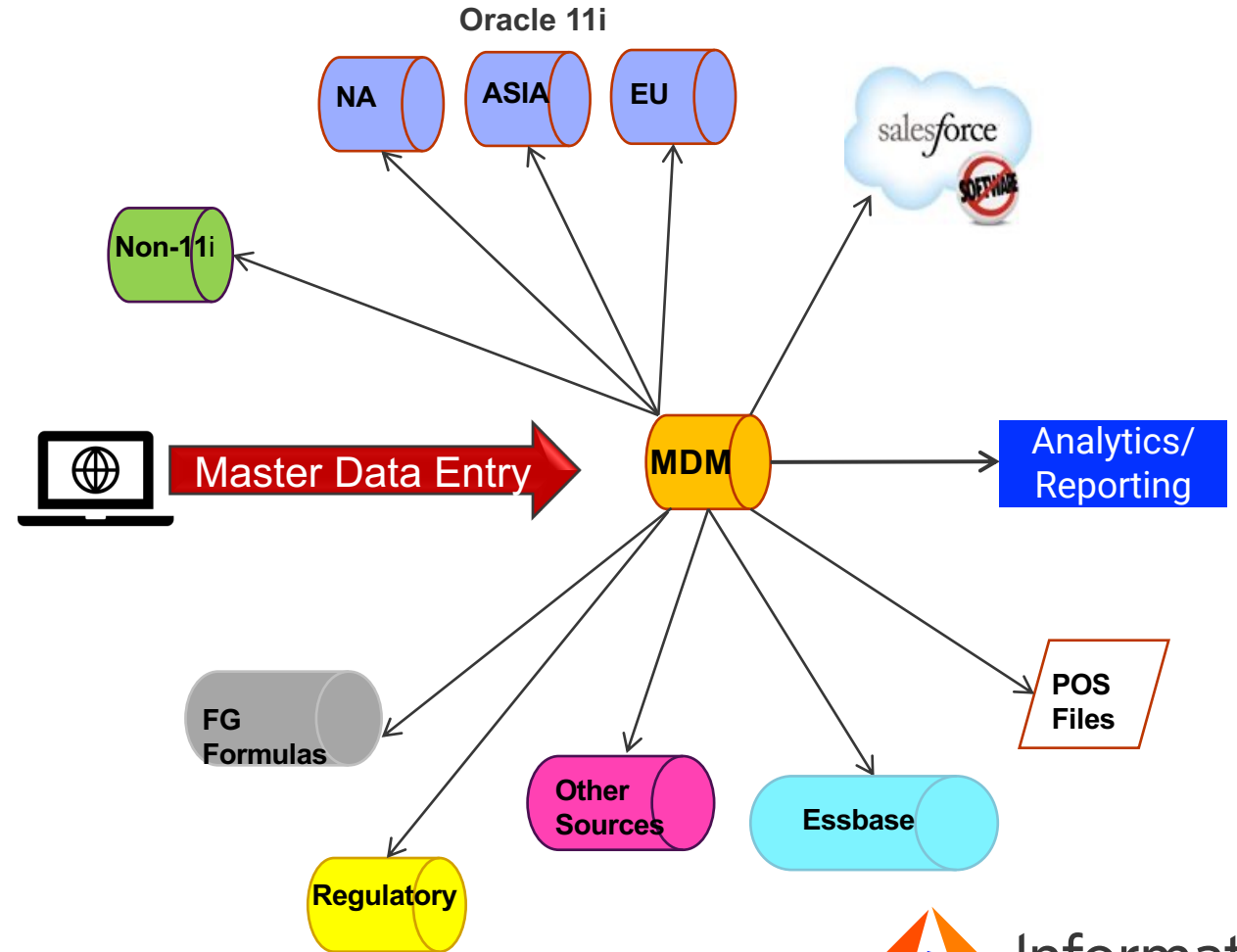
*The data collection processes around issuing an RFX were very manual, very complex and extremely inefficient. So if Vendor A increased its prices, and we wanted to go off and see what Vendor B or Vendor C could offer . . . it would take many, many months assembling the data, checking its accuracy and inputing it into the RFX.*

# MDM for Centralized Governance



- Current State**
- Multiple processes exist by Business Group and Region
  - No ownership of data
  - No Data Governance
  - Many versions of the truth

- Future State**
- Roles and Responsibilities defined through Data Governance
  - Central hub and workflow for all master data



# Deciding on a centralized architecture

Best  
Practice

- Architect the solutions starting with consumption scenarios
  - Consumption describes
    - Where business value will be derived from MDM
    - When and how data will be accessed
  - This also drives the overall data architecture for the solution
- Master Data as close to source as practical
  - Master data centrally when it is shared by most of the enterprise
- Master Relationships centrally as much as practical
  - Most business value is in relationships built on top of master data
  - Only place to see and act on cross-domain relationships

# Global Hub Considerations

- Determine the need/desire for a Common Core Data Model
- Determine how data is to be sourced from various systems
- Security/Physical Access concerns
- Identify Internationalization requirements
- Identify Synchronization and correlation requirements
- Design for non-invasive use of data from Existing Hubs
- Consider Hub as a Service for smaller business units

# Global Hub Considerations (cont..)

- Sustain good real-time and batch performance
- Standardized interfaces
- Possible unique factors for business unit or country-specific Hub.
- BU-Specific or Country-specific data model extensions
- Lookup tables
- Language/matching rules
- System interfaces
- External sources

# Cross-Country Considerations

- Matching data across countries
- Central data governance
- Central system administration/configuration

# Policy/Governance Considerations

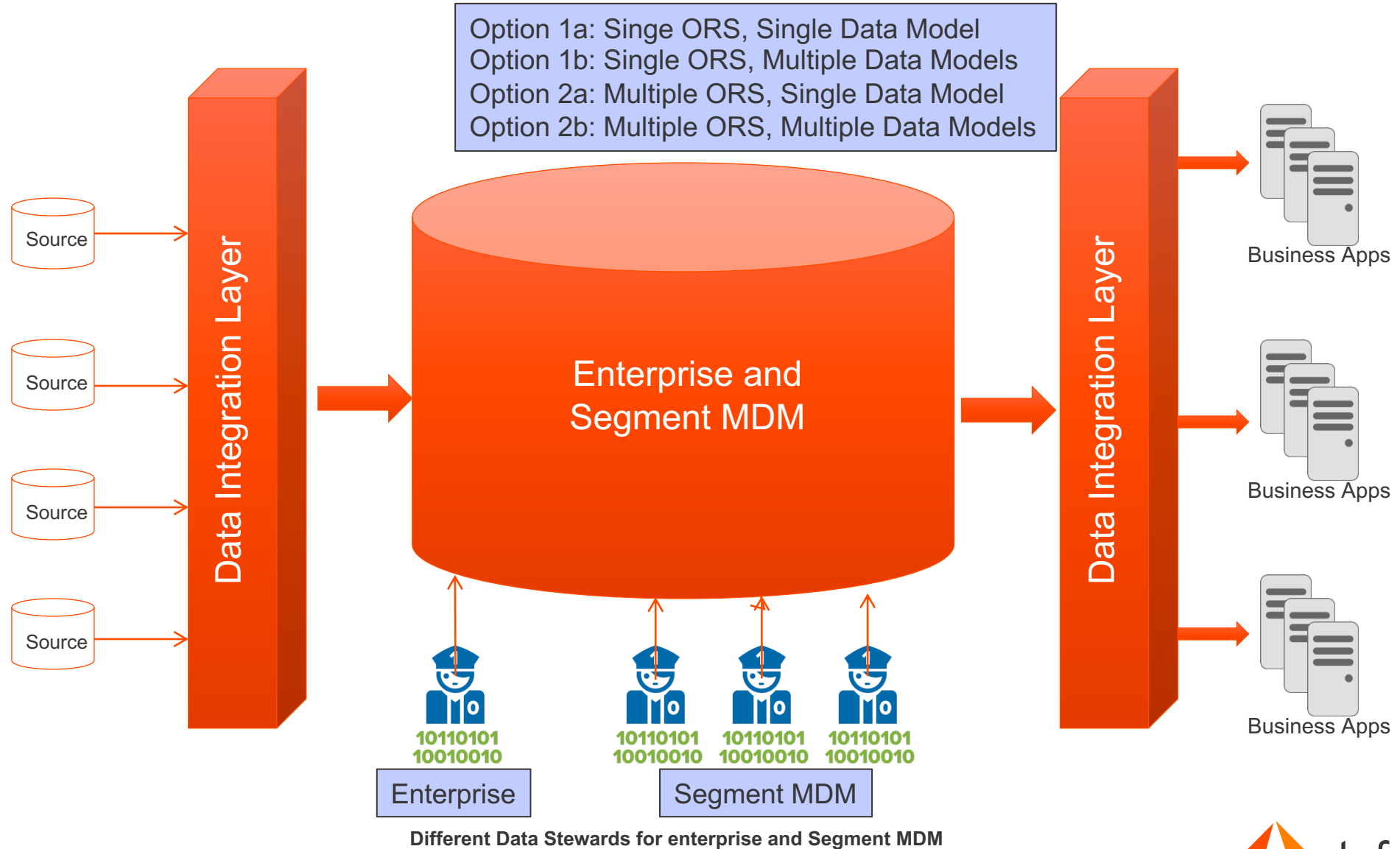
- Definition of Common Sources and Shared Core Customer Attributes
- Definition of Process for Sharing & Synchronization
- Data Stewardship Roles and Needs
- Establishing of Trust Framework
- Workflow Requirements

# Distributed Hub Options [Summary]

- Approach 1: Single Hub Instance with Single Repository
  - Option A: Single Data Model per Repository
  - Option B: Multiple Data Models per Repository
- Approach 2: Single Hub Instance with Multiple Repositories
  - Option A: Single Data Model per Repository
  - Option B: Multiple Data Models per Repository
- Approach 3: Multiple Hub Instances with Single Repository per Instance
  - Option A: Single Data Model per Repository
  - Option B: Multiple Data Models per Repository
- Approach 4: Hub of Hubs
  - Option A: Registry of Hubs
  - Option B: Subset Master Hub
  - Option C: Hub and Spoke

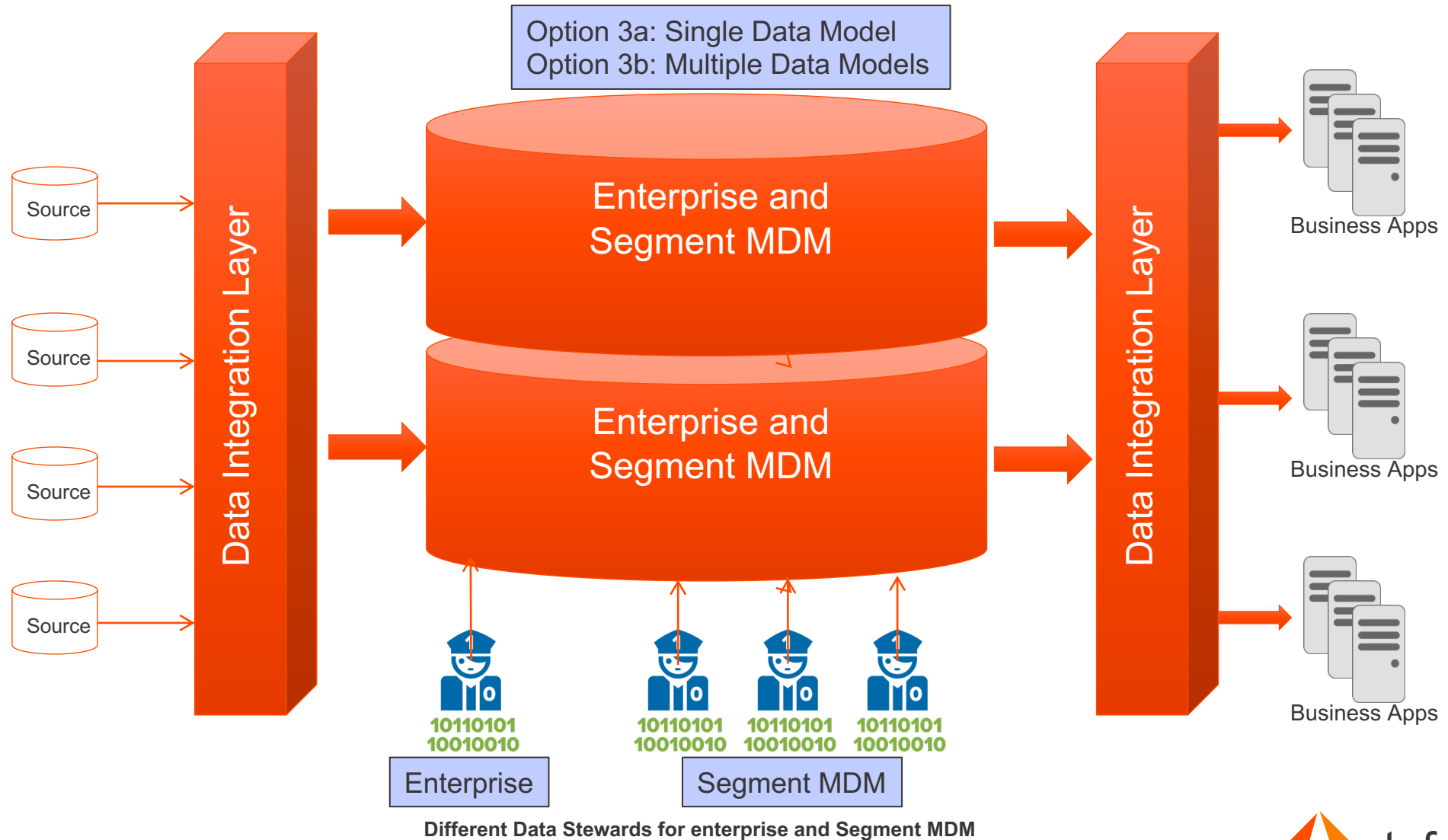
# MDM Reference Architecture

## Approaches 1 & 2



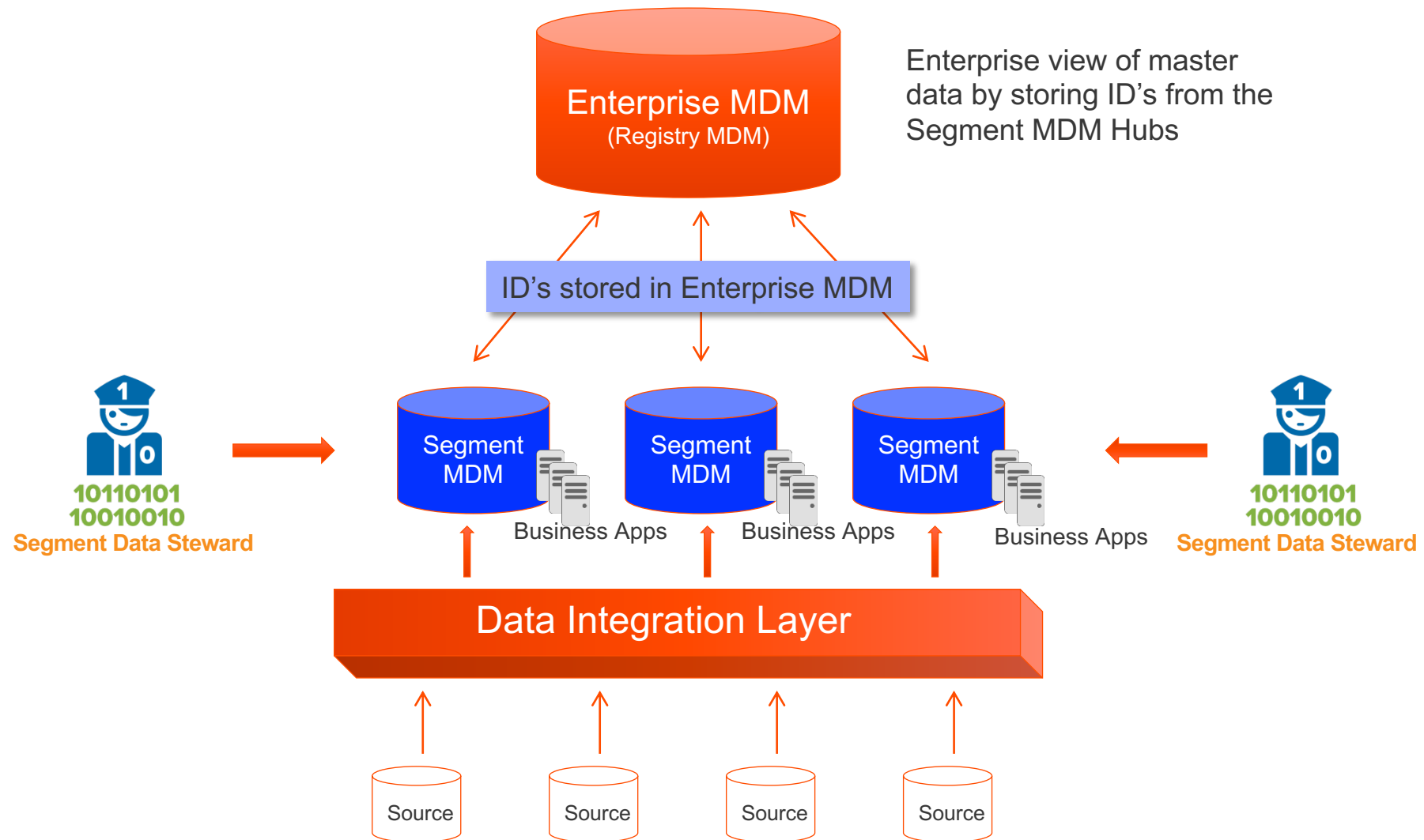
# MDM Reference Architecture

## Approach 3



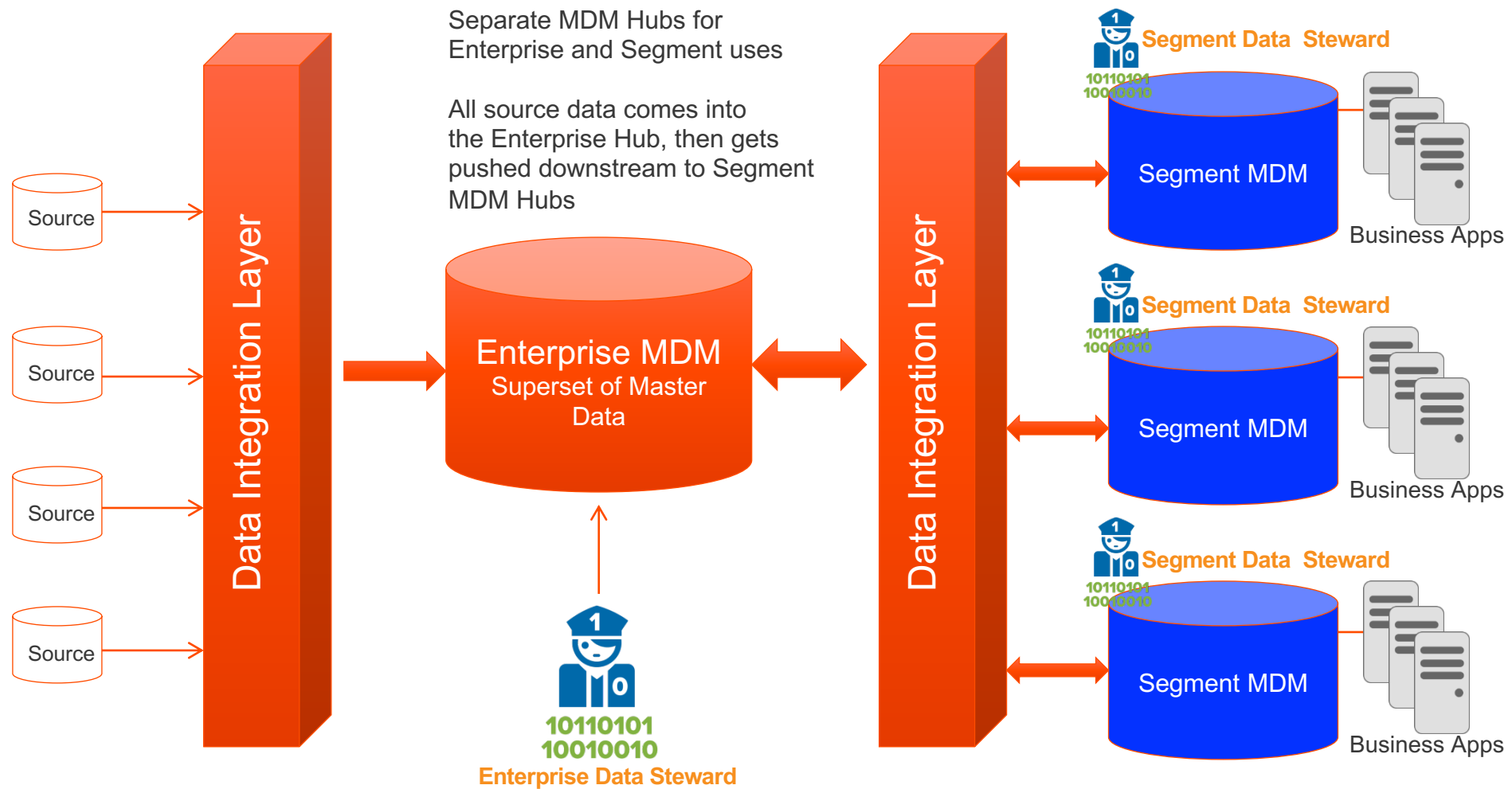
# MDM Reference Architecture

## Approach 4a

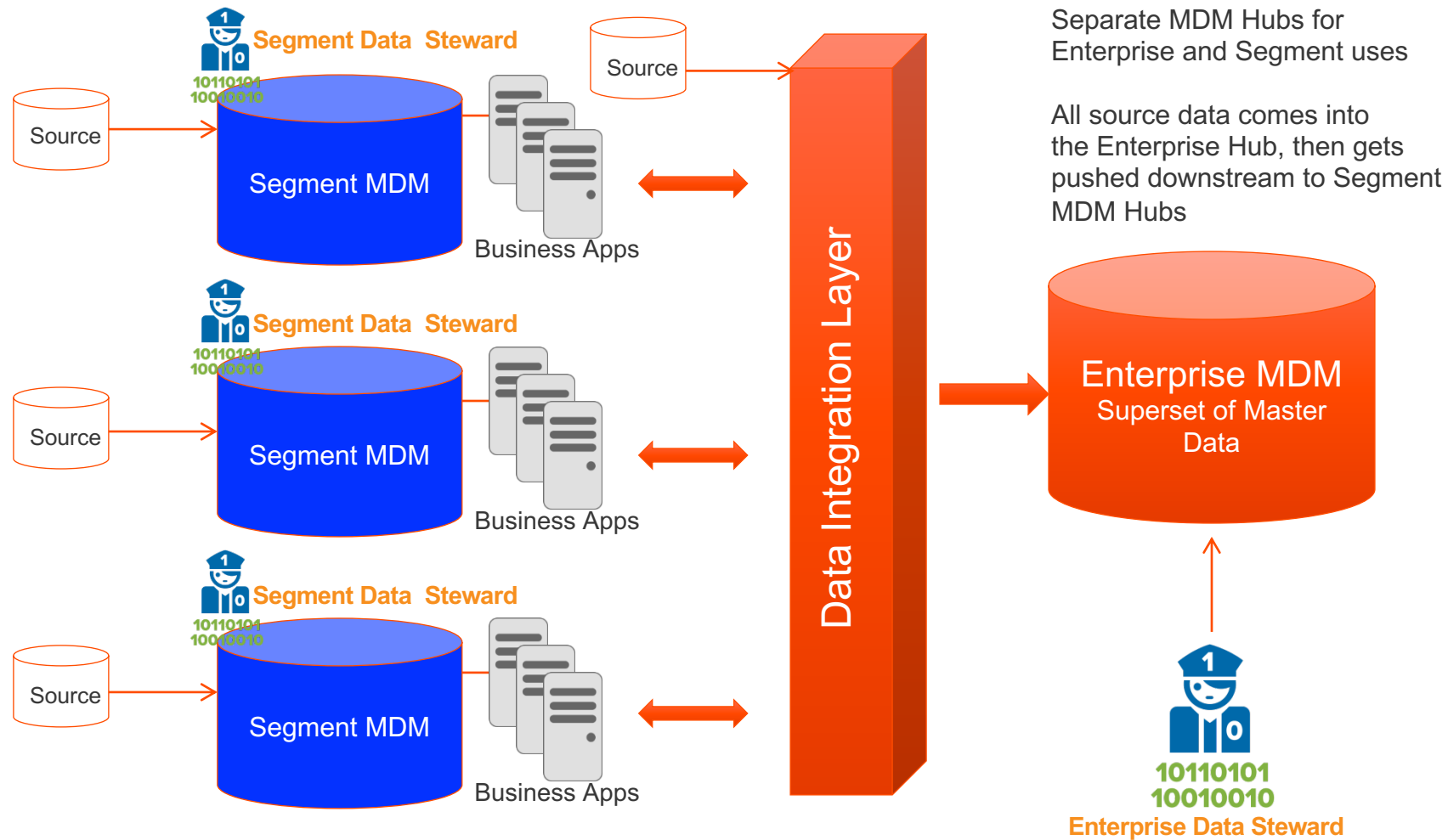


# MDM Reference Architecture

## Approach 4b



# MDM Reference Architecture Approach 4c

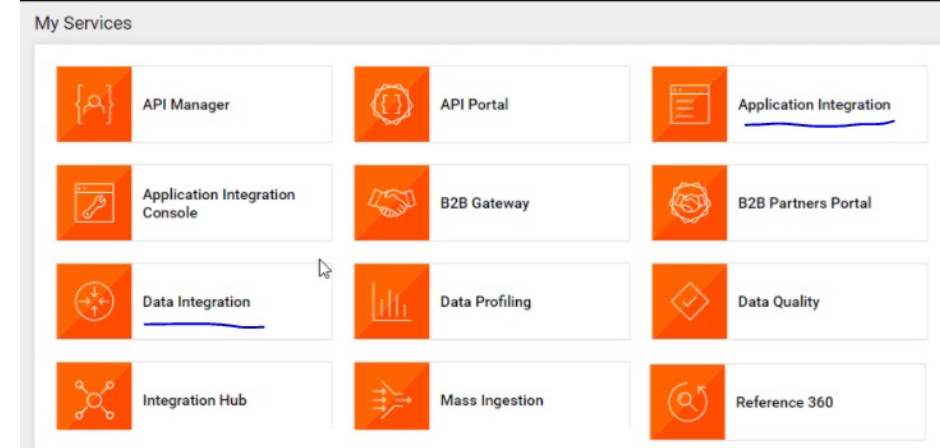
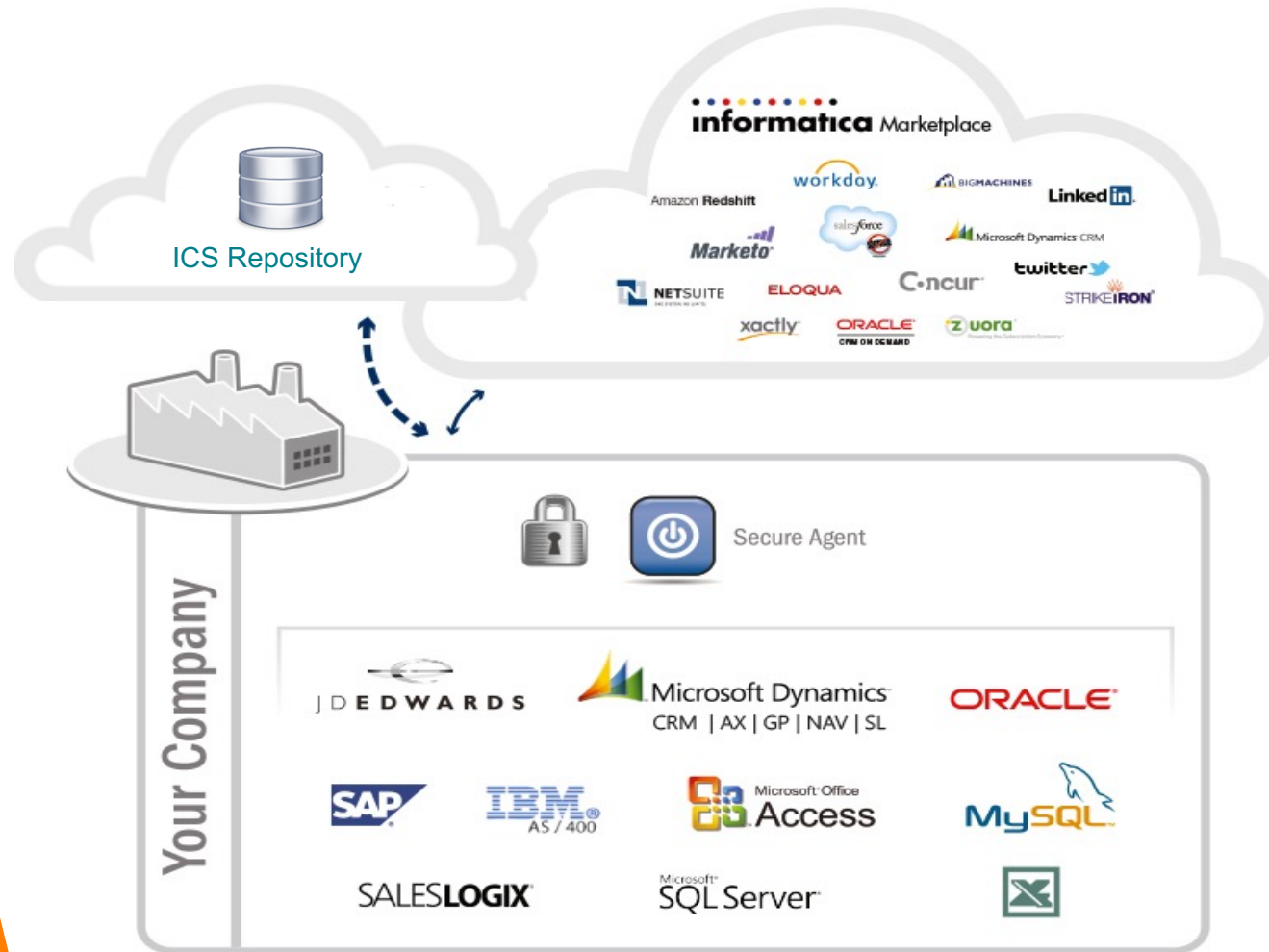


# Making the Decision

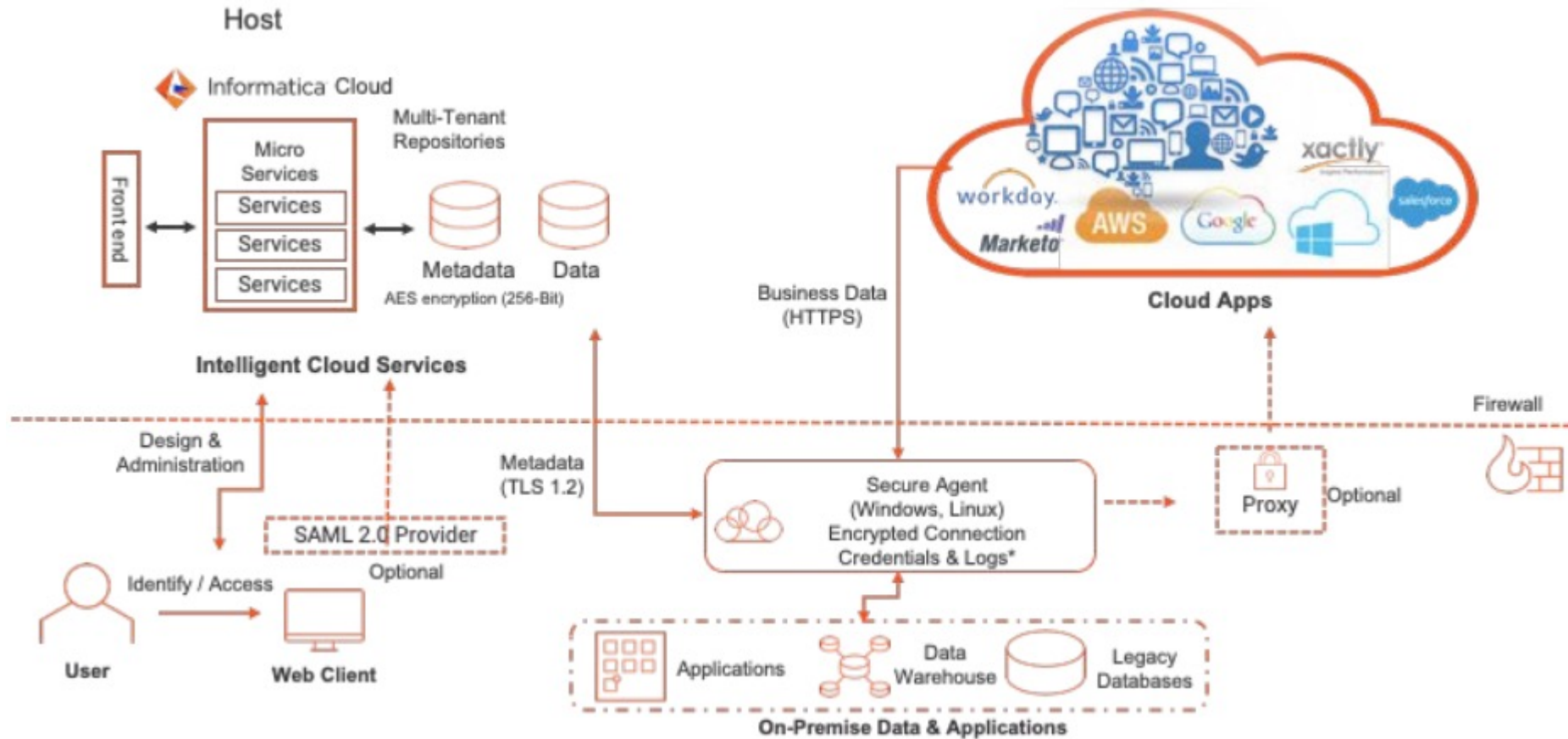
REQUIREMENT	APPROACH								
	1a	1b	2a	2b	3a	3b	4a	4b	4c
Common Data Model (core attributes)	√	√	√	√	√	√	√	√	√
Locale specific configuration for access control	√	√	√	√	√	√	√	√	√
Privacy laws governing use of data	√	√	√	√	√	√	√	√	√
Common Data Model (all attributes)	√	√	√	√	√	√			
Relationships across all entities	√		√		√				
Relationships across a subset of entities		√		√		√			
Locale specific data model extensions			√	√	√	√	√	√	√
Locale specific lookup tables			√	√	√	√	√	√	√
Locale specific workflow			√	√	√	√	√	√	√
Regional level data management			√	√	√	√	√	√	√
Privacy laws governing protection of data			√	√	√	√	√	√	√
Locale specific configuration for permissions			√	√	√	√	√	√	√
Country level data management					√	√	√	√	√
Privacy laws governing physical location of data					√	√	√	√	√
Stay active in a region and inactive in another					√	√	√	√	√
Locale specific configuration for user properties					√	√	√	√	√
Link data from existing heterogeneous hubs							√		
Consolidate from existing heterogeneous hubs								√	√
Master Data Closest to Source							√		√

# IICS – CAI briefing

# Simplified view



# Security Architecture



# Cloud runtime environment

❖ Cloud runtime environment could be one of the following options:

1. Informatica hosted cloud runtime environment
2. Informatica hosted cloud runtime environment optionally with elastic serverless components
3. Client hosted secure agent(s) in a VM hosted in private/public cloud.
4. Client hosted secure agents(s) in an on-prem environment.



# CAI

Automate business processes, accelerate transactions, and fuel real-time analytics.



## Cloud Application Integration: Key features

Automate business processes, accelerate transactions, and fuel real-time analytics.



## Single-canvas design tool

Use one tool for API creation, event generation and handling, real-time data integration, and process integration and automation.



## API implementation platform

Publishing a process auto-generates REST, OData, or SOAP APIs. No need to worry about protocol details.



## Built-in data providers

Enable your database with OData v4 with a single click; also expose it as a fully-fledged REST API-enabled database.



## Code-less service connectors

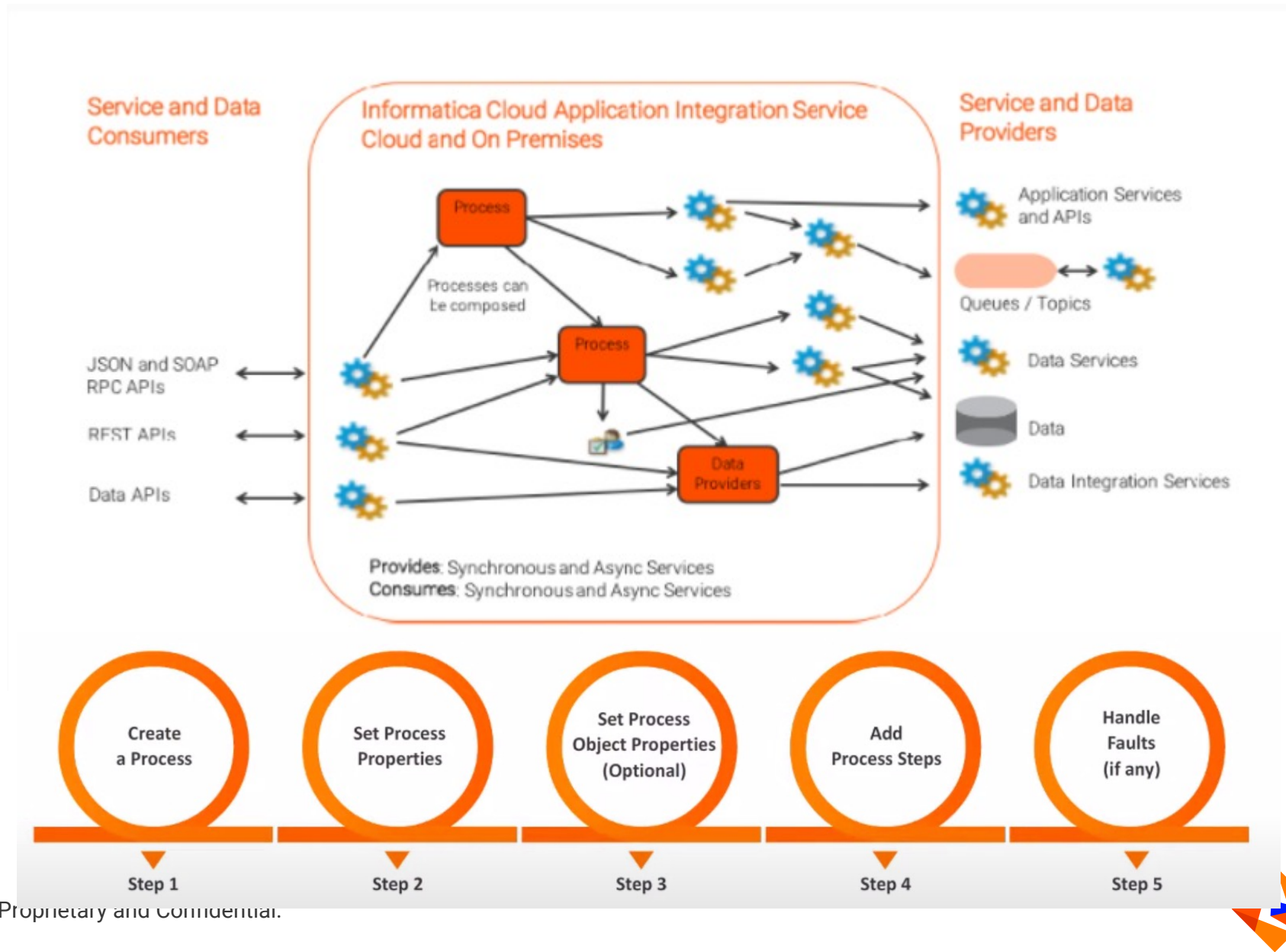
Develop REST and SOAP service API-based "service connectors" by leveraging definitions on a GitHub repository.



## Event-driven architecture

Easily integrate message- and event-based systems, queues, and topics with support for top tools.

# CAI...



# CAI – Hybrid Orchestration

The diagram illustrates a hybrid orchestration architecture. At the top, a cloud icon contains 'Cloud-based Processes' which include 'Cloud APIs' (SOAP, REST/XML, JSON) and an 'API Gateway'. Below this is the 'Informatica Cloud Process Server'. At the bottom, a server rack icon represents 'Agent-based Processes' which include a 'Secure Agent Process Server' and 'Services' (Applications, Data, and Services). Arrows show data flow between the cloud and agent-based processes. To the right, a cloud icon lists various integration capabilities and on-premises integration capabilities. The 'On Premises Integration Capabilities' section lists: SOAP, REST/XML, JSON; JDBC; AMQP, JMS, AWS SNS & SQS, Azure Message Bus (AMQP); Listeners: File, FTP/SFTP, AWS S3; Java; and Shell. The Informatica logo is at the bottom right.

**Cloud APIs**  
SOAP, REST/XML, JSON

**Cloud-based Processes**

**API Gateway**

**Informatica Cloud Process Server**

**Agent-based Processes**

**Secure Agent Process Server**

**Services**

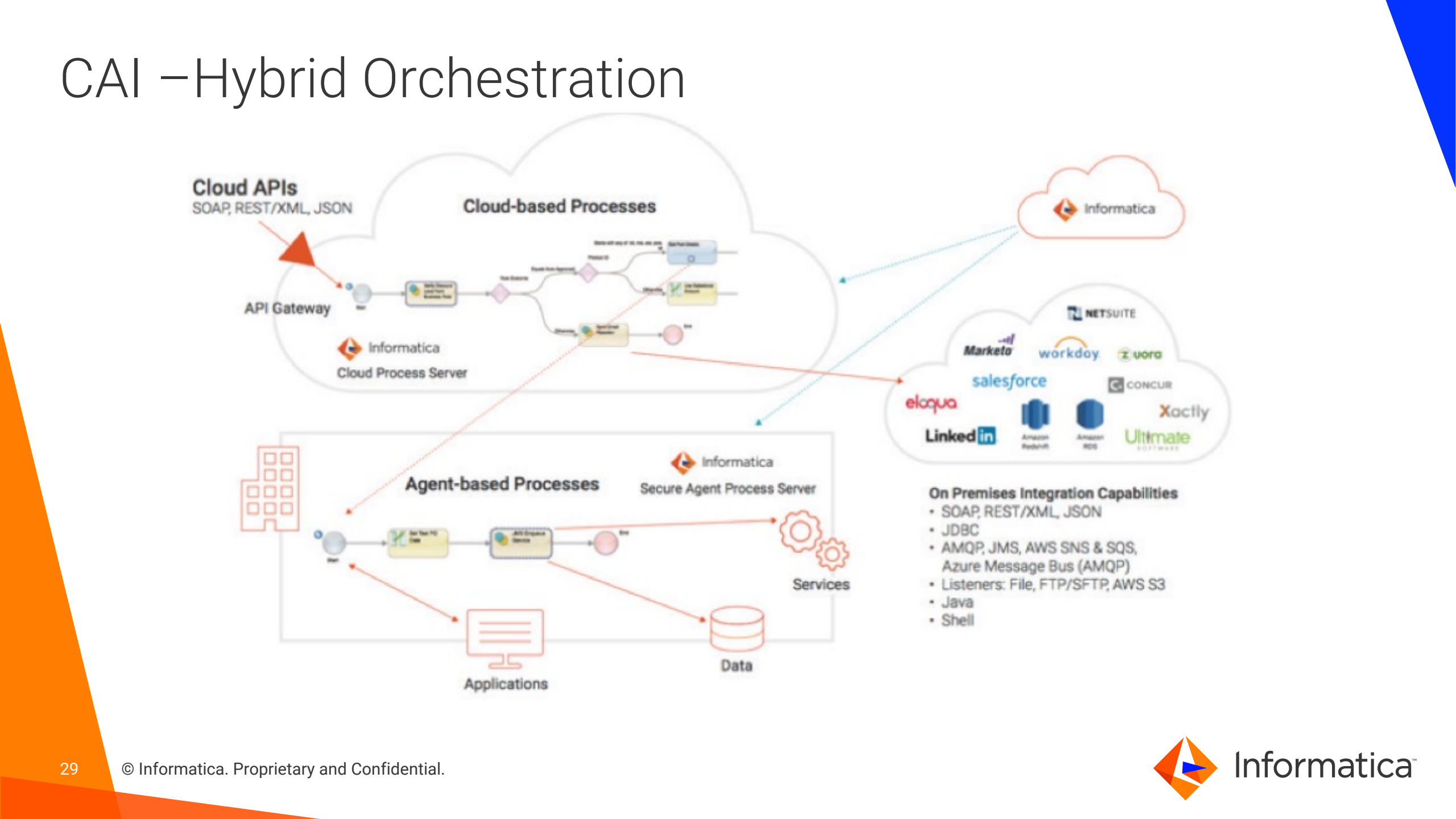
**Applications**

**Data**

**On Premises Integration Capabilities**

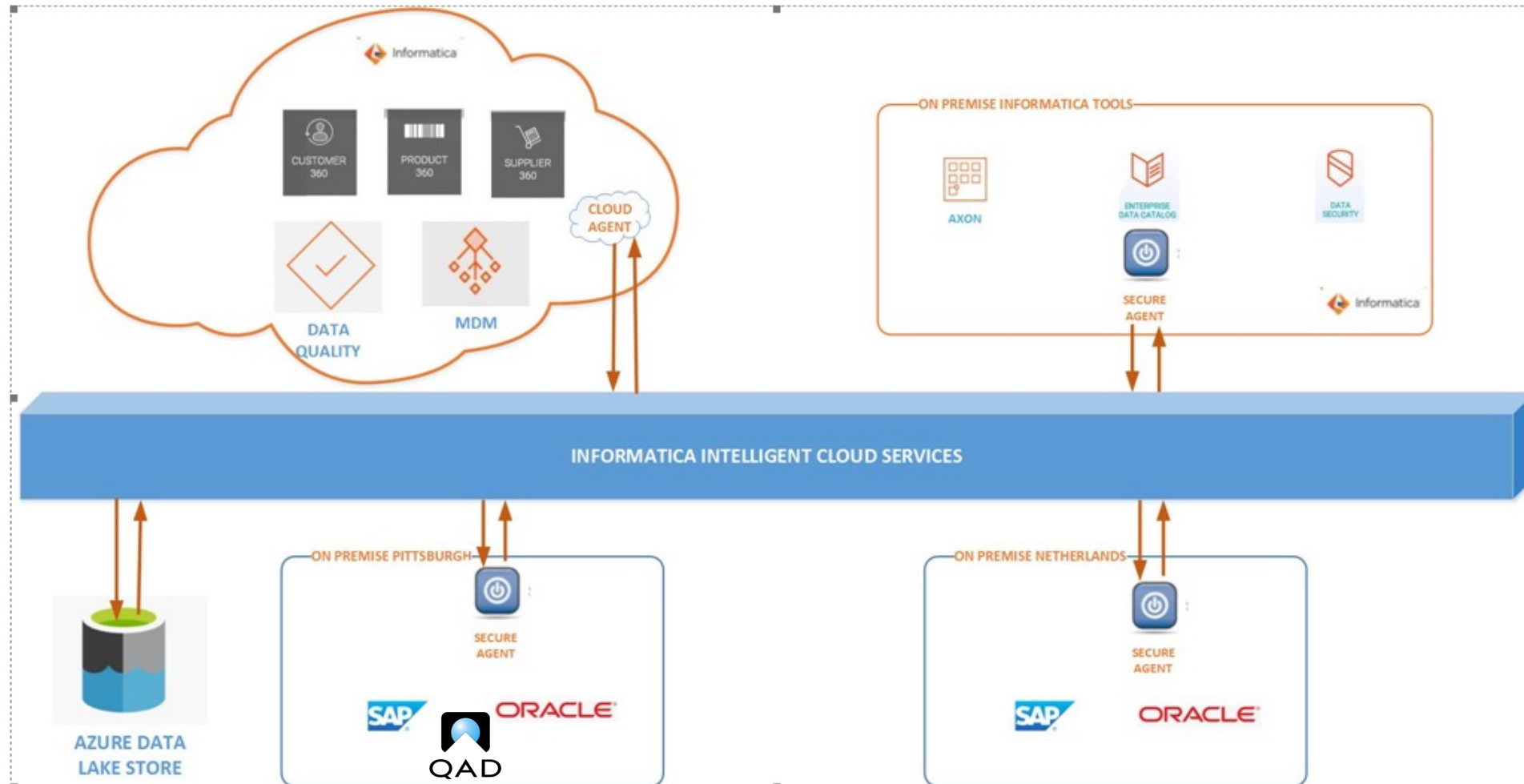
- SOAP, REST/XML, JSON
- JDBC
- AMQP, JMS, AWS SNS & SQS, Azure Message Bus (AMQP)
- Listeners: File, FTP/SFTP, AWS S3
- Java
- Shell

**Informatica**

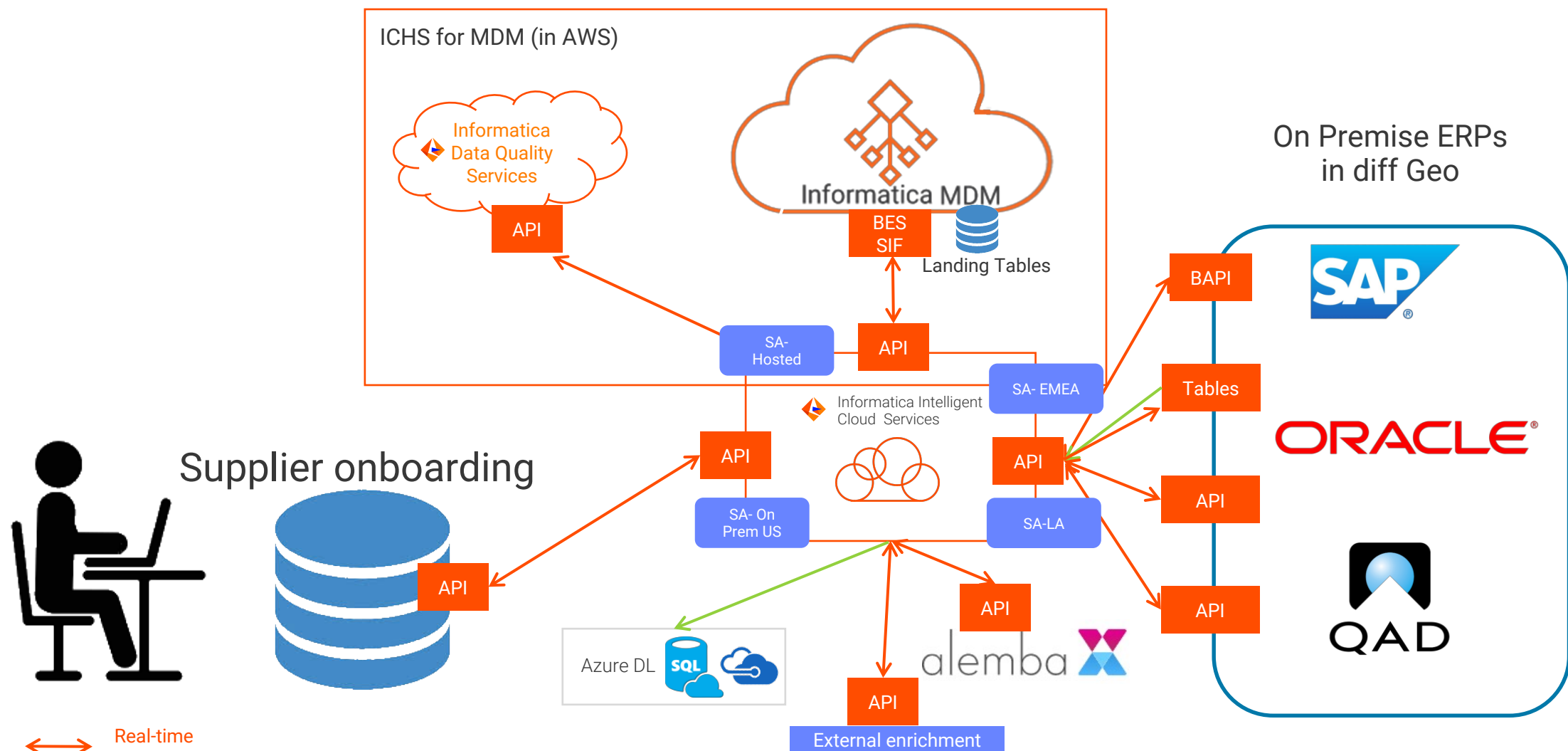


# Centralized supplier maintenance (MDM/CAI/CDI)

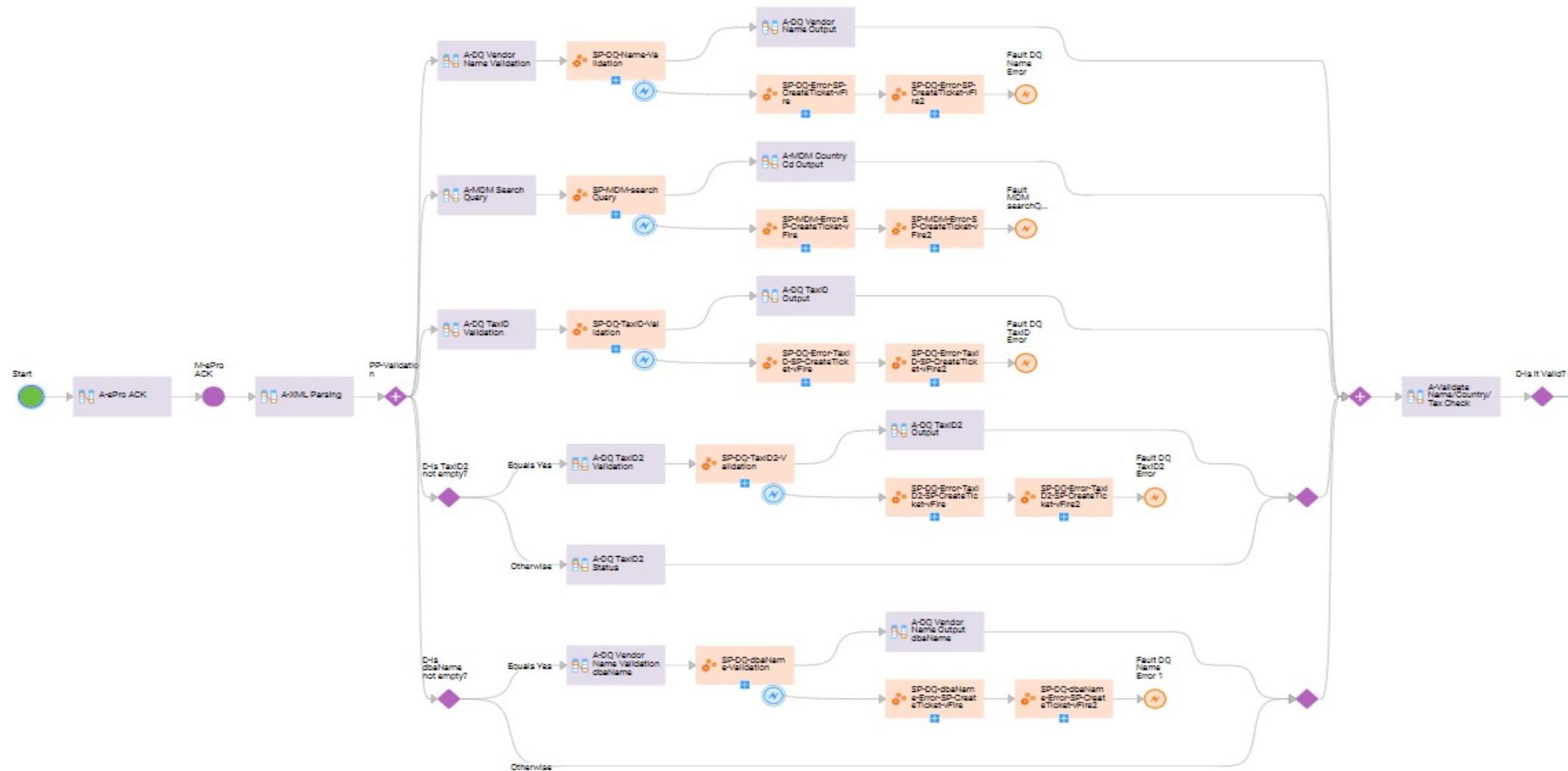
# High level Solution Architecture



# High level Solution Architecture

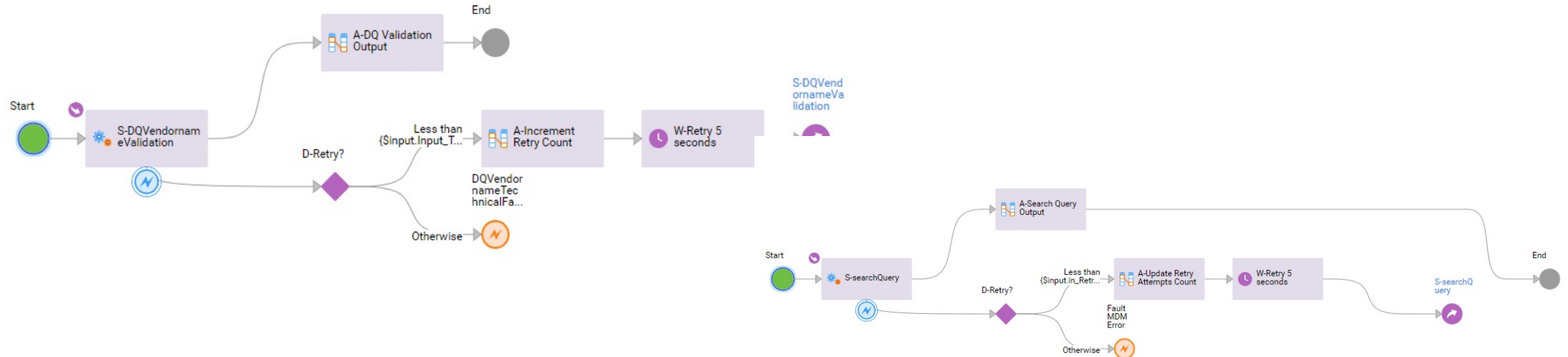


# CAI Orchestration



# CAI Orchestration

```
<?xml version="1.0" encoding="UTF-8"?>
<message>
  <header>
    <timestamp>2020-02-13T10:32:05.428+00:00</timestamp>
    <messageId>MessageID</messageId>
    <objectType>SUPPLIER</objectType>
    <objectId>abcd</objectId>
    <requestAttributeList/>
  </header>
  <payload>
    <![CDATA[<?xml version="1.0" encoding="UTF-8" standalone="yes"?><Supplier>THIS IS WHERE THE PAYLOAD GOES</Supplier>]]>
  </payload>
</message>
```



# Secure Agent configuration

**Properties** Metadata

---

**Connection Details**

Name:\*  (Unpublish connection to edit name)

Location:

Description:

Type:\*

**Run On:**

Connection Test: Not Supported

OData-Enabled: Not Supported

**Connection Properties**

Name	Value	Description
hostName:*	<input type="text" value="test.com"/>	Host Name

**Properties** Metadata

---

**Connection Details**

Name:\*  (Unpublish connection to edit name)

Location:

Description:

Type:\*

**Run On:**

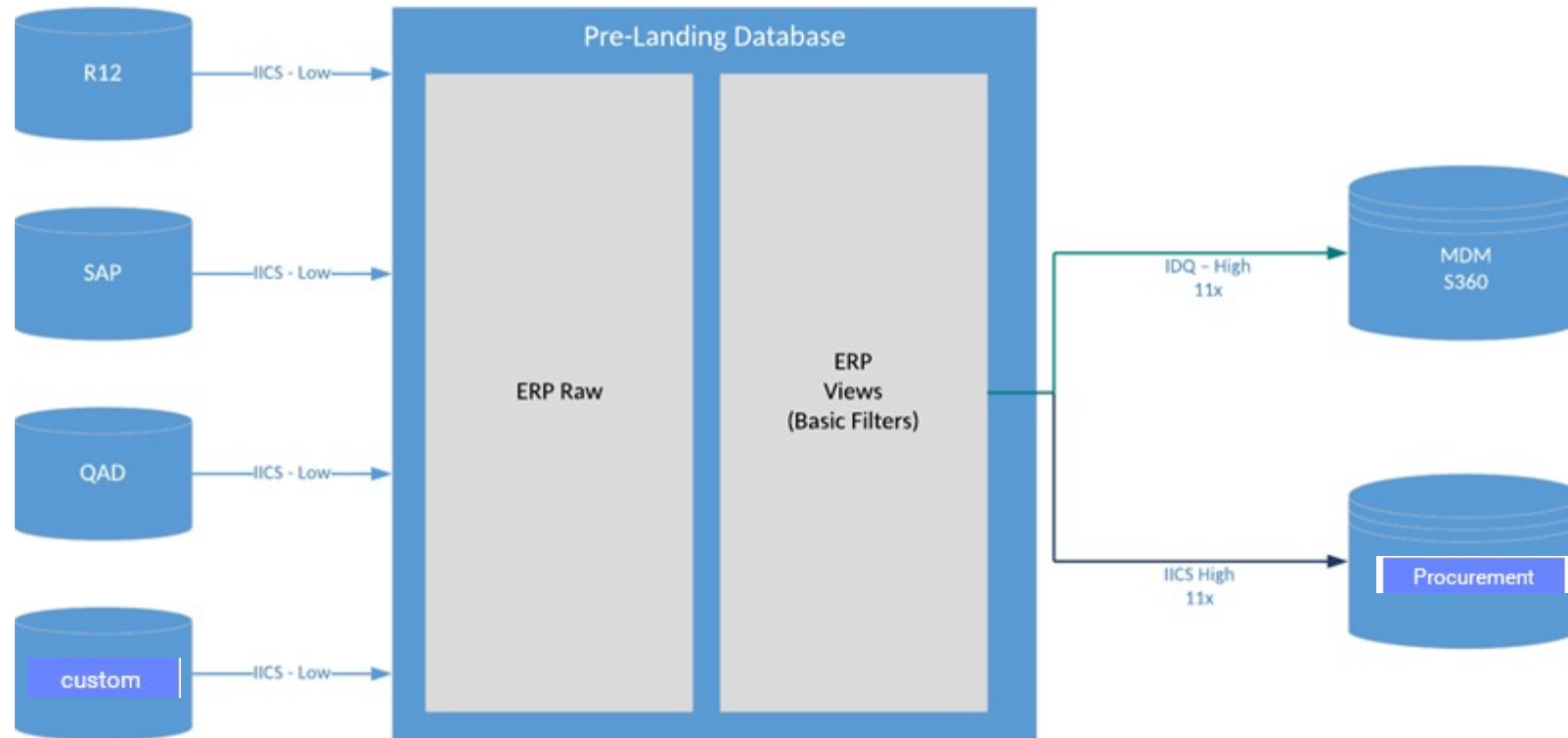
Connection Test: Not Supported

OData-Enabled: Not Supported

**Connection Properties**

Name	Value	Description
hostName:*	<input type="text" value="test.com"/>	Host Name

# IDL



# IDL match rules

Rule #	Auto	Type	Accept Li...	Purpose(Level)	Columns
1	Yes	Fuzzy	-99	Corp_Entity(Loose)	Ex_PartyClass {'Organization'} Ex_Tax_Type {'VAT'} Ex_VAT_Num Organization_Name (Fuzzy)
2	Yes	Fuzzy	-99	Corp_Entity(Loose)	Ex_PartyClass {'Organization'} Ex_TAXID_Num Ex_Tax_Type {'1099','TAX ID'} Organization_Name (Fuzzy)
3	Yes	Exact	---	---	Ex_Address Ex_City Ex_Country Ex_Organization_Name Ex_PartyClass {'Organization'} Ex_PostalCode Ex_Tax_ID ( $\emptyset \leftrightarrow \emptyset$ )
4	Yes	Fuzzy	0	Organization(Loose)	Ex_Address Ex_City Ex_Country Ex_PartyClass {'Organization'} Ex_PostalCode Ex_Tax_ID ( $\emptyset \leftrightarrow x$ ) Organization_Name (Fuzzy)
5	Yes	Fuzzy	0	Organization(Typical)	Address_Part1 (Fuzzy) Ex_City ( $\emptyset \leftrightarrow x$ ) Ex_Country Ex_PartyClass {'Organization'} Ex_PostalCode ( $\emptyset \leftrightarrow x$ ) Ex_Tax_ID ( $\emptyset \leftrightarrow x$ ) Organization_Name (Fuzzy)
6	Yes	Fuzzy	-99	Corp_Entity(Typical)	Ex_PartyClass {'Organization'} Ex_Tax_ID Organization_Name (Fuzzy)
7	Yes	Exact	---	---	Ex_Country Ex_PartyClass {'Organization'} Ex_Tax_ID

# Implementation challenges

- Coordinating the work with 10+ teams, planning
- Agreement on the data model
- Data governance processes
- Handling international data
- Procurement system limitations
- Network Security reviews

# We're Ready to Help!

## Different ways we can help

- Follow up Sessions
- Technical and Business Workshops
- Assessments
- Customized Engagements
- Technical and Business Advisors
- Implementation Support

For follow up and additional questions, please reach out to:

Jaimin Patel  
([japatel@informatica.com](mailto:japatel@informatica.com))

**Resident Architect, IPS NA**

Chris Main  
([Cmain@informatica.com](mailto:Cmain@informatica.com))

**Sr. Director-Professional  
Services  
North America**

Ian Parker  
([iparker@informatica.com](mailto:iparker@informatica.com))

**VP-Professional Services  
APJ**

Ian Baxter  
([ibaxter@informatica.com](mailto:ibaxter@informatica.com))

**Director-Professional  
Services  
EMEA**



**Informatica**  
Professional Services

Q&A