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Informatica Cloud Integration Hub Architecture and Use-Case Demo

- Ankit Tripathi, Senior Solutions Architect
- Ananya Venkat, Solutions Architect

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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.

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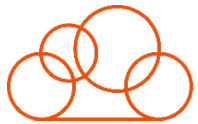
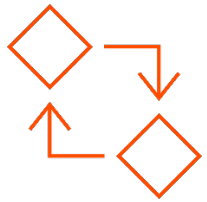


Bootstrap trial and POC Customers

Enriched Customer Onboarding experience



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Informatica Cloud Integration HUB & Demo

Ankit Tripathi
Senior Solution Architect – Customer Success

Ananya Venkat
Solution Architect – Customer Success

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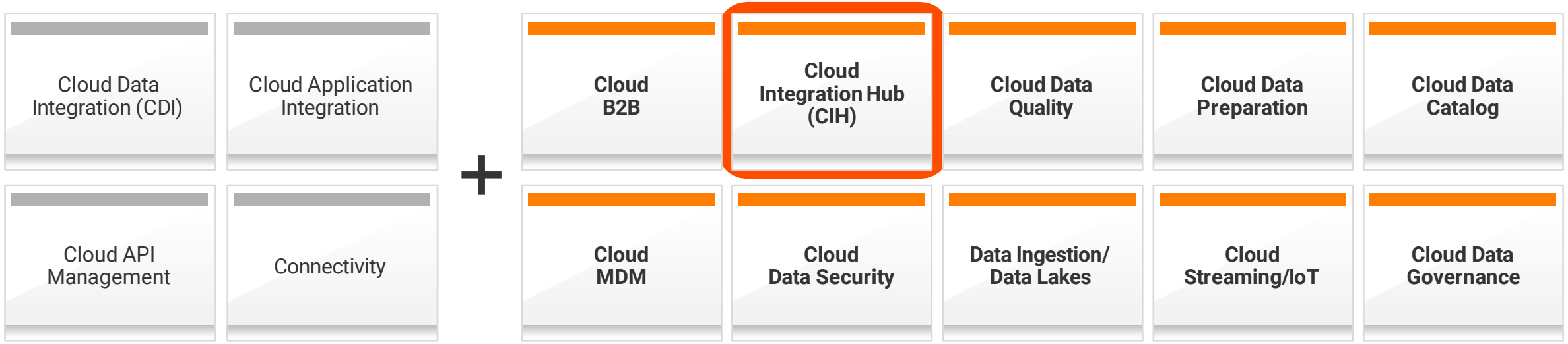
Agenda

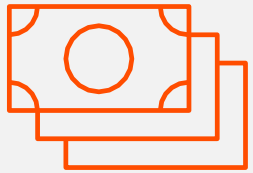
- Introduction to Cloud Integration Hub and related Assets
- Applications
- Topics
- Publications
- Subscriptions
- Cloud Integration Hub With File Mass Ingestion
- Rest API’s
- Demo
- Q&A

Informatica iPaaS (IDMC): Any data, any user, any pattern

Cloud Integration Hub (CIH) is part of IDMC



Challenges that companies are facing



Cost per integration going up

- Too many developers hand coding integrations
- Draining resources on point-to-point integration tasks
- Data transfer fees and API call charges going up

Data loss causes business to slow or stop

- Data loss/delay occurs as tightly coupled applications fail and stop communicating
- Downtime getting costlier by the minute
- Network bandwidth is limited

Sub-optimal integration design delaying time to market

- Business users do not have access to right data
- Not able to bring systems on-board fast enough
- Data stored far from consuming applications

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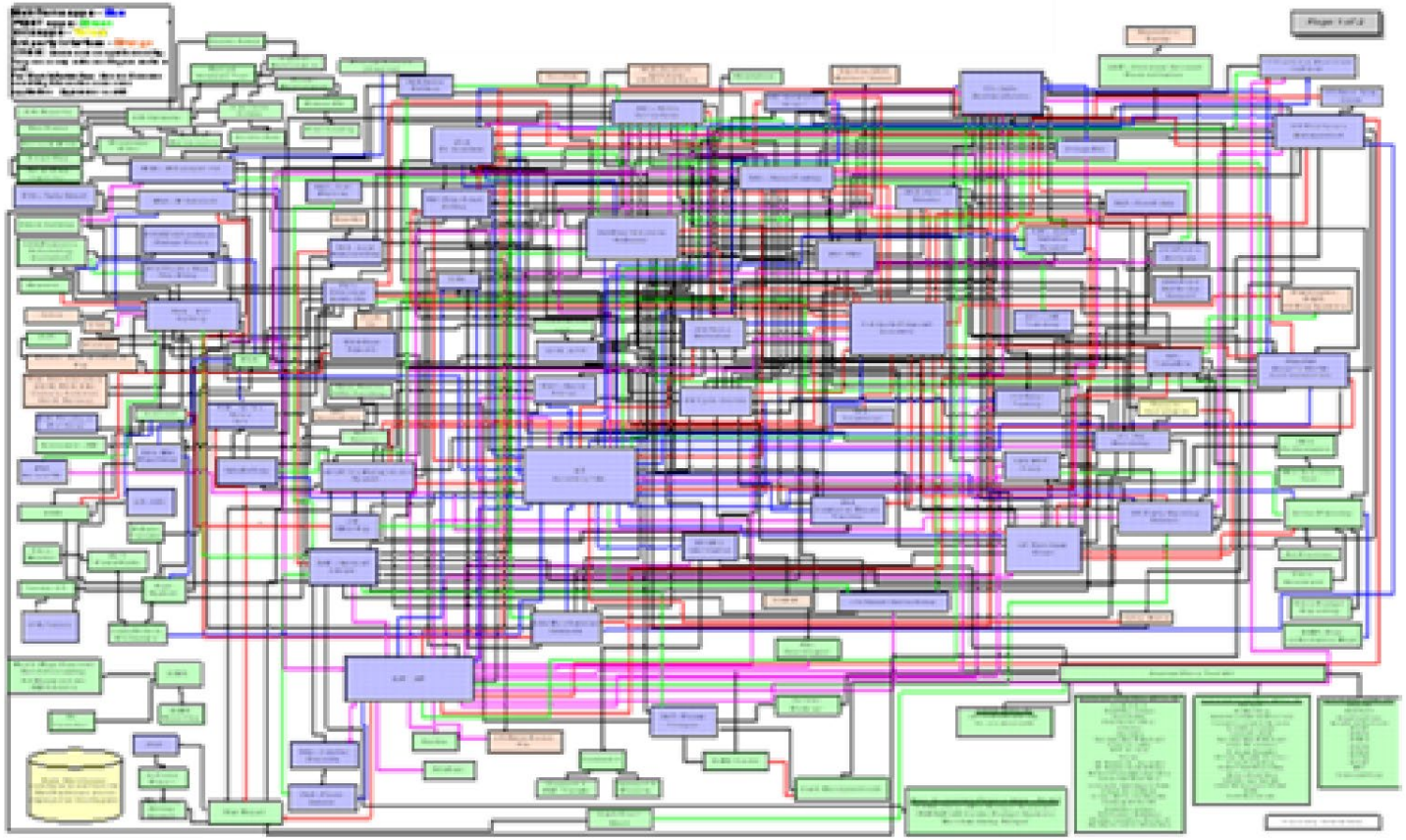
Reason 1: Cost per integration – how it's going up

Simple data flow mappings turn into a "hairball" as the integration tasks gets repetitive and complex



Point to point data integration architecture increases the number of connections and the cost

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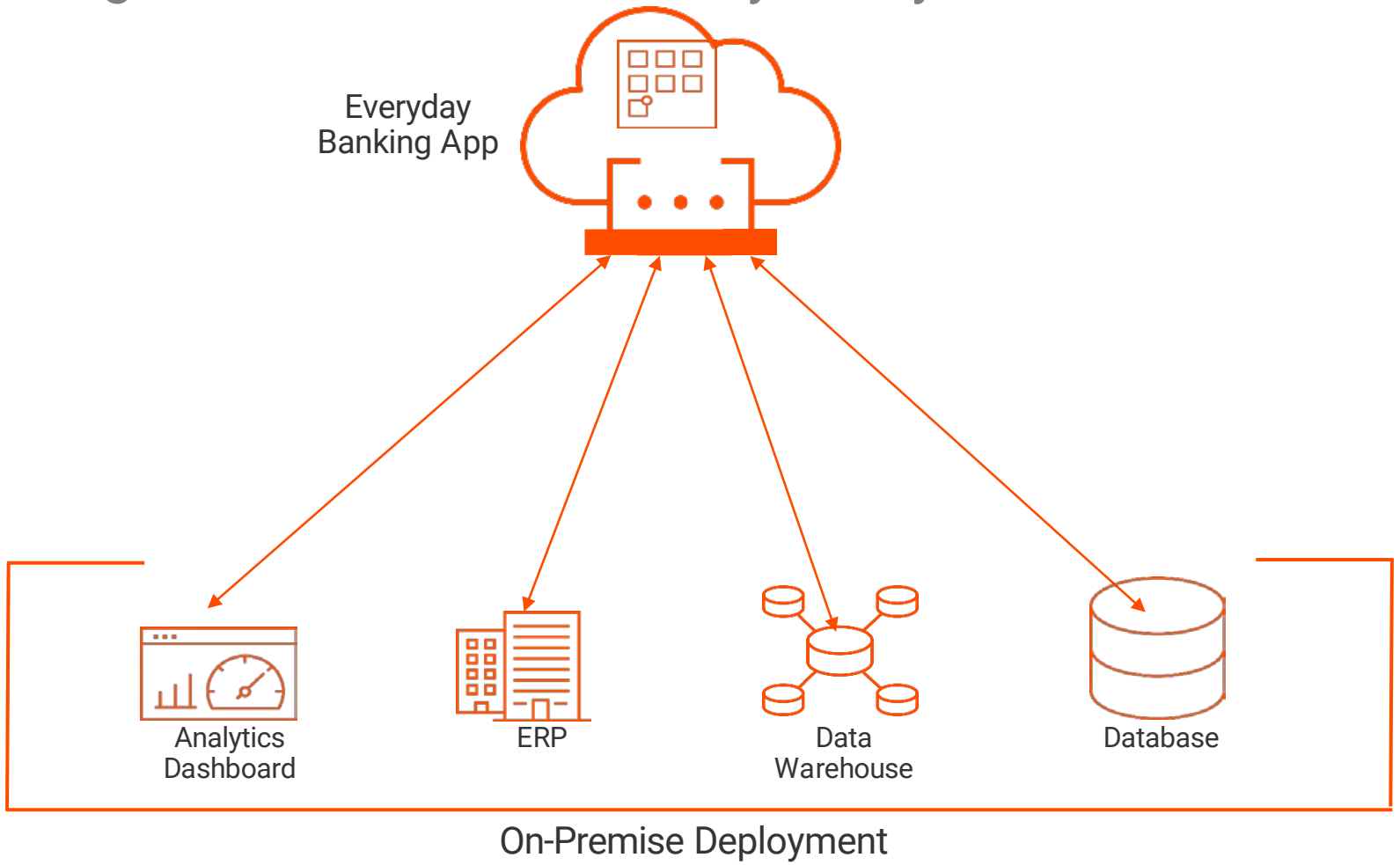
Reason 2: Cost is going up due to integration

You pay API charges and transfer fees every time you fetch data from the cloud



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Reason 3: Point-to-Point Integration is In-complete

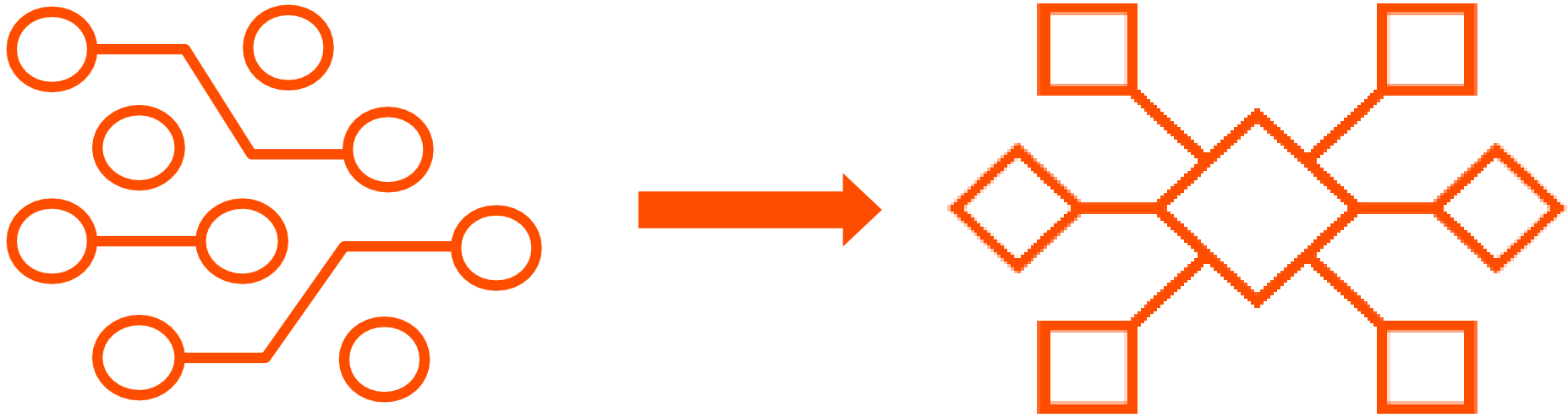
Let’s take an example of one eCommerce integration with ERP, it is usually one part of a bigger puzzle of Order & Customer Management process.

Order & Customer details between the two systems can be done with a point-to-point integration is good enough but when a simple initiative of handling customer loyalty points come into picture you need to keep a track of customers orders with another system which handles customer relationship.

This generally means you either buy or develop another point-to-point integration for the new system, which can easily be avoided with Hub & Spoke architecture.

A Hub and a Spoke integration pattern is what's needed

It improves internal efficiency by reducing the number of connections



Point to Point Integration

10 sources and 10 targets mean 100 connections

Hub n Spoke Integration

10 sources and 10 targets mean 20 connections

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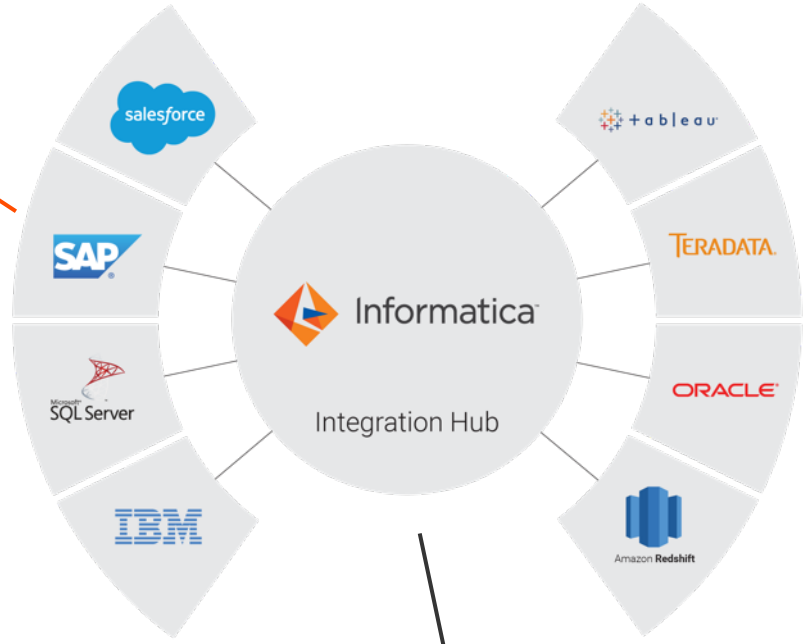
Integration Hub

Accelerate data-driven digital transformation

Reduce integration costs and improve productivity



Build resilient and reliable data maps

Speed up time to market

Unify. Govern. Share.

- Single hub to **unify** multiple clouds, big data, streaming sources and any existing systems
- **Self-Service** to increase agility and put data in the hands of the business
- Greater **visibility** and **control** of data
- Reduce the no. of interfaces each application has

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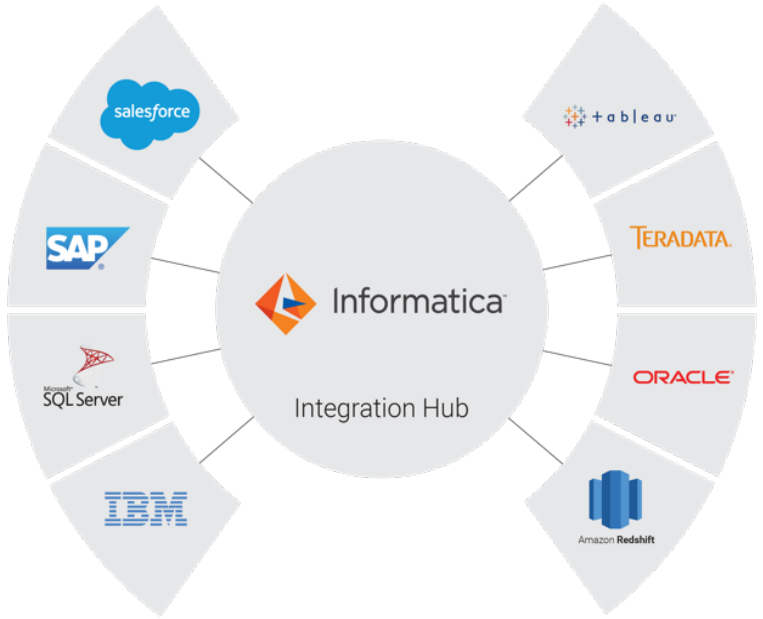
Integration Hub – Features Highlights

- **Decouple** source from target
- **Standardize** data access with canonical Topics
- **Simple** topic creation using metadata files or from a connection
- **Hosted** or **Private** Publication Repository
- Invoke **complex** cloud data integration batch mappings and tasks
- Publish and Subscribe to topics with direct **REST APIs**
- Internal **scheduler** for Pubs/Subs (External scheduler supported)
- View end to end data flow with integration **lineage**
- Track and **monitor** events with granular search
- Analyze existing DI mappings and get Hub pattern recommendations*



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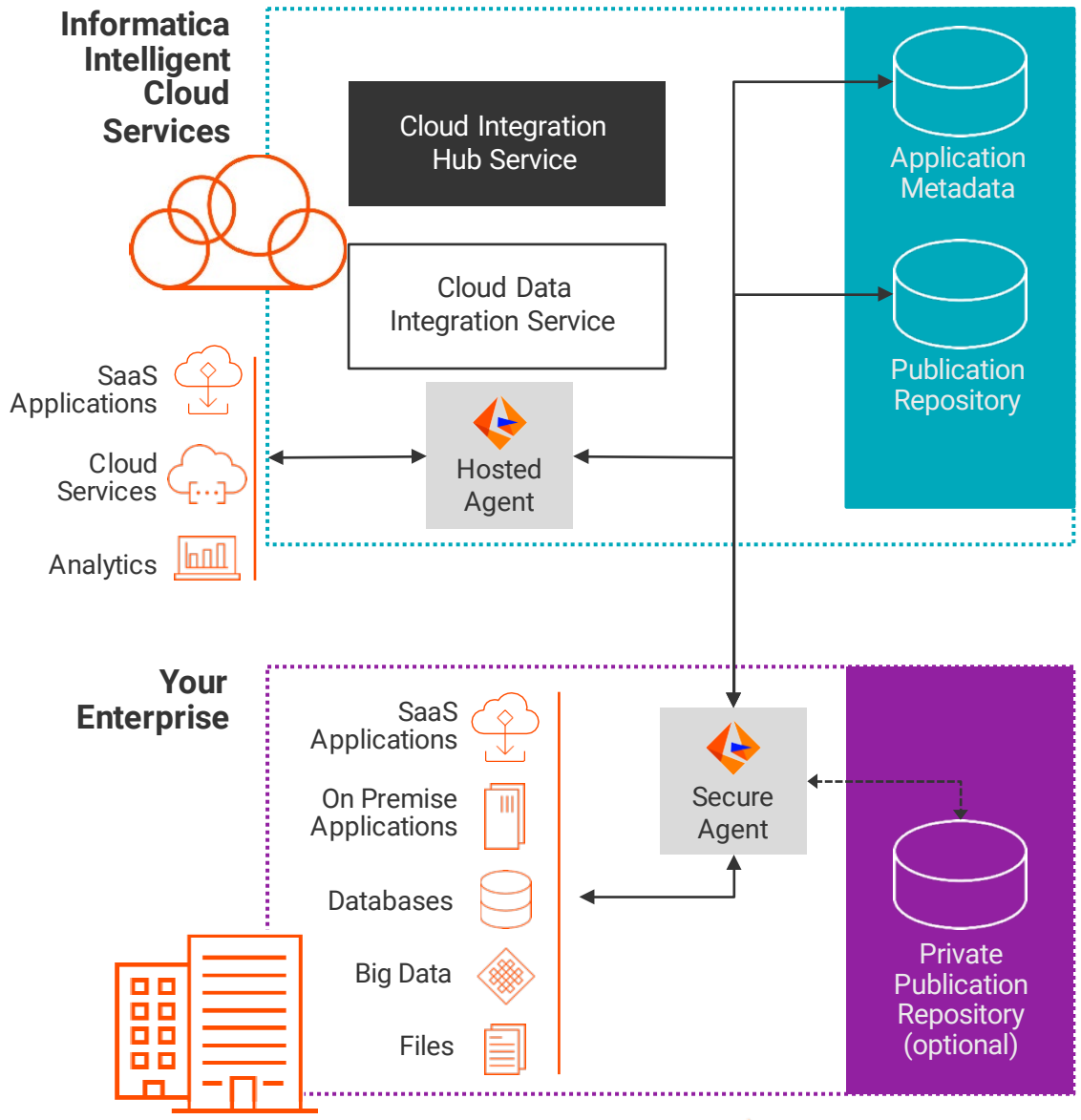
Cloud Integration Hub Architecture

- Hosted on IICS
- Support full Cloud and Hybrid mode
- Hosted or Private Publication Repository
- Local file system
- Secure and Encrypted, SOC-2 Compliant
- Source and Target De-coupling
- Multi-Latency, Batch & APIs
- Connectivity to any service or application



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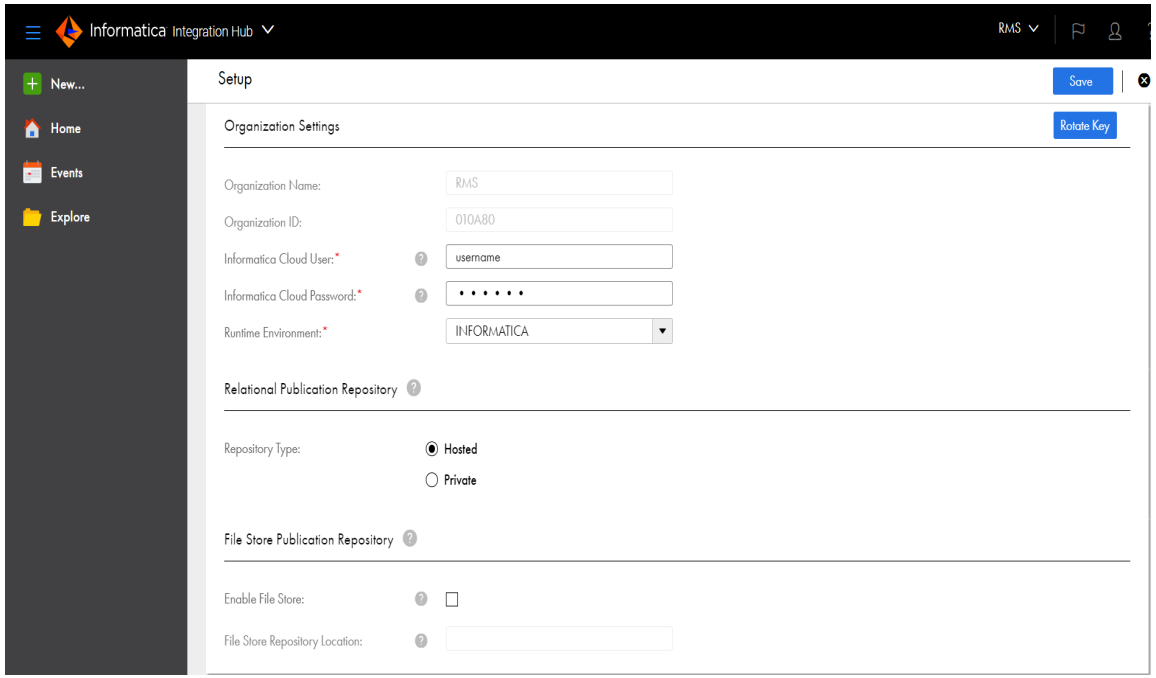
Publication Repository Service (PRS) and Types

- CIH stores topic data and files in a publication repository, according to the type of publication and subscription tasks.
- Types
  - Hosted PRS – Hosted on IICS Infrastructure. This can be used to host a relational DB.
  - Private PRS - Hosted and managed by the customer's organization on-premises or on the organization's private cloud, Can be set to Private repository mode for on-premise, customer managed mode (Oracle, MS-SQL or MySQL)
  - File Store PRS - Use a file store publication repository if you use publications and subscriptions that run file ingestion tasks



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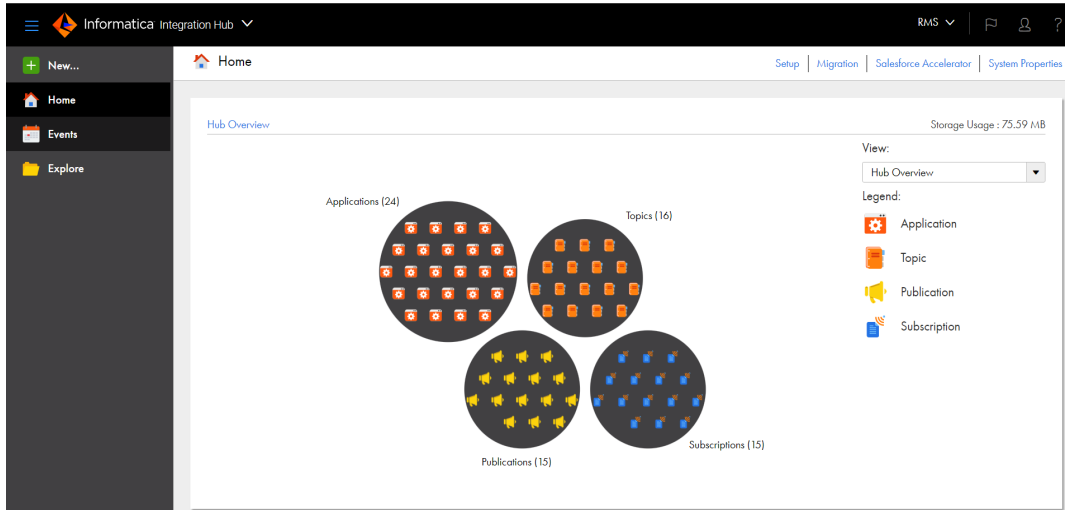
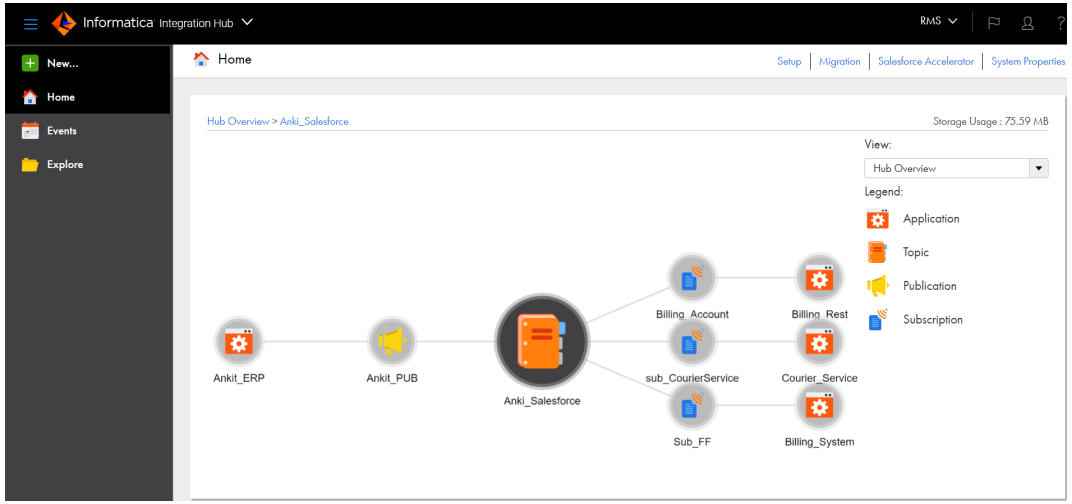
Cloud Integration Hub – Home View

- Provides an overview of Hub assets and their relationships
- Filters for most used topics, errors etc
- Clickable links for quick access to different assest pages
- Lineage view for end-to-end data flow visibility





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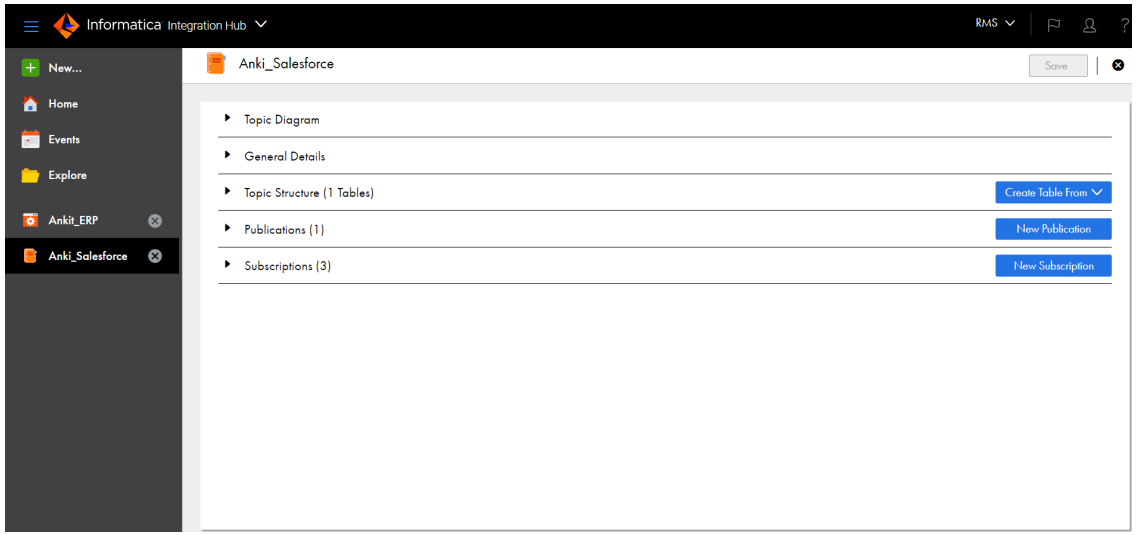
Glossary of terms for Cloud Integration Hub

- **Application** – Logical entity that represents an external service that publishes or subscribes data to/from CIH
- **Topic** – Logical object that defines a data subject area or domain
- **Publication** – Provides data to the hub via an Informatica Cloud Integration task or an API
- **Subscription** – Consumes data from the hub via an Informatica Cloud integration task
- **Publication Repository** – The underlying transient data store that hosts the Topics

Applications

- An application is a logical entity that represents any application, DB or other connection that writes to or reads from the hub.
- It is comprised of a name and description and a list of associated publications and subscriptions. It is mainly used to simplify the lineage view and tie in the pub and sub processes with business entities in the real world



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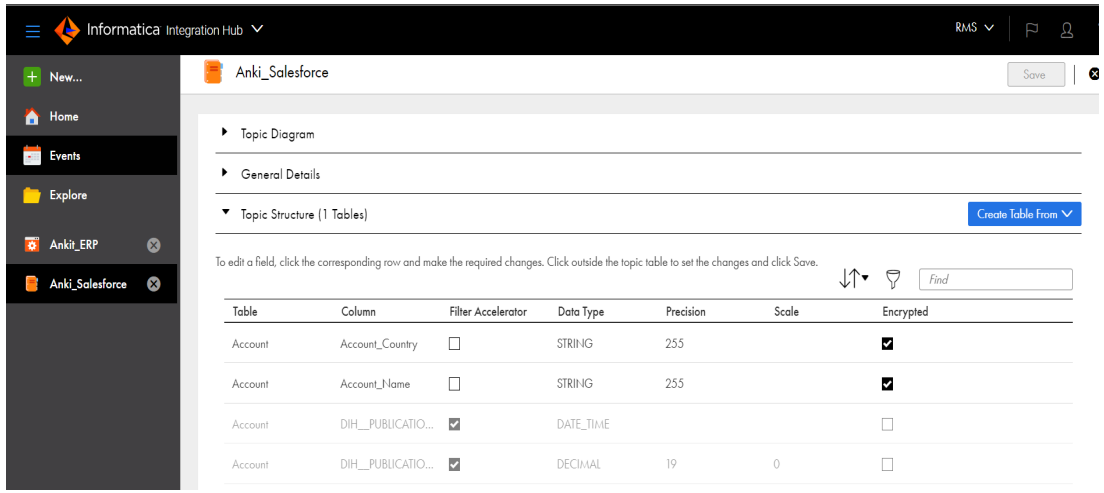
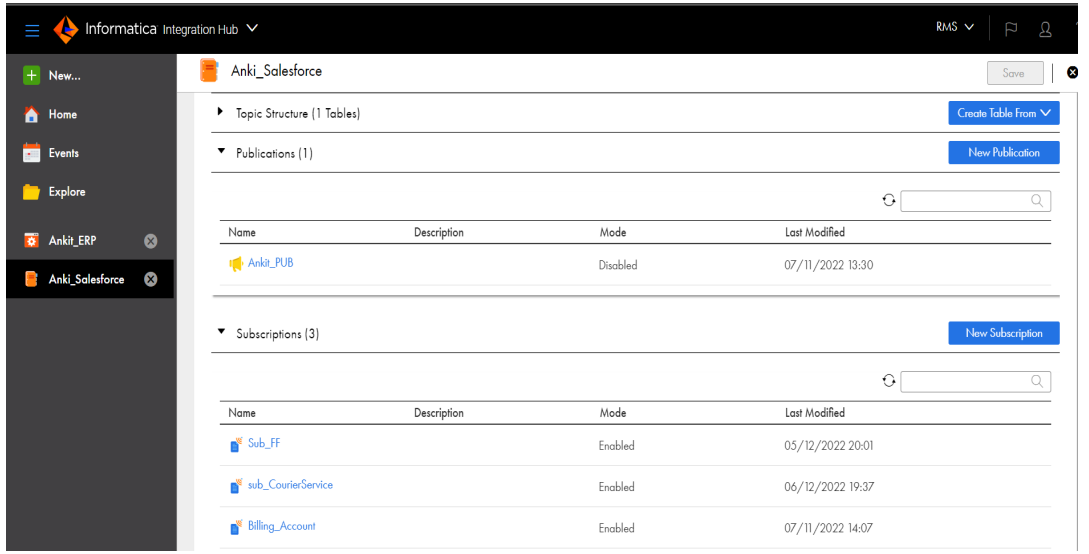
Topics

- A logical entity that holds a defined data set for a specific domain.
- The topic defines how data is written to and read from the hub.
- A topic structure is a set of one or more tables that are associated with a certain data domain
- Topic tables can be created manually from a file or from a connection schema
- Topics can be used as a standardization and facilitate consistent data proliferation across the organization
- The retention period defines the number of days that a published data set is persisted in the hub (for consumed and unconsumed data)





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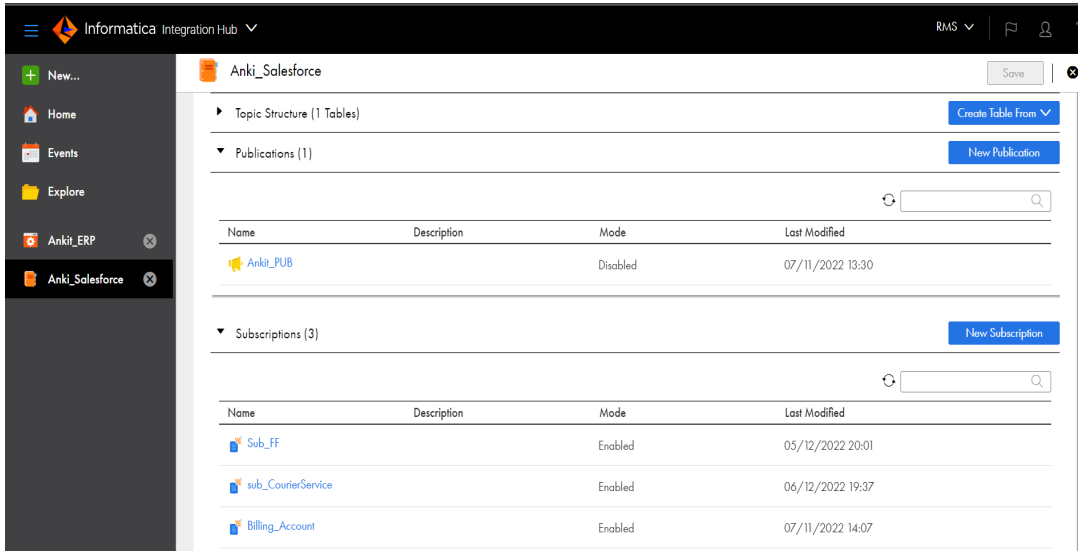
Publications

- A publication defines a dataflow and schedule for an application to write data into the hub
- A publication can be associated with either an IICS data integration task, API or a file ingestion task.
- Use API publications for event driven data processes, a DI task for batch-oriented data flow powered by Informatica flexible mapping capabilities, an FMI task to transfer source files as-is to the topic on the CIH File store PRS.
- Every publication is tied to a topic – which is the target of the publication flow



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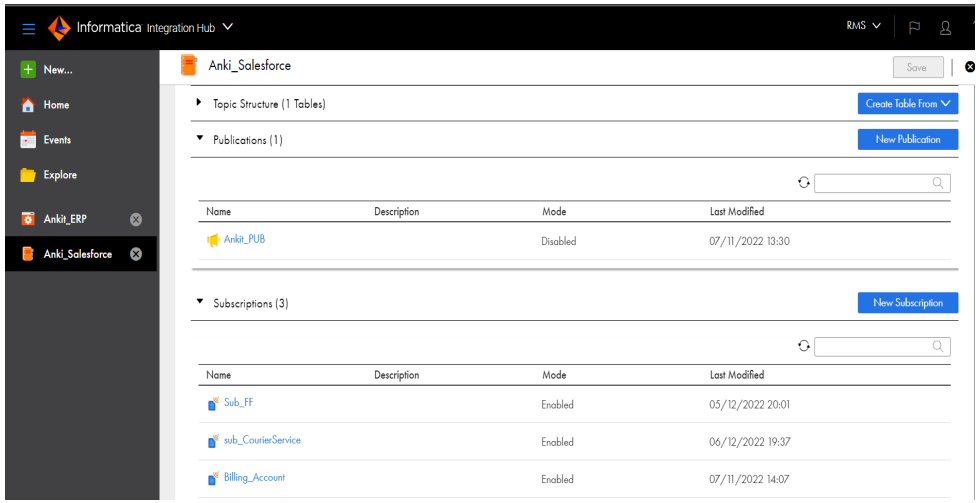
Subscriptions

- A subscription is very similar to a publication, but the data flow is other way around. It reads data from the hub and writes it to the application.
- Like a publication, you can define a subscription that is based on an API, a DI task or an FMI task
- Scheduling for DI based subscriptions can be defined for specific time, triggered when the associated publication is done or triggered by an external API
- API based subscriptions also includes an optional notification API
- In case of FMI, Mass Ingestion runs the file ingestion task, and transfers the files to the subscriber target.



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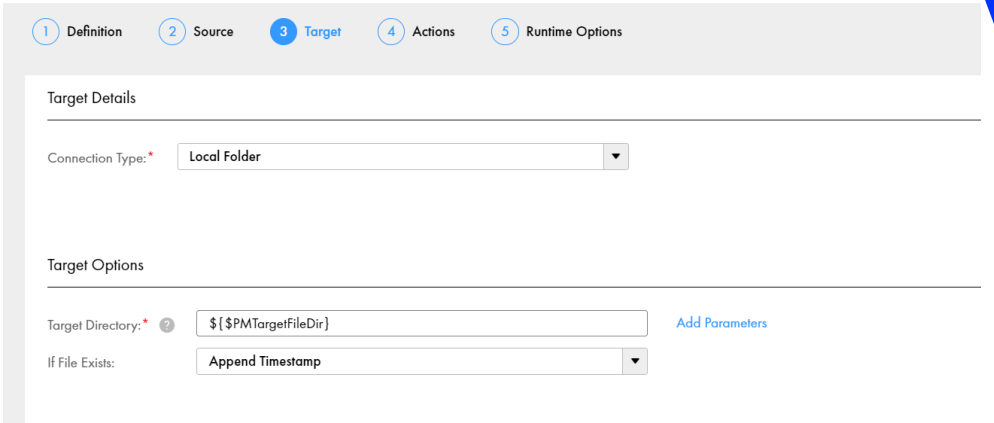
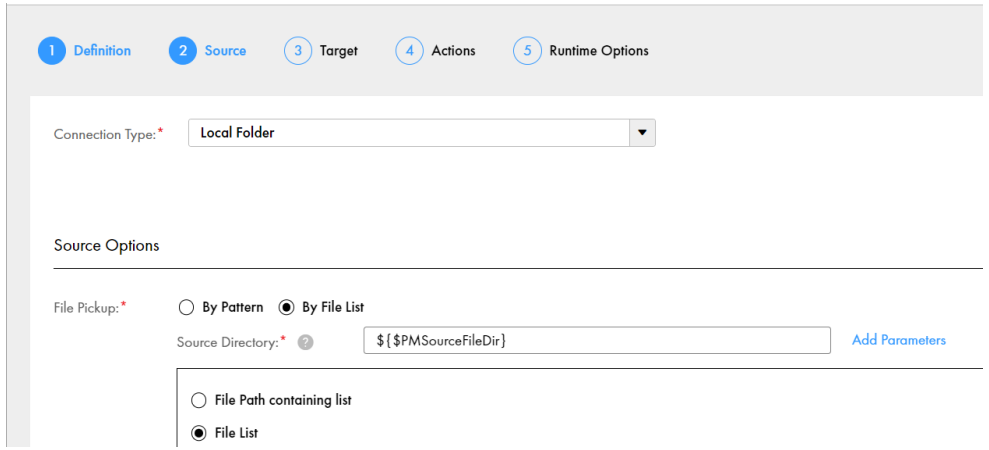
Integration Hub and File Mass Ingestion

- CIH is tightly coupled with FMI and can be used to publish and consume files as-is from the CIH using the hub & spoke / pub-sub paradigm
- Publications & Subscriptions can invoke File Mass Ingestion Tasks – where the Target or Source of the FMI asset is the relevant connection
- The pub/sub parameterization, scheduling, monitoring & reprocessing is managed by the Hub
- The status of the relevant tasks are captured in the Hub event view (including session logs & processing information)



FMI asset with a parameterized target



FMI asset with a parameterized source

Integration Hub REST API's

- Run Publication Subscription REST API – Starts a publication or a subscription, including disabled publications and subscriptions, and returns the event ID of the publication or the subscription event that Cloud Integration Hub generates
- Publish Data REST API. Publishes data directly to a topic on the Cloud Integration Hub publication repository. Returns the status of a publication process
- Consume Data REST API. Consume data directly from a topic on the Cloud Integration Hub publication repository
- Change Publication Subscription Mode REST API – toggles the mode of a publication or a subscription, that is, enables a disabled publication or subscription and disables an enabled publication or subscription
- Reprocess Event REST API. Reprocesses a publication or subscription event, including events of disabled publications and subscriptions
- Event Status REST API. Returns the status of a publication or subscription event
- Catalog REST API. Extracts data from the Cloud Integration Hub catalog, including topic, publication, and subscription metadata

Demo

Documentation

- Cloud Integration HUB
- Cloud Application Integration
- API Manager

Informatica Cloud Integration Hub is designed ....

- To bring down integration cost
- Increase data and integration reliability
- Improve IT efficiency and speed to market

Right data, in the hands of the right people, right when they need it

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Thank You

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