

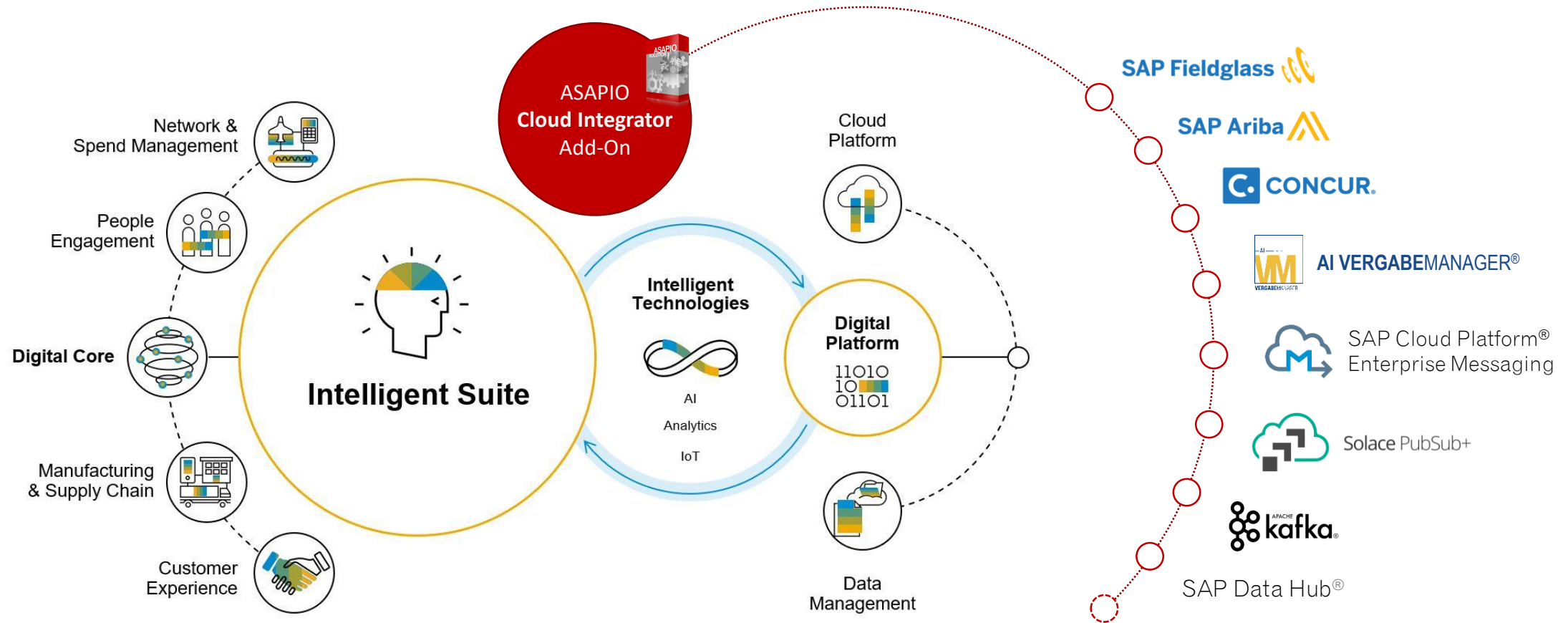
# ASAPIO Cloud Integrator and SAP Enterprise Messaging

## Connect your SAP systems to the cloud

Product Overview

17.7.2019

# Integration is crucial in today's solution landscapes: ASAPIO Cloud Integrator connects your SAP systems to the cloud



ASAPIO **Cloud Integrator** connects your SAP systems to the cloud:

- ❑ Add-on for SAP NetWeaver ABAP systems including SAP ERP and S/4HANA
- ❑ Native cloud integration without middleware
- ❑ Supports multi-backend landscapes

# ASAPIO – Your SAP Partner for Procurement Solutions, Cloud Integration and PLM

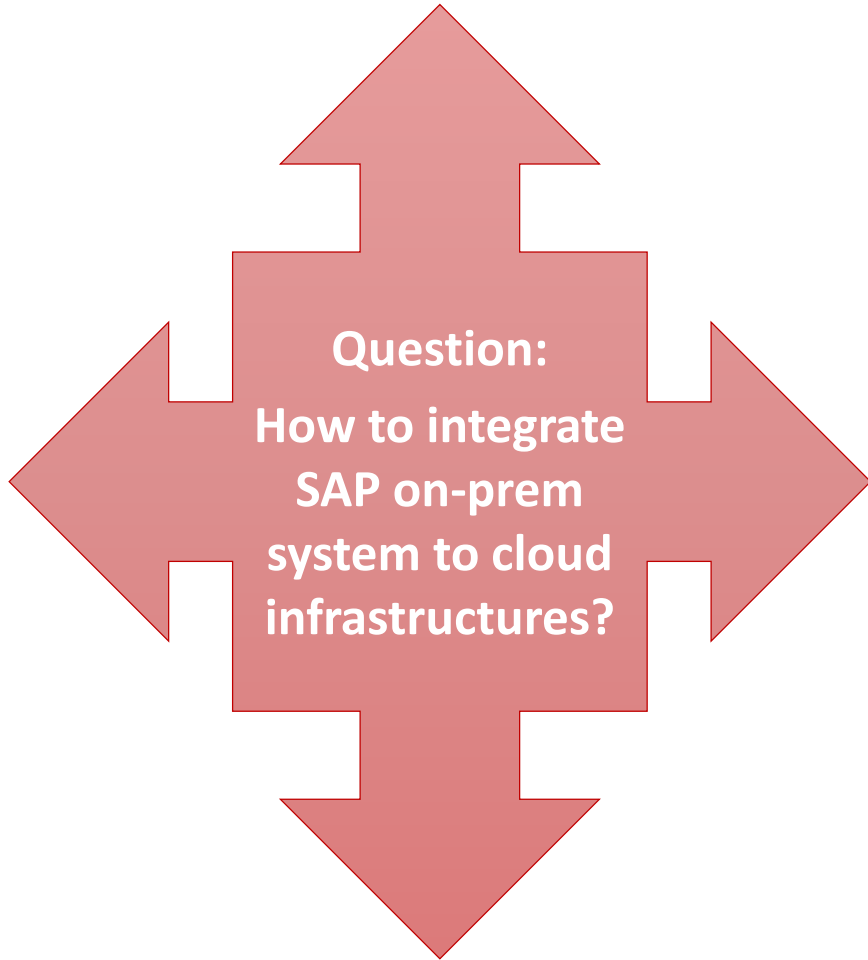
- ✓ Founded in 2003 by former SAP managers and senior consultants
- ✓ A team of over 40 SAP experts with many years of experience and in close cooperation with SAP
- ✓ Headquarters in Munich, locations in Hamburg, Heidelberg, Stuttgart and our Nearshore-Center in Voronezh/Russia
- ✓ Visit us at [asapio.com](https://www.asapio.com) for more information



## Our scope of services:

- SAP S/4HANA Sourcing & Procurement, SAP SRM, SAP ERP
- SAP Ariba, SAP Fieldglass and other cloud solutions
- Cloud Integration with ASAPIO Cloud Integrator
- SAP Automotive Solutions and SAP PLM
- Fiori, ABAP, Web Dynpro and other developments
- ASAPIO Add-Ons for SAP Procurement solutions

# Business Case: Why choose ASAPIO Cloud Integrator?



## Requirement:

Digital enterprise architectures typically require to collect all available data from data **producers**, allow for highly scalable and use-case-specific **data processing** with **microservices** and fast data provisioning to all kind of **consumers** and **front-ends**.

## Solution:

**ASAPIO Cloud Integrator** connects your on-prem SAP systems to cloud applications and acts as **Data Integration Layer** for collection, aggregation, partitioning, provisioning and communication of all kind of SAP data.

# Enable your SAP systems for digital integration: ASAPIO Cloud Integrator and SAP Enterprise Messaging

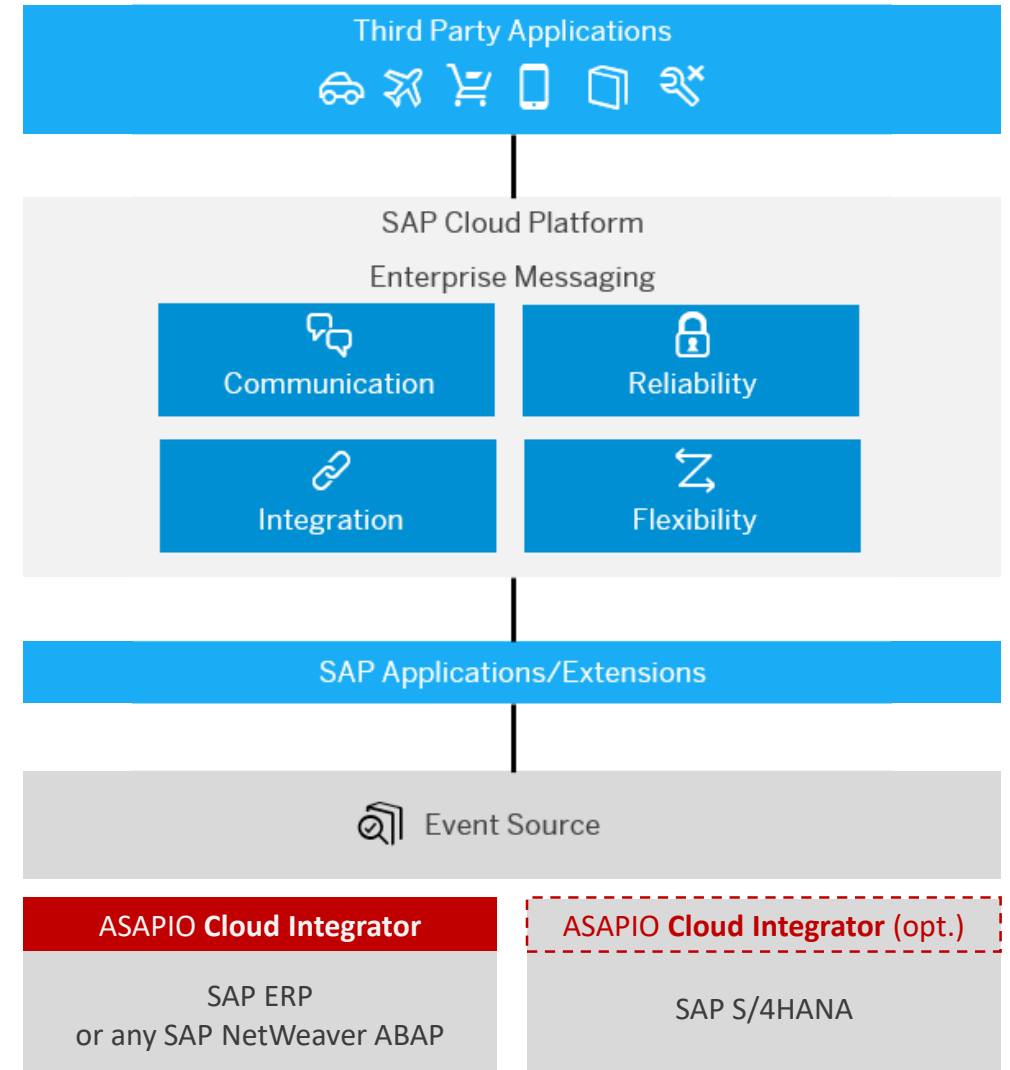
ASAPIO **Cloud Integrator** – product positioning:

**for SAP ERP systems:**

- ASAPIO Cloud Integrator connects SAP ERP systems to SAP Enterprise Messaging on SAP Cloud Platform
- for SAP ERP (and most systems based on SAP NetWeaver ABAP), ASAPIO Cloud Integrator enables it to “talk” natively with SAP Enterprise Messaging.

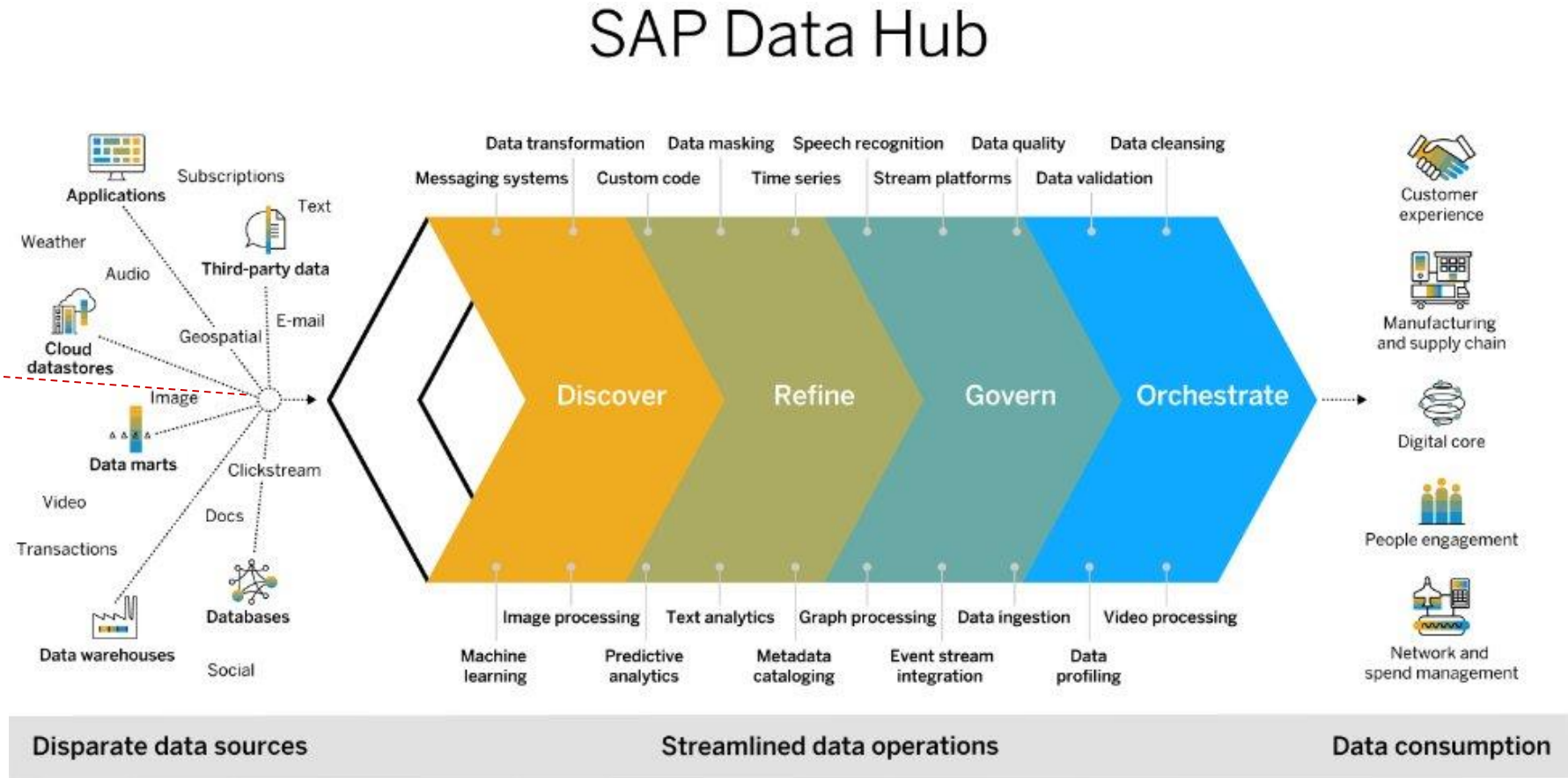
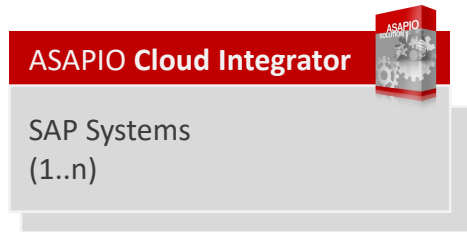
**for SAP S/4HANA systems:**

- S/4HANA has built-in connectivity for SAP Enterprise Messaging
- ASAPIO Cloud Integrator can optionally be used on S/4HANA systems, e.g. to enable **bulk loads** of mass data



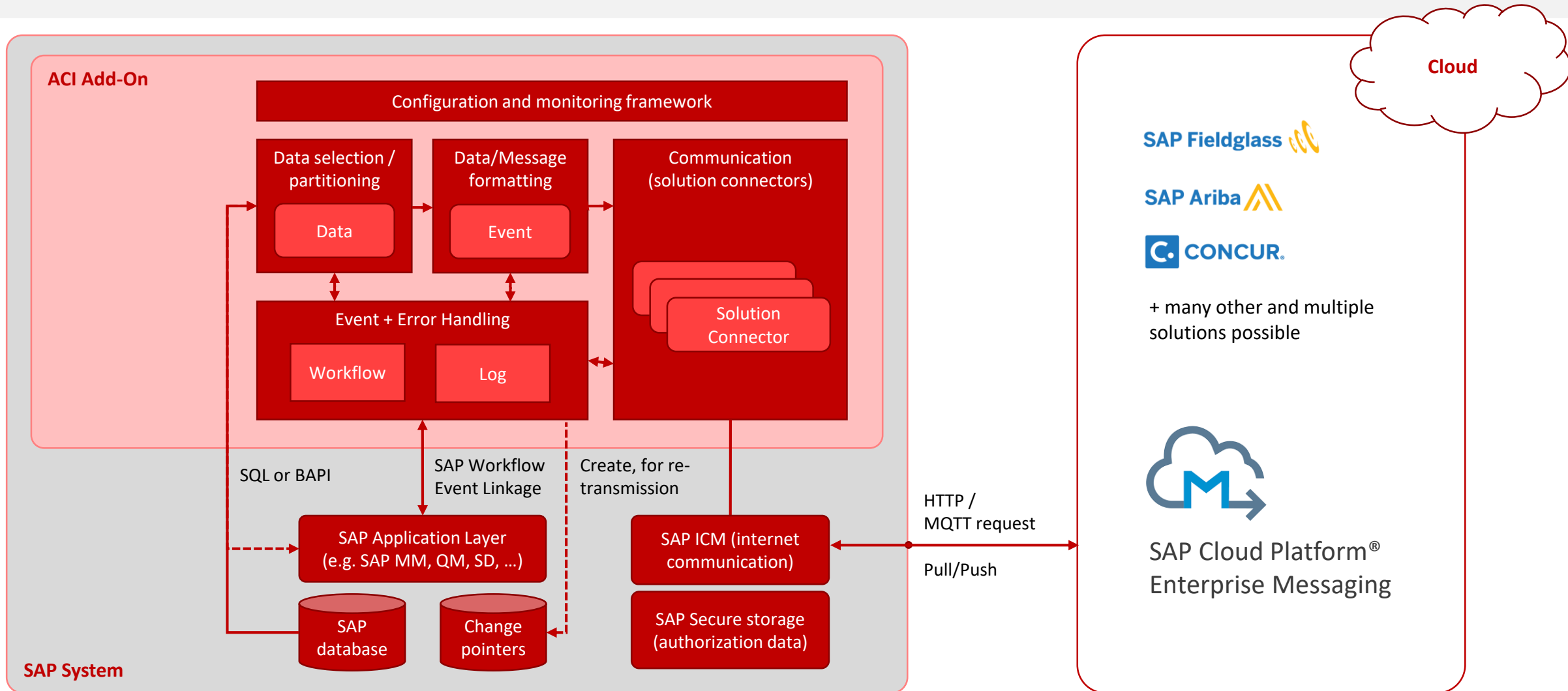
# Integrate, orchestrate and govern your data with SAP Data Hub.

## ASAPIO Cloud Integrator and SAP Data Hub





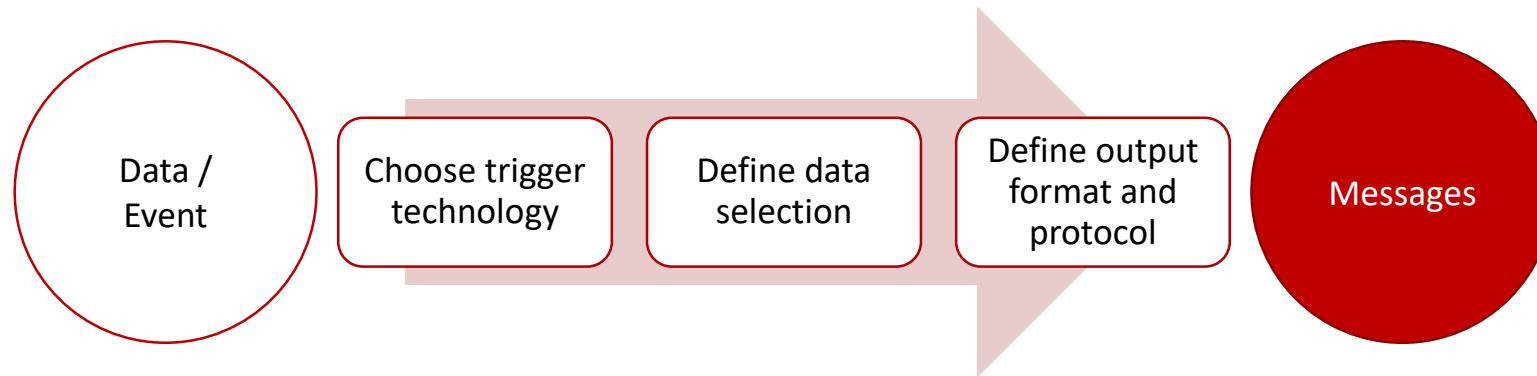
# ASAPIO Cloud Integrator: Application Architecture



# Enterprise Messaging with ASAPIO Cloud Integrator

You can use ASAPIO Cloud Integrator to model any kind of event for enterprise messaging:

1. Choose a trigger technology
2. Choose or develop a data selection module/method
3. Choose or develop an output format and protocol
4. Register Event





# ASAPIO Cloud Integrator: Key Benefits Of Our Architecture

## ASAPIO Cloud Integrator is unique in many ways:

- ACI is an add-on to your SAP systems and operates within your established SAP infrastructure in all aspects (application management, security, logging etc.)
- ACI has a modular and open architecture: we deliver content packages for data extraction and mapping and connectors for the different cloud solutions.
- ACI allows to enhance or create custom content (extractors, formatters) and connectors
- ACI uses highly scalable techniques to bring your data into the cloud:
  - event based triggers
  - delta loads / change pointers
  - parallel data processing (in multiple SAP work processes)
  - data splitting
  - direct SQL reads or BAPI calls for data selection possible
- ACI supports interface clustering for efficient provisioning to multiple cloud applications
- ACI does not require any middleware

*Please notice: Application of general features of ACI framework listed above varies for the different content packages.*

# ASAPIO Cloud Integrator: Feature overview (I)

## Supported trigger technologies:

- SAP Workflow Event Linkage: direct ACI call through SAP RFC connection (e.g. for single events)
- Scheduled processing of SAP change pointers (data enrichment, formatting for cloud application, communication)

## Processing options:

- For **low volume** use-cases, a connection via HTTP REST API is possible (without multi-threading)
- For bulk loads and **high-volume** use-cases, ACI supports multi-threading for packaged data retrieval and cloud communication calls:
  - ACI supports use of SAP server groups to control the load of the ABAP system, to minimize risk of system overload e.g. after mass data changes in the application system
  - MQTT for data streaming is optionally possible

# ASAPIO Cloud Integrator: Feature overview (II)

## Supported connection types:

- HTTP REST API
- MQTT via Websockets (min. NW 7.40 SP08)

## Supported monitoring and features:

- ACI offers a monitoring transaction to view all logged information
- ACI monitoring includes statistical and graphical analysis of data volume, times and errors
- Logging of HTTP return codes and messages
- Logging of requests (RAW data) can be switched on/off in app customizing
- In case of errors: retransmission control through SAP change pointers (to ensure event delivery)
- Notification / Escalation in case of multiple errors to system administrators or via SAP workflow possible

# ASAPIO Cloud Integrator: Configuration

The screenshot displays the SAP Customizing Implementation Guide (IMG) interface. The main menu includes 'Implementation Guide', 'Edit', 'Goto', 'Additional Information', 'Utilities', 'System', and 'Help'. The toolbar contains various navigation and utility icons. The current view is 'Display IMG'. Below the toolbar, there are navigation options: 'Existing BC Sets', 'BC Sets for Activity', 'Activated BC Sets for Activity', 'Release Notes', 'Change Log', and 'Where Else Used'. The 'Structure' pane on the left shows a tree view of the configuration structure. The 'ASAPIO Cloud Integrator' folder is expanded, revealing a list of configuration tasks under 'ALE Delta Customizing' and other categories. A red box highlights the 'ALE Delta Customizing' tasks, and a red callout box points to this section with the text 'Built-in to SAP Customizing Implementation guide'.

Implementation Guide Edit Goto Additional Information Utilities System Help

Display IMG

Existing BC Sets BC Sets for Activity Activated BC Sets for Activity Release Notes Change Log Where Else Used

Structure

- SAP Customizing Implementation Guide
  - ASAPIO Cloud Integrator
    - ALE Delta Customizing
      - Message Types in ALE for Cloud Interface
      - Definition of change relevant fields per message type
      - Change Pointer Deletion
      - Activate Change Pointers for Message Types
      - Activate Change Pointers - Generally
      - Additional Data for Message Type
      - Determine Change Pointer Target for Message Type
    - ACI: Connection Customizing File Transfer
    - ACI: Connection Customizing (via web services)
    - ACI: Maintain Cloud Adapter
    - ACI: Cloud Codepages
    - ACI: Import Events
    - ACI: Multi Backend System Plugins
    - ACI: Set the cloud connection password
    - ACI: Reset of change pointers for table BDCP2
  - ASAPIO Ariba Catalog Upload
  - Open Text Archiving and Document Access for SAP Solutions
  - SAP Field Service (Mobile App)
  - Open Text Business Suite for SAP Solutions
  - OpenText Travel Receipts Management
  - Retail Workforce Management

Built-in to SAP Customizing Implementation guide

# ASAPIO Cloud Integrator: Built-in Monitoring and Analytics

ASAPIO ACI Monitor

O/I	Cloud Instance Name	Replication Object	Timestamp	Cloud Response Code	Cloud Response	Variant	User	Σ	Bytes	Data preparation time
▶	AI_PROTO	DOWNLOAD_PARTLIST	14.06.2019 13:27:10	200			MJO		0	00:00:00
▶	AI_PROTO	DOWNLOAD_PARTLIST	14.06.2019 13:27:10	200			MJO		0	00:00:00
▶	AI_PROTO	DOWNLOAD_PARTLIST	14.06.2019 13:27:09	200			MJO		0	00:00:00
▶	AI_PROTO	DOWNLOAD_PARTLIST	14.06.2019 13:27:09	200			MJO		0	00:00:00
▶	AI_PROTO	DOWNLOAD_PARTLIST	14.06.2019 13:27:08	200			MJO		0	00:00:00
▶	AI_PROTO	DOWNLOAD_PARTLIST	14.06.2019 13:27:07	200			MJO		0	00:00:00

SAP Business Graphics

Graphic Edit Goto Options Extras Help

2D View 3D View Groups Left Sel. Up Sel. Down Right First Selection

ASAPIO Cloud Integrator Statistics - Data Volume

Cloud Instance Name

Time Period

Time Period
10.06.2019
11.06.2019
12.06.2019
13.06.2019
14.06.2019
15.06.2019
16.06.2019
17.06.2019
18.06.2019
19.06.2019

KB ( )

Cloud Instance Name

Time Period

10.06.2019 11.06.2019 12.06.2019 13.06.2019  
 14.06.2019 15.06.2019 16.06.2019 17.06.2019  
 18.06.2019 19.06.2019 20.06.2019 21.06.2019  
 22.06.2019 23.06.2019 24.06.2019

Running SAP Business Graphics...

ERD 731 R/3 R/3

# ASAPIO Cloud Integrator

## Product Highlights

### Connect applications, services, systems

Connect applications, services, and systems seamlessly across different landscapes using asynchronous communication.

- ✓ Initial Data Loads
- ✓ Incremental Data Loads
- ✓ Cross-system aggregation

### Communicate reliably at scale

Reliably send and receive messages through applications, services, and systems using standard messaging protocols and exchange patterns.

- ✓ End-to-End Monitoring
- ✓ Message re-processing
- ✓ Secure communication

### Event-driven extensions for SAP systems

Build applications and extensions that can react to events from your SAP system, out-of-the-box.

- ✓ Unlimited extensibility of events
- ✓ Easy to add to flexible framework
- ✓ Utilization of ALE change pointer

### High throughput of messages, low latency

The messaging infrastructure decouples communication to scale and handle unexpected peaks in data traffic.

- ✓ Configurable frequency
- ✓ Configurable package sizes
- ✓ Parallel processing

# ASAPIO Cloud Integrator Offering

## ASAPIO delivers the one-stop-solution for cloud connectivity!

Package contains:

- **Connectors** for your cloud solution, e.g. SAP Cloud Platform Enterprise Messaging
- **Add-On - instant and convenient** deployment
- **Monitoring** for **extraction** and **communication**
- **Data extraction templates** for your customization

### Key benefits:

- ✓ Ready-to-run
- ✓ Packaged add-on for **SAP ERP and S/4HANA**
- ✓ Available for **multi-backend** scenarios
- ✓ Extensive features for data extraction, **enhancements**, mapping and monitoring
- ✓ **Maintenance** through ticket system available (English, German), **free updates** included
- ✓ Both subscription or up-front license model available
- ✓ Future-proof: ACI also works with SAP Fieldglass, SAP Ariba and many other cloud solutions



### ASAPIO Cloud Integrator

+ Connector package

- ✓ Add-On solution
- ✓ Maintenance
- ✓ Subscription or up-front license model



# FAQ / Typical questions

*Is ACI a middleware?*

- No, ACI is not a middleware. ACI is a connectivity add-on for SAP systems. It extracts, filters and formats SAP data consumable to the connected cloud solution.

*Is ACI ready for big data?*

- Yes, ACI supports event-based communication, delta loads and multi-threading. This allows large amounts of data and high-frequency.

*Can ACI aggregate data from multiple SAP systems?*

- Yes, ACI can e.g. aggregate data from multiple SAP instances (central or decentral deployment possible) and ACI supports pre-fixing of data.

*Is ACI an SAP product?*

- ACI is a partner product developed and offered by ASAPIO GmbH & Co. KG, Munich / Germany

*Is ACI available for cloud-to-cloud scenarios?*

- Not yet, currently we focus on bringing SAP on-prem customers to the cloud by providing connectivity services.

*Is there SAP standard integration available for SAP Cloud Platform*

- Yes, but not for SAP ERP. For S/4HANA, standard integration scenarios are available for SAP Cloud Platform Enterprise Messaging.



# Contact

Peter Holtkamp

Managing Partner

**ASAPIO GmbH & Co. KG**

Landsberger Str. 400  
81241 Munich / Germany

Phone +49 (0)89 4520-744-0

Fax +49 (0)89 4520-744-2

Email [info@asapio.com](mailto:info@asapio.com)

<http://www.asapio.com>

# Disclaimer



These documents are provided by Asapio GmbH & Co. KG (hereinafter ASAPIO) and are for informational purposes only. ASAPIO assumes no liability or warranty for errors or omissions in this publication. ASAPIO only provides products and services as expressly set forth in the agreement for the respective products and services. None of the information contained herein is to be interpreted as an additional guarantee.

In particular, ASAPIO is under no obligation to follow any of the business operations outlined in this publication or any accompanying presentation, or to develop or publish features hereof.

The information contained in this publication does not constitute a promise, promise or legal obligation to deliver software. All forward-looking statements involve various risks and uncertainties that could cause actual results to differ materially from expectations. The forward-looking statements reflect the point in time when they were made. The reader is advised not to give excessive weight to these statements or to rely on them when making purchasing decisions.

Trademark Information: SAP, SAP SRM, SAP ERP, SAP Business Suite, SAP Ariba, SAP Fieldglass and other SAP product or technology names are the trademarks or registered trademarks of SAP SE in Germany and several other countries.