

Scalable business architectures with SAP integration: Event Messaging with SAP and ASAPIO Cloud Integrator

Product Overview

1.10.2019

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

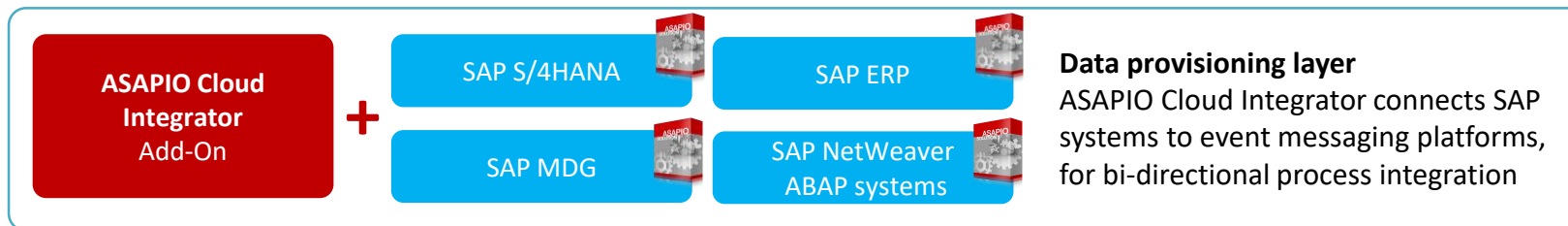
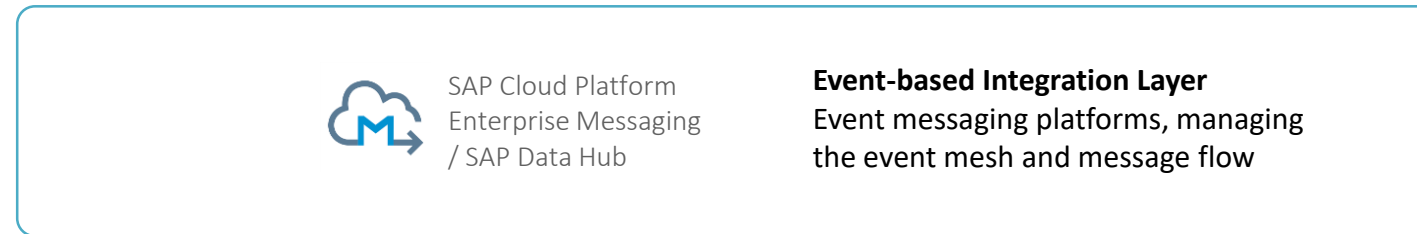


Our scope of services:

- 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

Enable your SAP systems for digital integration: ASAPIO Cloud Integrator for Event Messaging

ASAPIO Cloud Integrator enables your SAP system to natively connect to state-of-the-art event messaging solutions. This allows you to realize innovative business use-cases, involving SAP master and process data, bi-directional.



Enable your SAP systems for digital integration: ASAPIO Cloud Integrator supports SAP enterprise messaging technology

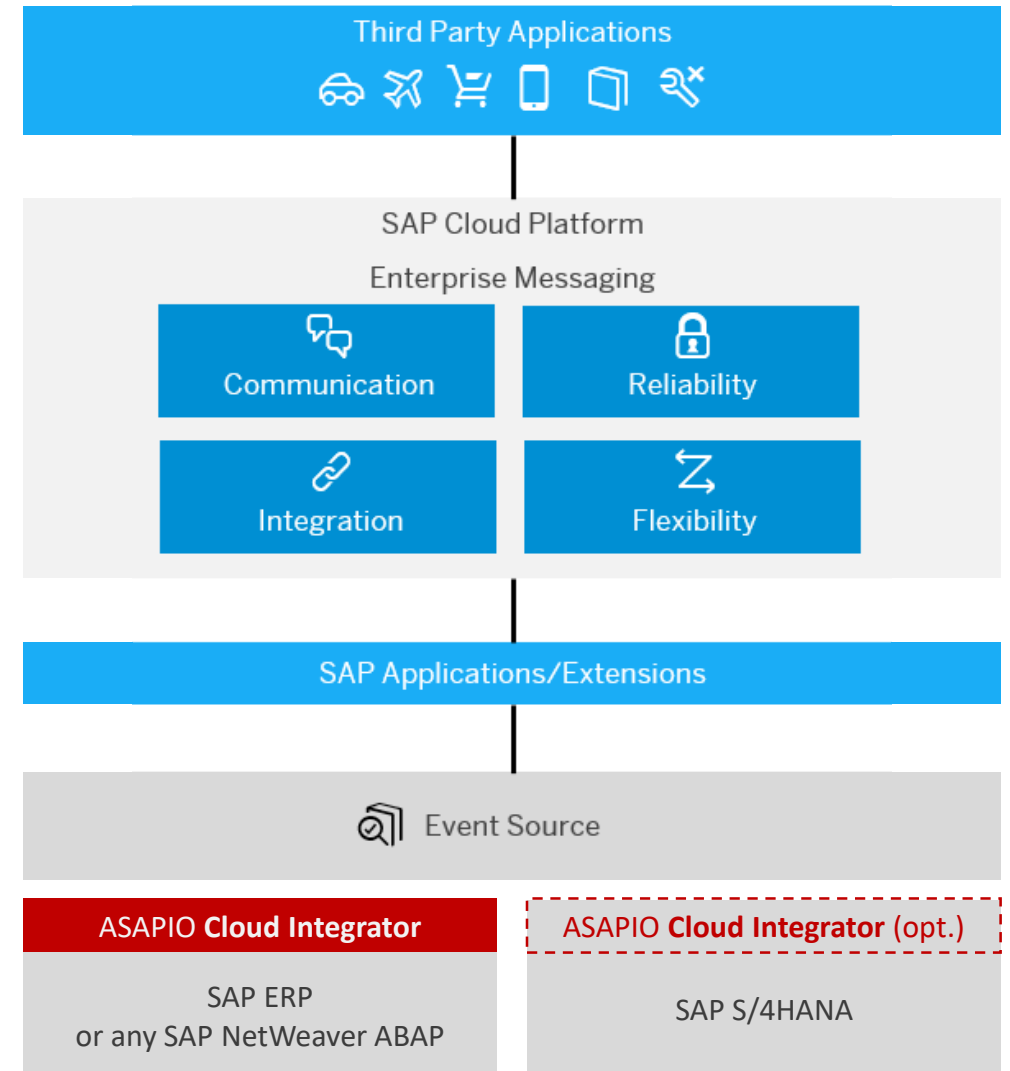
ASAPIO Cloud Integrator – product positioning:

for SAP ERP systems:

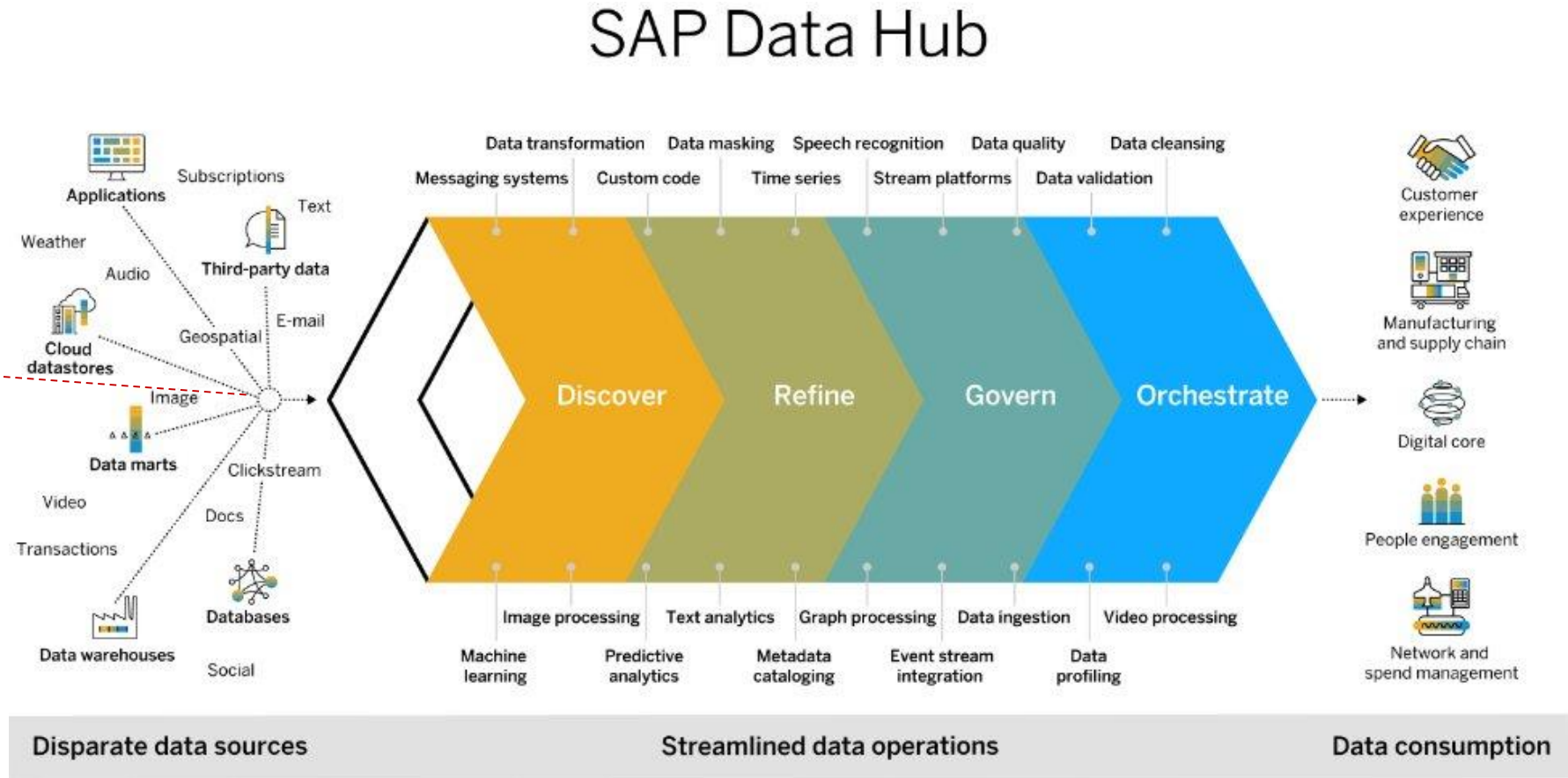
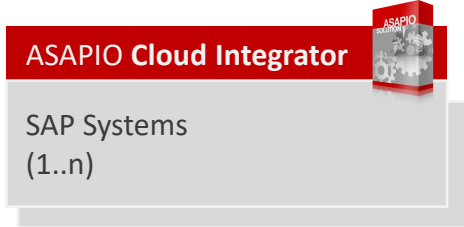
- ASAPIO Cloud Integrator connects SAP ERP systems to SAP Enterprise Messaging on SAP Cloud Platform
- for SAP ERP (and most systems based on SAP NetWeaver ABAP), ASAPIO Cloud Integrator enables it to “talk” natively with SAP Enterprise Messaging.

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: Use ASAPIO Cloud Integrator to connect to SAP Data Hub



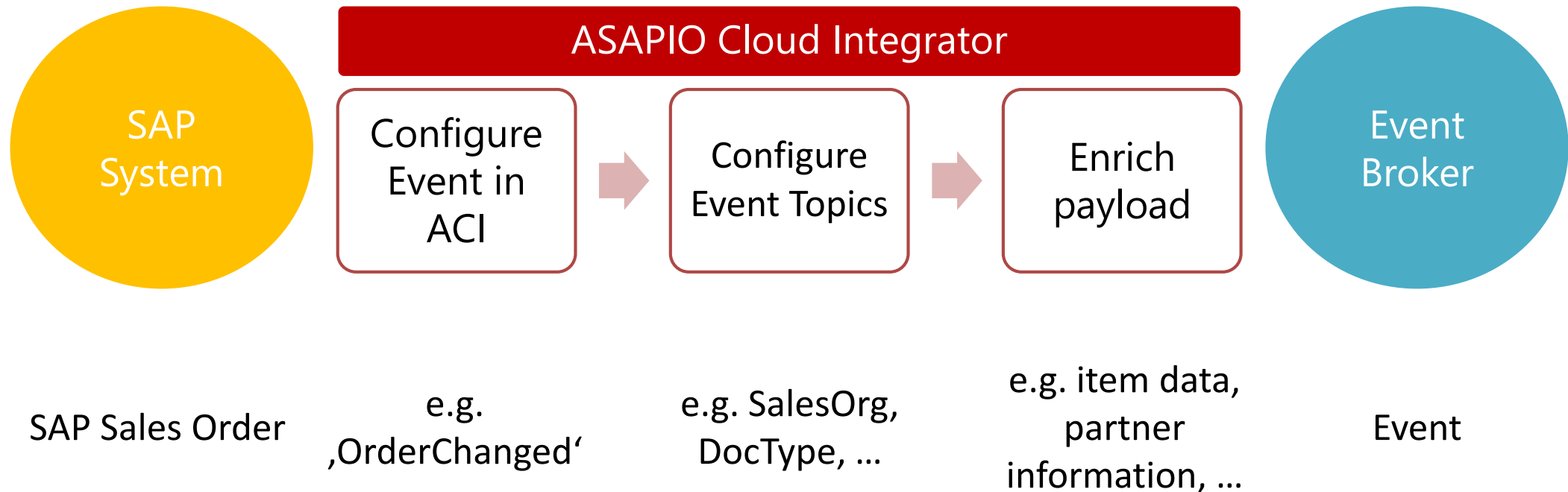
ASAPIO Cloud Integrator for Event Messaging: Business use-cases / examples

Just a few example of the wide range of applications which are possible with event infrastructures:

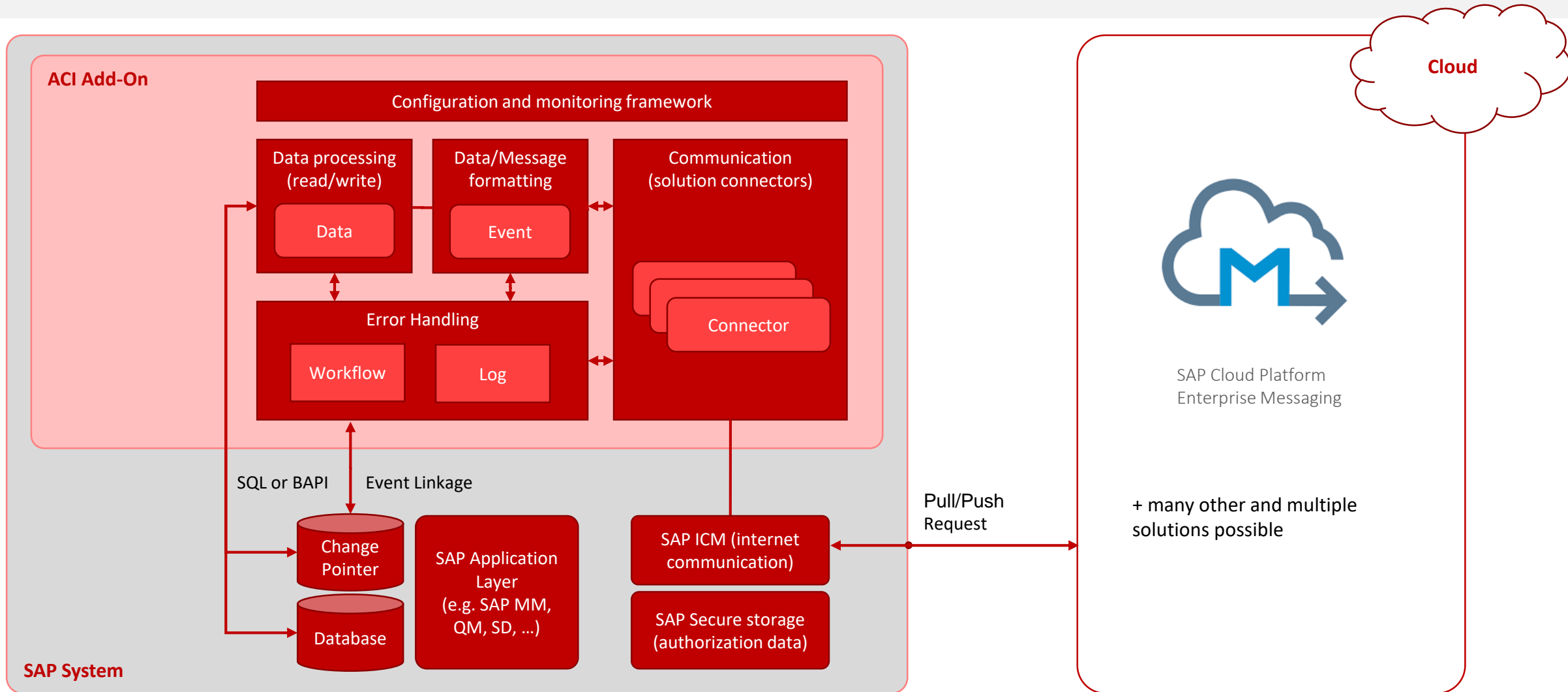
- Sales: Provide sales order status and tracking info to customers through websites and mobile apps
 - Sales: Connect consumer after-sales applications with SAP SD or CRM
 - Procurement: Provide purchase order information to employee apps
 - Logistics: Report quality management issues (e.g. from SAP QM) to quality cockpit solutions in real-time
 - IoT: Failing equipment / sensor data can create SAP maintenance order
 - Infrastructure: Provide SAP process data for data lakes
 - Analytics: bring SAP data into cloud analytics or data mining solutions
- + many more...

ASAPIO Cloud Integrator for Event Messaging: How to create events with ASAPIO Cloud Integrator?

- Building an event message from SAP data is simple with ASAPIO Cloud Integrator.
- Example: publish SAP sales orders on changes



ASAPIO Cloud Integrator: Application Architecture



ASAPIO Cloud Integrator Offering

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

Package contains:

- **Connectors** for your enterprise messaging solution
- **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 and other SAP NetWeaver systems, e.g. SAP MDG**
- ✓ 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 included
- ✓ Subscription



Solution details

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 or to on-prem event brokers:
 - 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 outbound AND inbound process and data flows
- ACI supports interface clustering for efficient provisioning to multiple cloud applications
- ACI does not require any middleware

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 (currently not released)

ASAPIO Cloud Integrator: Feature overview (II)

Supported connection types:

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

Supported monitoring and logging 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 title bar reads 'Display IMG'. Below the title bar, 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 objects. The 'ASAPIO Cloud Integrator' folder is expanded, revealing a list of configuration objects under 'ALE Delta Customizing'. A red box highlights this list, and a red callout box points to it with the text 'Configurable from within SAP Customizing Implementation Guide'. The list of objects includes:

- 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

Other objects in the tree include 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, and Retail Workforce Management.

Configurable from within SAP Customizing Implementation Guide

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

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 allows pre-fixing of data, e.g. to combine overlapping master data from multiple source systems.

Is ACI an SAP product?

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

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

<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.