SAP Cloud Platform Integration

Product Overview

SAP
February, 2018

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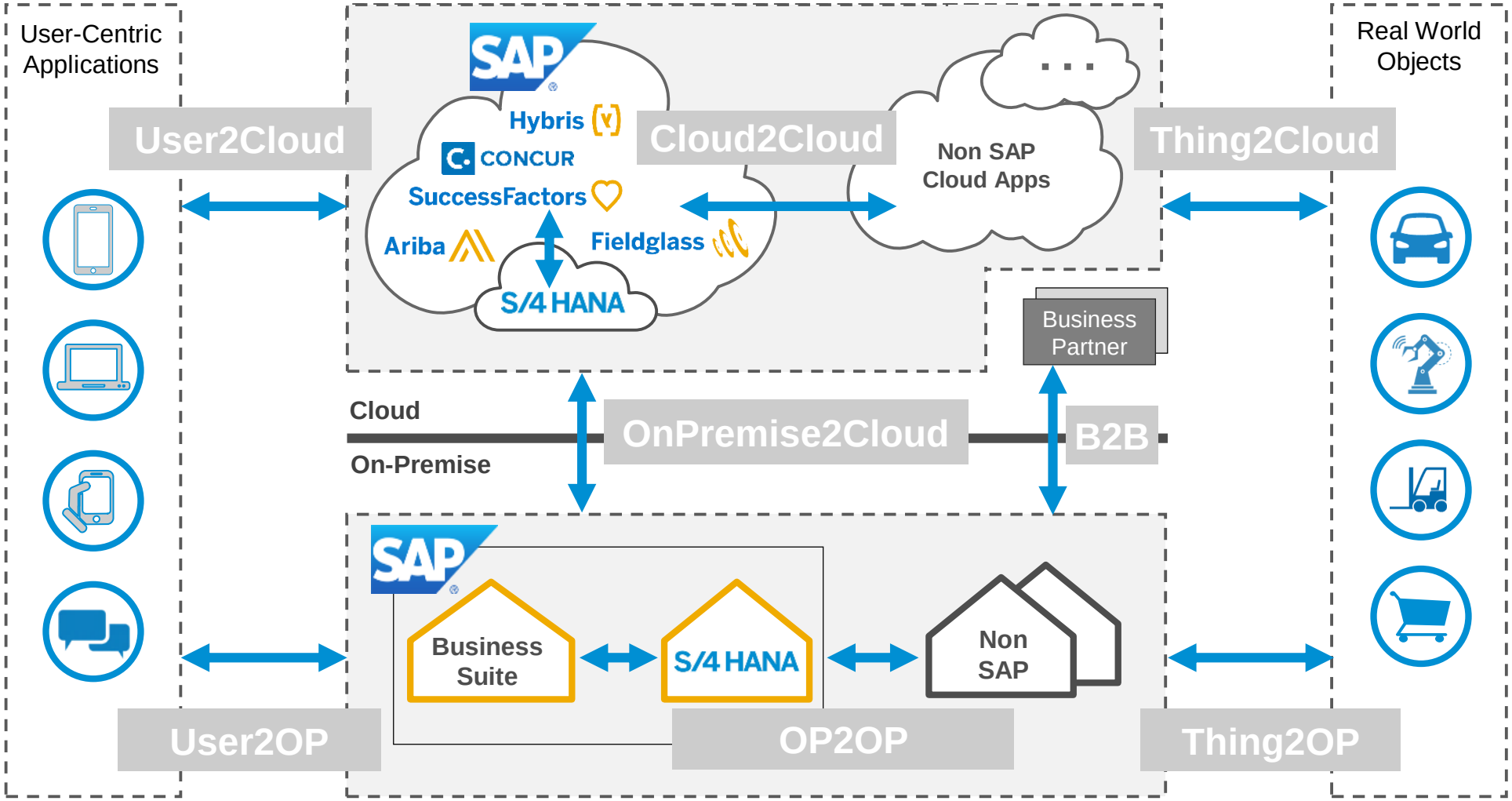
Integration Domains

High Level Scoping of Integration Areas



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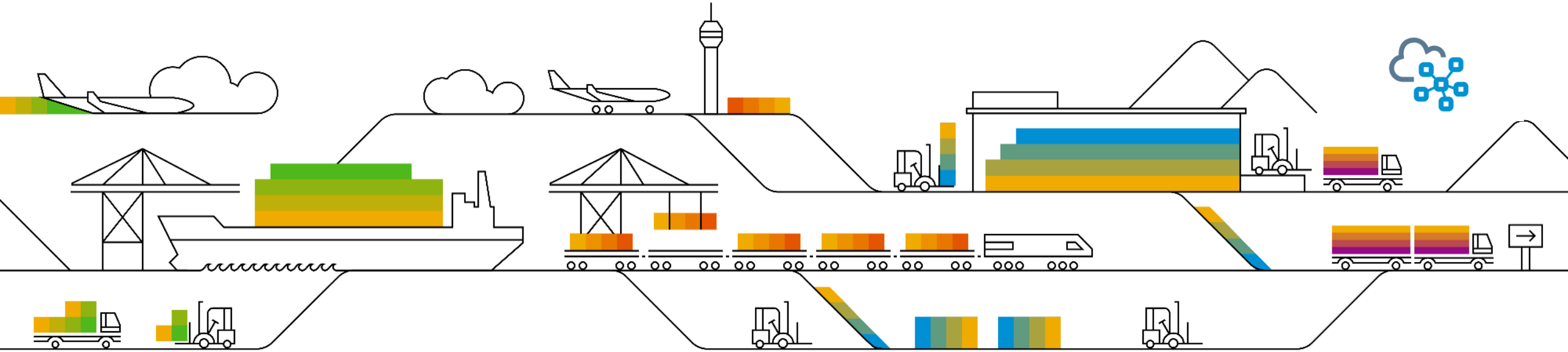
Integration Domain

SAP Cloud Platform Integration at a glance



SAP Cloud Platform Integration

Integrate Cloud Applications into your Application Landscape with Ease

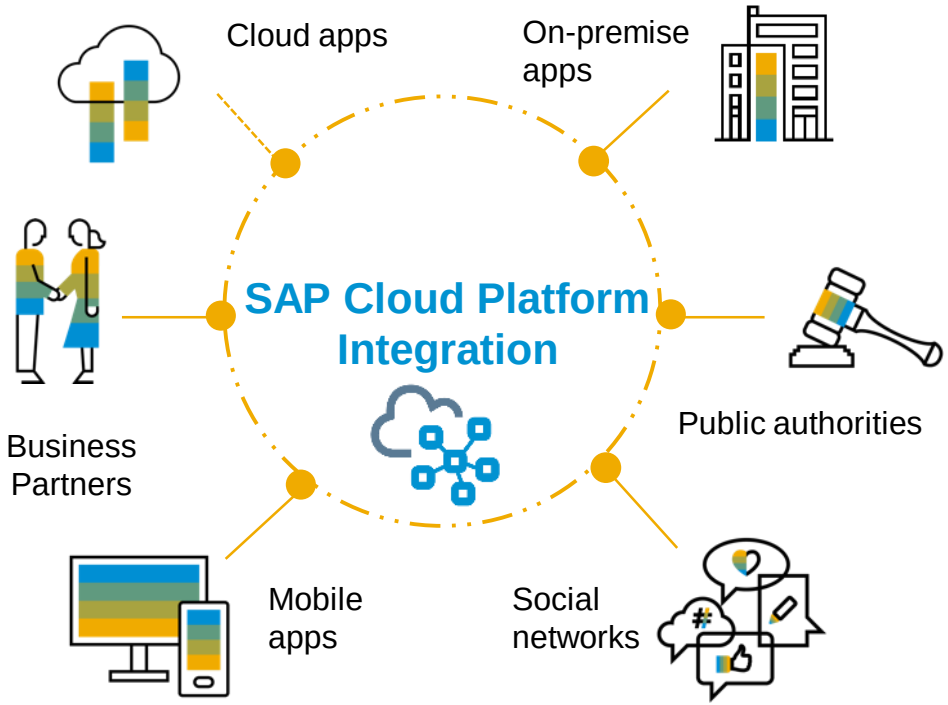
Seamlessly connects cloud applications with other cloud and on-premises apps, both from SAP and third-party providers.

Key Capabilities

- Prepackaged content to integration SAP and non-SAP apps
- Web based tool for modeling and monitoring integrations
- Strong security focus including data isolation
- Choice of application, B2B and technical protocol connectors – incl. adapter SDK

Key Benefits

- Cloud-native technology with subscription-based usage
- Safeguard and accelerate your integration projects with out-of-the box integration content
- Suited for citizen integrators and system integrators
- Enhanced productivity, reliability and quicker access to data
- Complements SAP Process Orchestration
- Open to partners for developing content and connectivity adapters



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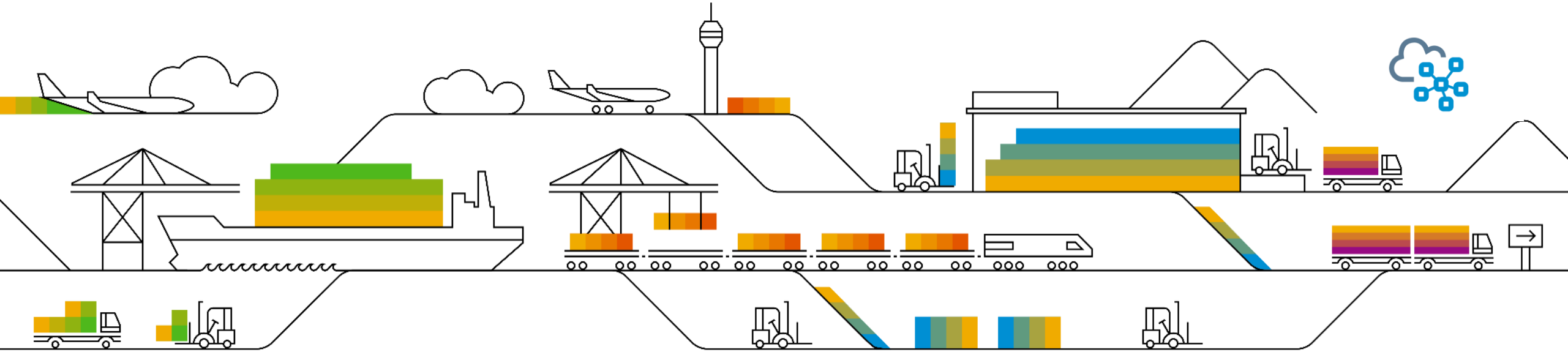
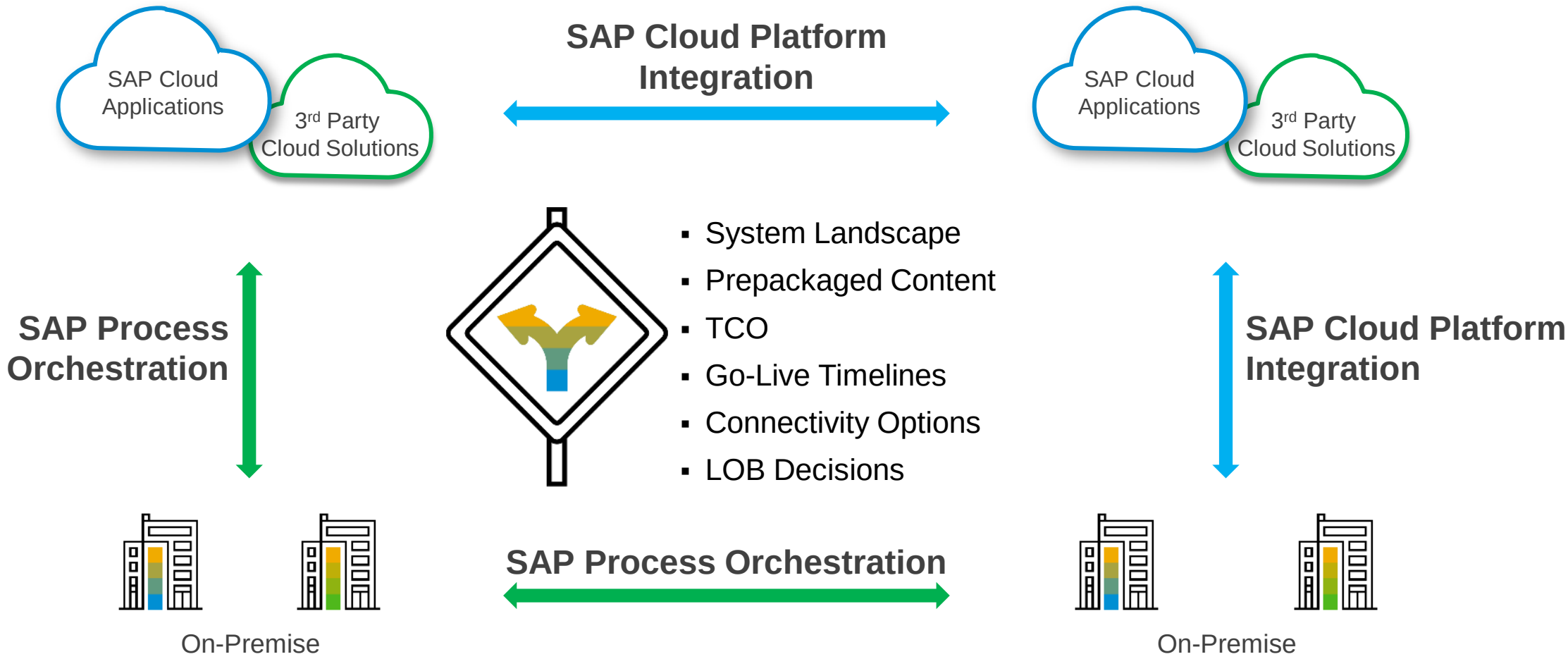
When to use what?



SAP Cloud Platform Integration

A complementary offering to SAP Process Orchestration



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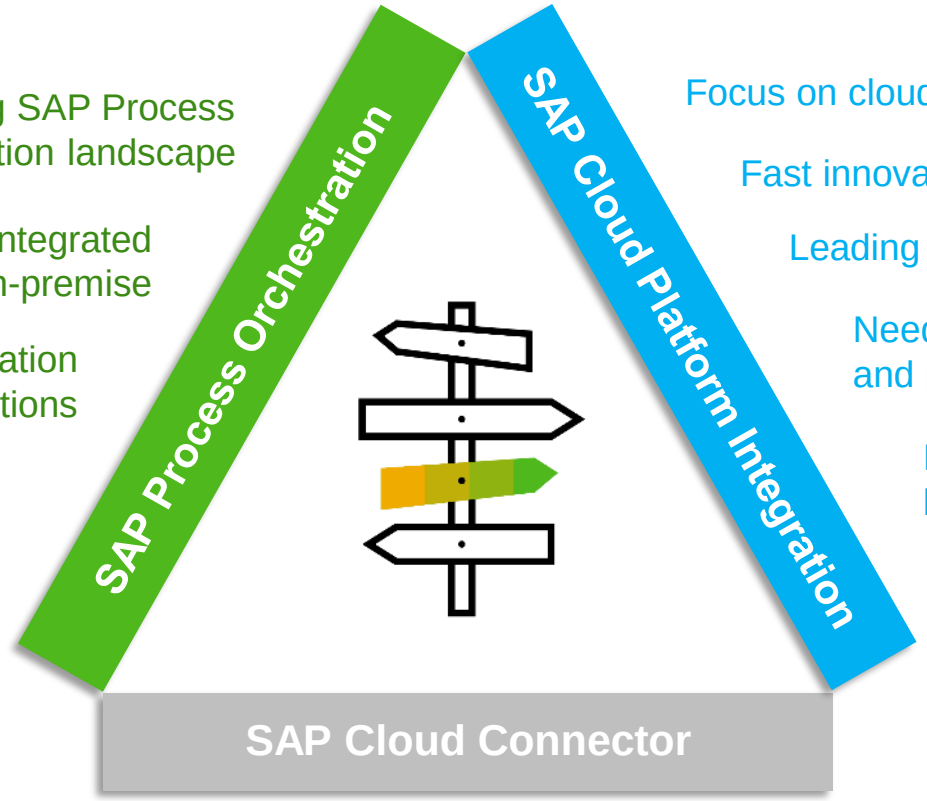
When to use what?

SAP Cloud Platform Integration, SAP Process Integration, SAP Cloud Connector

Leverage invests into existing SAP Process Integration landscape

Systems that need to be integrated are mainly on-premise

less or no needs for integration of cloud applications



Focus on cloud to cloud integration

Fast innovation

Leading system(s) within the cloud

Need of compliance scenarios, such as e-invoicing and payroll, to integrate with legal authorities

Do not have SAP Process Orchestration and bear the costs on-premise middleware

Integration with cloud applications, but no mediation (mapping, routing, connectivity, security)

- *All products will be developed and marketed in parallel and are fully complementary*
- *Prepackaged integration content is shipped for SAP Cloud Platform Integration as well as SAP Process Integration*

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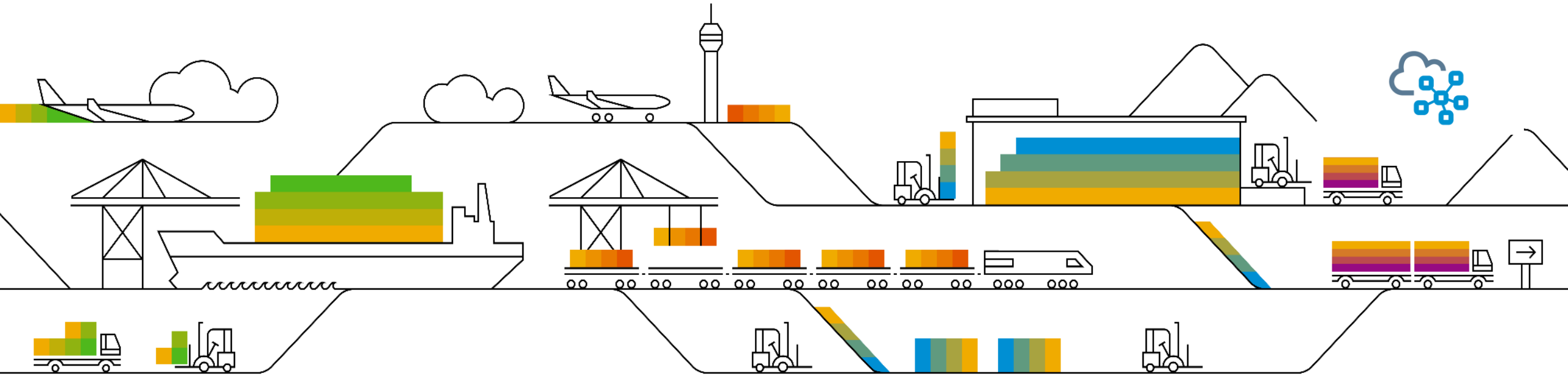
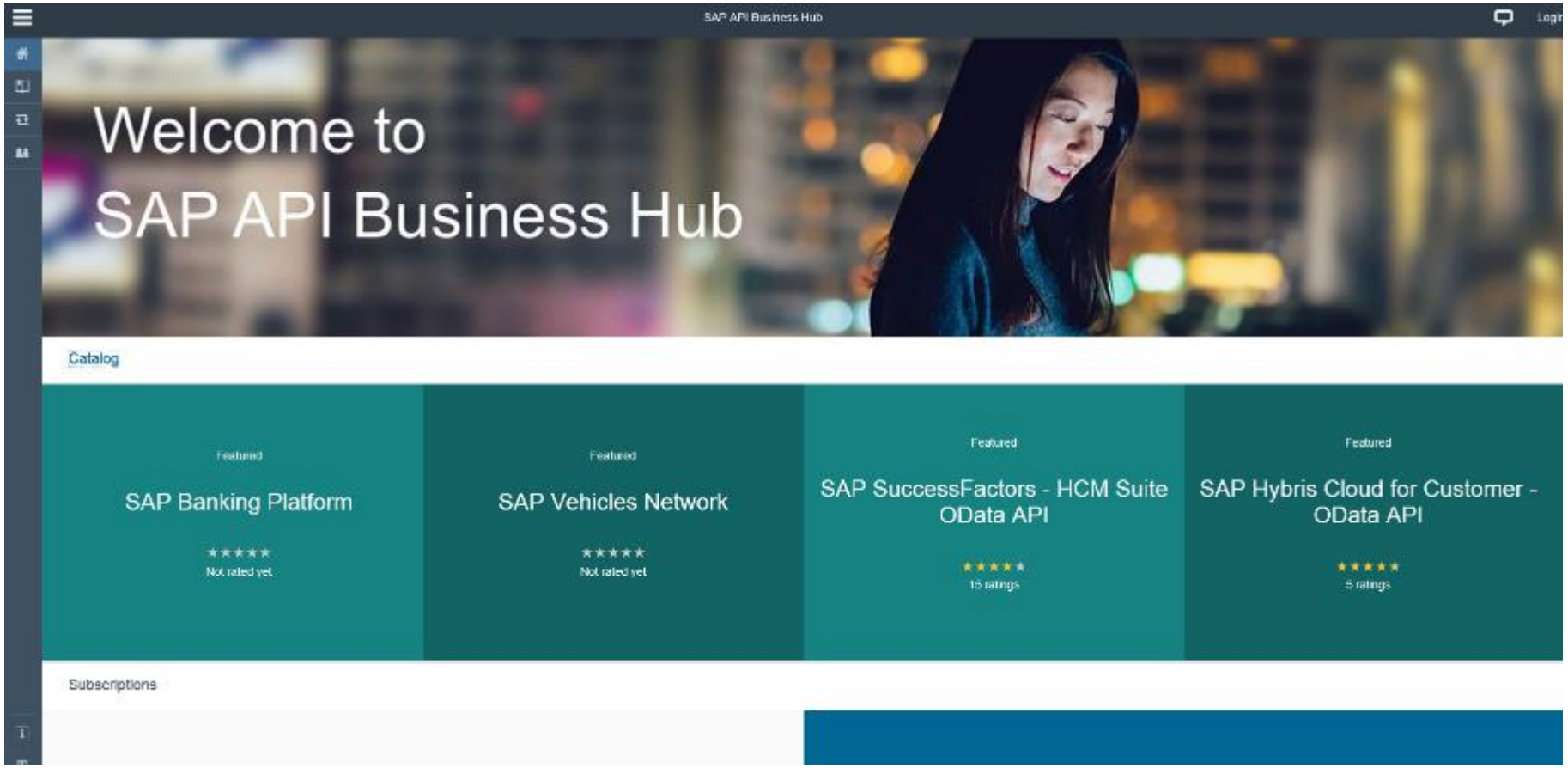
Accelerated Integration Through Pre-Configured Content Packages



Where to explore pre-packaged integration content?

Publicly available



[SAP API Business Hub]

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Accelerated Integration Through Pre-Configured Content Packages

Highlights

SAP Hybris Cloud for Customer
with SAP ERP/CRM, SAP Hybris Marketing, S/4HANA Cloud

VAT Register Books for Spain
with Spanish tax agency's system

SAP Localization Hub, digital compliance service
for electronic transfer of tax invoices and reports in India

SAP SuccessFactors
Employee Central with SAP S/4HANA Cloud, SAP ERP, 3rd party vendors

SAP Hybris Marketing Cloud
with SAP ERP/CRM, Twitter, Facebook, Google AdWords

eDocuments
Electronic Invoicing for Chile, Peru, Spain

Concur Expense
with SAP S/4HANA Cloud and SAP ERP

SAP Ariba Network
with SAP Business Suite

Short facts

630+
Pre-packaged integration flows and mappings by SAP and Partners

Additional connectivity options
developed with Adapter SDK by partners as Advantco, Rojo Consultancy, and KaTe

Salesforce, AMQP, MS Dynamics CRM, SugarCRM, Amazon Web Services, MQTT, MS SharePoint, ServiceNow
and more …

New pre-built integration content

SAP Hybris Marketing Cloud
with SAP Hybris Customer Attribution, SAP S/4HANA Cloud for Enterprise Management Cloud and on-prem, and Content Management System

SAP Asset Intelligence Network
with SAP Hybris C4C and SAP Cloud Platform IoT

SAP Hybris Service Engagement Center
with SAP Hybris Commerce

SAP Hybris Revenue Cloud
with SAP S/4HANA Cloud

Showcasing B2B Capabilities
with ASC X12 and UN/EDIFACT message types for mapping and converting messages

Best practices
in forms of code snippets, iFlow templates, FAQ and how-to-guides

Explore integration packages in the SAP API Business Hub

Discover, configure and manage pre-packaged integration content for SAP cloud applications and 3rd party integration scenarios here: https://api.sap.com/

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Connectivity and Converter Options of SAP Cloud Platform Integration

Adapters

- **HTTP****, **HTTPS***
- **SOAP** over HTTP
- **OData, ODC**** over HTTPS
- **SFTP**
- **RFC****
- **LDAP**** over TCP/IP
- **Mail** receiver (SMTP) and sender (IMAP or POP3)
- **IDoc** over SOAP
- SuccessFactors over SOAP, REST, or OData**
- **Ariba**: cXML over HTTPS
- **Facebook****, **Twitter**** over HTTP
- ***JMS, AS2****** *over HTTP*
- OEM (Advantco)
  - Salesforce: over REST
  - Microsoft Dynamics CRM
  - Amazon Web Services
  - SugarCRM

**as sender adapter | **as receiver adapter | ***available only with Enterprise edition*

Message Converters

- CSV ←→ XML
- JSON ←→ XML
- EDI (EDIFACT and ASC-X12) ←→ XML***

… full list of adapters by SAP in SAP Help Portal

… more info on adapter certification process for partners here

Adapter Development Kit

- Framework to create new adapters
- Certification available

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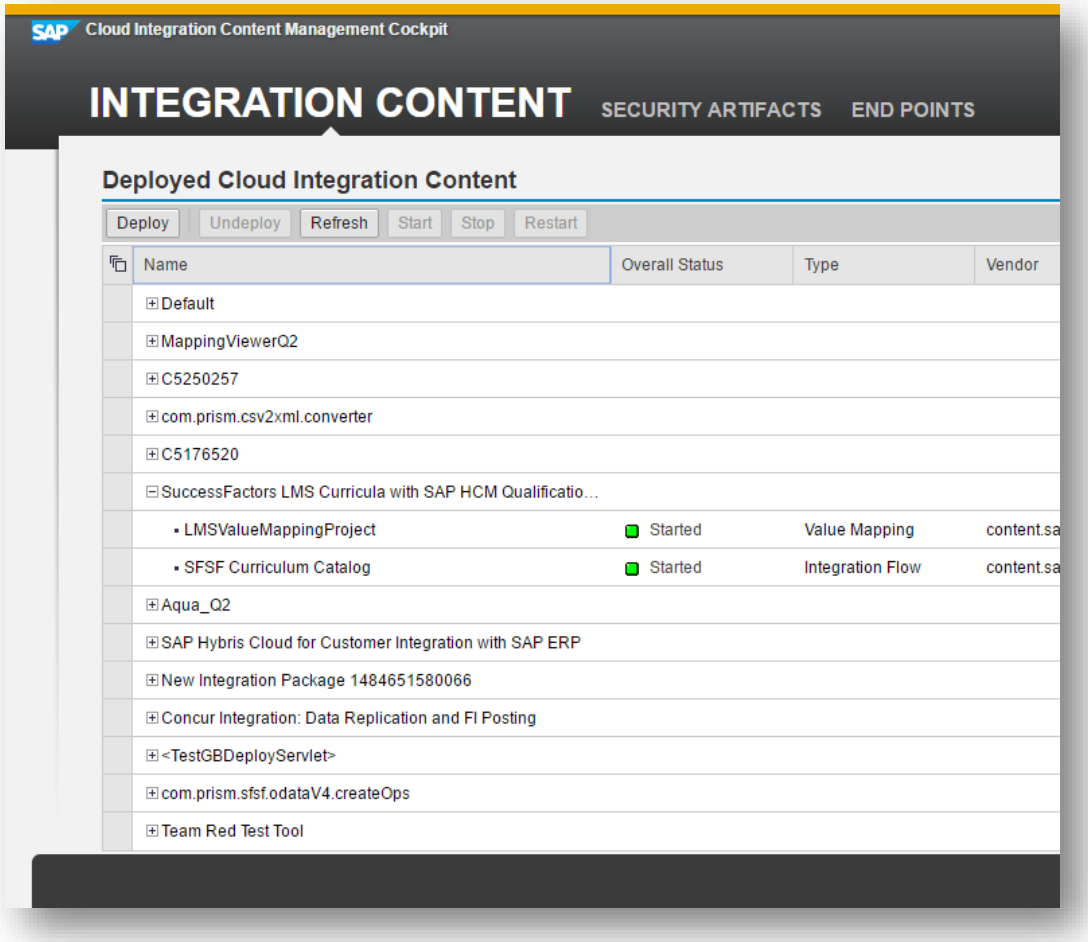
Cloud Integration Content at SAP Process Orchestration

Content re-use across SAP's integration platforms

Deploy, run, and monitor cloud integration content on SAP Process Orchestration

- SAP Cloud Platform Integration capabilities as documented in Supported Components, Adapters, and Events
- Deployment either via file export/import or directly accessing the SAP Cloud Platform Integration tenant
- Mass deployment supported
- Show cloud integration content messages in message overview monitor
- Show deployment and un-deployment of cloud integration content in audit log
- Scheduler jobs for cleaning up message processing log (MPL) store, data store and message store
- Grouping of deployed cloud integration content in the Cloud Integration Content Management Cockpit
- Display endpoints in the Cloud Integration Content Management Cockpit
- Navigate from the deployed cloud integration flow to either MPL or endpoint view
- See FAQ note 2428801



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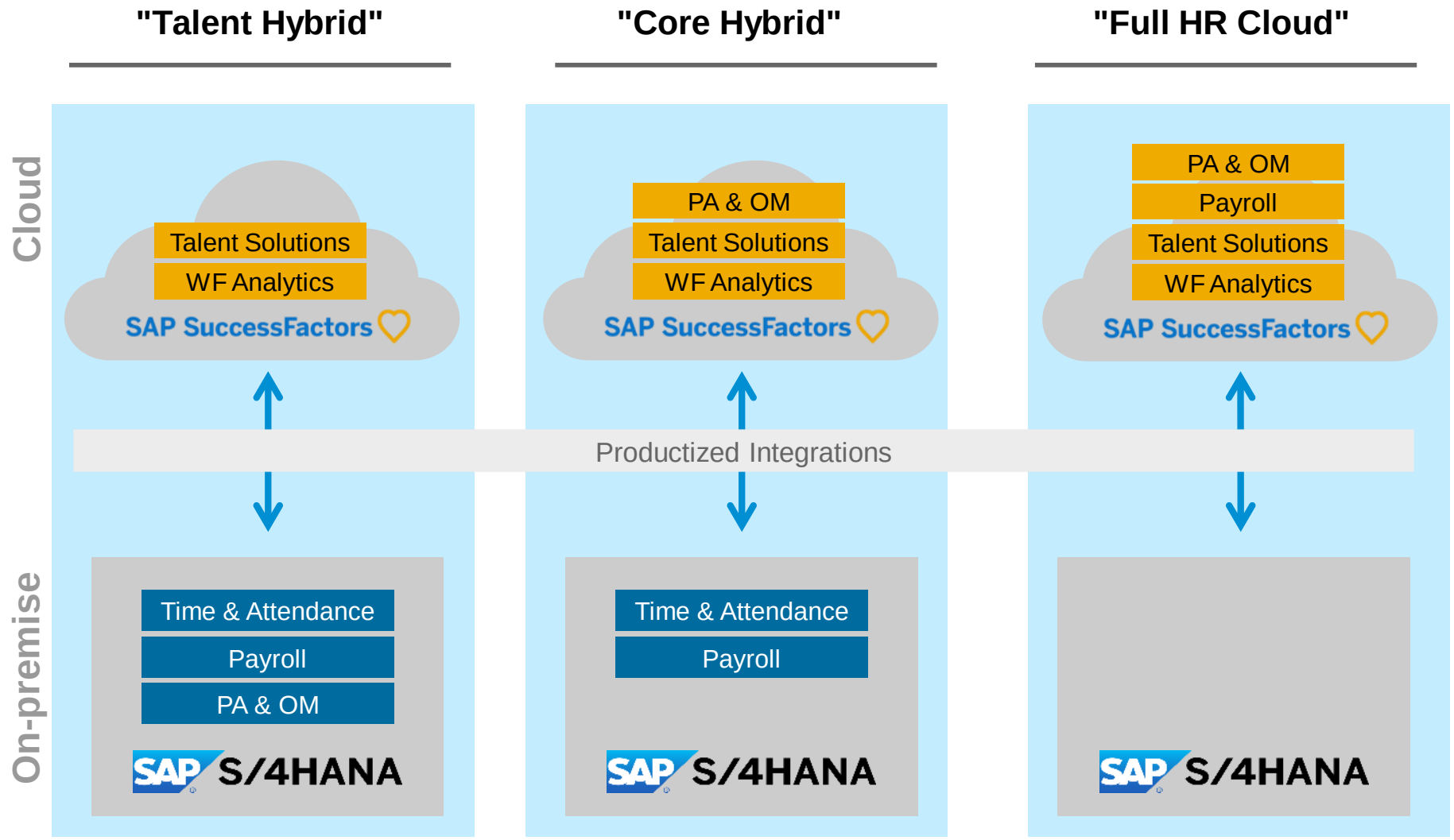
Deployment Options

SAP SuccessFactors with SAP S/4HANA on-premise



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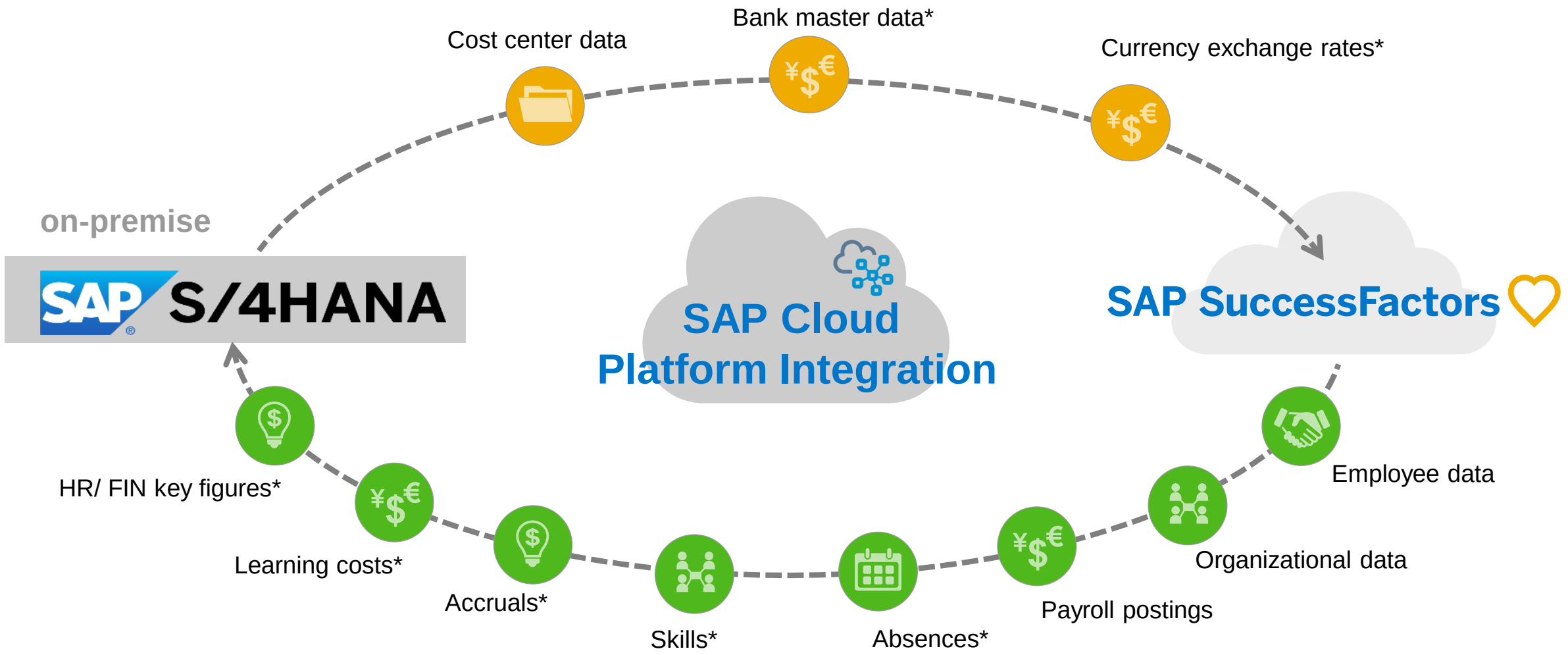
Connecting SAP SuccessFactors with SAP S/4HANA



* Planned (roadmap)

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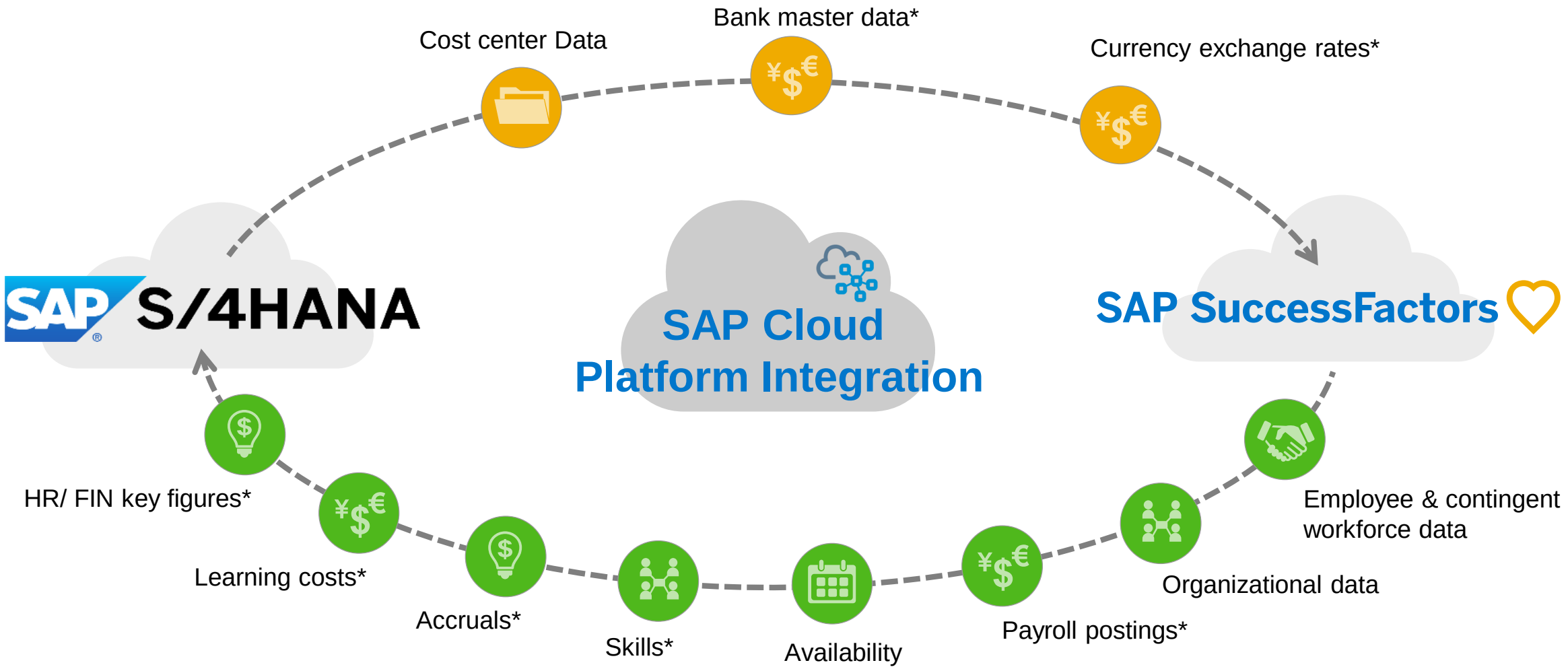
Connecting SAP SuccessFactors with SAP S/4HANA Cloud



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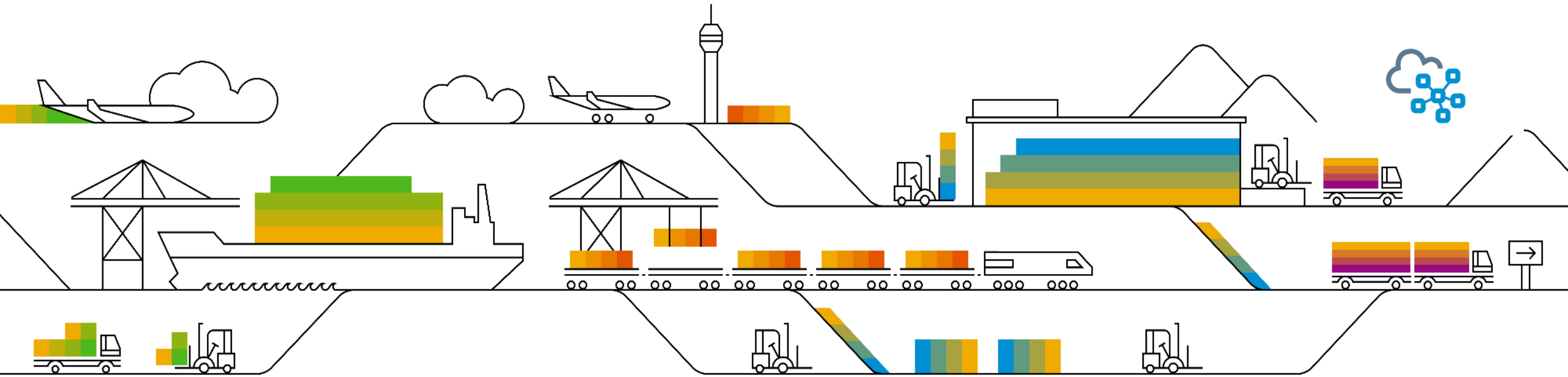
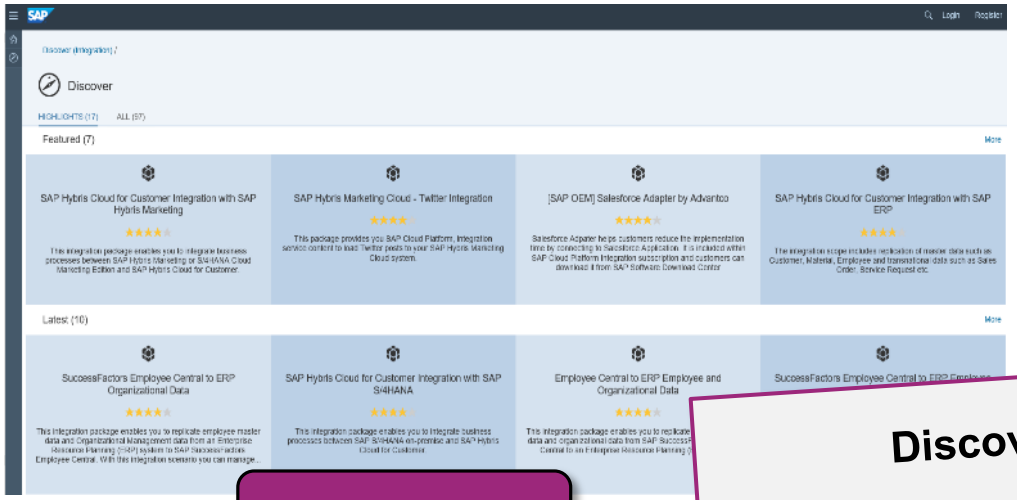
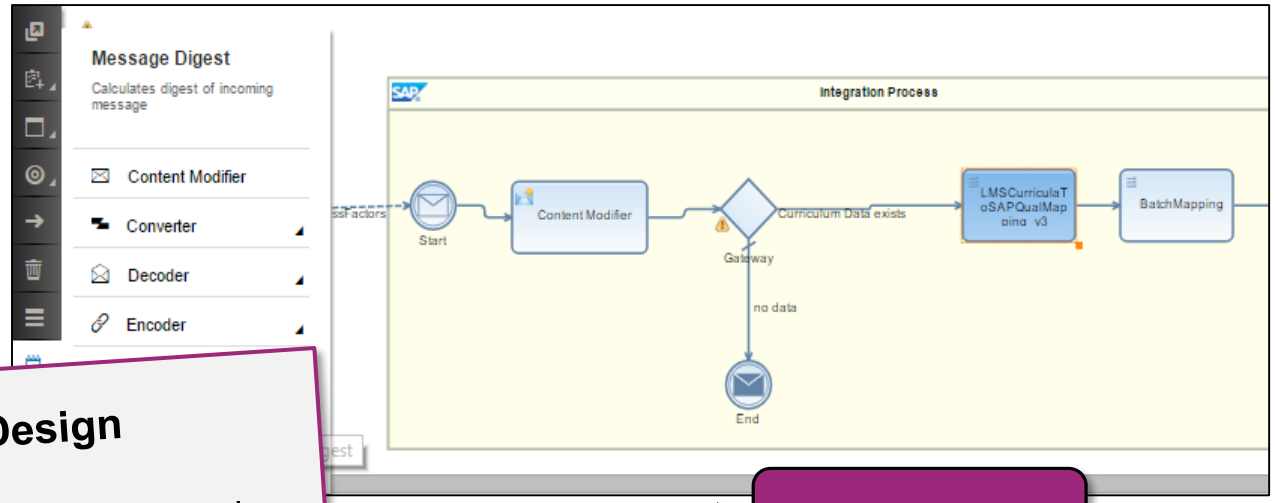
Discover → Design → Monitor



SAP Cloud Platform Integration

Discover and Design



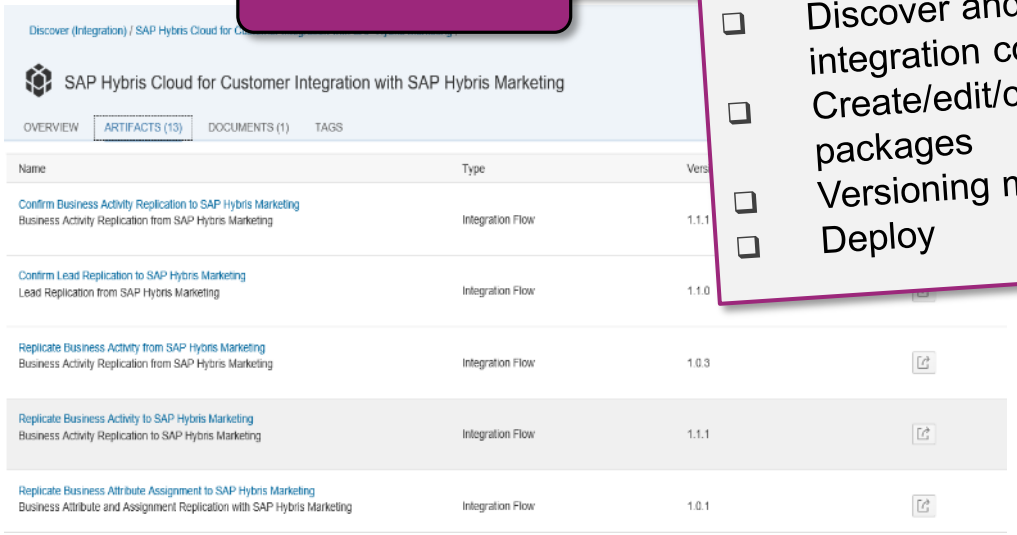


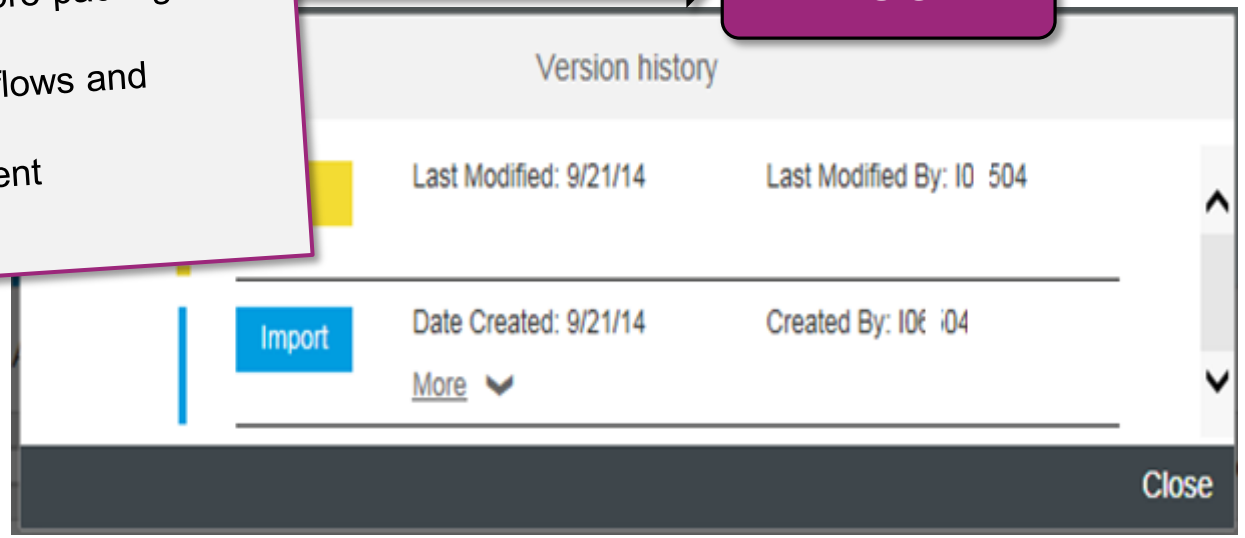
DISCOVER

DESIGN

Discover & Design

- ❑ Discover and browse pre-packaged integration content
- ❑ Create/edit/configure flows and packages
- ❑ Versioning management
- ❑ Deploy





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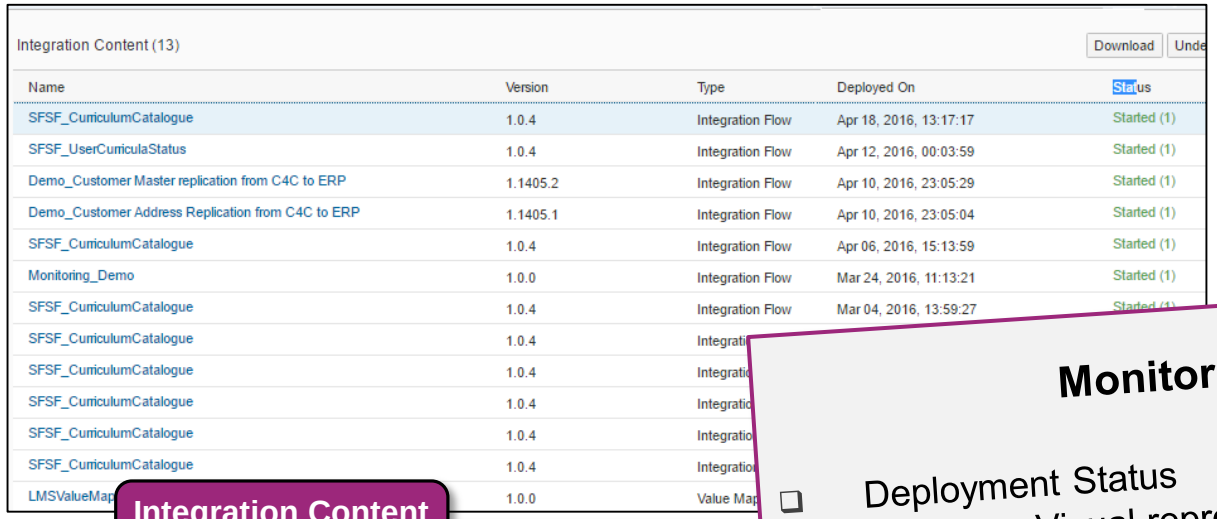
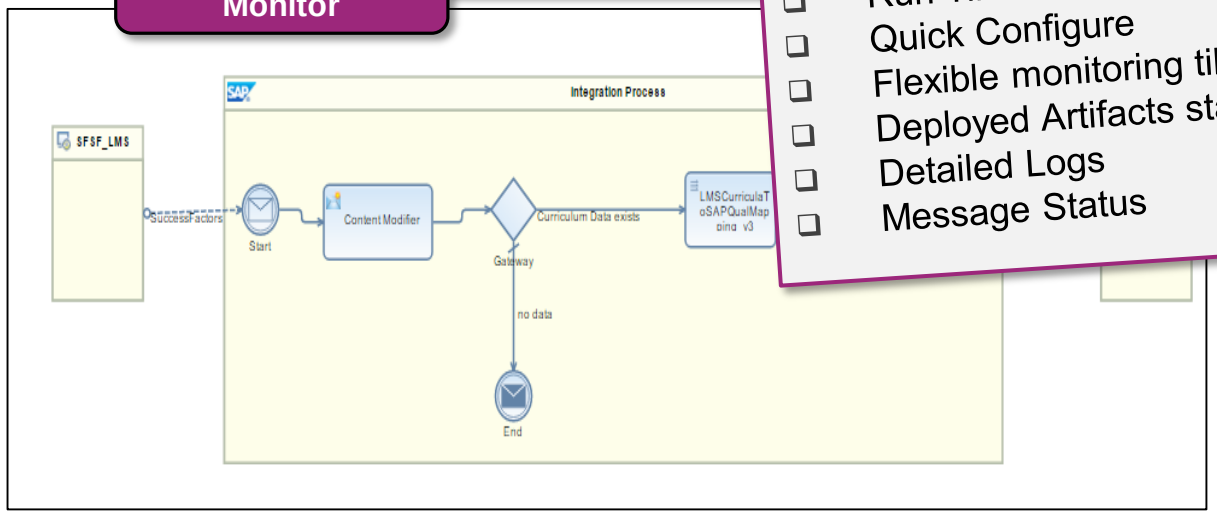
SAP Cloud Platform Integration

Monitoring

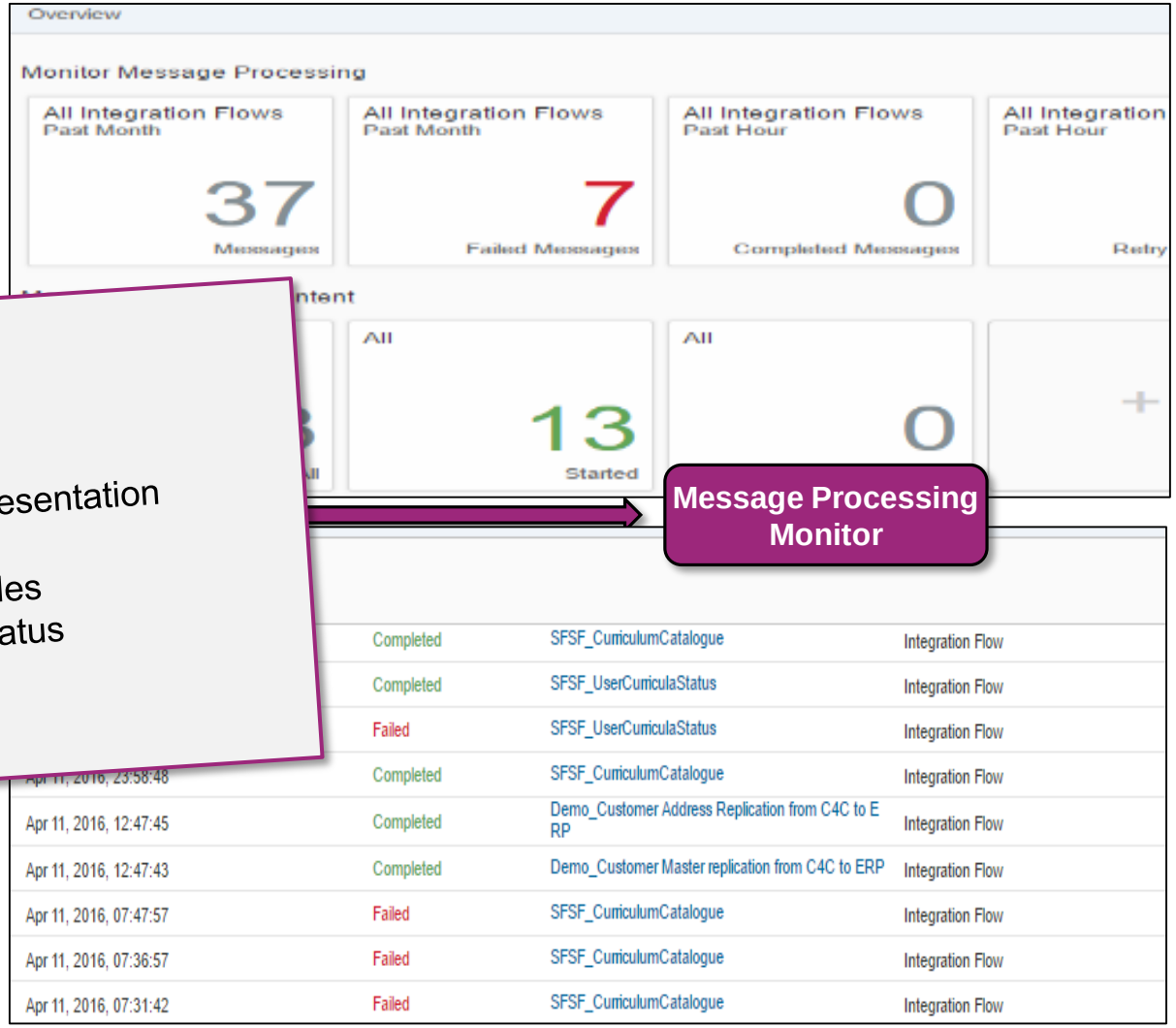


Integration Content Monitor



Monitor

- ❑ Deployment Status
- ❑ Run Time Visual representation
- ❑ Quick Configure
- ❑ Flexible monitoring tiles
- ❑ Deployed Artifacts status
- ❑ Detailed Logs
- ❑ Message Status



Message Processing Monitor

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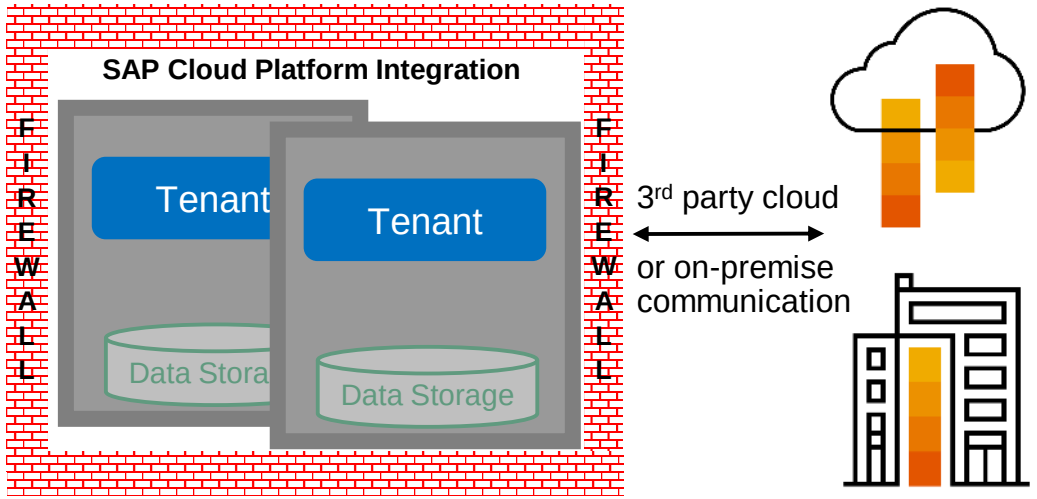
SAP Cloud Platform Integration

Security



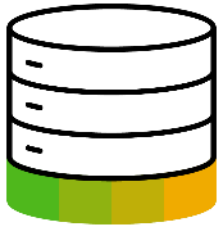
Secure ISO/IEC 27001 Certified Data Centers

- Hundreds of surveillance cameras with digital recording
- Fully monitored doors
- Tens of thousands of environmental sensors
- Security and facility support team onsite 24x7
- Biometric access to secured areas
- Multiple redundant internet connections from multiple carriers
- Redundant data storage in two data center locations

→ How Secure is the SAP Data Center?

Secure Provisioning and Infrastructure

- Multi-tenancy
- Data isolation
- Audit logs
- Roles based access
- Data privacy and protection
- Data storage and backup



Secure Communication

- Transport level: HTTPS, SFTP, basic authentication
- Payload level: Encryption, decryption, signing, signature verification
- Cryptographic message syntax PKCS#7
- XML digital signature (signing)
- WS security (encryption + signing)
- PGP (encryption and signing)
- Secure storage of key stores in data base
- Encrypted data persistency

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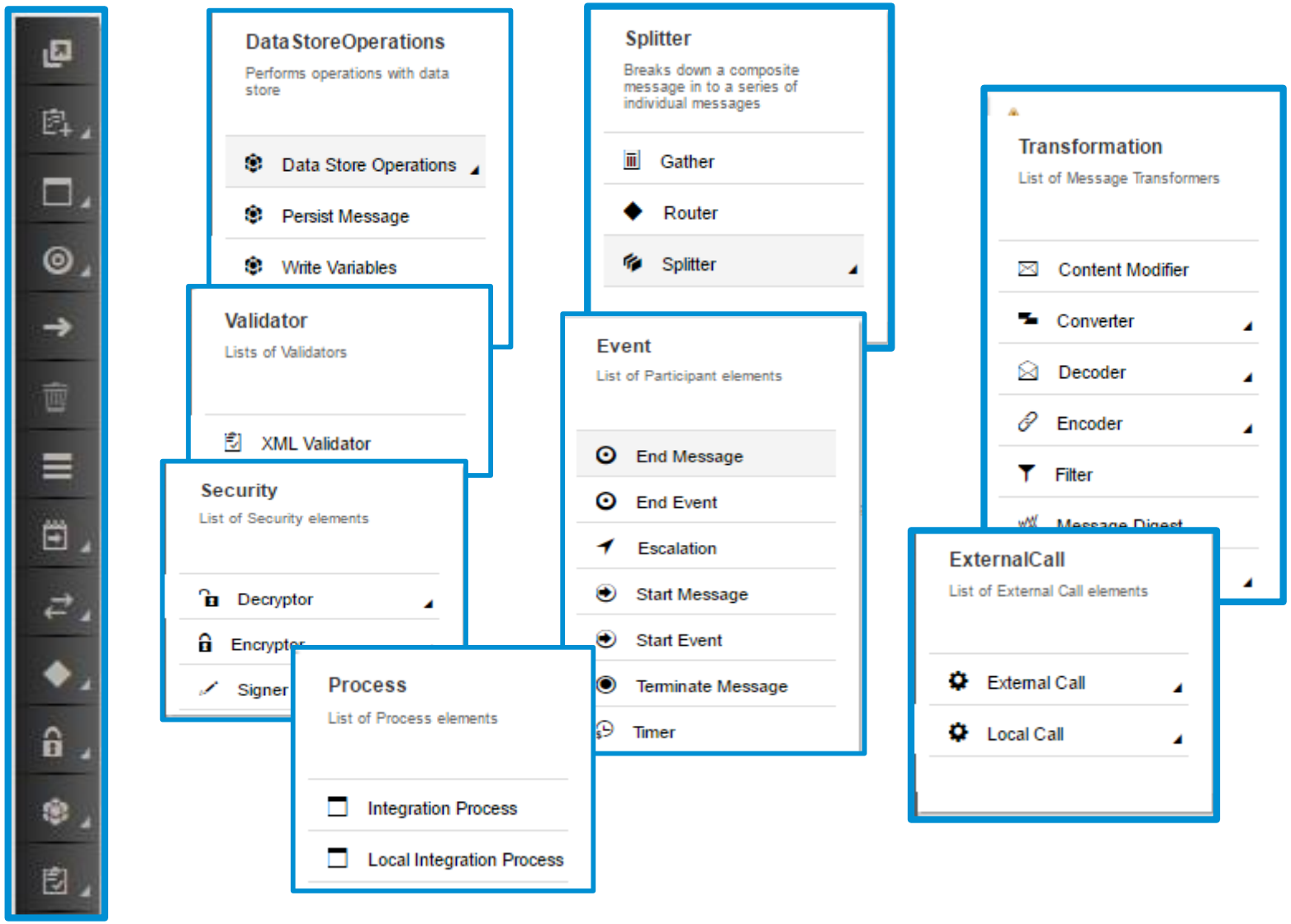
SAP Cloud Platform Integration

Light-weight orchestration capabilities

- Flexible design pipeline
- Independent and reusable process steps
- 40+ different steps available
  - Message Transformation
  - Message Mapping
  - Message Routing
  - Security Elements
  - Scripting
  - Tasks
  - Data Store Operations
  - Events
  - Many more…



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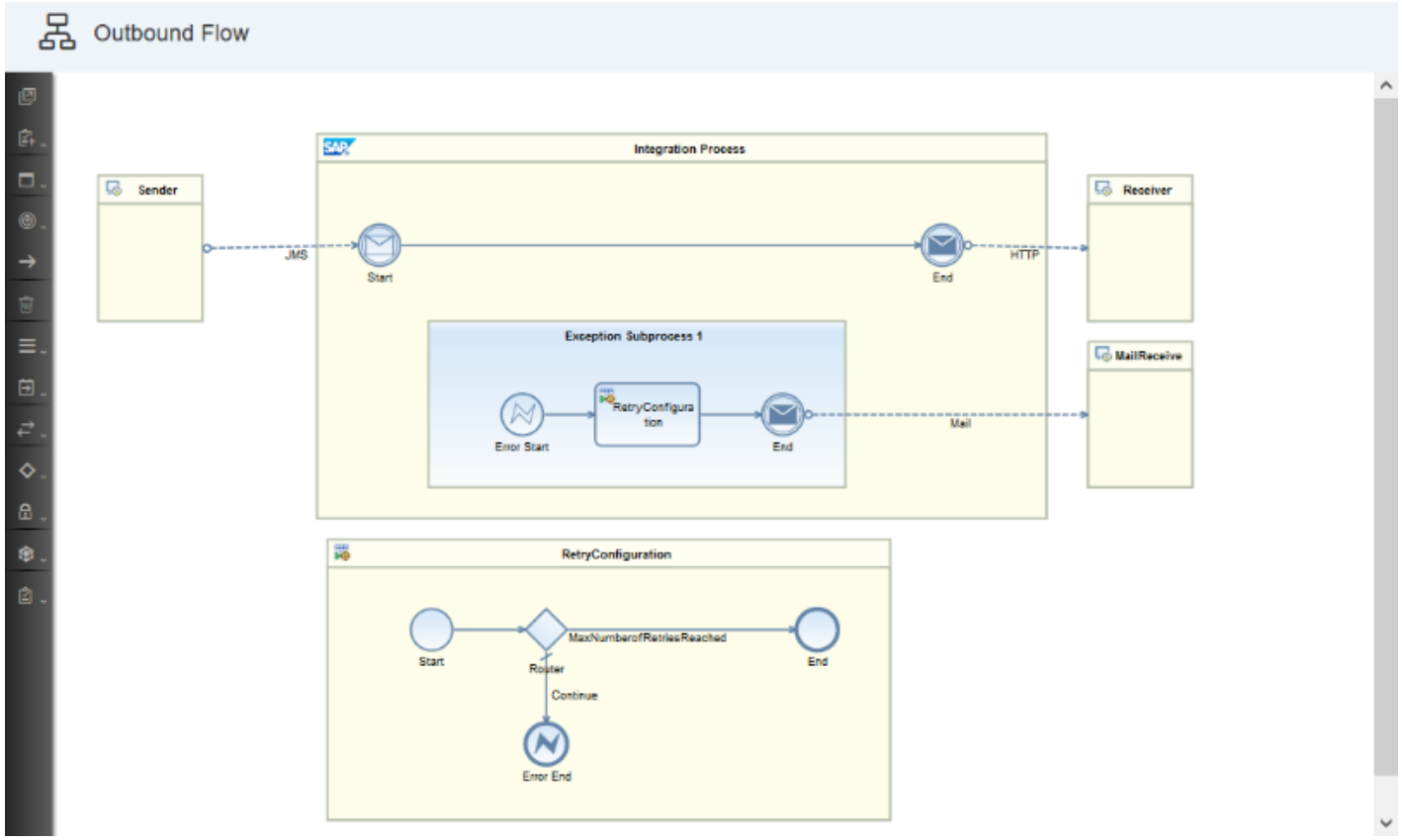
Asynchronous Messaging with Retry using JMS Adapters*

- JMS queue for decoupling of communication with option of message encryption
- JMS receiver adapter storing messages in JMS queue
- JMS sender adapter polling from queue
- Out of the box restart of failed messages and of dead letter handling
- Explicit modeling of integration flow transaction handling



Sample integration flow with explicit retry handling (optional)

Read also the community blog [Configuring asynchronous messaging with Retry using JMS adapter]

** Embedded consumption of SAP Cloud Platform Enterprise Messaging service -- included only in SAP Cloud Platform Integration enterprise edition*

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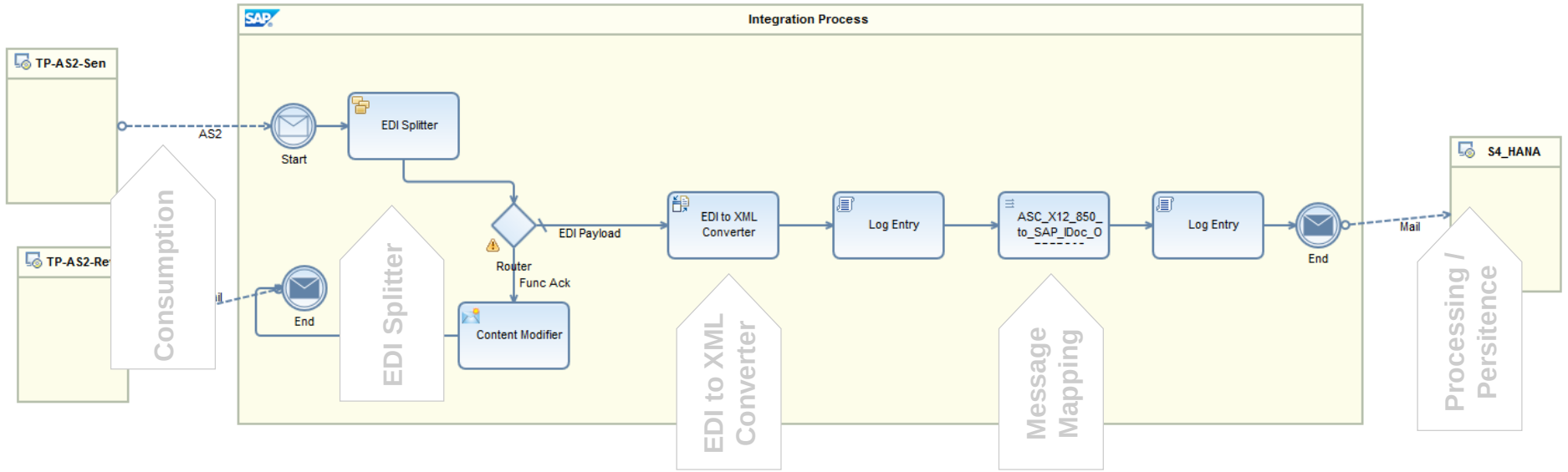
B2B Capabilities* with the Enterprise Edition of SAP Cloud Platform Integration



- **AS2 Adapter**
- **EDI Splitter**
  Split inbound bulk EDI messages and validate messages according UN/EDIFACT or ASC X.12 message type structures
- **EDI to XML Converter**
- **XML to EDI Converter**
- **Number Range Objects**
  adding unique interchange number to each EDI document

** At the moment, some B2B capabilities are only available in enterprise edition, not via the SAP Cloud Platform packages or other packages which include Cloud Integration.*

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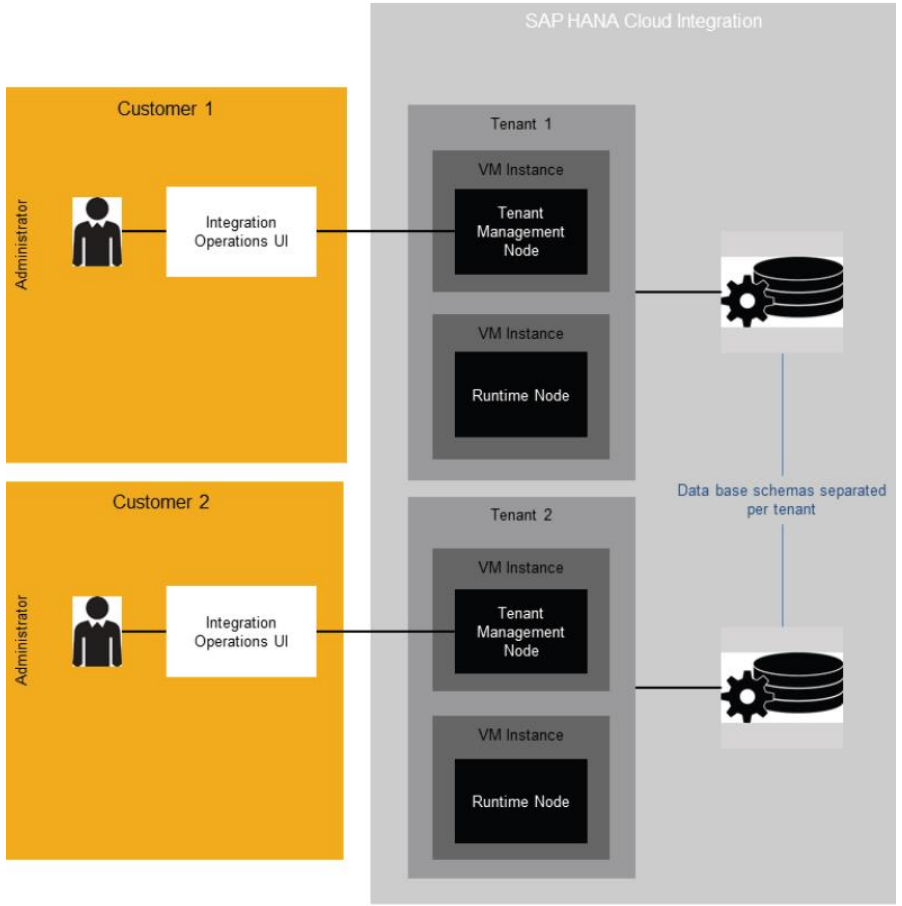
Runtime Concepts SAP Cloud Platform Integration

- Composed of a cluster of virtual processes
- Message processing tasks for a tenant are performed within a dedicated Java Virtual Machine
- An SAP Cloud Platform Integration cluster for a tenant (shortly referred to as tenant cluster) is composed of one (or more) tenant management nodes and one or more runtime nodes
- Tenant clusters of different participants (customers) are strictly separated from each other and are unable to interfere
- The individual processes are also referred to as nodes of the cluster



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One Platform for Process and Data Integration

Both covered in SAP Cloud Platform Integration

Process Integration		Data Integration
Chaining of process steps	Objective	Synchronization of data
System-2-system	Interaction type	System-2-system
Process-level	Coupling to application	Data-level
Application event	Primary trigger	Schedule
Near real-time / real-time	Urgency of completion	Batch
Single business objects	Unit of data exchange	Bulk-Data
▪ Transactional process integrity ▪ Reliability (Guaranteed delivery) ▪ Message orchestration	Specific requirements	▪ Data quality services: matching, consolidation ▪ Complex transformation from multiple data sources ▪ Mass data handling

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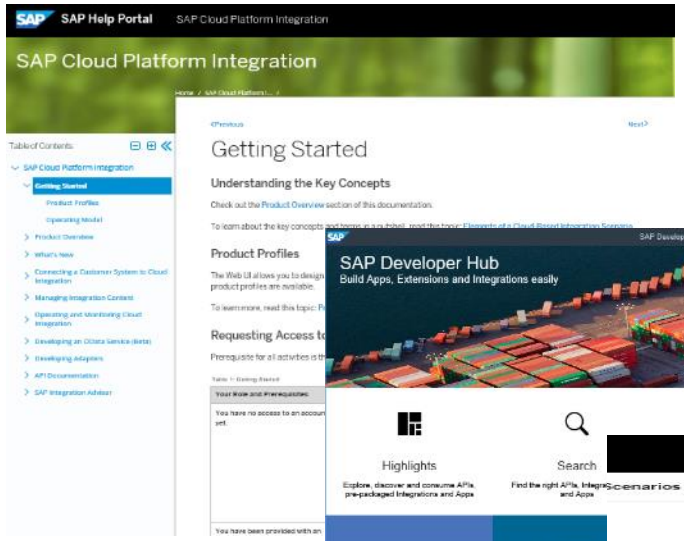
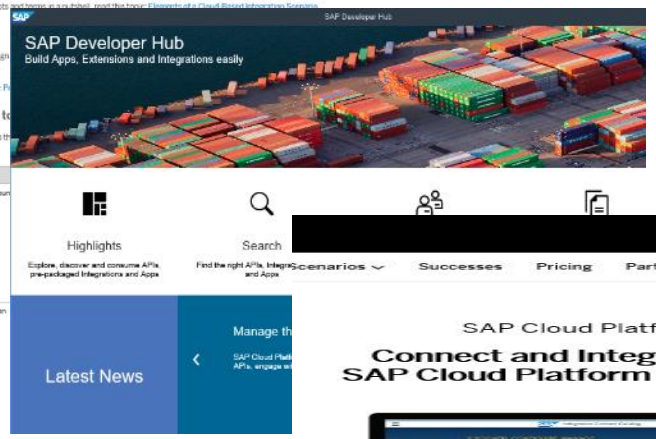
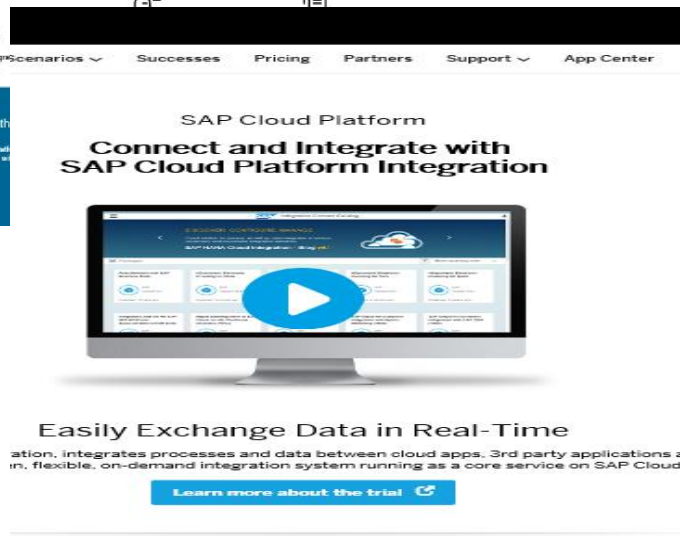
Get started today with SAP Cloud Platform Integration!



[SAP Cloud Platform Integration product documentation]



[SAP API Business Hub w/ pre-packaged integration content]



[SAP Cloud Platform Integration]

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Questions & answers

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Thank you.

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