

# SAP Cloud Platform Integration Suite

## Monthly Updates – January 2020

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# Agenda

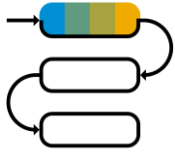


- SAP Cloud Platform Integration
- SAP Cloud Platform Integration Advisor
- Q&A



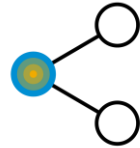
# SAP Cloud Platform Integration Suite

A modular iPaaS to connect the Intelligent Enterprise



## Cloud Integration

Seamlessly integrate anything, anywhere (A2A/B2B) in real time.



## API Management

Expose your data and processes as APIs. Manage E2E life cycle.



## Integration Advisor

Accelerate implementation and maintenance of B2B scenarios using machine learning.



## API Business Hub

Jump start integration projects with APIs, packaged integration content and adapters.



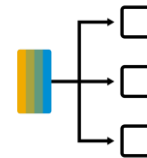
## Data Intelligence

Deliver data-driven innovation, unifying enterprise AI and intelligent information management.



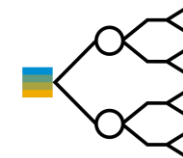
## Open Connectors

Accelerate connectivity to 3<sup>rd</sup> party applications.



## Connectivity

Securely access remote services that run on-premise.



## Enterprise Messaging

Decouple communication and send messages & events.

# What's New!! - SAP Cloud Platform Integration Suite

- What's New Initiative -
  - Newsletter: **First Monday**
  - Webinar: **Last Tuesday**
- One time subscription - no need to register for individual webinars
- Consolidated **Landing page** for all the Suite services – monthly aggregation
- Links to blogs, upcoming events, important news, updates, recordings, etc. for all Suite services in one newsletter

SAP® Cloud Platform **Integration Suite** THE BEST RUN 

## August Newsletter - What's New!!

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### Upcoming Webinar

Aug 29: [SAP Cloud Platform Integration Suite – Monthly Update](#)

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#### Connectivity Tests

Perform connectivity test against the Cloud Connector or test connection via the Cloud Connector to the backend.

[Learn how](#)

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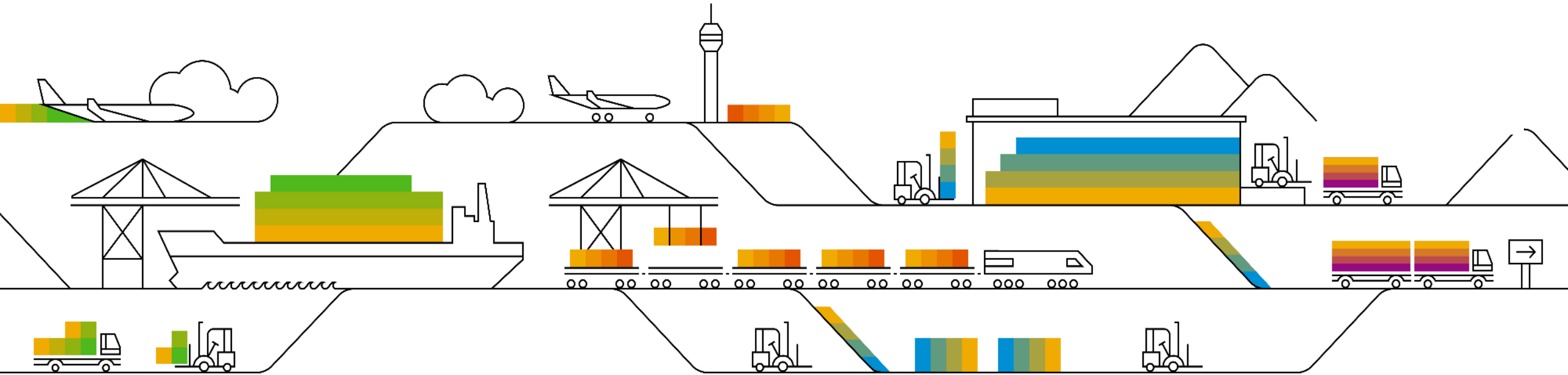
#### Self-service enablement

Enable Cloud Integration service on consumption-based commercial model for SAP Cloud Platform via self-service.

[Learn more](#)

**Subscribe Now!!**

# SAP Cloud Platform Integration



# Agenda

- Recent Enhancements
  - SuccessFactors & OData Adapter
  - Mapping
  - Externalization
  - AMQP Adapter
  - News and Announcements
- Integration Flow Design Guidelines



# SAP Cloud Platform Integration

## SuccessFactors & OData Adapter Enhancements

- SuccessFactors SOAP Adapter : Enhanced the adapter to support *StartRow* API property.
  - This now helps, especially in the pagination scenarios, to fetch the next page of record even in case of the session timeout.
- OData V2 outbound adapter
  - Support for GET operation in \$batch
  - Support for content-encoding formats
  - <https://help.sap.com/viewer/368c481cd6954bdfa5d0435479fd4eaf/Cloud/en-US/c5c2e38e0c87472e996dfda04920bfc4.html>



# SAP Cloud Platform Integration

## Mapping Enhancements

- Export Mapping as spreadsheet
- <https://help.sap.com/viewer/368c481cd6954bdfa5d0435479fd4eaf/Cloud/en-US/3d5cb7ff43fb4a4b9c28153472f6d0f1.html>
- Copy & paste of mapping expression
- <https://help.sap.com/viewer/368c481cd6954bdfa5d0435479fd4eaf/Cloud/en-US/3d5cb7ff43fb4a4b9c28153472f6d0f1.html>
- Copying message mapping from other integration flows

# Demo



# SAP Cloud Platform Integration

## AMQP Adapter

AMQP Sender and Receiver adapter now supports connectivity to on-premise messaging systems using the SAP Cloud Connector

AMQP

General

Connection

Processing

CONNECTION DETAILS

\*Host:

\*Port:

Proxy Type:

On-Premise

Location ID:

☒ Connect with TLS

Authentication:

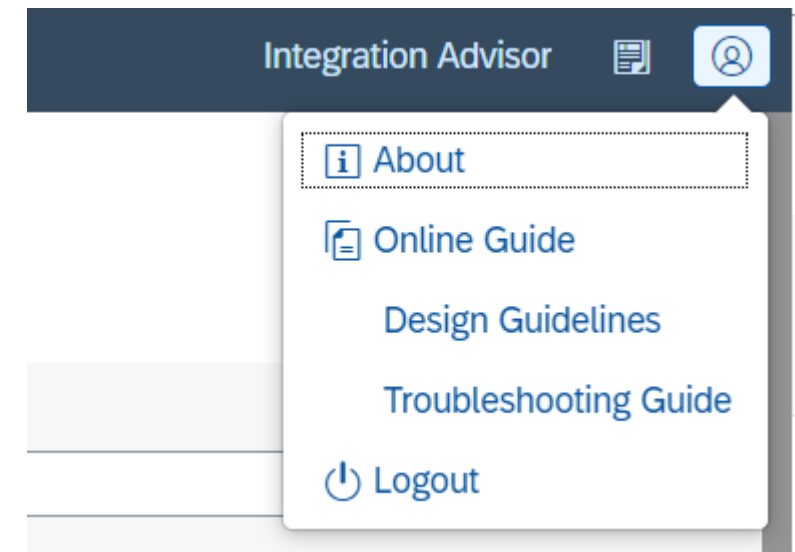
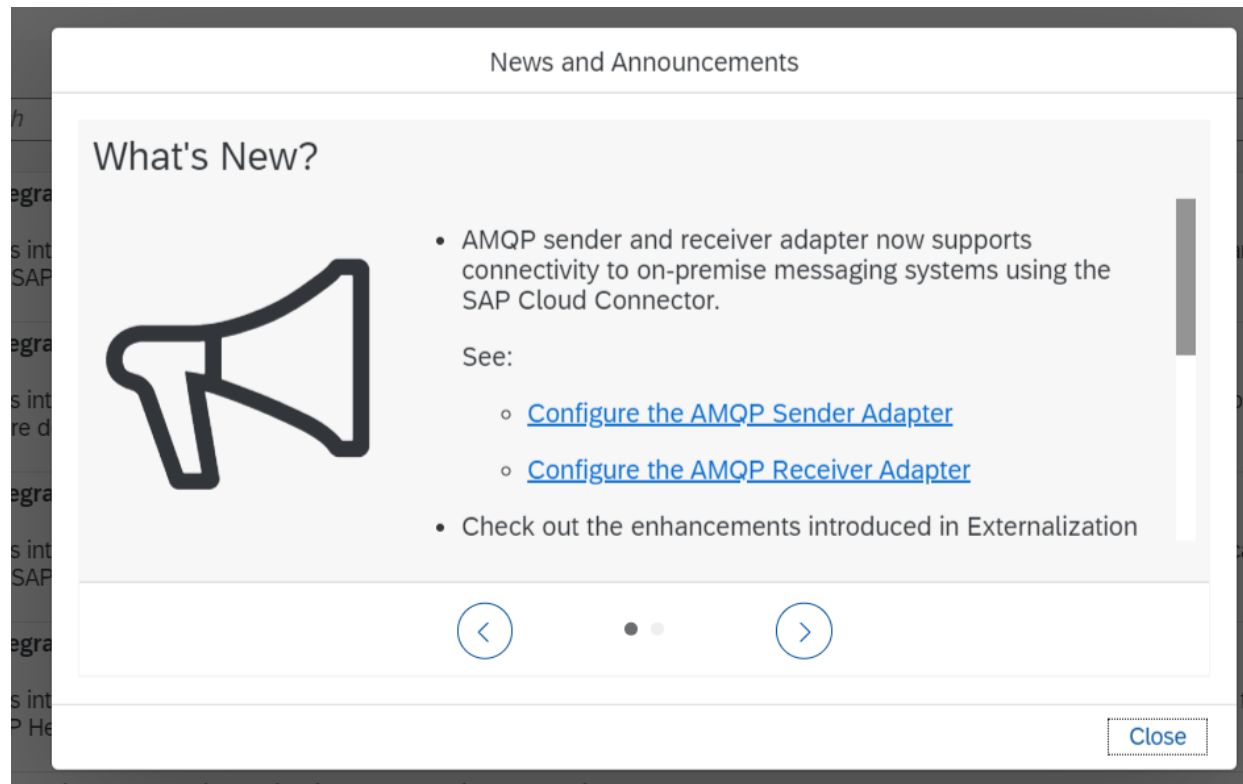
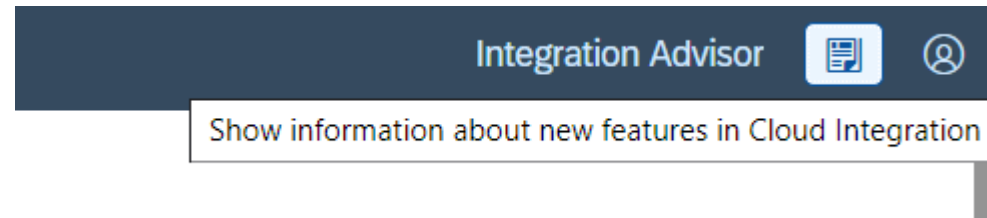
SASL

\*Credential Name:

<https://blogs.sap.com/2020/01/17/cloud-integration-how-to-connect-to-an-on-premise-amqp-server-via-cloud-connector/>

# SAP Cloud Platform Integration

Quick Access to News and Announcements, Design Guidelines & Troubleshooting Guide



# SAP Cloud Platform Integration

## Externalization Enhancements

Externalization feature enables an integration developer to define parameter for configurations of adapters or flow steps in an integration flow, whose values can be provided at a later point in time, without editing the integration flow.

### Enhancements:

1. Separation of responsibility of the Integration Flow Web Editor and Configuration View
  - **Default Value** - *The value of a parameter defined in the integration flow editor*
  - **Configure Value** – *The value configured from the configuration view*
2. Externalized Parameters View shows both Default & Configured values of parameter for comparison and quality assurance
3. Download Integration Flows with Default Values or Merged Configured and Default Values


<https://blogs.sap.com/2020/01/21/enrichments-of-externalization-feature-in-sap-cloud-platform-integration/>

# Demo





# SAP Cloud Platform Integration

## Integration Flow Design Guidelines

 **SAP Help Portal**


SAP Cloud Platform Integration



# SAP Cloud Platform Integration

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> Content-Based Routing

Content Enricher

> Content Filter

Message Filter

> Recipient List

Scatter-Gather

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## Guidelines to Implement Specific Integration Patterns

[Send feedback](#)

Cloud Integration supports the implementation of enterprise integration patterns that are also referred to as *integration patterns* or *messaging patterns*.

One example of an enterprise integration pattern is the content-based router. As an example, assume that a sender is connected to multiple receiver systems. The business process requires that a message from the sender is forwarded to a particular receiver system depending on the content of the message (for example, a customer ID). The content-based router makes such forwarding possible.

Another example is the splitter, which defines that a single message is split into multiple partial messages that can be processed individually.

This section provides simple example integration flows to show how to implement enterprise integration patterns.



You find the integration flows in the following integration package published on SAP API Business Hub:

**Integration Flow Design Guidelines - Enterprise Integration Patterns**




More information on enterprise integration patterns: <https://www.enterpriseintegrationpatterns.com/patterns/messaging/toc.html> ➤

### Related Information

Aggregator



Aa



# SAP Cloud Platform Integration

## Integration Flow Design Guidelines

# SAP Cloud Platform Integration

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# Guidelines to Design Enterprise-Grade Integration Flows

[Send feedback](#)

As an integration developer, you need to make sure that you design integration flows in a robust fashion in order to safeguard your company's mission-critical business processes.

An integration flow is *enterprise grade* when it's designed in such a way that it's qualified to implement parts of the mission-critical processes of an enterprise. A poorly designed integration flow can lead to certain errors. In the worst case, the integration flow breaks resulting in a service disruption for the business process. It is your responsibility to design an integration flow in such a way that the overall availability of the business process isn't impaired. To fulfill this requirement, you need to embrace certain characteristics constituting an enterprise-grade integration flow.

In this section, we introduce guidelines for designing enterprise-grade integration flows in SAP Cloud Platform Integration.

There are the following **qualities of an enterprise-grade integration flow**.

## High Availability

One of the key qualities of a cloud service is high availability. As such, it's essential that you build robust integration flows that never break the business process. A prerequisite is that you consider certain patterns when modeling the integration flow. These patterns can be assigned to different qualities constituting an enterprise-grade integration flow.



## Integration Flow Design Guidelines

## > How to Work with the Example Integration Flows

## Guidelines to Design Enterprise-Grade Integration Flows

- Run an Integration Flow
- Under Well-Defined Boundary Conditions

- Relax Dependencies to External Components

- Keep Readability in Mind

## ➤ Handle Errors Gracefully

- Use Prepackaged Integration Content Provided by SAP

- Apply Highest Security Standards

- Guidelines to Implement Specific Integration Patterns





# SAP Cloud Platform Integration

## Integration Flow Design Guidelines

# SAP API Business Hub

Discover and consume digital content packages with APIs, pre-packaged integrations, and sample apps from SAP and select partners

"design guidelines"

 All

All



API



## Integration

## Refine By

## ^ Products

- ☒ SAP Cloud Platform Integration
- ☐ SAP S/4HANA
- ☐ CELUM Digital Asset Management
- ☐ SAP Cloud Platform
- ☐ SAP Cloud Platform Business Rules

More

▼ Industries

▼ Lines Of Business

▼ Vendor

▼ Countries

Clear All

SAP Cloud Platform Integration 



## Integration Flow Design Guidelines - Keep Readability in Mind

### Integration Package

This integration package contains integration flows to illustrate the design **guidelines** for preserving



## Integration Flow Design Guidelines - Handle Errors Gracefully

## Integration Package

This integration package contains integration flows to illustrate the design **guidelines** for handling



## Integration Flow Design Guidelines - Enterprise Integration Patterns

## Integration Package

This integration package contains integration flows to illustrate the design of the most common Enterprise Integration Patterns



## Integration Flow Design Guidelines - Relax Dependencies to External Components

## Integration Package

This integration package contains integration flows to illustrate the design guidelines for relaxing



## Integration Flow Design Guidelines - Apply Highest Security Standards

Integration Package

This integration package contains integration flows to illustrate the design **guidelines** for applying



Integration Flow Design **Guidelines** - Run an Integration Flow Under Well-Defined Boundary Conditions

## Integration Package

This integration package contains integration flows to illustrate the design **guidelines** for managing

# SAP Cloud Platform Integration

## Integration Flow Design Guidelines

Postman

File Edit View Help

New

Import

Runner

My Workspace 

Invite

Filter

HistoryCollectionsAPIs BETA

New Collection

Trash

▼

ApplyHighestSecurityStandards

★

6 requests

▼

ApplySecurity\_DisabledDTDs

...

HEAD DisabledDTDs\_GetXsrfToken

POST DisabledDTDs

▼

ApplySecurity\_RemoveSensitiveContent

...

GET RemoveSensitiveContent

▼

EncodeDynamicParameters

...

HEAD EncodeDynamicParameters\_GetXsrfToken

POST EncodeDynamicParameters\_OffensiveHeader

POST EncodeDynamicParameters\_CorrectHeader

▶

SecureIfflows

★

5 requests

◀ GET ... [CONFL GET ... POST II HEAD [ GET ... X HEAD [ ▶ + ...

RemoveSensitiveContent

GET https://{{host}}/http/ApplySecurity/RemoveSensitiveContent

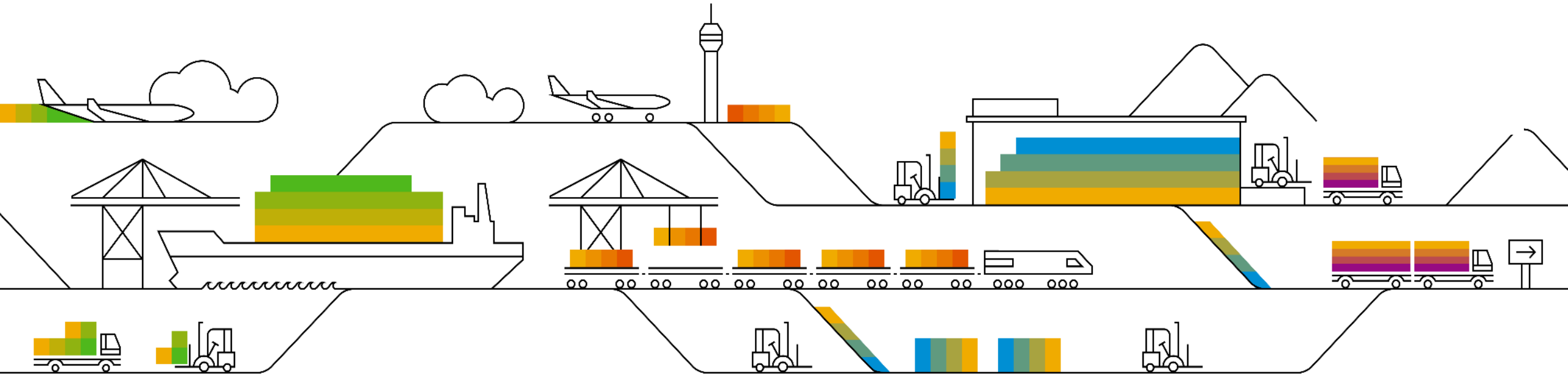
ParamsAuthorizationHeaders (3)BodyPre-request ScriptTests ●Settings

Query Params

KEY	VALUE
Key	Value

Response

# SAP Cloud Platform Integration Advisor



# Agenda



- Shared functions
- Comparison of message implementation guidelines
- Exchange of guideline versions in mappings
- Global codelists



# SAP Cloud Platform Integration Advisor shared functions

- Mapping functions are often used in the same way
- Increases reuse
- Reuse inside the MAG later inside the tenant

The screenshot shows the SAP Cloud Platform Integration Advisor interface. The main window displays a mapping between two source and target structures. The source structure is 'INT383-Exercise 1 Source MIG' and the target structure is 'INT383-Exercise1-00'. The 'Shared Code (1)' tab is selected, and the 'Function' tab is active, showing the definition of a shared function named 'ConcatWithComma'.

**Source: INT383-Exercise 1 Source MIG**

Structure	Name	Cardinality
✓ E1EDKA1	Segment Group - IDoc: Docume...	0..99
✓ E1EDKA1	IDoc: Document Header Partner ...	1..1
PARVW	Partner function (e.g. sold-to par...	0..1
PARTN	Partner number	0..1
LIFNR	Vendor number at customer loca...	0..1
NAME1	Name 1	0..1
NAME2	Name 2	0..1
NAME3	Name 3	0..1
NAME4	Name 4	0..1
STRAS	Street and house number 1	0..1

**Target: INT383-Exercise1-00**

Structure	Name	Cardinality	Status
> DTM[2005 = 17]	Date/time/period - Delivery ...	1..999999	
> IMD	Item description	0..999	
> FTX	Free text	0..99	
✓ SG2	Segment Group 2: NAD-LO...	0..99	
✓ NAD	Name and address	1..1	
3035	Party function code qualifier	1..1	
✓ C058	Name and address	0..1	
3124	Name and address description	1..1	
> UNS	Section control	1..1	
> UNT	Message trailer	1..1	

**Definition**

Scope:

☐ Local Code ☒ Shared Code

**Shared XSLT Code**

```
<?xml version='1.0' encoding='UTF-8' ?>
<xsl:variable name="name" select="$nodes_in/nodes_in_1[1]" />
<xsl:variable name="address" select="$nodes_in/nodes_in_2[1]" />
<xsl:value-of select="($name, $address)" separator="," />
```

☐ Confidential Function Content

# SAP Cloud Platform Integration Advisor

## MIG comparison

- Compare MIGs to identify similarities and differences
- Can compare 2 to n MIGs
- Can compare different versions of the same MIG but also different MIGs

[illegible]

# SAP Cloud Platform Integration Advisor

## exchange MIG version in MAG

- As MIGs can exist in different versions it is now possible to exchange the used version in the MAG

SAP Cloud Platform Integration Advisor

Mapping Guidelines /

Mapping IA Webinar Source IDOC to Automotive Purchase Order Interface  
Version: 1.0

Save Proposal Cancel ...

Overview Mapping Global Parameters (0) Shared Code (0) Notes (0)

General Information

Name: Mapping IA Webinar Source IDOC to Automotive Purchase Order Interface

Version: 1.0

Status: Draft

Source and Target MIGs

Source

MIG: IA Webinar Source IDOC

Version (Status): 1.0 (Draft) [Change...](#)

Message Type: ORDERS.ORDERS05 - Pu

Type System: IDoc

Type System Version: S4HANA 1709

Target

MIG: Automotive Purchase Order Interface

Version (Status): 2.0 (Draft) [Change...](#)

Other MIG Versions

Version	Status	Modified On	Modified By	Name
1.0	Active	13 Nov. 2018 07:18	I331104	Automotive Purchase Order Interface

[Change Version](#)

Documentation

Summary:

Definition:

\* Source Business Context

# SAP Cloud Platform Integration Advisor

## global code value mapping

- Code value mappings are often used in the same way
- Increases reuse
- Makes changes to a value mapping easier

The screenshot displays the SAP Cloud Platform Integration Advisor interface. The main window shows a mapping configuration for 'Mapping IA Webinar Source IDOC to Webinar Automotive PO EDIFACT' (Version: 1.0). The 'Mapping' tab is active, showing a tree structure of source and target elements. A dialog box titled 'Select a Global Code Value Mapping' is open, showing a list of mappings. The selected mapping is 'Value Mapping from ISO\_CodelistsAndSchemes/ISO\_3166-1 to ISO\_CodelistsAndSchemes/ISO\_3166-1'. Below the dialog, the 'Using Global Mapping' section shows a table of source code values and their definitions, with a target code value column.

Source Code Value	Definition	Target Code Value
AD - Andorra		AD - Andorra
AE - United Arab Emirates		AE - United Arab Emirates
AF - Afghanistan		AF - Afghanistan
AG - Antigua and Barbuda		none
AI - Anguilla		none
AL - Albania		none
AM - Armenia		none



# Demo



# Q&A

# Thank you.

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