SAP Integration Suite
Monthly Updates – November 2021

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THE BEST RUN **SAP**

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Agenda

- Cloud Integration

- Re-cap from SAP TechEd 2021

- #AskAnythingIntegration

Cloud Integration
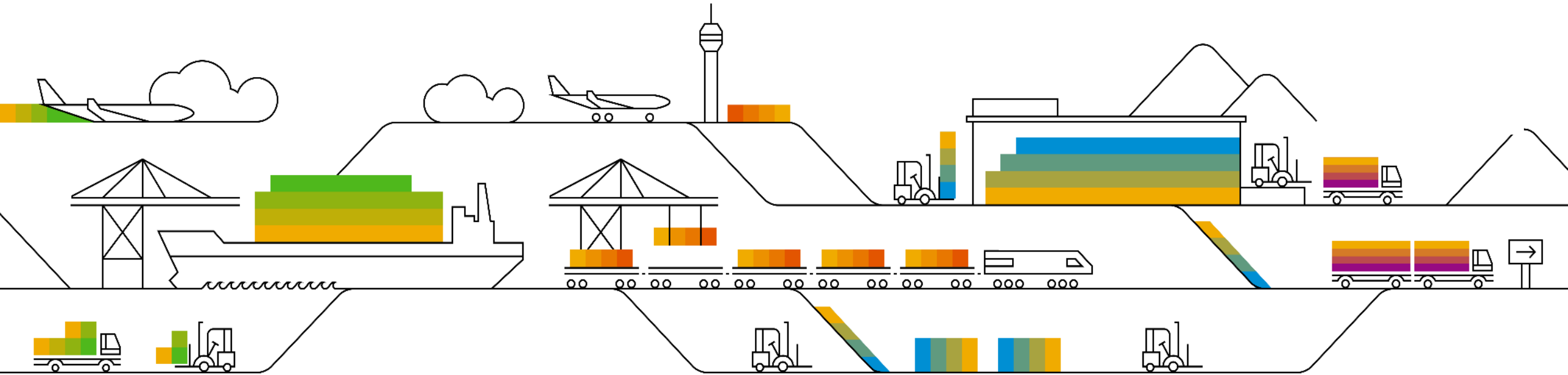
Integration Flow Design Guidelines

Quality of Service Exactly Once

Exactly Once = Guaranteed Delivery + Idempotent Receiver

Building blocks to ensure guaranteed delivery

- Unique ID
- ID mapping
- Acknowledgement
- Sender with Retry
- Idempotent Receiver
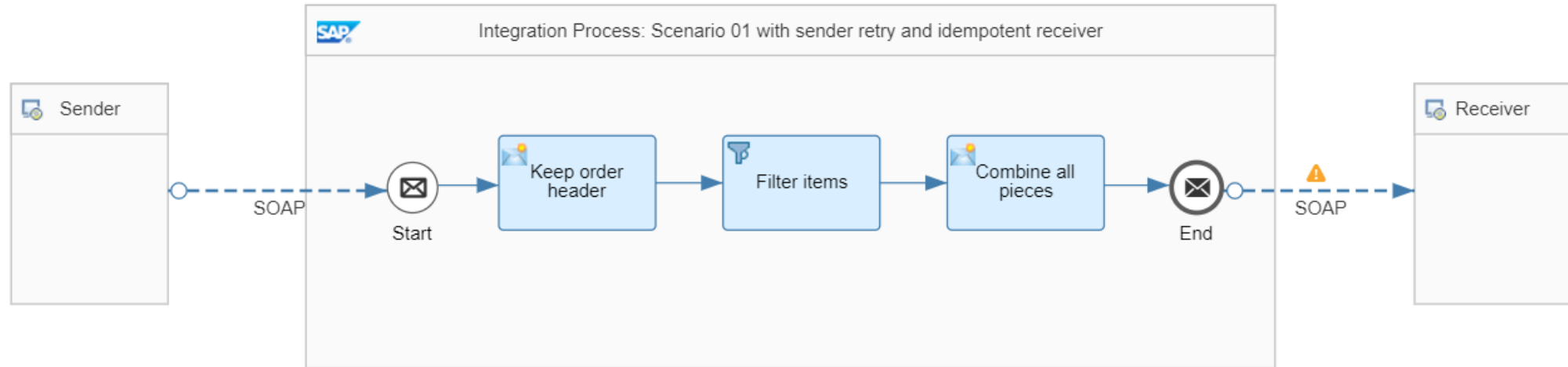
Recap: ID Mapping Step shipped in Sept 2021

You can use the ID Mapping step to implement scenarios with exactly once processing of messages.

The ID Mapping step maps a source message ID to a target message ID. A receiver can use the target message ID, for example, to make sure that the receiver can process a certain message only once.

See: Define ID Mapping

Integration Flow Design Guidelines – Exactly Once Scenario 01
Sender Supporting Retry & Idempotent Receiver

Integration Process: Scenario 01 with sender retry and idempotent receiver

Sender → SOAP → Start → Keep order header → Filter items → Combine all pieces → End → SOAP → Receiver

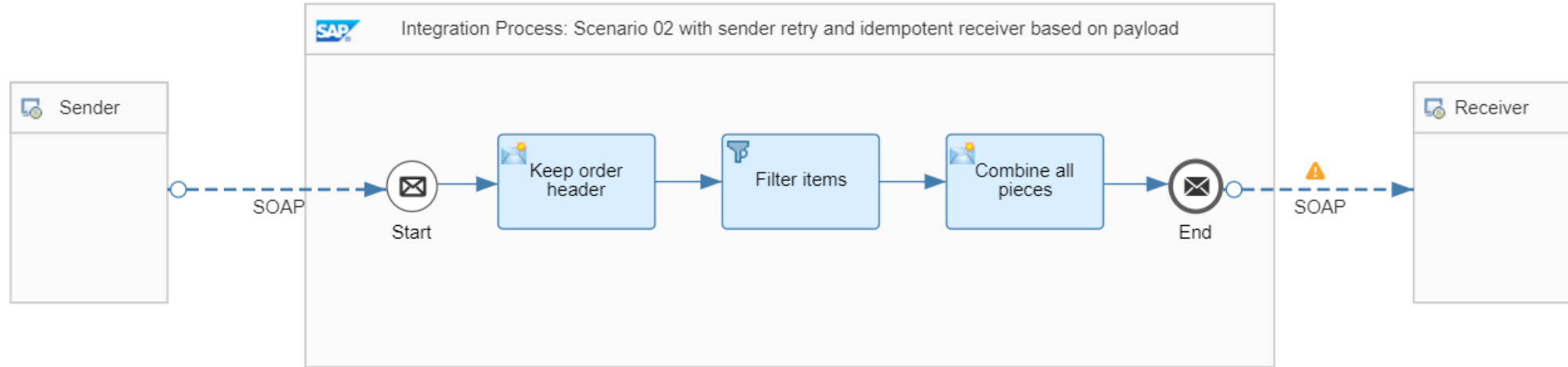Message ID stored in header **SapMessageIdEx** and routed through

SOAP

General   Connection   **Processing**
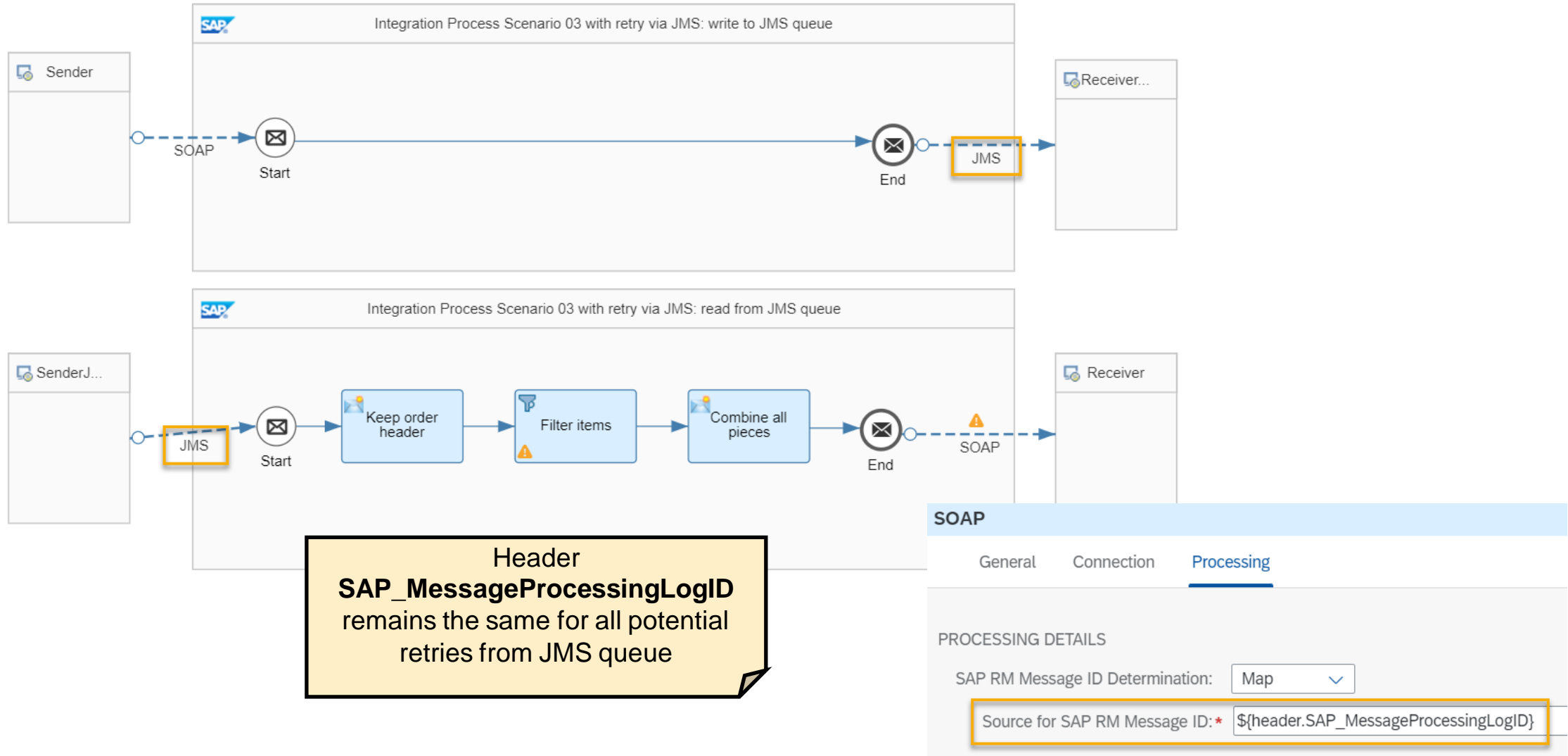
PROCESSING DETAILS

SAP RM Message ID Determination: Reuse

Integration Flow Design Guidelines – Exactly Once Scenario 02
Message Protocol Not Supporting Unique ID

Integration Process: Scenario 02 with sender retry and idempotent receiver based on payload

Sender → SOAP → Start → Keep order header → Filter items → Combine all pieces → End → SOAP → Receiver

Unique ID retrieved from payload and stored in property **orderNumber**

SOAP

General   Connection   **Processing**

PROCESSING DETAILS

SAP RM Message ID Determination: Map ▾

Source for SAP RM Message ID: * ${property.orderNumber}

Integration Flow Design Guidelines – Exactly Once Scenario 03
Middleware Handling Retry

Integration Process Scenario 03 with retry via JMS: write to JMS queue

Integration Process Scenario 03 with retry via JMS: read from JMS queue

Keep order header

Filter items

Combine all pieces

Header
SAP_MessageProcessingLogID
remains the same for all potential retries from JMS queue

SOAP

General | Connection | Processing

PROCESSING DETAILS

SAP RM Message ID Determination: | Map

Source for SAP RM Message ID: * | ${header.SAP_MessageProcessingLogID}

Integration Flow Design Guidelines – Exactly Once Scenario 04
Splitter Scenario with ID Mapping

ID mapping based on concatenated header **SapMessageIdEx** and **CamelSplitIndex**
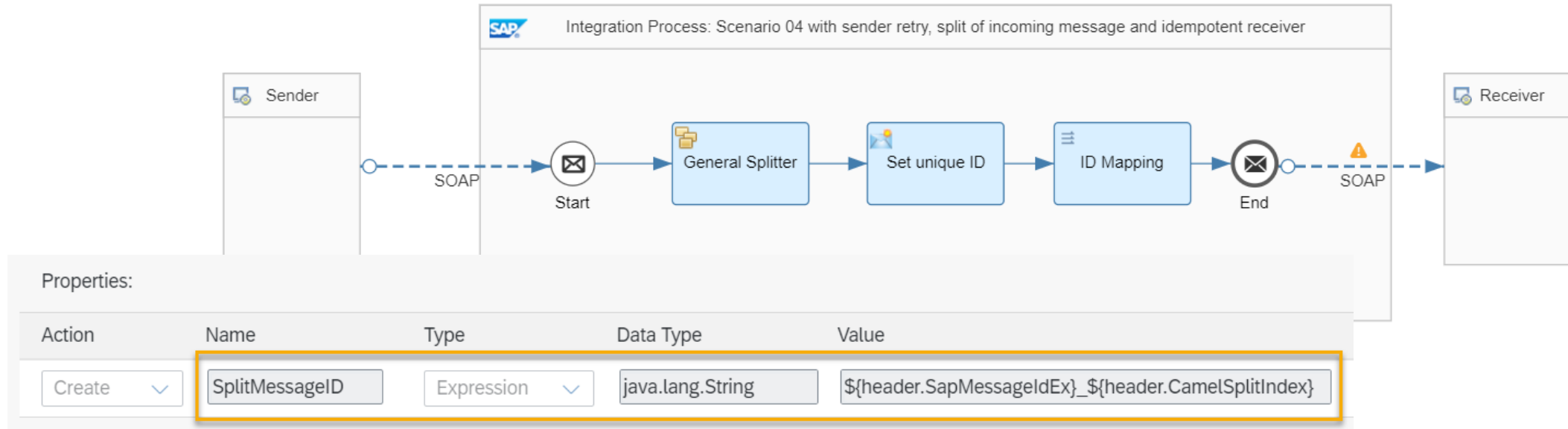
ID Mapping

General   Processing

Source Message ID: *	${property.SplitMessageID}
Target Header Name: *	SapMessageIdEx
Context: *	IDMapperContext_01
Visibility:	Integration Flow
Expiration Period (in d): *	30

SOAP

General   Connection   Processing

PROCESSING DETAILS

SAP RM Message ID Determination:	Reuse

Outlook*

Support for duplicate check as flow step in modelling

- Via local "idempotent" subprocess
- Message ID is checked in idempotent repository
- Processing can be stopped in case of duplicate detection
- Duplicate check is logged in MPL

* Planned to be shipped in Q1 2022; note: roadmap items may be changed by SAP at any time for any reason without notice.

Re-cap from SAP TechEd 2021
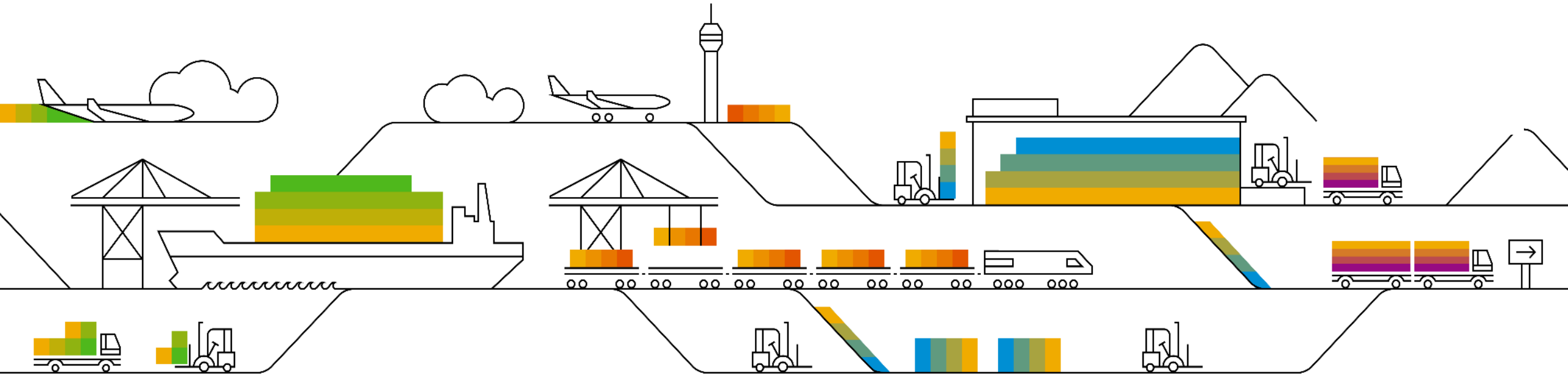
SAP TechEd 2021 – SAP Integration Suite
Key blogs

- SAP TechEd 2021: Connecting Your Enterprise with SAP Integration Suite

- Run SAP TechEd DEV163 – Get Hands-On Experience with SAP Integration Suite at your own pace

SAP Integration Suite
SAP TechEd 2021 – Hot Topics

1 **Hybrid Deployment Option**

2 **PO Migration**

3 **Ease of Use, Coherence Developer Productivity**

4 **Operations High Availability**

5 **Licensing and Pricing**

6 **B2B**

SAP TechEd 2021 – SAP Integration Suite

Key questions & requirements

General

- What is CPI currently called? == Will CPI be called as Integration Suite going forward?
- What kind of skillset/language is required to use CPI?
- Is "SAP Integration Suite" running on Private cloud?
- If I intend to use only Integration Suite, does it matter which cloud provider I choose AWS/Azure?
- We are in Private Cloud ECC, we would like to see if we can use CPI as middleware, is that possible or should be go with SAP PI/PO?
- How important is for Integration Suite to be on the same cloud provider as SAP and other cloud run apps?
- Instead of one tool, why SAP is adding multiple tools for Integration. Will SAP combine all and make one tool?
- Is the Integration Suite synonymous with Smart Data Integration or they are different?
- Where does the CPI tool fit into this. Has this been rebranded? What about CPI-DS?
- Where do data transformations (e.g. joins, filters, etc.) get applied in IS? Has DI replaced CPI-DS?
- Is there difference on Neo /CF wrt to Integration Suite?
- Till when CPI on Neo will be available?

SAP TechEd 2021 – SAP Integration Suite

Key questions & requirements

Operations

- Additional nodes will be added automatically if volume increases or do we need to request SAP during high load scenario? - Is it same for CF also?
- Does SAP Integration suite support high latency scenarios? What is typical response/execution time for pass through async/sync scenarios?
- Any pointers to testing of the integrations including APIs?
- Is there any scalability and performance/sizing guide planned for Integration suite?
- If any iFlow/API is handling huge data, can we dedicate nodes for this process so that others will not impact on performance?
- Does auto scaling of Cloud Foundry apply to CPI also?
- Which are the details for the HA/DR roadmap feature that is planned?
- Is the HA setup available on CF or Neo or both?

Education

- Where can I learn more about CPI? Does it have queuing capability?
- Any Plans for video series for learning API, Event Mesh, Hub. etc?

SAP TechEd 2021 – SAP Integration Suite

Key questions & requirements

Hybrid deployment

- Can you please give more information regarding the hybrid deployment option? [Licensing] Will the hybrid deployment be part of the CPI licenses? Message numbers will not increase license costs, right? When is this option planned?

- Is there someplace to go and see a detailed technical overview of how to install the hybrid deployment of SAP Integration Suite?

- Is PO required for hybrid deployment?

- If I build CPI artifacts using IS now and use PO as runtime, will it be possible to migrate to hybrid deployment without any rework?

- Ground to Ground integration will be a separate license? Will this be a container with CPI/APIM capabilities to be deployed onprem?

- Will the ground 2 ground be available through PO7.5 CPI runtime or as a separate runtime?

- Is OnPrem available for his now or is that in the future?

- In Integration suite (CPI or API Mgmt), can we dedicate few nodes for particular/critical processes so that other jobs will not impact even if these processes?

- Is there a plan to create/release a on-prem version of the Integration Suite for those who have no plan to move to cloud in the future?

- Will Hybrid Suite run on prem? where can I find more information?

- Can you share more information in Hybrid Integration cell? What does it mean?

- Will 'Hybrid' Integration cell work from SAP Integration Suite on NEO?

- Is hybrid deployment option used mainly for IT security reasons or bandwidth/performance reasons?

- Future integration tool will be Integration suite as per SAP roadmap and there are guides released to migrate from PO to CPI. With Hybrid deployment, do we migrate PO to on-prem IS?

- Any tentative date for availability of Integration cell?

SAP TechEd 2021 – SAP Integration Suite

Key questions & requirements

SAP PI/PO move or upgrade

- My client doesn't allow data in the cloud for security reasons - what options will they have when PO is end of life?
- When is SAP planning to release the migration tool from PO to CPI?
- Is there any news about being able to use in SAP IS a sort of pipeline functionality which is today core to SAP PO?
- Why SAP is not supporting the Retry approach in CPI same as SAP PO and we have to use JMS or Datastore and create additional flow to achieve such requirement?
- Will the on premise PI/PO be migrated to the Integration Suite going forward? == Moving forward, will SAP Integration Suite be replacing SAP Process Orchestration?
- Can you provide more input (links, docs, tutorials) on migration/transition SAPPO-->CPI?
- Can we use CPI for on-prime to on-prime integration? if yes pros and cons?

Monitoring

- Is there a plan to make available all Monitoring features available on PO in Integration suite?
- With SAP Integration Suite - Customers are looking for a more better end to end interface monitoring dashboard out of the box. Do you have any updates around this topic?

Additional questions

- Can we leverage SAP integration suite in GxP compliance scenarios? [Pharmaceutical Industry]

SAP TechEd 2021 – SAP Integration Suite

Key questions & requirements

B2B (incl. Integration Advisor)

- What are the plans for the B2B Add On? For support with true EDI (ANSI X12, EDIFACT)
- Is there any accelerator planned to migrate B2B integration from PO to Integration suite?
- Are there any productive use cases implemented for B2B integration using integration suite and integration advisor?
- Is the Integration Advisor delivered as part of the SAP BTP?
- In CPI, we can't create data types, also in integration advisor we can't do the complex mapping (For this again we have to come to CPI). How will SAP simplify?
- Can the integration hub be leveraged to support EDI with non SAP systems as well?

Licensing and pricing

- Where can I find the cost details for using CPI?
- Is IS part of BTP or a product which has to be licensed extra?
- Within the BTP free tier does the integration suite trial version provides Kafka adapter available for doing PO?
- Will Signavio be part of SAP Integration Suite or still be a separate offering?
- For those of use who haven't our S/4 in NS2 due to security requirements, is Integration Suite available to us? Limited to US person support only?
- With integration suite premium edition, any limitation of no of calls with alert notification service and also any limit on number of internal JMS queues?

SAP TechEd 2021 – SAP Integration Suite

Key questions & requirements

Integration Suite Details

- Is there any change planned for Ariba integration with S/4HANA? or it will continue to use Ariba CIG?

- Will AIG/CIG continue to stay as is or will the Ariba integration tool will eventually in the future expected to flow through integration suite?

- If SAP integration suite is "the universal integration platform " from SAP why AIG/CIG is needed just only for Ariba integration with ECC/S4?

- What is the SAP's preferred method to interact with Salesforce, Amazon? Is it via 3rd Party adapters provided by Rojo which is part of SAP IS or use the Open Connector?

- For Workday integration, I see it available in open connectors as well in adapters to be downloaded. What is recommended method?

- Is JMS adapter supported with CPI? == Is JMS messaging supported now or is that still in the future? - Channels as well or just queues?

- What reason of some of non-sap adapters available out of box e.g. Facebook while critical adapters like - SalesForce, ServiceNow need to be deployed separately?

- These days, we are seeing that integration needs to build much custom/business logic. Why SAP integration Suite does not support Java to allow customers to write more logic in integration?

- Does Integration Suite provide any predefined reports for IT and Business? Like Business team wants to know the total number of order for a business division/customer?

- How does CPI support event-driven architecture? e.g. broadcasting and consuming events to/from Kafka stream? - So with SAP Integration Suite we get everything we need to connect our SAP backend solutions with a Kafka event stream?

- Any plan to have mapping and debugging tool in CPI?

SAP TechEd 2021 – SAP Integration Suite
Key questions & requirements

SAP Process Orchestration

- In which integration pattern mentioned PI/PO is integrated?
- Is Event driven pattern available in PI/PO?
- How we can use event integration in PI/PO?
- Are you planning to implement an API to download the runtime content? Answer: (Yes, you can download the cloud content via the SAP PO tooling already to the local cloud integration runtime. Further APIs are currently not planned.)
- Why can't we edit or remove the UDF in the message mapping which is imported via PO? - Does the update of UFDs also support the external jars which are referenced in the UDF?

What is #AskAnythingIntegration?

Provides a platform for customers, partners, consultants, and participants to ask their most important and top priority questions and get them answered by the panel of experts.
- Questions can be sent upfront or posted directly in the call
- Questions and answers will then be published as a public FAQ document with regular updates and additions

Panel of Experts: Speakers of the monthly webinar + product Management team
Schedule: Runs every alternate month
Duration: 20 mins
Moderator: Gautham (gautham.krishna@sap.com)

Note: "Interact with #IntegrationBlackBelt" section will transition to alternate months.

#AskAnythingIntegration

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