SAP Business Unleashed Innovation Day

When you connect everything,
you can achieve anything.

Leverage real-time business insights with an event-driven architecture

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Agenda

What is Event-Driven Architecture?

SAP's event-driven ecosystem and strategy.
Focus: SAP Integration Suite, Advanced Event Mesh.

SAP solutions for event-driven integration

Demo: Event-driven integration with SAP S/4HANA and SAP Integration Suite, Advanced Event Mesh

Intelligent Enterprise EDA from SAP

Helpful resources

Event-driven architecture

- An **event** is a **significant change in state**.
- **Event source** sends an event to inform of change.
- Message holding event description in encoded format is distributed through an **event broker**.
- **Event consumers** have registered with event broker and are informed of event.
- Events come in different flavors: **notification events** or **data events**.

```
{"type":"sap.s4.beh.product.v1.Product.Changed.v1","
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"source":"/default/sap.s4.beh/0000000007","id":"fa163
e0b-4824-1eec-83f7-32dfc754759c","time":"2023-09-
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datacontenttype":"application/json","data":
{"Product": "160","ProductType": "FRIP"}}
```
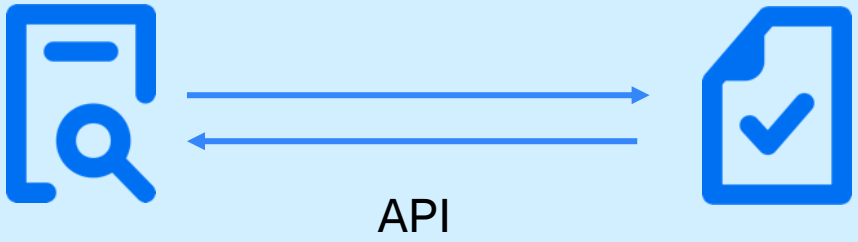
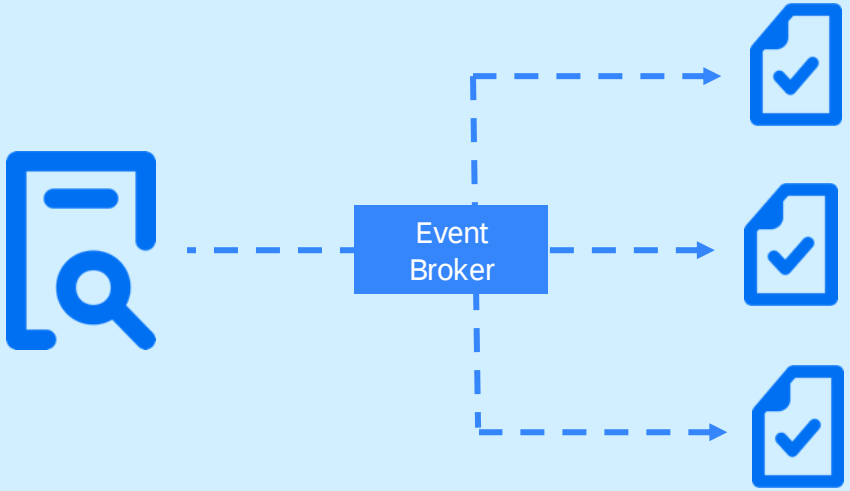

API Architecture vs. Event-Driven Architecture

API Architecture



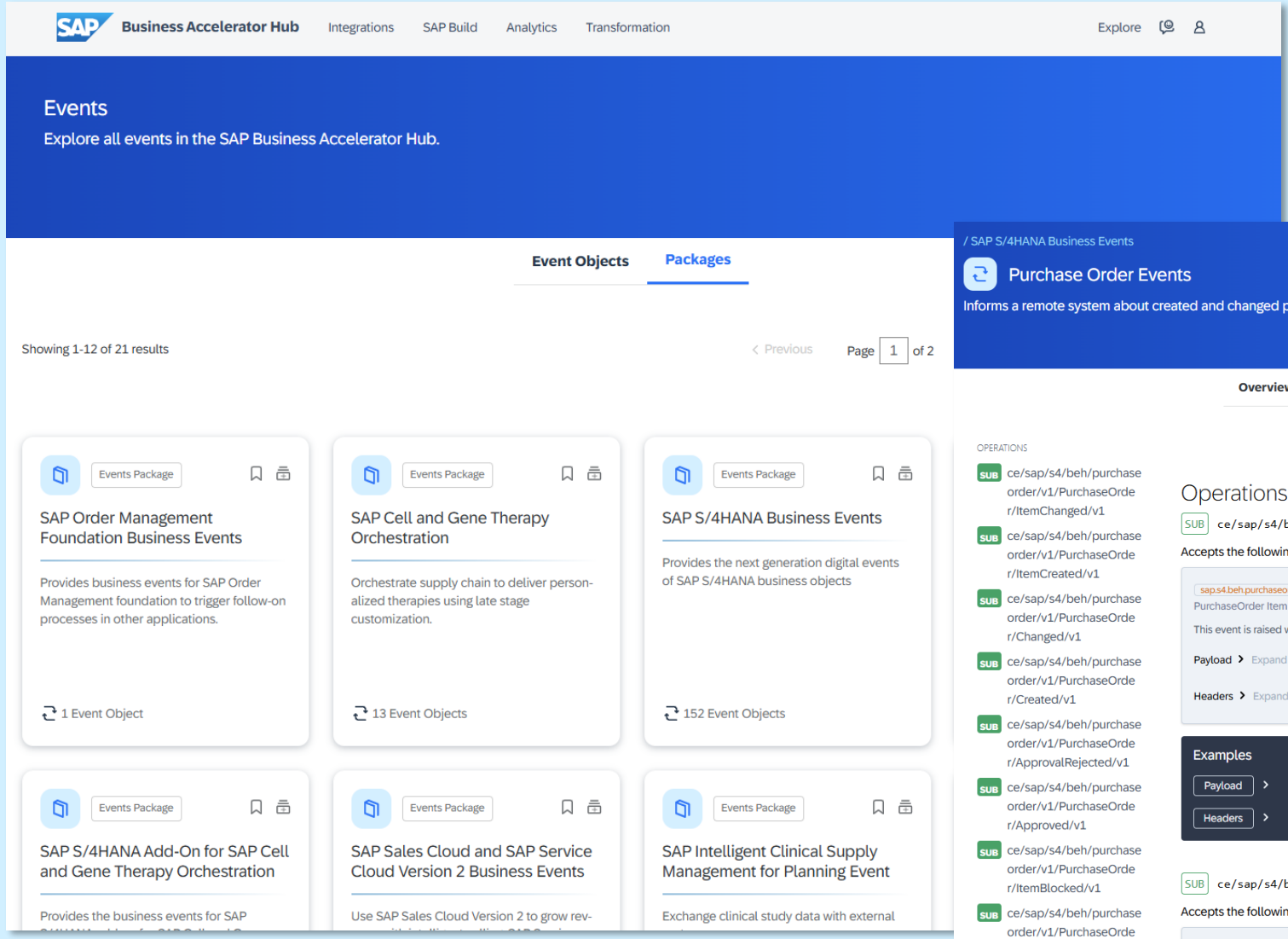
Request and Reply Based
Synchronous

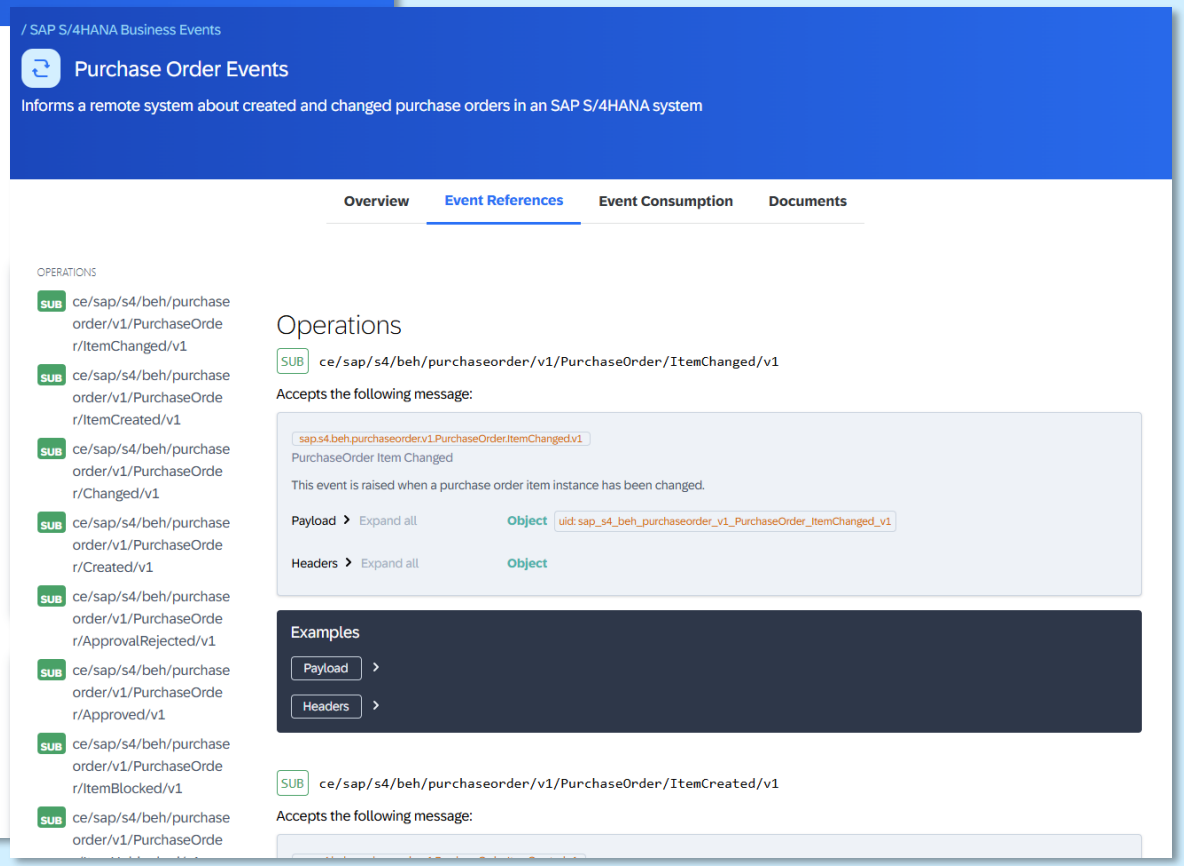
Event-Driven Architecture (EDA)



Push-Based
Asynchronous
Decoupled

SAP Business Suite Event Sources





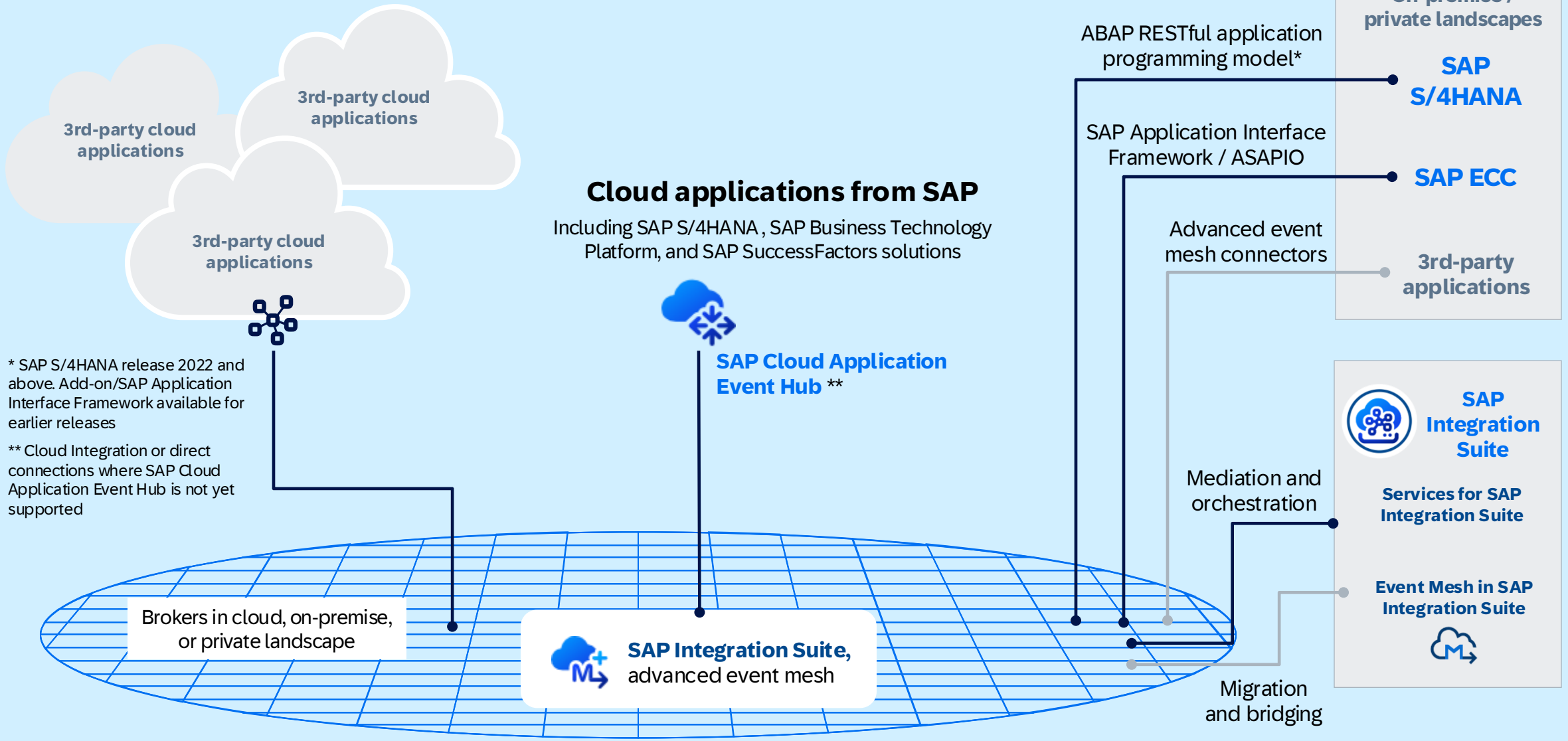
Topics:

sap/s4/beh/purchaseorder/v1/PurchaseOrder/ItemChanged

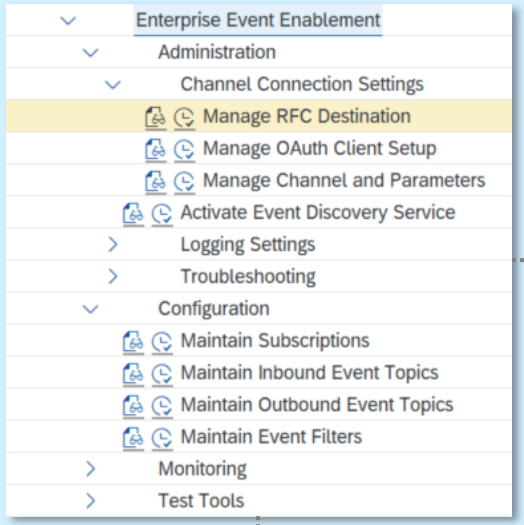
sap/s4/beh/businesspartner/v1/BusinessPartner/Created

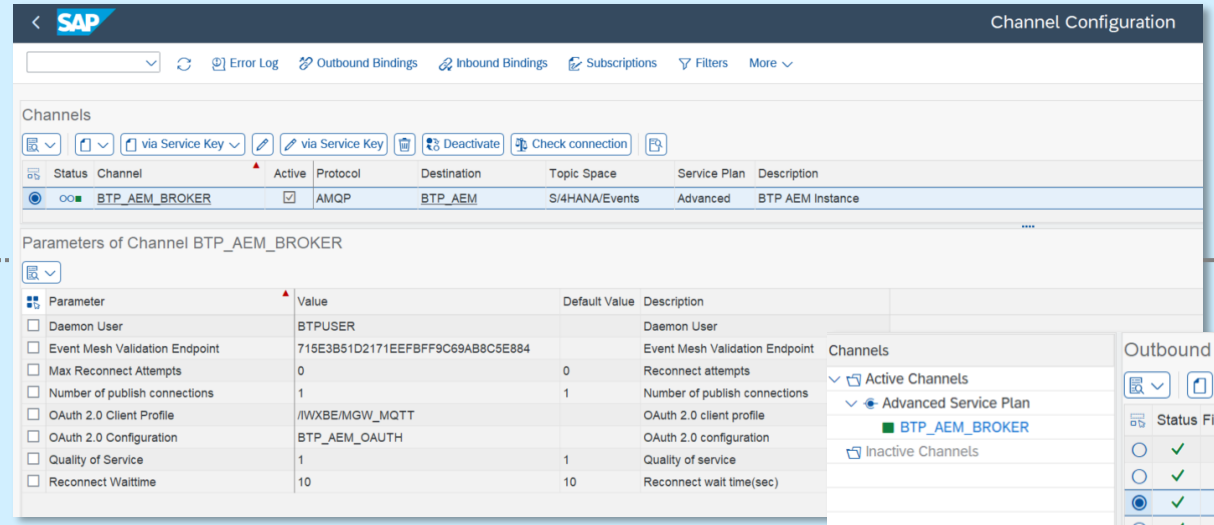
sap/ssc/caseService/caseCreated/v1

SAP's event-driven technical ecosystem and strategy



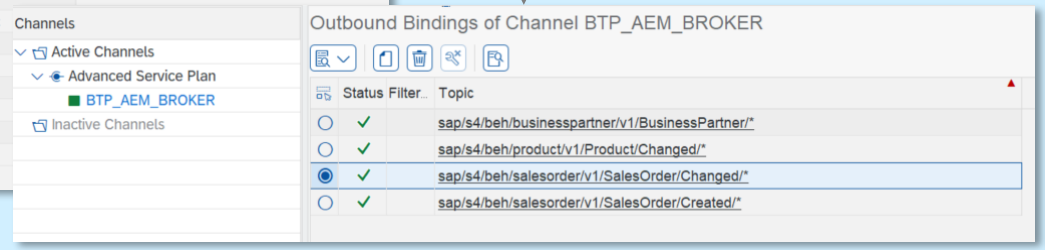
SAP S/4HANA connectivity to SAP Integration Suite, AEM



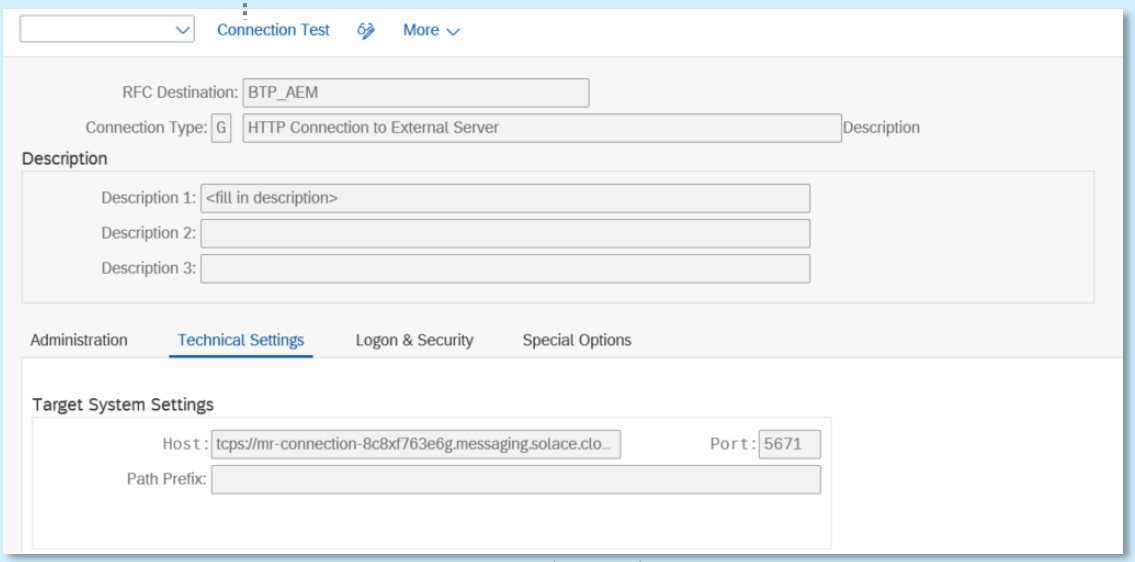


AMQP connection to AEM broker

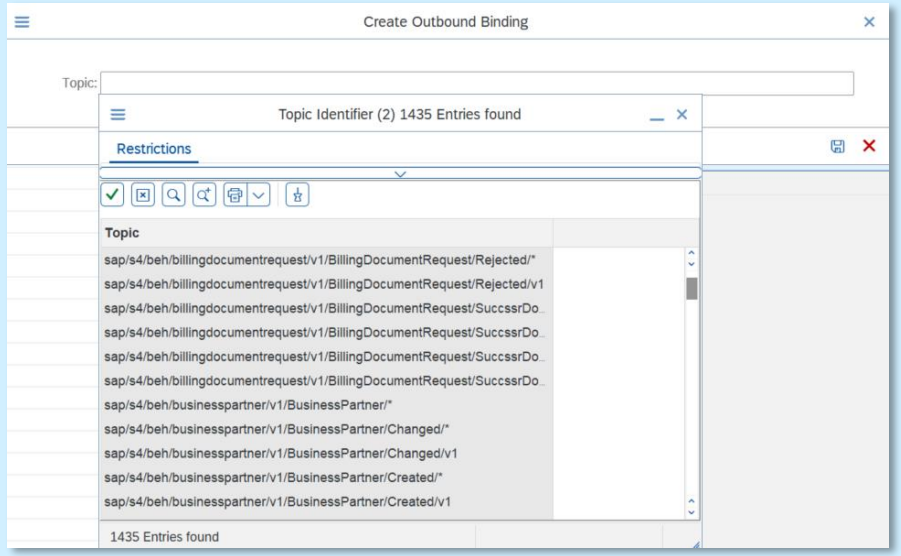
Create outbound binding



Outbound topics to publish

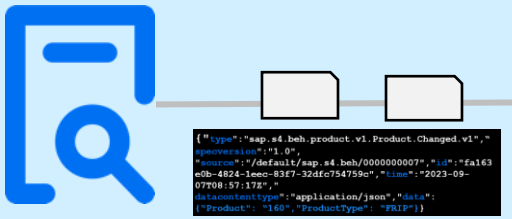


AEM broker connection details



Publish-Subscribe Messaging Pattern

Event-Driven Architecture (EDA)



Publisher

Publishes event messages
to topics or queues

Publishing messages on topics:

sap/s4/beh/product/v1/Product/Changed

sap/s4/beh/salesorder/v1/SalesOrder/Changed

sap/s4/beh/businesspartner/v1/BusinessPartner/Created

sap/s4/beh/businesspartner/v1/BusinessPartner/Changed

sap/ssc/caseService/caseCreated/v1

Event Broker

Queue

s4hanaBusinessPartnerMgmt

Topic Subscription(s):
sap/s4/beh/businesspartner/v1/BusinessPartner/*

s4hanaOrderChanges

Topic Subscription(s):
sap/s4/beh/salesorder/v1/SalesOrder/Changed

sscCaseManagement

Topic Subscription(s):
sap/ssc/caseService/caseCreated/v1

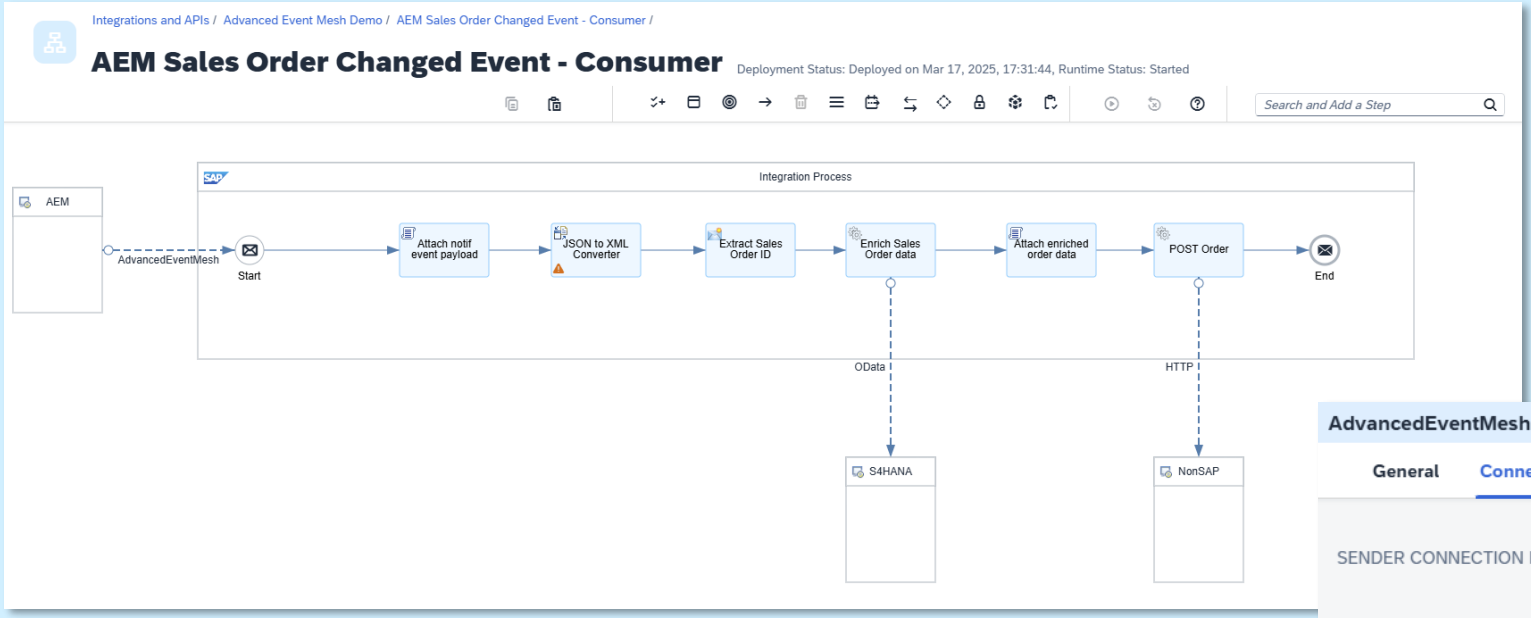
Subscriber

Receives or consumes
events from queues

Topic subscription

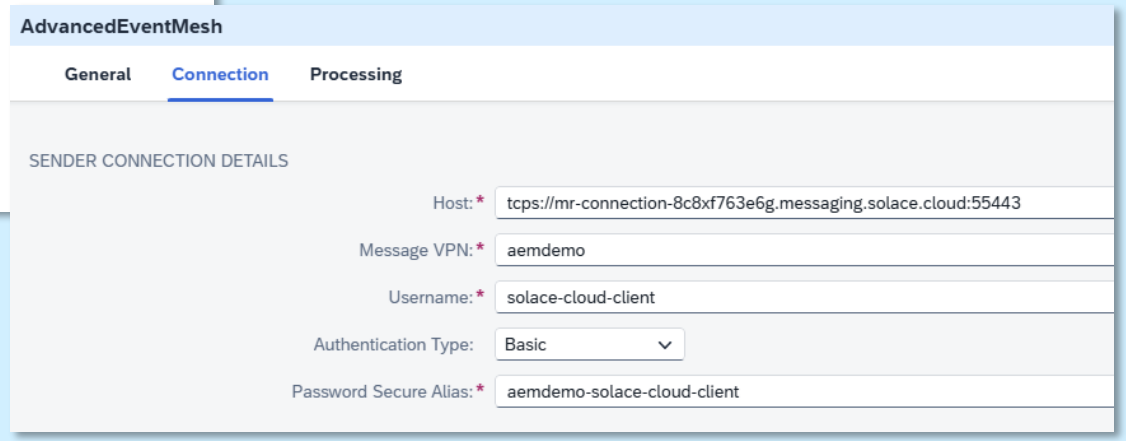
Used to attract published events.
Can contain wildcards for filtering and routing
(e.g. /BusinessParnter/*).

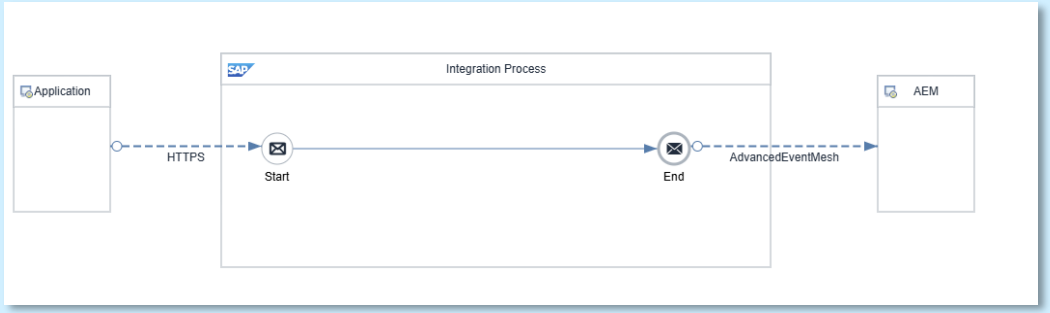
Integration Flow: Consumer or Producer of Events



Demo scenario: iFlow as event consumer

Adapters:
AdvancedEventMesh (SMF message protocol)
AMQP
MQTT, HTTP



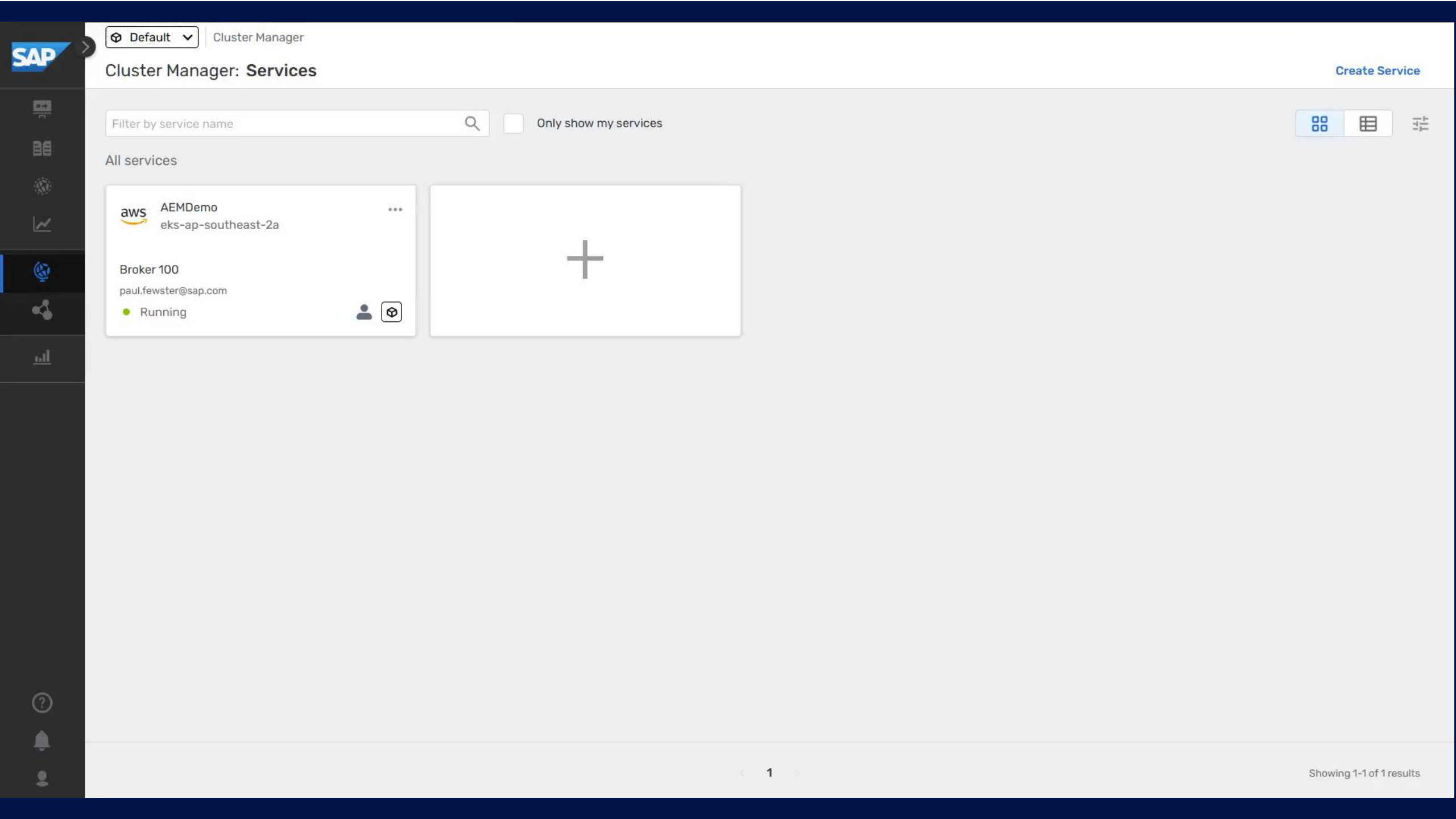


iFlow as event publisher

Comparing SAP solutions for event-driven integration

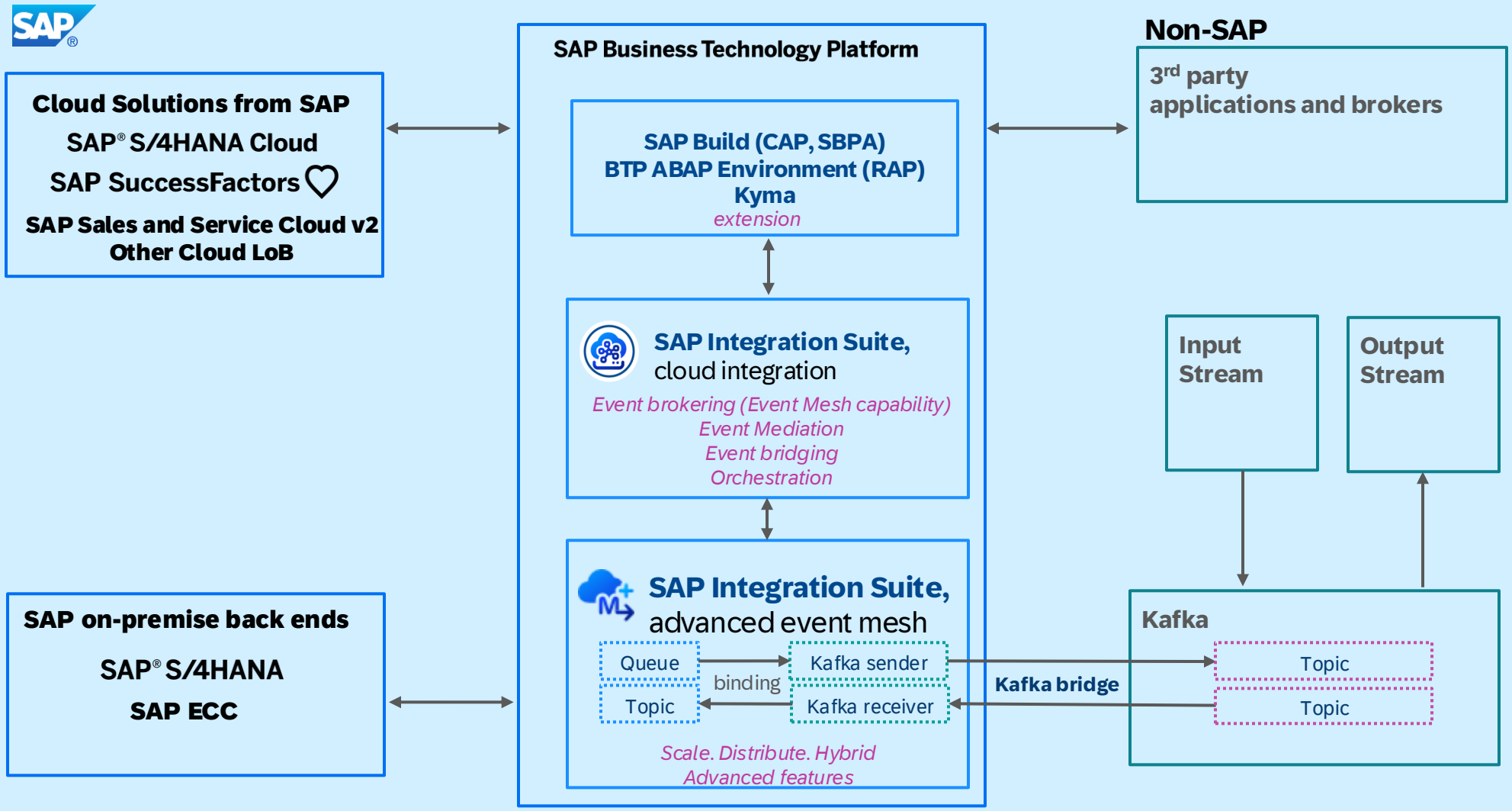
		SAP Event Mesh	SAP Integration Suite, advanced event mesh
Standard	Fully managed cloud service	✓	✓
	Infrastructure Model	Shared	Exclusive in T-Shirt Sizes
	Deployment Options	BTP Deployment	Private and Public Clouds
	Connecting SAP and non-SAP systems	✓	✓
	Out-of-the box support for SAP event sources	✓	✓
	Support of Standard Protocols	✓	✓
	Message size and storage	1MB / 10GB	Up to 30MB / Up to 6TB
	Typical use case size	Small to Medium	Small to Ultra Large
Advanced	Network of Event Brokers	-	✓
	Advanced Event Monitoring and Analysis	-	✓
	Dynamic Event Routing	-	✓
	Filtering	-	✓
	Event replay	-	✓
	Event Management	-	✓

Demo

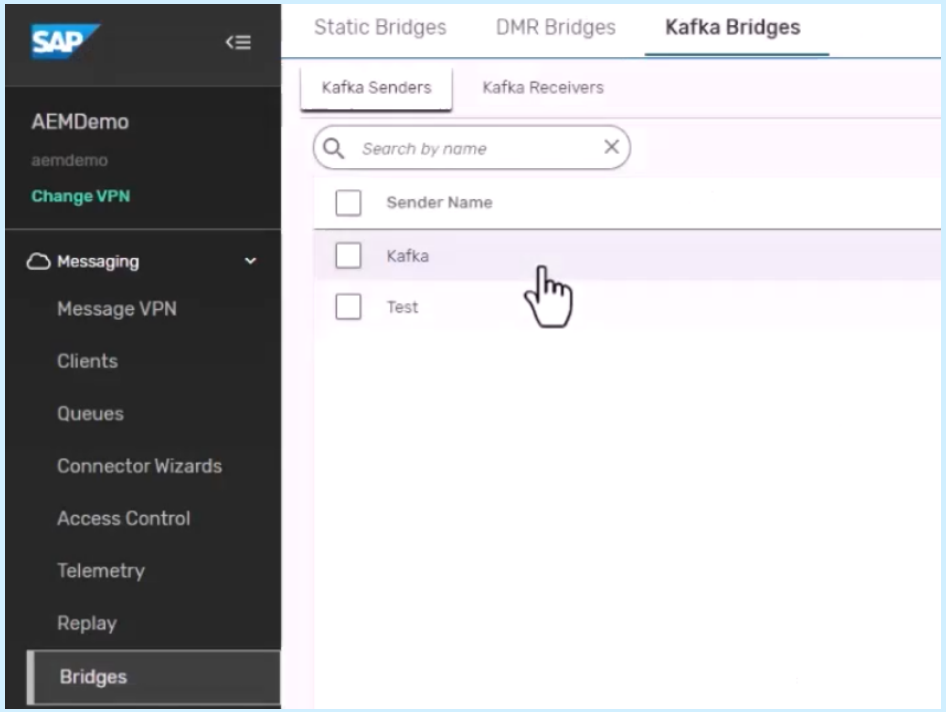

Default
Cluster Manager
Cluster Manager: Services
Create Service
Filter by service name
Only show my services
All services
aws
AEMDemo
eks-ap-southeast-2a
Broker 100
paul.fewster@sap.com
Running
1
Showing 1-1 of 1 results

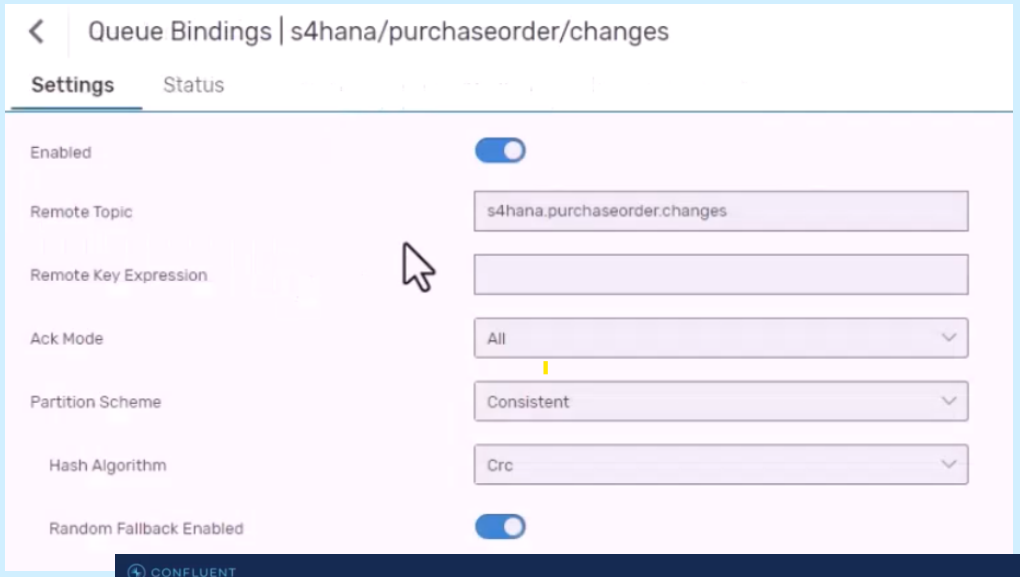
Intelligent Enterprise EDA from SAP

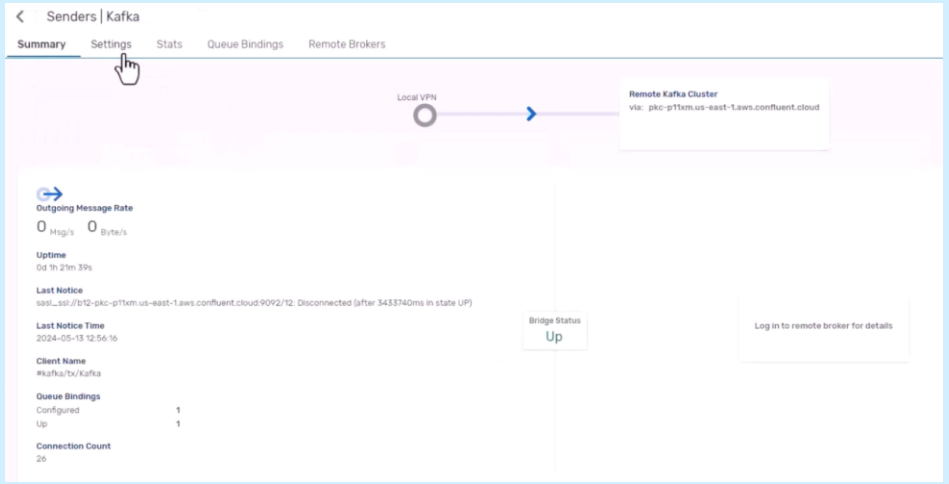
Focus: Kafka Bridge

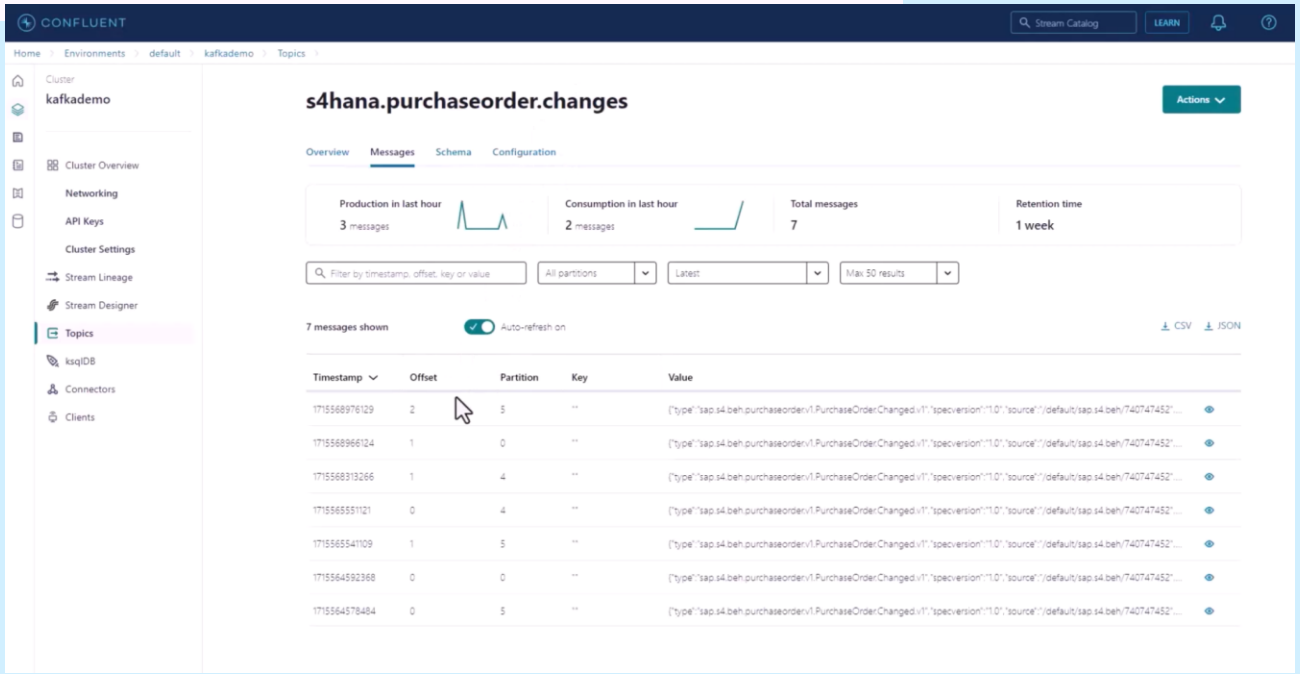


Kafka bridge

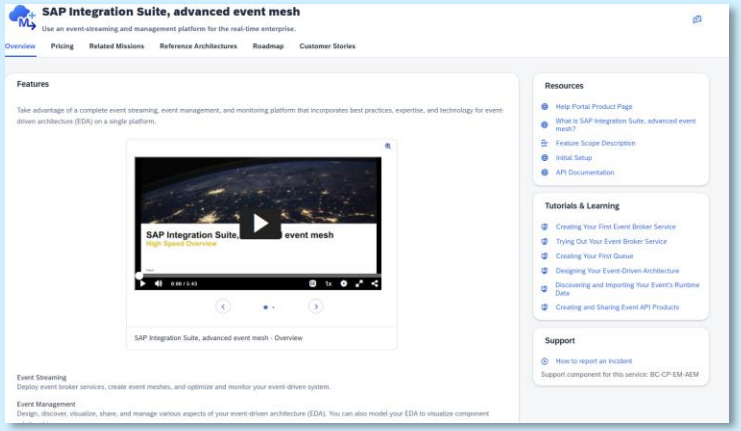








Learn More



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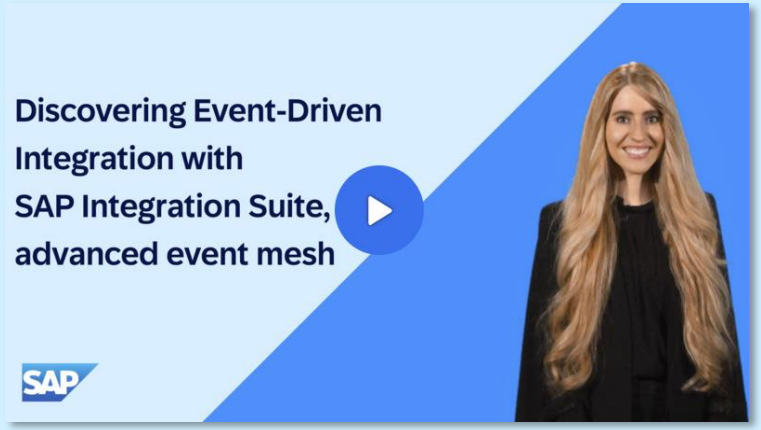
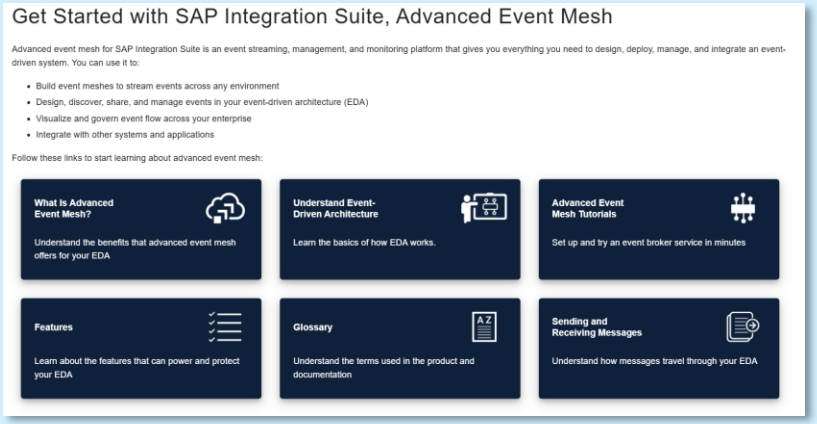


[Learning Journey]



[Documentation]

Thank you

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