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Enabling Asynchronous Integrations by using Event-Driven Architecture

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Agenda

High Speed Introduction

Hands-On

Q&A



Events and real-world event-driven architecture

An **event** is a **significant change in state**.

Notification events or **data events** can be sent from the **event source** to inform of the change.

A message holding the event description in an encoded format is sent through an **event broker**.

Event consumers have registered with the event broker and are informed of the event.



```
{"type":"sap.s4.beh.businesspartner.v1.BusinessPartner.Changed.v1","specversion":"1.0","source":"/default/sap.s4.beh/0000000007","id":"fa163e0b-4824-1eec-83f7-32dfc754759c","time":"2021-09-07T08:57:17Z","datacontenttype":"application/json","data":{"BusinessPartner":"1000187"}}
```

SAP's event-driven ecosystem

Event sources

SAP S/4HANA
SAP S/4HANA Cloud
SAP ERP
SAP SuccessFactors solutions
SAP Marketing Cloud
SAP Data Intelligence
SAP CPQ
Other SAP solutions
3rd party

Eventing infrastructure

SAP Integration Suite

- SAP Event Mesh
- Advanced event mesh
- Event catalogs

Event consumers

SAP Integration Suite
SAP Business Technology Platform (SAP BTP) services and apps
SAP back ends
(SAP S/4HANA Cloud and SAP S/4HANA, SAP ECC and SAP S/4HANA using add-on)
SAP BTP, Kyma runtime
SAP Data Intelligence
SAP Datasphere*
SAP Build*
3rd party

Know-how

Guidance (ISA-M ...) and learning materials (DC missions ...)

Event sources and consumers

Standard SAP and custom add-on events

SAP ERP

- Custom events only using the event enablement add-on
- Can be notification events and data events
- Allowing for inbound and outbound events
- CloudEvents format

Add-on

SAP S/4HANA Cloud

Standard

- ~600 standard notification events documented on SAP Business Accelerator Hub
- Notification events that cannot be adjusted
- New events by request to SAP development only

ABAP RESTful application programming model-based events

- Currently custom notification and data events
- Adjustable and extensible standard events from February 2024

SAP S/4HANA

Standard

- ~600 standard notification events documented on SAP Business Accelerator Hub

ABAP RESTful application programming model-based events

- Extensible standard events from 2308
- Custom notification and data events

Custom add-on events

- Notification and data events
- Can be inbound and outbound

Add-on

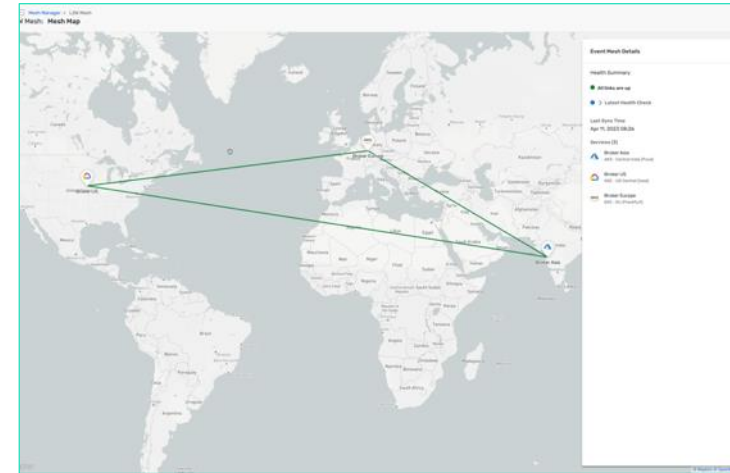
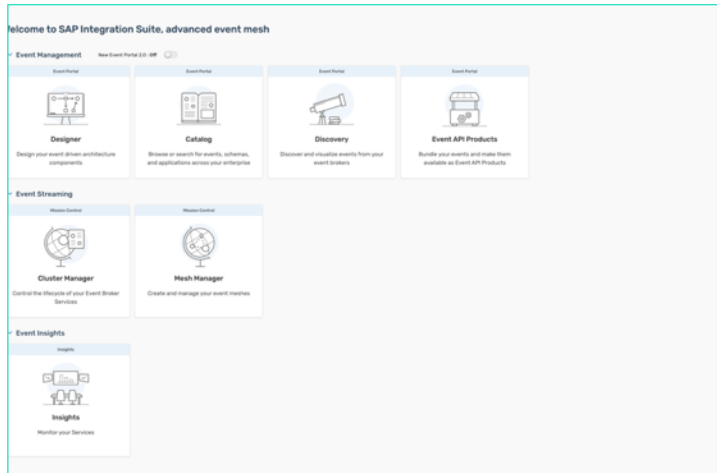
SAP SuccessFactors solutions

- Intelligent service events reused
- Adjustable standard events
- Can be notification and data events
- Not possible to create custom events
- No CloudEvents format yet (JSON/SOAP)

SAP Integration Suite, advanced event mesh

SAP Integration Suite

SAP Integration Suite, advanced event mesh



Overview

- Distributed mesh of event brokers that can be deployed across environments
- Full purpose set of eventing services
- Supports event streaming, event management, and event monitoring
- Brokers come in T-shirt sizes and fully scale as required

Benefits

- Enterprise-grade performance, reliability, security, and governance
- Scales from small to ultra large use cases
- Brokers can be deployed in existing public cloud or private cloud environments
- Dynamic message routing, topic hierarchy, and fine-grained filtering
- Includes advanced event management toolset



Hands-On

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Questions?

For questions after this session, contact us
at stefan.ressing@sap.com

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Be sure to complete the session
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today's experience.

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