How Event Driven Architecture Can Help Power Your Real-time Business Processes

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SOLACE

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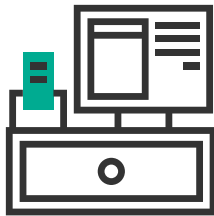THE BEST RUN **SAP**

What is EDA and Why is it Needed?

When an event occurs in an enterprise

They often need/want to do something about it

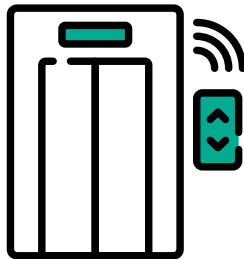**But legacy tech slows awareness and ability to respond**

Customer buys certain product

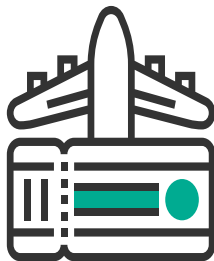Request replenish from stock room → **Stock Updated**

High temp detected in drive motor

Notify security to indicate closure → **Maintenance Team Alerted**

Passenger boards flight a little late

Communicate delay to Luggage Team → **Luggage Loaded on Board**

✖ Data stuck within silos/environments

✖ Slow, inefficient WAN distribution

✖ Complex architecture

Traditional Ways of Transferring data caused Missed Opportunities

**Batch Delivery = Big Delays**

Event-Specific Updates

Request Reply & On Demand

API-Led

Continuous Awareness, Alerted Immediately About Exceptions

Periodic Polling = Wasteful

As Things Happen

Push & Stream

Event-Driven

What If You Could "Tune In" to Specific Kinds of Events Occurring Across Your Enterprise and Across Clouds?

Hashtags

#SAP #AEM #BTP

Events and Topics

SAP Integration Suite, Advanced Event Mesh
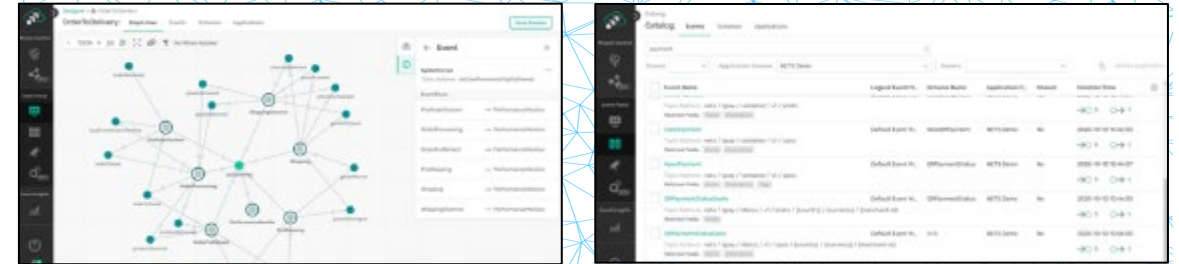
pay/init/v1/corp/us   order/shipped/v2/sku123/eu

pay/init/*/*/sg   order/shipped/*/sku123/>
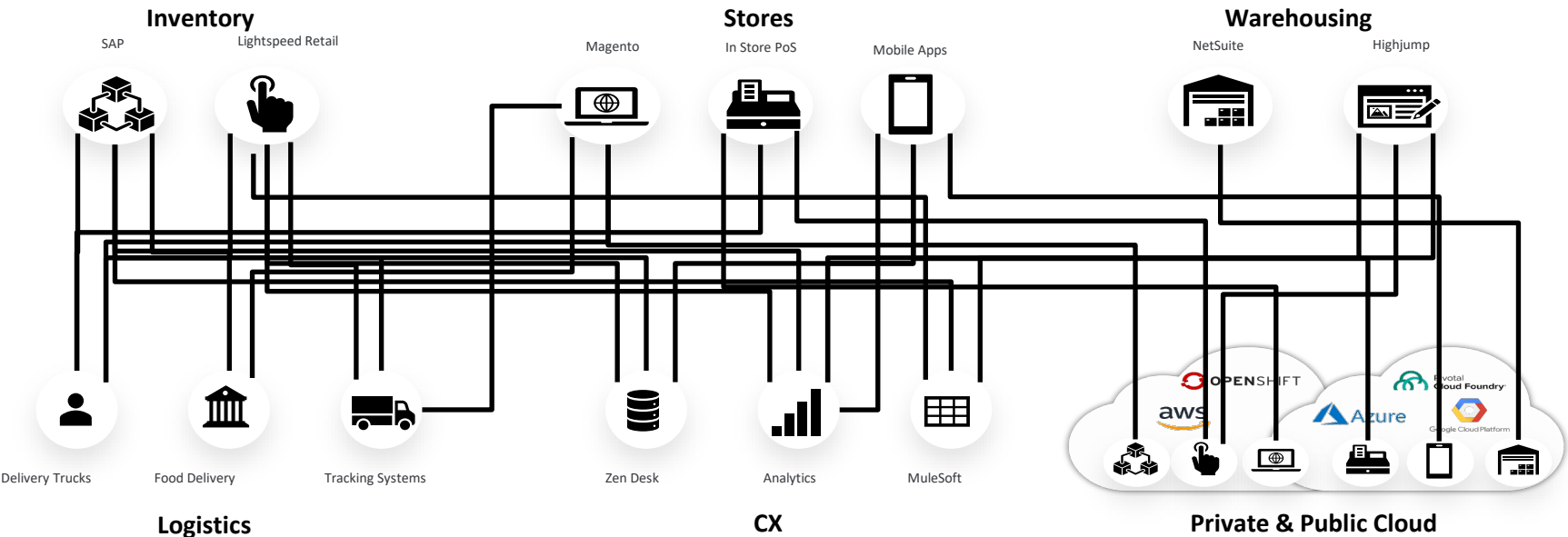
em/bpass/DXB/*/scan/>   order/cancel/>

Advanced Event Mesh = Twitter of the Enterprise

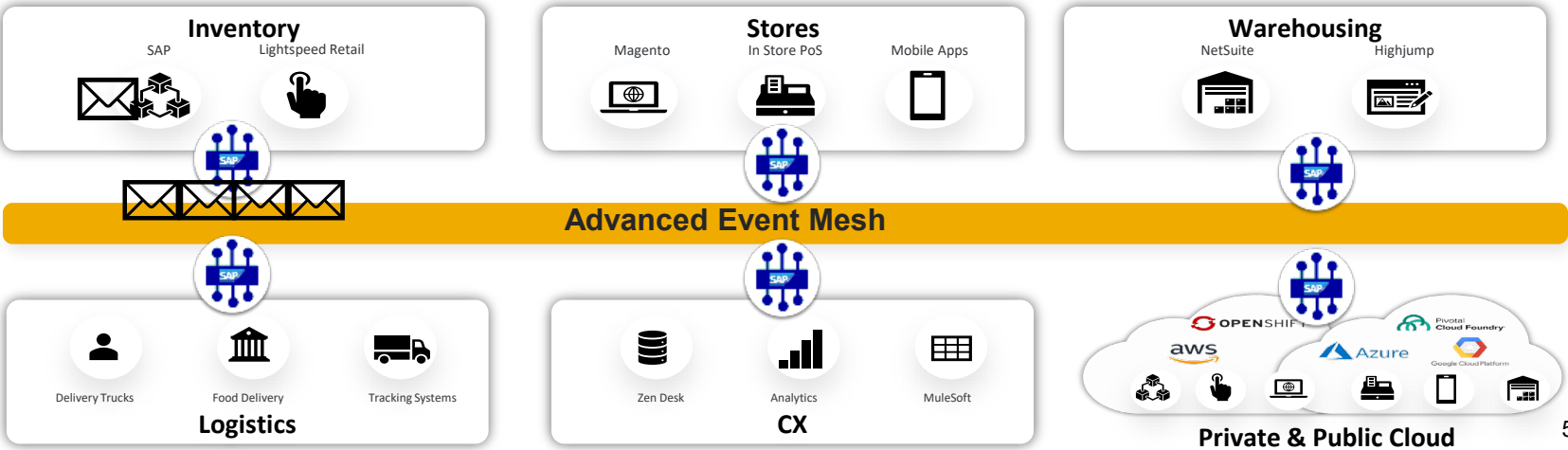# Move from Spaghetti Integration to Plug & Play Architecture

From

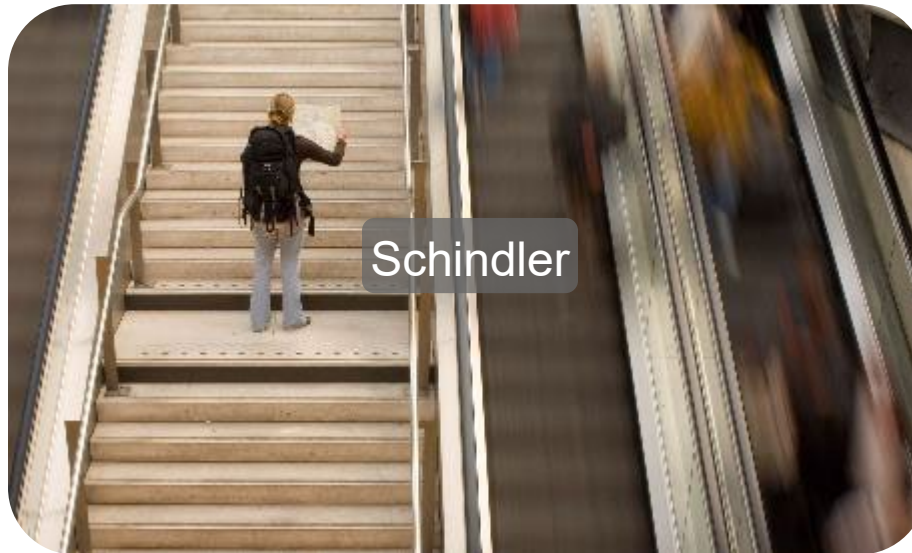**"Spaghetti Architectures" Delay Digital Transformation**

Inventory
- SAP
- Lightspeed Retail

Stores
- Magento
- In Store PoS
- Mobile Apps

Warehousing
- NetSuite
- Highjump

Logistics
- Delivery Trucks
- Food Delivery
- Tracking Systems

CX
- Zen Desk
- Analytics
- MuleSoft

Private & Public Cloud

To

A Publish – Subscribe Mesh

Inventory
- SAP
- Lightspeed Retail

Stores
- Magento
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Warehousing
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Advanced Event Mesh

Logistics
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Private & Public Cloud

Enterprises Across Industries Are Embracing EDA

Daimler

Barclays

IKEA

FAA

Unilever

Schindler

15

15M Euros savings annually in shipping cost

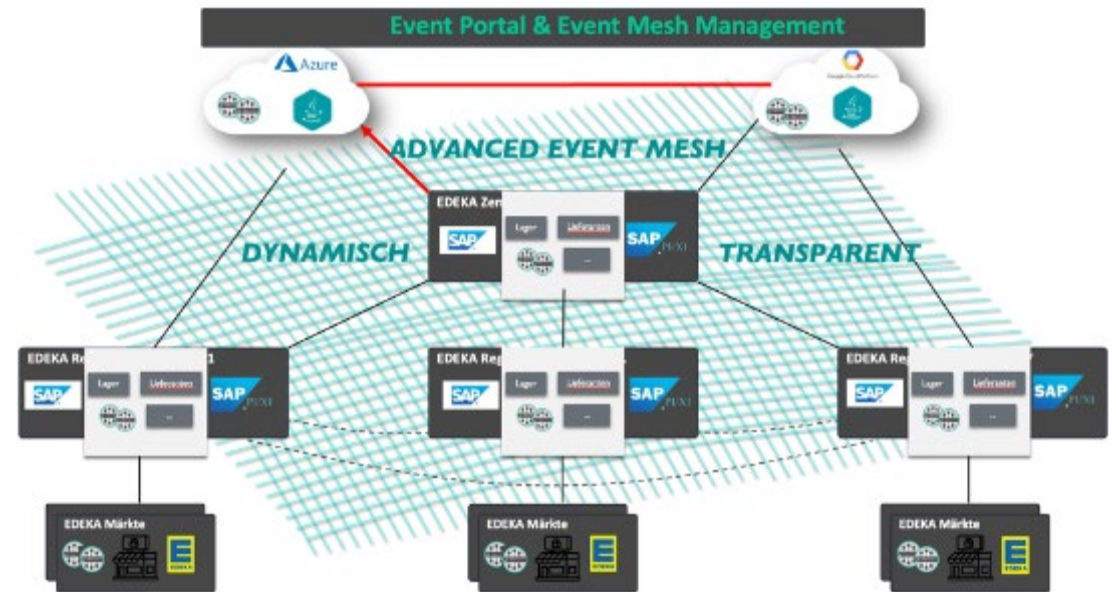▪Lack of Full Supply Chain Visibility

▪At any given time, 12,000 containers on 1,500 at sea

▪Numerous parties: customs agents, port authorities, inland transporters, freight forwarders

Real-Time Promotion Management

Event Portal & Event Mesh Management

ADVANCED EVENT MESH

DYNAMISCH   TRANSPARENT

Hot day?

Apples **may perish**

Drop the price

Update price in SAP Master Data

Push to stores in near real time

Price across 6000 stores **updated in near real time!**

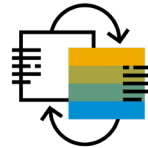# Customer Outcomes achieved with Advanced Event Mesh

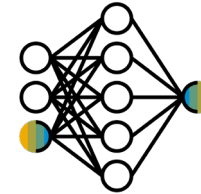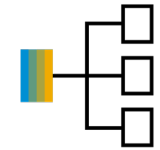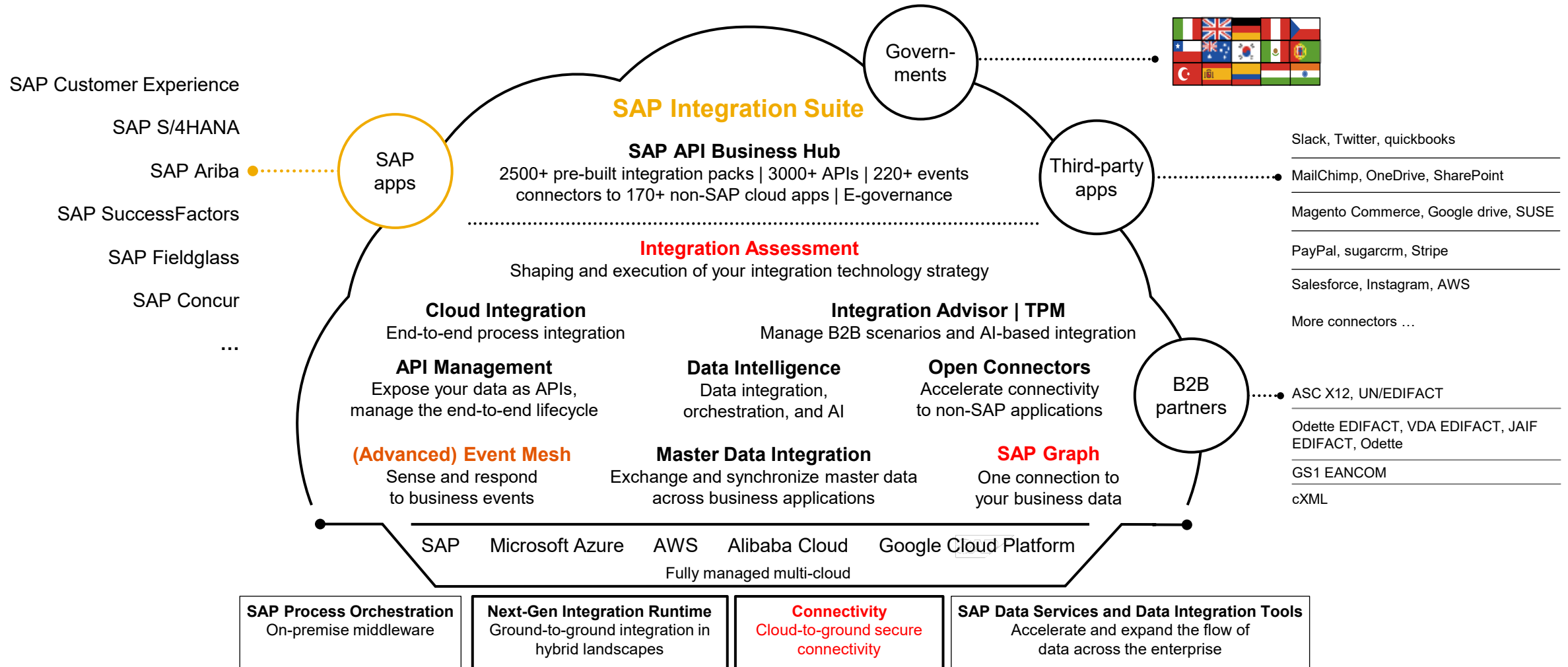| Real Time Response	Events Discovery	Decoupled Connectivity	Dynamic Routing	Fan Out Calling
Cut cost of 1-to-many interfaces	Accelerate application development	Reduce egress charges	Reduce system load	Improve customer satisfaction

Integration at SAP
SAP's Hybrid Integration Platform for the Intelligent Enterprise

SAP Customer Experience

SAP S/4HANA

SAP Ariba

SAP SuccessFactors

SAP Fieldglass

SAP Concur

...

SAP apps

Govern-ments

Third-party apps

B2B partners

SAP Integration Suite

SAP API Business Hub
2500+ pre-built integration packs | 3000+ APIs | 220+ events
connectors to 170+ non-SAP cloud apps | E-governance

Integration Assessment
Shaping and execution of your integration technology strategy

Cloud Integration
End-to-end process integration

Integration Advisor | TPM
Manage B2B scenarios and AI-based integration

API Management
Expose your data as APIs,
manage the end-to-end lifecycle

Data Intelligence
Data integration,
orchestration, and AI

Open Connectors
Accelerate connectivity
to non-SAP applications

(Advanced) Event Mesh
Sense and respond
to business events

Master Data Integration
Exchange and synchronize master data
across business applications

SAP Graph
One connection to
your business data

SAP   Microsoft Azure   AWS   Alibaba Cloud   Google Cloud Platform
Fully managed multi-cloud

Slack, Twitter, quickbooks

MailChimp, OneDrive, SharePoint

Magento Commerce, Google drive, SUSE

PayPal, sugarcrm, Stripe

Salesforce, Instagram, AWS

More connectors …

ASC X12, UN/EDIFACT

Odette EDIFACT, VDA EDIFACT, JAIF
EDIFACT, Odette

GS1 EANCOM

cXML

| **SAP Process Orchestration**
On-premise middleware | **Next-Gen Integration Runtime**
Ground-to-ground integration in
hybrid landscapes | **Connectivity**
Cloud-to-ground secure
connectivity | **SAP Data Services and Data Integration Tools**
Accelerate and expand the flow of
data across the enterprise |

SAP's event-driven ecosystem today

Event sources

SAP S/4HANA

SAP S/4HANA Cloud

SAP ERP

SAP SuccessFactors solutions

SAP Marketing Cloud

SAP Fieldglass solutions

SAP Data Intelligence

SAP CPQ

Other SAP solutions

3rd party

Eventing infrastructure

SAP Integration Suite

- SAP Event Mesh
- Advanced Event Mesh
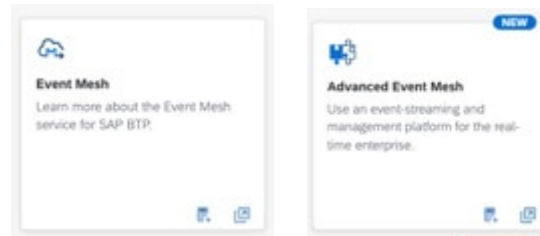
- Event routing services
- Event catalogs

Event consumers

SAP Integration Suite

SAP Extension Suite

SAP BTP Services & Apps

SAP back ends
(SAP S/4HANA Cloud and SAP S/4HANA, SAP ECC and SAP S/4HANA using add-on)

Project "Kyma"

SAP Data Intelligence

Azure Event Grid
(Beta Program)

3rd party

Know-How   Guidance (ISA-M …) and Learning Materials (DC Missions …)

Getting Started

Learn

Practice
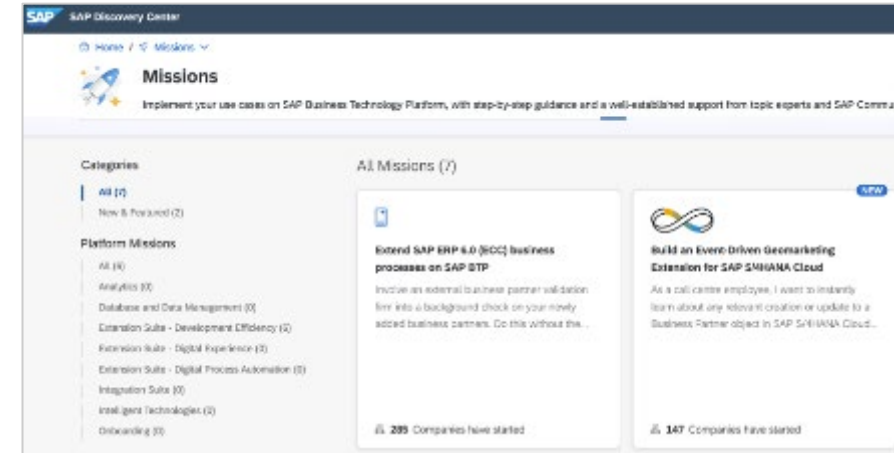
Explore
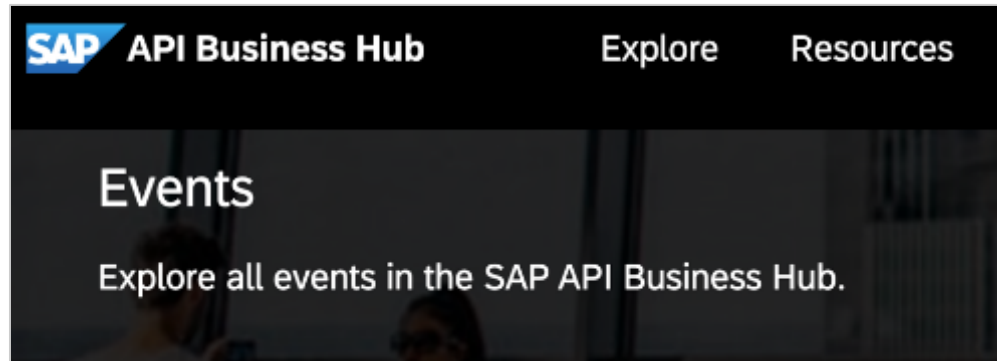
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Thank you.

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THE BEST RUN **SAP**

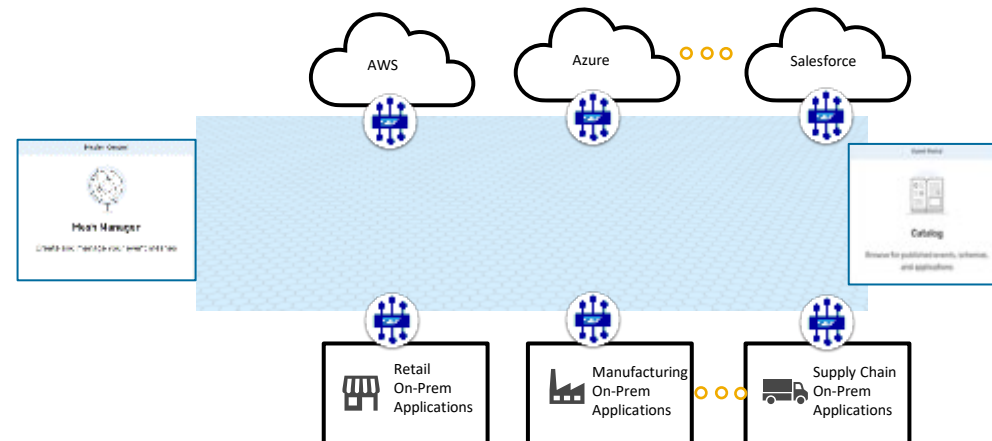# Difference between Event Mesh and Advanced Event Mesh

Existing: SAP Event Mesh – Default Plan
Deployment in BTP Only
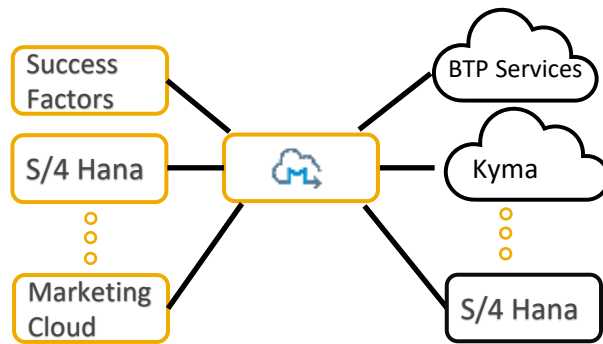
SAP Event Mesh helps to integrate the SAP applications landscape.

BTP Deployment only, with set limits

New: SAP Advanced Event Mesh – included in CPEA
Helps connect SAP to the world

SAP Advanced Event Mesh helps to integrate the SAP applications to non-SAP software and vice-versa across Cloud and on-Prem, and also help Catalog Events as Products

Deploy *anywhere*,
including customers Data Centre, Non BTP Cloud, and event Edge

The Challenge

Every customer wants an **easier, faster and more flexible way** to integrate/**interconnect** their applications, systems, and microservices.

SAP S/4HANA

On-Premises

AWS

Azure

Google Cloud Platform
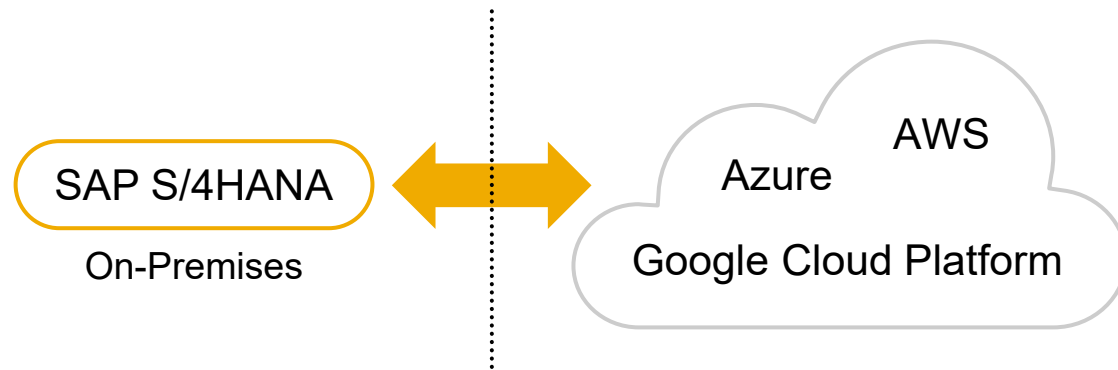
Key Criteria

- **Decouple integration artifacts to ease upgrades** (aka "futureproof")

- **Strive for real-time**
(e.g. Amazon drops a package, 10 seconds later, you're notified, today's expectation)

- **Push not pull**
(think instant messaging)

- **Support diverse communication and connectivity options**
(let apps speak their own language)

- **Reduce duplication for one-to-many scenarios**
(like LinkedIn Videos)

SAP's Event-Driven Ecosystem Tomorrow

SAP Business Applications

Extensible Standard Events & SAP to SAP Event Integration

SAP on premise backends

Extensible Standard Events & for older backends custom events

SAP Integration Suite

Event Bridging & Brokering

Third Party

Crossing Vendor Boundaries

Advanced Event Mesh

High Volume Eventing