

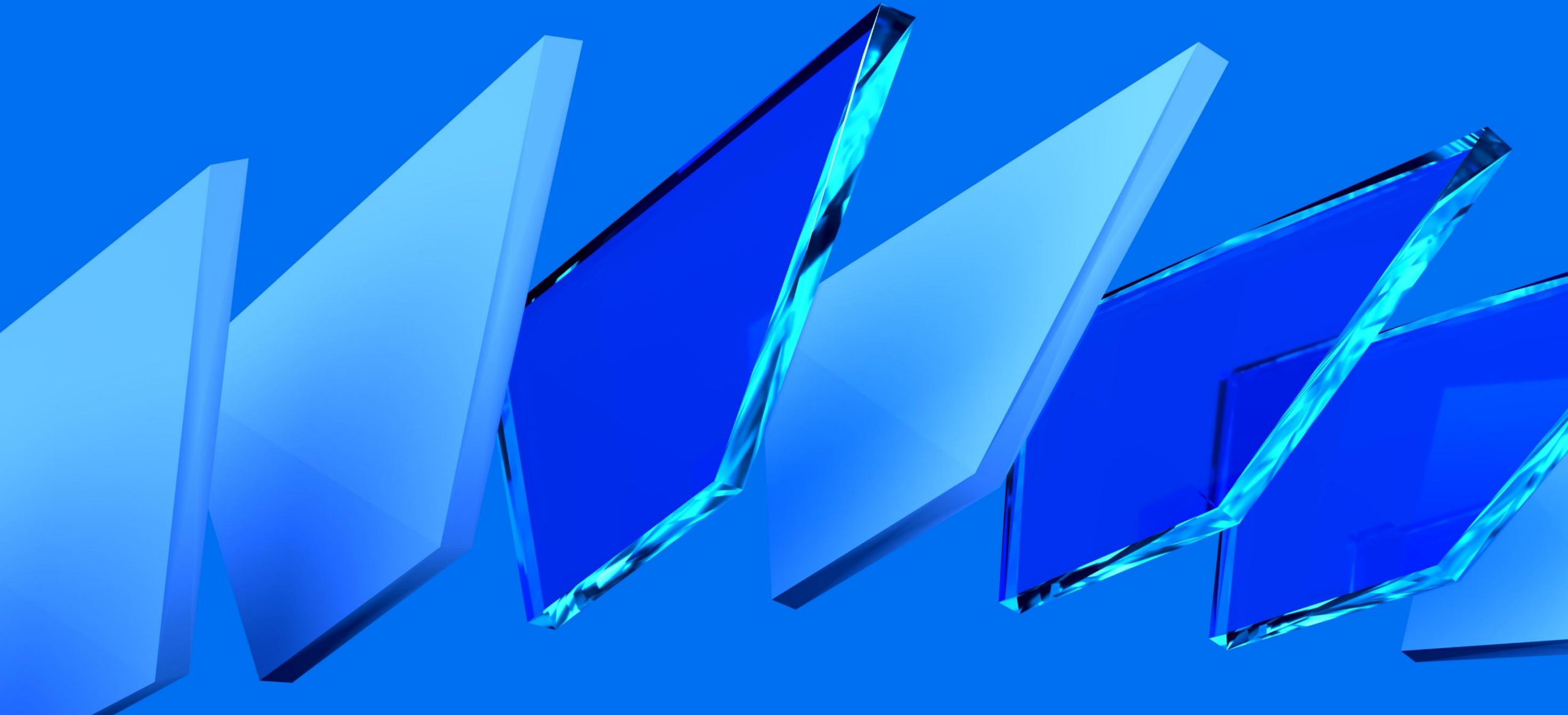
Introduction to SAP Advanced Event Mesh – Ask Me Anything



Oct 15, 2025



Event Driven Architecture in a nutshell



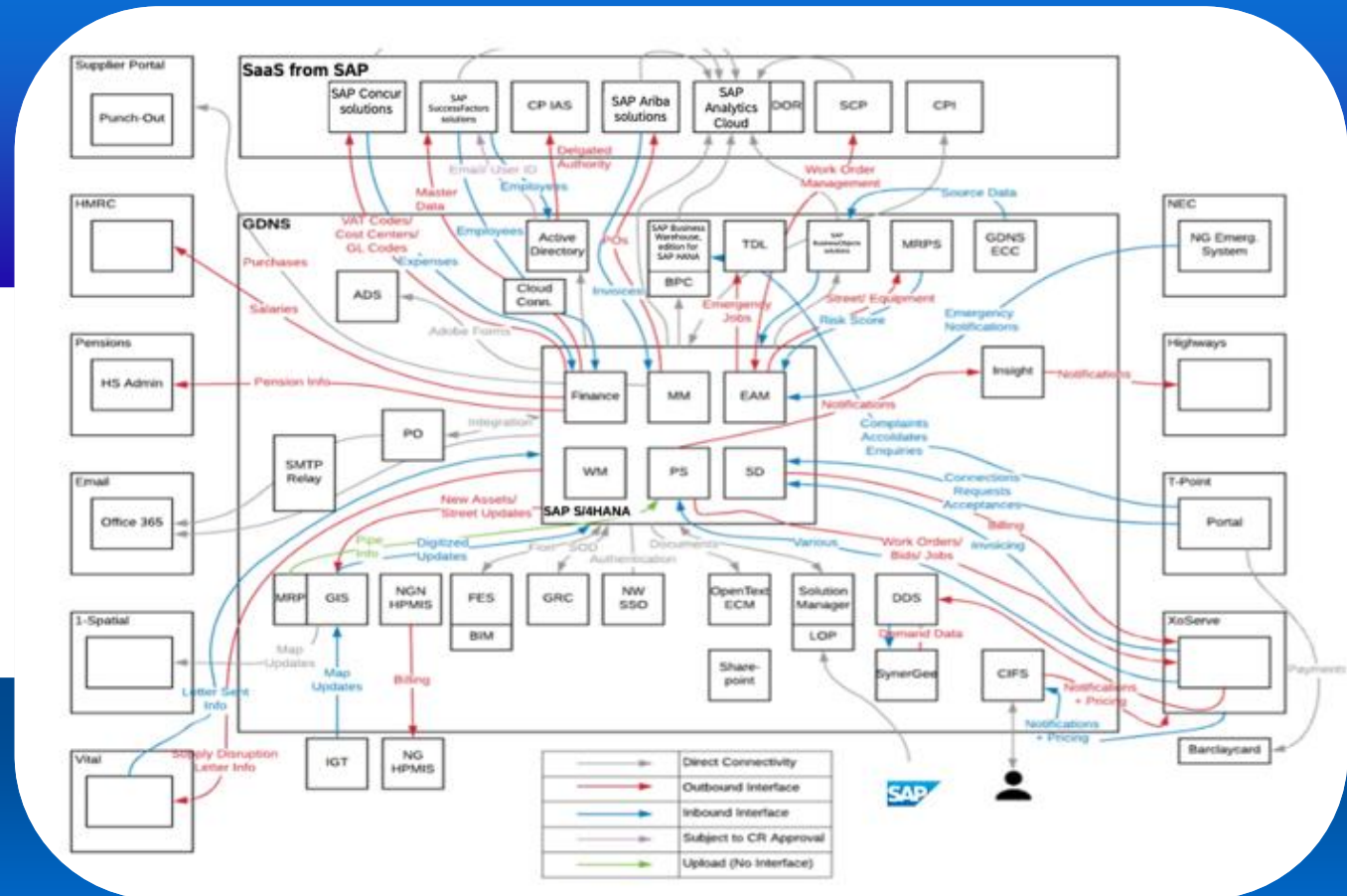
The need for Integration Modernization: **Spaghetti** anybody?

Complex Integration Landscapes

- Cloud and on-premise
- SAP and third-party applications
- Integration silos and data silos

Unprecedented business challenges

- Omnichannel experience in real-time
- Supply chain transparency and agility
- Governance & Compliance
- Mergers & Acquisitions



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 **event broker**.
- **Event consumers** have registered with event broker and are informed of event.
- Events come in different flavors: **notification events** or **data events**.

Event-Driven Architecture



```
{ "type": "sap.s4.beh.product.v1.Product.Changed.v1", "specversion": "1.0", "source": "/default/sap.s4.beh/0000000007", "id": "fa163e0b-4824-1eec-83f7-32dfc754759c", "time": "2023-09-07T08:57:17Z", "datacontenttype": "application/json", "data": {"Product": "160", "ProductType": "FRIP"}}
```


Event-Driven **Business** Architecture



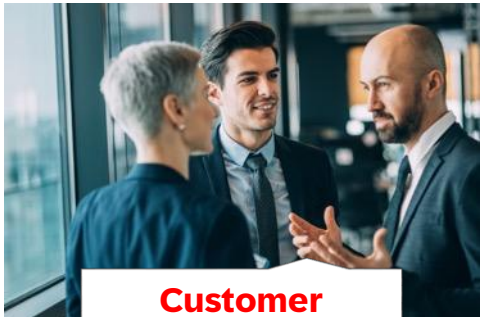
Payment Settled



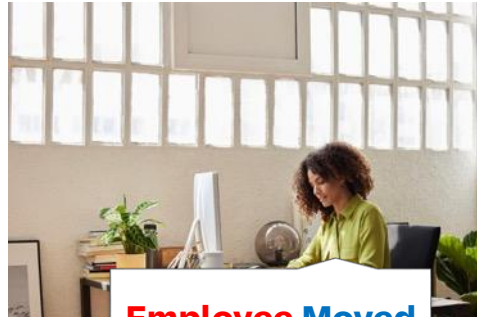
Loan Approved



Market Data Updated



Customer Onboarded



Employee Moved



Account Opened

Each event can be described with:

- **A noun:** The “Thing”
- **A verb:** What happened to the “Thing”
- **Properties:** Description

Event =

(noun) + (verb) + [properties]

Event Driven **SAP** Business Architecture



StockTransportOrder.
Creation



SalesOrder.
Updated



Employee.
Hired



BusinessPartner.
Created

Business Accelerator Hub

IntegrationsData ProductsSAP BuildAnalyticsTransformation

Events

Explore all events in the SAP Business Accelerator Hub.

Event ObjectsPackages

Showing 1-12 of 455 results

Event Object

Release Decision Trigger Release Scopes Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of release scopes for release decision triggers

Event Object

Batch Release Countries Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of batch release countries

Event Object

Transport Records Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of transport records

Event Object

Restriction Driver Data Changes Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of restriction driver data changes

Event Object

Temperature Records Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of temperature records

Event Object

Certificates Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of certificate data

Event Object

Certificate Documents Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of certificate documents

Event Object

Release Decision Triggers Inbound

Version 7.0.0

ACTIVE

Inform SAP Batch Release Hub for Life Sciences about the creation or update of release decision triggers

Event Object

Characteristics for Inspection Lots Inbound

Version 7.0.0

ACTIVE

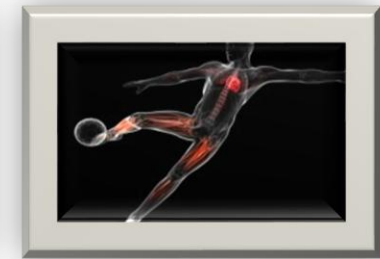
Inform SAP Batch Release Hub for Life Sciences about the creation or update of characteristics for inspection lots

SAP Integration Suite's Event Brokers



Event Mesh in SAP Integration Suite

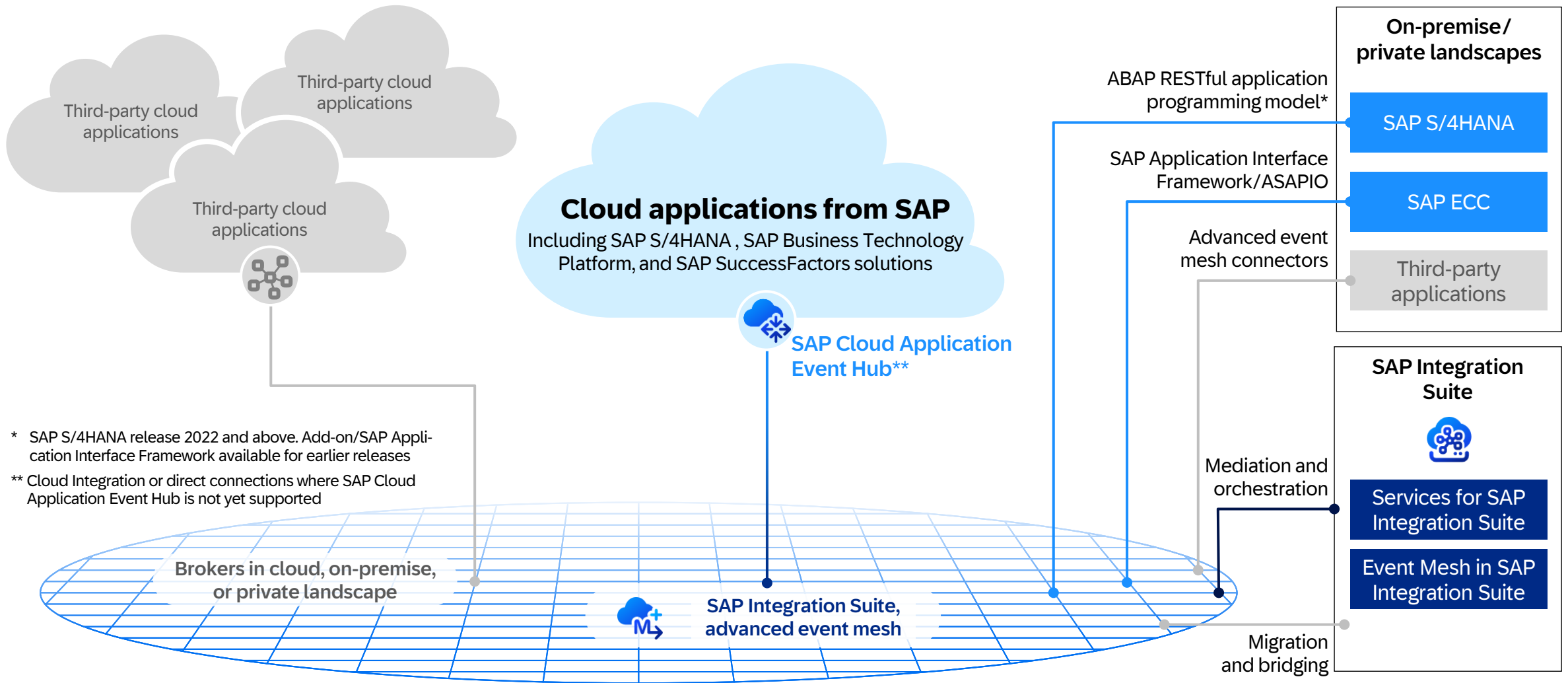
Basic, isolated, small to medium use cases



Advanced Event Mesh

Team Player EDA, distributed, social, S to XXXL

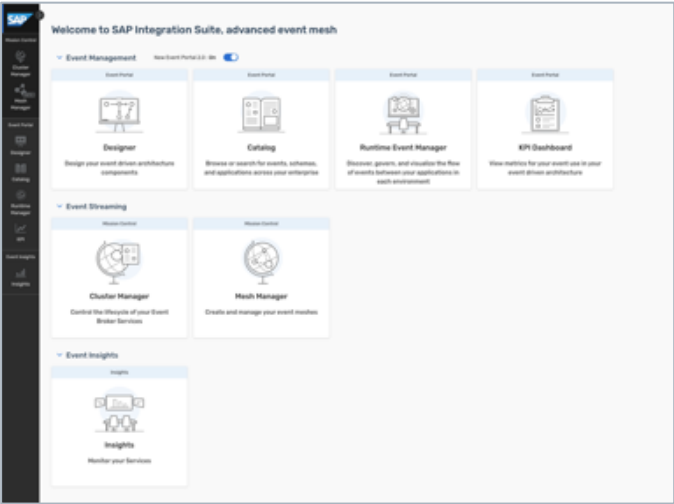
SAP's Event-Driven Technical Ecosystem and Strategy



* SAP S/4HANA release 2022 and above. Add-on/SAP Application Interface Framework available for earlier releases

** Cloud Integration or direct connections where SAP Cloud Application Event Hub is not yet supported

SAP Integration Suite, Advanced Event Mesh

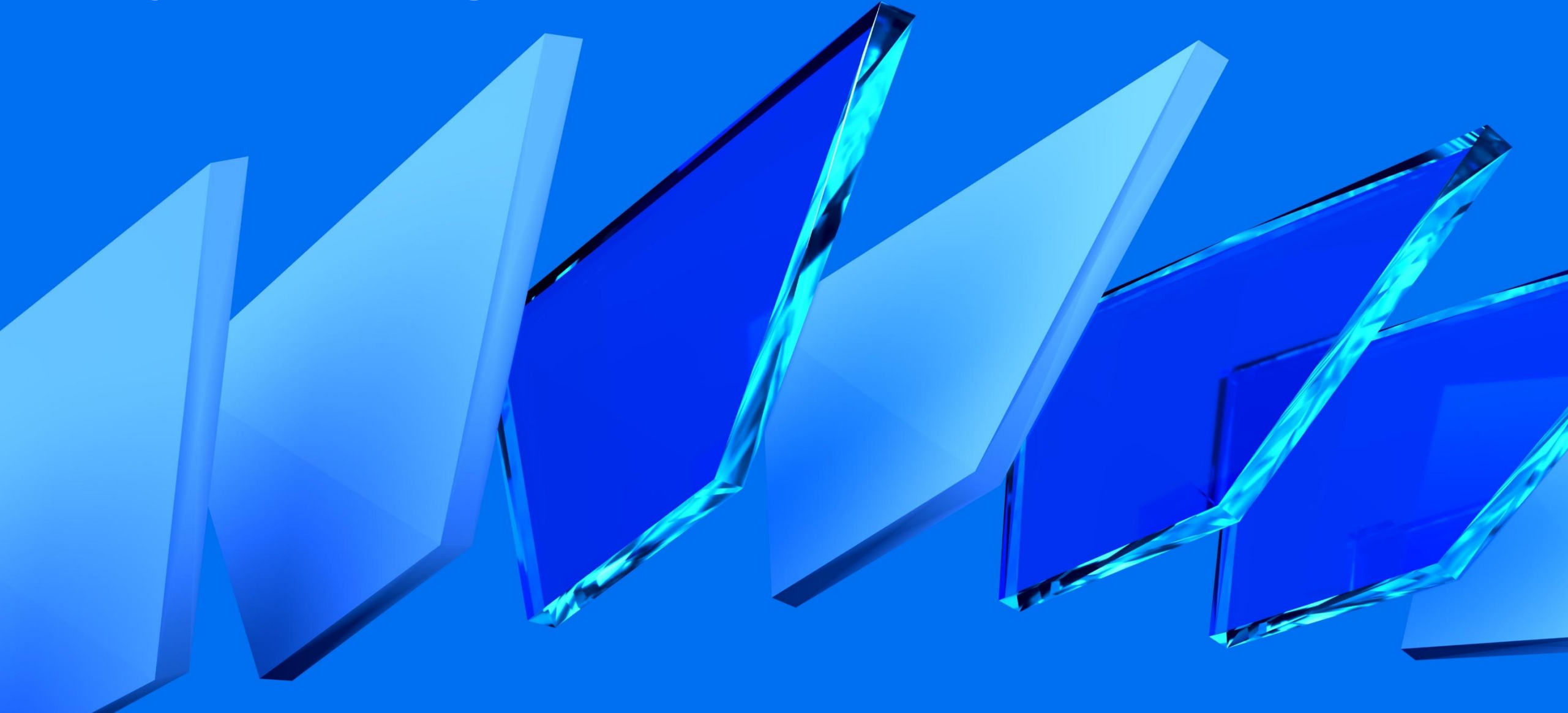


Fully managed cloud service	✓
Infrastructure model	Exclusive in T-shirt sizes
Deployment options	Private and public clouds
Connecting SAP and third-party systems	✓
Native support for SAP S/4HANA	✓
Support of standard protocols	✓
Message size and storage	Up to 30MB / Up to 6TB
Typical use case size	Small to ultra large
Network of event brokers	✓

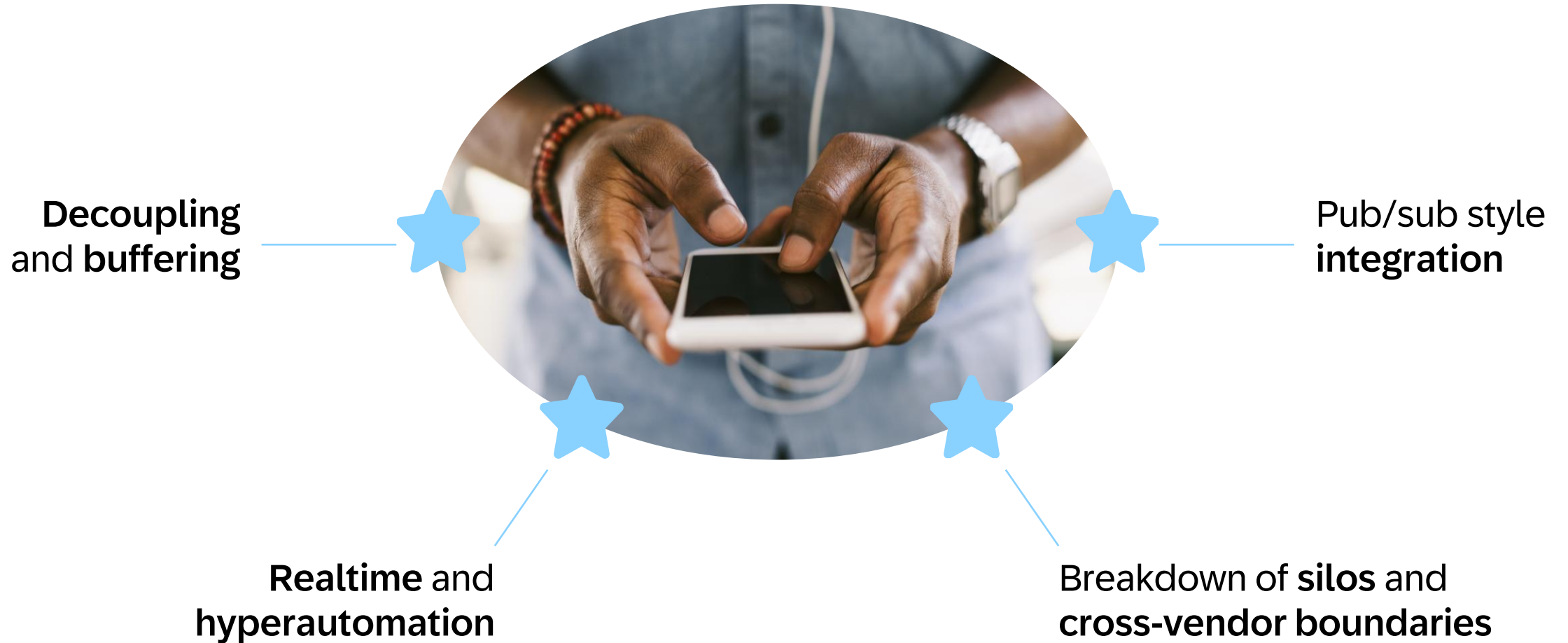
Advanced event monitoring and analysis	✓
Dynamic event routing	✓
Sophisticated filtering	✓
Event replay	✓
Event management	✓
Distributed tracing	✓
Partitioned queues	✓



Key advantages and benefits

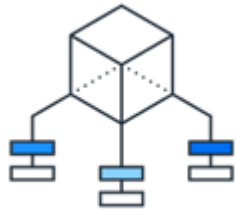


Benefits of Event-Driven Architecture



Key Advantages of an EDA Strategy

Publishing



Reduce unnecessary duplicate data pipelines & just plug in new consumers

Decoupled Connectivity



Reduce the risk that changes in one module will necessitate a change in another module

Dynamic Routing



Delivers the correct message to the correct application in realtime dynamically

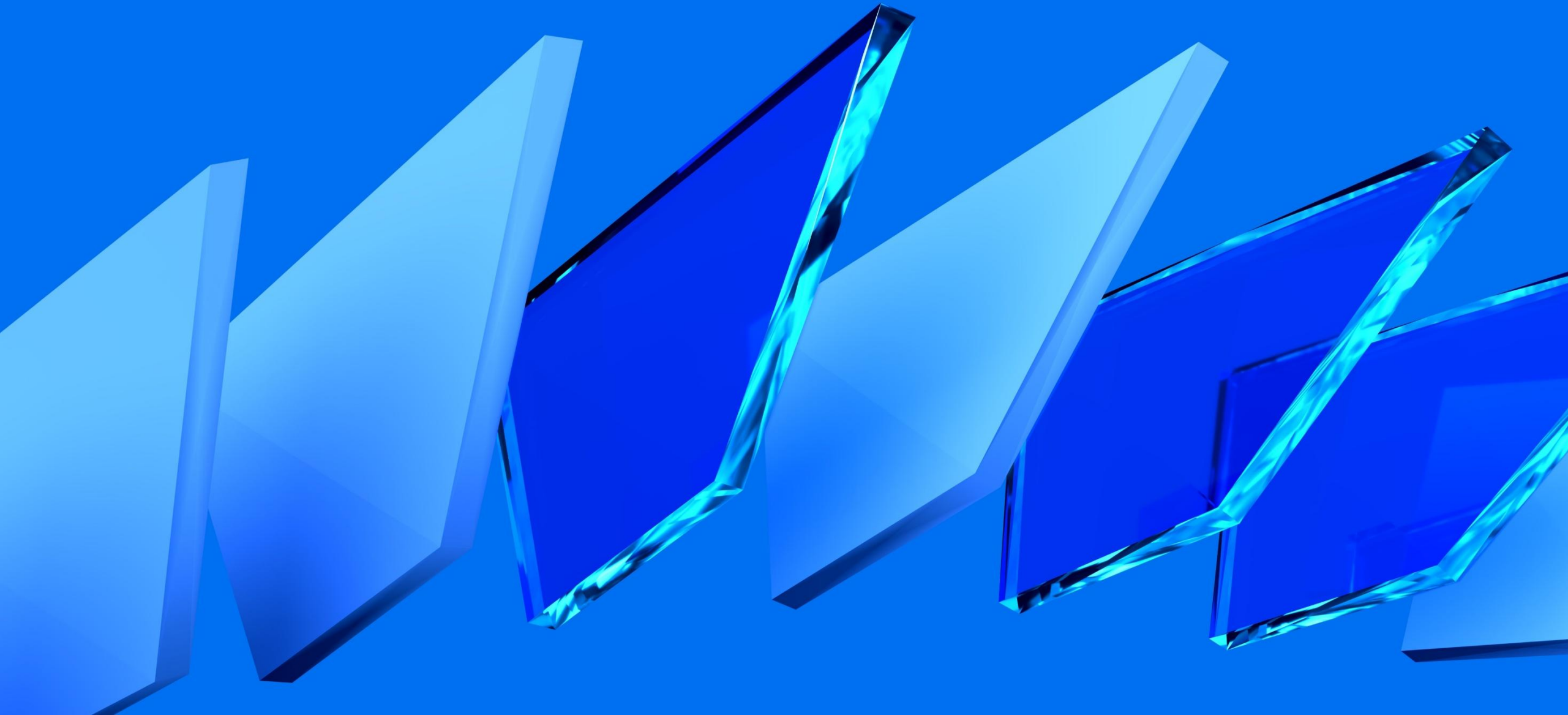
Reusable

Adaptable

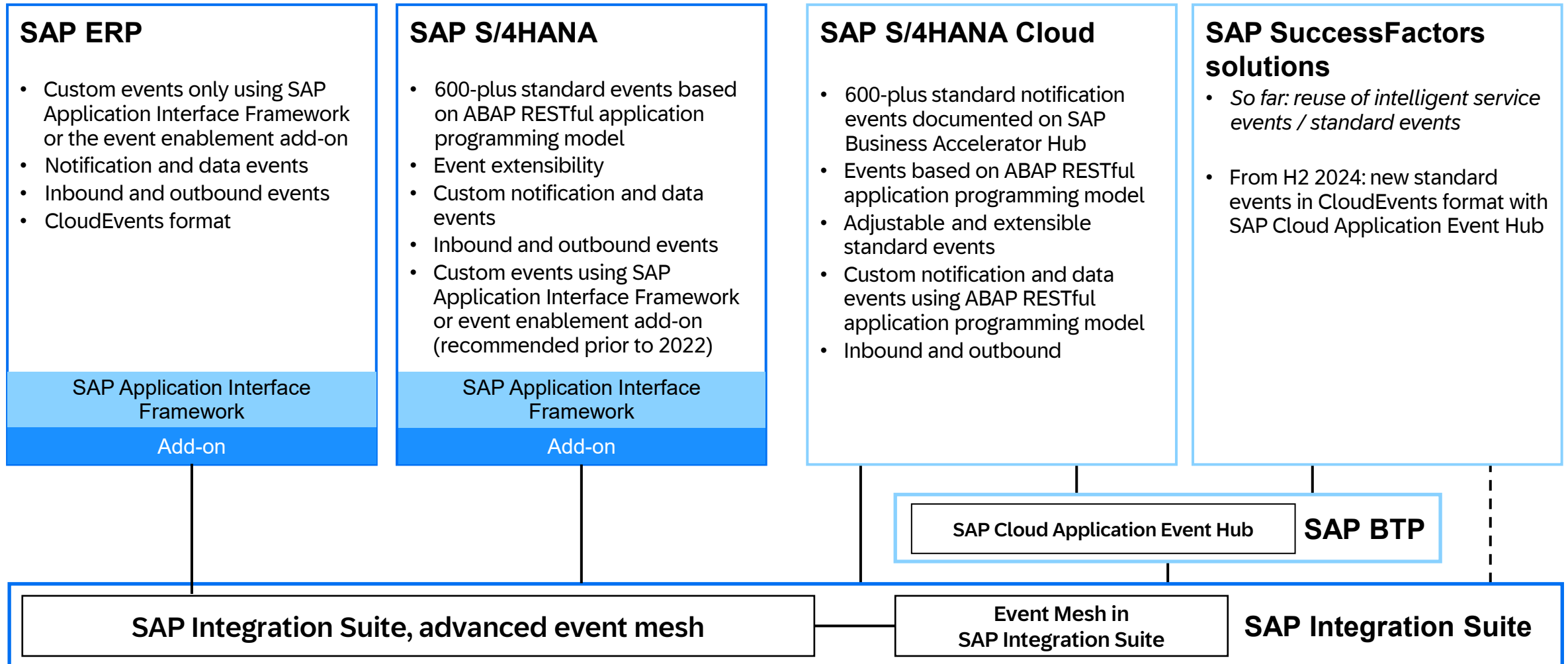
Evolvable

Scalable

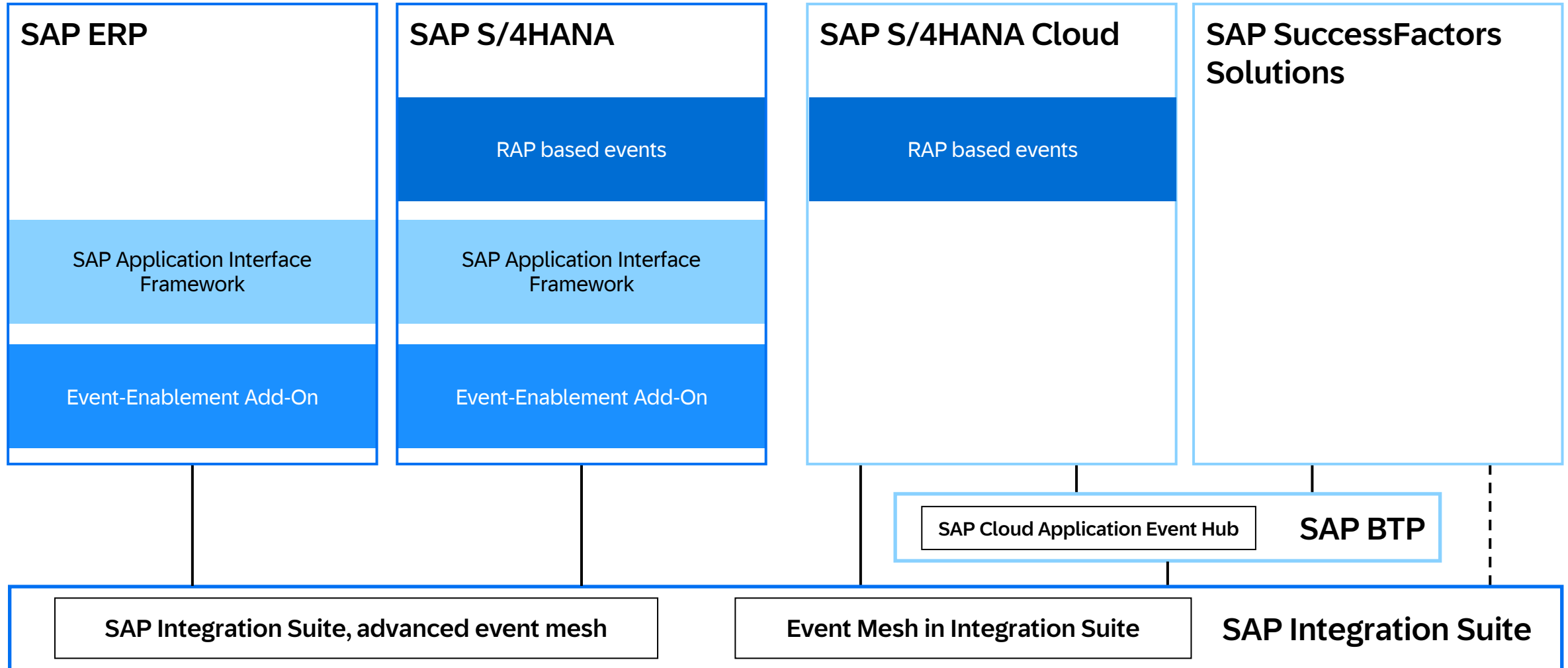
SAP EDA Ecosystem and strategy



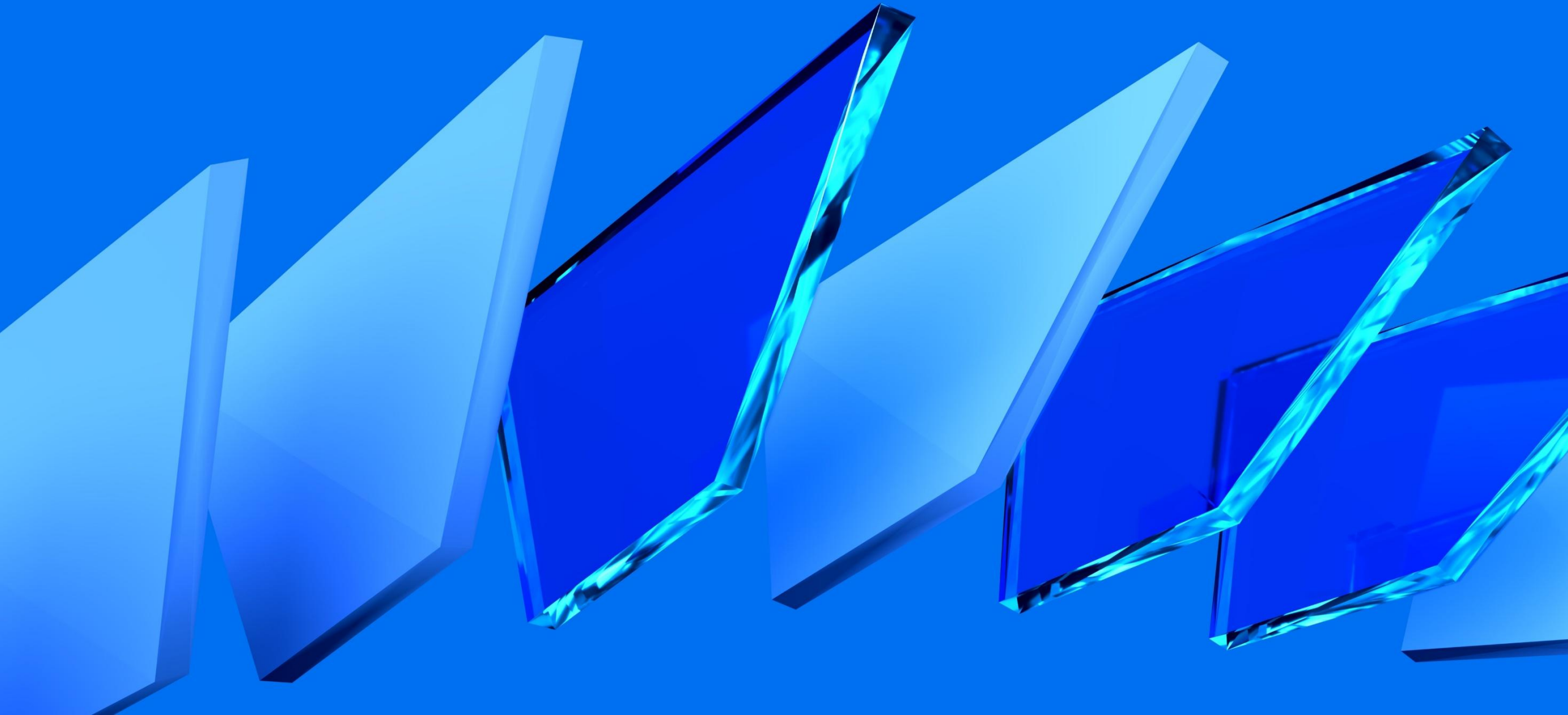
Selected SAP Event Sources



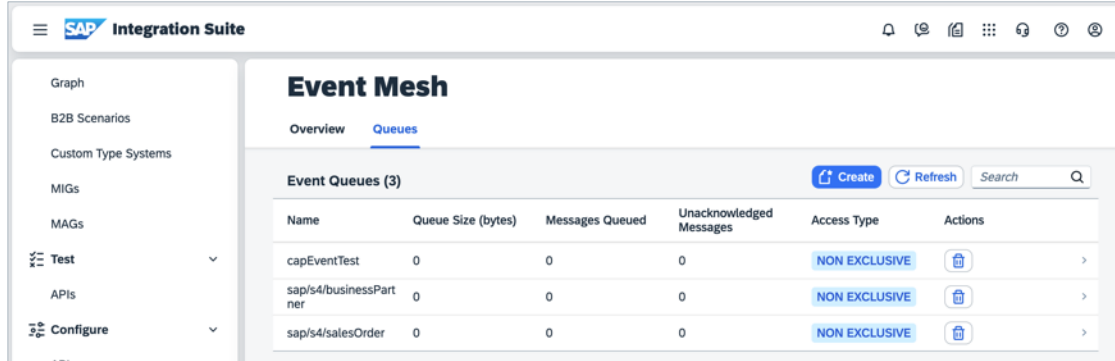
Event Sources for AEM and/or EMIS



Advanced Event Mesh



Event Brokers – EMIS and Advanced Event Mesh



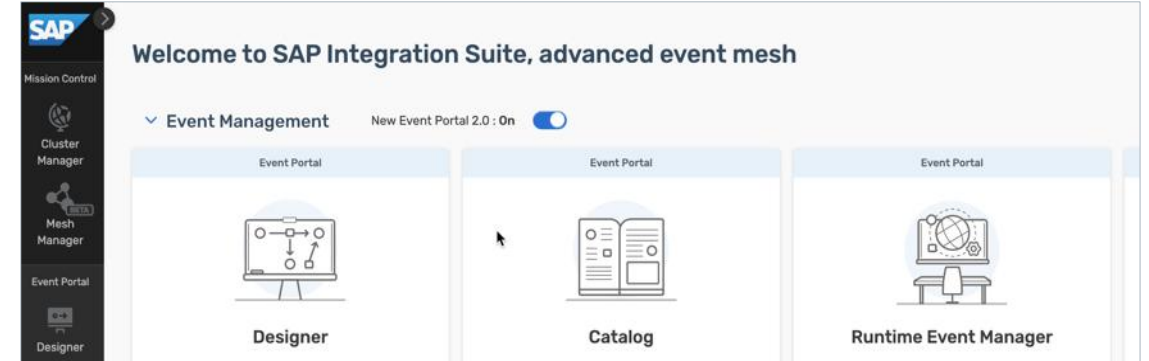
The screenshot shows the 'Event Mesh' section of the SAP Integration Suite. The 'Queues' tab is active, displaying a table of 'Event Queues (3)'. The table has columns for Name, Queue Size (bytes), Messages Queued, Unacknowledged Messages, Access Type, and Actions. Three queues are listed: 'capEventTest', 'sap/s4/businessPartner', and 'sap/s4/salesOrder', all with a 'NON EXCLUSIVE' access type. A sidebar on the left contains navigation links for Graph, B2B Scenarios, Custom Type Systems, MIGs, MAGs, Test, APIs, and Configure.

Name	Queue Size (bytes)	Messages Queued	Unacknowledged Messages	Access Type	Actions
capEventTest	0	0	0	NON EXCLUSIVE	[Icon]
sap/s4/businessPartner	0	0	0	NON EXCLUSIVE	[Icon]
sap/s4/salesOrder	0	0	0	NON EXCLUSIVE	[Icon]

☆ Event Mesh in SAP Integration Suite

- Low-entry hurdle and shared infrastructure
- Focused feature set, limited to extension and smaller integration
- Notification events and limited amount of data events
- Frequent migration to advanced event mesh once use cases get more demanding

→ Great for basic and “isolated” small to medium use cases



☆ SAP Integration Suite, advanced event mesh

- Leading event broker with almost no scale limits (# of brokers, broker size)
- Sophisticated features
- Platform includes Event Portal, Insights, DT, Deployment options ...
- All kinds of events and 3rd-party integration
- Small to extremely large event meshes
- Future-ready for AI and employee-initiated EDA

→ Great for EDA use cases offering distributed EDA

Selected Capabilities of SAP Integration Suite, Advanced Event Mesh

1 General Purpose

General purpose, multi-site EDA platform and portal

2 Use Case Scenarios

SAP to SAP
SAP to Everything
Everything to Everything

3 Decentralized

Supports distributed networks of event brokers deployed in different clouds and on-premises

4 Deployable Anywhere

Can be deployed in your cloud of choice or in your on-premise K8S

5 Authentication and Security

Customer's own – basic, TLS cert, Kerberos, OAuth
Private Connectivity

6 Filtering

Sophisticated, fine-grained filtering

7 Real-Time Monitoring

Real-Time monitoring, capacity insights and distributed tracing

8 Pricing

Highly competitive pricing
Start cheap, scale as you go

9 Openness

Supports JMS, REST and AMQP & MQTT & SMF (native and over WebSocket)

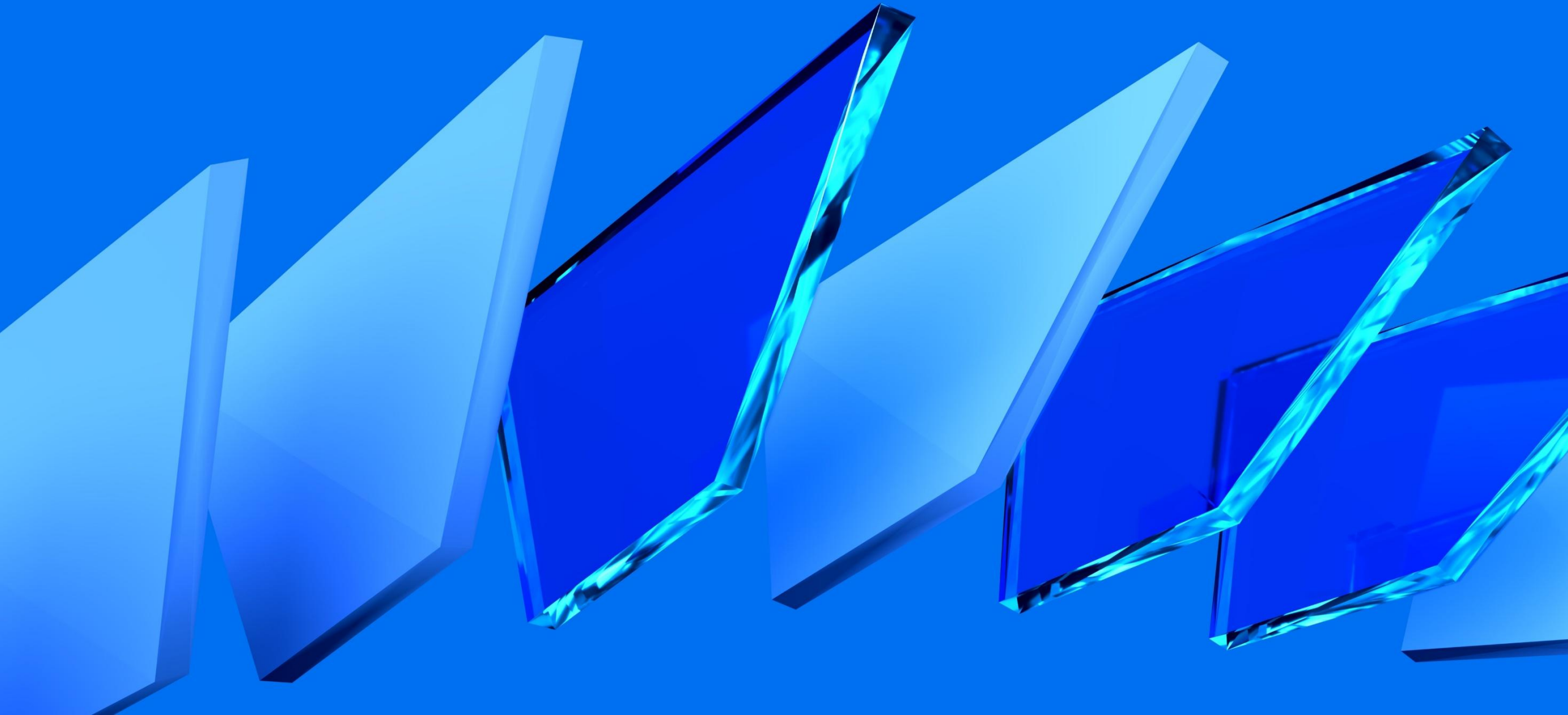
10 Performance

Outstanding performance based on various selectable T-shirt Sizes
Up to billions of events/day
30 MB per message and up to 6TB storage per node

AEM: Broker Sizes

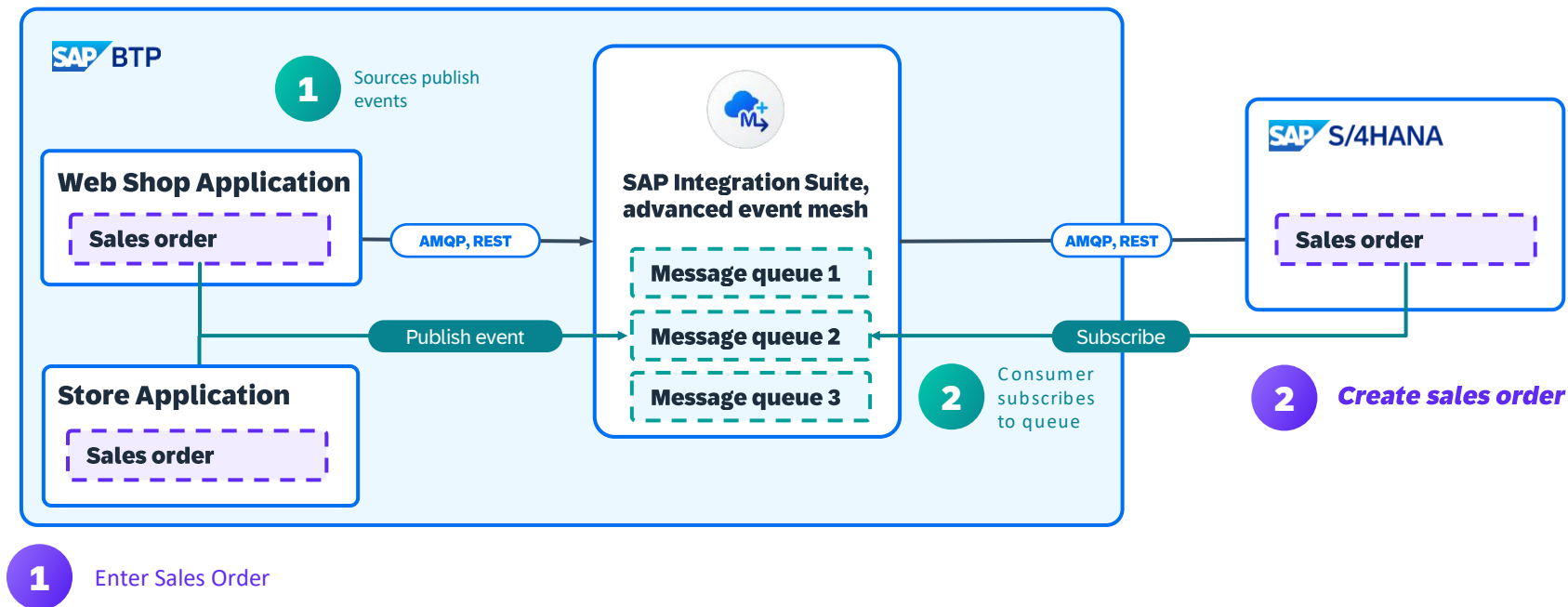
	Developer	Enterprise Services					
T-Shirt Size	XXS	XS	S	M	L	XL	XXL
Availability Configuration	Single node	High-Availability					
Scaling Tier	100	250	1K	5K	10K	50K	100K
Maximum Queues	100	250	1000	5K	10K	50K	100K
Maximum Throughput (Mbps)	8	450		750		1,000	
Default Storage (GB)	25	50	200	400	600	800	1000
Maximum Storage (GB)	6TB						
Maximum Message Size (MB) Persistent	30	30		30			

Customer Use cases



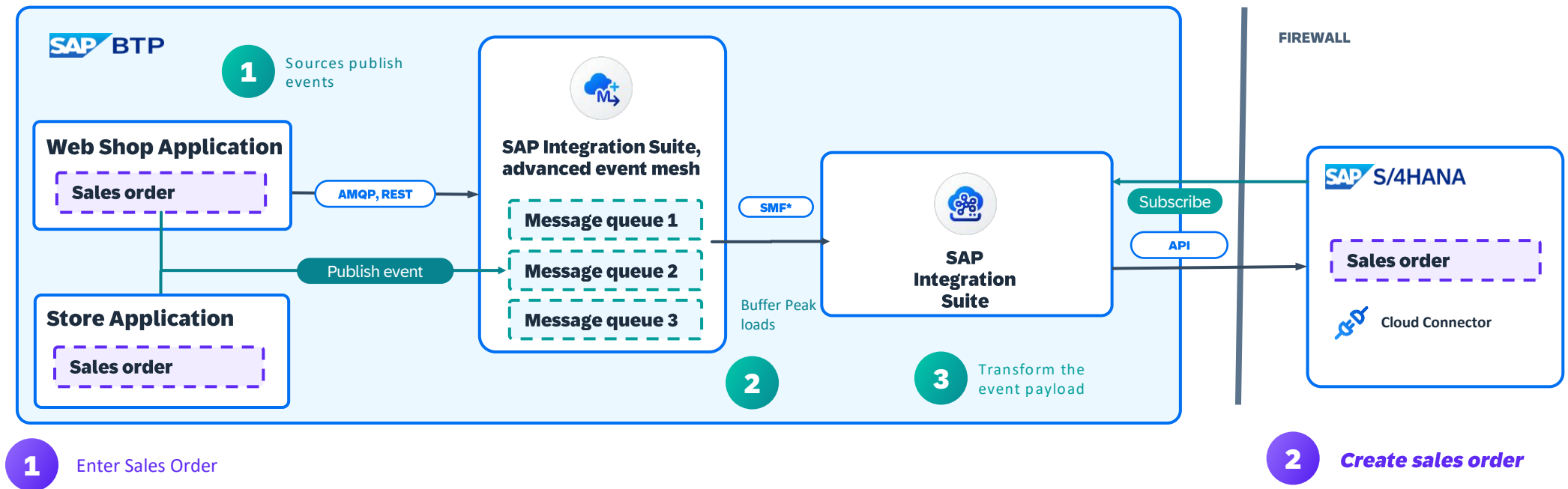
Event-based integration with SAP Integration Suite

Shock absorber - **Event-driven SAP Integration Suite, advanced event mesh based scenario buffering extreme peak loads**



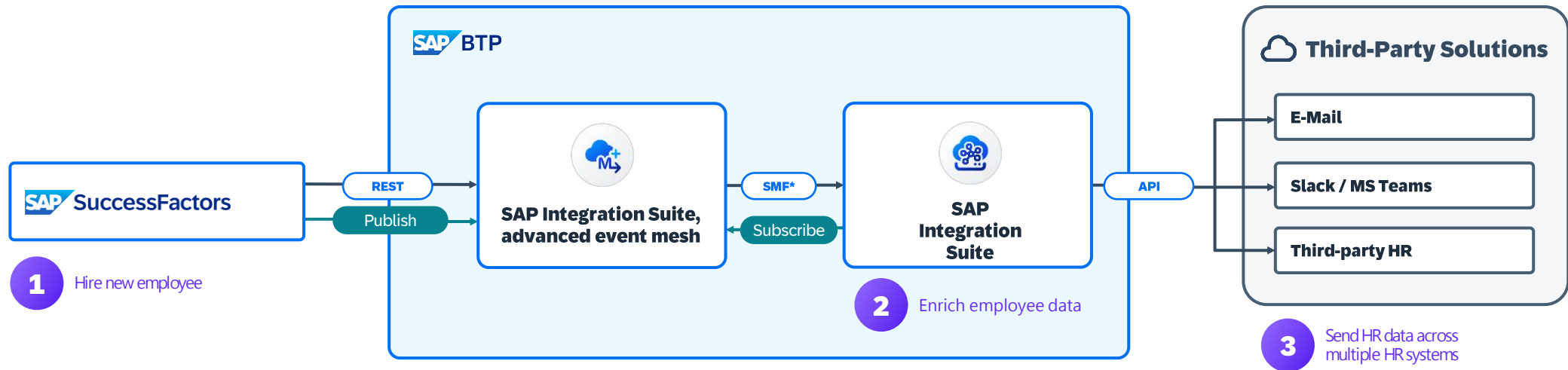
Event-based integration with SAP Integration Suite

Shock absorber - **Event-driven SAP Integration Suite**, advanced event mesh based scenario buffering extreme peak loads



Event-based integration with SAP Integration Suite

Employ modern integration styles combining event-driven and API-based integration to enrich employee onboarding



Legend

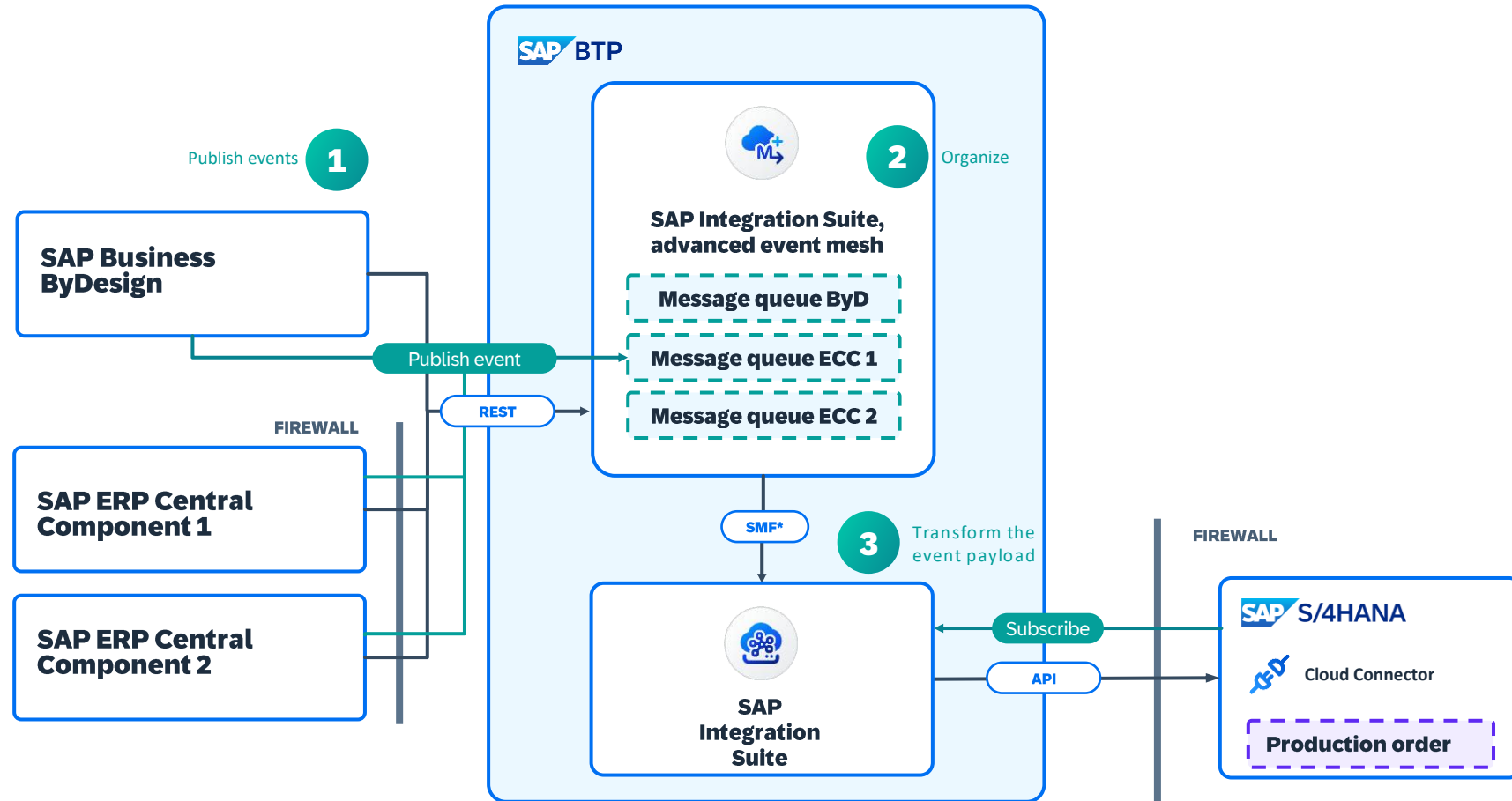
- Data flow
- Pub-sub process

Business process

*Solace message format

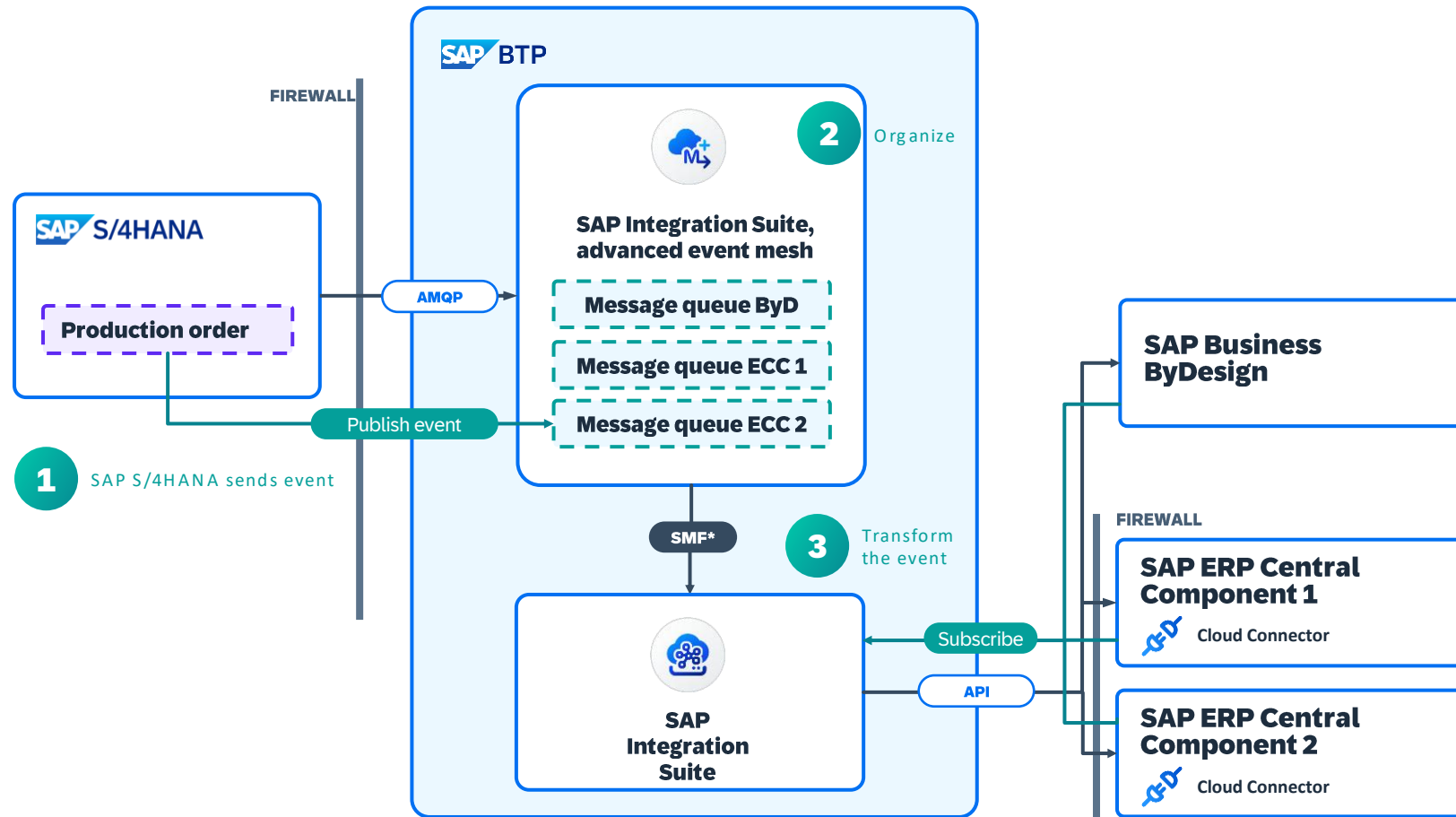
Event-based integration with SAP Integration Suite - inbound

Distribute data from and to highly diverse backends including event transformation



Event-based integration with SAP Integration Suite - outbound

Distribute data from and to highly diverse backends including event transformation



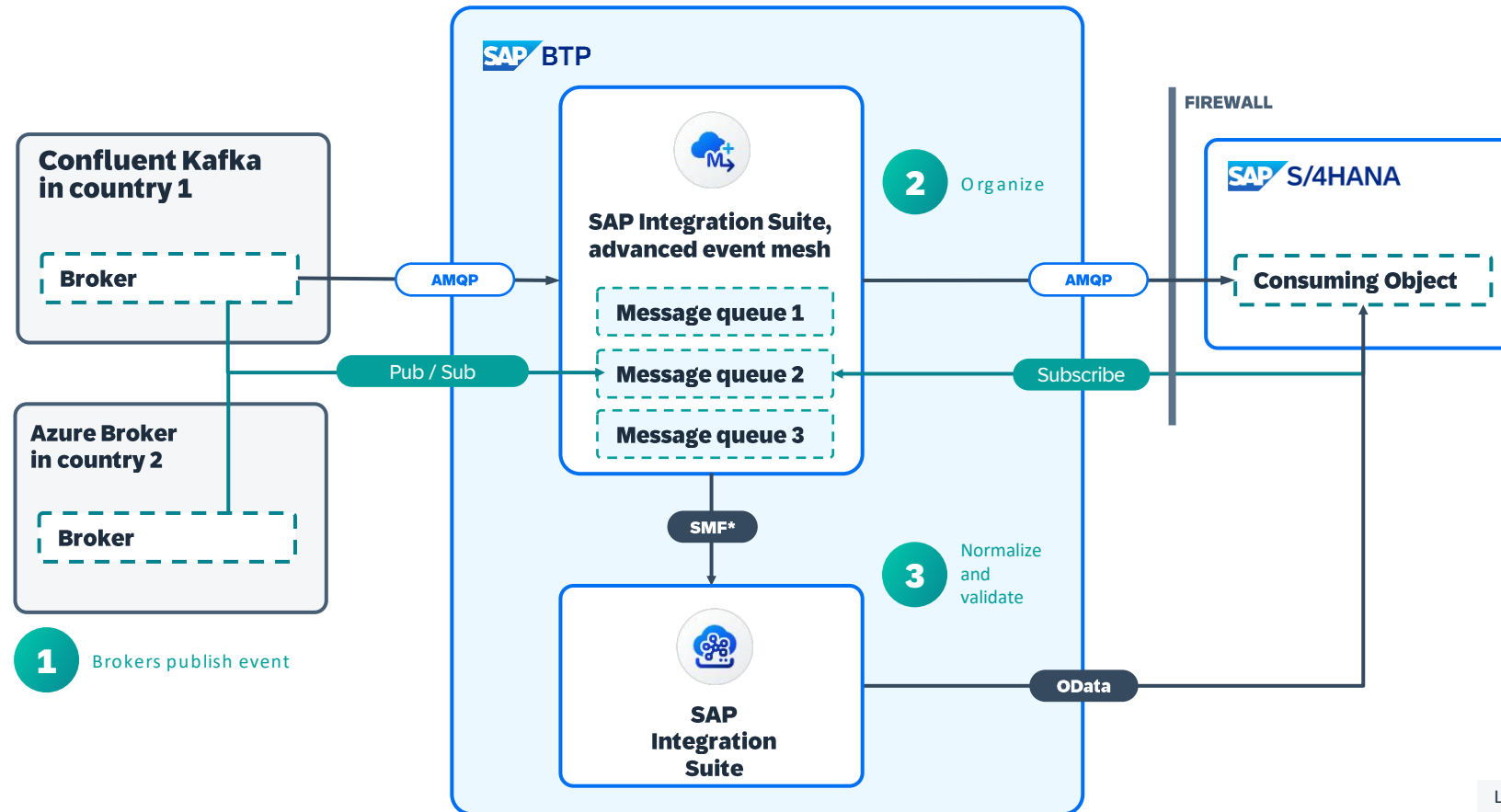
Legend

- Data flow
- Pub-sub process

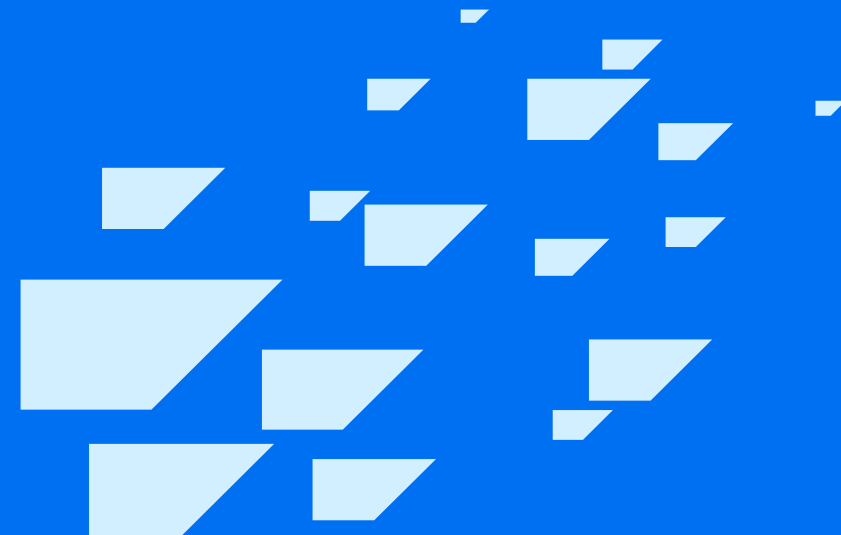
*Solace message format

Event-based integration with SAP Integration Suite – event aggregation

Collection and aggregation of events from different event sources and event brokers to feed into SAP S/4HANA



“Top customers are relying on EDA to drive their business”



Credit Card Service Provider: Real-time Integration

All credit card authorizations for **Top 3 credit card** company in real-time via Advanced Event Mesh

- ✓ Improved **customer experience** through **near real-time response time** for premium value position
- ✓ Major **savings** and reduced **TCO**
- ✓ Easily scale infrastructure in **future**
- ✓ Effective **fraud detection**



Consumer Goods: Supply Chain Monitoring

Supply Chain: 12000 containers on **1500 ships**

EDA Supply Chain Tracking: **10K container records** per day

- ✓ \$10M **annual savings**
- ✓ **CO2 alerts** for sustainable logistics
- ✓ **Suez Canal blockade** handled in less than 2 hours



Furniture Retailer: Real-Time Integrations

Real-time view and updates on stocks and shipments

- ✓ Accurate **stock information** & order status across omnichannel customer experience
- ✓ Customer facing **web shop** connected to inventory and logistics backend in real-time
- ✓ Major **savings** and reduced **TCO**
- ✓ Online share **revenue increase** from **18%** to **30%**



Digital Twin for DDMRP – Manufacturing

- ✓ Inventory shortages across the production line lead to production delays
- ✓ Advanced Mesh connects 5000 systems to the MES and central **manufacturing planning, monitoring of inventory** in motion to ensure no machinery runs out of work.
- ✓ Inventory reduction: 23% increase in **productivity**



Advanced Event Mesh Key Values

1. Real-Time Data Flow

Enables instant communication between apps, devices, and services. Keep up to date with live information.

2. Seamless Integration

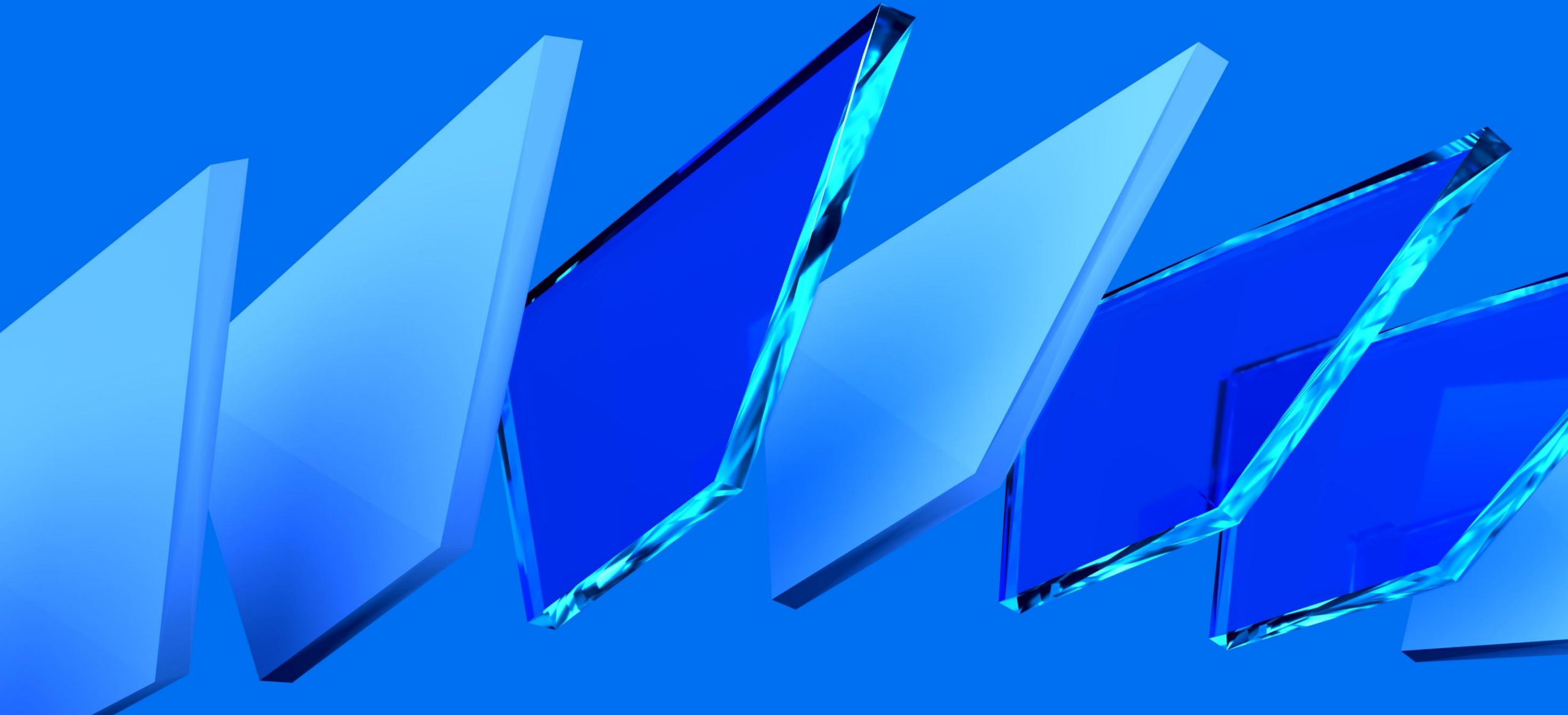
Connects SAP and non-SAP systems across cloud, on-prem, and hybrid setups. Reduces complexity with own mesh network.

3. Scalable & Resilient Architecture

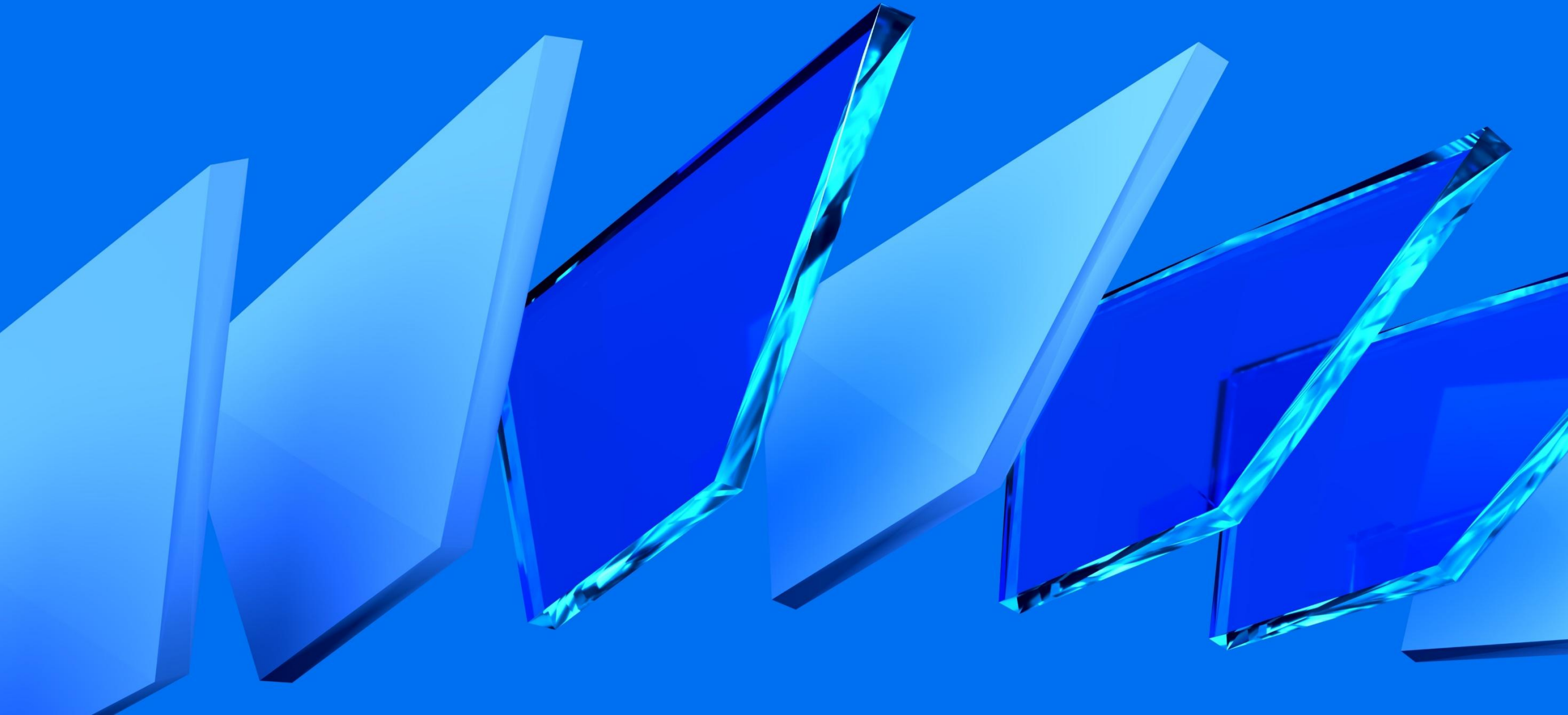
Start at any size, and expands seamlessly to match growing use-cases. Supports critical scenarios to ensure uninterrupted business operations through guaranteed delivery.



Demo



Outlook



Roadmap Highlights and Direction



Connection and Migration options
from EMIS to AEM



Integration into **SAP Standard Tooling**
e.g. CALM monitoring



End-to-End Visibility
Distributed Tracing between
SAP S/4HANA and AEM

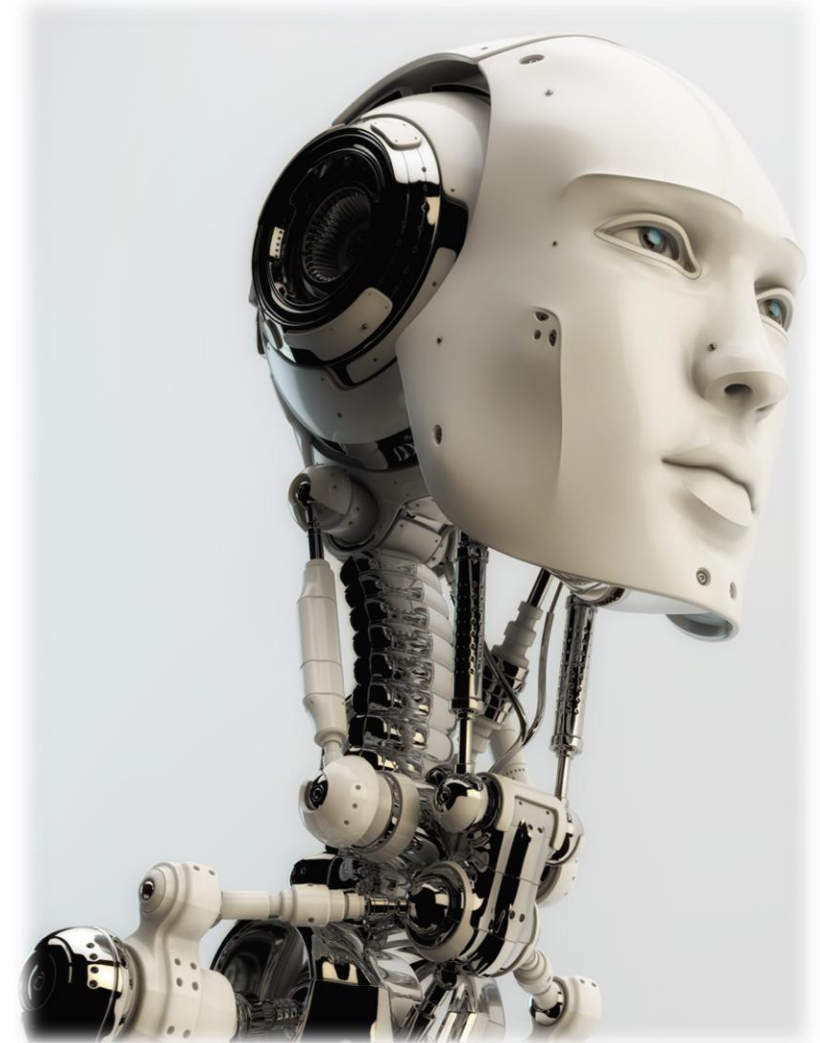


Developer Hub for
APIs and Events

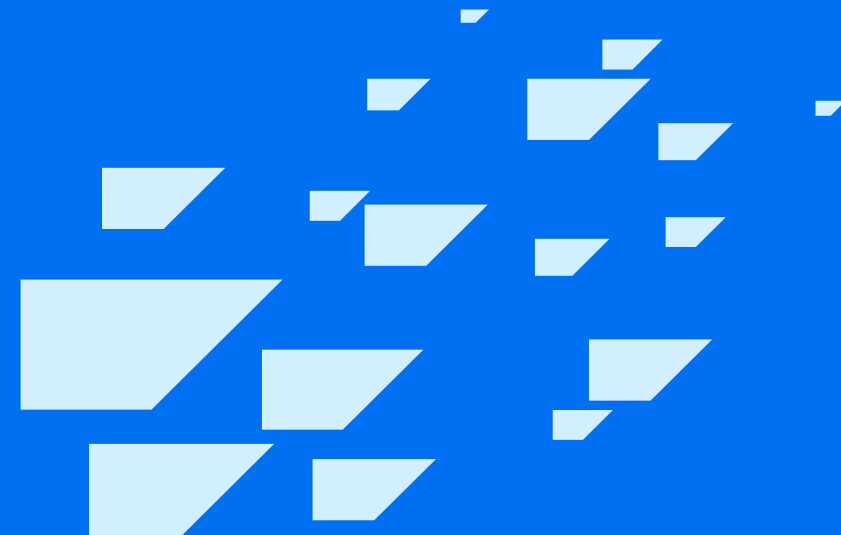
More **Extensible Events** in SAP
S/4HANA

Summary and key takeaways

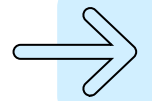
- **Speed and flexibility** expected by business
- Ability to **complement**, not replace, traditional integration approaches
- **Key technology** for real-time **AI**
- **Exponential growth** over the next years
- **EDA Skills** will become crucial



“SAP is EDA-ready”



Learn More!



Learning Journey AEM



Code Jam on Event-Driven Integrations



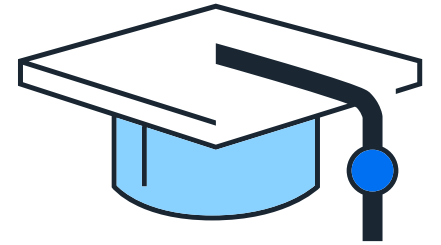
SAP Discovery Center on SAP Integration Suite, advanced event mesh



SAP Integration Suite, advanced event mesh documentation



SAP Integration Suite, advanced event mesh Discovery Center Mission



Thank you.

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