



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

Giuseppe Bruni / Global Head Industry and Value Advisory
SOLACE



Niki Scaglione / SAP Enterprise Integration Lead
SAP BTP Global Center of Excellence



April 25, 2023

Public



Disclaimer

The information in this presentation is confidential and proprietary to SAP and may not be disclosed without the permission of SAP. Except for your obligation to protect confidential information, this presentation is not subject to your license agreement or any other service or subscription agreement with SAP. SAP has no obligation to pursue any course of business outlined in this presentation or any related document, or to develop or release any functionality mentioned therein.

This presentation, or any related document and SAP's strategy and possible future developments, products and or platforms directions and functionality are all subject to change and may be changed by SAP at any time for any reason without notice. The information in this presentation is not a commitment, promise or legal obligation to deliver any material, code or functionality. This presentation is provided without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. This presentation is for informational purposes and may not be incorporated into a contract. SAP assumes no responsibility for errors or omissions in this presentation, except if such damages were caused by SAP's intentional or gross negligence.

All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

Event Streaming in Real-Time Supply Chain

10M\$

annual savings in detention and demurrage

1.6K

vessel position records per day

10K

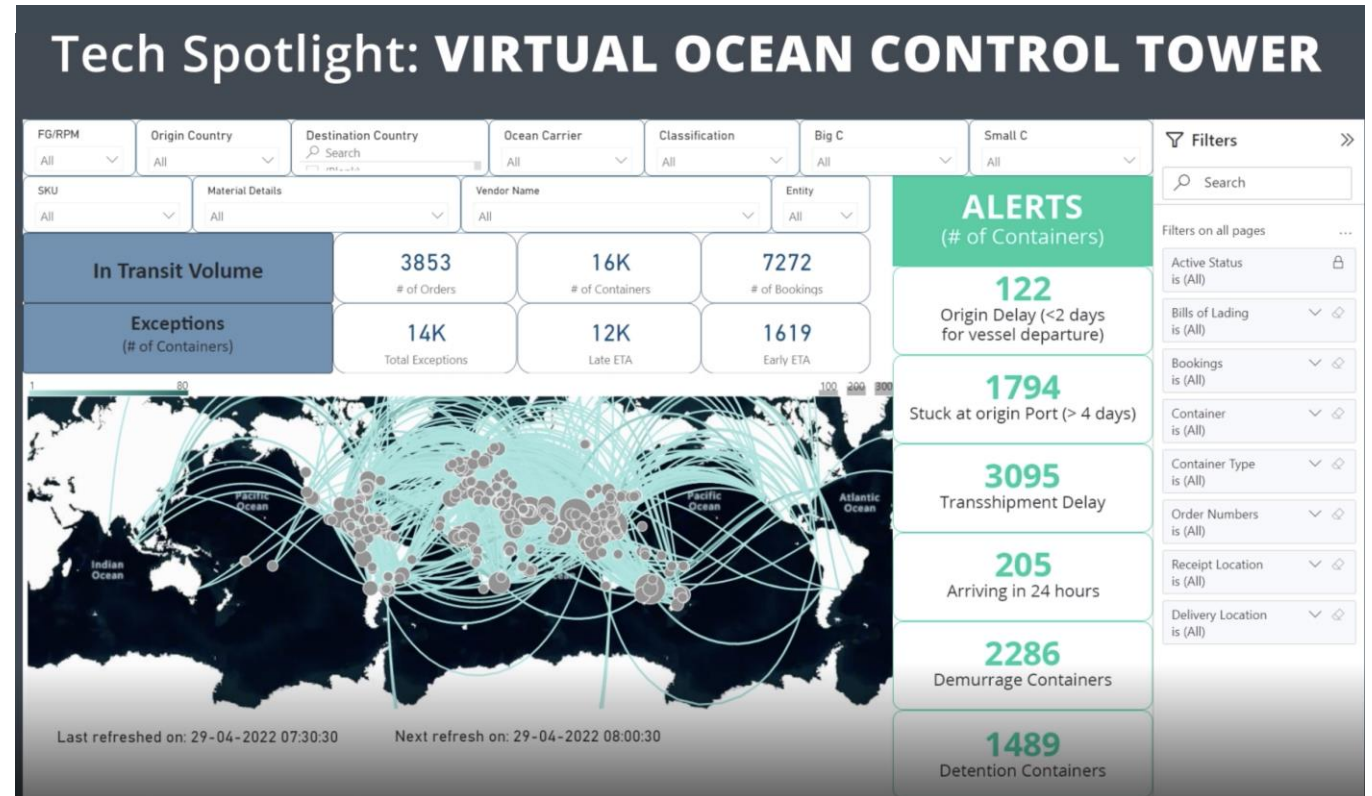
container records per day

Suez Canal Blockade

handled in <2hrs

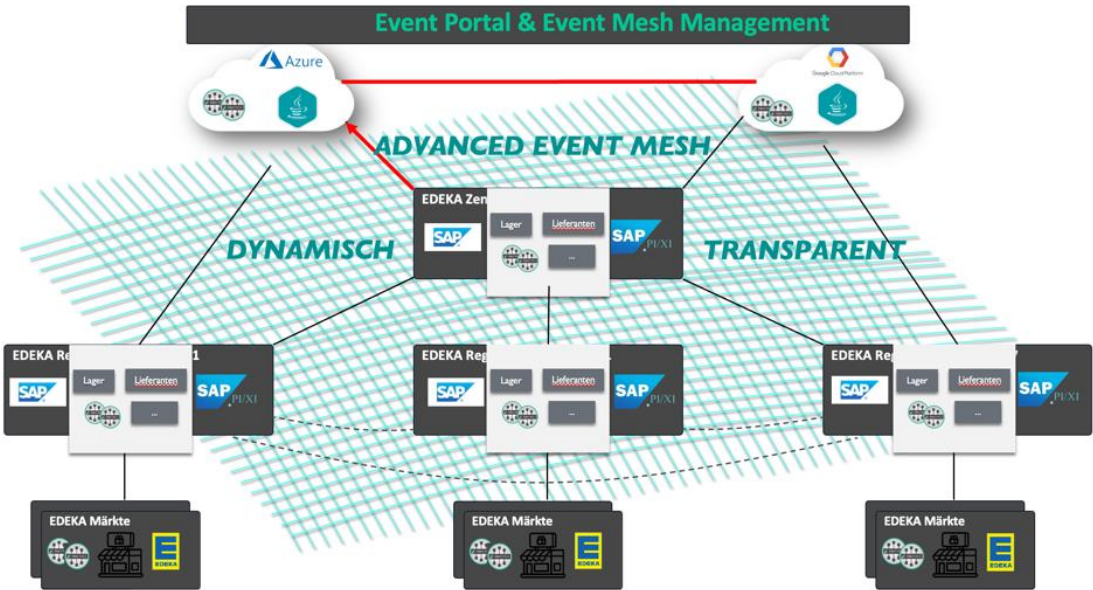
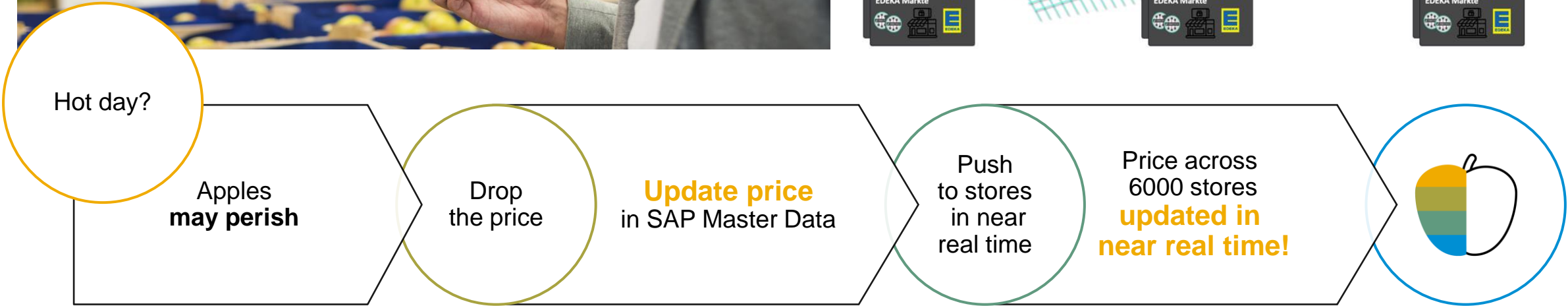
CO2 Alerts

Sustainable logistics



Using real-time visibility of shipping containers to stay ahead of the Suez Canal blockage

Real-Time Promotion Management



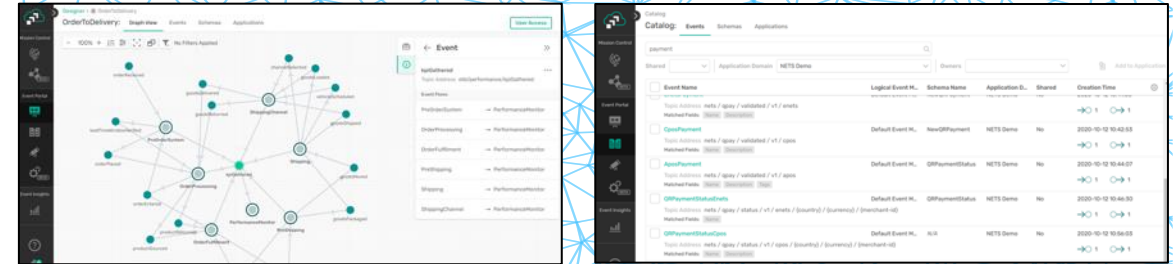
What If You Could “Tune In” to Specific Kinds of Events Occurring Across Your Enterprise and Across Clouds?

Hashtags



Events and Topics

SAP Integration Suite, Advanced Event Mesh



pay/init/v1/corp/us

pay/init/*/sg

em/bpass/DXB/*/scan/>

order/shipped/v2/sku123/eu

order/shipped/*/sku123/>

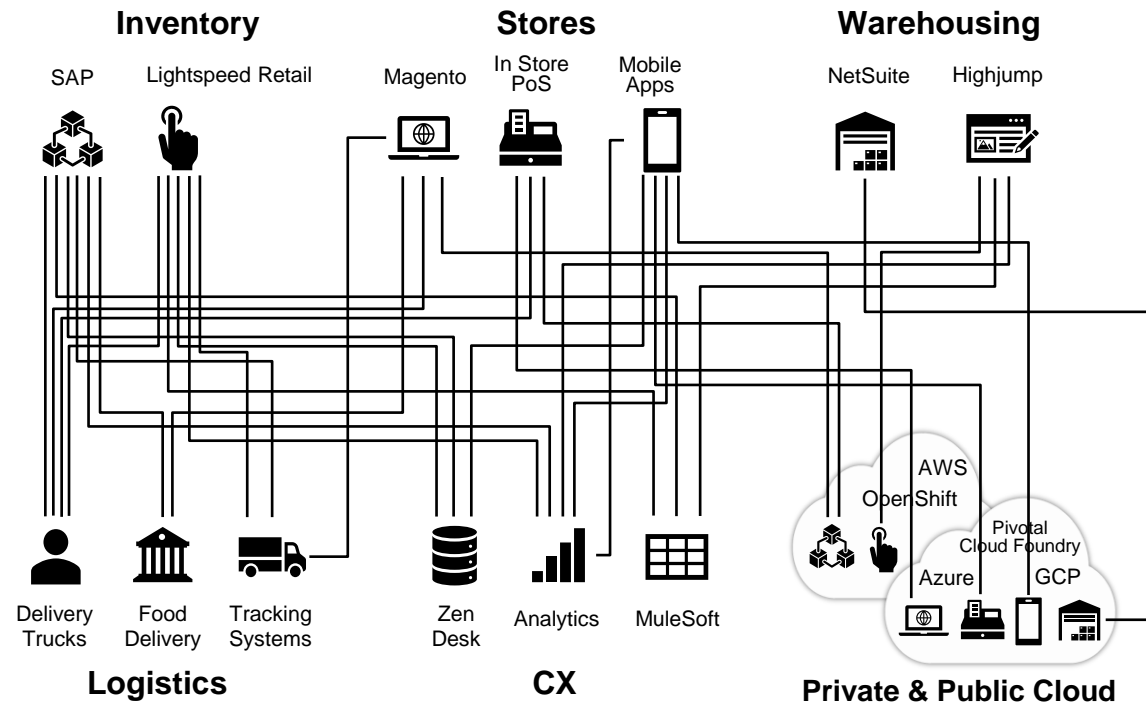
order/cancel/>

Advanced Event Mesh = Twitter of the Enterprise

Move from Spaghetti Integration to Plug & Play Architecture

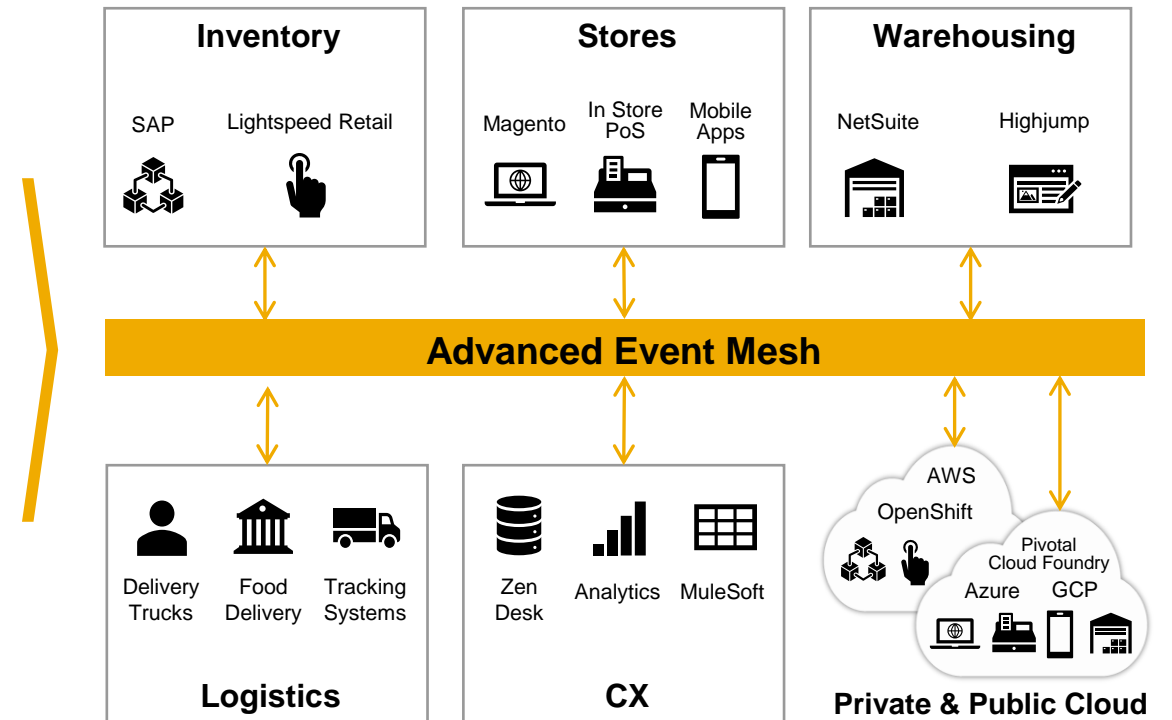
From

“Spaghetti Architectures” Delay Digital Transformation



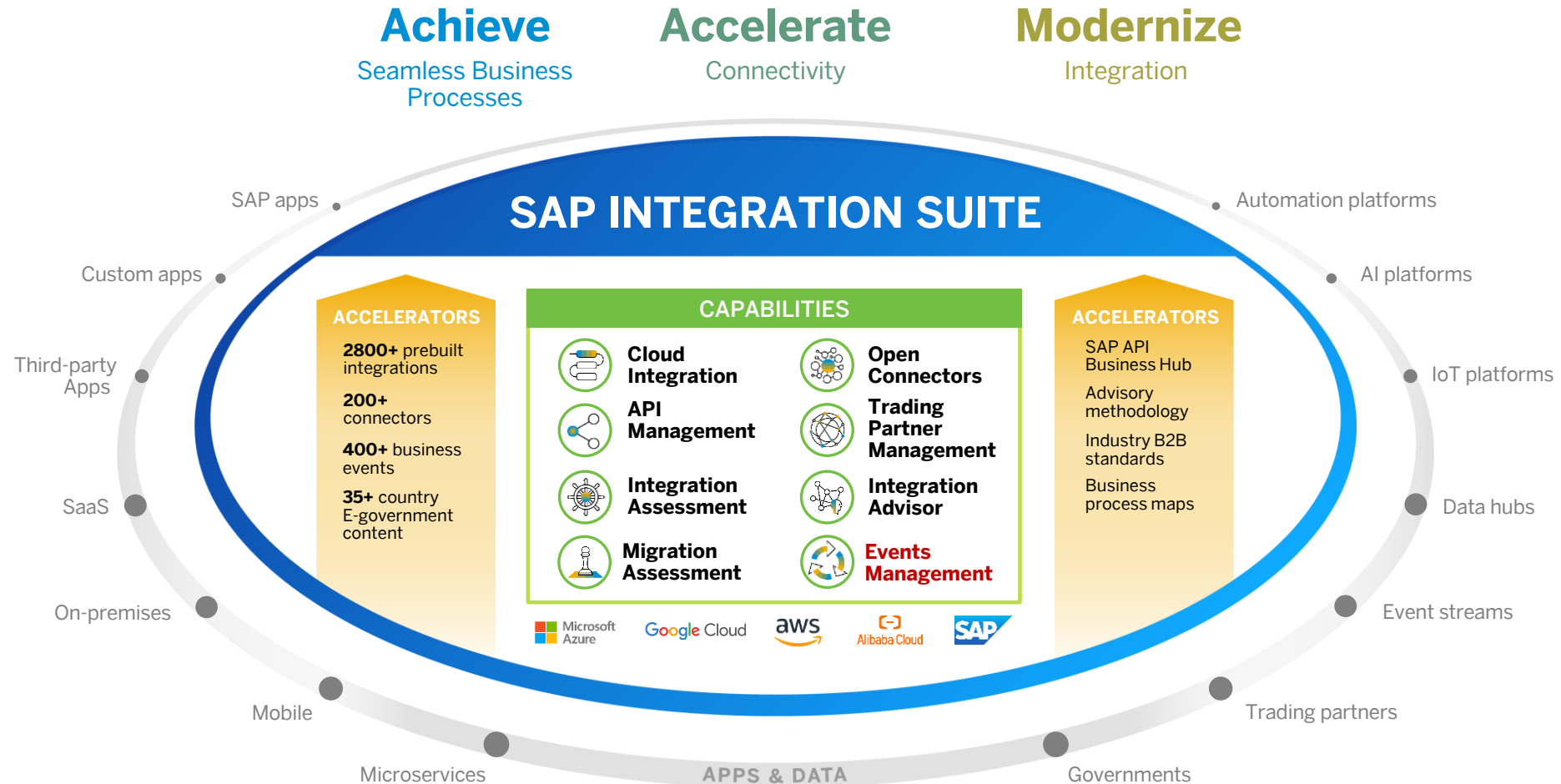
To

A Publish – Subscribe Mesh



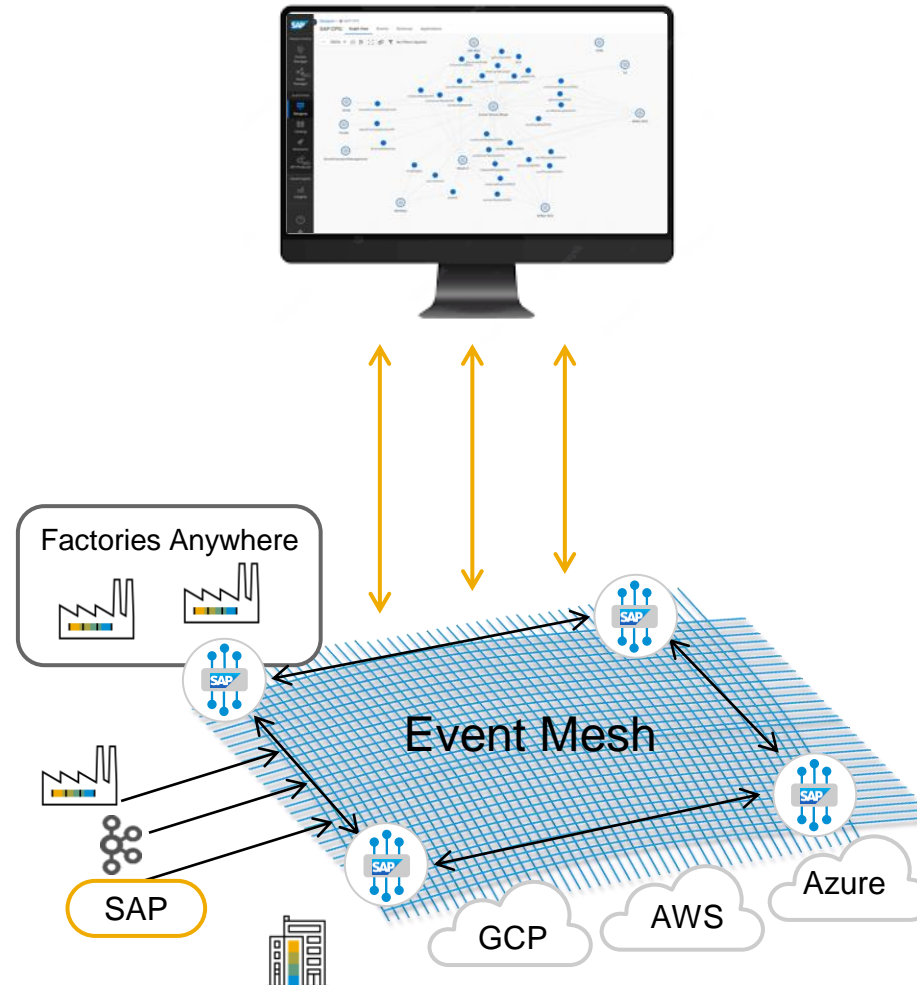
SAP Integration Suite

SAP's hybrid integration platform for the Intelligent Enterprise



SAP Integration Suite, Advanced Event Mesh

Manage and Process Events at Enterprise Scale



Event Management

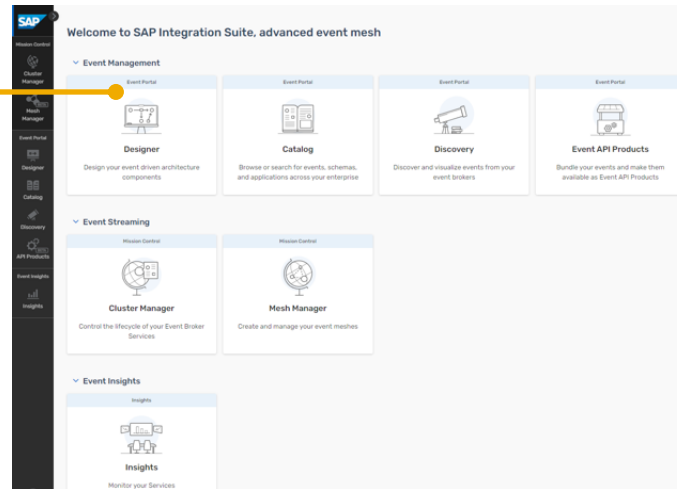
Design, Catalog, Discovery
Event Products and Monitor

Event Streaming

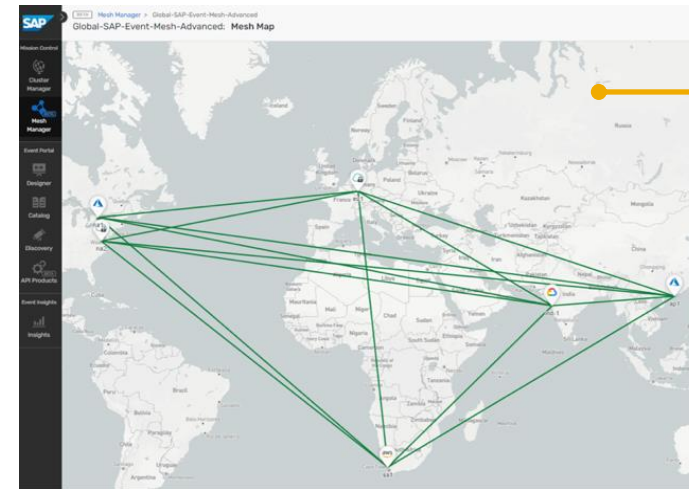
Real-time routing of filtered
events across geographically
distributed landscapes

SAP Integration Suite, Advanced Event Mesh: Tooling

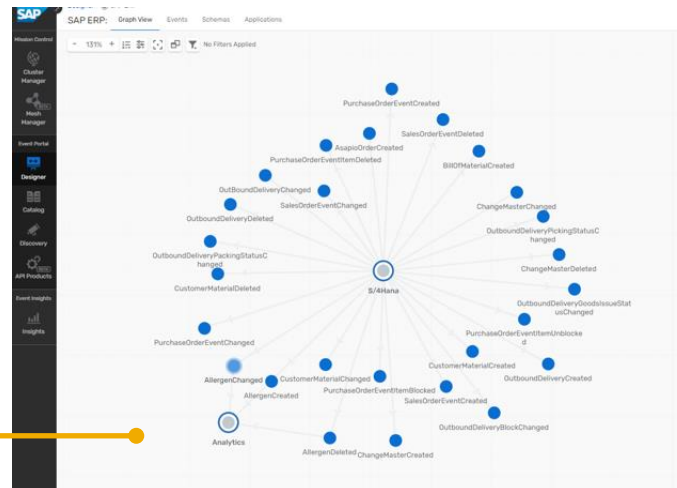
Cloud Console



Mesh Map



Designer

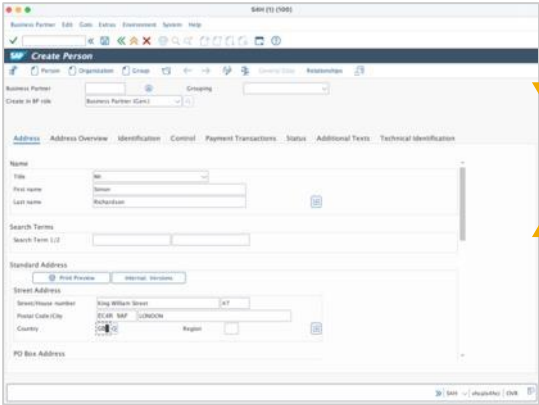


Events	Schemas	Applications	
perform an action			
	Logical Event Mesh	Topic Address	Schemas
	Extended SAP Event Mesh	/4 / sap.s4.bwh.altergen.v1.AlterGen.Created.v1	AlterGen
	Extended SAP Event Mesh	/4 / sap.s4.bwh.altergen.v1.AlterGen.Created.v1	AlterGen
	Extended SAP Event Mesh	/4 / sap.s4.bwh.altergen.v1.AlterGen.Deleted.v1	AlterGen
	Extended SAP Event Mesh	esapio / PurchaseOrder / (SAPInstance) / (OrgID) / (APVersion) / (Format) / (BusinessObjectID)	ESAPIO
	Extended SAP Event Mesh	/4 / sap.s4.bwh.billmaterial.v1.BillMaterial.Created.v1	BillOfMaterial
d	Extended SAP Event Mesh	/4 / sap.s4.bwh.changemaster.v1.ChangeMaster.Created.v1	ChangeMaster
	Extended SAP Event Mesh	/4 / sap.s4.bwh.changemaster.v1.ChangeMaster.Created.v1	ChangeMaster
	Extended SAP Event Mesh	/4 / sap.s4.bwh.changemaster.v1.ChangeMaster.Deleted.v1	ChangeMaster
gnd	Extended SAP Event Mesh	/4 / sap.s4.bwh.customermaterial.v1.CustomerMaterial.Created.v1	CustomerMaterial
test	Extended SAP Event Mesh	/4 / sap.s4.bwh.customermaterial.v1.CustomerMaterial.Created.v1	CustomerMaterial
test	Extended SAP Event Mesh	/4 / sap.s4.bwh.customermaterial.v1.CustomerMaterial.Deleted.v1	CustomerMaterial
KChangeIn	Extended SAP Event Mesh	/4 / sap.s4.bwh.outbounddelivery.v1.OutboundDelivery.DelivStockChanged.v1	OutboundDelivery
ngnd	Extended SAP Event Mesh	/4 / sap.s4.bwh.outbounddelivery.v1.OutboundDelivery.Created.v1	OutboundDelivery
nd	Extended SAP Event Mesh	/4 / sap.s4.bwh.outbounddelivery.v1.OutboundDelivery.Created.v1	OutboundDelivery
test	Extended SAP Event Mesh	/4 / sap.s4.bwh.outbounddelivery.v1.OutboundDelivery.Deleted.v1	OutboundDelivery
statusStatusChanged	Extended SAP Event Mesh	/4 / sap.s4.bwh.outbounddelivery.v1.OutboundDelivery.DeliveryStatusChanged.v1	OutboundDelivery
ingStatusChanged	Extended SAP Event Mesh	/4 / sap.s4.bwh.outbounddelivery.v1.OutboundDelivery.PickingStatusChanged.v1	OutboundDelivery
ingStatusChanged	Extended SAP Event Mesh	/4 / sap.s4.bwh.outbounddelivery.v1.OutboundDelivery.PickingStatusChanged.v1	OutboundDelivery
hanged	Extended SAP Event Mesh	/4 / sap.s4.bwh.purchaseorder.v1.PurchaseOrder.Created.v1	PurchaseOrder
reated	Extended SAP Event Mesh	/4 / sap.s4.bwh.purchaseorder.v1.PurchaseOrder.Created.v1	PurchaseOrder

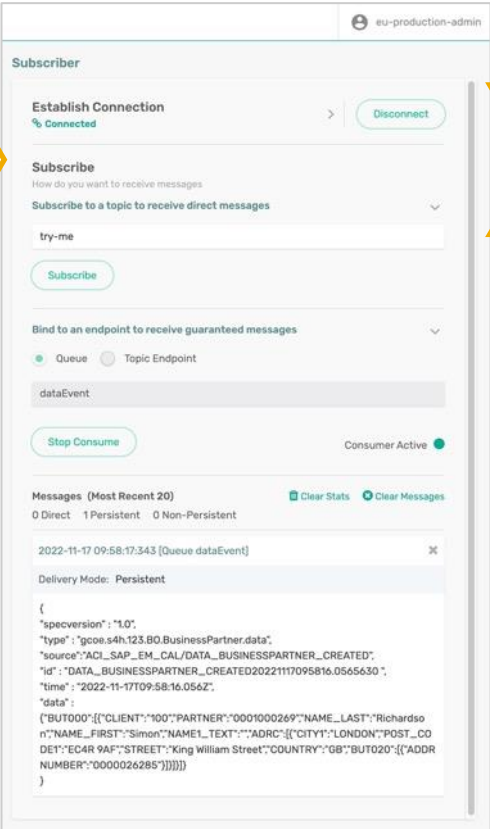
Event Catalog

Distribute Events from SAP to multiple Consumers

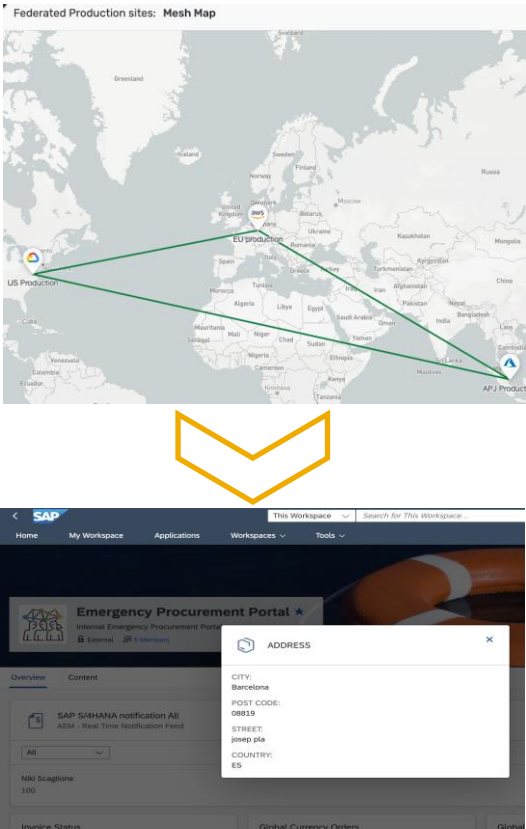
S/4HANA
Business Party



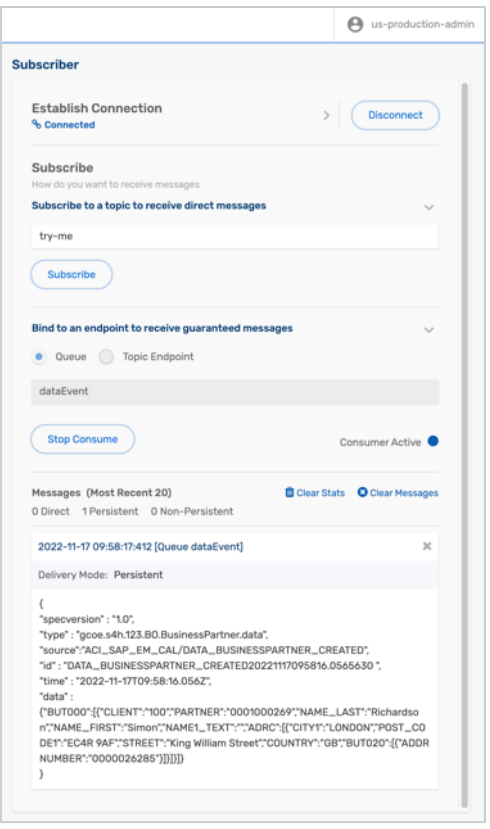
Business Party
Event published to
AEM EU Broker



AEM Mesh Map

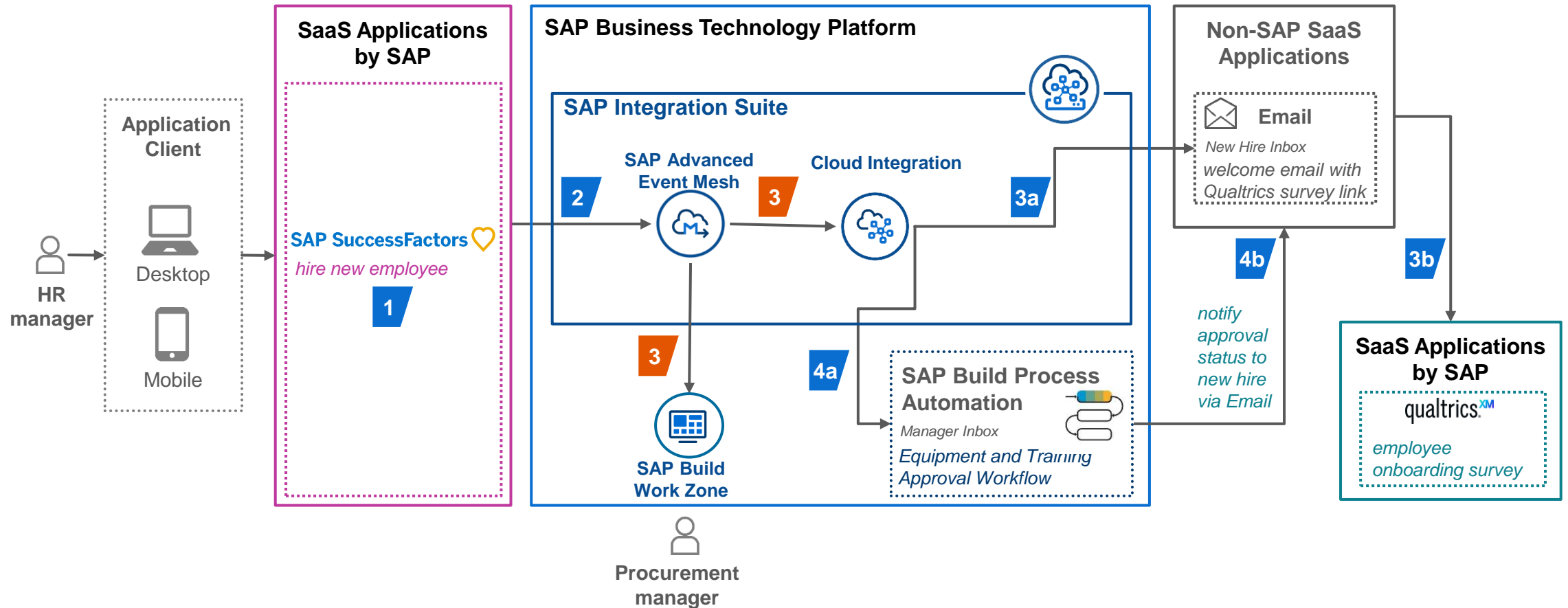


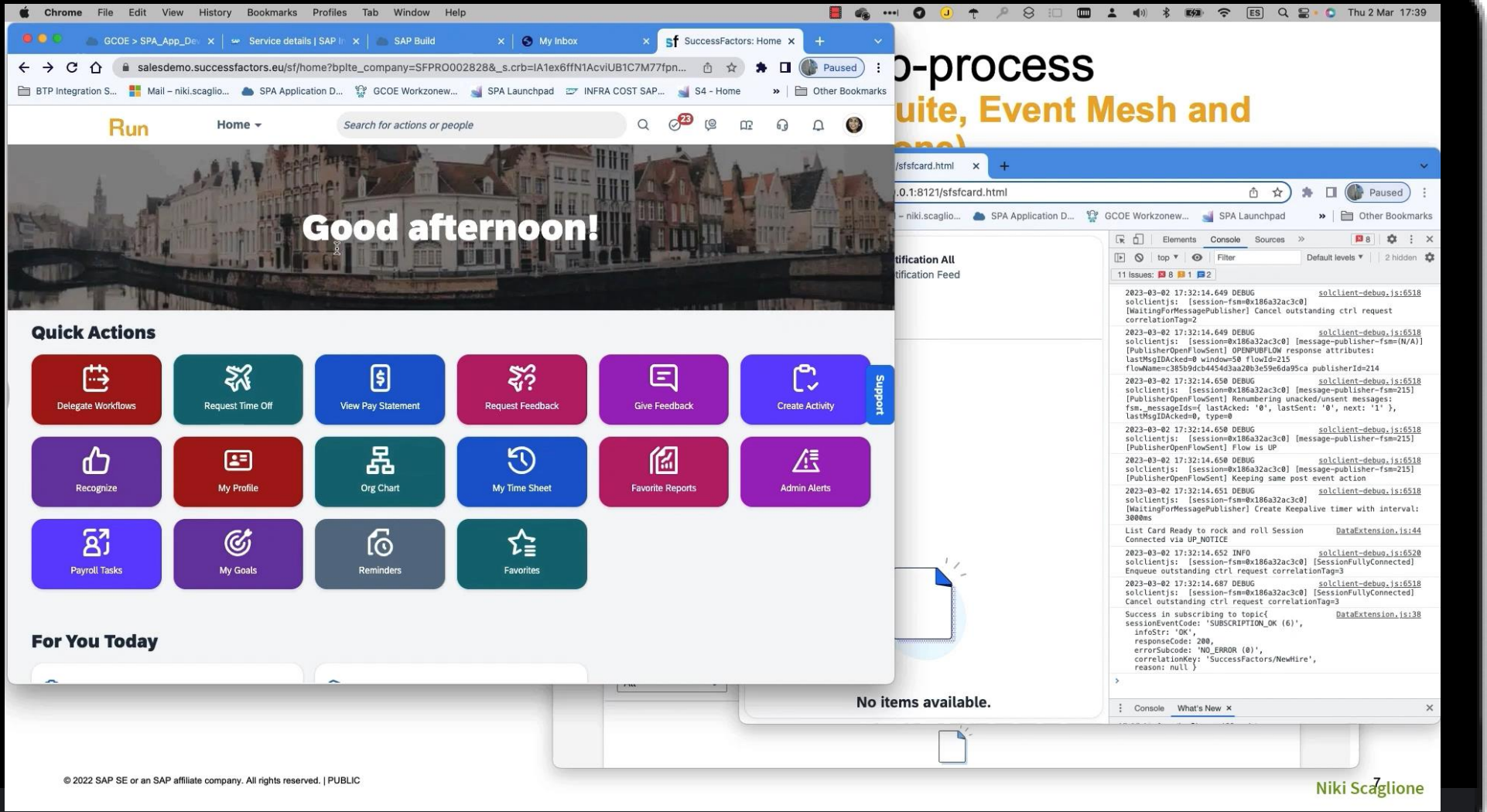
Simultaneously
published to
AEM US Broker



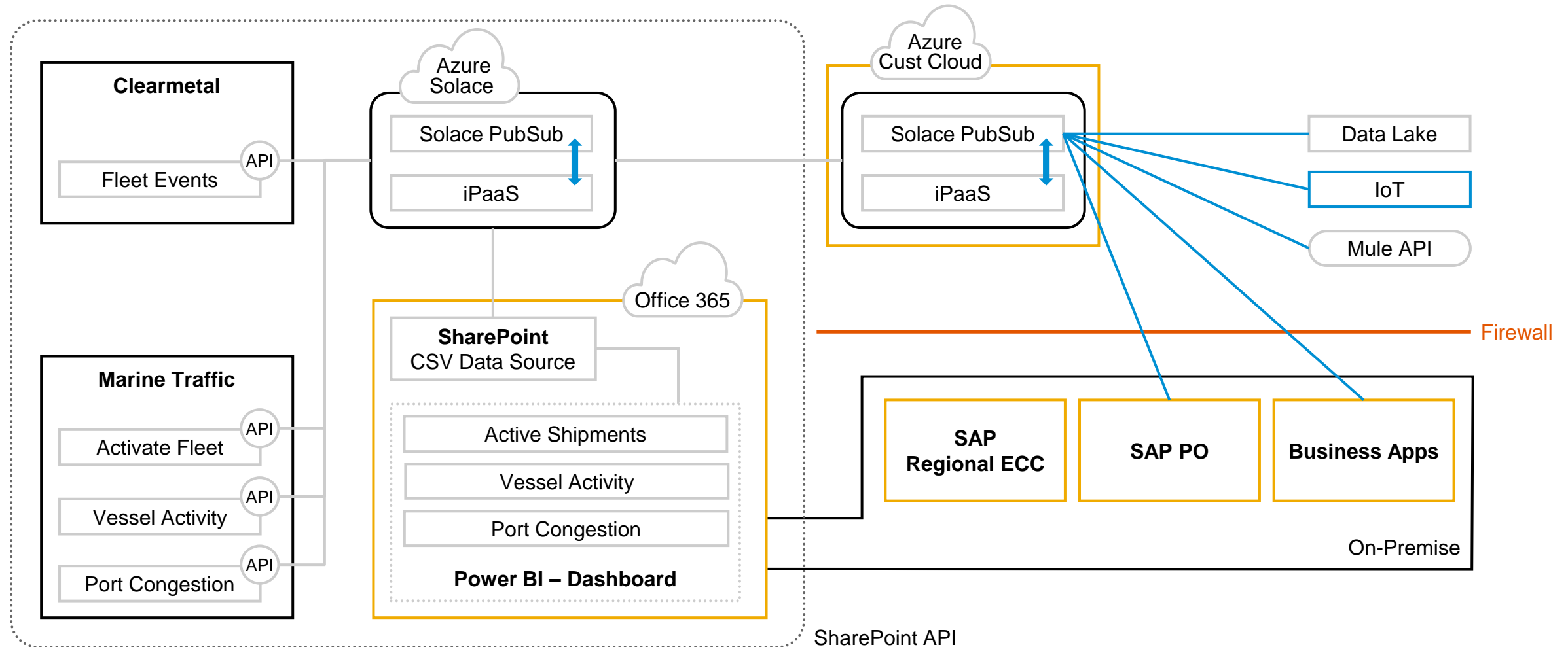
Hire-to-retire: Employee Onboarding sub-process

Hyper Automation Scenario (SAP Integration Suite, advance event mesh, SAP Build Process Automation, SAP Build Workzone)





Architecture Example: Supply Chain Real Time Monitoring



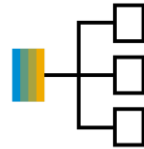
Five Key Elements of an Enterprise EDA Strategy

Real Time Response



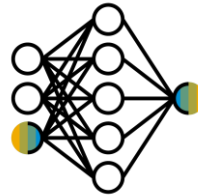
Real time data routing and synchronisation between systems

Fan Out Calling



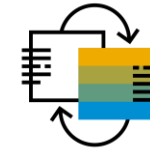
Reduce unnecessary duplicate data pipelines & just plug new consumers in

Dynamic Routing



Delivers the correct message to the correct application in real time dynamically

Decoupled Connectivity



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

Events Discovery



Enterprise EDA requires event visibility across the enterprise – developers won't use what they can't find

Improve customer satisfaction and experience

Cut development time + cost of 1-to-many interfaces

Reduce egress charges and load on interfaces

Leverage plug & play for higher agility

Accelerate application development

Getting Started

Learn

Karsten Strothmann

September 1, 2022 | 12 minute read

SAP's Event-Driven Ecosystem Revisited

2

19

1,089

Edit

In many ways, nature is a great architect and comes up with concepts long before developers and architects had even thought about using them to solve IT problems. After they did, they typically realize quickly that nature's concepts provide great value for them.

Event-driven architecture is one of these concepts that for a long time used to go unnoticed, except for spiders that have used event-driven architecture for thousands of years.



Explore

THE BEST RUN

SAP

MENU

SPOTLIGHT

MY LIST

Welcome to your Integration Space.



Practice

SAP

SAP Discovery Center

Home

Missions

Missions

Implement your use cases on SAP Business Technology Platform, with step-by-step guidance and a well-established support from topic experts and SAP Community.

Categories

All (7)

New & Featured (2)

Platform Missions

All (6)

Analytics (0)

Database and Data Management (0)

Extension Suite - Development Efficiency (6)

Extension Suite - Digital Experience (0)

Extension Suite - Digital Process Automation (0)

Integration Suite (0)

Intelligent Technologies (0)

Onboarding (0)

All Missions (7)

Extend SAP ERP 6.0 (ECC) business processes on SAP BTP

Involves an external business partner validation firm into a background check on your newly added business partners. Do this without the...

285 Companies have started

Build an Event-Driven Geomarketing Extension for SAP S/4HANA Cloud

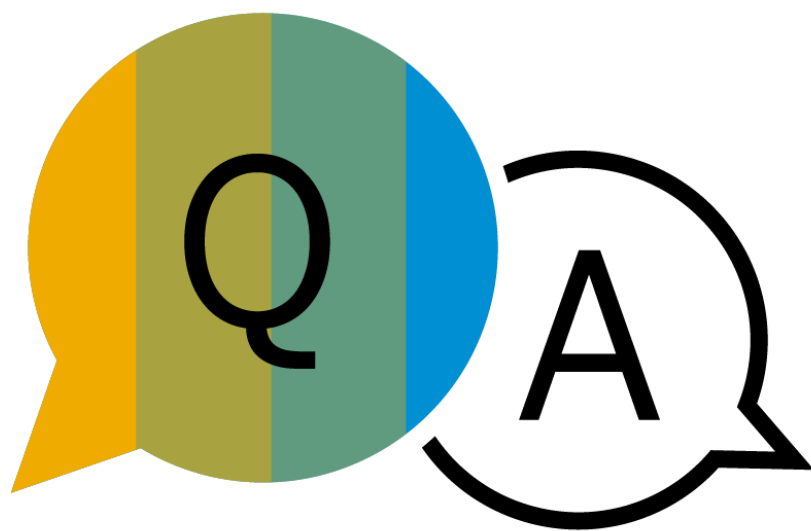
As a call centre employee, I want to instantly learn about any relevant creation or update to a Business Partner object in SAP S/4HANA Cloud...

147 Companies have started



Do





Thank you.

Contact information:

Niki Scaglione
niki.scaglione@sap.com

Christian Holtfurth
christian.holtfurth@solace.com

