



Leverage Advanced Event Mesh with low code tool

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SAPinsider
2023



In This Session

- How to make data available in SAP via REST endpoints
- How to expose Change Pointers and Business Object Events to SAP Advanced Event Mesh via low code tool
- How to combine data and events to send out customized events real-time to SAP Advanced Event Mesh

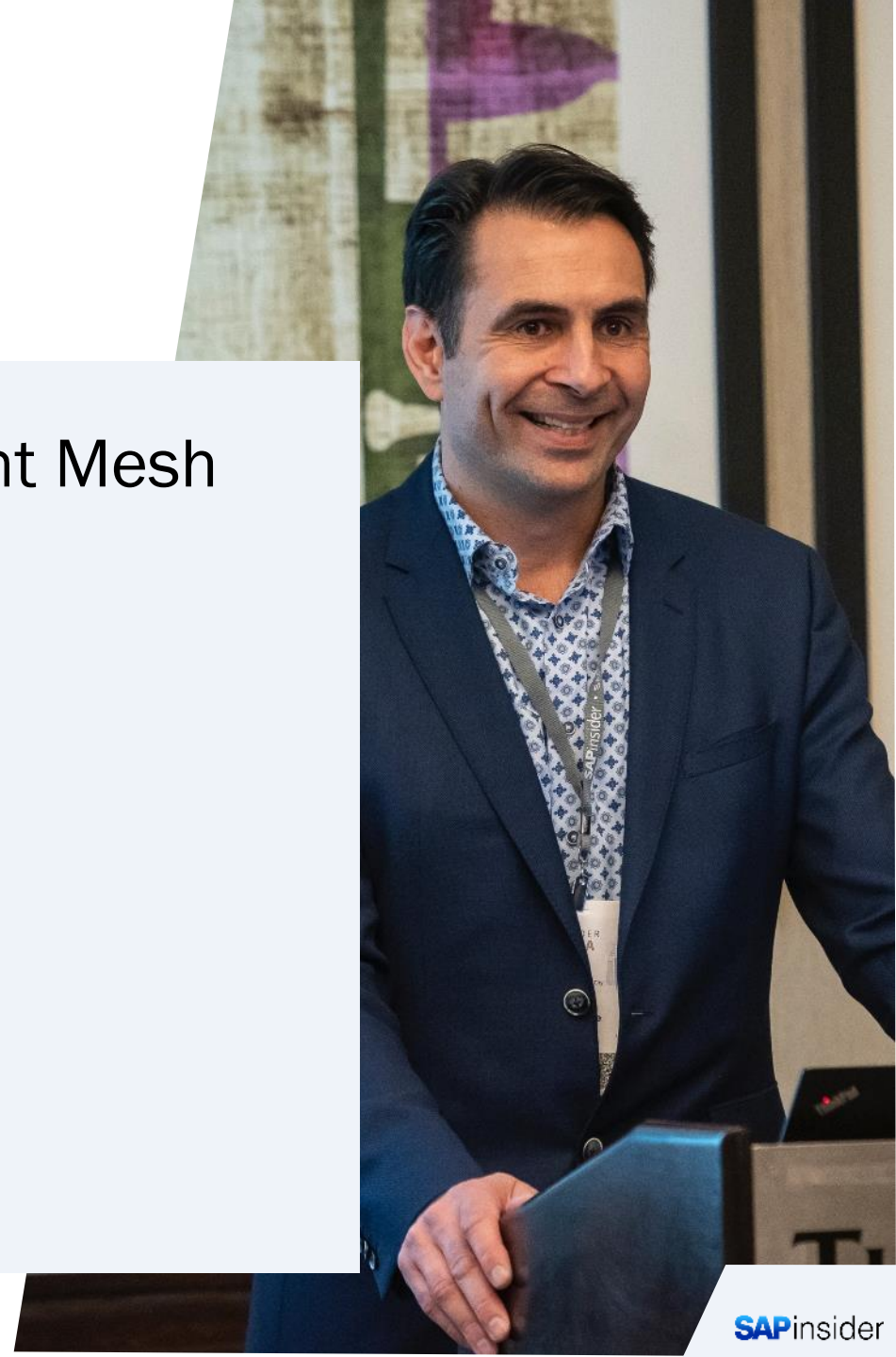
Who am I?

- Working with Development since 1998 (Java, .Net, Perl, visual basic, PHP, asp, JavaScript etc.)
- Working with Integrations since 2003 (SAP XI/PI/PO, CPI, Boomi, Oracle fusion, MuleSoft, Biztalk, Azure logic Apps etc.)
- Working with Governance since 2011
- Working with APIs since 2015 (Azure, Boomi, Kong, Apigee, SAP)
- 2023 Working as Supporter, Developer, Architect and IT Strategy Advisor
- 3rd Kong Summit (Virtual, San Francisco, Virtual)
- Nerd i.e.. Sci-fi/Fantasy books, movies, TV and comic book
- Father of 3 (9, 7 and 3 years old)



Agenda

- SAP Events and Advanced Event Mesh
- What is aXis for SAP
- Demo
- Wrap-Up

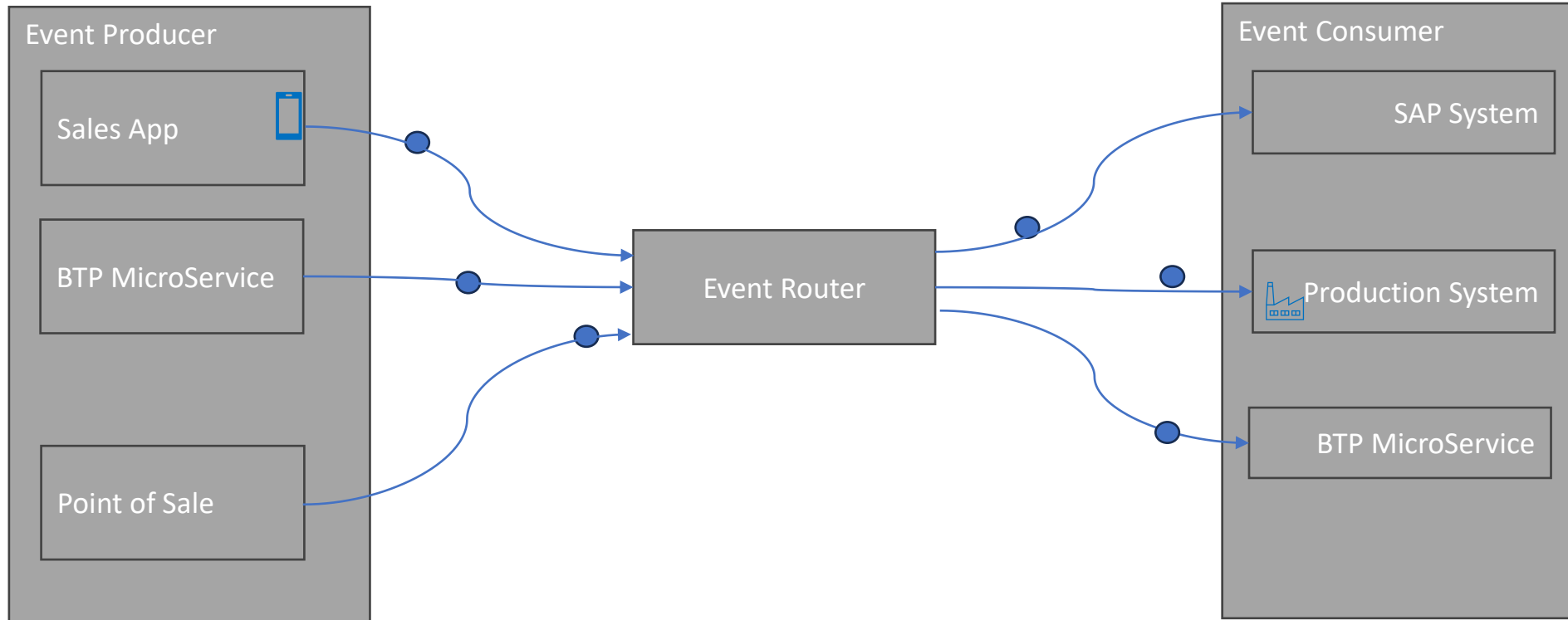


SAP Events and Advanced Event Mesh

- What is EDA (simplified)
- What are events in SAP
- What is SAP Advanced Event Mesh



What is EDA (simplified)



What are SAP ERP Events?

Change Pointers

Listening to changes on field level and send event about this. I.e.

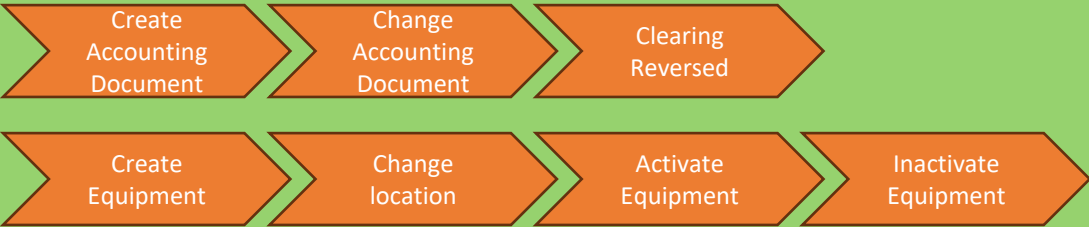
MARA						
MATNR	LAEDA	MTART	SPART	EANNR	KUNNR	PRDHA

MAKT			
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Whenever an update in the database hits one of the marked field, a change pointer is sent

Business Events

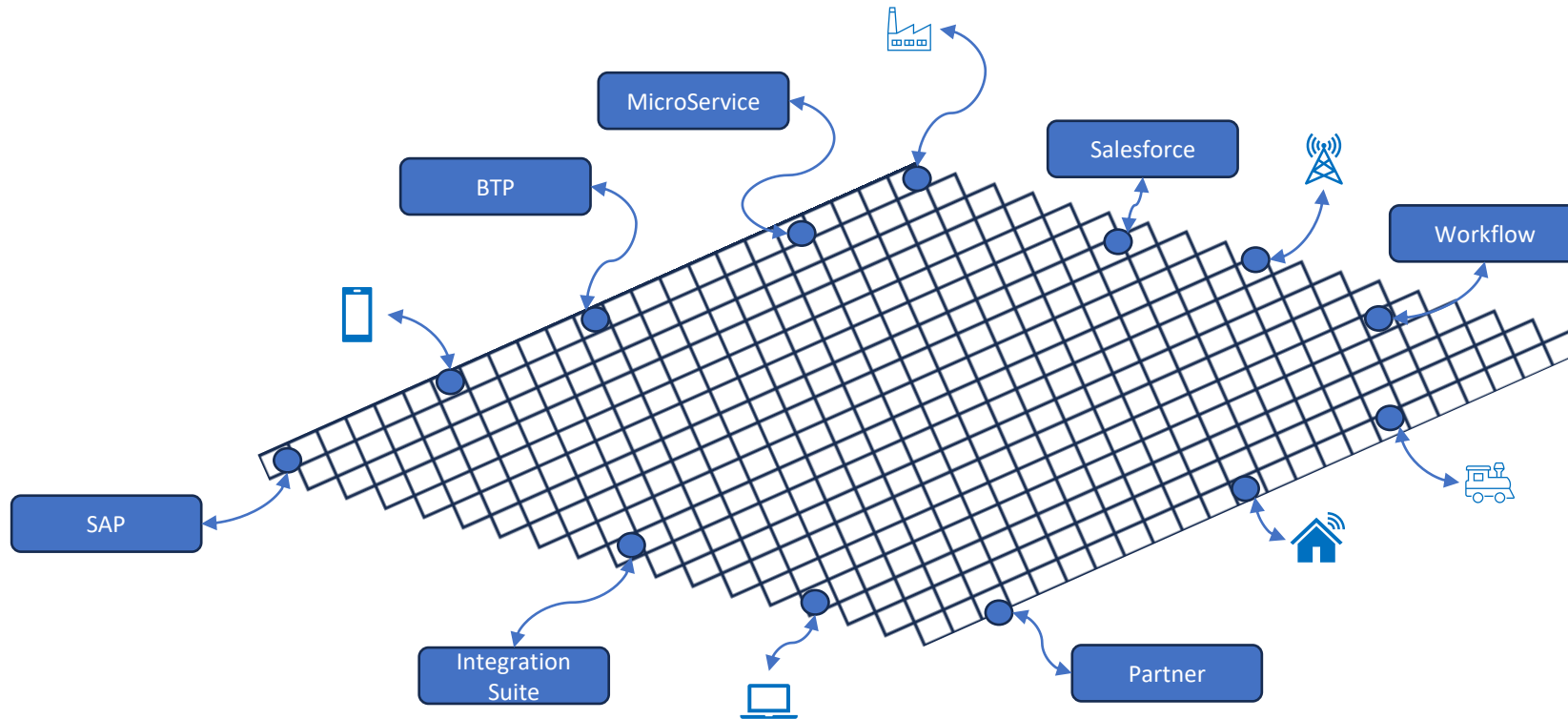
Listening to business events on business object level and send event about this i.e.



Every time a step is completed via GUI, Fiori or Function Modules, an event is sent

Many standard SAP Events – as well as custom built events

What is SAP Advanced Event Mesh (simplified)



- Event Routing (topics)
- Queueing
- Realtime
- High-Throughput
- Extremely Scalable
- Guaranteed Delivery

What is aXis for SAP

- Preface
- Vision
- Architecture
- Performance metrics



Preface

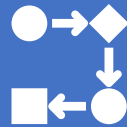
- Everything which we will show is based on ABAP and vue.js, deployed on a local SAP system.
- See it as a cheat code to enable yourself faster for events.
- It is used to demonstrate what is possible
- It is used to make you think about the options SAP provides

Vision



No Code Solution

- No ABAP resources needed for getting data out of SAP. Let ABAP resources focus on strategic work.
- Flexible and simplified UI making it possible to easily choose which data to expose or update



Leverage SAP Events

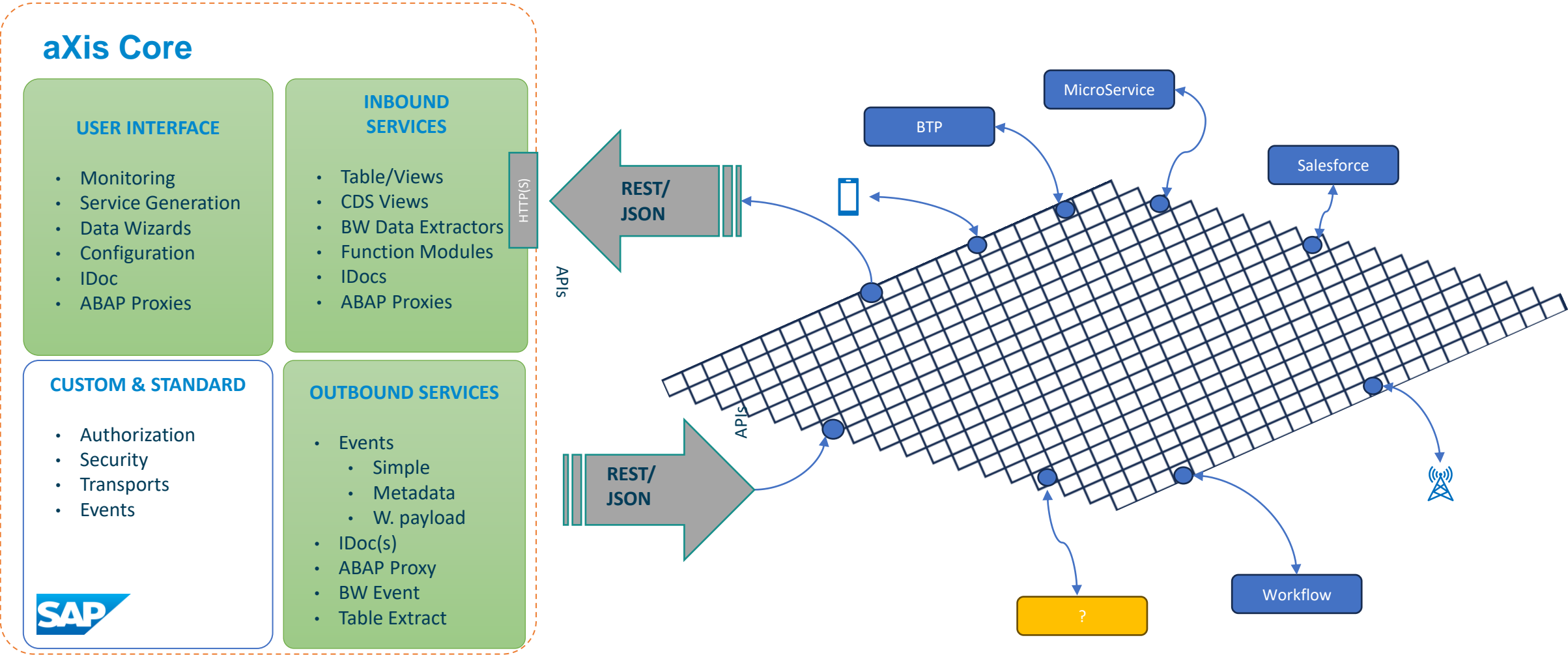
- Utilizing SAP Standard events to create events-as-a-service for the IT Landscape
- Distributing data via SAP business event – both delta and initial loads
- High performance enabling millions of records within minutes



Open API

- Uses Non-proprietary APIs ensuring direct connection between SAP and external systems – inbound and outbound
- Enable reuse of APIs across system landscape

Architecture for aXis for SAP





αXis for SAP ERP

SAP[®] Certified
Integration with SAP NetWeaver[®]

αXis for SAP S/4HANA

SAP[®] Certified
Integration with SAP S/4HANA[®]



Performance Metrics

Events	Events with metada	Events with payload
Outbound realtime	Outbound realtime	Outbound realtime
649 events/second	473 events/second	617 events/second
Outbound batch	Outbound batch	Outbound batch
2.160.000.000 events/day 25.000 events/second	1.848.960.000 events/day 21.400 events/second	1.296.000.000 events/day 15.000 events/second

Types of events

- Events sending out just event id with system
- Event with metadata sending out event including data before and data after change
- Events with payload sending out event associated with a custom table service

Event Framework

- Close to zero latency with direct connection to event broker
- Minimal system performance impact in daily operations
- Multi threaded batch for load distribution

* Preliminary numbers based on minimal server configuration for SAP configuration. Testing optimized solution during October 2023

aXis for SAP demo

- Combining the various steps:
 - Show swagger file for table services
 - Show events being sent out of SAP into Solace and Integration Suite



Demo wrap-up

- Showed how to easily send out updates to Business partners.
- All Business Objects have different events
- It is possible with dynamic topics for Advanced Event Mesh
- It is possible to have data follow the event
- Real-time and batch updates are possible with events



Use cases for Advanced Event Mesh

- Pricing updates
- Sales Order updates
- Production Order updates
- Stock Changes
- Accounting Document Changes
- ?



Wrap up

- Showed how it was possible to make data available in SAP via REST endpoints.
 - Used a tool – but it can be done without
- Showed Change Pointers and Business Object Events and how to expose these to SAP Advanced Event Mesh via low code tool
- Combined SAP data and SAP events to ensure data was sent out realtime to SAP Advanced Event Mesh

Where to Find More Information

- SAPinsider.org
- <https://axis.invixo.com/request-trial>
 - Get a Trial for aXis for SAP
- <https://axis.invixo.com/Learning-Hub/InstallationGuide>
 - Installation Guide
- <https://axis.invixo.com/getting-started-with-axis>
 - Getting started with aXis for SAP

Key Points to Take Home

- Change Pointer Events are good for handling changes to data
- Business Events are good for unique events occurring in business processes
- SAP Has many standard Change Pointer and Business Events available – use them
- An event mesh can be used for guaranteed delivery of messages across infrastructure handling millions of messages within minutes
- Utilize low code tools such as aXis for SAP to leverage your ABAP resources for strategic development
- aXis for SAP can lower development costs and time to market.

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