VFTee

Solace

The #1 Global Vendor for Event-Driven Architectures

1   About Solace

1.1   About

Solace is the leading vendor for Event Driven Architectures. They are a Canadian company founded in 2001 that delivered the most current digital foundation for some of the largest groups in the world including Apple, Univeler, Tencent, Bosh, SAP, P&G, Les Mousquetaires, AMEX, NASA, Daimler, Renault, HSBC, Barclays, JP Morgan, etc.

Their origin comes from financial markets, where they have been creating high performance Trading & Market Data Distribution platforms – moving events in real time. They now also have several customers in Telecom where they have large and small customers.

Their technology is a productized hybridization between, Kafka, SOA, active/Rabbit/IBM MQ that can collect & distribute massive volumes of data & events between any kind of applications - to deliver a real time IT ecosystem.

Some unique capabilities include:

*   Extensive productized toolset for deploying event-driven mesh at speed
*   Complete Governance and Observability with Dynamic Routing, Distributed Tracing and the Event Portal , including managing of Kafka brokers
*   Only ones from EDA space that can guarantee delivery of messages for banking and telco-grade applications
*   Ideal solution for IoT Event Mesh: native support for APIs and open standards like MQTT, OpenTelemetry...
*   Delivery on-premises, Cloud-Managed (Azure, GCP, AWS) but also dedicated Physical Appliance (SLA 99,999)

2 Payment Platforms

2.1   Relevance of EDA for Payment Platforms

A Payments Modern Platform must do the following:

- Support innovation of new applications and services that will help retain and acquire customers

- Support a high volume of transactions in the quickest response time with accuracy

- Balance transaction authentication and authorization with fraud detection without decreasing customer satisfaction

- Route events securely across the whole ecosystem with efficiency

Solace has improved **NETS** ability to bring new services to market — such as the QR code application they recently deployed — from two projects every six months to one project every month. NETS aims to leverage that agility and Solace's easy scalability to expand their reach and offer their innovative digital and touchless payment services across Asia.

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3   Event Mesh

3.1   Highlights

An event mesh is a network of interconnected event brokers that enables the distribution of events information among applications, cloud services, and devices within an enterprise.

An event mesh can route information from one application to any other applications no matter where they are deployed (in a datacenter, in a private or public cloud, at the edge, etc).

### 3.1.1   General
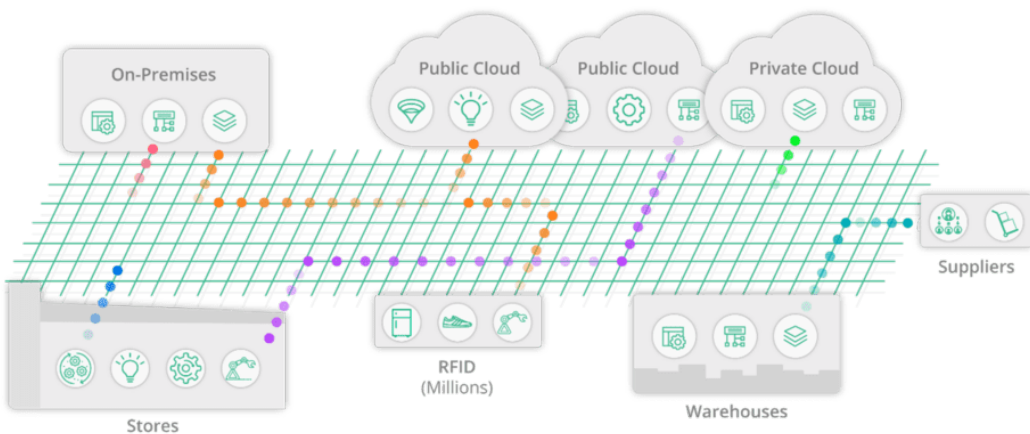
3.1.2   In Banking
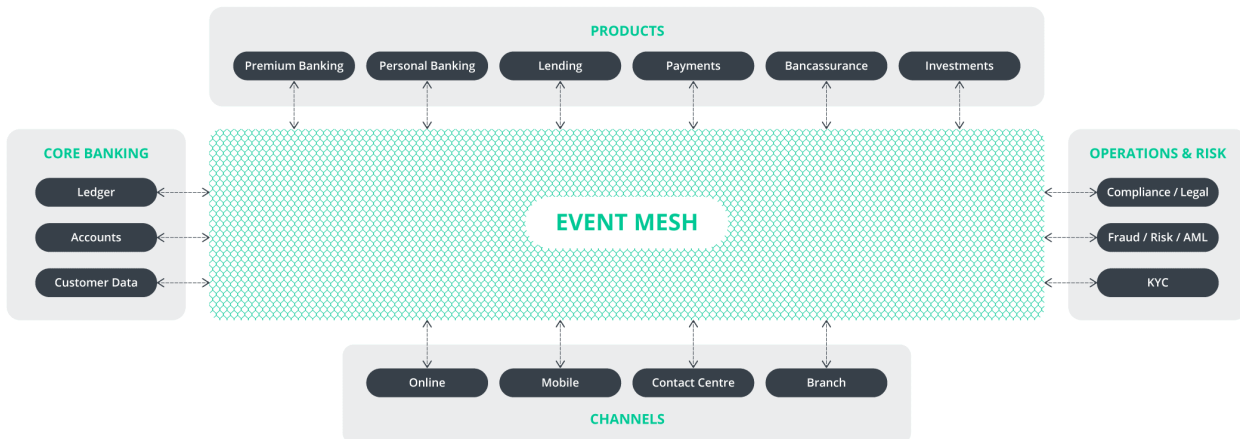
3.2   Design, Deploy and Manage Event-Driven Companies

Compared to traditional, now legacy SOA and MQ-based approaches, Event-Driven offers several advantages:

- Scalability: Event-driven architectures can scale horizontally, meaning that more instances of a service can be added to handle an increasing volume of events. This makes them ideal for handling large and unpredictable workloads.

- Flexibility: Because events are decoupled from the systems that generate or consume them, it's easier to make changes to one system without affecting others. This enables developers to add, remove or modify functionality without disrupting the entire system.

- Variety: Solace's event mesh supports a wide range of event types and formats, easy integration with different systems and technologies, and hybrid cloud deployment that spans cloud and on-premises systems.

- Responsiveness: Event-driven architectures can respond to events in real-time, allowing systems to react to changing conditions quickly. This can be particularly useful in applications that require fast response times, such as financial trading or IoT systems.

- Resilience: Event-driven architectures can be designed to be resilient in the face of failures. Services can continue to operate independently even if others fail, thanks to the decoupling of events.

- Asynchronous Communications: An event mesh can support asynchronous communications so systems can send and receive information without having to wait for a response.

- Visibility: An event mesh lets administrators track and monitor events as they move through the mesh.

- Cost-effectiveness: Event-driven architectures can be cost-effective because services are only active when they need to be, reducing the need for expensive computing resources.

- Security: An event mesh by Solace can protect against unauthorized access and tampering.

Overall event-driven is a new paradigm for modern Enterprise Architectures. And solace is the only EDA vendor with banking-grade, guaranteed message delivery capabilities.
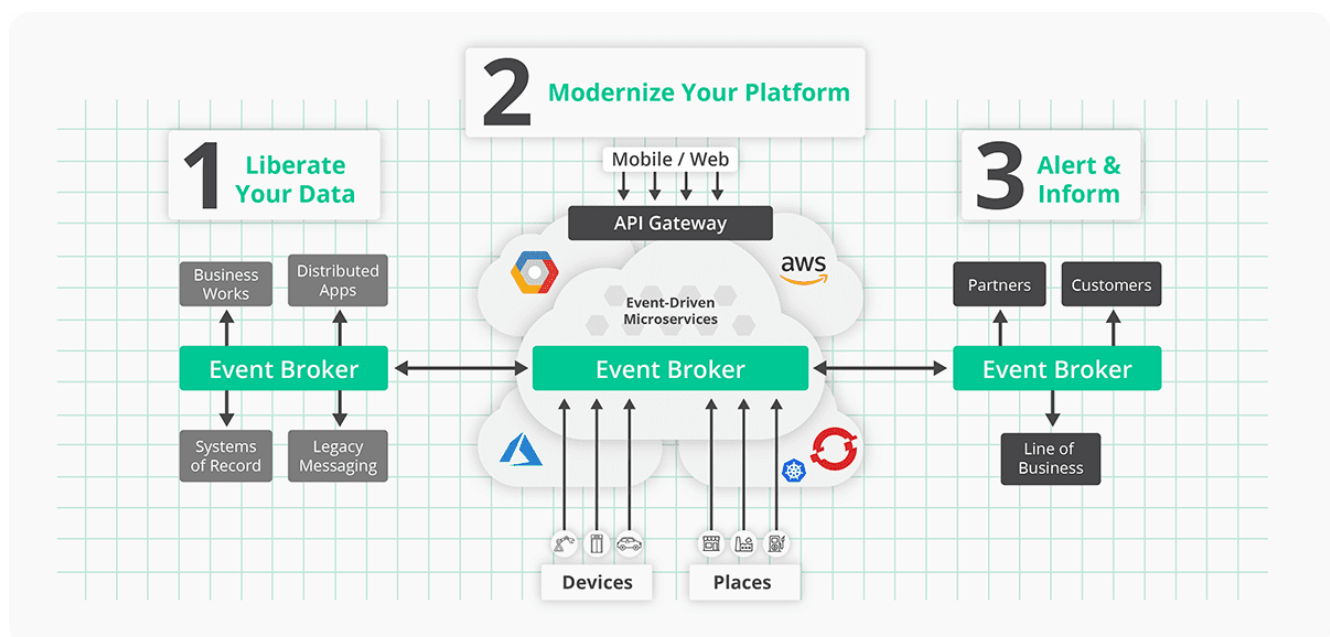
4   Extending IBM

4.1   Extend Beyond your Messaging Queue

4.1.1   In short

Combining Solace's PubSub+ platform with IBM's middleware can help you extend your software integration paradigms from IBM's proprietary queuing protocols all the way to industry standard REST APIs, unifying your connectivity architectural layer into a seamlessly coherent unit.

4.1.2   Summary

One key advantage of using Solace's PubSub+ in conjunction with IBM MQ is that it can help you to reduce the complexity and cost associated with managing multiple messaging systems. PubSub+ supports a wide range of messaging protocols (including MQTT, AMQP, JMS, and REST) and can act as a messaging gateway between different systems. This means that it provides greater flexibility when it comes to integrating with other systems which may be using different messaging protocols. In effect, you can use Solace's PubSub+ to unify messaging across your entire infrastructure, including IBM MQ, and to simplify your overall messaging environment.

In addition, PubSub+ is designed specifically for Event Driven Architectures, which means it is optimized to handle high volumes of data at a very low latency. This is critical for applications that require real-time data processing and event-based workflows.

Finally, PubSub+ offers a wide range of advanced features that are specifically designed to support event-driven architectures. These include support for message replay, message filtering, message transformation, and more. These features are not available in IBM MQ or may require additional development effort to implement.

Overall, Solace's PubSub platform provides a flexible architecture that can support a variety of messaging patterns, including publish/subscribe, request/reply, and event-driven architectures. This can make it easier for banks to adopt new technologies and integrate with other systems, such as cloud-based services or mobile applications.

By extending their messaging queue system with Solace's PubSub platform, banks can benefit from increased scalability, flexibility, resilience, security, and integration capabilities, allowing them to process transactions more efficiently and securely, and respond more quickly to changing market conditions.

4.2   Dedicated Connector

The Solace PubSub+ Connector for IBM MQ bridges data between the Solace PubSub+ Event Broker and IBM MQ providing a flexible and efficient way to integrate IBM MQ application data with your Solace-backed, event-driven architecture and the Event Mesh.

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About VFTee

VFTee is a boutique Information Technology consulting firm with vast international expertise and experience. It helps companies achieve business optimization via digital transformation initiatives.

VFTee delivers practical consulting and solutions that enable customers to improve their revenues, reduce their costs and risks, and become more agile to compete in the new era.

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