

# PubSub+ Event Broker Software

Real-time data distribution for event-driven enterprises

**solace**

Solace PubSub+ Event Broker efficiently streams events and information across cloud, on-premises and IoT environments. The “+” means it supports a wide range of message exchange patterns including publish/subscribe, request/reply, queueing and streaming, with qualities of service like best effort and guaranteed delivery. It’s available as an appliance, software, and a service, all of which offer the same functionality and can be managed and monitored with a single administration interface.

## Key Capabilities and Features

### APIs & Protocols

- Support for AMQP, JMS, MQTT, Node.js, Paho, Qpid, WebSocket and more
- Messaging APIs for C, C++, C#/NET, Java, JavaScript, JMS/JCA and Node.js

### Federated Architecture

- Routing across distributed cloud and on-premises environments
- Dynamic self-learning routing
- Fast, bandwidth-efficient routing over wide area networks

### Reliability & Robustness

- Built-in fault tolerance and high availability configuration options
- Built-in disaster recovery functionality for business continuity

### Capacity & Performance

- Very high throughput and low, consistent latency

### Advanced Messaging

- Message caching and replay
- Sophisticated topics, including wildcards
- Message prioritization
- Dead message queues
- In-service upgrades

### Integration

- Easily integrate events from leading streaming and analytics products
- Free open source Kafka connectors, for both sources and sinks

### Management & Monitoring

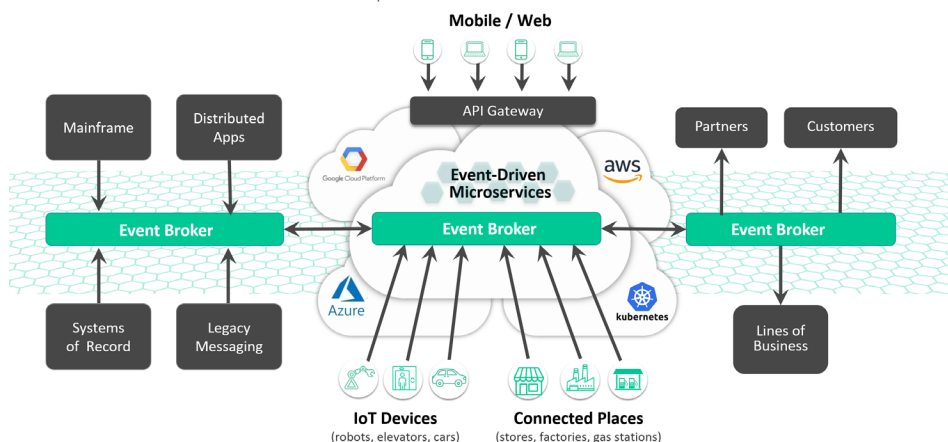
- Centralized administration
- Powerful, proactive monitoring and alerting, including integration with existing monitoring tools

### Security

- Authentication, authorization and encryption of assets and information

## The Event Mesh Advantage

You can connect your PubSub+ event brokers to create an “event mesh” that efficiently streams events from wherever they occur to everywhere they’re needed, around the world and in all kinds of cloud, on-premises, IoT and mobile environments.



## Customers

### RBC Capital Markets

RBC Capital Markets has deployed Solace PubSub+ appliances to act as the message bus of their low latency trading platform.

*“65 billion messages a day. That’s 750,000 messages a second, 24 hours a day. That’s huge volume, and we do all that completely seamlessly without any data loss.”*

*-Joshua Carroll, managing director, global head of shared application services*

### CargoSmart

CargoSmart uses PubSub+ to establish reliable IoT connections between vessels, control centers and applications running in diverse cloud and on-premises environments.

*“PubSub+ has given CargoSmart a world-class foundation upon which they can deploy a game-changing solution that leverages the Internet of Things to help smart shippers differentiate themselves in the marketplace.”*

*-Belinda So, general manager, CargoSmart*

### Grasshopper

Grasshopper used PubSub+ to build an event mesh that incorporates cloud-native AI/ML services into their trading system by linking systems across cloud and on-premises environments.

*“Solace provides the reliable, robust event distribution we need to exchange all kinds of real-time market data and transactions across many exchanges. Our decision to use PubSub+ to incorporate cloud-based machine learning into our system was easy given Solace’s hybrid cloud capabilities.”*

*Tan T-Kiang, CIO, Grasshopper and Tilde*

# Software Editions

PubSub+ Event Broker: Software can be deployed in almost any cloud or on-premises environment.

Two editions are available:

- **Standard** edition is a **free**, enterprise-grade alternative to open source messaging technologies.
- **Enterprise** edition is for customers that need to unlock more throughput or connections, or require personalized customer support.

		Standard	Enterprise
Pricing		Free	Licensed per Core
Deployment		Eval, Dev and Prod	Eval, Dev and Prod
Functionality		Full	Full
TLS		Yes	Yes
AMQP, JMS, MQTT, REST, WebSocket		Yes	Yes
High Availability		Yes	Yes
Replication for DR		Yes	Yes
Connections	Enterprise/JMS	1,000	30,000
	IoT, REST, Web	1,000	200,000
Message VPNs		1	5
Non-Persistent Messaging Performance	Point to Point	10,000 msgs/sec	2.8M msgs/sec
	With Fan-out	1.0M msgs/sec	8.0M msgs/sec
	Latency	127 $\mu$ s average 288 $\mu$ s 99th percentile	127 $\mu$ s average 288 $\mu$ s 99th Percentile
Persistent Messaging Performance	Point to Point	10,000 msgs/sec	100,000 msgs/sec
	With Fan-out	490,000 msgs/sec	680,000 msgs/sec
Support		Paid Upgrade	Included

## Why Enterprises Choose PubSub+ Software

### Easy to Get Started

Quick Starts make it easy for apps and microservices in different clouds, including Alibaba, AWS, Azure, GCP, Huawei and Tencent, so you can exchange information between them, and move apps from cloud to cloud without changing code or updating APIs.

### Runs Anywhere

You can deploy PubSub+ software in many cloud or on-premises computing environments, including popular container and hypervisor platforms like Docker, Kubernetes, OpenShift, and Pivotal Platform. Tight integration with popular IaaS and PaaS technologies lets you deploy and govern messaging services in a wide range of public and private cloud environments.

## Specifications

### System Requirements

#### CPU

- Minimum 1 Core
- 2 recommended for Standard, 4 recommended for Enterprise

#### RAM

- Min 1 GB
- 4 GB for 1K connections, up to 52 GB at 200K connections

#### Disk Space

- 30 GB plus message spool

### Environments

#### Hypervisors

- VMware, KVM, Hyper-V, Docker

#### Clouds

- AWS, Azure, GCP, OpenStack

#### PaaS

- K8S, PCF, PKS, OpenShift

Learn more at [solace.com/software](https://solace.com/software)

# solace.

Solace helps large enterprises become modern and real-time by giving them everything they need to make their business operations and customer interactions event-driven. With PubSub+, the market's first and only event management platform, the company provides a comprehensive way to create, document, discover and stream events from where they are produced to where they need to be consumed – securely, reliably, quickly, and guaranteed. Behind Solace technology is the world's leading group of data movement experts, with nearly 20 years of experience helping global enterprises solve some of the most demanding challenges in a variety of industries – from capital markets, retail, and gaming to space, aviation, and automotive. Established enterprises such as SAP, Barclays and the Royal Bank of Canada, multinational automobile manufacturers such as Renault and Groupe PSA, and industry disruptors such as Jio use Solace's advanced event broker technologies to modernize legacy applications, deploy modern microservices, and build an event mesh to support their hybrid cloud, multi-cloud and IoT architectures. Learn more at [solace.com](https://solace.com).