# PubSub+ Event Broker ⊕ Appliance

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 onpremises 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**

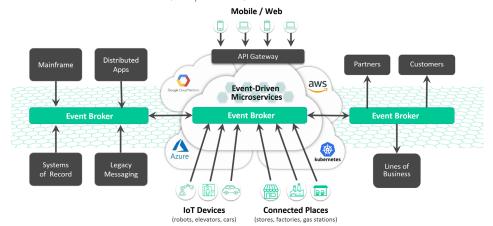
- · Centralized administration
- Powerful, proactive monitoring and alerting, including integration with existing monitoring tools

# 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 worldclass 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 onpremises 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

# **Appliance Models**

PubSub+ Event Broker is available as a **turnkey** rack-mounted appliance that offers unparalleled performance and low TCO.

It is available in two models:

**3530** is the perfect fit for mid-sized businesses.



**3560** has what it takes to handle high volume big data, cloud and IoT requirements.



		PubSub+ 3530	PubSub+ 3560
I/O Cards		4x1GE	2x10GE, 4x10GE, 8x10GE
Connections	Enterprise/JMS	6,000	30,000
	REST, IoT, Web	6,000	200,000
Non-Persistent Messaging Performance	Point to Point	4.7M msgs/sec	8.5M msgs/sec
	With Fan-out	4.7M msgs/sec	28M msgs/sec
	Throughput	4 Gbps	80Gbps
	Latency	28 microseconds	18 microseconds
Persistent Messaging Performance	Point to Point	75,000 msgs/sec	645,000 msgs/sec
	With Fan-out	450,000 msgs/sec	6,000,000 msgs/sec
	Throughput	1 Gbps	9.5 Gbps

# Why Enterprises Choose PubSub+ Appliances

# **Purpose-built for Performance**

PubSub+ appliances are purpose-built with high-speed FPGAs and network processors that eliminate the need for an OS and support massive throughput and extremely low, predictable latency.

### 99.999% Availability

PubSub+ appliances offer built-in redundancy with discrete data and control planes, field-serviceable power supplies and internal solid-state disks.

### **Automated Disaster Recovery**

PubSub+ appliances can continuously replicate all messages to standby sites, complete with their states, queues, and configuration for very fast failover with no message loss.

# **Hardware & Networking Specifications**

#### **Model Names**

- Product Name: 3560 Model: 3200
- · Product Name: 3530 Model: 3200

### **Safety Approvals**

- IEC 60950-1 2nd Ed. (including AM 1:2009 and AM 2:2013)
- CSA 22.2 No. 60950 1-07 (including amendments 1 and 2)

#### **Physical**

- · Weight: 54lbs. (24.5 kg)
- · Height: 3.5" (89mm)
- · Width: 17.1" (435mm)
- Depth: 31.9" (810mm)

#### **Interfaces**

- Ethernet 1000BaseT (3530 only)
- Ethernet 10G Base SR (3560 only)
- · Fibre Channel 8/4 Gbps auto-negotiation
- · RS232

### Power

- · 3530:
  - Power Supply: 80+, 2x1000W Input: 100-240VAC, 3.5-1.5A, 47-63Hz Consumption: 260W @120V (275VA)
- · 3560:

Power Supply: 80+, 2x1000W Input: 100-240VAC, 3.5-1.5A, 47-63Hz Consumption: 360W @120V (380VA)

### **EMC Approvals**

- FCC Part 15 Class A
- · EN61000-3-2/3
- · CISPR 22: Ed. 6.0 2008-09
- · EN55032: 2012/AC: 2013

#### **Environmental**

- · Operating Temperature: 10°C to 40°C
- Operating Humidity: 5% to 85% (non-condensing)
- Storage Temperature: -40°C to 65°C
- Storage Humidity: 5% to 95% (non-condensing)
- Air Flow Direction: Front to Back
- RoHS

# Learn more at solace.com/appliance



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.