

PubSub+ Event Brokers

Module Objectives

- **Overview of PubSub+ Event Brokers:**
 - Cloud (as a Service)
 - Software
 - Appliance

Three Deployment Options = One Platform

Software



Deploy in cloud or on-prem

As a Service



Easy startup and elastic capacity

Hardware



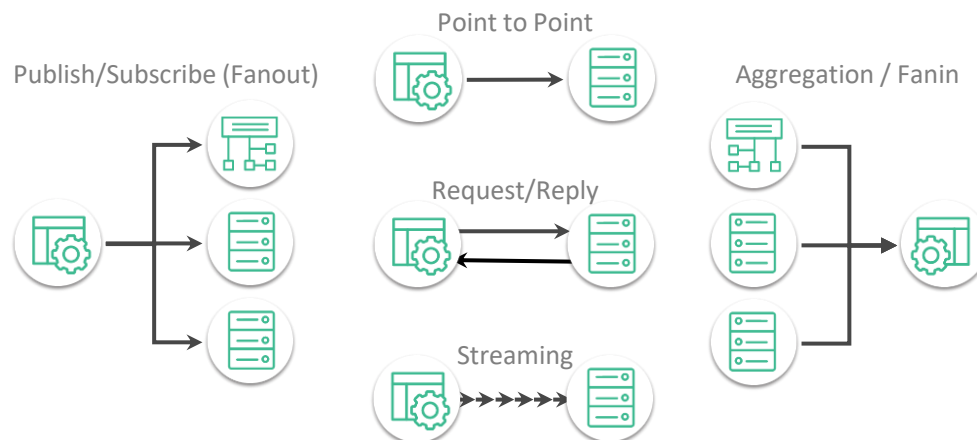
Massive capacity with low TCO

Seamless Interoperability and Identical Support for:

Protocols



Patterns



Features

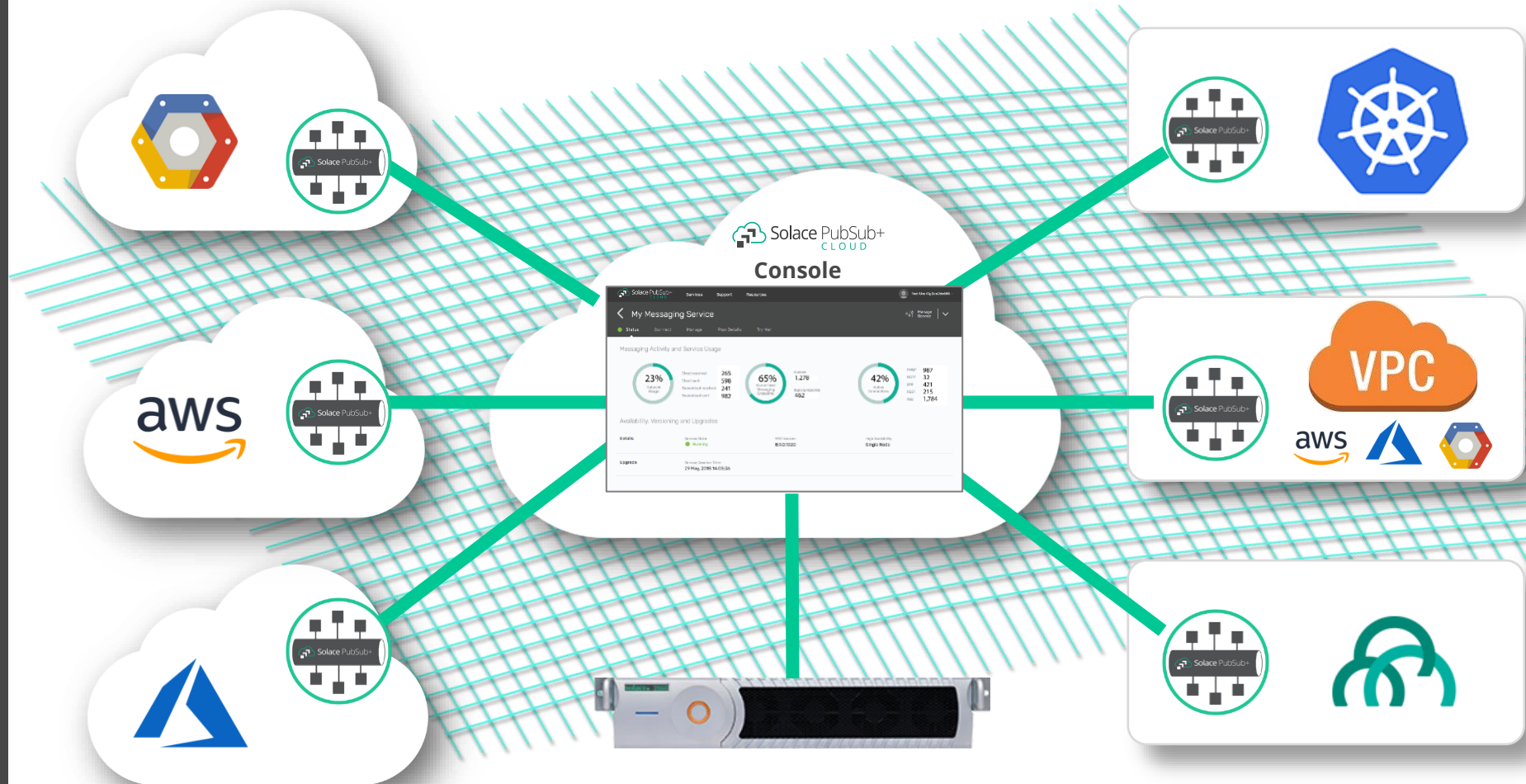
- Dynamic Message Routing
- Message Replay
- Slow Consumer Handling
- WAN Optimization
- HA and Security

PubSub+ Event Broker: Cloud

Cloud manage your Solace estate through one console:

- Lifecycle management
- Provisioning
- Monitor
- Upgrades
- Governance

Deploy anywhere, manage in the cloud anywhere



solace.

PubSub+ Event Broker: Software

World's best event broker, easily deployable into any environment



Different packaging options:

- Machine Images tuned for different environments
- Docker Containers
- Cloud Quick Start scripts

Cloud Quick Start

- AWS, Azure, GCP, GKE, PKS, Kubernetes
- Available on Solace Github:
<https://github.com/SolaceProducts/>

Simple Elastic Scaling

- Horizontally with automated provisioning
- Vertically via addition of cores and RAM

PubSub+ Software Editions

	Standard Edition Free!	Enterprise Edition Free 90-day Evaluation, then licensed per core
Messaging Functionality	Full	Full
Max Message Rate	10,000 messages/second	90,000-1.5M messages/second
Simultaneous Connections	1,000 connections	200,000 connections
Transport Layer Security (TLS)	✓	✓
AMQP, JMS, MQTT, REST, WebSockets	✓	✓
High Availability	✓	✓
Replication for Disaster Recovery	✓	✓
Support	\$	Included



PubSub+ Event Broker: Appliance

Only purpose-built messaging
middleware hardware appliance



- **Purpose-built from chips to chassis**
 - FPGA and Network Processor-based “blades” for each messaging function
 - Hardware datapath for performance, predictability, robustness
- **Turnkey deployment**
 - “Rack and run” installation
 - Performance as promised with no need to integrate or tune
- **Simple Elastic Scaling**
 - Horizontal with automatic discovery
 - Vertical with higher performance cards

Solace PubSub+ Appliance Models

	3530 		3560 	
Network Connectivity	4x1GE		2x10GE, 4x10GE, 8x10GE	
Enterprise/JMS Connections	6,000		30,000	
IoT / Web Messaging Connections	6,000		200,000	
Non-Persistent Latency	28 microseconds		18 microseconds	
	Point-to-Point	Fan-out	Point-to-Point	Fan-out
Non-Persistent Msg Rate (msg/sec)	4.6M	4.6M	9M	28M
Non-Persistent Throughput	4 Gbps	4 Gbps	80 Gbps	80 Gbps
Persistent Msg Rate (msg/sec)	75K	460K	645K	5.5M
Persistent Throughput	1 Gbps	4 Gbps	9.5 Gbps	80 Gbps

Hands-on Activity

- **Create a developer service using PubSub+ Cloud**
- **Deploy Software Event Broker on Docker**

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