



solace

Virtual Message Router

The Solace Virtual Message Router is an implementation of Solace's market leading messaging technology that runs on general purpose processors in environments like the datacenter, developer's laptops, IoT gateways or the cloud.

Key Capabilities

Reliable Messaging

The VMR can deliver millions of messages per second to thousands of subscribers.

Guaranteed Messaging

Solace message routers can guarantee that messages are delivered no matter what, in the same order they were sent.

Internet of Things (IoT)

Solace appliances can provide high throughput, end-to-end messaging across the core, edge and fog layers of typical IoT architectures

Hybrid Cloud Deployment

The VMR runs natively in popular IaaS and PaaS environments in public and private clouds, along with containers, virtual and legacy non-cloud environments.

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Open Standard Messaging, Everywhere You Need It

The VMR provides enterprise-grade messaging capabilities deployable in any computing environment. The VMR provides the same rich feature set as Solace's proven hardware appliances, with the same open protocol support, APIs and common management. The VMR can be deployed in the datacenter or natively within all popular private and public clouds.

Designed For Multi-Core CPU Architectures

The VMR features a multi-threaded, parallel pipelined architecture, optimized for modern multi-core processor environments. The VMR can take full advantage of multiple processor cores, with performance scaling in proportion to the number of cores made available.

Open Standard APIs and Unified Administration

All of Solace's messaging capabilities are accessible through open standard APIs that are available for common operating systems and programming languages. Solace VMRs and appliances are managed together, providing system-level visibility across hybrid clouds.

Capacity and Performance

Non-Persistent Messaging

- Point-to-point: 1,329,000 msgs/sec
- Fanout: 4,390,000 msgs/sec

Guaranteed Messaging

- Point-to-point: 81,000 msgs/sec
- Fanout: 641,000 msgs/sec

System Requirements

- OS: 64 bit
- CPU: Intel i5 or later, 2.2 GHz or higher
- Processor cores: 2 or more (performance proportional to # of cores)
- RAM: 8GB (4GB available for VMR)
- Disk Space: 20G free disk space

Clouds

- Amazon Web Services
- Google Cloud Platform
- HPE Helion
- IBM BlueMix
- Microsoft Azure
- Mirantis
- OpenShift
- OpenStack
- Pivotal Cloud Foundry
- SAP HANA

VMs, Hypervisors & Containers

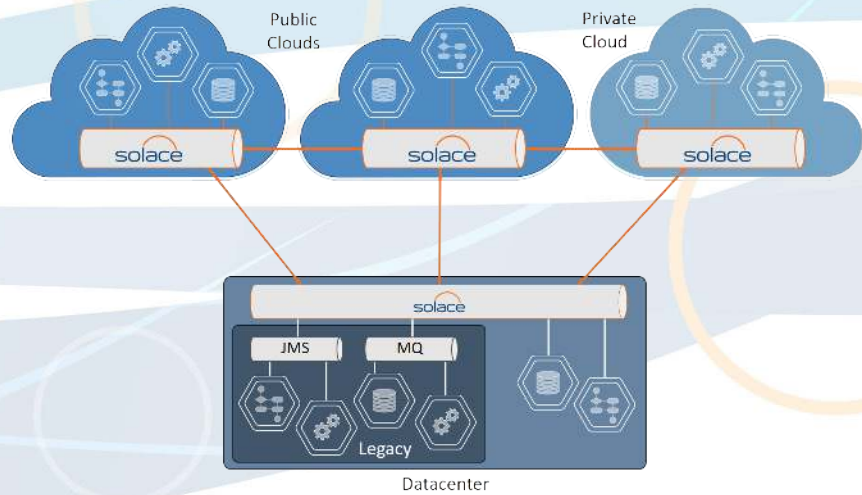
- OVA Package
- VMware
- VirtualBox
- QCOW2 Package
- KVM
- Microsoft Hyper-V
- Docker

Hybrid Cloud Data Movement

The Solace VMR lets you pick the clouds that are right for you today and migrate applications as assets and environments evolve, because we integrate our technology with each cloud technology.

You can freely share data and workloads across clouds and legacy environments, and even seamlessly incorporate Solace appliances into your infrastructure where you want high-density message routing in datacenters.

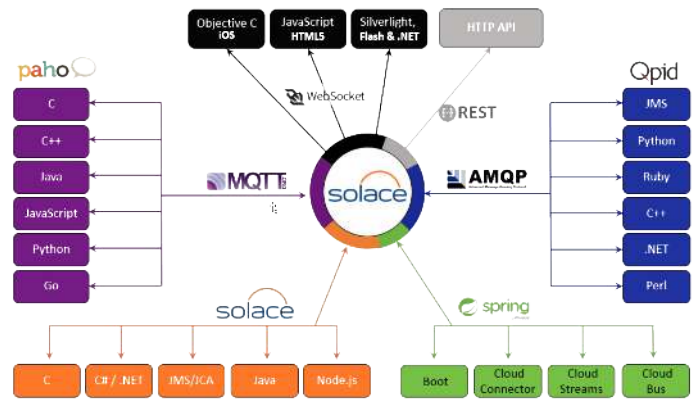
You can move applications from one cloud to another. You can configure, monitor and secure your data movement across all clouds in a consistent way with the DevOps tools you already use, all while avoiding any “lock-in” through the use of open standard protocols and open APIs.



APIs & Protocols

Solace messaging APIs offer robust and uniform client access to all of Solace’s capabilities and qualities of service, and are available for C, .NET, iOS, Java, JavaScript, JMS and Node.js.

Solace also supports open APIs, standard protocols and open source technologies such as JMS/JCA, MQTT, Paho, REST and WebSockets, and soon AMQP and Qpid.



Features and Functionality

Messaging Patterns and QoS

- Publish/Subscribe and Request/Reply
- Fanin, fanout, streaming
- Reliable and guaranteed (persistent) delivery

Security

- Per client authentication via Radius, LDAP, AD-Single-Sign-On/Kerberos, or Local Publisher, subscriber and IP layer access control lists

Virtualization

- Ability to virtualize application groups on a single VMR Instance with complete message isolation.

Distribution

- Integrated routing protocols and VPN bridging for WAN between edge and core, w/ support for reliable and guaranteed delivery
- Fully interoperable with Solace 3530 and 3560 hardware appliances – deploy VMR at the edge or in the public cloud, and either VMRs or hardware appliances in the core or private cloud

Caching

- Last value caching with all request/reply semantics built into the API.

Monitoring & Management

- Deep per-client and per-message statistics from layer 1 to layer 7
- Manage with CLI, SolAdmin GUI and/or SEMP RESTful API
- Integration with ITRS, TS-Associates

DevOps

- Ansible, Bosh, Chef, GitHub, Gradle, Jenkins, Maven, Puppet, Vagrant



Solace technology enables open data movement by routing information between applications, devices and people across clouds using open APIs and protocols. Open data movement helps companies modernize legacy applications and successfully pursue analytics, big data, cloud computing and Internet of Things strategies.

Learn more at <https://solace.com>.