

# PubSub+ System Architecture and Design

Your business goals may include moving to event-driven architecture (EDA), migrating to a modern messaging broker, digital transformation, or anything in between, and you are considering or have purchased Solace PubSub+ event broker technology to realize your goals.

It's important to establish a solid foundation to ensure you successfully deploy the PubSub+ Platform. Not every enterprise, however, has inhouse expertise or experience with event-driven architecture or Solace technology to deliver results that achieve business objectives. Solace offers the System Architecture and Design packaged service to address this challenge.

With the service, your internal teams – including IT, middleware and application teams – are assigned a dedicated senior solution architect from Solace Professional Services who will establish a foundational system architecture. This ensures best practices are employed and helps to ensure specific application and infrastructure deployments achieve objectives.

## **Activities Included**

#### Messaging models, architecture, and standard interfaces for communication

- Map your use case(s) to standard messaging patterns and PubSub+ features
- Review/verify message sizes, rates, peak volumes, forecasted growth
- Define integration points in your environment, including network and storage

#### Naming conventions/Taxonomy Hierarchy

We apply best practices for designing a topic hierarchy to your use case to ensure your deployment has all the characteristics of a welldesigned event hierarchy, including:

- Multi-level routing, filtering, and governance
- Easier information gathering across events
- Understandable relationships between event and business functional domains
- Removing the explicit need for orchestration
- Removing locality and source silos
- Data versioning
- Fine-grain filtering
- Fine-grain access control

## High Availability (HA) design and strategy for business continuity

We define the HA and DR model best suited to your use case, balancing consistency, availability, and performance. If you require replay capabilities, we map requirements to the Solace Replay feature set. This includes:

- Defining the ideal architecture for Solace brokers and other technology components in your environment
- Designing applications to properly use Solace HA and DR features and functionality

#### Security - Authentication-Authorization-Accounting: LDAP, SSL, client certificates.

We map your security requirements, best practices, and systems to Solace features. This covers all forms of interfacing with the Solace PubSub+ Platform: administration, internal client connections, and external client connections.

#### Monitoring

If you are fluent in monitoring and have existing infrastructure, Solace Professional Services will provide expertise on Solace-specific best practices for monitoring PubSub+ event brokers:

- Solace event types and severity
- Statistics and recommended thresholds
- Integration options

If you are new to monitoring and/or do not have an existing monitoring solution, the following additional activities will be performed:

- Recommend monitoring platforms based on requirements and budget
- Detail operational procedures for proactive and reactive monitoring

#### Configuration management and deployment automation (DevOps)

Solace experts will design the integration of the Solace PubSub+ Platform and role-based administration into your DevOps infrastructure and procedures. Alternatively, we can provide expertise to define or enhance DevOps practices for your enterprise based on industry standard tools. Any integration proposed by Solace will be based on our SEMPv2 protocol.

Your organization can then implement the design, or it can be performed by Solace Professional Services using an additional service offering.

### **Benefits**

- Solace architects are experts in adapting various design methodologies to real-world customer infrastructure and business requirements, such as event-driven architecture, legacy messaging migration, message-oriented middleware, and more.
- Solace Professional Services personnel are Solace product deployment experts and have the experience and technical expertise needed for success.
- Solace Professional Services are dedicated to customer success and providing the right architecture and design that will work both today and in the future as your deployments expand.
- Close collaboration between Solace Professional Services architects, systems engineers, engineering, and support ensures we look at any issue from multiple perspectives and have a comprehensive team to draw on quickly if issues arise.

## **Pricing and Duration**

This service starts at 40 hours with a Solace Professional Services architect.

Pricing starts at \$14,000 list.