

The Solace logo is a large, teal-colored wordmark 'solace.' with a dot at the end, oriented vertically. It is superimposed over a grayscale background image of a person in a white lab coat looking at a computer monitor in a classroom or training environment.

**Delivery Method:** Instructor-led private on-site classroom

**Course Duration:** Three days of training

**Target Audience:** This course is designed for developers and engineering staff responsible for developing applications that leverage Solace messaging. As well as, administrators responsible for configuring, managing application level features

**Prerequisites:**

- Basic understanding of TCP/IP networking concepts is helpful but not required
- Prior knowledge of Enterprise Integrations using messaging is helpful but not required

**Pricing:** Please contact us at [services@solace.com](mailto:services@solace.com)

**More Information:** To learn more, contact your account executive or email [services@solace.com](mailto:services@solace.com).

## INTRODUCTION TO SOLACE PUBSUB+ CLOUD 101 TRAINING

### Course Overview

This intensive, three days, instructor-led course provides an introduction into Solace products, and how you can spin up message broker services that meet your exact needs in mere minutes, and scale on demand to any level.

The course begins with a general overview of Solace technology and administration tool basics. It continues with a deep-dive into PubSub+ Event Broker as a service, covering its features and configuration options. The course covers an overview of the system administration configuration and monitoring done by the Solace operations team, as well as the application level administration that you will be responsible for to configure & administer various features on your PubSub+ Event Broker service.

The course also covers an overview of the high availability models, data replication, and disaster recovery features of the message broker services. We will also cover how to bridge data between geographic locations and environments. In this course, you will also learn how to develop applications using one of Solace Enterprise Messaging APIs. Most modules are accompanied with lab exercises that provide hands-on experience.

### Course Objectives

Upon completion of this course, participants will be able to do the following:

- Understand at a high level the various features and capabilities provided by the Solace product line, and how to administer them
- Understand at a high level the concepts and experience needed to work with Solace messaging
- Configure different delivery modes, and implement exchange patterns for applications that are not tolerant to data loss
- Troubleshoot and monitor health of Solace products
- Understand the different levels of robustness supported by Solace such as high availability, disaster Recover, slow consumer manager, and fast failover
- Develop applications that leverage Solace messaging using your language or protocol of choice
- Understand at a high level how to design, describe and discover events on the Event Portal

## Course Agenda

Module	Objective
Day 1	
<b>Introduction &amp; Logistics</b> (INT 1000)	Meet, greet, introductions. Set agenda for the day & Course.
<b>Introduction to Solace</b> (INT 1001)	Understand at a high level the various features and capabilities provided by the Solace product line.
<b>Introduction to Messaging Concepts</b> (INT 1005)	Understand the basic messaging concepts, terminology & standards, and a high-level overview of PubSub+ Event Brokers.
<b>PubSub+ Cloud Fundamentals</b> (CLOUD 1000)	Become familiar with the cloud console interface and all its various features. Understand the different options available for VPC deployment, service configuration, user management and client authentication.
	Hands-On (Create PubSub+ Cloud Service & Manage API Token & Trying Out Your Service & Configure Authentication & Testing your Connection)
<b>Topic Structures and Hierarchies</b> (INT 1015)	Understand how applications exchange data using Solace Topics. Covers Topic structure, hierarchies, design examples, and use cases.
<b>Direct Messaging: Overview &amp; Features</b> (ADM 1055)	Understanding of Solace's Direct Messaging and features like Shared Subscription and Message Eliding.
	Hands-On (Shared Subscription)
<b>Client Management Overview</b> (ADM 1015)	Understand the options available for administrators to manage client authentication and authorization rules.
	Hands-On (Client Authorization)

Module	Objective
Day 2	
<b>Introduction to Guaranteed Messaging</b> (ADM 1100)	Understand how Solace provides persistence to applications that cannot tolerate message loss.
<b>Guaranteed Messaging Patterns</b> (ADM 1105)	Understand the various message exchange patterns that administration can manage & configure for applications that use persistence.  Hands-On (Guaranteed Messaging)
<b>Guaranteed Messaging Management</b> (ADM 1110)	Become familiar with the options available to administrators to manage resources and control access to Queues.
<b>Message Promotion and Demotion</b> (INT 1035)	Administer and implement Guaranteed Messaging patterns using Solace Topics & Queues and understand message promotion & demotion.
<b>High Availability</b> (CLOUD 1250)	Understand how PubSub+ Cloud can be configured to provide high availability to applications.
<b>Data Center Replication</b> (ADM 1260)	Become familiar with features provided by Solace for disaster recovery and data replication across different data centers or clouds.
<b>Support</b> (CLOUD 1030)	Become familiar with opening tickets with Solace Support and different method of interaction with Support Team.
<b>Event Portal</b> (CLOUD 1350)	Understand at a high level how to design, describe and discover events on the Event Portal  Hands-On (Event Portal)

Module	Objective
Day 3	
<b>VPN Bridging</b> (ADM 1305)	Understand how share data across messaging environments using Solace's VPN Bridges. <hr/> Hands-On (Static Bridging)
<b>Dynamic Message Routing</b> (ADM 1310)	Understand how to connect Solace PubSub+ instances over Hybrid Cloud or for Horizontal Scaling.
<b>Solace Messaging</b> (DEV 1000)	Become familiar with the different Solace Enterprise APIs, and the Open Protocols Solace supports.
<b>Sending &amp; Receiving Messages</b> (DEV 1150 & DEV 1155)	Overview of the concepts to send messages to and receive messages from Solace in both a direct and guaranteed fashion. <hr/> Hands-On (Direct Messaging & Guaranteed Messaging)
<b>Monitoring &amp; Troubleshooting</b> (DEV 1350)	Configuring logging in API for troubleshooting & diagnostics and exploring statistics available from the API for monitoring. <hr/> Hands-On (Monitoring)
<b>Best Practices</b> (DEV 1400)	A high-level overview of API usage best practices, and threading & performance considerations.

Optional Module	
<b>REST</b> (ADM 1400)	Understand how applications can use RESTful APIs to exchange messages on Solace and how to administer REST features.
<b>MQTT</b> (ADM 1405)	Understand the MQTT protocol at a high-level, and how to leverage Solace to do MQTT messaging.
<b>JMS</b> (ADM 1410)	Understand the JMS protocol at a high-level, and how to extend JMS messaging to Solace.
<b>AMQP</b> (ADM 1415)	Understand the AMQP protocol at a high-level, and how the protocol maps to Solace.
<b>SolGeneos Agent</b> (ADM 1180)	Overview of the agent which monitor Solace Routers in an ITRS Geneos environment
<b>PubSub+ Cache</b> (ADM 1060)	Overview of PubSub+ Cache software daemon, its role as a Last Value Cache, and how to deploy and manage it.