

The Solace logo is a large, stylized wordmark in a teal color, oriented vertically. It is positioned on the left side of the page, partially overlapping a background image of a person working at a computer.

INTRODUCTION TO SOLACE DEVELOPMENT 101 TRAINING

Course Overview

This two-day, instructor-led course provides students with the concepts needed to develop applications to leverage Solace messaging. The course begins with a general overview of Solace technology, including messaging concepts and terminology. It provides an overview of the Enterprise APIs and open protocols available to utilize Solace's messaging capabilities. This course will include hands-on labs where an example application is developed over the two-day time frame. To start the development of this example application, the course covers the basics of connecting to Solace, looking at the specific requirements for the language or protocol of interest. The example application is then developed to send and receive data through Solace in both a direct and guaranteed fashion. To enhance the application, we explore the different advanced messaging features available, including OBO subscription management, queue browsing, and structured data types. Further topics include monitoring & troubleshooting techniques, and best practices for having an efficient, clean application.

Course Objectives

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

- Understand at a high level the concepts and experience needed to work with Solace messaging
- Run and understand the starter applications provided on the Solace Training Github
- Develop applications using your language or protocol of choice
- Use Solace guaranteed messaging to avoid message loss
- Troubleshoot common application issues by enabling logs and implementing error handling
- Configure applications to operate in a high availability messaging environment
- Structure data in messages to exchange them across different platforms and APIs
- Troubleshoot and monitor health of Solace products

Delivery Method: Instructor-led private on-site classroom

Course Duration: Two days of training

Target Audience: This course is designed for developers and engineering staff responsible for developing applications that leverage Solace messaging.

Prerequisites:

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

Pricing: Please contact us at services@solace.com

More Information: To learn more, contact your account executive or email services@solace.com.

Course Agenda

Module	Objective
Day 1	
Introduction & Logistics (INT 1000)	Meet, greet, introductions. Set agenda for the day & Course.
Introduction to Solace (INT 1001)	Understand at a high level the various features and capabilities provided by the Solace product line.
Introduction to Messaging Concepts (INT 1005)	Understand the basic messaging concepts, terminology & standards, and a high-level overview of PubSub+ Event Brokers.
Solace Multi-Tenancy Overview (INT 1020)	Understanding of Solace Multi-Tenancy, administration, data & resource scoping, and roles-based access.
	Hands-On (Create PubSub+ Cloud Service & Trying Out Your Service & Manage API Token)
Topic Structures and Hierarchies (INT 1015)	Understand how applications exchange data using Solace Topics. Covers Topic structure, hierarchies, design examples, and use cases.
Solace Messaging (DEV 1000)	Become familiar with the different Solace Enterprise APIs, and the Open Protocols Solace supports.
Client Management Overview (ADM 1015)	Understand the options available for administrators to manage client authentication and authorization rules.
	Hands-On (Download Samples)
Connecting to Solace (DEV 1050)	Understand what objects are required to connect to Solace and connect the sample code to your Solace Cloud environment.
	Hands-On (Connecting to your Broker)
Sending & Receiving Messages (DEV 1150 & DEV 1155)	Overview of the concepts to send messages to and receive messages from Solace in both a direct and guaranteed fashion.
	Hands-On (Direct Messaging)

Module	Objective
Day 2	
Advanced Direct Messaging Concepts (ADM 1055)	Explore direct advanced concepts such as load-balancing consumption and direct message eliding
Guaranteed Messaging Patterns (ADM 1105)	Understand the various message exchange patterns that administration can manage & configure for applications that use persistence.
	Hands-On (Guaranteed Messaging)
Advanced Guaranteed Messaging Concepts (DEV 1260)	Explore and understand API window sizes for sending & receiving messages, transactions, queue browsers, and selectors.
Message Promotion and Demotion (INT 1035)	Administer and implement Guaranteed Messaging patterns using Solace Topics & Queues and understand message promotion & demotion.
Chat Application	Hands-On (Chat Application)
Monitoring & Troubleshooting (DEV 1350)	Configuring logging in API for troubleshooting & diagnostics and exploring statistics available from the API for monitoring.
Best Practices (DEV 1400)	A high-level overview of API usage best practices, and threading & performance considerations.
Optional	
Messages & Structured Data Types (DEV 1300)	Exploring different parts of a message, various message types and message interoperability between APIs. Structuring application data in messages using Solace's Structured Data Types.