

Spring Cloud Developer

Cloud-native application architectures and processes are becoming a proven strategy to enable fast delivery of business value.

Spring Boot and Spring Cloud are a powerful combination for building modern cloud-native application architectures that leverage industry battle-tested Spring ecosystem and 3rd party solutions to solve accompanying problems of scaling, availability and fault tolerance.

The 3-day Spring Cloud Developer course provides participants with an in-depth coverage of cloud-native and microservices patterns using Spring Cloud and Netflix components to help solve challenges associated with running distributed, cloud-native applications over a microservices architecture.

PIVOTAL TRAINING APPROACH

Upon completion of this course, participants will be able to demonstrate how each of following components contribute to Cloud-Native applications deployment, scaling and fault tolerance characteristics:

- Distributed Application
- Service-to-service Calls
- Service Registration and Discovery
- Client vs. Server Side Load balancing
- Circuit Breakers
- Config Server
- Distributed Trace

SKU

EDU-1102

DELIVERY METHODS

Instructor-led

DURATION

Three days of instructor-led training

PREREQUISITES

This course assumes you have significant Java experience, and one of the following:

Completion of Pivotal's Cloud-Native Developer course, Completion of Pivotal's Spring Core course, Completion of Pivotal's Spring Boot course, Spring Boot experience

TARGET AUDIENCE

Developers interested in learning how to construct scalable and fault-tolerant cloud-native applications using the Spring Cloud family of projects.

MORE INFORMATION

On-site training is also available for customers who prefer to bring a Pivotal Certified Instructor to their own facilities For more information about on-site classes, contact us at

pivotal.io/training/contact.

COURSE MODULES

INTRODUCTION

- Spring Cloud Introduction

DISTRIBUTED APPLICATION

- Application Continuum
- Spring Cloud Dependencies

SERVICE REGISTRY AND DISCOVERY

- Service Registry Pattern
- Eureka Service Registry
- Service Discovery Clients
- Eureka Server REST Operations
- Eureka Client Health Check

CLIENT LOAD BALANCING

- Spring Cloud Netflix Ribbon
- Retry and Custom Load Balancing Rule

CIRCUIT BREAKER

- Netflix Hystrix
- Stats Aggregation

CONFIG SERVER

- External Configuration
- Spring Cloud Config Server
- Distributed Updates
- Vault Backend
- Handling Transient Failures

DECLARATIVE REST CLIENT

- Netflix Feign Client

DISTRIBUTED TRACE

- Producer - Sleuth
- Consumer - Zipkin

SECURITY WITH OAUTH 2.0

- Securing REST Endpoints

TERMS AND CONDITIONS

By procuring these services, Customer agrees that the terms and conditions set forth here: <https://pivotal.io/training/terms> are incorporated by reference into this Training Brief and shall govern the provision of Pivotal's Services herein, unless Customer has a signed applicable agreement with Pivotal.

You may not record the training in any medium, nor may you reproduce, copy, or distribute any Course Materials provided pursuant to or in conjunction with the Training Services. Pivotal will determine the personnel assigned to perform the Training Services.

INSTRUCTOR-LED TRAINING

Delivery. These courses may be delivered in-person or online, and can be purchased pursuant to a Purchase Order Cancellation Policy.

By Pivotal. Pivotal reserves the right to cancel or reschedule any instructor-led class. If a cancellation or reschedule is necessary, Pivotal will make every effort to notify you at least 10 business days in advance. Unfortunately, last-minute cancellations and rescheduling sometimes require this notification period to be less than 10 business days. Please consider this when making your travel plans. Pivotal will not, in any way, be held responsible for any costs, including loss of airfare or other transportation costs, hotel expenses, or other damages that you may incur in the event that Pivotal cancels or reschedules a class. Pivotal will refund the tuition fee only.

By You. Instructor-led private training course fees are 100% refundable if Pivotal receives written notice of cancellation at least 10 business days prior to the start date of the class. If notice is received within 1-9 days prior to the start date, 50% of the registration fees will be refunded. A refund will not be issued if notice is received on the course start date. Cancellations must be submitted in writing to education@pivotal.io. Private course attendees may transfer their enrollment with written consent by Pivotal by contacting education@pivotal.io.

Expiration Policy. Instructor-led public training course entitlement expires within 12 months from date of purchase (if purchased online), or 12 months from date of invoice (if purchased pursuant to a Purchase Order), after which You will not be entitled to a refund.

BUSINESS HOURS

Training Services shall be performed by Pivotal from 9:00 A.M. until 5:00 P.M. in the local time zone where the Training Services are being performed by Pivotal, Monday through Friday excluding local statutory holidays (for example, within the State of California for Pivotal's US employees), and any additional holidays that Pivotal grants to its employees, a list of which can be provided by Pivotal to you prior to the commencement of Training Services.