



Fast Track To Scala

Duration 2 day(s) (FAST-TRACK-SCALA-02)

Official LIGHTBEND Training

Official Training



Description

This course is designed to give experienced developers the necessary know-how to confidently start programming with the Scala language. This training will give you a solid understanding of the basic principles of language, tooling and the development process as well as a good appreciation of the more advanced features. If you already have a Scala programming experience, then this course will be a good complement to your knowledge, but no prior knowledge of Scala is required.

Goals

- Able to program in Scala
- Know and be able to apply functional programming style with Scala
- To know how to use the basic tools of the Scala language
- Be operational to develop in Scala in production environments

Public

- Architects
- Developers
- Project managers

Prerequisites

- To follow this training you must have experience with the Java language preferably, if not an object-oriented language.
- No knowledge of the Scala language is required.

Structure

50% Theory, 50% Practice

Program

Introduction

- What is Scala language?
- The origins of language?
- Why choose this language?

First step with Scala

- The syntax
- REPL

Basics of the object approach

- Creating and using classes
- Attributes and methods
- Singleton with object
- The classes classes

Tests

- Eco-system of test libraries in Scala
- Introduction to BDD
- ScalaTest

Collection and functional programming

- Overview and use of the Collections API in Scala
- Immutability, persistent data structure and structural sharing
- Higher order functions and functions

Loop for and for expressions

- Difference between the for loop and for expressions
- Composition of higher order functions

Inheritance and trait

- Scala type system
- Mix-in features
- Linearization

Pattern matching

- Usage and benefits
- Exception handling
- Decomposition of tuples

Work with the Option type

- Introduction to the type Option
- Usage and benefits

Manage errors

- Introduction to Try type
- Usage and benefits