



Scala

Duration 3 day(s) (SCALA-03)

Programming in Scala

Description

Goals

- Become familiar with the tools specific to Scala work
- Know the language, its use cases and know how to interface with Java components
- Understand functional programming
- Discover the notion of Actors

Public

- Architects
- Developers
- Project managers

Prerequisites

- Be familiar with Java development
- Know how to work with Eclipse or IntelliJ idea
- Be familiar with object concepts

Structure

50% Theory, 50% Practice

Program

Day 1

- Guided tour of Scala
 - Origins of language
 - Main Features
 - Use Scala use cases
 - Sell Scala to his boss
- Getting started with Scala
 - Tooling:
 - Installation of Scala
 - Installing an IDE: Eclipse or IntelliJ
 - SBT
 - Scala for Java gurus
- Basics of functional programming
 - High order functions
 - Mutable objects or not
 - Recursion
 - Lab:
 - Using the REPL
 - Implementation of a simple project with SBT
 - set up a multi module project with SBT

Day 2

- Object programming in Scala
 - Classes and singleton
 - Inheritance and traits
 - Polymorphism and redefinition of methods
 - Scala standard class hierarchy
 - Packages & imports
- Pattern matching
 - Lab:
 - Setting up the pattern matching
 - Case classes
 - Creation of a mini application

Day 3: Utilities

- XML support
- Regexp support
- Actors: principles and setting up
- Communicate with Java
- Lab: actors