

Scala for Cloudera

Learn via: **Classroom**

Duration: **1 Day**

Overview

Cloudera University's one-day Scala training course will teach you the key language concepts and programming techniques you need so that you can concentrate on the subjects covered in Cloudera's Spark-related training courses without also having to learn a complex programming language at the same time.

Scala is a programming language that is a superset of Java, blending the object-oriented and the functional programming paradigms. The language is complex and could take a semester or more to master. This class focuses only on the elements that are necessary to be able to program in Cloudera's training courses.

Prerequisites

There are no prerequisites for this course.

Who Should Attend

Basic knowledge of programming concepts such as objects, conditional statements, and looping is required. This course is best suited to students with Java programming experience. Those with experience in another language may prefer the Just Enough Python course. Basic knowledge of Linux is assumed.

What You Will Learn

Through instructor-led discussion or OnDemand videos, as well as hands-on exercises, participants will learn:

- What Scala is and how it differs from languages such as Java or Python
- Why Scala is a good choice for Spark programming
- How to use key language features such as data types, collections, and flow control
- How to implement functional programming solutions in Scala
- How to work with Scala classes, packages, and libraries

Training Outline

1. Introduction

2. Scala Overview

- Introducing Scala
- Scala's Role in Distributed
- Data Processing
- The Motivation for Scala

3. Scala Basics

- Key Scala Concepts
- Programming in Scala
- Putting Scala Basics to Work

4. Working with Data Types

- Overview of Scala Variables
- Operating with Numeric Types
- Building Boolean Expressions

- Working with Strings

5. Grouping Data Together

- Storing Elements of Different Types
- Overview of Scala Collection Types
- Creating a Collection of Unique Elements
- Fast Access to Head of Collection
- Fast Access to Arbitrary Elements
- Fast Access with a Key
- Common Collection Type Conversions

6. Flow Control in Scala

- Looping
- Using Iterators
- Writing Functions
- Passing Functions as Arguments
- Collection Iteration Methods
- Pattern Matching
- Processing Data with Partial Functions

7. Using and Creating Libraries

- Using Classes and Objects
- Creating and Using Packages
- Importing Part of a Package

8. Conclusion