

Getting Productive with Advanced Scala and Akka in 3 Days

Developer to Developer Training Series





Course Outline

The 3 day Advanced Scala and Akka course is aimed at developers who already have a strong understanding of the fundamentals of building applications using Akka and Scala on a single JVM and are looking to learn how to scale out to multiple nodes and 3rd party systems

The course has a practical focus, mixing presentation with in depth hands on labs and exercises.



Proposed Structure

Day 1	Day 2
Scala Refresher	Case classes and pattern matching
<ul style="list-style-type: none">◆ Control constructs, Classes & case classes	<ul style="list-style-type: none">◆ Internal DSL
<ul style="list-style-type: none">◆ Traits, Objects, Functions	<ul style="list-style-type: none">◆ Control abstractions
<ul style="list-style-type: none">◆ Collections	
<ul style="list-style-type: none">◆ Pattern Matching	
<ul style="list-style-type: none">◆ Partial Functions, folding	
Advanced OOP	Custom collections
<ul style="list-style-type: none">◆ Recursion / Tail Recursion	<ul style="list-style-type: none">◆ Builders
<ul style="list-style-type: none">◆ Partial functions	<ul style="list-style-type: none">◆ Like traits
<ul style="list-style-type: none">◆ Higher order functions	
<ul style="list-style-type: none">◆ Partially applied functions	
<ul style="list-style-type: none">◆ Folding	
Type System	Akka Refresher
<ul style="list-style-type: none">◆ Custom value classes	<ul style="list-style-type: none">◆ Fault Tolerance, concurrency scalability.
<ul style="list-style-type: none">◆ Type Parameters	<ul style="list-style-type: none">◆ Actors, lifecycle
<ul style="list-style-type: none">◆ Variance	<ul style="list-style-type: none">◆ Understanding Actors
<ul style="list-style-type: none">◆ Bounds	<ul style="list-style-type: none">◆ Futures
<ul style="list-style-type: none">◆ Type members	<ul style="list-style-type: none">◆ Routers and Dispatchers

Implicits	Day 3
◆ Implicit conversions	◆ Akka Remoting
◆ Implicit classes	◆ Akka Cluster
◆ Pimp my library	◆ Cluster Aware Routers
◆ Class tags	◆ Cluster Singleton
	◆ Cluster Sharding
	◆ Akka Persistence



Course Prerequisites

To benefit from this Advanced Scala and Akka course, you'll need to have have at least 3 months programming experience with Scala and Akka prior to attending this course. To fully understand the various advanced features covered in this course, you'll need to feel comfortable to Scala and Akka in your applications, before attending.

- ◆ For more information on the course or a discussion on your custom need, send a mail to info@knoldus.com