



Akka

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# Agenda

- What is Akka
- Actors
- Fault Tolerance
- Example
- Result comparison:  
Akka, Java7 (fork/join), Erlang

# What is Akka

- Scalable real-time transaction processing language for concurrent, fault-tolerant and scalable applications
- Concurrent & scalabe (Actor Model)
- Fault-tolerant (Let it crash model)
- Open Source and available under the Apache 2 License
- Download from <http://akka.io/downloads/>
- Has both Java and Scala APIs

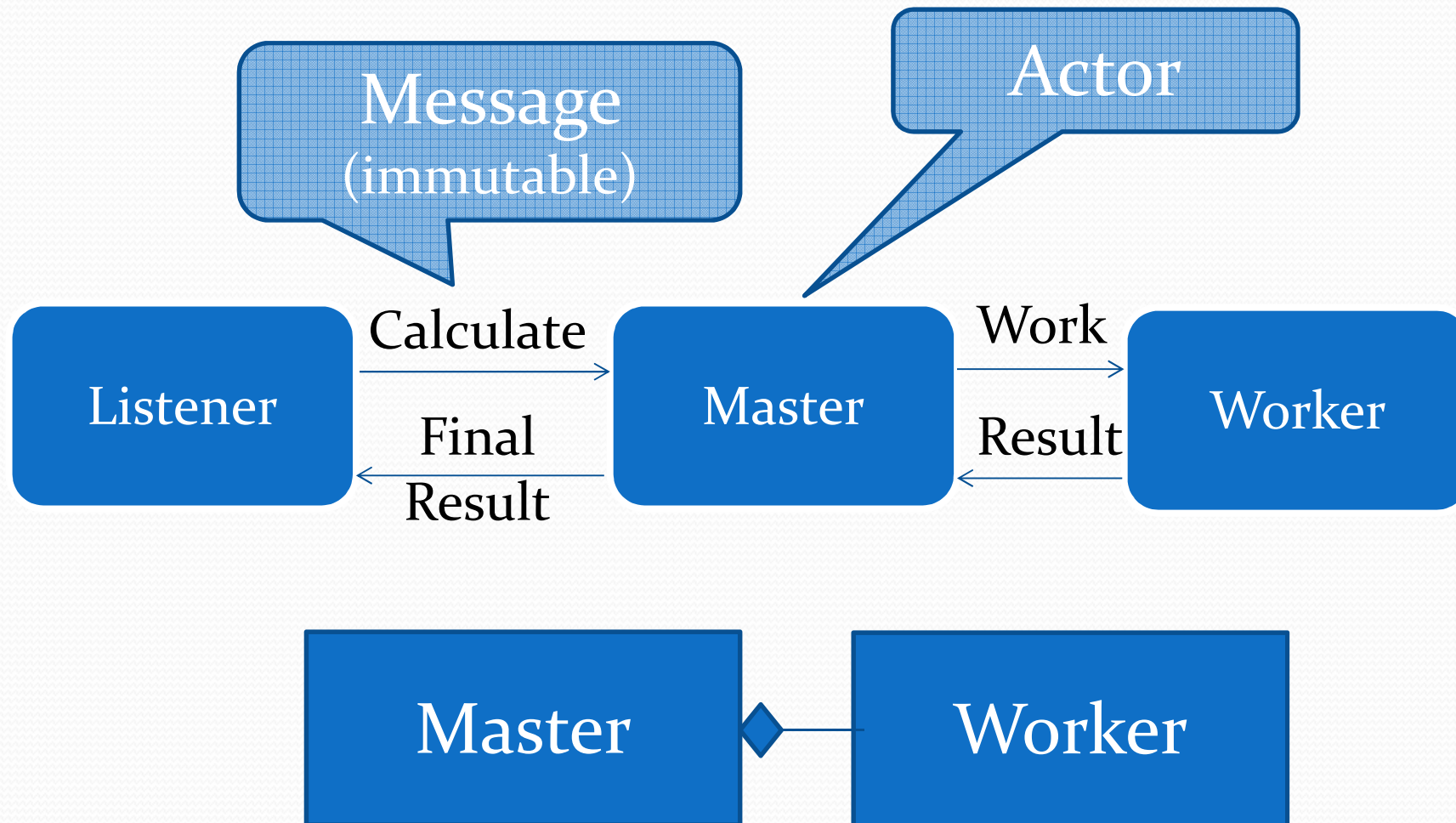
# Actors

- Objects which encapsulate state and behavior
- Communicate exclusively by exchanging messages which are placed into the recipient's mailbox
- Simple and high-level abstractions for concurrency and parallelism
- Asynchronous, non-blocking and highly performant event-driven programming model.
- Very lightweight event-driven processes (~2.7 million actors / 1 GB)

# TypeSafe

- TypeSafe Stack (S/W platform to build scalable apps)
  - Scala
  - Akka
  - Play!
- TypeSafe Console (commercial)
  1. Slick Web UI with real-time view into the system
  2. Management through Dashboard, JMX and REST
  3. Dapper-style tracing of messages across components and remote nodes
  4. Real-time statistics
  5. Very low overhead monitoring agents
  6. Consolidation of statistics and logging information to a single node
  7. Storage of statistics data for later processing
  8. Provisioning and rolling upgrades

# An example



# Questions

