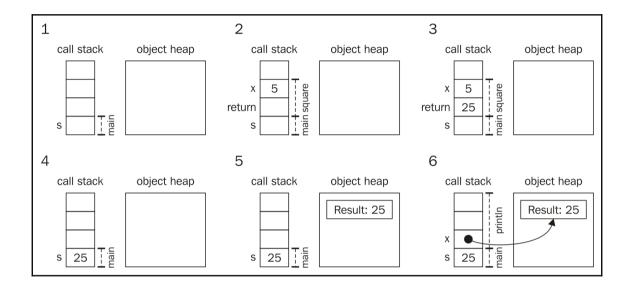
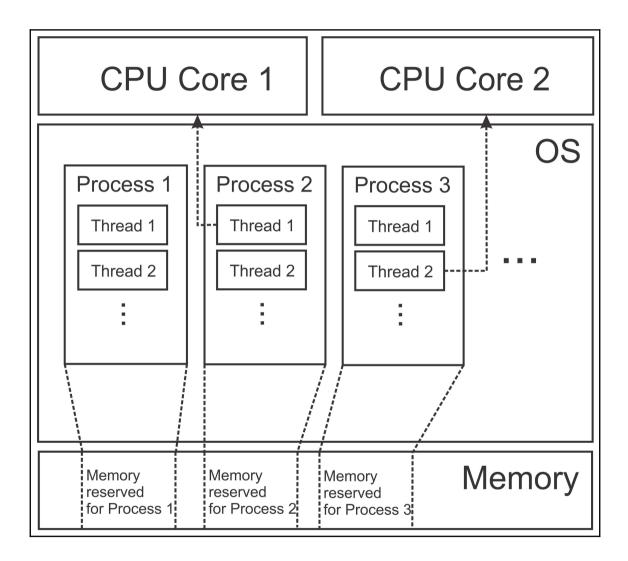
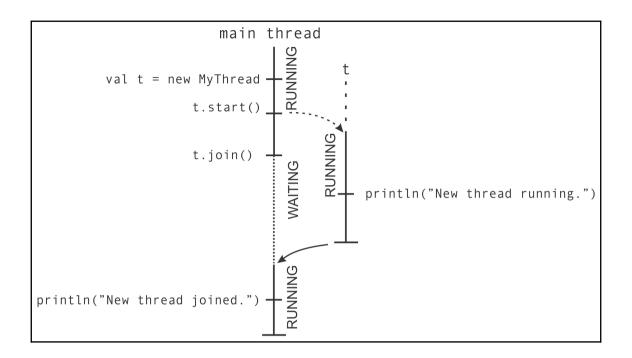
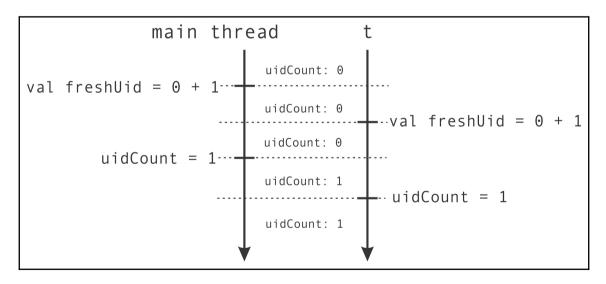
### **Chapter 1: Introduction**

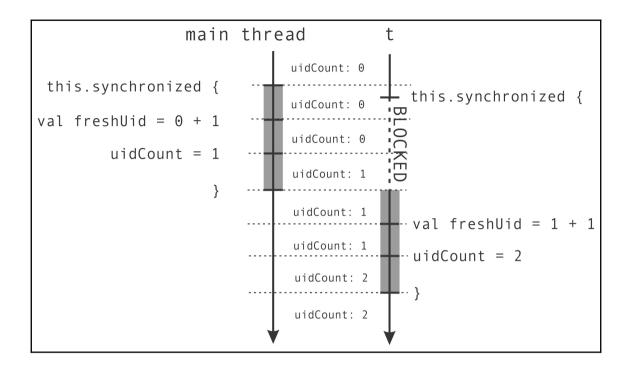


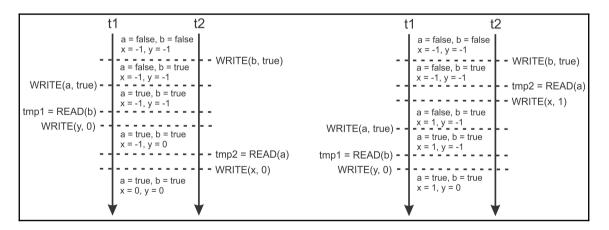
# Chapter 2: Concurrency on the JVM and the Java Memory Model



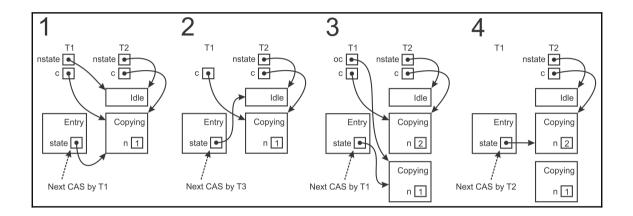


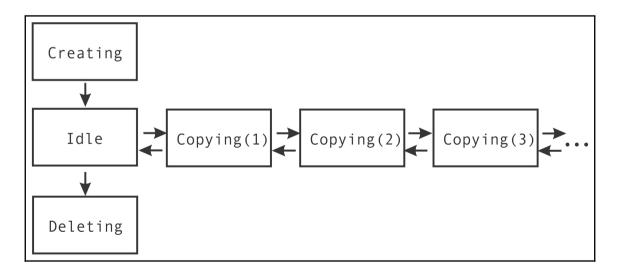


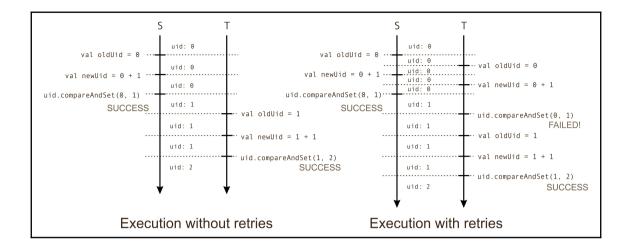




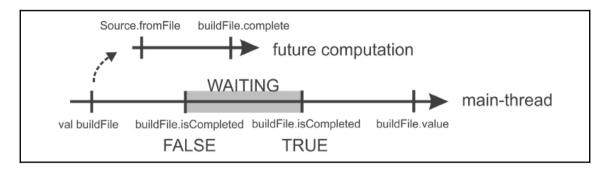
## Chapter 3: Traditional Building Blocks of Concurrency

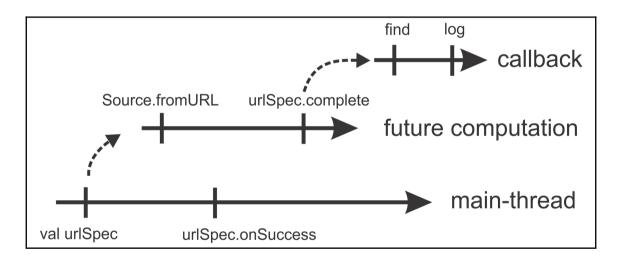


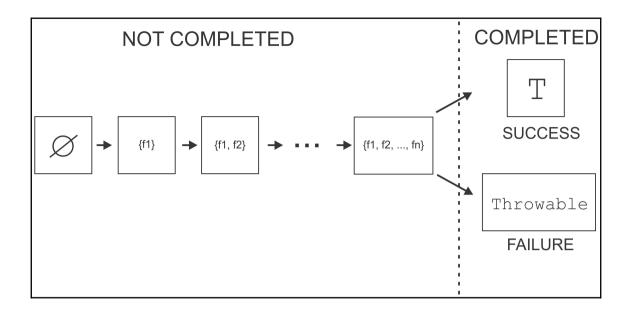


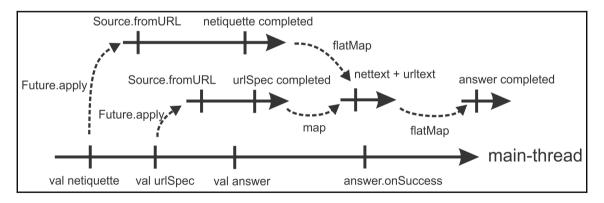


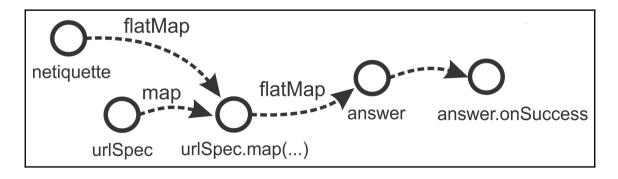
### Chapter 4: Asynchronous Programming with Futures and Promises

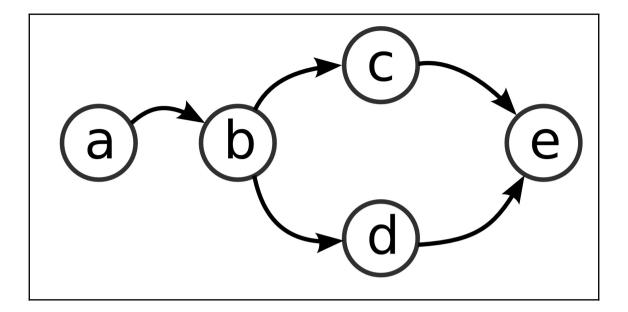




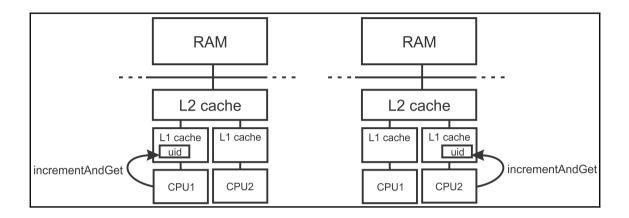


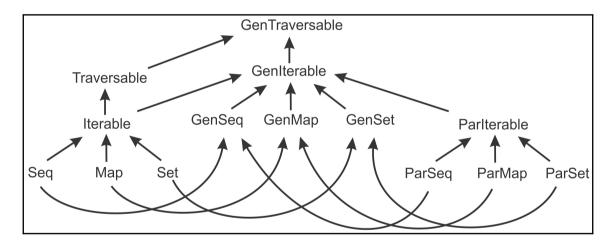




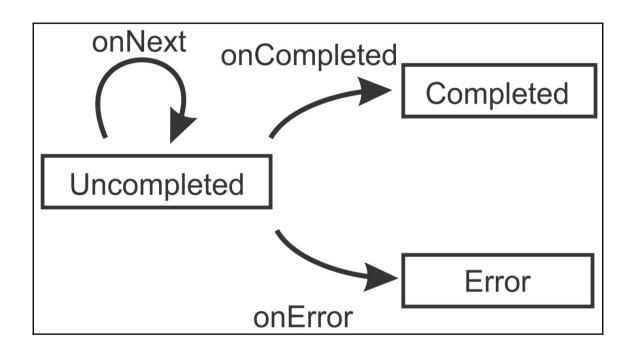


#### **Chapter 5: Data-Parallel Collections**

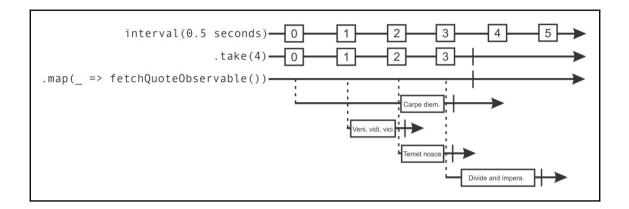


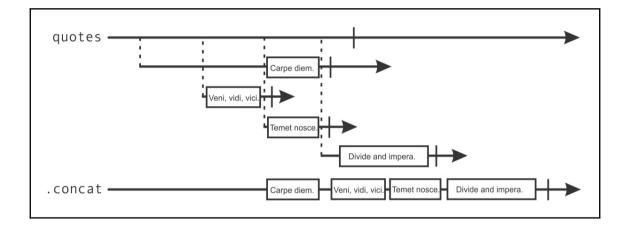


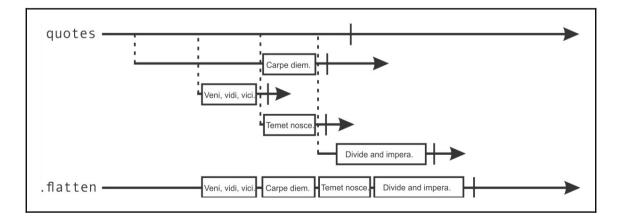
# Chapter 6: Concurrent Programming with Reactive Extensions

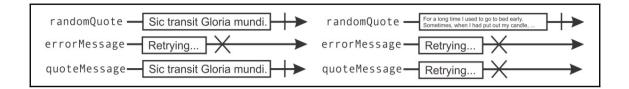


interval(0.5 seconds)-0-1-2-3-4	5 6 7 8 9 10 11 12 ->
.filter(_ % 2 == 1) 1 3	5 7 9 11 >>
.map(n => s"num \$n")	num 5 num 7 num 9 num 11
.take(5) num 1 num 3	num 5 num 7 num 9

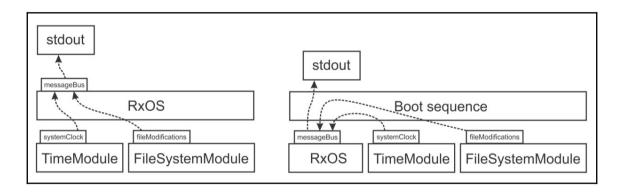




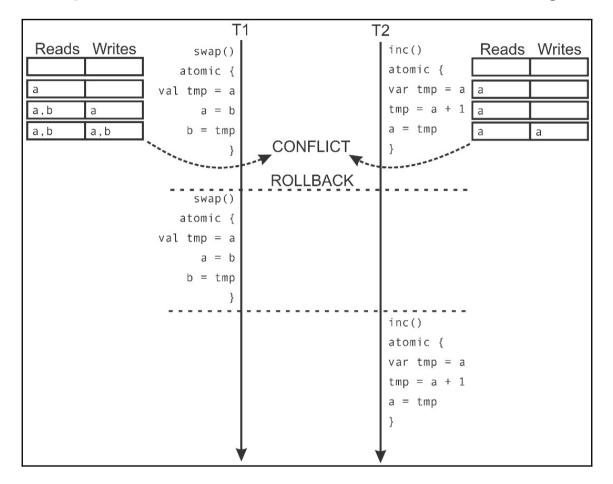




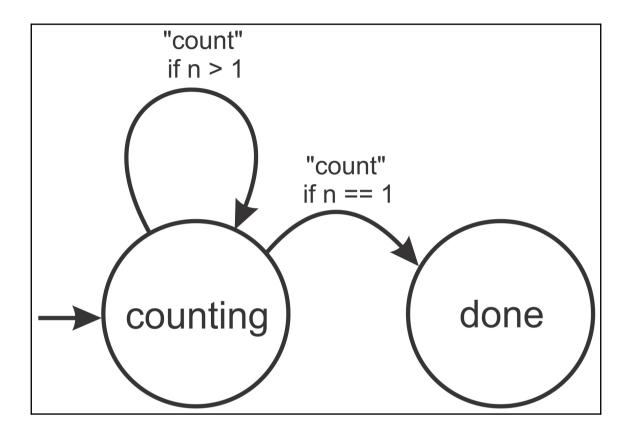


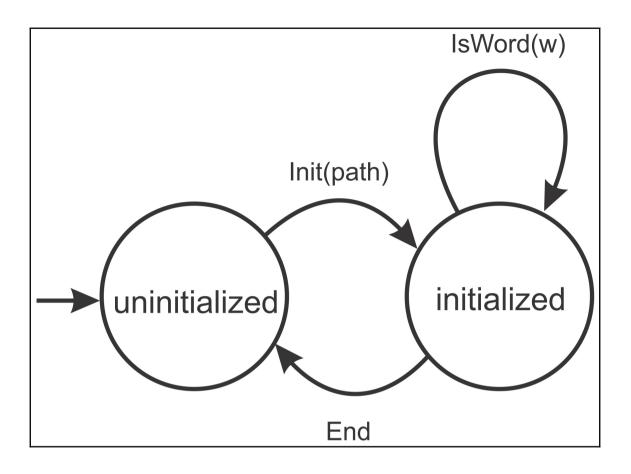


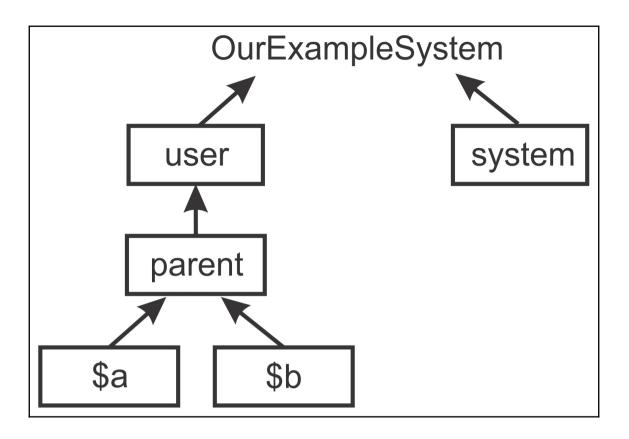
### **Chapter 7: Software Transactional Memory**

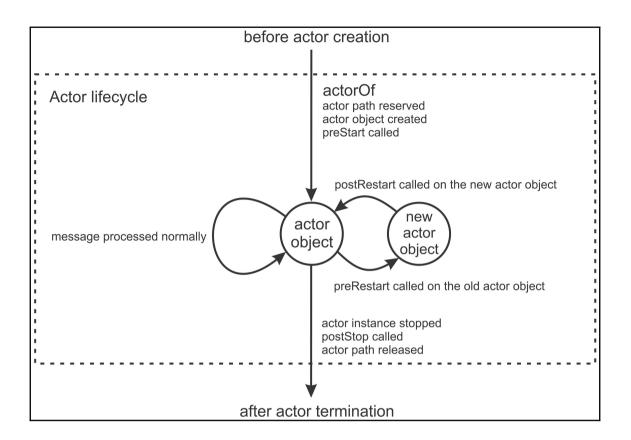


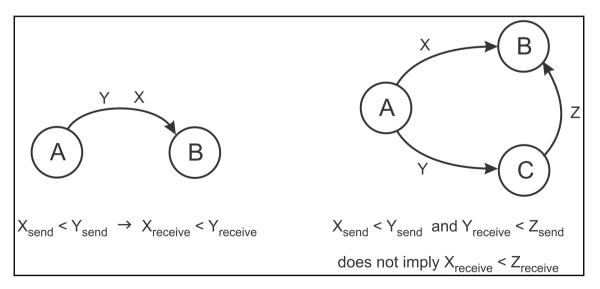
### **Chapter 8: Actors**

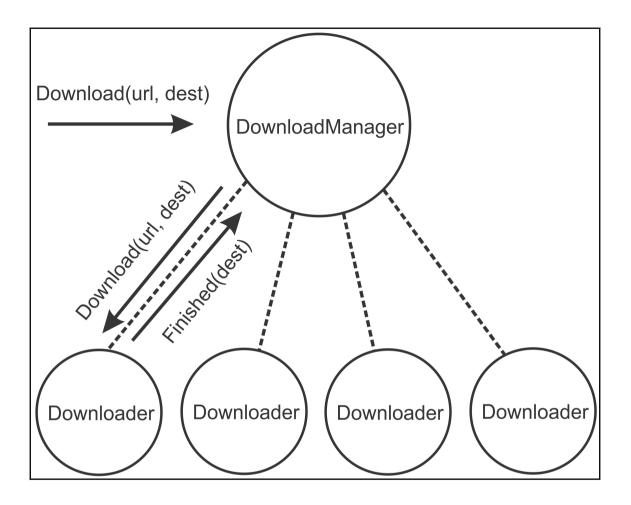




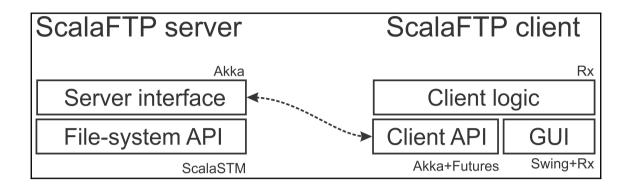


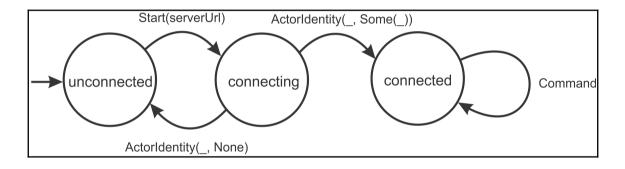






### **Chapter 9: Concurrency in Practice**





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Path:		^	Path:.\src\main\scala\org\earni	ngconcurrency	^
Filename	Size	Date modified	Filename	Size	Date modified
project		2014/04/28 16:44:47	ch2		2014/05/16 11:48:16
src		2014/04/28 16:43:10	ch5		2014/05/28 16:43:27
.git		2014/07/18 10:53:02	ch6		2014/07/18 01:25:26
target		2014/07/18 10:31:43	ch3		2014/05/30 16:31:33
url-spec.txt	46kB	2014/07/10 21:15:35	ch4		2014/05/26 11:11:39
.gitignore	0kB	2014/04/28 16:43:10	ch8		2014/07/18 01:25:26
build.sbt	1kB	2014/07/18 10:35:02	ch7		2014/07/04 00:03:14
			ch9		2014/07/18 01:25:26
			package.scala	0kB	2014/04/28 16:43:10
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🐻 Overview 🔛 Monitor 🗮 Threads	🗛 Sampler 🛞 Profiler					
C org.learningconcurrency.ch9.Deadlock (pid 21484)						
Threads		Threads visualization				
Live threads: 11 Daemon threads: 8	Deadlock detected! Take a thread dump to get more info.	Thread Dump				
Timeline Table Details		×				
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Threads 0:	00 0:10	[m:s]:				
RMI TCP Connection(3)-192.168						
JMX server connection timeout 15						
RMI Scheduler(0)						
RMI TCP Accept-0						
Thread-1						
Thread-0						
Attach Listener						
Signal Dispatcher						
Finalizer						
Reference Handler						
🗖 main						
	Running Sleeping	) 🔛 Wait 📕 Monitor				

Start Page 🛛 🏂 org.learningconcurrency.ch9.Deadlock (pid 21484) 🔀	
🚯 Overview 🔛 Monitor 🗮 Threads 🥋 Sampler 🛞 Profiler 🚟 [threaddump] 5:03:24 PM 🗙	
O org.learningconcurrency.ch9.Deadlock (pid 21484)	
Thread Dump	
- None	-
<pre>"Thread-1" prio=6 tid=0x000000011def000 nid=0xfdc waiting for monitor entry [0x0000 java.lang.Thread.State: BLOCKED (on object monitor) at org.learningconcurrency.ch9.Deadlock\$.send(Debugging.scala:15) - waiting to lock &lt;0x0000007af230070&gt; (a org.learningconcurrency.ch9.Deadlock\$Accoun at org.learningconcurrency.ch9.Deadlock\$\$anonfun\$2\$\$anonfun\$2Deadlock\$Accoun at org.learningconcurrency.ch9.Deadlock\$\$anonfun\$2\$\$anonfun\$2\$\$anonfun\$apply\$mcV\$sp\$2.a; at scala.collection.immutable.Range.foreach\$mVc\$sp(Range.scala:160) at org.learningconcurrency.ch9.Deadlock\$\$anonfun\$2.apply\$mcV\$sp(Debugging.sc at org.learningconcurrency.ch2.package\$\$anon\$1.run(package.scala:12)</pre>	=
Locked ownable synchronizers: - None	
<pre>"Thread-0" prio=6 tid=0x000000011dec000 nid=0x4bd4 waiting for monitor entry [0x000 java.lang.Thread.State: BLOCKED (on object monitor)     at org.learningconcurrency.ch9.Deadlock\$.send(Debugging.scala:15)     - waiting to lock &lt;0x0000007af230080&gt; (a org.learningconcurrency.ch9.Deadloc     - locked &lt;0x00000007af230070&gt; (a org.learningconcurrency.ch9.Deadlock\$Accoun     at org.learningconcurrency.ch9.Deadlock\$\$anonfun\$1\$\$anonfun\$apply\$mcV\$sp\$1.a;     at scala.collection.immutable.Range.foreach\$mVc\$sp(Range.scala:160)     at org.learningconcurrency.ch9.Deadlock\$\$anonfun\$1.apply\$mcV\$sp(Debugging.sc     at org.learningconcurrency.ch2.package\$\$anon\$1.run(package.scala:12)</pre>	
Locked ownable synchronizers:	-
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### **Chapter 10: Reactors**

