

# **Timers and Schedulers**



# Schedulers

Send a message at a certain time

```
context.scheduleOnce(1.second, loggerActor, "reminder")
```

Run an arbitrary computation at a certain time

```
import system.executionContext  
system.scheduler.scheduleOnce(2.seconds, () => system.terminate())
```

Things to be careful with

- if you schedule many arbitrary computations, use a dedicated ExecutionContext
- cancel schedules you're not using

# Timers

Send messages to yourself at a certain time

```
Behaviors.withTimers { timer =>
  timer.startSingleTimer(Timeout, 1.hour) // send message to self

  // return a Behavior here
}
```

Manipulate the passage of time in tests

```
class TimersSpec extends ScalaTestWithActorTestKit(ManualTime.config) {

  // within test
  val time: ManualTime = ManualTime()

  probe.expectNoMessage(1.second)
  // accelerate time
  time.timePasses(1.hour)
  // assertions "after" 1 hour
  probe.expectMessage(Report)
```

**Akka rocks**

