

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

