# Compare

1. @Scheduled
2. Via Quartz
3. Via JDK Timer

Quartz Scheduler vs. Spring Scheduler

## Spring Scheduler

Quick and basic.

@Scheduled(fixedRate = 40000)

public void reportCurrentTime() {

System.out.println("Hello World");

}

* [**FixedRate**](http://docs.spring.io/spring/docs/current/spring-framework-reference/html/scheduling.html)(Run periodically at specific intervals even if previous execution did not finish)& [**FixedDelay**](http://docs.spring.io/spring/docs/current/spring-framework-reference/html/scheduling.html)(Delay the next execution of the task for a specific time frame after completion of last execution)
* [**Cron**](http://linux.die.net/man/8/cron) expression

## Quartz Scheduler

Clustering as well as JobPersistence.

0. Create sheduler.

1. Job which implements Job interface.

2. Create JobDetail which is instance of the job using the builder org.quartz.JobBuilder.newJob(MyJob.class)

3. Create a Triger

4. Finally set the job and the trigger to the scheduler

SchedulerFactory ***schedFact*** = new org.quartz.impl.StdSchedulerFactory();

Scheduler sched = ***schedFact***.getScheduler();  
  
sched.start();  
  
*// define the job and tie it to our HelloJob class*JobDetail job = *newJob*(HelloJob.**class**)  
 .withIdentity(**"myJob"**, **"group1"**)  
 .build();  
  
*// Trigger the job to run now, and then every 40 seconds*Trigger trigger = TriggerBuilder.*newTrigger*()  
 .withIdentity(**"myTrigger"**, **"group1"**)  
 .startNow()  
 .withSchedule(*simpleSchedule*()  
 .withIntervalInSeconds(40)  
 .repeatForever())  
 .build();  
  
*// Tell quartz to schedule the job using our trigger*sched.scheduleJob(job, trigger);

<https://www.mkyong.com/java/quartz-2-scheduler-tutorial/>

**Quartz Job**

Quartz job is defined what you want to run?

package com.mkyong.common;

import org.quartz.Job;

import org.quartz.JobExecutionContext;

import org.quartz.JobExecutionException;

public class HelloJob implements Job

{

public void execute(JobExecutionContext context)

throws JobExecutionException {

System.out.println("Hello Quartz!");

}

}

## Quartz Trigger

Quartz trigger is defined when the Quartz will run your above Quartz’s job?

## Scheduler

Scheduler class links both “**Job**” and “**Trigger**” together and execute it.