

# Spring 定时任务 No qualifying bean of type TaskScheduler available 及 Could not find default TaskScheduler bean 异常处理

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来源网站: [链滴](#)

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最近使用Spring + SpringMvc + Quartz的系统中，使用@annotation注解方式，直接在类的方法上用@Scheduled(cron=" 0 /5 \* \* ?" )来实现定时任务，在使用debug日志级别时，启动提示Could not find default TaskScheduler bean异常：



```
10:44:18.816 [main] DEBUG org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor - Could not find default TaskScheduler bean
```

```
org.springframework.beans.factory.NoSuchBeanDefinitionException: No qualifying bean of type 'org.springframework.scheduling.TaskScheduler' available
    at org.springframework.beans.factory.support.DefaultListableBeanFactory.resolveNamedBean(DefaultListableBeanFactory.java:996)
    at org.springframework.beans.factory.support.DefaultListableBeanFactory.resolveNamedBean(DefaultListableBeanFactory.java:994)
    at org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.resolveSchedulerBean(ScheduledAnnotationBeanPostProcessor.java:285)
    at org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.finishRegistration(ScheduledAnnotationBeanPostProcessor.java:226)
    at org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.onApplicationEvent(ScheduledAnnotationBeanPostProcessor.java:203)
    at org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.onApplicationEvent(ScheduledAnnotationBeanPostProcessor.java:97)
    at org.springframework.context.event.SimpleApplicationEventMulticaster.doInvokeListener(SimpleApplicationEventMulticaster.java:172)
    at org.springframework.context.event.SimpleApplicationEventMulticaster.invokeListener(SimpleApplicationEventMulticaster.java:165)
    at org.springframework.context.event.SimpleApplicationEventMulticaster.multicastEvent(SimpleApplicationEventMulticaster.java:139)
    at org.springframework.context.support.AbstractApplicationContext.publishEvent(AbstractApplicationContext.java:393)
    at org.springframework.context.support.AbstractApplicationContext.publishEvent(AbstractApplicationContext.java:347)
    at org.springframework.context.support.AbstractApplicationContext.finishRefresh(Abstract
```

```

pplicationContext.java:883)
    at org.springframework.context.support.AbstractApplicationContext._refresh(AbstractApplic
ationContext.java:546)
    at org.springframework.context.support.AbstractApplicationContext.refresh(AbstractApplic
ationContext.java:41010)
    at org.springframework.web.servlet.FrameworkServlet.configureAndRefreshWebApplicatio
Context(FrameworkServlet.java:668)
    at org.springframework.web.servlet.FrameworkServlet.createWebApplicationContext(Fram
workServlet.java:634)
    at org.springframework.web.servlet.FrameworkServlet.createWebApplicationContext(Fram
workServlet.java:682)
    at org.springframework.web.servlet.FrameworkServlet.initWebApplicationContext(Framewo
rkServlet.java:553)
    at org.springframework.web.servlet.FrameworkServlet.jrInitWebApplicationContext(Frame
orkServlet.java:40002)
    at org.springframework.web.servlet.FrameworkServlet.initServletBean(FrameworkServlet.jav
:494)
    at org.springframework.web.servlet.HttpServletBean.init(HttpServletBean.java:171)
    at javax.servlet.GenericServlet.init(GenericServlet.java:158)
    at org.apache.catalina.core.StandardWrapper.initServlet(StandardWrapper.java:1123)
    at org.apache.catalina.core.StandardWrapper.loadServlet(StandardWrapper.java:1078)
    at org.apache.catalina.core.StandardWrapper.load(StandardWrapper.java:971)
    at org.apache.catalina.core.StandardContext.loadOnStartup(StandardContext.java:4849)
    at org.apache.catalina.core.StandardContext.startInternal(StandardContext.java:5165)
    at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
    at org.apache.catalina.core.ContainerBase$StartChild.call(ContainerBase.java:1382)
    at org.apache.catalina.core.ContainerBase$StartChild.call(ContainerBase.java:1372)
    at java.util.concurrent.FutureTask.run(FutureTask.java:266)
    at org.apache.tomcat.util.threads.InlineExecutorService.execute(InlineExecutorService.java:7
)
    at java.util.concurrent.AbstractExecutorService.submit(AbstractExecutorService.java:134)
    at org.apache.catalina.core.ContainerBase.startInternal(ContainerBase.java:907)
    at org.apache.catalina.core.StandardHost.startInternal(StandardHost.java:831)
    at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
    at org.apache.catalina.core.ContainerBase$StartChild.call(ContainerBase.java:1382)
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    at java.util.concurrent.AbstractExecutorService.submit(AbstractExecutorService.java:134)
    at org.apache.catalina.core.ContainerBase.startInternal(ContainerBase.java:907)
    at org.apache.catalina.core.StandardEngine.startInternal(StandardEngine.java:262)
    at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
    at org.apache.catalina.core.StandardService.startInternal(StandardService.java:423)
    at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
    at org.apache.catalina.core.StandardServer.startInternal(StandardServer.java:933)
    at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
    at org.apache.catalina.startup.Catalina.start(Catalina.java:637)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
    at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
    at sun.reflect.DelegatingMethodAccessorImpl.__invoke(DelegatingMethodAccessorImpl.java
43)
    at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:
5009)

```

```
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:5012)
at java.lang.reflect.Method.invoke(Method.java:498)
at org.apache.catalina.startup.Bootstrap.start(Bootstrap.java:350)
at org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:492)
```

10:44:18.823 [main] DEBUG org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor - Could not find default ScheduledExecutorService bean

```
org.springframework.beans.factory.NoSuchBeanDefinitionException: No qualifying bean of type 'java.util.concurrent.ScheduledExecutorService' available
    at org.springframework.beans.factory.support.DefaultListableBeanFactory.resolveNamedBean(DefaultListableBeanFactory.java:996)
    at org.springframework.beans.factory.support.DefaultListableBeanFactory.resolveNamedBean(DefaultListableBeanFactory.java:994)
    at org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.resolveSchedulerBean(ScheduledAnnotationBeanPostProcessor.java:285)
    at org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.finishRegistration(ScheduledAnnotationBeanPostProcessor.java:247)
    at org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.onApplicationEvent(ScheduledAnnotationBeanPostProcessor.java:203)
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    at org.springframework.context.event.SimpleApplicationEventMulticaster.multicastEvent(SimpleApplicationEventMulticaster.java:139)
    at org.springframework.context.support.AbstractApplicationContext.publishEvent(AbstractApplicationContext.java:393)
    at org.springframework.context.support.AbstractApplicationContext.publishEvent(AbstractApplicationContext.java:347)
    at org.springframework.context.support.AbstractApplicationContext.finishRefresh(AbstractApplicationContext.java:883)
    at org.springframework.context.support.AbstractApplicationContext.__refresh(AbstractApplicationContext.java:546)
    at org.springframework.context.support.AbstractApplicationContext.refresh(AbstractApplicationContext.java:41010)
    at org.springframework.web.servlet.FrameworkServlet.configureAndRefreshWebApplicationContext(FrameworkServlet.java:668)
    at org.springframework.web.servlet.FrameworkServlet.createWebApplicationContext(FrameworkServlet.java:634)
    at org.springframework.web.servlet.FrameworkServlet.createWebApplicationContext(FrameworkServlet.java:682)
    at org.springframework.web.servlet.FrameworkServlet.initWebApplicationContext(FrameworkServlet.java:553)
    at org.springframework.web.servlet.FrameworkServlet.jsrInitWebApplicationContext(FrameworkServlet.java:40002)
    at org.springframework.web.servlet.FrameworkServlet.initServletBean(FrameworkServlet.java:494)
    at org.springframework.web.servlet.HttpServletBean.init(HttpServletBean.java:171)
    at javax.servlet.GenericServlet.init(GenericServlet.java:158)
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```

```

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at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
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at org.apache.catalina.core.ContainerBase$StartChild.call(ContainerBase.java:1372)
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at org.apache.tomcat.util.threads.InlineExecutorService.execute(InlineExecutorService.java:7
)
at java.util.concurrent.AbstractExecutorService.submit(AbstractExecutorService.java:134)
at org.apache.catalina.core.ContainerBase.startInternal(ContainerBase.java:907)
at org.apache.catalina.core.StandardHost.startInternal(StandardHost.java:831)
at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
at org.apache.catalina.core.ContainerBase$StartChild.call(ContainerBase.java:1382)
at org.apache.catalina.core.ContainerBase$StartChild.call(ContainerBase.java:1372)
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at org.apache.tomcat.util.threads.InlineExecutorService.execute(InlineExecutorService.java:7
)
at java.util.concurrent.AbstractExecutorService.submit(AbstractExecutorService.java:134)
at org.apache.catalina.core.ContainerBase.startInternal(ContainerBase.java:907)
at org.apache.catalina.core.StandardEngine.startInternal(StandardEngine.java:262)
at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
at org.apache.catalina.core.StandardService.startInternal(StandardService.java:423)
at org.apache.catalina.util.LifecycleBase.start(LifecycleBase.java:183)
at org.apache.catalina.core.StandardServer.startInternal(StandardServer.java:933)
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at org.apache.catalina.startup.Catalina.start(Catalina.java:637)
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
at sun.reflect.DelegatingMethodAccessorImpl.__invoke(DelegatingMethodAccessorImpl.java
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at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:
5009)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:
5012)
at java.lang.reflect.Method.invoke(Method.java:498)
at org.apache.catalina.startup.Bootstrap.start(Bootstrap.java:350)
at org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:492)
10:44:18.823 [main] INFO org.springframework.scheduling.annotation.ScheduledAnnotationB
anPostProcessor - No TaskScheduler/ScheduledExecutorService bean found for scheduled pr
cessing

```

很困惑，配置都没有问题啊？通过在stackoverflow辛苦寻找才发现其实是定时任务框架的一个机，原来在org.springframework.scheduling.annotation.ScheduledAnnotationBeanPostProcessor.nishRegistration():这个方法中，是这样处理的：

```

if (this.registrar.hasTasks() && this.registrar.getScheduler() == null) {
    Assert.state(this.beanFactory != null, "BeanFactory must be set to find scheduler by type");
    try {
        // Search for TaskScheduler bean...
        this.registrar.setTaskScheduler(this.beanFactory.getBean(TaskScheduler.class));
    }
    catch (NoSuchBeanDefinitionException ex) {

```

```

        logger.debug("Could not find default TaskScheduler bean", ex);
        // Search for ScheduledExecutorService bean next...
        try {
            this.registrar.setScheduler(this.beanFactory.getBean(ScheduledExecutorService.class));
        }
        catch (NoSuchBeanDefinitionException ex2) {
            logger.debug("Could not find default ScheduledExecutorService bean", ex);
            // Giving up -&gt; falling back to default scheduler within the registrar...
        }
    }
}

```

上面代码中，程序通过beanfactory.getBean方法找到在Spring中注册的调度器，如果 ScheduledExecutorService 没有找到，就使用默认的调度器。所以，这个过程中如果没有找到ScheduledExecutorService，就会在debug级别的日志输出一个异常：

```
logger.debug("Could not find default TaskScheduler bean", ex);
```

当然，这个你所看到的异常并不影响应用程序运行，如果你不想看到这个异常，就可以通过提升org.springframework.scheduling这个包下日志级别来屏蔽这个不合理的异常：

logback & log4j xml:

```

<logger name="org.springframework.scheduling">
    <level value="info" />
</logger>

```

log4j.properties

```
log4j.logger.org.springframework.scheduling=INFO
```

当然，你也可以通过配置上下文：

```

@Configuration
@EnableAsync
public class AppContext extends WebMvcConfigurationSupport{
    @Bean
    public Executor taskExecutor() {
        return new SimpleAsyncTaskExecutor();
    }
}

```

或者配置spring-mvc.xml文件：

```

<task:executor id="executor" pool-size="100"/>
<task:scheduler id="scheduler" pool-size="100"/>
<task:annotation-driven scheduler="scheduler" executor="executor" proxy-target-class="true"/>

```

参见：<https://stackoverflow.com/questions/31816365/spring-async-issue-when-upgrading-from-4-2-0-rc3-to-4-2-0-release/31820129#31820129>