

BUG描述

做完 第4节：线程池数据上报（Redis 注册中心） 后，运行项目报错如下

```

  ____  _
 / ___|| | | |
| |___| |_| |
 \___ \|  _/
      |_|_|

:: Spring Boot ::      (v2.7.6)

2024-08-03 22:58:32.841 INFO 4504 --- [main] n.d.s.d.DynamicThreadPoolTestApplication : Starting DynamicThreadPoolTestApplication using Java 1.8.0_351 on LAPTOP-AQ26TV7C with PID 4504 (
2024-08-03 22:58:32.842 INFO 4504 --- [main] n.d.s.d.DynamicThreadPoolTestApplication : The following 1 profile is active: "dev"
2024-08-03 22:58:33.574 INFO 4504 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Multiple Spring Data modules found, entering strict repository configuration mode
2024-08-03 22:58:33.577 INFO 4504 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data Redis repositories in DEFAULT mode.
2024-08-03 22:58:33.608 INFO 4504 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 8 ms. Found 0 Redis repository interfaces.
2024-08-03 22:59:12.372 INFO 4504 --- [main] org.redisson.Version : Redisson 3.26.0
2024-08-03 22:59:13.960 INFO 4504 --- [sson-netty-1-5] o.redisson.connection.ConnectionHolder : 1 connections initialized for 192.168.67.129/192.168.67.129:16379
2024-08-03 22:59:14.011 INFO 4504 --- [sson-netty-1-23] o.redisson.connection.ConnectionHolder : 10 connections initialized for 192.168.67.129/192.168.67.129:16379
2024-08-03 22:59:19.036 INFO 4504 --- [main] org.redisson.Version : Redisson 3.26.0
2024-08-03 22:59:31.632 WARN 4504 --- [main] s.c.a.AnnotationConfigApplicationContext : Exception encountered during context initialization - cancelling refresh attempt: org.springframework
2024-08-03 22:59:31.664 INFO 4504 --- [main] ConditionEvaluationReportLoggingListener :

Error starting ApplicationContext. To display the conditions report re-run your application with 'debug' enabled.
2024-08-03 22:59:31.728 ERROR 4504 --- [main] o.s.boot.SpringApplication : Application run failed

org.springframework.beans.factory.UnsatisfiedDependencyException: Error creating bean with name 'redisTemplate' defined in class path resource [org.redisson/spring/starter/RedissonAu
    at org.springframework.beans.factory.support.ConstructorResolver.createArgumentArray(ConstructorResolver.java:800) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.ConstructorResolver.instantiateUsingFactoryMethod(ConstructorResolver.java:541) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.AbstractAutowiredCapableBeanFactory.instantiateUsingFactoryMethod(AbstractAutowiredCapableBeanFactory.java:1352) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.AbstractAutowiredCapableBeanFactory.createBeanInstance(AbstractAutowiredCapableBeanFactory.java:1195) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.AbstractAutowiredCapableBeanFactory.doCreateBean(AbstractAutowiredCapableBeanFactory.java:502) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.AbstractAutowiredCapableBeanFactory.createBean(AbstractAutowiredCapableBeanFactory.java:542) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.AbstractBeanFactory.lambda$doGetBean$0(AbstractBeanFactory.java:335) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.DefaultSingletonBeanRegistry.getSingleton(DefaultSingletonBeanRegistry.java:234) ~[spring-beans-5.3.24.jar:5.3.24]
    at org.springframework.beans.factory.support.DefaultSingletonBeanRegistry.getSingleton(DefaultSingletonBeanRegistry.java:234) ~[spring-beans-5.3.24.jar:5.3.24]

```

我排查后发现，redissonClient 这个Bean注入了两次，如上图所示

一次是我们在自己的项目中定义的，另一个是官方的

官方定义 redissonClient bean是这样的 的方法是这样的

```

130     }
131
132     @Bean(destroyMethod = "shutdown")
133     @ConditionalOnMissingBean(RedissonClient.class)
134     public RedissonClient redisson() throws IOException {
135         Config config;
136
137         Method clusterMethod = ReflectionUtils.findMethod(RedisProperties.class, name: "getCluster");
138         Method usernameMethod = ReflectionUtils.findMethod(RedisProperties.class, name: "getUsername");
139         Method timeoutMethod = ReflectionUtils.findMethod(RedisProperties.class, name: "getTimeout");
140         Method connectTimeoutMethod = ReflectionUtils.findMethod(RedisProperties.class, name: "getConnectTimeout");
141         Method clientNameMethod = ReflectionUtils.findMethod(RedisProperties.class, name: "getClientName");
142
143         Object timeoutValue = ReflectionUtils.invokeMethod(timeoutMethod, redisProperties);
144         String prefix = getPrefix();
145
146         String username = null;
147         int database = redisProperties.getDatabase();
148         String password = redisProperties.getPassword();
149         boolean isSentinel = false;
150         boolean isCluster = false;
151         if (hasConnectionDetails()) {
152             ObjectProvider<RedisConnectionDetails> provider = ctx.getBeanProvider(RedisConnectionDetails.class);
153             RedisConnectionDetails b = provider.getIfAvailable();
154             if (b != null) {
155                 password = b.getPassword();
156                 username = b.getUsername();
157
158                 if (b.getSentinel() != null) {
159                     isSentinel = true;
160                 }
161                 if (b.getCluster() != null) {
162                     isCluster = true;
163                 }
164             }
165         }
166     }

```

官方定义的方法上有个注解是 @ConditionalOnMissingBean(RedissonClient.class)

我的理解是，只有不存在 RedissonClient.class 组件的时候才会启用这个Bean

但是，上面我们已经已经注册了RedissonClient了，这里却还是会执行

我一开始觉得可能是Bean的加载顺序问题，但是我在下断点debug时，也确实是先走的我自己定义 RedissonClient 的方法

所以不知道怎么解决了

附加信息

DynamicThreadPoolAutoConfig.java (自动装配的入口类)

```
1  package site.notcoder.dtp.sdk.dynamicthreadpoolspringbootstarter.config;
2
3  import lombok.extern.slf4j.Slf4j;
4  import org.apache.commons.lang.StringUtils;
5  import org.redisson.Redisson;
6  import org.redisson.api.RedissonClient;
7  import org.redisson.codec.JsonJacksonCodec;
8  import org.redisson.config.Config;
9  import
org.springframework.boot.context.properties.EnableConfigurationProperties;
10 import org.springframework.context.ApplicationContext;
11 import org.springframework.context.annotation.Bean;
12 import org.springframework.context.annotation.Configuration;
13 import org.springframework.scheduling.annotation.EnableScheduling;
14 import
site.notcoder.dtp.sdk.dynamicthreadpoolspringbootstarter.config.properties.D
ynamicThreadPoolAutoProperties;
15 import
site.notcoder.dtp.sdk.dynamicthreadpoolspringbootstarter.config.properties.D
ynamicThreadPoolRegistryRedisAutoProperties;
16 import
site.notcoder.dtp.sdk.dynamicthreadpoolspringbootstarter.registry.IRegistry;
17 import
site.notcoder.dtp.sdk.dynamicthreadpoolspringbootstarter.registry.redis.Redi
sRegistry;
18 import
site.notcoder.dtp.sdk.dynamicthreadpoolspringbootstarter.service.impl.Dynami
cThreadPoolService;
19
20 import java.util.Map;
21 import java.util.concurrent.ThreadPoolExecutor;
22
23 /**
24  * 自动配置入口
25  */
26 @Slf4j
27 @Configuration
28 @EnableConfigurationProperties({
29     DynamicThreadPoolRegistryRedisAutoProperties.class,
30 })
31 @EnableScheduling
32 public class DynamicThreadPoolAutoConfig {
33
```

```

34     @Bean
35     public RedissonClient
redissonClient(DynamicThreadPoolRegistryRedisAutoProperties properties) {
36         Config config = new Config();
37         config.setCodec(JsonJacksonCodec.INSTANCE);
38         config.useSingleServer()
39             .setAddress(String.format("redis://%s:%d",
properties.getHost(), properties.getPort()))
40             .setPassword(properties.getPassword())
41             .setDatabase(properties.getDatabase())
42             .setConnectionPoolSize(properties.getConnectionPoolSize())
43
44             .setConnectionMinimumIdleSize(properties.getConnectionMinimumIdleSize())
45
46             .setIdleConnectionTimeout(properties.getIdleConnectionTimeout())
47             .setConnectTimeout(properties.getConnectTimeout())
48             .setRetryAttempts(properties.getRetryAttempts())
49             .setRetryInterval(properties.getRetryInterval())
50             .setKeepAlive(properties.getKeepAlive());
51         return Redisson.create(config);
52     }
53
54     @Bean
55     public IRegistry redisRegistry(RedissonClient redissonClient) {
56         return new RedisRegistry(redissonClient);
57     }
58
59     @Bean
60     public DynamicThreadPoolService dynamicThreadPoolService(
61         ApplicationContext applicationContext,
62         Map<String, ThreadPoolExecutor> threadPoolExecutorMap,
63         RedissonClient redissonClient
64     ) {
65         String applicationName =
66             applicationContext.getEnvironment().getProperty("spring.application.name");
67         if (StringUtils.isBlank(applicationName)) {
68             log.warn("动态线程池启动提示。SpringBoot 应用未配置应用名
(spring.application.name)");
69         }
70
71         return new DynamicThreadPoolService(applicationName,
72             threadPoolExecutorMap);
73     }
74 }

```

DynamicThreadPoolRegistryRedisAutoProperties.java (配置类)

```

1 package
site.notcoder.dtp.sdk.dynamicthreadpoolspringbootstarter.config.properties;
2
3 import lombok.AllArgsConstructor;

```

```

4  import lombok.Data;
5  import lombok.NoArgsConstructor;
6  import org.springframework.boot.context.properties.ConfigurationProperties;
7
8  /**
9   * 线程池注册中心 Redis 配置
10  */
11
12  @Data
13  @NoArgsConstructor
14  @AllArgsConstructor
15  @ConfigurationProperties("dynamic-thread-pool.registry.redis")
16  public class DynamicThreadPoolRegistryRedisAutoProperties {
17
18      /** Redis地址 */
19      private String host;
20      /** Redis端口, 默认6379 */
21      private Integer port = 6379;
22      /** Redis数据库, 默认是0 */
23      private Integer database = 0;
24      /** Redis 密码 */
25      private String password;
26      /** 设置连接池的大小, 默认为64 */
27      private int connectionPoolSize = 64;
28      /** 设置连接池的最小空闲连接数, 默认为10 */
29      private int connectionMinimumIdleSize = 10;
30      /** 设置连接的最大空闲时间 (单位: 毫秒), 超过该时间的空闲连接将被关闭, 默认为10000
31      */
32      private int idleConnectionTimeout = 10000;
33      /** 设置连接超时时间 (单位: 毫秒), 默认为10000 */
34      private int connectTimeout = 10000;
35      /** 设置连接重试次数, 默认为3 */
36      private int retryAttempts = 3;
37      /** 设置连接重试的间隔时间 (单位: 毫秒), 默认为1000 */
38      private int retryInterval = 1000;
39      /** 设置定期检查连接是否可用的时间间隔 (单位: 毫秒), 默认为0, 表示不进行定期检查 */
40      private int pingInterval = 0;
41      /** 设置是否保持长连接, 默认为true */
42      private Boolean keepAlive = true;
43  }

```

application-dev.yml (dynamic-thread-pool-tset)

```

1  server:
2      port: 8091
3
4  # 线程池配置
5  thread:
6      pool:
7          executor:
8              config:
9                  core-pool-size: 20
10                 max-pool-size: 50
11                 keep-alive-time: 5000

```

```
12         block-queue-size: 5000
13         policy: CallerRunsPolicy
14
15 # 动态线程池配置
16 dynamic-thread-pool:
17     registry:
18         redis:
19             host: 192.168.67.129
20             port: 16379
```