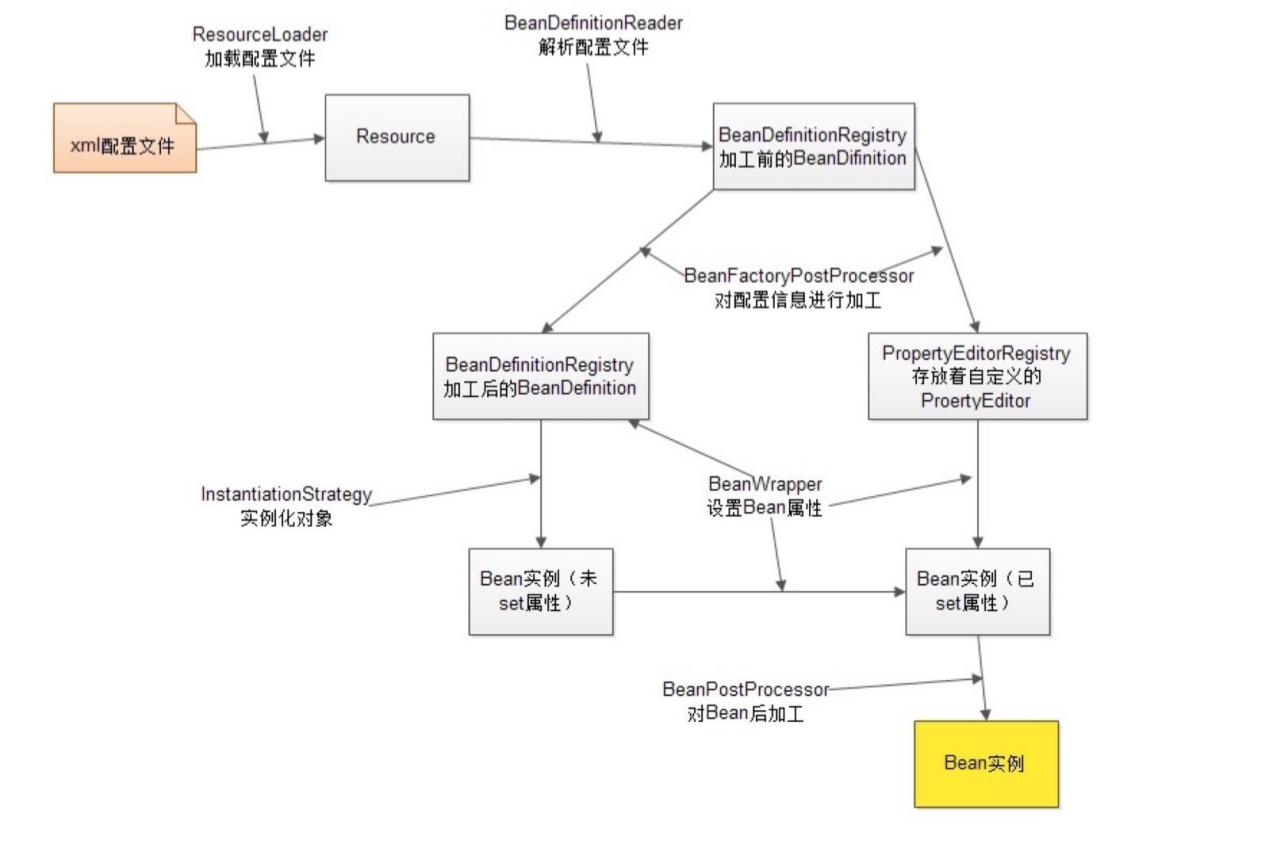
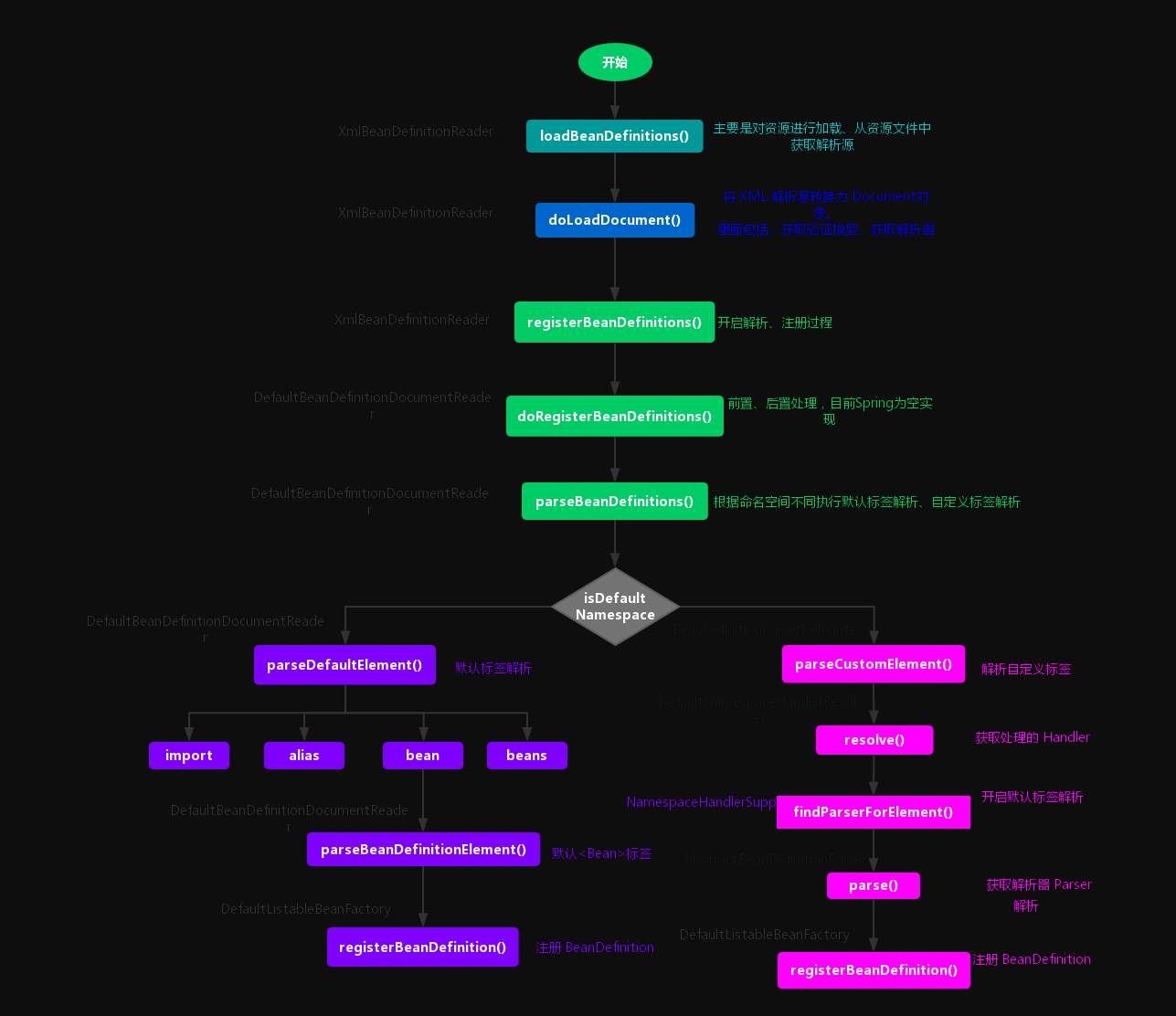
### SpringIOC加载过程图解



### SpringIOC转载Bean到BeanDefinition过程



### SpringIOC实例化bean过程(getBean(XXX.class))

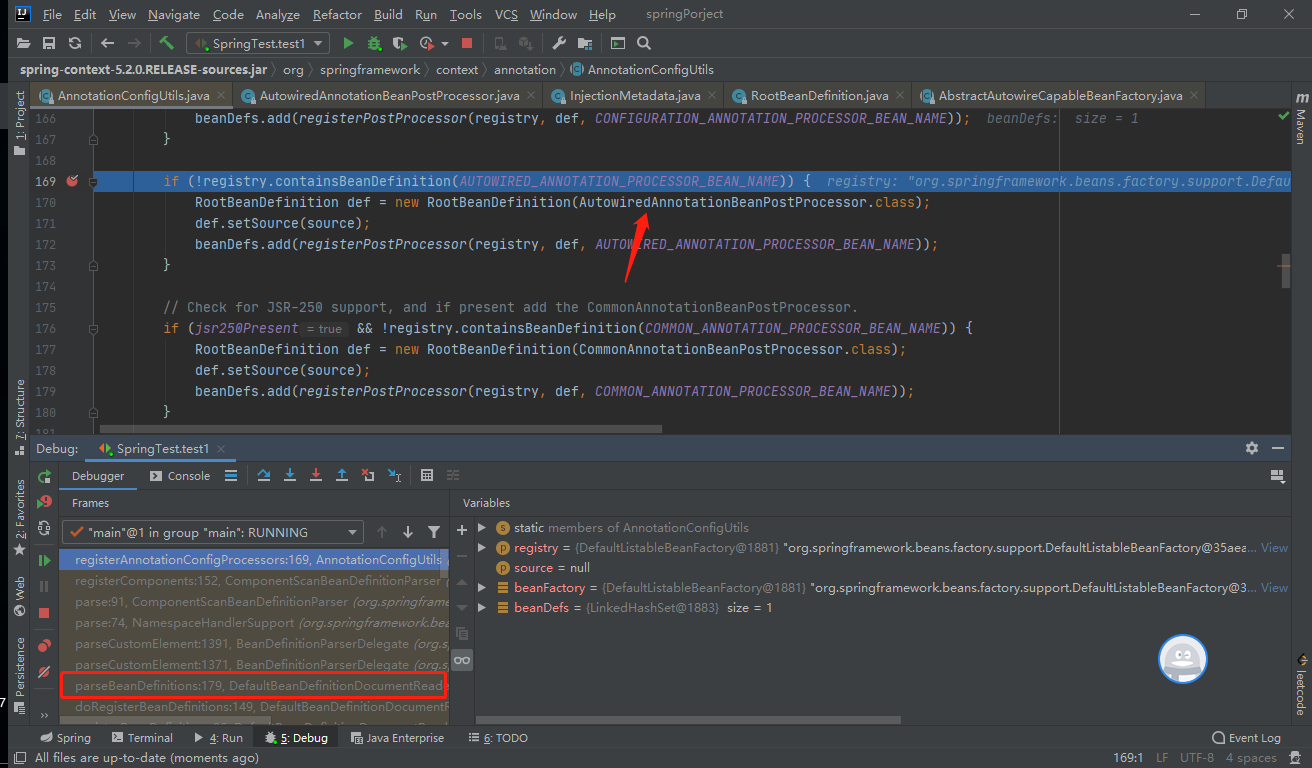


### Spring中@Autowried自动装配是如何实现的

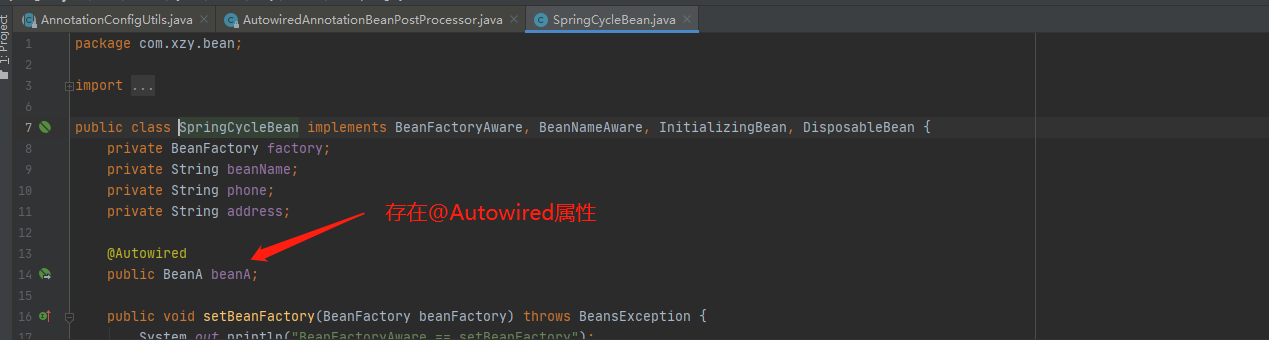
<https://zhuanlan.zhihu.com/p/28775709>

首先，@Autowried是通过后处理器实现的

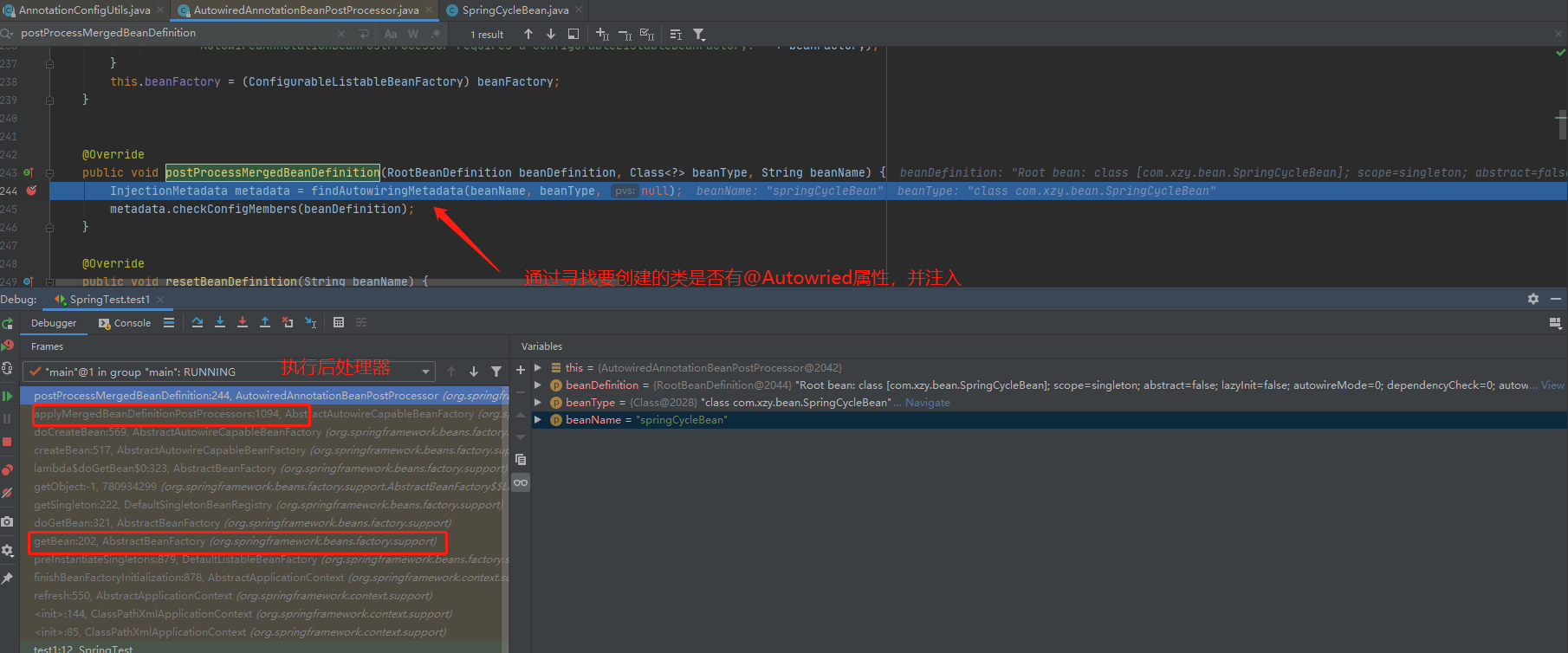
当我们在配置文件里面添加注释<context:component-scan/>时。Spring通过parseBeanDefinitions解析标签，会自动注入AutowiredAnnotationBeanPostProcessor后处理器。

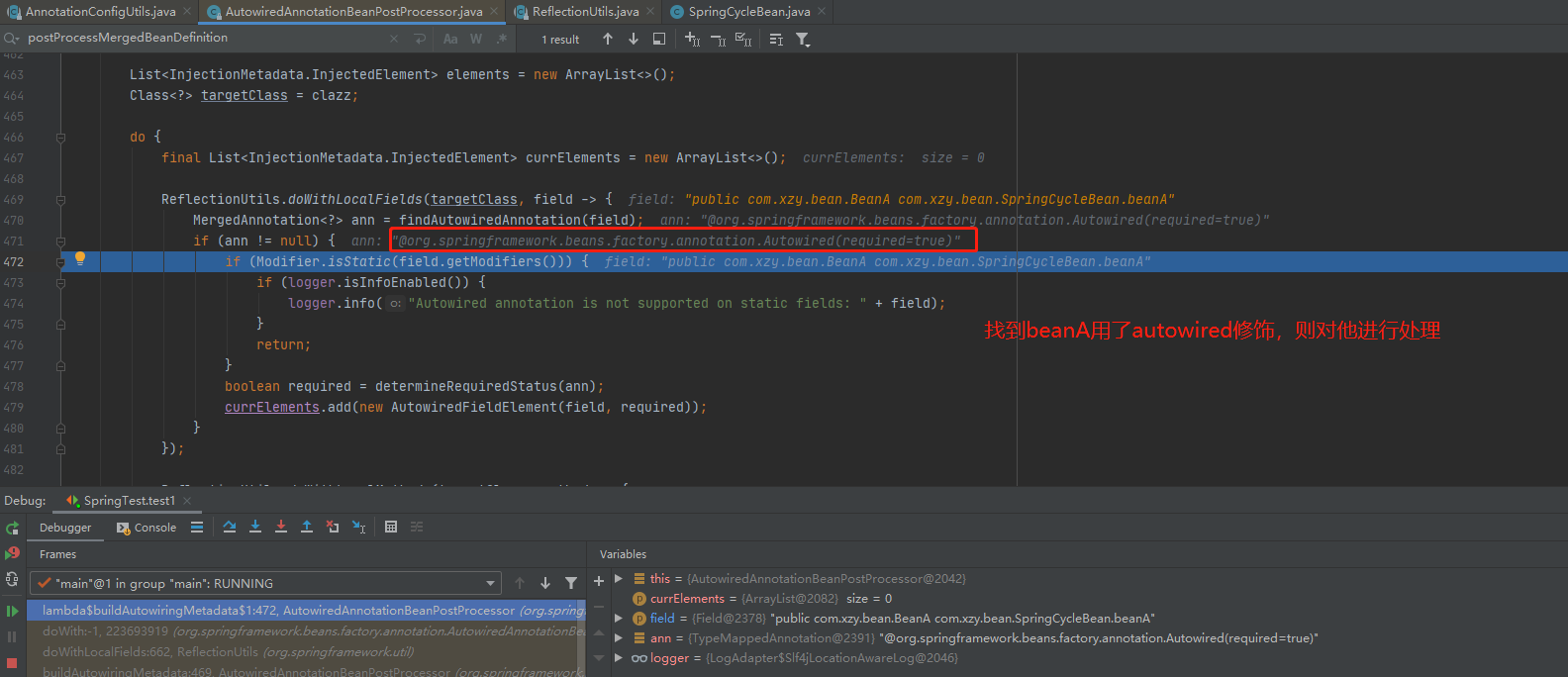


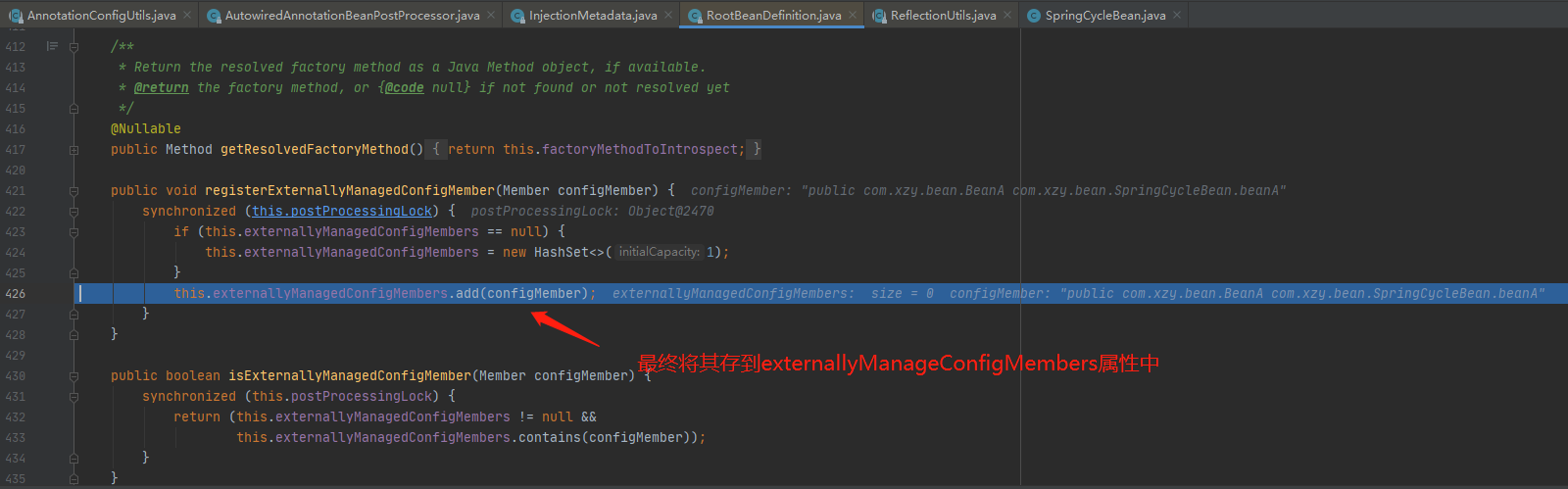
假如一个对象有@Autowried属性，则在getBean时，会通过AutowiredAnnotationBeanPostProcessor来解析@Autowried



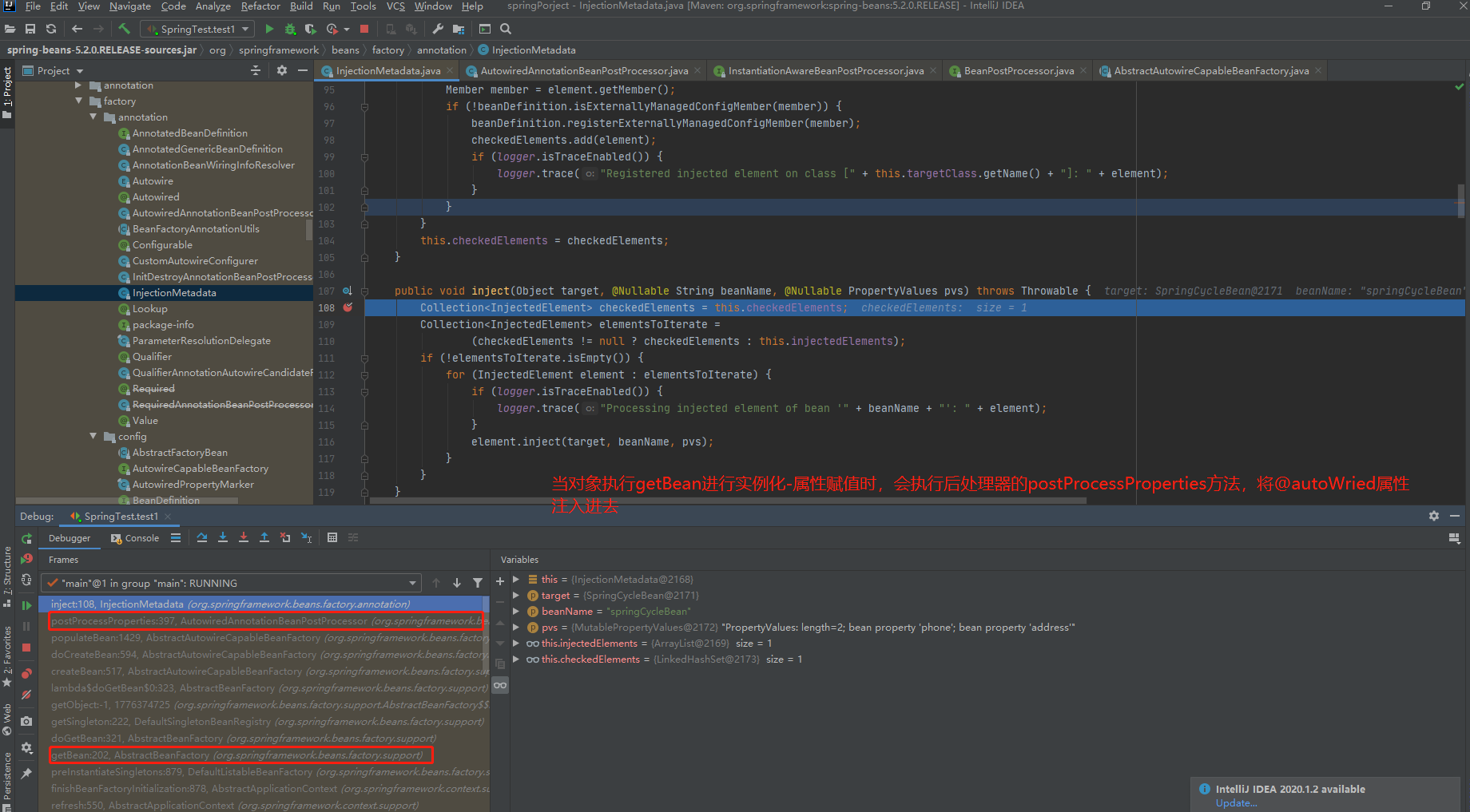
下图，在实例化之后，设置属性之前，由于实现了MergedBeanDefinitionPostProcessor，则会调用postProcessMergedBeanDefinition[这个方法在实例化后属性赋值之前调用]，找到对应的Autowired







当创建的对象要设置属性时，触发了AutowiredAnnotationBeanPostProcessor实现的后处理赋值方法postProcessPropertyValues(此方法是在InstantiationAwareBeanPostProcessorAdapter类中，需要子类重写)

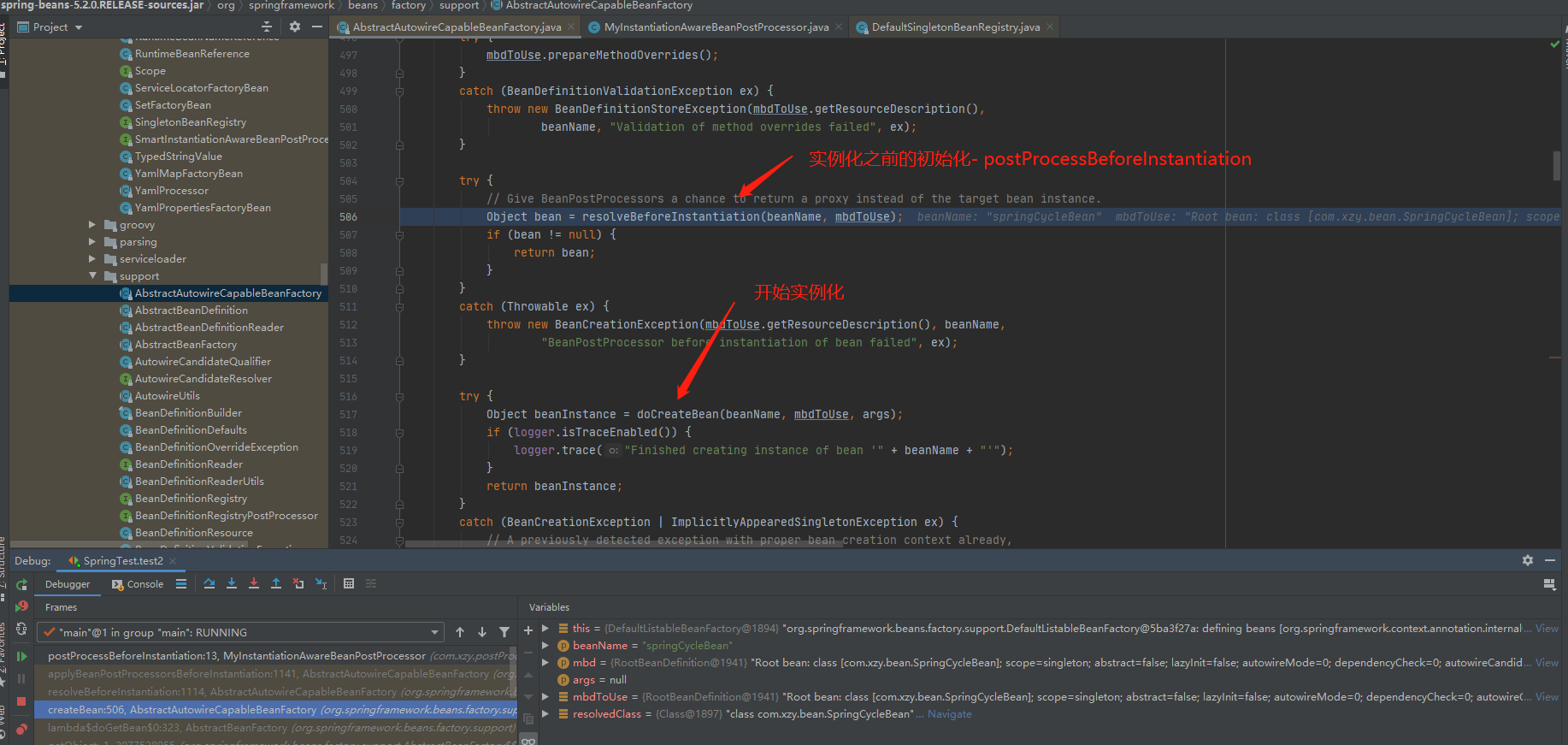


### Spring各种后处理器执行的代码

#### postProcessBeforeInstantiation实例化之前调用

org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory

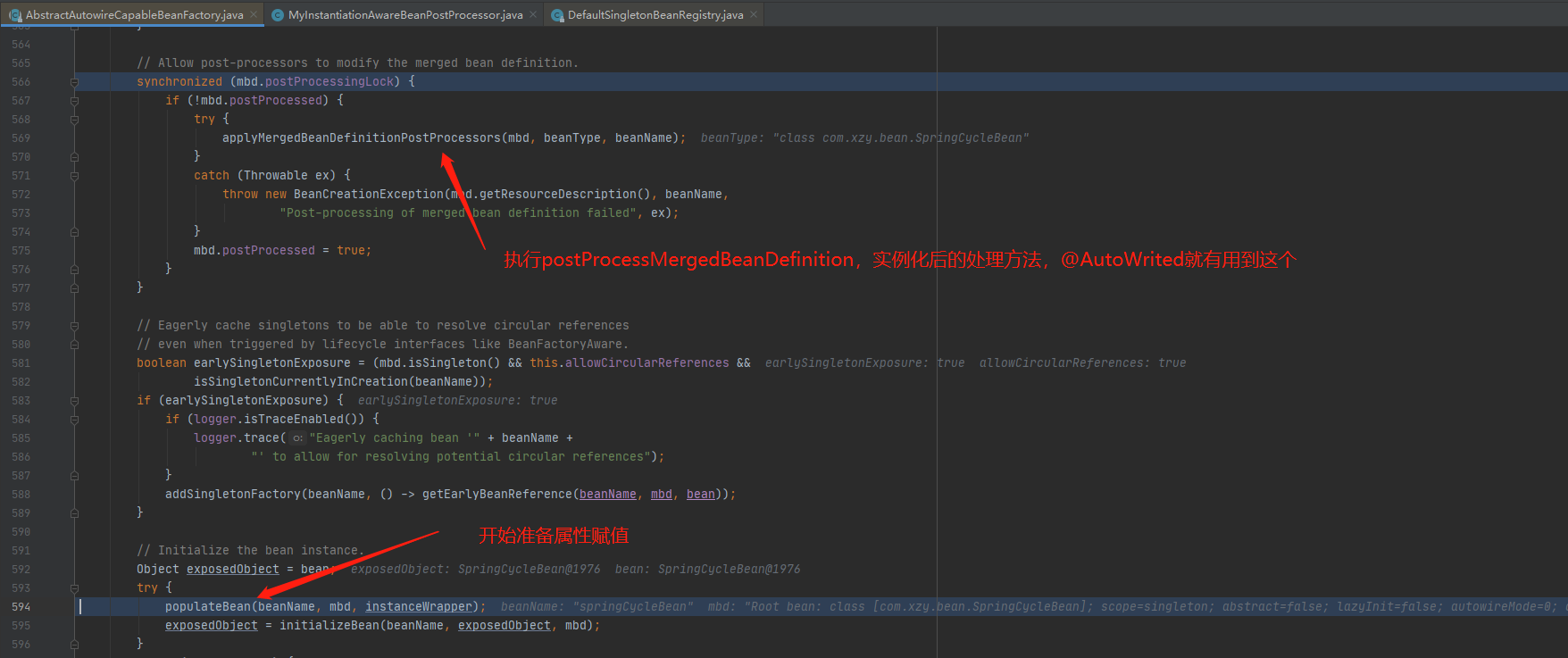
AOP的原理就是基于这个处理器方法，在他之前做了一层代理



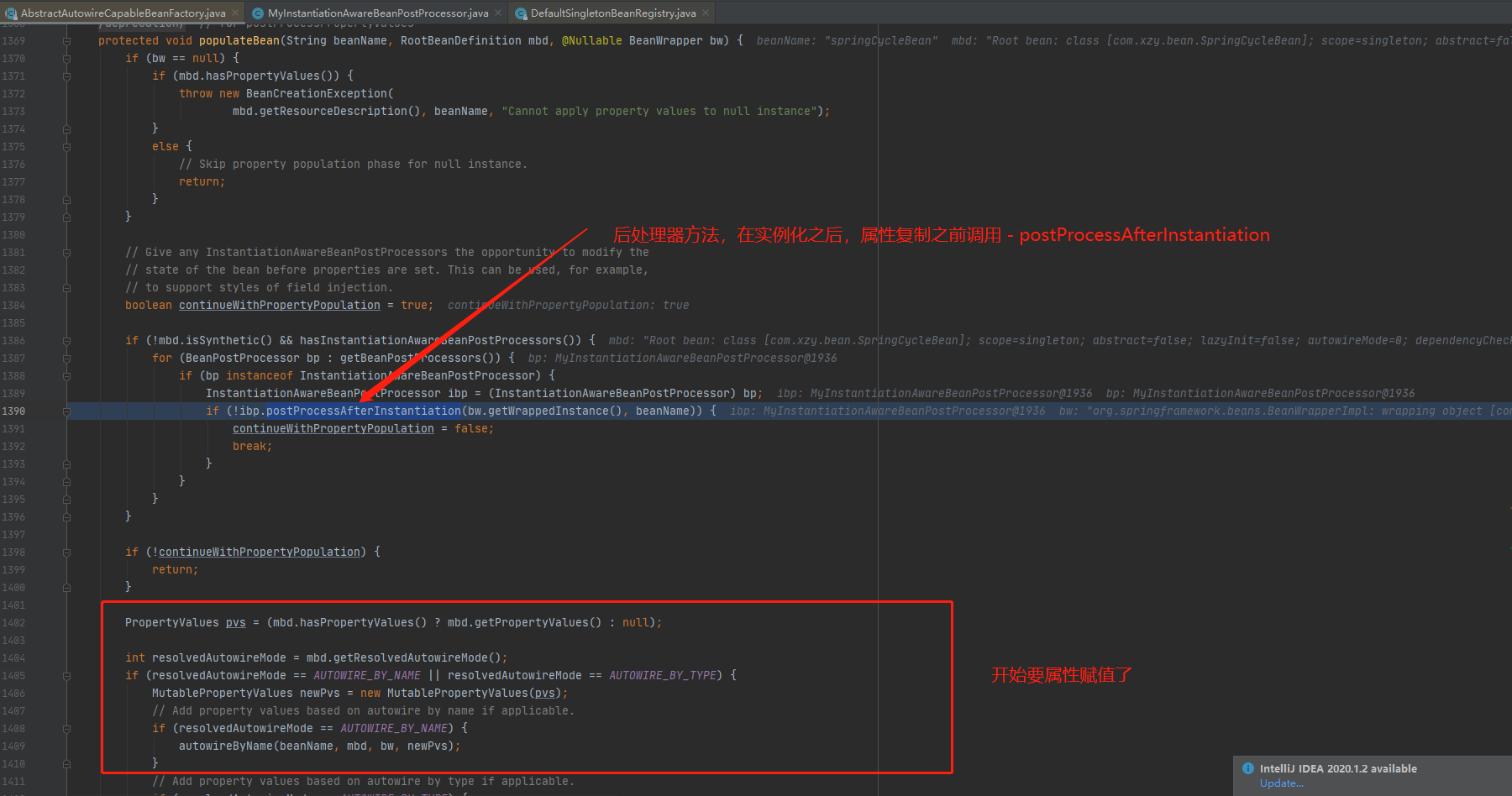
#### postProcessMergedBeanDefinition

org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory

postProcessMergedBeanDefinition和postProcessAfterInstantiation比对，两个都是在实例化之后，属性赋值之前调用，且前者早于后者，目前不清楚之间的区别



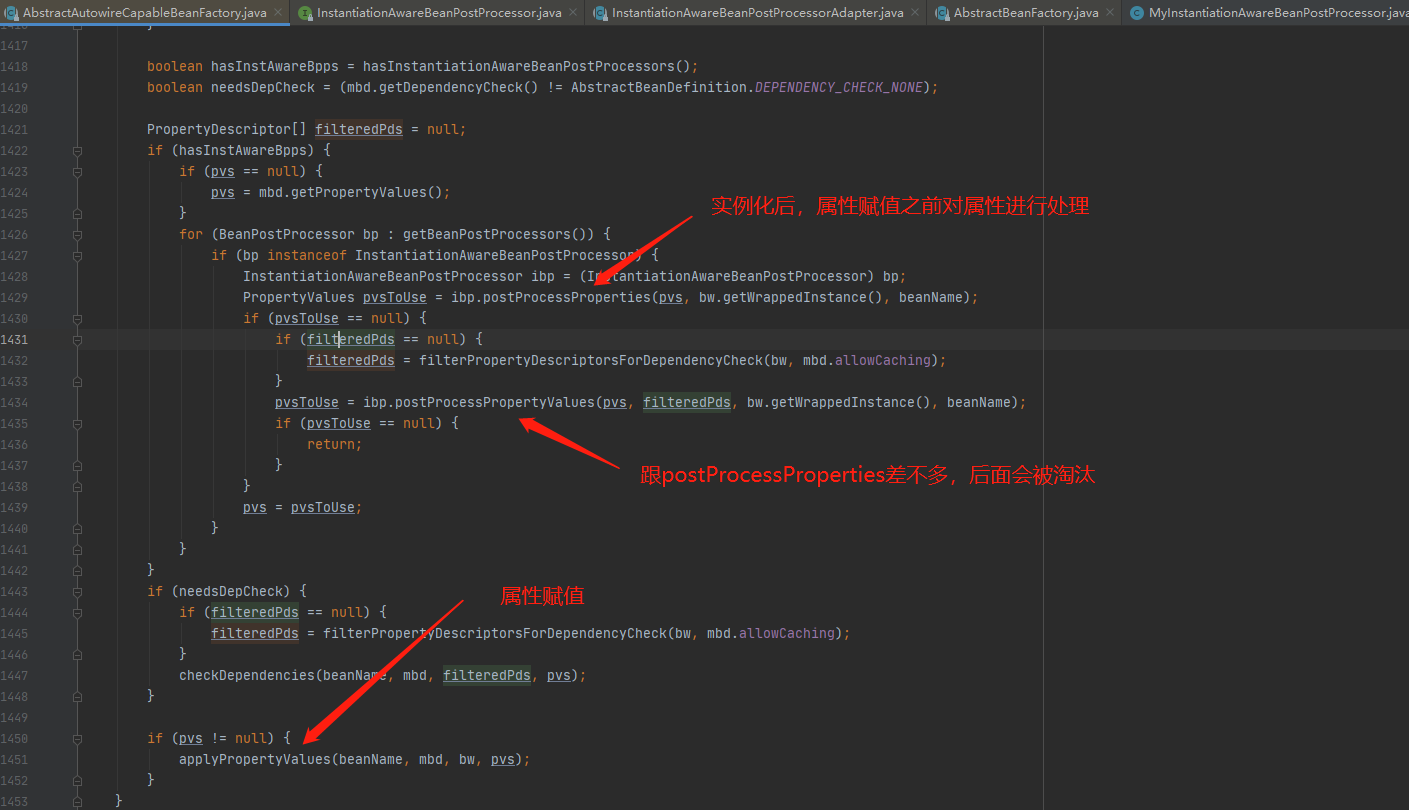
#### postProcessAfterInstantiation

org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory

#### postProcessProperties

org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory

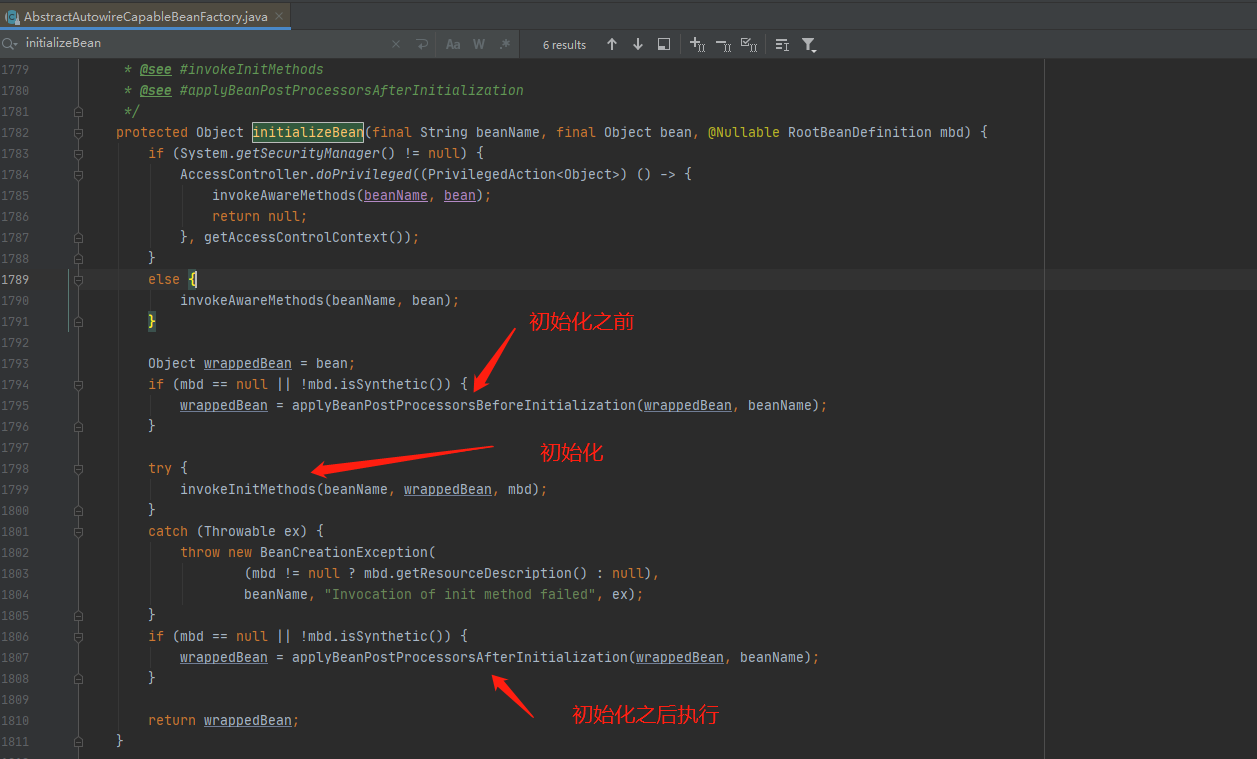
用于在属性赋值之前对属性做一些改动



#### postProcessBeforeInitialization

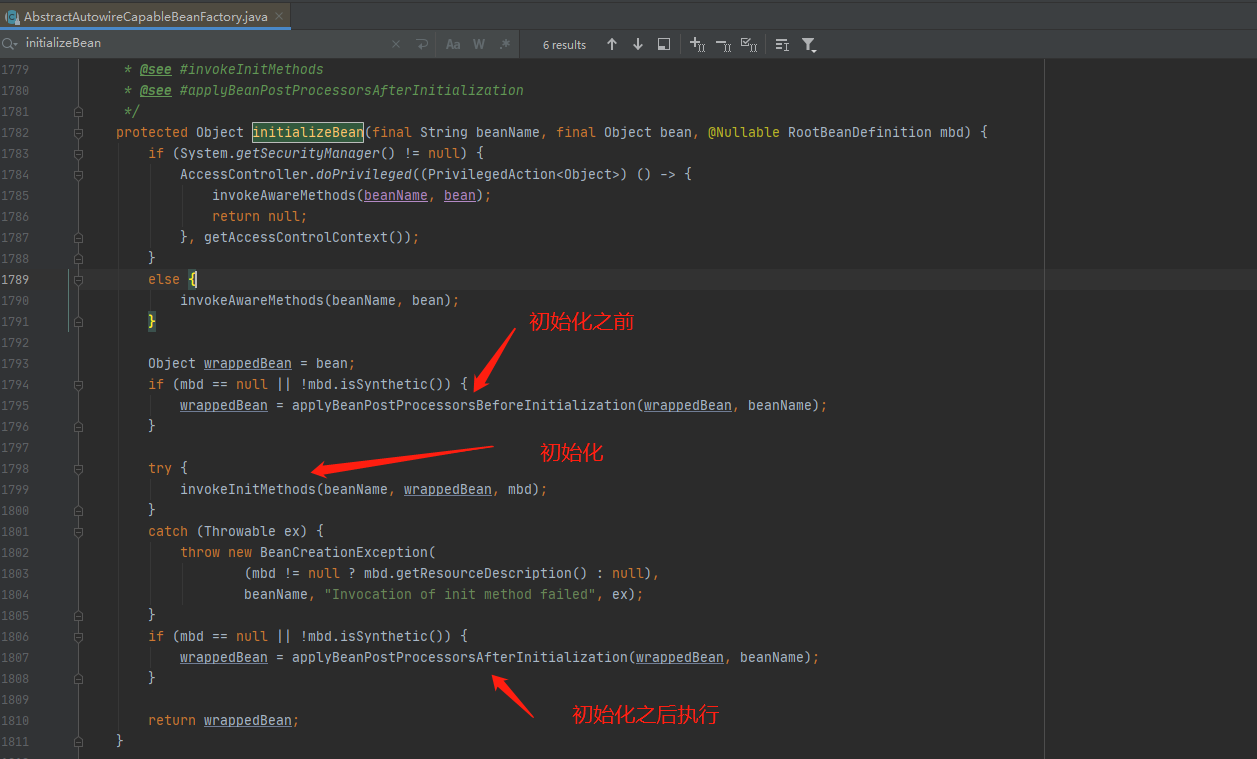
org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory

在初始化之前执行



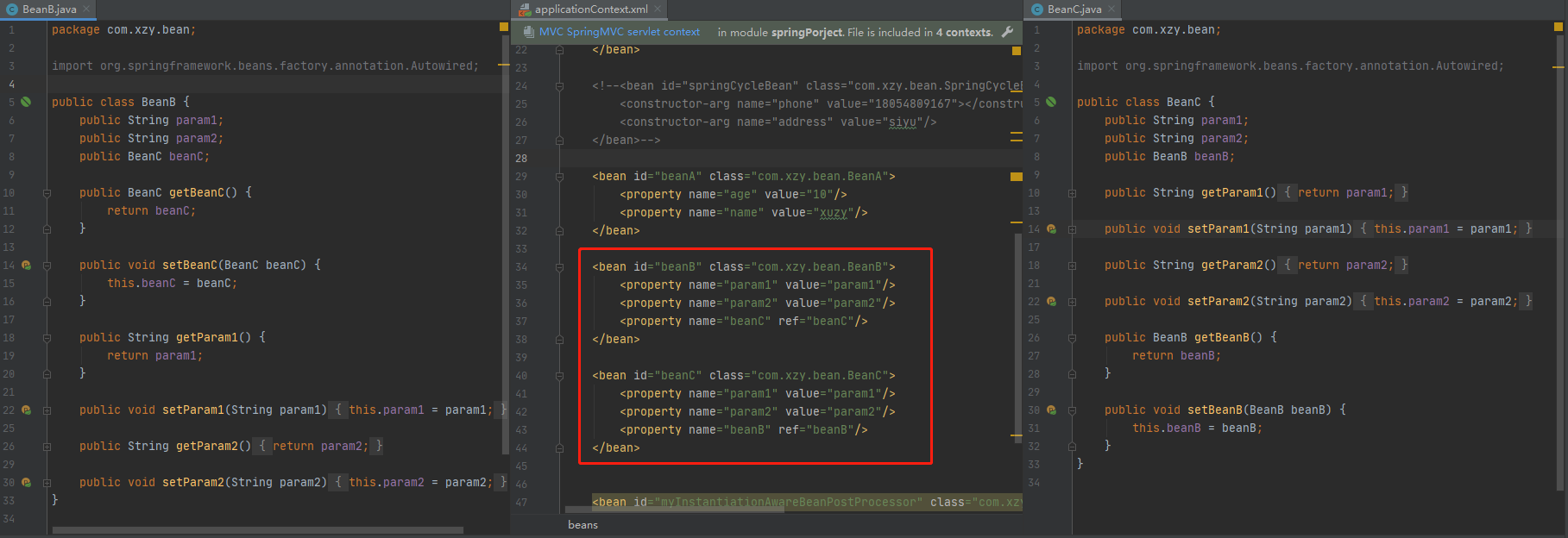
#### postProcessAfterInitialization

org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory



### Spring如何解决循环依赖

#### 循环依赖类设置



#### 相关流程图

