

# Spring: Why is afterPropertiesSet of InitializingBean needed when we have also custom init() or @PostConstruct

Asked 2 years ago   Active 1 year, 8 months ago   Viewed 4k times

Why is `afterPropertiesSet` of `InitializingBean` needed when we have also custom `init()` `@Bean(initMethod = "init")` or `@PostConstruct` ? What actions can I do with one and not do with the other ? When should I use one and not the other. All are callbacks triggered after all properties are autowired.

java   spring   javabeans

asked May 21 '18 at 11:49



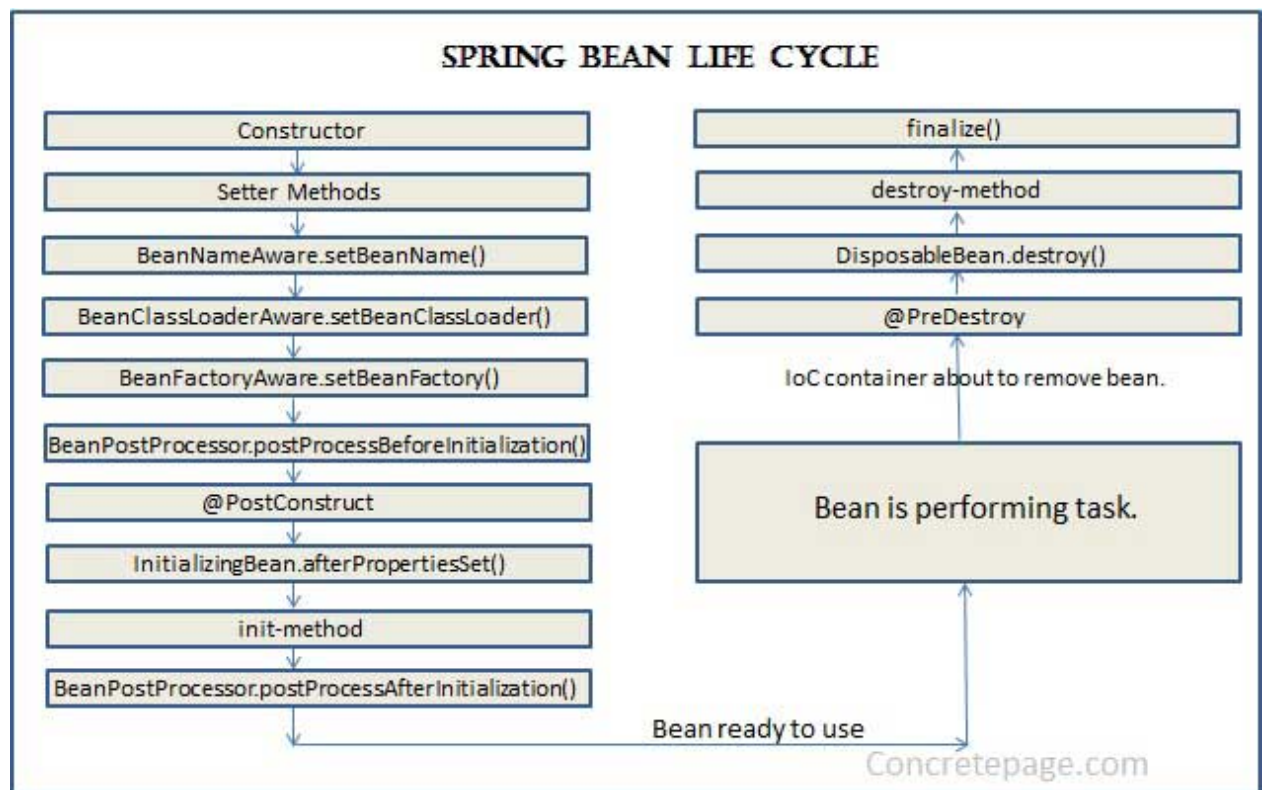
Ida Amit

779 ● 1 ● 6 ● 14

## 1 Answer

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In general, if a bean implements `InitializingBean` , first `@PostConstruct` is called, then the `afterPropertiesSet` and then `init-method` .



`@PostConstruct` is a JSR-250 annotation while `init-method` and `InitializingBean` is Spring's tools for bean initialization.

### InitializingBean vs. init-method

Choosing between Spring tools, `init-method` and `destroy-method` is the recommended approach because of no direct dependency to Spring Framework and we can create our own methods. `init-method` is a way of calling custom method independent of Spring, if you'll decide to go with some other framework, you can reuse this method.

## PostConstruct vs. Spring tools

Spring documentation provides clear explanation about preferable ways of initialization:

To interact with the container's management of the bean lifecycle, you can implement the Spring `InitializingBean` and `DisposableBean` interfaces. The container calls `afterPropertiesSet()` for the former and `destroy()` for the latter to allow the bean to perform certain actions upon initialization and destruction of your beans.

The JSR-250 `@PostConstruct` and `@PreDestroy` annotations are generally considered best practice for receiving lifecycle callbacks in a modern Spring application. Using these annotations means that your beans are not coupled to Spring specific interfaces.

edited Sep 12 '18 at 8:44

answered May 21 '18 at 12:12



J-Alex

5,483 ● 7 ● 34 ● 48

2 ▲ Could you please clarify the difference between `afterPropertiesSet` and `init-method` –  
🚩 [Ida Amit](#) May 21 '18 at 12:26 ✎

▲ @Alma Shvartz First of all, `afterPropertiesSet` called before `init-method` but making a tight coupling of a bean with Spring Framework. `init-method` is a custom method independent of Spring, if you'll decide to go with something else, you can reuse the method. – [J-Alex](#) May 21 '18 at 12:32

▲ @J-Alex, Very nice diagram, with a tiny inaccuracy: `@PostConstruct` is part of `postProcessBeforeInitialization` phase, not a separate action. The details are in [stackoverflow.com/questions/8519187/...](https://stackoverflow.com/questions/8519187/...) – [igor.zh](#) Nov 1 '18 at 20:29