



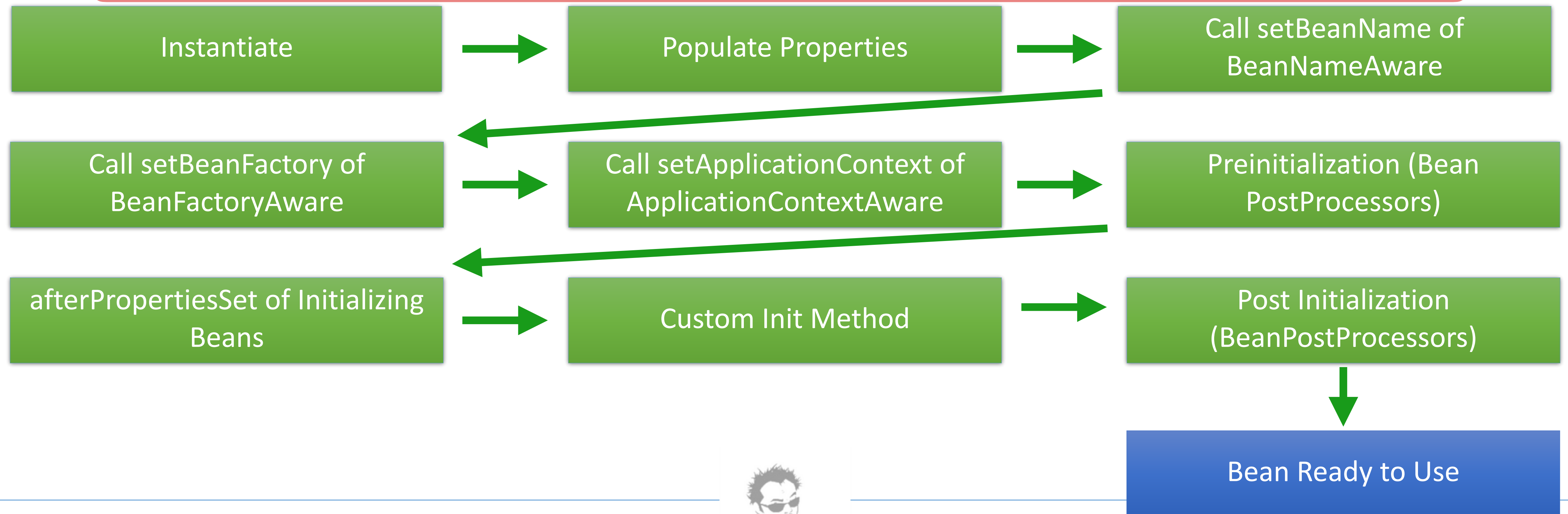
Spring Framework 5

Beginner to Guru

Spring Bean Lifecycle



Spring Bean Lifecycle





Spring Bean Lifecycle

Container Shutdown



@PreDestroy annotated
method



Disposable Bean's destroy()





Callback Interfaces

- Spring has two interfaces you can implement for call back events
- InitializingBean.afterPropertiesSet()
 - Called after properties are set
- DisposableBean.destroy()
 - Called during bean destruction in shutdown



Lifecycle Annotations

- Spring has two annotations you can use to hook into the bean life cycle
- **@PostConstruct** annotated methods will be called after the bean has been constructed, but before its returned to the requesting object
- **@PreDestroy** is called just before the bean is destroyed by the container



Bean Post Processors

- Gives you a means to tap into the Spring context life cycle and interact with beans as they are processed
- Called for all beans in context
- Implement interface **BeanPostProcessor**
 - **postProcessBeforeInitialization** - Called before bean initialization method
 - **postProcessAfterInitialization** - Called after bean initialization





‘Aware’ Interfaces

- Spring has over 14 ‘Aware’ interfaces.
- These are used to access the Spring Framework infrastructure
- These are largely used within the framework
- Rarely used by Spring developers
- Review extensions of the Aware Interface for current interfaces





'Aware' Interfaces

Aware Interface	Description
ApplicationContextAware	Interface to be implemented by any object that wishes to be notified of the ApplicationContext that it runs in.
ApplicationEventPublisherAware	Set the ApplicationEventPublisher that this object runs in.
BeanClassLoaderAware	Callback that supplies the bean class loader to a bean instance.
BeanFactoryAware	Callback that supplies the owning factory to a bean instance.
BeanNameAware	Set the name of the bean in the bean factory that created this bean.
BootstrapContextAware	Set the BootstrapContext that this object runs in.



‘Aware’ Interfaces

Aware Interface	Description
LoadTimeWeaverAware	Set the LoadTimeWeaver of this object's containing ApplicationContext.
MessageSourceAware	Set the MessageSource that this object runs in.
NotificationPublisherAware	Set the NotificationPublisher instance for the current managed resource instance.
PortletConfigAware	Set the PortletConfig this object runs in.
PortletContextAware	Set the PortletContext that this object runs in.
ResourceLoaderAware	Set the ResourceLoader that this object runs in.
ServletConfigAware	Set the ServletConfig that this object runs in.
ServletContextAware	Set the ServletContext that this object runs in.

