Lazy-initialized beans

By default, ApplicationContext implementations eagerly create and configure all singleton beans as part of the initialization process. Generally, this pre-instantiation is desirable, because errors in the configuration or surrounding environment are discovered immediately, as opposed to hours or even days later. When this behavior is not desirable, you can prevent pre-instantiation of a singleton bean by marking the bean definition as lazy-initialized. A lazy-initialized bean tells the IoC container to create a bean instance when it is first requested, rather than at startup.

In XML, this behavior is controlled by the lazy-init attribute on the <bean/> element; for example:

```
<bean id="lazy" class="com.foo.ExpensiveToCreateBean" lazy-init="true"/>

<bean name="not.lazy" class="com.foo.AnotherBean"/>
```

When the preceding configuration is consumed by an ApplicationContext, the bean named lazy is not eagerly pre-instantiated when the ApplicationContext is starting up, whereas the not.lazy bean is eagerly pre-instantiated. However, when a lazy-initialized bean is a dependency of a singleton bean that is not lazy-initialized, the ApplicationContext creates the lazy-initialized bean at startup, because it must satisfy the singleton's dependencies. The lazy-initialized bean is injected into a singleton bean elsewhere that is not lazy-initialized.

You can also control lazy-initialization at the container level by using the default-lazy-init attribute on the <beans/> element; for example:

```
<beans default-lazy-init="true">
        <!-- no beans will be pre-instantiated... -->
</beans>
```