



# Spring Boot Starter Dependencies



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Spring Boot starter dependencies are a cornerstone of its philosophy: *"convention over configuration."* They simplify build configuration by grouping commonly used dependencies into cohesive modules — so instead of figuring out individual dependencies and their versions, you just include one "starter" and go.

### What Are Spring Boot Starters?

A Spring Boot starter is a set of dependencies i.e. a dependency descriptor in `pom.xml` or `build.gradle` that you can include in your project. Each starter provides the transitive dependencies needed to get a feature up and running.

### Key Benefits:

- Auto-includes compatible versions of libraries
- Reduces boilerplate in your build file
- Plays nicely with Spring Boot's auto-configuration



## Commonly Used Spring Boot Starters

Starter	Purpose
<b>spring-boot-starter</b>	<b>Core starter, includes logging and YAML support</b>
<b>spring-boot-starter-web</b>	<b>Build web apps, includes Spring MVC, Jackson, embedded Tomcat</b>
<b>spring-boot-starter-data-jpa</b>	<b>Spring Data JPA, Hibernate</b>
<b>spring-boot-starter-security</b>	<b>Spring Security for authentication &amp; authorization</b>
<b>spring-boot-starter-thymeleaf</b>	<b>Server-side rendering with Thymeleaf</b>
<b>spring-boot-starter-test</b>	<b>Testing support with JUnit, Mockito, Hamcrest</b>
<b>spring-boot-starter-actuator</b>	<b>Monitoring and metrics for production apps</b>
<b>spring-boot-starter-validation</b>	<b>Bean validation with Hibernate Validator</b>
<b>spring-boot-starter-logging</b>	<b>Default logging with Logback</b>



## Example: Using Starters in Maven

```
<dependency>  
  <groupId>org.springframework.boot</groupId>  
  <artifactId>spring-boot-starter-web</artifactId>  
</dependency>
```

## Custom Starters

You can create your own starter for use across multiple projects:

Steps:

1. Create a module with common dependencies.
2. Add Spring Boot's starter parent:

```
<parent>  
  <groupId>org.springframework.boot</groupId>  
  <artifactId>spring-boot-starter-parent</artifactId>  
  <version>3.2.0</version>  
</parent>
```



3. Mark it with custom name & Use it in other projects like  
e.g., mycustomstarter-boot-starter-xyz:

```
<dependency>  
  <groupId>com.mycustomstarter </groupId>  
  <artifactId> mycustomstarter-boot-starter-xyz</artifactId>  
</dependency>
```

## Checking What's Inside a Starter

Each starter is just a pom.xml that aggregates other dependencies.  
To see what's inside ,Search on [Maven Central](#) & Look for the  
starter's POM file

spring-boot-starter-web includes:

- spring-web
- spring-webmvc
- jackson-databind
- spring-boot-starter-json
- spring-boot-starter-tomcat
- spring-boot-starter-logging