

# Maven Dependencies



**Bryan Hansen**

Director of Software Development

@bh5k

# Outline

**Versions**

**Types**

**Transitive Dependencies**

**Scopes**

```
<dependency>
  <groupId>org.apache.commons</groupId>
  <artifactId>commons-lang3</artifactId>
  <version>3.8.1</version>
</dependency>
```

**List what you need**

**Transitive**

**groupId**

**artifactId**

**version**

# Versions

**SNAPSHOT**

**myapp-1.0-SNAPSHOT.jar**

**RELEASE**

**Industry common terms**

**myapp-1.0-M1.jar**

**myapp-1.0-RC1.jar**

**myapp-1.0-RELEASE.jar**

**myapp-1.0-Final.jar**

```
<groupId>com.pluralsight</groupId>
<artifactId>HelloWorld</artifactId>
<version>1.0-SNAPSHOT</version>
<modelVersion>4.0.0</modelVersion>
<packaging>jar</packaging>
```

## Packaging Types

**pom, jar, war, ear, maven-plugin**

**Default jar**

## Dependency Pom or Bill of Materials

# Transitive Dependencies

If you add a dependency:

```
<dependency>
    <groupId>org.hibernate</groupId>
    <artifactId>hibernate-core</artifactId>
    <version>5.4.1.Final</version>
</dependency>
```

Downloaded Transitive Dependencies:

- antlr : 2.7.7 [compile]
- byte-buddy : 1.9.5 [compile]
- classmate : 1.3.4 [compile]
- commons-lang3 : 3.8.1 [compile]
- dom4j : 2.1.1 [compile]
- FastInfoSet : 1.2.15 [compile]
- hibernate-commons-annotations : 5.1.0.Final [compile]
- hibernate-core : 5.4.1.Final [compile]
- istack-commons-runtime : 3.0.7 [compile]
- jandex : 2.0.5.Final [compile]
- javassist : 3.24.0-GA [compile]
- javax.activation-api : 1.2.0 [compile]
- javax.persistence-api : 2.2 [compile]
- jaxb-api : 2.3.1 [compile]
- jaxb-runtime : 2.3.1 [compile]
- jboss-logging : 3.3.2.Final [compile]
- jboss-transaction-api\_1.2\_spec : 1.1.1.Final [compile]
- stax-ex : 1.8 [compile]
- txw2 : 2.3.1 [compile]

# Scopes

`compile`

`provided`

`runtime`

`test`

`system`

`import`



**Add a dependency**

**Reference transitive dependencies**

**Use scopes**

# Summary

**Version numbers**

**SNAPSHOT**

**Types**

**Transitive dependencies**

**Scopes**