

Professional Skills
Agile Fundamentals
Jira
Git
Databases Introduction
Java Beginner
Maven <ul style="list-style-type: none"><li>What is Maven?</li><li>Adding Dependencies</li><li>Goals and Phases</li><li>Versioning</li><li>Packaging Java Applications (.jar)</li></ul>
Testing (Foundation)
Java Intermediate
HTML
CSS
Javascript
Spring Boot
Selenium
Sonarqube
Advanced Testing (Theory)
Cucumber
MongoDB
Express
NodeJS
React
Express-Testing
Networking
Security
Cloud Fundamentals

# Versioning

## Contents

- [Overview](#)
  - [Snapshot Version](#)
  - [Release Version](#)
- [Tutorial](#)
- [Exercises](#)

## Overview

Maven versioning follows a system similar to semantic versioning. Each version number will consist of three elements; major version, minor version, and incremental version. **Incremental** is increased when the changes that we are making are only bug fixes. **Minor** is increased when we add new features or improvements that are backwards compatible with the previous version, and the incremental version will be reset to 0. **Major** is increased when we add new features or improvements that are not backwards compatible with the previous version, and both the minor and incremental versions will be reset to 0.

### Snapshot Version

Maven versioning also allows for the string "-SNAPSHOT" to be appended to the end of the version number. This string is used for versions that are *in development* where the functionality and code base can be changing on a day to day basis. Snapshot versions will usually be one version number higher than the most recent release with the "-SNAPSHOT" string appended. The level of version we increment (major, minor, incremental) will depend on the work we plan on doing on the project.

For example if we were implementing additional functionality that is backwards compatible with the previous release we would increment the minor version by one and append "-SNAPSHOT". So if our previous release was version **1.12.4** our development version number would be **1.13.0-SNAPSHOT**.

### Release Version

Once our "-SNAPSHOT" version is ready to be deployed we can release it with a release version number. The release version number will simply be the development version with the "-SNAPSHOT" string removed. So if we had a development version of **1.13.0-SNAPSHOT** then our release version would be **1.13.0**.

## Tutorial

The version number of your project can be found at the top of your **pom.xml** like the following.

AWS Foundations
AWS Intermediate
Linux
DevOps
Jenkins Introduction
Jenkins Pipeline
Markdown
IDE Cheatsheet

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <groupId>com.qa</groupId>
  <artifactId>versioning-example</artifactId>
  <version>1.0.0-SNAPSHOT</version>

</project>
```

Any properties, dependencies etc. will come after the version number of your project.

## Exercises

There are no exercises for this module.