Exec Maven Plugin - Running Java Programs from Maven Build

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Maven

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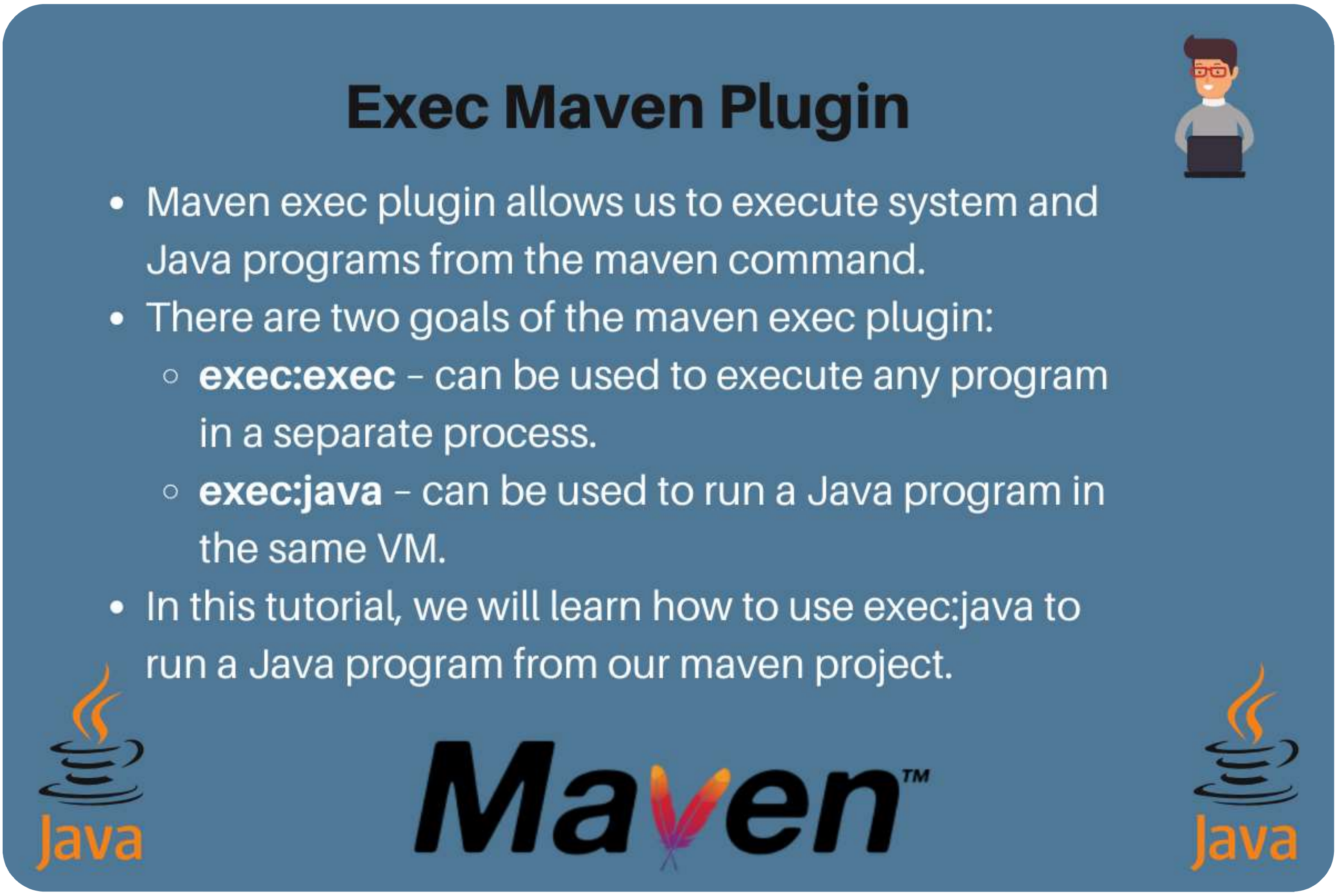

Exec Maven Plugin

- Maven exec plugin allows us to execute system and Java programs from the maven command.
- There are two goals of the maven exec plugin:
  - **exec:exec** – can be used to execute any program in a separate process.
  - **exec:java** – can be used to run a Java program in the same VM.
- In this tutorial, we will learn how to use exec:java to run a Java program from our maven project.

While we believe that this content benefits our community, we have not yet thoroughly reviewed it. If you have any suggestions for improvements, please let us know by clicking the "report an issue" button at the bottom of the tutorial.

Maven exec plugin allows us to execute system and Java programs from the maven command.

There are two goals of the maven exec plugin:

1. **exec:exec** - can be used to execute any program in a separate process.
2. **exec:java** - can be used to run a Java program in the same VM.

In this tutorial, we will learn how to use **exec:java** to run a Java program from our maven project.

Step 1: Adding exec-maven-plugin Configurations to pom.xml

If you want to use any maven plugin, you need to configure it in the pom.xml build section. Just add the below plugin configuration to your project pom.xml file.

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```
<plugin>
                <groupId>org.codehaus.mojo</groupId>
                <artifactId>exec-maven-plugin</artifactId>
                <version>1.6.0</version>
                <configuration>
                        <mainClass>com.journaldev.maven.utils.BuildInfo</mainClass>
                </configuration>
</plugin>
```

The most important point to note here is the “**mainClass**” element inside the “**configuration**”. This is where we specify the Java class that will be executed by the **exec:java** goal.

Here is the content of the Java class. It’s a simple class where we are printing Java version details and the current time.

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```
package com.journaldev.maven.utils;

import java.time.LocalDateTime;

public class BuildInfo {

        public static void main(String[] args) {
                String javaVersion = Runtime.version().toString();
                String time = LocalDateTime.now().toString();
                System.out.println("********\nBuild Time: " + time
                                + "\nJava Version: " + javaVersion + "\n********");
        }

}
```

Step 2: Running the maven build with exec:java goal

Here is the output when we run the maven build with the exec:java goal.

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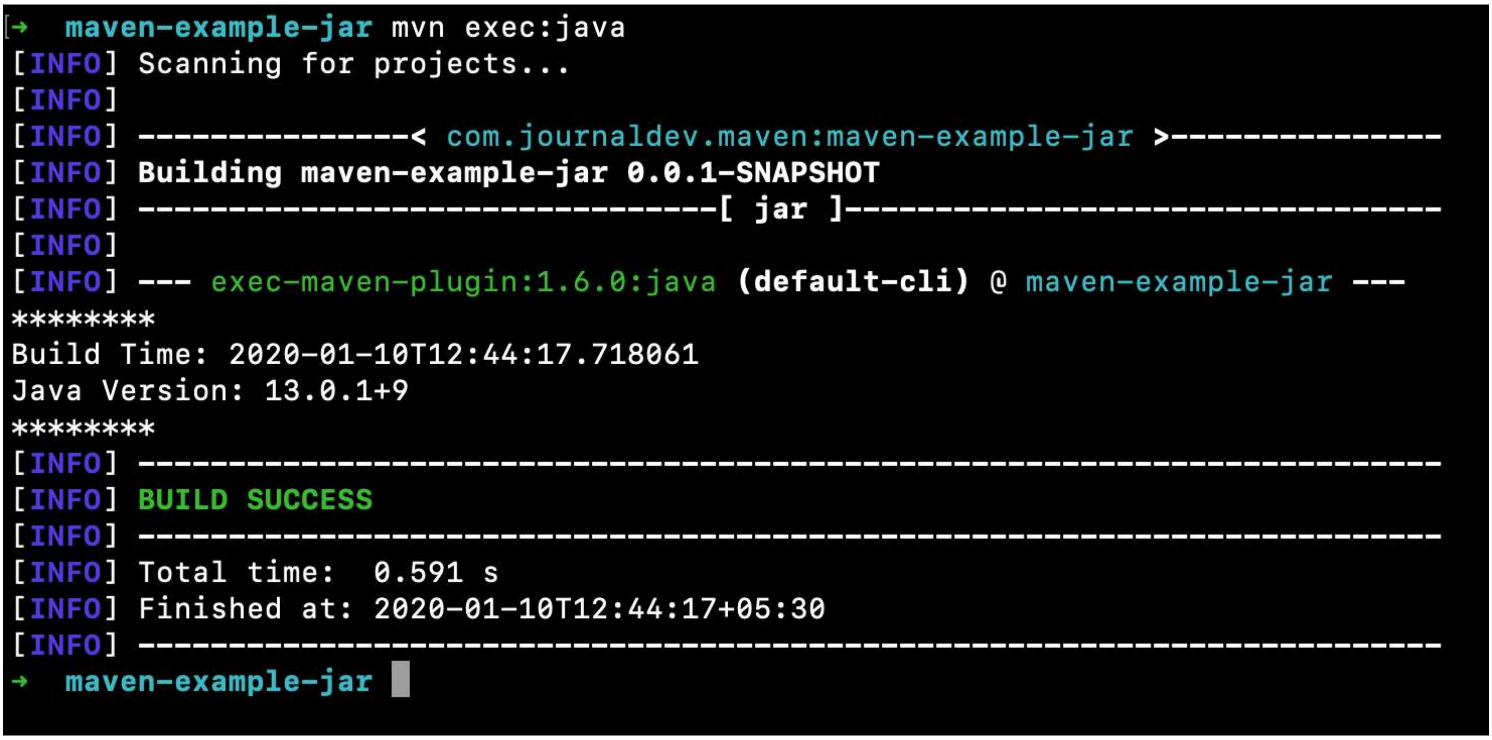
```
$ mvn exec:java
[INFO] Scanning for projects...
[INFO]
[INFO] ---------------< com.journaldev.maven:maven-example-jar >---------------
[INFO] Building maven-example-jar 0.0.1-SNAPSHOT
[INFO] --------------------------------[ jar ]---------------------------------
[INFO]
[INFO] --- exec-maven-plugin:1.6.0:java (default-cli) @ maven-example-jar ---
********
Build Time: 2020-01-10T12:44:17.718061
Java Version: 13.0.1+9
********
```

```
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  0.591 s
[INFO] Finished at: 2020-01-10T12:44:17+05:30
[INFO] ------------------------------------------------------------------------
$
```



```
→  maven-example-jar mvn exec:java
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→  maven-example-jar
```

Exec Maven Plugin Java Example