

The logo features the word "maven" in a bold, black, sans-serif font. The letter "a" is unique, containing a vibrant, multi-colored feather with shades of red, orange, yellow, and blue. A thick black horizontal line cuts through the middle of the feather, extending from the "m" to the "n". Above the feather, the word "Apache" is written in a large, bold, black, sans-serif font.

**maven**

## Maven Build Life Cycle

**mvn clean** : to clean local repo.

**mvn compile** : to compile the code

**mvn test** : to apply test cases

**mvn package** : to prepare a Package

**mvn install** : to Install a file Local Repo. [ .m2]

**mvn deploy** : to deploy a file remote server /  
Global repos (nexus)

# Example POM

```
<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.companyname.project-group</groupId>
    <artifactId>project</artifactId>
    <version>1.0</version>
</project>
```

# Maven install

- **#apt-get update**
- **#apt-get install openjdk-7-jdk -y**
- **#apt-get install tomcat7 –y**
- **#apt-get install maven -y (or)**
- **#apt-get install maven2 -y**
- **#mvn -version**

# Distribution Installation

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Apache Maven Project <http://maven.apache.org/>

Apache / Maven / Download Apache Maven 

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## Downloading Apache Maven 3.5.2

### Files

Maven is distributed in several formats for your convenience. Simply pick a ready-made binary distribution archive and follow the [installation instructions](#). Use a source archive if you intend to build Maven yourself.

In order to guard against corrupted downloads/installations, it is highly recommended to [verify the signature](#) of the release bundles against the public [KEYS](#) used by the Apache Maven developers.

	Link	Checksum	Signature
Binary tar.gz archive	<a href="#">apache-maven-3.5.2-bin.tar.gz</a>	<a href="#">apache-maven-3.5.2-bin.tar.gz.md5</a>	<a href="#">apache-maven-3.5.2-bin.tar.gz.asc</a>
Binary zip archive	<a href="#">apache-maven-3.5.2-bin.zip</a>	<a href="#">apache-maven-3.5.2-bin.zip.md5</a>	<a href="#">apache-maven-3.5.2-bin.zip.asc</a>
Source tar.gz archive	<a href="#">apache-maven-3.5.2-src.tar.gz</a>	<a href="#">apache-maven-3.5.2-src.tar.gz.md5</a>	<a href="#">apache-maven-3.5.2-src.tar.gz.asc</a>
Source zip archive	<a href="#">apache-maven-3.5.2-src.zip</a>	<a href="#">apache-maven-3.5.2-src.zip.md5</a>	<a href="#">apache-maven-3.5.2-src.zip.asc</a>

DevOps by SATIAH @ SathyaTech

# Distribution Installation

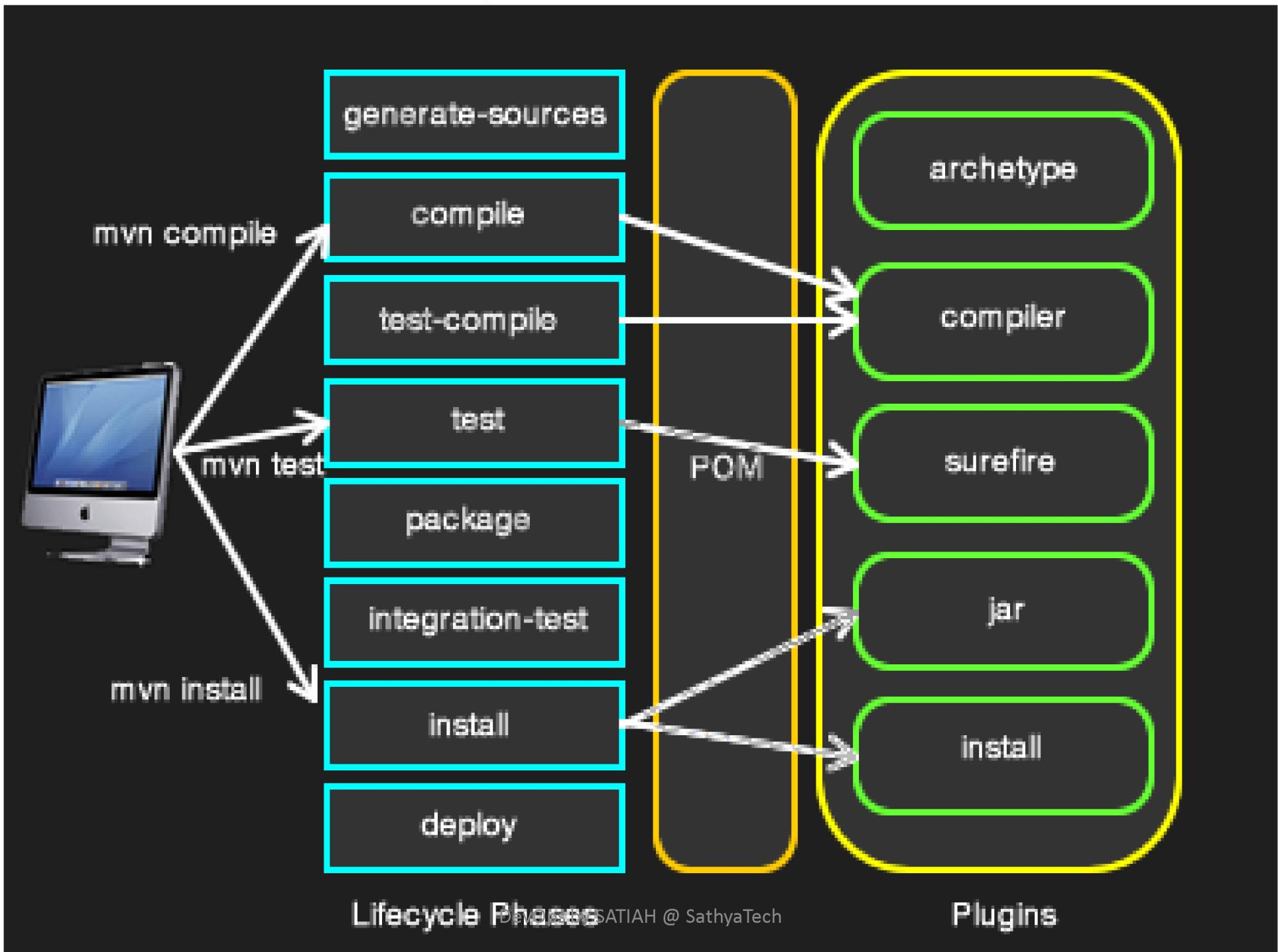
```
#vi ~/.profile (or) #vi ~/.bashrc  
export JAVA_HOME="/opt/jdk1.8.0_151"  
export PATH=$JAVA_HOME/bin:$PATH
```

```
export CATALINA_HOME="/opt/apache-tomcat-9.0.2"  
export PATH=$CATALINA_HOME/bin:$PATH
```

```
export M2_HOME="/opt/apache-maven-3.5.2"  
export PATH=$M2_HOME/bin:$PATH
```

```
export ANT_HOME="/opt/apache-ant-1.10.1"  
export PATH=$ANT_HOME/bin:$PATH
```

```
# source .profile
```



## Maven - Tomcat Deployment

### Step-1 : Tomcat Authentication

Add an user with roles manager-gui and manager-script.

```
#vi %TOMCAT7_PATH%/conf/tomcat-
users.xml

<tomcat-users>

    <role rolename="manager-gui"/>
    <role rolename="manager-script"/>
    <user username="admin"
password="password" roles="manager-
gui,manager-script" />

</tomcat-users>
```

## Maven - Tomcat Deployment

### Step-2 : Maven Authentication

Add above Tomcat's user in the Maven setting file, later Maven will use this user to login Tomcat server.

```
# vi %MAVEN_PATH%/.m2/settings.xml
```

```
<servers>
```

```
  <server>
```

```
    <id>TomcatServer</id>
```

```
    <username>admin</username>
```

```
    <password>password</password>
```

```
  </server>
```

```
</servers>
```

## Maven - Tomcat Deployment

### Step-3 : Tomcat7 Maven Plugin

Declares a Maven Tomcat plugin.

```
# vi %project%/pom.xml
```

```
<plugin>
```

```
  <groupId>org.apache.tomcat.maven</groupId>
```

```
  <artifactId>tomcat7-maven-plugin</artifactId>
```

```
  <version>2.2</version> <configuration>
```

```
    <url>http://localhost:8080/manager/text</url>
```

```
    <server>TomcatServer</server>
```

```
    <path>/myproj</path> </configuration>
```

```
</plugin>
```

## Maven - Tomcat Deployment

### Step-4 : Deploy to Tomcat

Commands to manipulate WAR file on Tomcat.

**# mvn compile**

**# mvn package**

**# mvn tomcat7:deploy**

**# mvn tomcat7:undeploy**

**# mvn tomcat7:redeploy**

then you can check in /opt/tomcat/webapps

### Step-5 : Deploy to Tomcat

**Browser → https://localhost:8080/myproj**