

# Archetype creation

从“现有项目”创建“原型”，包括三个步骤：

Creating an archetype from an existing project involves three steps:

- the archetype resolution 原型解析
- the archetype installation:deployment 原型安装:部署
- the archetype usage 使用原型

## Usage

动手实践一下吧！！！！

Calling `mvn archetype:create-from-project` the plugin first resolves the

package by guessing the project directory. 1. 先通过猜测项目目录解析包，然后生成“原型的目录树”

It then generates the directory tree of the archetype in the `target/generated-sources/archetype` directory.

```
mvn archetype:create-from-project mvn archetype:create-from-project
[INFO] Scanning for projects...
[INFO] Searching repository for plugin with prefix: 'archetype'.
[INFO] -----
-----
[INFO] Building project
[INFO]   task-segment: [archetype:create-from-project]
[INFO] -----
-----
[INFO] Preparing archetype:create-from-project
[INFO] No goals needed for project - skipping
[INFO] Setting property: classpath.resource.loader.class => 'org.codehaus.plexus.velocity.ContextClassLoaderResourceLoader'.
[INFO] Setting property: velocimacro.messages.on => 'false'.
[INFO] Setting property: resource.loader => 'classpath'.
[INFO] Setting property: resource.manager.logwhenfound => 'false'.
[INFO] [archetype:create-from-project]
[INFO] Setting default archetype's groupId: com.company
[INFO] Setting default archetype's artifactId: project
[INFO] Setting default archetype's version: 1.0-SNAPSHOT
[INFO] Setting default groupId: com.company
[INFO] Setting default artifactId: project
[INFO] Setting default version: 1.0-SNAPSHOT
[INFO] Setting default package: com.company.project
[INFO] Archetype created in target/generated-sources/archetype
[INFO] -----
-----
[INFO] BUILD SUCCESSFUL
[INFO] -----
-----
[INFO] Total time: 4 seconds
[INFO] Finished at: Fri Feb 22 21:49:52 GMT 2008
[INFO] Final Memory: 10M/26M
[INFO] -----
-----
```

Then move to that generated directory and call `mvn install` on the created archetype.

## 2. 安装 “创建的原型” 到本地仓库

```
$ cd target/generated-sources/archetype/
$ mvn install
```

`cd target/generated-sources/archetype/`  
`mvn clean install -Dmaven.test.skip=true`

```
[INFO] Scanning for projects...
[INFO] -----
[INFO] Building project
[INFO]   task-segment: [install]
[INFO] -----
[INFO] [resources:resources]
[INFO] Using default encoding to copy filtered resources.
[INFO] [resources:testResources]
[INFO] Using default encoding to copy filtered resources.
[INFO] Setting property: classpath.resource.loader.class => 'org.codehaus
aus.plexus.velocity.ContextClassLoaderResourceLoader'.
[INFO] Setting property: velocimacro.messages.on => 'false'.
[INFO] Setting property: resource.loader => 'classpath'.
[INFO] Setting property: resource.manager.logwhenfound => 'false'.
[INFO] [archetype:jar]
[INFO] [archetype:add-archetype-metadata]
[INFO] [archetype:integration-test]
[INFO] [install:install]
[INFO] Installing /home/local/rafale/projects/tmp/project/target/gener
ated-sources/archetype/target/project-1.0-SNAPSHOT.jar to /home/rafale
/.m2/repository/com/company/project/1.0-SNAPSHOT/project-1.0-SNAPSHOT.
jar
[INFO] [archetype:update-local-catalog]
[INFO] -----
[INFO] BUILD SUCCESSFUL
[INFO] -----
[INFO] Total time: 10 seconds
[INFO] Finished at: Fri Feb 22 21:51:57 GMT 2008
[INFO] Final Memory: 14M/35M
[INFO] -----
```

Finally move to a fresh directory and use your archetype.

## 3. 使用原型

```
$ mkdir /tmp/archetype
$ cd /tmp/archetype
$ mvn archetype:generate -DarchetypeCatalog=local
```

`mvn archetype:generate -DarchetypeCatalog=local`

```
[INFO] Scanning for projects...
[INFO] Searching repository for plugin with prefix: 'archetype'.
[INFO] -----
[INFO] Building Maven Default Project
```

```
[INFO] task-segment: [archetype:generate] (aggregator-style)
[INFO] -----
-----
[INFO] Preparing archetype:generate
[INFO] No goals needed for project - skipping
[INFO] Setting property: classpath.resource.loader.class => 'org.codehaus.plexus.velocity.ContextClassLoaderResourceLoader'.
[INFO] Setting property: velocimacro.messages.on => 'false'.
[INFO] Setting property: resource.loader => 'classpath'.
[INFO] Setting property: resource.manager.logwhenfound => 'false'.
[INFO] [archetype:generate]
Choose archetype:
1: local -> project (project)
Choose a number or apply filter (format: [groupId:]artifactId, case sensitive contains): 1:
```

## Configuration

允许用户使用“系统属性或属性文件”提供一些敏感配置

The `create-from-project` goal enable the user to provide some sensible configuration using the system properties or a property file.

The `system properties` permits the user to define the `groupId`, `artifactId`, `version` of the created archetype. They also permits to override the resolved package and to create a partial archetype.

When used, the `property file` takes precedence over the system properties. It is also the only way to define additional properties in the archetype.