

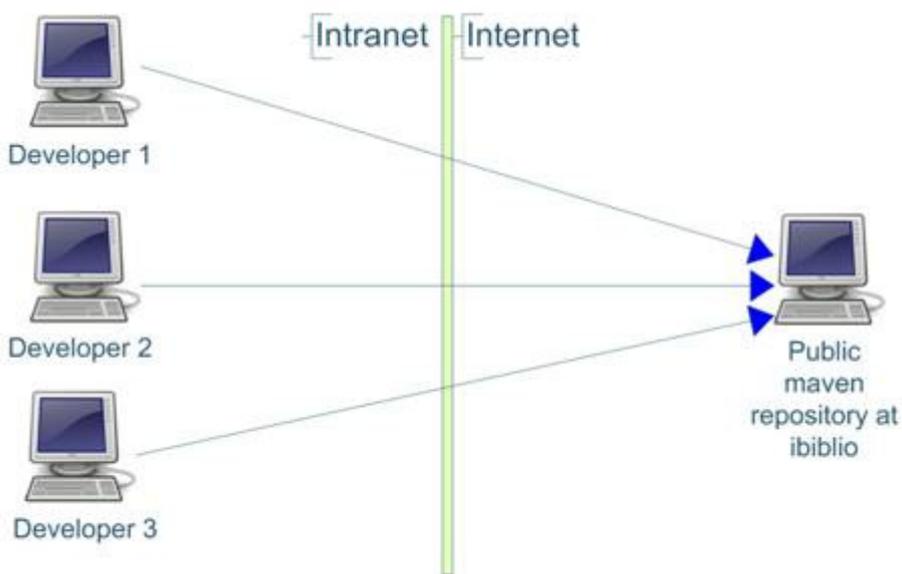
## Repository

### Summary

Maven Repository is a repository for artifacts and is composed of local and remote repositories. It call and use the dependencies declared in the pom.xml of the project form the repositories.

### Description

- With the installation of Maven, the repository to store and mange Maven artifacts are automatically installed.  
It is basically installed in C:\ Documents and Settings\ Administrator\ .m2\ repository.
- Maven remote repository  
This contains the central repository provided by Maven and the remote repository provided by enterprises and other organizations.  
The developer can use the environment setup to download and use the artifacts needed by the one or more external repositories.



- Local repository: this caches artifacts in the local file system; it downloads artifacts from the remote repository and stores and manages them.
- Remote repository: this provides almost all artifacts except the ones provided by 3<sup>rd</sup> parties via HTTP servers.

### Environmental settings

In the settings.xml file, Maven' s environment setup file, you can change the location of the local repository and set up the remote repository.

#### Local Repository Location Change

```
<settings>
  <!-- localRepository
    | The path to the local repository maven will use to store artifacts.
    |
    | Default: ~/.m2/repository-->
  <localRepository>C:/java/.m2/repository</localRepository>
</settings>
```

#### Nexus Interface Setting

## Manual

### Maven Repository Call Process

In general, the required libraries are located in the internal directories of the project and used by designating the path, but in Maven, they are used and managed by using the dependency mechanism (libraries declared in the configuration file).

1. Declare libraries in the pom.xml of the project 2. Search for the libraries declared in the developer' s local repository.

1. If libraries exist, cache them in the project
2. if they don' t, request to the remote repository

3. Search for the libraries declared in the remote repository.

1. The local repository downloads and store the found artifacts from the remote repository.

### Structure of the Local Repository and How to Store Artifacts

Directory Structure where the artifacts are stored

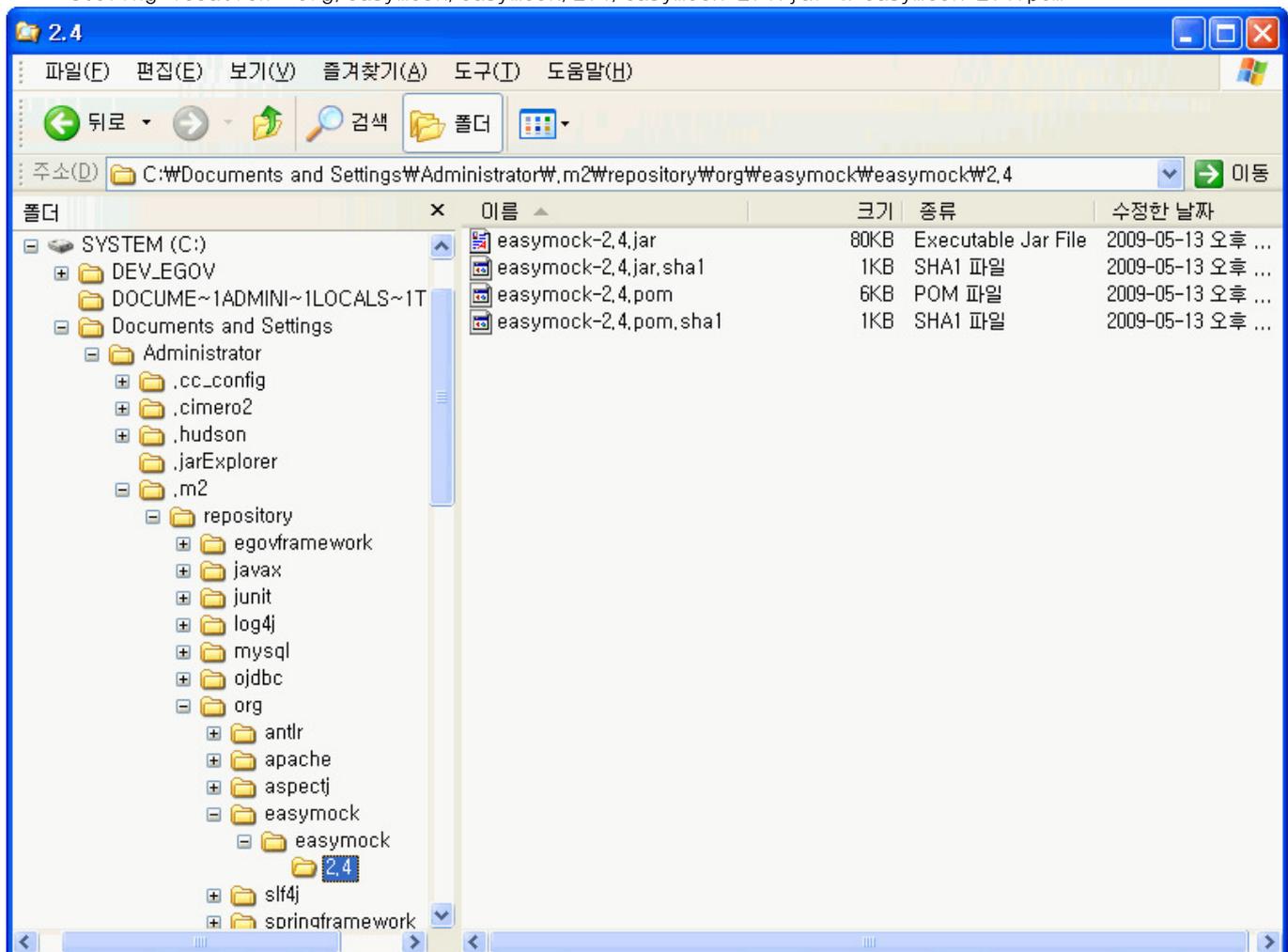
: groupId / artifact name / version / artifact name-version.jar & artifact name-version.pom

Example) groupId: org.easymock

artifactId: easymock

version: 2.4

- Storing location: org/easymock/easymock/2.4/easymock-2.4.jar & easymock-2.4.pom



## References

