

Maven Repositories Search Order

- When resolving an artifact, Maven will:
 - First: Check in the local repository (aka cache) located under <user home>/.m2/repository/
 - Next: Maven Central
 - Next: any additional repositories configured
- Search order of additional repositories:
 - Typically not important
 - Is Alphabetical by repository id value





Repository Mirrors

- Mirrors are used to override project defined repository values
- Mirrors are configured in settings.xml.
 - Default location is in <user home>/.m2 directory
- A mirror will override the URL of the repository
- Can be used to improve performance by directing to regional servers
- Or to redirect to internal repository manager
- Values set in settings.xml will apply to all Maven projects executed on system





Defining Additional Remote Repositories

- Repositories can be defined in the repositories element of the POM, or in the repositories element in the settings.xml file.
 - POM definitions will be specific to the Maven project
 - settings.xml definitions are system wide





Repository Element

- id unique value required
- name human readable name
- url URL for repository
- layout legacy or default (Default is generally used)
- releases Repository Policy for handling downloading of releases
- snapshots Repository Policy for handling downloading of snapshots





Repository Policy

- Used for release and snapshot elements of Repository definitions
- enabled true / false
- updatePolicy always, daily (default), interval:XXX (xxx in minutes), never
- checksumPolicy What to do if verification of artifact fails
 - values: ignore, fail, warn





Example

```
<repositories>
    <repository>
       <id>spring-snapshots</id>
       <name>Spring Snapshots</name>
       <url>https://repo.spring.io/snapshot</url>
       <snapshots>
           <enabled>true</enabled>
       </snapshots>
    </repository>
    <repository>
       <id>spring-milestones</id>
       <name>Spring Milestones</name>
       <url>https://repo.spring.io/milestone</url>
       <snapshots>
           <enabled>false
       </snapshots>
    </repository>
    <repository>
       <id>spring-releases</id>
       <name>Spring Releases</name>
       <url>https://repo.spring.io/release</url>
       <snapshots>
           <enabled>false
       </snapshots>
    </repository>
</repositories>
```