

# HowToEnableEL22

## How To Enable [ExpressionLanguage](#)-2.2 in Tomcat6 and Jetty6

EL-2.2 is part of [JSR-245 MR2](#) (JSP-2.2) and therefor not included in Tomcat6 nor Jetty6. This will be part of Tomcat7 and Jetty7, but with a few manual steps, you can use EL-2.2 even in current containers.

### EL-2.2 Implementation

Currently, the best Implementation we use is the one available from the glassfish project. An Apache implementation is ongoing and is currently available as a SNAPSHOT build, however we recommend to use el-api.jar and el-impl.jar from glassfish until it is final.

### Maven

To make the 2 required jars available for your project, you can simply use maven:

```
<!-- EL 2 -->
<dependency>
  <groupId>javax.el</groupId>
  <artifactId>el-api</artifactId>
  <version>2.2</version>
  <scope>provided</scope>
</dependency>
<profiles>
  <profile>
    <id>jetty</id>
    <build>
      <plugins>
        <plugin>
          <groupId>org.mortbay.jetty</groupId>
          <artifactId>maven-jetty-plugin</artifactId>
          <version>${jetty-version}</version>
          <configuration>
            <scanIntervalSeconds>10</scanIntervalSeconds>
          </configuration>
        </plugin>
      </plugins>
    </build>
    <dependencies>
      <dependency>
        <groupId>javax.el</groupId>
        <artifactId>el-api</artifactId>
        <version>2.2</version>
        <scope>compile</scope>
      </dependency>
      <dependency>
        <groupId>org.glassfish.web</groupId>
        <artifactId>el-impl</artifactId>
        <scope>runtime</scope>
        <version>2.2</version>
      </dependency>
    </dependencies>
  </profile>
</profiles>
```

### Apache's EL 2.2 implementation

The above code uses Sun's EL 2.2 implementation from Glassfish. If you want to use Apache's implementation, you have to use the following dependencies from the Apache SNAPSHOT repository:

```
<dependency>
  <groupId>org.apache.tomcat</groupId>
  <artifactId>tomcat-el-api</artifactId>
  <version>7.0.0-SNAPSHOT</version>
</dependency>
<dependency>
  <groupId>org.apache.tomcat</groupId>
  <artifactId>tomcat-jasper-el</artifactId>
  <version>7.0.0-SNAPSHOT</version>
</dependency>
```

However keep in mind that this implementation is only a SNAPSHOT build and thus you might run into some problems with it.

## web.xml settings

In addition you have to configure the right expression factory implementation in the web.xml. For Sun's EL 2.2 implementation this is `com.sun.el.ExpressionFactoryImpl` and for Apache's implementation this is `org.apache.el.ExpressionFactoryImpl`. The following snippet shows the web.xml configuration for Sun's impl.

```
<context-param>
  <param-name>org.apache.myfaces.EXPRESSION_FACTORY</param-name>
  <param-value>com.sun.el.ExpressionFactoryImpl</param-value>
</context-param>
```

## Tomcat preparation

Tomcat6 has to be prepared, otherwise it will crash with a Exception on container startup:

- 1. go to the tomcat home directory
- 2. remove tomcats el-api.jar from the classpath:  
\$> mv ./lib/el-api.jar ./lib/el-api.jar.nixda
- 3. copy the EL-2.2 jars into ./lib (el-api-2.2.jar, el-impl-2.2.jar)
- 4. make sure that your WARs don't contain those 2 el jars!