Apache Tomcat migration tool for Jakarta EE

Overview

The purpose of the tool is to take a web application written for Java EE 8 that runs on Apache Tomcat 9 and convert it automatically so it runs on Apache Tomcat 10 which implements Jakarta EE 9.

The tool can be used from the command line or as an Ant task.

Usage

Download

Download a source or binary distribution from https://tomcat.apache.org/download-migration.cgi

Build

Build the migration tool from source with:

```
./mvnw verify
```

To run the migration tool locally, you are most likely to want:

```
target/jakartaee-migration-*-shaded.jar
```

Migrate

Migrate your Servlet application with:

```
java -jar jakartaee-migration-*-shaded.jar <source> <destination>
```

The source should be a path to a compressed archive, a folder or an individual file. The destination will be created at the specified path as a resource of the same type as the source.

INFO This tool will remove cryptographic signatures from JAR files contained in the *source*, as the changed resources would not match them anymore.

A warning will be logged for each JAR file where the signature has been removed.

This tool is also available on <u>Debian</u>, <u>Ubuntu</u> and <u>Fedora</u> systems by installing the *tomcat-jakartaee-migration* package and invoking the <code>javax2jakarta</code> command.

Ant task

The migration tool is available as an Ant task, here is an example:

```
<taskdef name="javax2jakarta"
classname="org.apache.tomcat.jakartaee.MigrationTask" classpath="jakartaee-
migration-*-shaded.jar"/>
<javax2jakarta src="webapp.war" dest="webapp.migrated.war"
profile="tomcat"/>
```

Differences between Java EE 8 and Jakarta EE 9

The difference between Java EE 8 and Jakarta EE 9 is that all the <u>Java EE 8 packages</u> in the <code>javax.*</code> namespace have moved to the <code>jakarta.*</code> namespace. Some subpackages have also been renamed. This migration tool performs all the necessary changes to migrate an application from Java EE 8 to Jakarta EE 9 by renaming each Java EE 8 package to its Jakarta EE 9 replacement. This includes package references in classes, String constants, configuration files, JSPs, TLDs etc.

Note: Not all <code>javax.*</code> packages are part of Java EE. Only those defined by Java EE have moved to the <code>jakarta.*</code> namespace.

Note: It is not necessary to migrate any references to XML schemas. The schemas don't directly reference javax packages and Jakarta EE 9 will continue to support the use of schemas from Java EE 8 and earlier.

Legal

This tool modifies web application content as described in the previous section. This may include modification of third-party provided content. It is strongly recommended that you confirm that the license(s) associated with any third-party content permit such modifications, especially if you intend to distribute the result.