

# Liberica JDK

## Updating Time Zone Data



Liberica JDK  
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# 1. Introduction

Liberica JDK includes the timezone data file `tzdb.dat` that contains information about local time options/properties, including UTC offsets and daylight saving time (DST) changes in different countries. This information is sometimes changed, and thus such data in Liberica JDK may become obsolete before a new build of Liberica JDK is released.

The Time Zone Database (often called `tz` or `zoneinfo` ) contains code and data that represent the history of local time for many representative locations around the globe. The Time Zone Database is now hosted by the [Internet Assigned Numbers Authority](#) (IANA).

## IANA Updater

[IANAUpdater](#) is the tool that updates the Time Zones information in Liberica JDK and potentially other OpenJDK-based distributions.

IANAUpdater reads timezone data from [IANA Time Zone Database](#) and converts it into binary format of the file `tzdb.dat` used in Liberica JDK.

Ensure that you have sufficient privileges to modify the `JDK_HOME/jre/lib` or `JRE_HOME/lib` directory to successfully update timezone data.

## 2. Using IANA Updater

1. [Download IANAUpdater.](#)
2. Run the IANAUpdater tool with the following command:

```
java -jar IANAUpdater.jar [-options]
```

If no option is provided, the list of available options is displayed.

### Available options

Option	Description	Mandatory
-t, --target	Path to Liberica runtime base installation directory which contains file tzdb.dat in one of its subdirectories, or the absolute path to tzdb.dat file.	Yes
-z, --tzbundle	Absolute path to the new timezone data bundle file or URL link to the new IANA timezone data bundle.	Yes
-q, --quiet	Switch to silent mode (do not display any messages).	No
-v, --version	Print the version number of IANAUpdater and exit.	No

## Examples

**Note:**

In the following examples we use IANA Updater version 20230215, which is the latest version by the time of creating this document.

- Update Liberica JDK which can be found in `${JAVA_HOME}` with time zone data provided in a file:

```
java -jar IANAUpdater-20230215.jar -t ${JAVA_HOME} -z tzdata2021a.tar.gz
```

- Update Liberica JDK `tzdb.dat` with time zone data provided in a file:

```
java -jar IANAUpdater-20230215.jar -t ${JAVA_HOME}/jre/lib/tzdb.dat -z  
tzdata2021a.tar.gz
```

- Update Liberica JDK `tzdb.dat` with time zone data from web URL:

```
java -jar IANAUpdater-20230215.jar -t ${JAVA_HOME} -z  
https://data.iana.org/time-zones/releases/tzdata2021a.tar.gz
```

- Quietly update `{PRODUCT_NAME} tzdb.dat` with time zone data provided in a file:

```
java -jar IANAUpdater-20230215.jar -t ${JAVA_HOME} -z tzdata2021a.tar.gz -q
```



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