

The TOTEM Toolbox : Getting started...

Download the latest TOTEM release from the download section of the TOTEM toolbox website :

<http://totem.run.montefiore.ulg.ac.be/>

The toolbox comes in two archives : a binary one with a precompiled toolbox and a source one with all the Java sources. These archives contain the following directories :

- **dist** contains the executable JAR (Java Archive File) **totem-<version>.jar** (only for binary package)
- **documentation** contains the UserGuide
- **example** contains examples of topology, traffic matrix and scenario
- **licence** contains the licence of the third libraries
- **lib** contains the libraries needed to compile and execute the toolbox
- **src** contains the source code (only for source package)

Currently, the toolbox has been tested only on linux platforms.

Needed Tools

To use the toolbox, you only need a Java Virtual Machine (J2SE 5.0 or newer).

To be able to use MultiCommodity Flow Algorithm (MCNF), you have to install the GLPK (GNU Linear Programming Kit) software.

Users who want to compile the toolbox also need a Java compiler (JDK 5.0 or newer) and Ant (release 1.6.2 or newer).

Note for Ubuntu 7.04 users :

You can simply install the **sun-java6-jdk**, **ant**, **glpk** packages and their dependencies in the Synaptic Package Manager to be able to launch and compile the TOTEM toolbox.

Installation

To use the toolbox, you need a Java Virtual Machine (J2SE 5.0 or newer). If you haven't a Java Virtual machine you have to download and install it. Don't forget to add the path to the java executable binaries (java and javac) to your PATH environment variable.

Decompress the TOTEM archive with

```
tar -xzvf totem-<version>.tar.gz
```

With the binary archive, the installation is finished. You can launch the GUI of the toolbox using the command **./totem.sh**

With the source release, you need to compile the toolbox as described in the next section.

Compilation

The source archive contains all the Java source files and you need to compile them before running the toolbox. To compile the toolbox, we need Ant (release 1.6.2 or newer) provided by the Apache project. Ant is a Java-based build tool. It is kind of tool like Make. If you haven't Ant installed, download and install it.

The Ant build file (build.xml) contains the following interesting targets :

- **build** builds the TOTEM project
- **clean** cleans the project and prepares the directory
- **doc** generates the javadoc in doc directory

By using :

```
ant clean build
```

The whole toolbox is compiled and built in the dist/totem-<version>.jar file. If you compile the toolbox for the first time, you need to call ant clean to create the needed directories. More information can be found in the README file.