

## Installation guide for Linux OS (recommended version: ubuntu 14.04 LTS)

- Install apache2 webserver
- Install Java (openjdk or oracle jre)
- Install apache tomcat8
- Install the apache2 module mod\_jk in order to pass requests to apache tomcat (libapache2-mod-jk)
- Install mysql server and set the root connection data during setup
- Install phantomjs via the node package manager (npm)

## Configuration guide

1. Go into the directory `/etc/apache2/sites-enabled/`. Configure the active apache site configuration, add the entry `JKMount /* ajp13_worker` and disable the `DocumentRoot`.
2. Change to the directory `/etc/libapache2-mod-jk/`. Add the “ajp worker” to the `workers.properties` file: `worker.list=ajp13_worker` (usually this is already done). Make sure that `workers.java_home` and `workers.tomcat_home` are set correctly.
3. Go into directory `/var/lib/tomcat8/conf/`. Open the file `server.xml` with your favorite editor. Disable the connector `<Connector port="8080" protocol="HTTP/1.1" />` by commenting the entry. Enable the connector `<Connector port="8009" address="127.0.0.1" protocol="AJP/1.3" redirectPort="8443" />` by removing the comments.
4. Create a mysql database named qtafi (f.e. `CREATE DATABASE qtafi;`)
5. Add the web archive files `admin.war` and `qtafi.war` to the webapp directory `/var/lib/tomcat8/webapps`.
6. After the deployment go into to the `/var/lib/tomcat8/webapps/admin/WEB-INF` directory. Configure the file `db.properties`. Replace the entries by your local mysql connection data.
7. In the file `project.properties` set the directories `rootpath`, `archiv` and `exportdirectory` - these directories have to be created manually - for example:  
`rootpath=/home/qtafi/projects` (location for projects and questionnaires)  
`archiv=/home/qtafi/archives` (location for deleted projects)  
`exportdirectory=/home/qtafi/export` (used during exporting of reports)
8. Tomcat needs the permission to read and write into these folders, you have to assign the tomcat user the required permissions.
9. Edit `/var/lib/tomcat8/webapps/qtafi/WEB-INF/application.xml`. Replace the values in `<property name="username" value="root"></property>` and `<property name="password" value="12345"></property>` by your own mysql connection data. Edit also the entry `<property name="rootpath" value="/home/qtafi/projects"/>` and set your projects folder as value f. e. `/home/qtafi/projects`.
10. Create the directory `/usr/share/tomcat8/BaseXData` and assign the tomcat user read and write permissions.
11. Restart apache tomcat (`service tomcat8 restart`). You are now ready to open `http://<yourdomain>/admin/manager` in your browser. Log in with the username “admin” and the password “12345”.

**We strongly suggest to apply a secure connection by using a SSL certificate. Further you should change the default login data as soon as possible.**

If you encounter troubles please have a look in the tomcat log files first (usually `/var/log/tomcat8/`).

Depending on the expected traffic on the server you will have to increase the provided memory for the tomcat webserver (f.e. `JAVA_OPTS="-Xmx2048m"`).

Have fun!