

1 Installation guide for rat-trap components

This document describes how to install the components for the rat-trap spam-tracking system. The project homepage at Sourceforge is <http://www.sourceforge.net/projects/rat-trap/> .

1.1 Prerequisites

1. A server with access to the Internet. Although we recommend the use of a Linux operating – system the system will also be usable on the Microsoft Windows OS.
2. JDK and JRE larger than version 1.4.0 but not 1.5 (!!)
(<http://java.sun.com/j2se/1.4.2/download.html>)
3. Jakarta Tomcat application - server larger than version 5.0
(<http://jakarta.apache.org/tomcat/index.html>)
4. Apache ANT (<http://ant.apache.org/>)
5. Access to a MySQL database server (
 - a) The system should also work with any other SQL – compliant database.
 - b) The needed modifications will be described later in this document.
6. An email-domain with a catch-all account.
7. A user account on the target – system that is permitted to:
 - a) use the *traceroute* – command
 - b) deploy a web-application repository (war) on the tomcat – server.
 - c) getting access to crontab or a crontab – like application for scheduling
8. If you want to build from the latest sources you will need a command – line cvs – tool.
(<https://www.cvshome.org/>)
9. the lure-website will need the following
 - a) some php – enabled web space
10. You should be able to use your operating system at command-line level and the use of a text-editor should be familiar to you! ;-)

1.2 Installation procedure

1.2.1 Download and install the Database

Since this is a database driven application you will need a database.. ;-) Here are the instructions how to install the needed Database on your server:

- Download and extract the zipped SQL – dumpfile from our Sourceforge-page.
- Import the rat-trap-dump.sql into your target database. For MySQL it will look like the following:

```
mysql -u your_username -p your_database < rat-trap-dump.sql
```

1.2.2 Install the server – components

If you have installed a command line version of CVS you can simply proceed with Chapter 1.2.4 (Modify the configuration files of the server components). Otherwise you have to do the next step before proceeding.

1.2.3 Download the Sources with your browser

At first you need to get the zip-package with the latests version of compiled source code from our project homepage at Sourceforge. Extract the archive to a directory of your choice that we will call *\$RAT_TRAP_INSTALL_DIR* in this document. After that you will have to continue with editing the configuration files in chapter 1.2.5.

1.2.4 Retrieve the source code with ANT

Just go to the download-section of our project – homepage at Sourceforge and download the *build.xml* file for the installation of all rat-trap modules. Then put the file in the directory (will be called *\$RAT_TRAP_INSTALL_DIR* in this document) where you want to install the rat-trap server components. Make sure that you have installed ANT and CVS correctly and that you have set the PATH environment variable of your system to point at the directories containing the binaries for ANT and CVS.

After that you can just type: *ant getsource-all* . That will download everything you need from the rat-trap public CVS – account.

1.2.5 Modify the configuration files of the server components

Database configuration

The configuration-file for the database – layer can be found at the following location:
\$RAT_TRAP_INSTALL_DIR/rat-trap-lib/src/de/fhkl/zw/mkup/rattrap/db/db.properties

The configuration parameters for all database operations are defined in this file. You may only alter the strings after the '=' character. Since the names of the properties are pretty self-describing they won't be described any further.

The only parameters that will be described are the first and the last parameter:

the **db_protocol** defines a JDBC – compliant protocol-name for the database connection. This could be something like 'mysql', 'odbc', 'cloudscape', 'pgsql' and so on. It should be the valid protocol – name for the driver you are using. In our case this will be 'mysql'.

The **db_driver** must contain the complete and valid class-name of your JDBC – driver. This will be *org.gjt.mm.mysql.Driver* for the official MySQL JDBC – driver.

Mail configuration

The configuration file for email – related stuff is located here:

\$RAT_TRAP_INSTALL_DIR/rat-trap-link/src/de/fhkl/zw/mkup/rattrap/mail/messages.properties

The parameters in this file are also self-describing. Just enter the values you usually enter during the configuration of your favorite email-client.

1.2.6 Build all modules with ANT

After you have modified the configuration-files to fit your needs you change to your installation – directory (`$RAT_TRAP_INSTALL_DIR`) and execute the following command: `ant build-all` . This will compile and package all rat-trap server components.

After the build you will find the components at the following locations:

Linker:

`$RAT_TRAP_INSTALL_DIR/rat-trap-link/build/bin/rat-trap-link.jar`

Localizer:

`$RAT_TRAP_INSTALL_DIR/rat-trap-localizer/build/bin/rat-trap-localizer.jar`

Server:

`$RAT_TRAP_INSTALL_DIR/rat-trap-server/rat-trap-server.war`

HINT:

If you will encounter any build errors in during the build of the *rat-trap-server* component it might be caused by an invalid CLASSPATH to the servlet-libs. The root – cause for this might be inadequate user-rights to access the *common/libs* directory of the tomcat server. Ask your administrator or yourself for extended user-rights to access this directory. ;-)

Additionally to that you need the CATALINA_HOME environment-variable set to the root-directory of the Jakarta Tomcat

1.2.7 After build

It might be useful for you that the *Linker* and *Localizer* will be executed regularly by your System. On Linux and Unix systems this task is done by the cron – daemon.

The command for your crontab should look like this:

Linker:

`cd $RAT_TRAP_INSTALL_DIR/rat-trap-link/build/bin && java -jar rat-trap-link.jar`

Localizer:

`cd $RAT_TRAP_INSTALL_DIR/rat-trap-localizer/build/bin/ && java -jar rat-trap-localizer.jar`

Make sure that you always 'cd' into the build/bin directory of the component you want to execute before you start it. Otherwise that component will crash with an *ClassNotFoundException*.

Server:

You will find the war-package ready for deployment in the directory `RAT_TRAP_INSTALL_DIR/rat-trap-server` .

1.2.8 Installing the lure-website

The lure-website is the part of our application that catches the harvesting bots and logs their ip-number and the timestamp of the access.

Both, the download – package and the CVS – download contain the lure-website directory. Copy this directory to any webserver that is capable of interpreting PHP – scripts. Before you can access the lure-website you again have to edit a configuration-file that is called *config.inc.php*

Set the server, port and email-domain to your defined values. The server and port must match the tomcat – server on that you installed the *rat-trap-server.war*. The email-domain must match the domain on which you have your catch-all account.

1.2.9 Getting the rat-trap-client

You can download the compiled and jar-packaged *rat-trap-client* from our project homepage at Sourceforge. You can start the jar-package with *java -jar rat-trap-client.jar*.

1.3 Ressources

- You can find a quick tutorial on installing and using Apache ANT at Sitepoint.com (<http://www.sitepoint.com/article/apache-ant-demystified>).
- CoreServlets offers a pretty complete tutorial on the installation of Jakarta Tomcat (<http://www.coreservlets.com/Apache-Tomcat-Tutorial/>).
- This document explains how to deploy a application or web application repository in Jakarta Tomcat: <http://jakarta.apache.org/tomcat/tomcat-5.0-doc/appdev/deployment.html>.