

# effiTRAQ Installation (for Windows OS)

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## I. Prerequisite

This section would be required if the server does not already contain the required software and settings.

### 1. Download Required Software:

The following software are required for effiTRAQ to run properly: (Note that all these software can also be downloaded from <http://www.effikc.com/software/>)

1. Java JDK-6 for Windows: Available from <http://java.sun.com/javase/downloads/index.jsp>
2. MySQL 5.1.x: Available from <http://dev.mysql.com/downloads/mysql/5.1.html>
3. Apache Tomcat 5.5.x: Available from <http://www.apache.org/dist/tomcat/tomcat-5/v5.5.26/bin/apache-tomcat-5.5.26.zip>
4. Sun JavaMail API (v1.4.X): Download link: <http://java.sun.com/products/javamail/downloads/index.html>
5. Sun JavaBeans Activation Framework: Download link: <http://java.sun.com/products/javabeans/jaf/downloads/index.html>
6. MySQL Connector/J v3.1.14 JDBC driver: Download link: <http://dev.mysql.com/downloads/connector/j/3.1.html>

### 2. Software Installation:

- Install Java
- Install MySQL. Note down the administrator (or root) password) that you set
- Install Tomcat

### 3. Set Environment Variables:

The location of the installation 'bin' directories for the Java SDK, Tomcat, and MySQL database server installations, needs to be added to the command execution **PATH** environment variable (if the installation process has not already added them to the **PATH** variable). This can be accomplished through the "**System Properties**" window as follows:

- Right-click on "**My Computer**" and select "**Properties**", the "**System Properties**" window will display. Select the "**Advanced**" tab, then press the "**Environment Variables**" button.
- In the "**System Variables**" section, add (click 'New') the following variables if they do not already exist. Otherwise edit (click 'Edit') them such that they point to the correct location.

Variable Name: **JAVA\_HOME**

Variable Value: The directory where you installed Java. For example: *C:\Program Files\Java\jdk1.6.0*

Variable Name: **CATALINA\_HOME**

Variable Value: The directory where you installed Apache Tomcat. For example: *C:\Program FileC:\Program Files\Apache Software Foundation\Tomcat 5.5*

Variable Name: **MYSQL\_HOME**

Variable Value: The directory where you installed MySQL. For example: *C:\Program Files\MySQL\MySQL Server 5.1*

*(NOTE: Quotes should **NOT** be used to enclose an installation directory for these environment variable specifications, even if the directory contains embedded spaces)*

Variable Name: **Path** (In most cases the Path variable would exist from before)

Variable Value: %JAVA\_HOME%\bin; %MYSQL\_HOME%\bin; %CATALINA\_HOME%\bin

NOTE: If the Path variable exists from before, these values need to be added at the end. For example, clicking on 'Edit' button showed the following existing values for Path variable:

%SystemRoot%\system32;%SystemRoot%;%SystemRoot%\System32\Wbem

You would edit the Path variable as follows:

%SystemRoot%\system32;%SystemRoot%;%SystemRoot%\System32\Wbem;%JAVA\_HOME%\bin;

- Click "**OK**" on the "**Environment Variable**" window
- Check whether the path variables are correctly set or not. Click on "**Start**" and select "**Run**". In the terminal type **cmd** and click "**OK**". In the terminal that opens up, type the following commands (one after the other) and press "Enter"

```
>echo %JAVA_HOME%  
>echo %CATALINA_HOME%  
>echo %MYSQL_HOME%
```

(NOTE: If the variables have been properly set, you should be seeing the values that you had set above)

## 4. JAR File Installation:

Copy the MySQL Connector/J "mysql-connector-java-3.1.X-bin.jar" JDBC driver jar file, the JavaMail api jar file "mail.jar" and JavaBean Activation Framework jar file "activation.jar" into the following locations:

- %JAVA\_HOME%\jre\lib\ext (where %JAVA\_HOME% is the location of your Java installation)
- %CATALINA\_HOME%\common\lib (where %CATALINA\_HOME% is the location of your Tomcat installation)

## II. effiTRAQ Installation

Once the server is configured with all the required software, you can proceed to installing the effiTRAQ application. For this, copy the effiTRAQ.zip package to a convenient directory on your server and unzip it.

### 1. Initialization:

Run (double click) the file "**Setup.bat**". It will take you through a step by step database and account setup for the effiTRAQ application. Please note down the configuration that you provide on a piece of paper for future reference:

- Database name, database user name, database password: Enter the values that were emailed to you along with the project
- MySQL root password: Enter the admin/ root password that you set for MySQL at the time of installation
- Account ID: Enter the account ID that you would like to use for your application. Please choose a well thought out ID as it would be visible to all the users of your effiTRAQ system. For example if your company name is 'ABC Inc,' you could choose 'abc' as your account ID.
- Account administration password: Enter the administrator password that you would like to create for your account. (Note it down for future reference)
- Administrator Email Address: Enter the email address where your password would be emailed to in case you ever forget it.

Once installation is complete, you can exit the setup by hitting the 'Enter' button

### 2. Web-application Startup:

- Install effiTRAQ Web-Application: Go to "**Start**", click on "**Programs**", click on "**Apache Tomcat 5.5**" and click on "**Apache Tomcat Program Directory**". Copy and paste the "**effiTRAQ.war**" file into the "**webapps**" folder inside the Tomcat program directory.

- Start Tomcat: Go to "**Start**", click on "**Programs**", click on "**Apache Tomcat 5.5**" and click on "**Monitor Tomcat**". This starts the Tomcat wizard. Click on the Tomcat icon in the task bar and click on "Start" then "OK".
- Access effiTRAQ Application: Open a browser (Firefox, Chrome, Internet Explorer etc.).
  - If you are opening the browser from the server machine itself, type:  
*http://localhost:8080/effiTRAQ/Track*
  - If you are opening the browser from a PC that is not the server, type:  
*http://ipaddress:8080/effiTRAQ/Track* (For example:  
*http://173.142.63.23:8080/effiTRAQ/Track*)

NOTE 1: If you have a domain name e.g. *www.example.com*, you would have to do a redirection of request from port 80 to 8080 to access the application as  
*http://www.example.com/effiTRAQ/Track*

NOTE 2: We are assuming that Tomcat would be running on port 8080 (default port). Otherwise change 8080 with the actual port on which Tomcat is running

- A login page would open up on your browser window requiring the following details:  
Account: Use the account ID that you created above  
User: admin  
Password: Use the administrator password that you created above

Once you login, you would be able to use the effiTRAQ web-application using the "Instructions" under the "Help" tab.

### 3. Communication Server:

The communication server is that part of effiTRAQ which communicates with remote GPS devices.

- Start the server: Double click the file "**Start\_Server.bat**". Make sure that server port **9001** is not being blocked by your firewall or router as this is the port on which the communication server would be listening for remote GPS devices.
- Stop the server: The communication server should be kept running for as long as you want to use effiTRAQ. If you want to stop using it, run the file "Stop\_Server.bat"
- Log Files: All log files would be created in the "serverLogs" directory
- Configure GPS Hardware: Set the IP Address as the IP Address of your server. Use server port as 9001