

ETB MANAGER INSTALLATION GUIDE

(Windows Server)

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Introduction

Welcome to the eTB Manager Installation Guide to the Windows Server platform. This document contains detailed instructions on how to install eTB Manager in a Windows Server.

Requirements

Below is the list of software you will need to install eTB Manager:

- Java JRE 1.6;
- MySQL Server 5.5 or higher;
- JBOSS AS 4.2.3.GA;
- Apache Web Server;

The list below are eTB Manager specific files that are necessary to have before install:

- The eTB Manager war file (specific for your country);
- eTB Manager database backup file;
- Apache Tomcat connector;

Although the JBOSS AS contains a built-in web server (Tomcat embedded), it is highly recommended to use another web server (IIS or Apache) to expose the application. Along this document, you will find instructions on how to install eTB Manager and create a bridge between JBOSS server and the Apache Web Server.

All software required by eTB Manager are free (no license fee required) and widely used by the open-source community. Information about the required software is easily found in the Internet.

Downloading

Here you find instructions on how to download the software necessary to start the installation:

- **eTB Manager war file** – It is the core application, and its file name has the following format:
etbmanager-<version>-<country>.war
where <version> is the application version number and <country> is the abbreviated name of the country that this version was developed to. For example, etbmanager-2.0-UZ.war is the eTB Manager version 2.0 customized to Uzbekistan. If you don't have this file, contact MSH to get it;
- **Java JRE 1.6** – You will need a Java Virtual Machine installed in the computer you want to server. It is important that you download the right version of the Java JRE (Java Runtime Environment), which is version 1.6. Although there are today several distributions of Java, it is highly recommended that you

download the Java JRE from Oracle, which is the reference for that. By the time this document was written, the latest release of Java JRE 1.6 available was the Java SE6u45 release, and it can be downloaded from

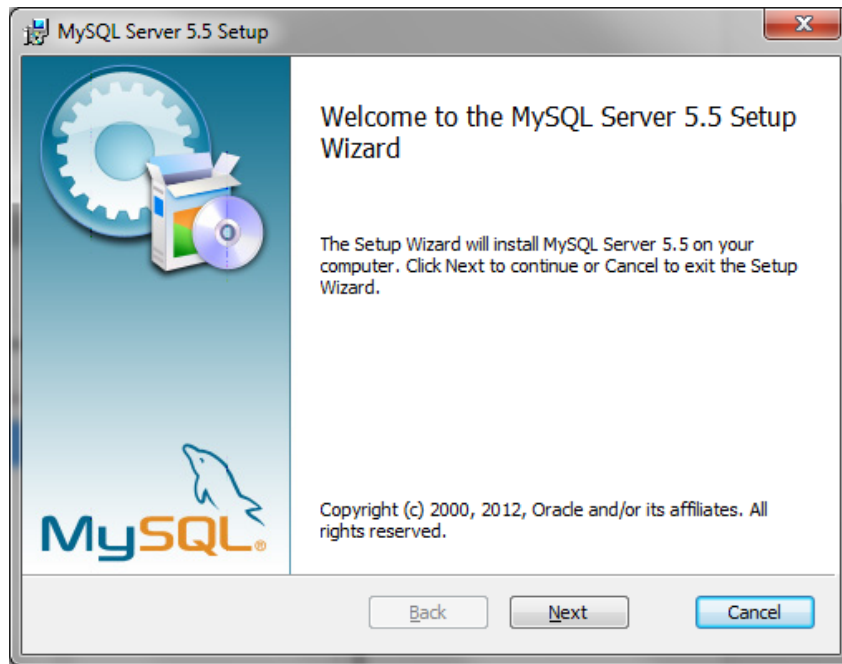
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

- **MySQL** – eTB Manager uses MySQL database to persist its data. MySQL is very popular and widely used in many commercial applications. eTB Manager uses version 5. Today MySQL is distributed in several different ways – in community, commercial releases and in other packages (like WAMP and LAMP). Choose the best that fits to you, but if you are installing from the scratch, we recommend that you use the community server release, which is free of charges and can be downloaded from
<http://dev.mysql.com/downloads/>
- **JBOSS AS 4.2.3.GA** – The JBOSS application server is one of the most popular open-source JEE server. A JEE server is capable of running Java applications following the Java Enterprise Edition specification. Although you can download it from the JBOSS site, we recommend that you download the JBOSS AS already customized for eTB Manager in production. It's available at
<http://www.etbmanager.org/download/jboss-4.2.3.ga.zip>
- **Apache Web Server** – Maybe the Apache WS is the most popular Web Server in the Internet. We recommend the use of Apache WS version 2.2 or higher. Apache web server can be freely downloaded from
<http://httpd.apache.org/download.cgi>

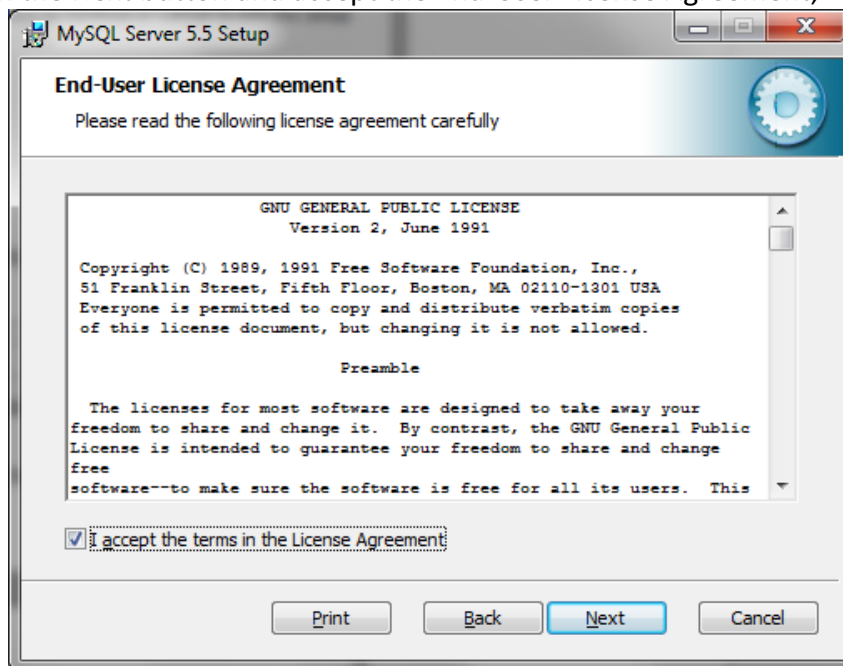
Installing MySQL

The installation instructions bellow consider that you downloaded the installation package for MySQL version 5.5:

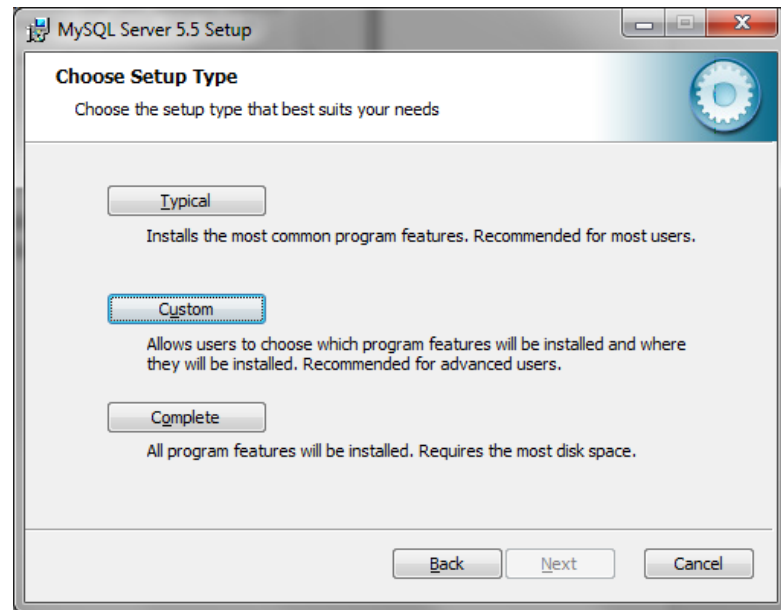
1. Run the setup program you downloaded from the MySQL site. For Windows version, this file is called mysql-5.5.<version>-winx62.msi. You'll see the image bellow when you run the setup program;



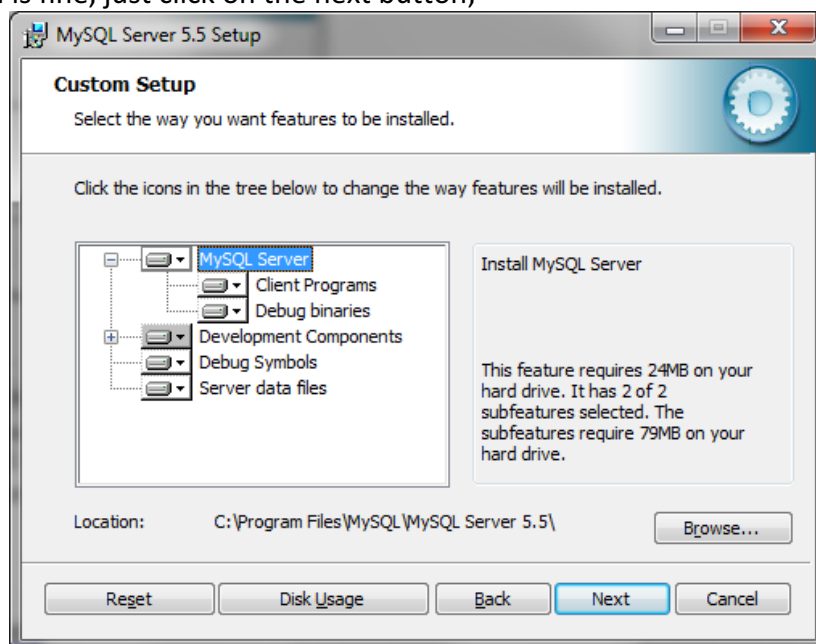
2. Click on the Next button and accept the End-User License Agreement;



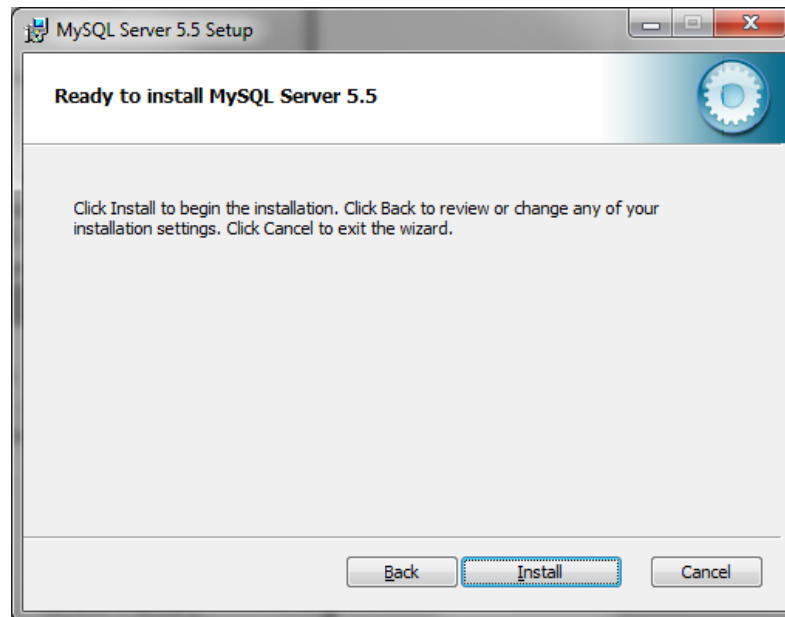
3. Because we want to make sure some features will be properly configured in MySQL, click on the custom setup type;



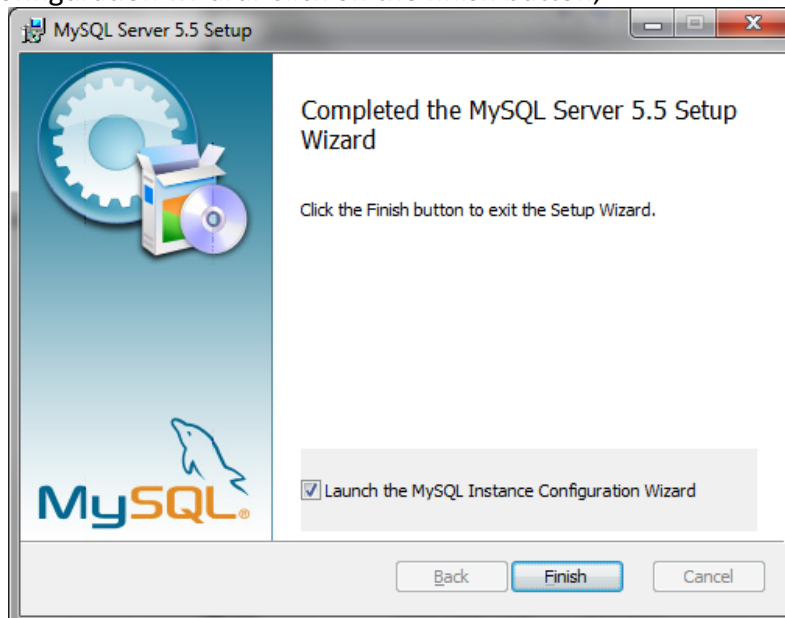
4. Select the location where you want MySQL to be installed, or, if the suggested location is fine, just click on the next button;



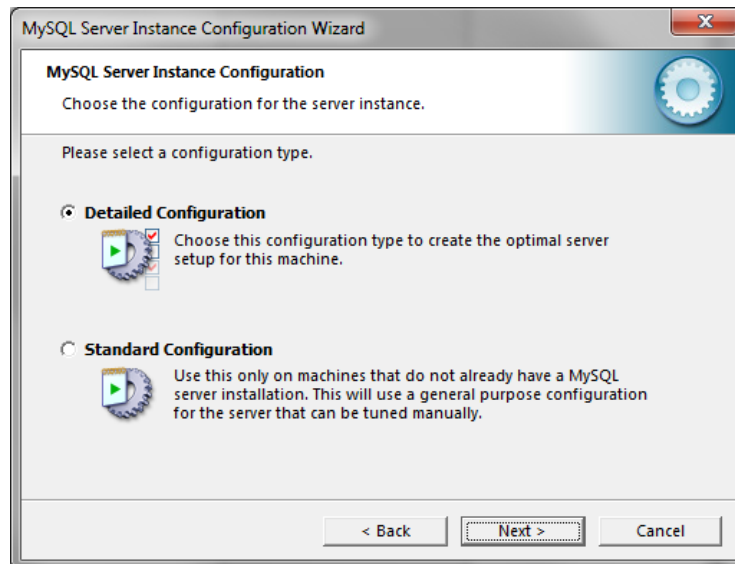
5. Click on the Install button to start the installation procedures;



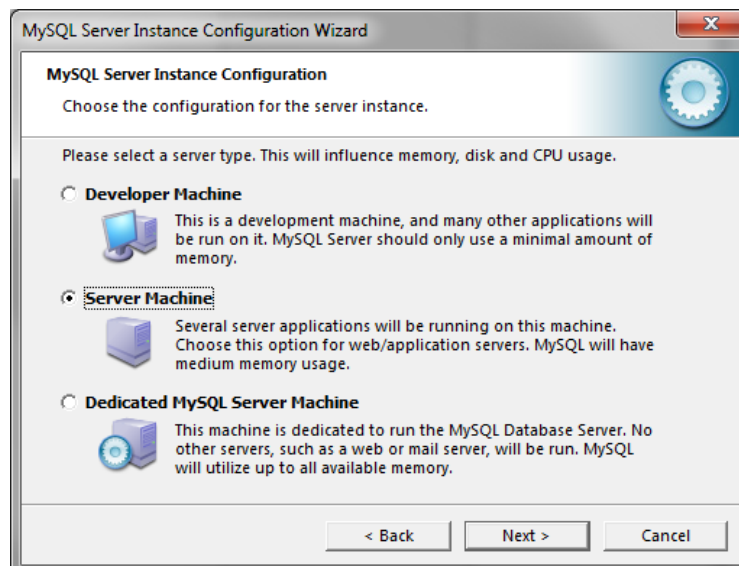
6. When the installation is done, you will see the screen below to launch the MySQL configuration wizard. Click on the finish button;



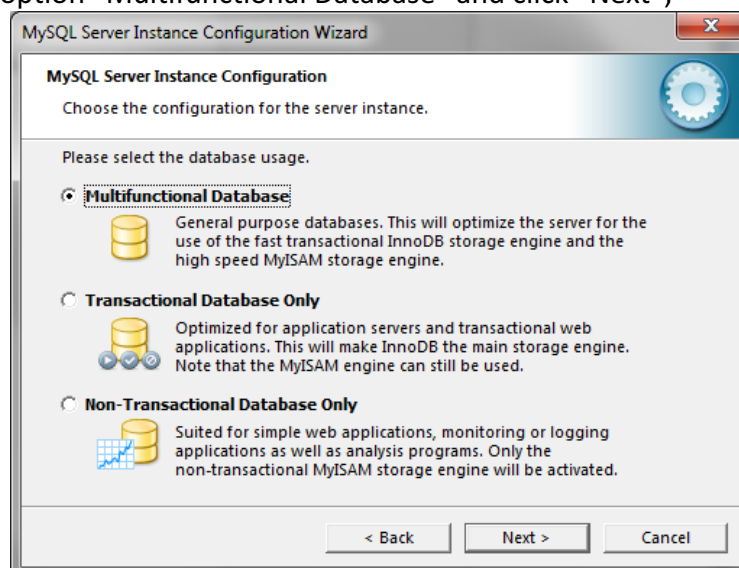
7. Select the instance of the MySQL server and click on the Next button;
8. Select the detailed configuration option and click on the Next button;



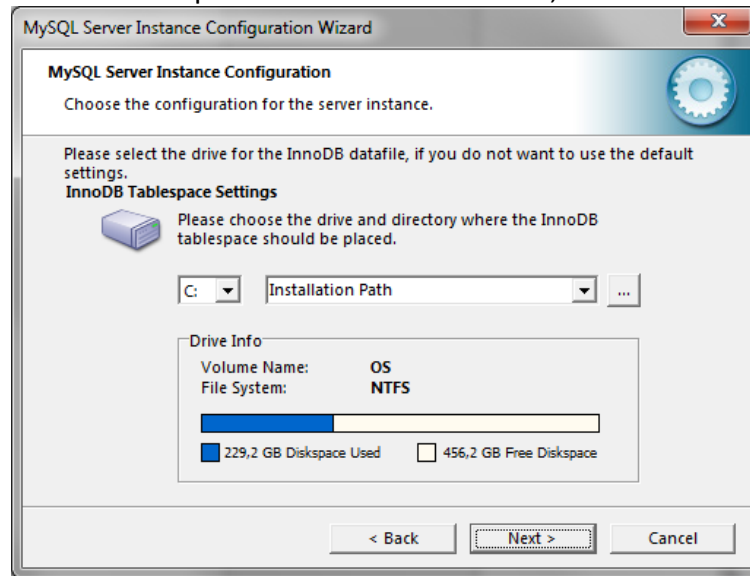
9. On the configuration of the server instance, select “Server Machine” and click “Next”;



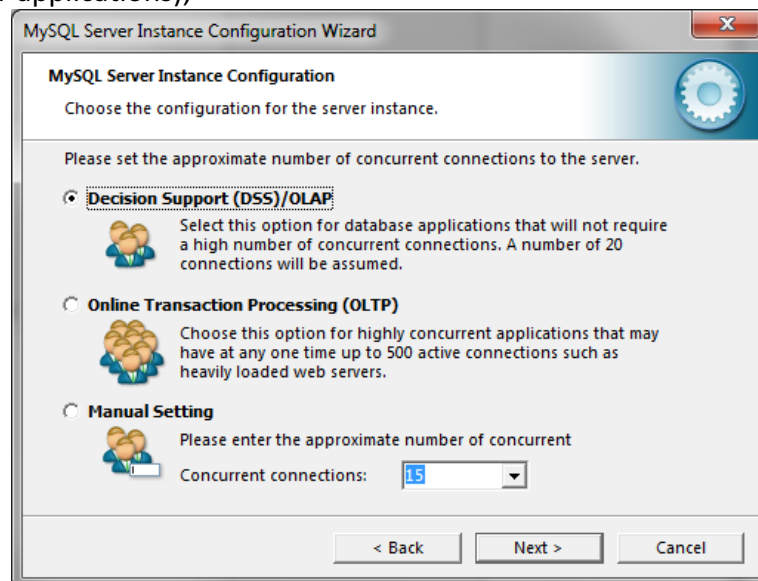
10. Select the option “Multifunctional Database” and click “Next”;



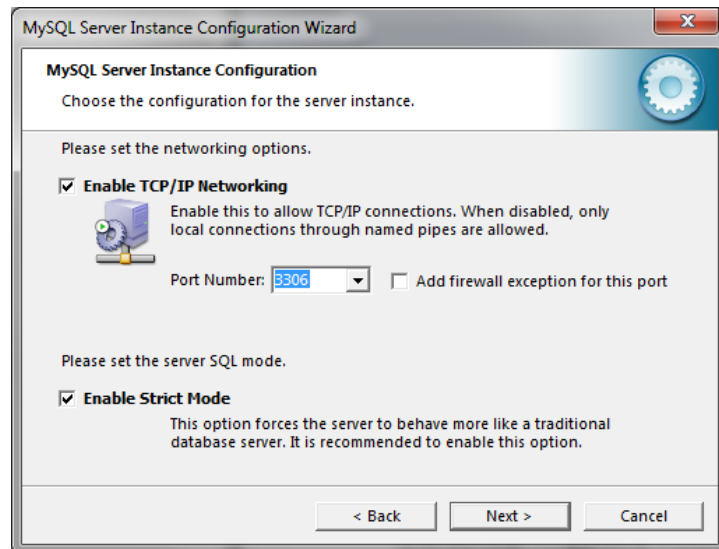
11. Select the folder where you want the MySQL data to be stored. If no folder is selected, the installation path will be used as default;



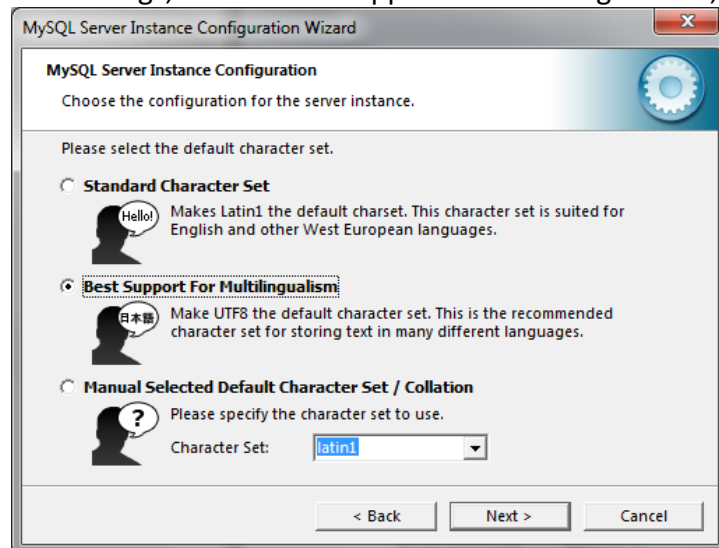
12. The next session you will inform the approximate number of concurrent connections for your instance of MySQL. For eTB Manager the default configuration of 20 connections is more than enough, but change it if you think it'll be necessary for your database server (for example, using MySQL server with other applications);



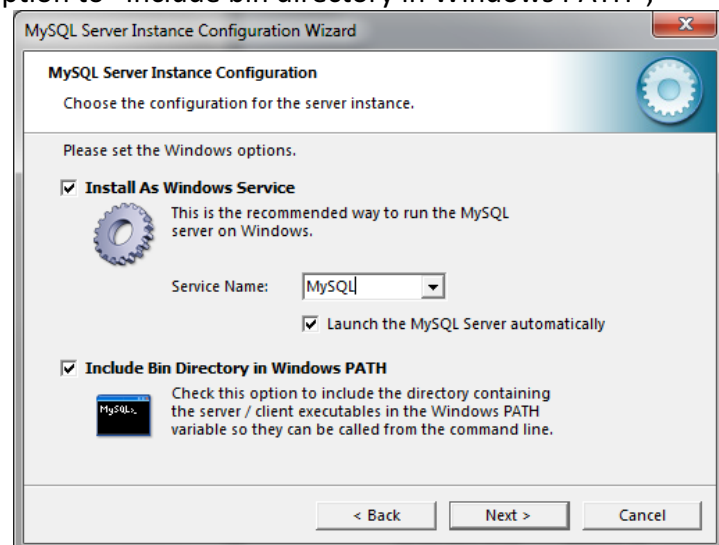
13. Use the default port for TCP/IP networking (unless you have a specific reason to use a different port);



14. In the character settings, select “Best support for Multilingualism”;



15. Select the option to install it as a Windows Service and, for easier maintenance, select the option to “Include bin directory in Windows PATH”;



16. Specify a proper password for the root user. Remember this password because it will be necessary to finish installation of eTB Manager;

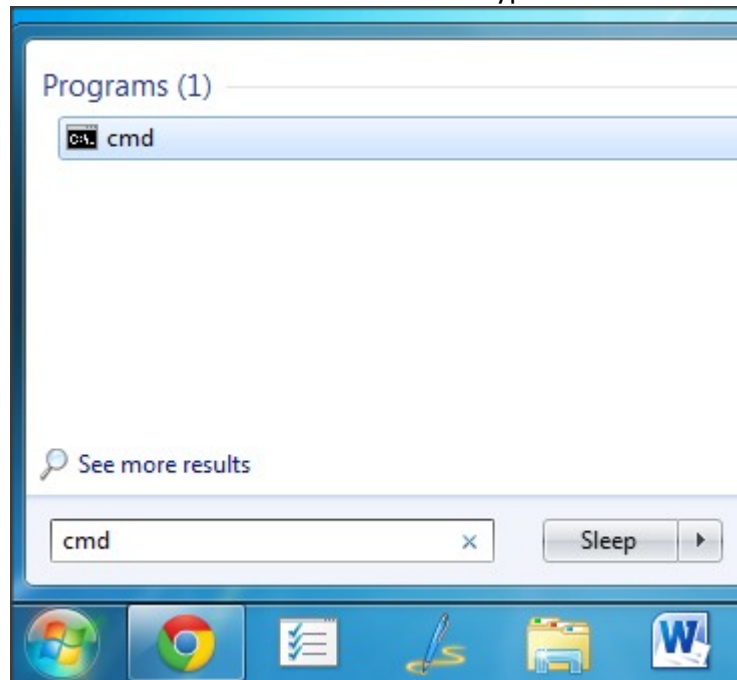


17. Click on the Execute button and wait for the end of the installation;

Initializing/Restoring eTB Manager Database

In order to initialize eTB Manager database or restoring it from a backup file you'll need a database backup script of eTB Manager. This file usually has the extension .sql.

1. Open the command line console in widows and type cmd and click enter;



2. In the command line window, type the following command

```
mysql -u [username] -p[password] etbmanager <
[etbmanager.bkp.sql]
```

Where:

- *[username]* is the MySQL username. If no username was created in the MySQL server, the root username is the default;

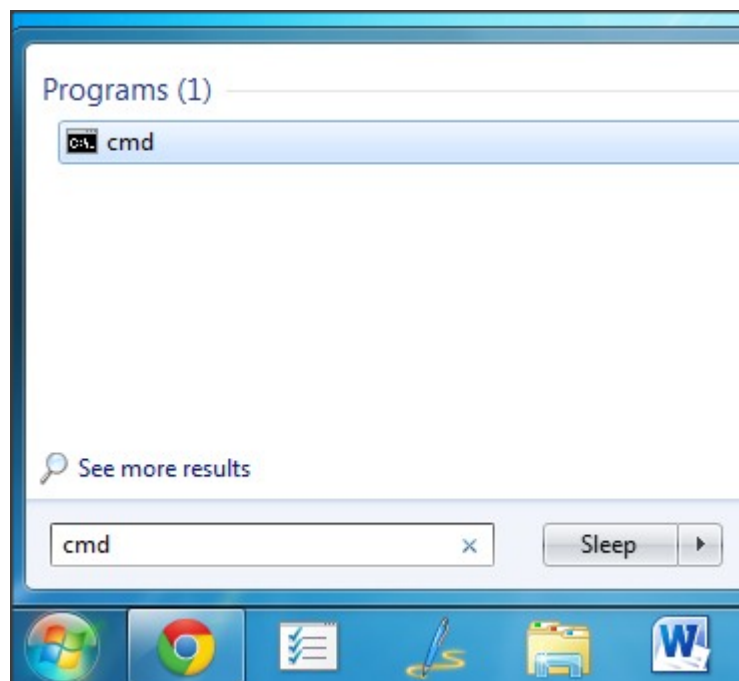
- *[password]* is the password of the given user name;
- *[etbmanager.bkp.sql]* is the full qualified eTB Manager backup file name;

Wait for the creation and restoring of the database. It may take a while depending on the size of the backup file. The program mysql works in silent mode. If no error happens, no message will be displayed and a new database called etbmanager will be created in the MySQL.

Installing JBOSS AS

JBOSS AS must be installed in Windows as a service. There is no setup program to perform the installation, but it's just available using the command line:

1. Extract the jboss-4.2.3.ga.zip in a folder. This is the folder where your JBOSS AS will be installed;
2. Open the command line as administrator. To do that, click on the Windows start menu and type cmd, but instead of clicking on enter, use **Ctrl + Shift + Enter**. You will be prompted with the obnoxious User Account Control dialog, but it will then open up a command prompt in Administrator mode;



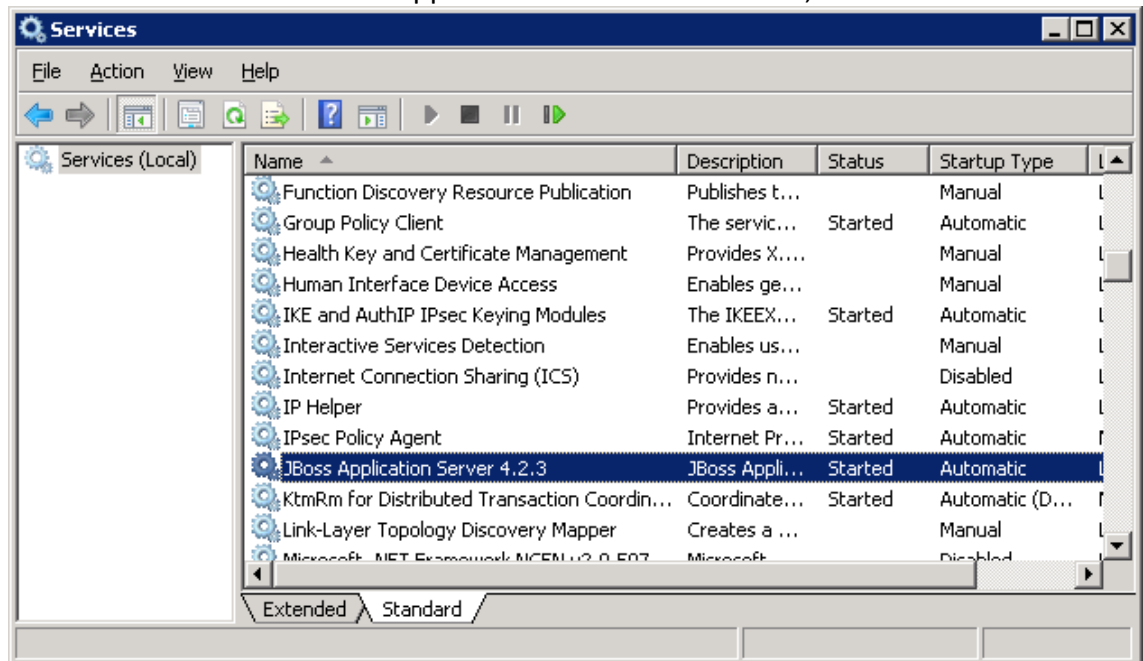
3. Go to the JBOSS bin folder and type the following command:

```
service.bat install
```

If the following message is displayed, JBOSS is successfully installed:

```
Service JBoss Application Server 4.2.3 installed
```

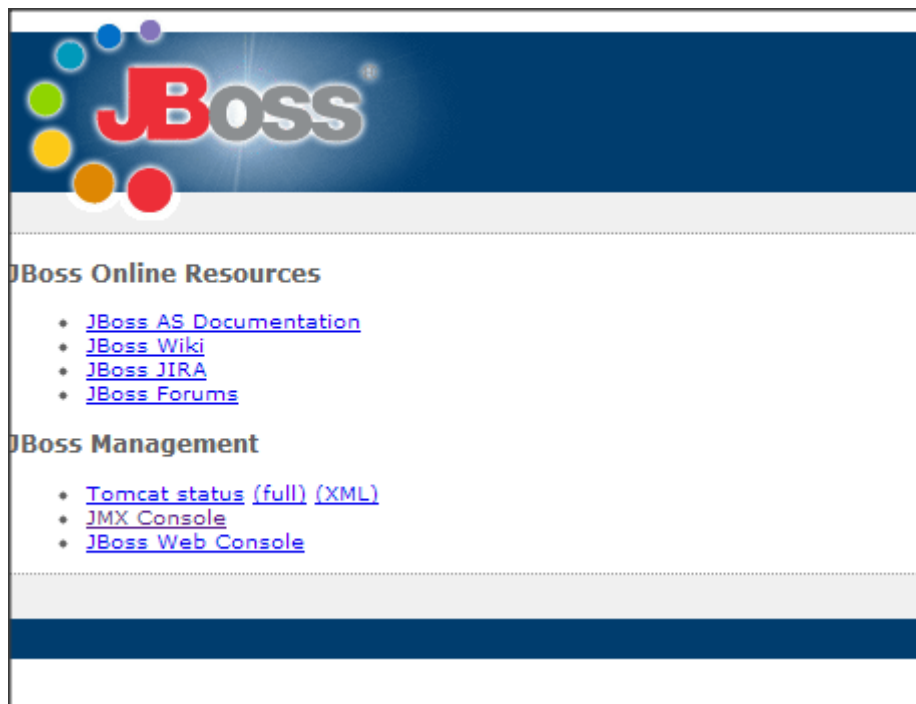
4. In Windows, Go to Control Panel | Administrative Tools and open the Services window. Search for the JBoss Application Server 4.2.3 Service;



5. Select the server and start it. Wait a while (JBoss takes from 20 seconds to 1 minute to start, depending on the server capability) and open the following address in your Internet browser:

<http://localhost:8080>

And make sure the following page is displayed



This page means that JBOSS is working fine.

Configuring eTB Manager Database Access

In order to configure how eTB manager connects to the database, follow the instructions bellow. Consider `<jboss-dir>` as the folder where jboss is installed.

1. Go to the `<jboss-dir>\server\default\deploy\MSH` and open the file `etbmanager-ds.xml` in a text editor of your choice;

```
1. <?xml version="1.0" encoding="UTF-8"?>
2. <!DOCTYPE datasources
3.     PUBLIC "-//JBoss//DTD JBOSS JCA Config 1.5//EN"
4.     "http://www.jboss.org/j2ee/dtd/jboss-ds_1_5.dtd">
5.
6. <datasources>
7.
8.     <local-tx-datasource>
9.         <jndi-name>mdrtbDatasource</jndi-name>
10.        <connection-url>
11.            jdbc:mysql://localhost:3306/etbmanager
12.        </connection-url>
13.        <driver-class>com.mysql.jdbc.Driver</driver-class>
14.        <user-name>root</user-name>
15.        <password>mysqlpassword</password>
16.        <exception-sorter-class-
17.            name>org.jboss.resource.adapter.jdbc.vendor.MySQLExceptionSorter</exception-
18.            sorter-class-name>
19.
20.        <metadata>
21.            <type-mapping>mySQL</type-mapping>
22.        </metadata>
23.    </local-tx-datasource>
24.</datasources>
```

2. Line 11 – If necessary, update the server name (in the example as localhost) and the database name (in the example as etbmanager);
3. Line 14 and 15 – If necessary, update the user name and password with a valid MySQL user name;
3. Save the file and close the text editor;
4. It's not necessary to restart JBOSS AS, since JBOSS keep track of file changes and will automatically redeploy it.

Configuring eTB Manager to send e-mail messages

You must configure a valid e-mail user account in order to have eTB Manager dispatching e-mail messages (for example, a new password to a user). To do that, follow the steps below:

1. In the <jboss-dir>\server\default\deploy\MSH folder, open the file etbmanager-service.xml

```
1. <!DOCTYPE server>
2. <server>
3.   <mbean code="org.jboss.mail.MailService"
4.     name="jboss:service=mail/etbMail">
5.     <attribute name="JNDIName">java:/mail/etbMail</attribute>
6.     <!-- Use these if your outgoing server requires authentication -
7.     ->
8.     <attribute name="User">mail-user</attribute>
9.     <attribute name="Password">password</attribute>
10.    <attribute name="Configuration">
11.      <configuration>
12.        <property name="mail.transport.protocol" value="smtp"/>
13.        <property name="mail.smtp.host" value="smtp.server"/>
14.        <property name="mail.from" value="from@mail.com"/>
15.        <property name="mail.debug" value="false"/>
16.        <property name="mail.smtp.auth" value="true"/>
17.        <property name="mail.smtp.user" value="mail-user"/>
18.        <property name="mail.smtp.password" value="password"/>
19.      </configuration>
20.    </attribute>
21.  </mbean>
22. </server>
```

23. Update lines 7,8 and 17,18 with a valid user name and password of the mail server;
24. Update lines 12,13,14,15,16,17 with information about your mail server.

If your SMTP server supports (or requires) a secure connection, you may replace the attribute mail.transport.protocol by smtps. In this case, all mail.smtp prefixes must be replaced by mail.smtps. The example bellow shows how to configure a connection to Google Gmail, which requires a TLS connection:

```
1. <!-- Ommited previous lines -->
2.
3.   <attribute name="Configuration">
4.     <configuration>
5.       <property name="mail.transport.protocol" value="smtps"/>
6.       <property name="mail.smtps.host"
7.       value="smtp.gmail.com"/>
8.       <property name="mail.from" value="etbm@gmail.com"/>
9.       <property name="mail.debug" value="false"/>
10.      <property name="mail.smtps.auth" value="true"/>
11.      <property name="mail.smtps.user" value="mail-user"/>
12.      <property name="mail.smtps.password" value="password"/>
13.      <property name="mail.smtps.port" value="465"/>
14.    </configuration>
15.  </attribute>
16. </mbean>
17. </server>
```

Using your WEB server

You may already have a different WEB server (like IIS or Apache), and the JBOSS default port is 8080. So you may want to install a bridge linking your web server to the JBOSS, so the users will access the eTB Manager system using an URL pointing to your WEB server.

The link bellow explains how to configure Apache Tomcat Connector in a Apache Web Server.

<http://tomcat.apache.org/connectors-doc/index.html>

If you prefer to use the Microsoft Internet Information Server, so use the link bellow:

http://tomcat.apache.org/connectors-doc/webserver_howto/iis.html