eTB Manager – Setup Instructions

Operating System: Linux Debian Sqeeze version 6

Requirements:

- Java 1.6 or higher;
- JBOSS server 4.2.3.GA (customized to eTB Manager);
- Apache 2;
- MySQL version 5 or higher;
- JK-MOD apache tomcat integration;

Pre-requirements

Log into Linux in a terminal window using the root user name or equivalent.

Installing LAMP

LAMP is a package containing Apache, MySQL and PHP. It's the easiest way of installing Apache and MySQL services, which are required to run eTB Manager.

To install LAMP, type the following command

```
# apt-get update
# apt-get install apache2 mysql-server php5 php5-mysql
```

Getting JBOSS

eTB Manager runs under JBOSS AS version 4.2.3.GA. This is not the regular version of JBOSS AS server, but customized to run eTBManager, so if you want to download it, requires a copy to MSH. If your system is already running, keep a backup copy of the jboss server (the jboss-4.2.3.GA folder);

Installing Java

Include the non-free option to the apt source:

```
# vi /etc/apt/sources.list
```

And add

deb http://ftp.br.debian.org/debian/ lenny main non-free

```
# apt-get update
# apt-get install sun-java5-jdk
# java -version
```

Installing JBOSS

Move the JBOSS directory to one folder of your preference (in this example, we'll use /home/msh/jboss-4.2.3.GA):

```
# mv jboss-4.2.3.GA /home/msh
```

Find out where java was installed:

```
# find / -name "java"
```

You must see something like:

```
/etc/alternatives/java
/var/lib/dpkg/alternatives/java
/usr/bin/java
/usr/lib/jvm/java-1.6.0-sun-1.6.0.20/bin/java
/usr/lib/jvm/java-1.6.0-sun-1.6.0.20/jre/bin/java
/usr/share/java
```

Open the file /etc/profile and include the following lines to the end of the file:

```
JAVA_HOME="/usr/lib/jvm/java-1.6.0-sun-1.6.0.20"
JBOSS_HOME="/var/jboss"

export JBOSS_HOME JAVA_HOME
```

Save the file and execute the command:

```
# source /etc/profile
```

Create a new JBOSS user and change its permissions to the jboss folder:

```
# useradd jboss -d /var/jboss-5.1.0.GA
# chown root:jboss /var/jboss-5.1.0.GA -R
# chmod 770 /var/jboss-5.1.0.GA -R
```

Create an initialization script:

```
# vi /etc/init.d/jboss
```

And type the following content:

```bash
#!/bin/bash
# Jboss init-script
VER="5.1.0.GA"
case $1 in

start)
echo "Starting Jboss $VER ..."
su - jboss -c '/var/jboss/bin/run.sh -b 0.0.0.0 &'
;;
stop)
su - jboss -c '/var/jboss/bin/shutdown.sh -S'
echo "Jboss Stop."
;;
restart)
echo "Restating Jboss ..."
su - jboss -c '/var/jboss/bin/shutdown.sh -S'
su - jboss -c '/var/jboss/bin/run.sh -b 0.0.0.0 &'
;;

esac
exit 0
```

Save the file and change its permissions:

```
# chmod +x /etc/init.d/jboss
```

Setup jboss to start each time the operating system is restarted:

```
# cd /etc/rc2.d
# ln -s ../init.d/jboss S99jboss
```

Managing JBOSS AS

Starting JBOSS AS:

```
# /etc/init.d/jboss start
```

Stopping JBOSS AS:

```
# /etc/init.d/jboss stop
```

Restarting JBOSS AS:

```
# /etc/init.d/jboss restart
```

MySQL Configuration

In MySQL, create a new database called etbmanager. If no tool is available, you may use mysql command line:

```
# mysql –u <user> -p<password>
```

And in the command line enter the line

```
CREATE DATABASE etbmanager CHARACTER SET utf8 COLLATE
utf8_general_ci;
```

Restore the eTB Manager backup file available:

```
# mysql –u <user> -p<password> etbmanager < etbmanager.bkp.sql
```

Where *etbmanager.bkp.sql* is the name of the backup file.

eTB Manager configuration files

eTB Manager contains 2 important configuration files located at the *<JBOSS>/server/default/deploy/MSH* folder:

- Etbmanager-service.xml – e-mail configuration
- Etbmanager-ds.xml - Database configuration

These files contain information about how eTB Manager will connect to the database (MySQL server) and dispatch system messages (e-mail accounts).

> **You must open these files and make sure the configuration is correct in order to eTB Manager work properly.**

Linking JBOSS to Apache WEB Server

When JBOSS is installed, for security reasons, the server is just visible locally (127.0.0.1 at the port 8080). In order to make it available to the users, the best scenario is to create a link between Apache Web Server and JBOSS using the Apache Tomcat Connector described at http://tomcat.apache.org/connectors-doc/.

1. Download the Apache Tomcat Connector compactible with your web server, which usually is a file called **mod_jk.so**;
2. Copy the mod_jk.so file to the module folder of Apache (usually at /usr/lib/apache2/modules/mod_jk.so)

Edit the Apache configuration file

```
# vi /etc/apache2/apache2.conf
```

At the end of the file enter the following lines:

```
LoadModule    jk_module   /usr/lib/apache2/modules/mod_jk.so

AddModule     mod_jk.c

JkWorkersFile /etc/apache2/workers.properties

# Where to put jk shared memory
JkShmFile     /var/log/httpd/mod_jk.shm

# Where to put jk logs
JkLogFile     /var/log/httpd/mod_jk.log

# Set the jk log level [debug/error/info]
JkLogLevel    info

# Select the timestamp log format
JkLogStampFormat "[%a %b %d %H:%M:%S %Y] "

# Specify etbmanager URL location in JBOSS server
JkMount  /etbmanager* worker1
```

Create a file called workers.properties in the /etc/apache2 folder

```
# vi /etc/apache2/workers.properties
```

And enter the following content

```
# Define 1 real worker using ajp13
worker.list=worker1
# Set properties for worker1 (ajp13)
worker.worker1.type=ajp13
worker.worker1.host=localhost
worker.worker1.port=8009
worker.worker1.connection_pool_size=30
```

Now restart Apache to test the configuration (JBOSS must be running already):

```
# /etc/init.d/apache2 restart
```

If no error is displayed, go to a web browser and type the following URL

http://<my-server-address>/etbmanager

and you shall see eTb Manager login page