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**BabbleSMS**

**Installation Guide**

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**BabbleSMS Installation Guide**

# **INTRODUCTION**

BabbleSMS Allows for you to send SMS from the convenience of your web browser. To run the System in your machine, you need to install the following softwares:

* Jdk 1.7.0 or higher version
* JBoss Wildfly Application Server
* 3rd Party Jar files
* Postgresql server
* Ant
* Subversion

**Installation and configuration**

# **Install Java**

This tutorial will cover the installation of 32-bit and 64-bit Oracle Java 7 (currently version number 1.8.0\_25) JDK on 32-bit and 64-bit Ubuntu operating systems. These instructions will also work on Debian and Linux Mint.

1. **Check to see if your Ubuntu Linux operating system architecture is 32-bit or 64-bit, open up a terminal and run the following command below.**

***Type/Copy/Paste:*** *file /sbin/init*

1. **Check if you have Java installed on your system**. To do this, you will have to run the Java version command from terminal.

***Type/Copy/Paste:*** *java –version*

* **If you have OpenJDK installed on your system it may look like this:**

*Java version "1.7.0\_15"  
OpenJDK Runtime Environment (IcedTea6 1.10pre) (7b15~pre1-0lucid1)  
OpenJDK 64-Bit Server VM (build 19.0-b09, mixed mode)*

1. **Completely remove the OpenJDK/JRE from your system and create a directory to hold your Oracle Java JDK/JRE binaries.** This will prevent system conflicts and confusion between different vendor versions of Java. For example, if you have the OpenJDK/JRE installed on your system, you can remove it by typing the following at the command line and then create a path for the next installation:

*sudo apt-get purge openjdk-\\**

*sudo mkdir -p /opt/Programs/jdks/*

1. [**Download the Oracle Java JDK/JRE for Linux**](http://www.oracle.com/technetwork/java/javase/downloads/index.html)**.** Make sure you select the **correct** compressed binaries for your system architecture 32-bit or 64-bit (which end in tar.gz).

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

1. **Copy the Oracle Java binaries into the /opt/Programs/jdks directory.** In most cases, the Oracle Java binaries are downloaded to: **/home/"your\_user\_name"/Downloads.**

* **32-bit Oracle Java on 32-bit Ubuntu Linux installation instructions: Type the following in a terminal**

***Type/Copy/Paste:*** *cd ~/Downloads*

***Type/Copy/Paste:*** *sudo cp -r jdk-8u25-linux-i586.tar.gz /opt/Programs/jdks*

***Type/Copy/Paste:*** *cd /opt/Programs/jdks*

1. **64-bit Oracle Java on 64-bit Ubuntu Linux installation instructions:**

***Type/Copy/Paste:*** *cd ~/Downloads*

***Type/Copy/Paste:*** *sudo cp -r jdk-8u25-linux-x64.tar.gz /opt/Programs/jdks*

***Type/Copy/Paste:*** *cd /opt/Programs/jdks*

1. **Unpack the compressed Java binaries, in the directory /opt/Programs/jdks**

***Type/Copy/Paste:*** *sudo tar xvzf jdk-8u25-linux-i586.tar.gz*

***Or***

***Type/Copy/Paste****: sudo tar xvzf jdk-8u25-linux-x64.tar.gz*

**Double-check your directories.** At this point, you should have one uncompressed binary directory in /opt/Programs/jdks for the Java JDK listed as:

***Type/Copy/Paste:*** *ls –al /opt/Programs/jdks*

***jdk1.8.0\_25***

1. **Edit the system PATH file /etc/profile and add the following system variables to your system path**. Use nano, gedit or any other text editor, as root, open up /etc/profile.

***Type/Copy/Paste:*** *sudo gedit /etc/profile*

*Or*

***Type/Copy/Paste:*** *sudo nano /etc/profile*

1. **Scroll down to the end of the file using your arrow keys and add the following lines below to the end of your /etc/profile file:**

***Type/Copy/Paste:****JAVA\_HOME=/opt/Programs/jdk1.8.0\_25  
JRE\_HOME=$JAVA\_HOME/jre  
PATH=$PATH:$JAVA\_HOME/bin:$JRE\_HOME/bin  
export JAVA\_HOME  
export JRE\_HOME  
export PATH*

1. **Inform your Ubuntu Linux system where your Oracle Java JDK/JRE is located.** This will tell the system that the new Oracle Java version is available for use.

**Type/Copy/Paste:** *sudo update-alternatives --install "/usr/bin/java" "java" "/opt/Programs/jdks/jdk1.8.0\_25/jre/bin/java" 1*

1. **Inform your Ubuntu Linux system that Oracle Java JDK/JRE must be the default Java.**

***Type/Copy/Paste:*** *sudo update-alternatives --set java /opt/Programs/jdks/jdk1.8.0\_25/jre/bin/java*

1. **Reload your system wide PATH /etc/profile by typing the following command:**

***Type/Copy/Paste****: . /etc/profile*

Note your system-wide PATH /etc/profile file will reload after reboot of your Ubuntu Linux system

# **Install Wildfly**

1. Create a path where you will install your JBoss Wildfly application server

***Type/Copy/Paste****: Sudo mkdir /opt/Programs/Wildfly/*

1. Download JBoss Wildfly and extract the zip file to the above directory.

<http://download.jboss.org/wildfly/8.2.0.Final/wildfly-8.2.0.Final.zip>

1. Copy the directory to /opt/Programs/Wildfly

*cp wildfly-8.2.0.Final.zip /opt/Programs/Wildfly*

*unzip wildfly-8.2.0.Final.zip*

*mv wildfly-8.2.0.Final BabbleSMS*

1. Start Wildfly

*cd /opt/Programs/Wildfly/BabbleSMS/bin*

*./standalone.sh*

1. Add user

*cd /opt/Programs/Wildfly/BabbleSMS/bin*

*./add-user.sh*

# **Install Jar files**

The BabbleSMS requires 3rd Party jar files that can be downloaded from <http://tawi.mobi/jars.zip>

1. Create a directory /opt/Jars

*mkdir /opt/Jars*

1. Download the jar files and extract the zip

*Cd /opt/Jars*

*Wget* [*http://tawi.mobi/jars.zip*](http://tawi.mobi/jars.zip)

*Unzip jars.zip*

# **Install Postgres**

Postgresql is the database Server. To install

**As root:**

1. Add the PostgreSQL Apt Repository create a Debian sources list file (e.g. pgdg.list)

*nano /etc/apt/sources.list.d/pgdg.list*

1. Add the following line and save the file

*deb* [*http://apt.postgresql.org/pub/repos/apt/*](http://apt.postgresql.org/pub/repos/apt/) *wheezy-pgdg main*

1. Import the repository signing key

*wget* [*https://www.postgresql.org/media/keys/ACCC4CF8.asc*](https://www.postgresql.org/media/keys/ACCC4CF8.asc)

*apt-key add ACCC4CF8.asc*

1. Update the package lists

*apt-get update*

1. Finally, install PostgreSQL as usual

*apt-get install postgresql*

Returns something like this

*The following extra packages will be installed:*

*libpq5 pgdg-keyring postgresql-9.3 postgresql-client-9.3 postgresql-client-common postgresql-common*

Just press Y to continue.

1. This will install PostgreSQL 9.4 (or the latest PostgreSQL version at this time). You may install another version (e.g. 9.3), using:

*apt-get install postgresql-9.3*

1. The postgres database user initially has no password. To assign it a password (or to override the password assigned by socket credentials), run a command like the following. This command assigns the postgres user the password "newpassword".

*Sudo –s #Become superuser*

*Su postgres*

*$> psql -c "ALTER USER postgres WITH PASSWORD 'newpassword'" -d template1*

1. **Add a user and database in Postgres**To create a normal user and an associated database you need to follow the procedure below:

**Step #1: Becoming a superuser**

You need to login as database super user under postgresql server. Again the simplest way to connect as the postgres user is to change to the postgres unix user on the database server using su command as follows:

*# su - postgres*

**Step #2: Now connect to database server**

Type the following command

*$ psql template1*

OR

*$ psql -d template1 -U postgres*

Output:

*psql (9.1.4)*

*Type "help" for help.*

*template1=#*

**Step #3: Add a user called [username]**

Type the following command to create a user called tom with a password called myPassword:

*template1=# CREATE USER babblesms WITH PASSWORD ‘Hymfatsh8’;*

**Step #4: Allow the new user to create a database**

*template1=# ALTER ROLE babblesms WITH CREATEDB;*

Type \q to quit:

*template1=# \q*

1. Create babblesmsdb database and grant privileges

*$ psql template1*

*template1=# CREATE DATABASE babblesmsdb;*

*template1=# GRANT ALL PRIVILEGES ON DATABASE babblesmsdb to babblesms;*

# **Install ant**

1. To install ant:

*sudo apt-get install ant*

# **Install Subversion**

1. To install subversion:

*sudo apt-get install subversion*

1. Create a directory on /home called svn

*mkdir ~/svn*

1. Checkout BabbleSMS project

*Svn checkout* [*http://tawi.mobi/publicsvn/BabbleSMS*](http://tawi.mobi/publicsvn/BabbleSMS)

# **Populate the database**

1. Go to the BabbleSMS project on subversion folder

*cd ~/svn/BabbleSMS/webapp/bin*

1. Execute the script to populate the database

*./dbSetup.sh*

# **Deploy the BabbleSMS Project**

To deploy the BabbleSMS

*cd ~/svn/BabbleSMS/webapp/*

*ant dist*

Check the logs as the project is deployed. If it is successful, you can access the BabbleSMS system from your browser by accessing the following URL: <http://localhost:8080/BabbleSMS>

Introduction

System Requirements

Installing Prerequisites

Retrieving Source Code

Application Deployment