

# Installing DSpace 1.5 on Ubuntu 8.04

<?xml version="1.0" encoding="utf-8"?>

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Reference documentation: [http://www.dspace.org/index.php?option=com\\_content&task=view&id=152#checker](http://www.dspace.org/index.php?option=com_content&task=view&id=152#checker)

This is a revision of [Installing DSpace 1.4 on Ubuntu 7.04](#).

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<li>Ensure all repositories are enabled (free, non-free, universe) (**System -> Administration -> Synaptic Package Manager -> Settings -> Repositories**, ensure all are checked except **Source code**) and **Reload** (button is on main GUI window).</li> Hint: For the next steps, you can use the **Search** button and look for prefixes of the package names below, like 'tomcat','sun-java', etc. You may select all of the packages and then **Apply** as one operation.

<li>Install <tt>tomcat5.5</tt> package and all associated dependencies</li>

<li>Install <tt>sun-java5-jdk</tt> or <tt>sun-java6-jdk</tt> package and all associated dependencies</li>

<li>Install <tt>postgresql-8.2</tt> or <tt>postgresql-8.3</tt> package and all associated dependencies</li>

<li>Install <tt>libpg-java</tt> package for the Postgres JDBC driver</li>

<li>Install <tt>ant-optional</tt> package for regular expression support in build.xml</li>

<li>Install <tt>maven2</tt> package for the maven build utility</li>

<li>Make Ubuntu use the Sun JDK (DSpace will not work with the default gcj java), either:

```
sudo update-alternatives --set java /usr/lib/jvm/java-1.5.0-sun/jre/bin/java
```

Or

```
sudo update-alternatives --set java /usr/lib/jvm/java-6-sun/jre/bin/java
```

</li>

<li>Create the Unix 'dspace' user, update the passwd, create the directory in which you will install dspace, and ensure that the Unix 'dspace' user has write privileges on that directory:

```
sudo useradd -m dspace
sudo passwd dspace
sudo mkdir /dspace
sudo chown dspace /dspace
```

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<li>Create the PostgreSQL 'dspace' user and the 'dspace' database. Using <tt>sudo</tt> as the Unix 'postgres' user, authorize the 'dspace' user. You will need to select a password, and specify 'n' to the create new roles prompt. Then, as the 'dspace' user, create the database.

```
sudo -u postgres createuser -U postgres -d -A -P dspace
sudo -u dspace createdb -U dspace -E UNICODE dspace
```

</li>

<li>Change ownership of the tomcat directories to the dspace user:

```
sudo chown -R dspace /var/cache/tomcat5.5
sudo chown -R dspace /var/lib/tomcat5.5
sudo chown -R dspace /var/log/tomcat5.5
sudo chown -R dspace /etc/tomcat5.5
```

</li>

<li>Now perform the following tasks as the <tt>dspace</tt> user:

```
sudo su - dspace
bash
```

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<li>

Using the release package:

<ol>

<li>Download DSpace release (or src-release) from <http://sourceforge.net/projects/dspace> in any directory (e.g. <tt>/home/dspace</tt>) and unpack it. The new DSpace directory is referred to as **dspace-src**. (example: <tt>/home/dspace/dspace-1.5.0-release</tt>)</li>

<li>Configure <tt>dspace-src/dspace/config/dspace.cfg</tt> – **check to see if email configuration is required for Ubuntu, currently set to local-only**</li>

<li>cd into the <tt>dspace-src/dspace</tt> directory. </li>

<li>Package the install:

```
mvn package
```

Your first run of Maven downloads a lot of dependencies. Be prepared for several minutes of download activity, followed by several minutes of build activity. Note that if you accidentally run Maven using gcj instead of Sun Java, and it fails, you should remove the `~/m2` directory (<tt>rm -rf /home/dspace/.m2</tt> before proceeding with the correct java).

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<li>cd into `dspace-src/dspace/target/dspace-version-build.dir/`

<li>Initialize the database and install the software:

```
ant fresh_install
```

</li></ol>

Remark: If the build fails two things are necessary to do before a new attempt: 1. Remove the remains of the failed build (execute <tt>ant clean</tt>), 2. Remove the dspace tables from the database by dropping and recreating it (execute <tt>dropdb -U dspace dspace</tt>; <tt>createdb -U dspace -E UNICODE dspace</tt>). Of course the reason for the failing must be cured too.</li>

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<li>Create the initial DSpace administrator:

```
/dspace/bin/create-administrator
```

</li>

<li>Append the following lines to <tt>/etc/default/tomcat5.5</tt> to set the preferences necessary for dspace:

```
TOMCAT5_USER=dspace
TOMCAT5_SECURITY=no
```

</li>

<li>Modify the Tomcat properties in <tt>/etc/tomcat5.5/server.xml</tt> to use UTF-8 encoding. You can also change the port from the non-standard <tt>8180</tt> to <tt>8080</tt> to match the examples in DSpace documentation, and the dspace.cfg file:

```
<Connector port="8180" maxHttpHeaderSize="8192"
  maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
  enableLookups="false" redirectPort="8443" acceptCount="100"
  connectionTimeout="20000" disableUploadTimeout="true"
  URIEncoding="UTF-8" />
```

Also in <tt>server.xml</tt> modify the webapps directory to point to `/dspace/webapps`:

```
<Host name="localhost" appBase="/dspace/webapps"
  unpackWARs="true" autoDeploy="true"
  xmlValidation="false" xmlNamespaceAware="false">
```

</li>

<li>Start Tomcat:

```
sudo /etc/init.d/tomcat5.5 start
```

</li>

<li>Open the new URL in your Web browser: <http://hostname:8180/jspui> or <http://hostname:8180/xmlui> (adjust for your hostname and port number, accordingly)

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## Other Guides

- <http://ir.sun.ac.za/wiki/index.php/Dspace>

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