

DSPACE on Windows XP

Installation Guide



Prepared by:

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Pre-requisite Software:

1. Java SDK 1.5 or later (standard SDK is fine)
<http://java.sun.com/javase/downloads/index.jsp>
2. PostgreSQL 8.x for Windows OR Oracle 9 or later.
 - If you install PostgreSQL, it's recommended to select to install the pgAdmin III tool
<http://www.postgresql.org/download/windows>
3. Apache Ant 1.6.2 or later. Unzip the package in C:\ and add C:\apache-ant-1.6.2\bin to the PATH environment variable. For Ant to work properly, you should ensure that JAVA_HOME is set.
<http://ant.apache.org/bindownload.cgi>
4. Jakarta Tomcat 5.x or later
<http://tomcat.apache.org/download-60.cgi>
5. Apache Maven 2.0.8 or later
<http://maven.apache.org/download.html>

Step I Installing Java



1. Double Click



jdk-6u11-windows-i586-p

and follow the instructions to install java

Step II Installing Apache Ant & Apache Maven

1. Copy  apache-ant-1.7.1 folder and paste in C:\
2. Copy  apache-maven-2.1.0 folder and paste in C:\

Step III Setting up PATH for Java, Apache Ant, Apache Maven (System Variables)

1. Right click My Computer, click Properties, click Advanced, click Environment Variables, select "PATH" from **System Variables**, click edit

PATH for Java C:\Program Files\Java\jdk1.6.0_11\bin
PATH for Ant C:\apache-ant-1.7.1\bin
PATH for Maven C:\apache-maven-2.1.0\bin

2. Add the above PATH variables in the edit box as last item (With Semi-Colons after each PATH)
;C:\Program Files\Java\jdk1.6.0_11\bin;C:\apache-ant-1.7.1\bin;C:\apache-maven-2.1.0\bin

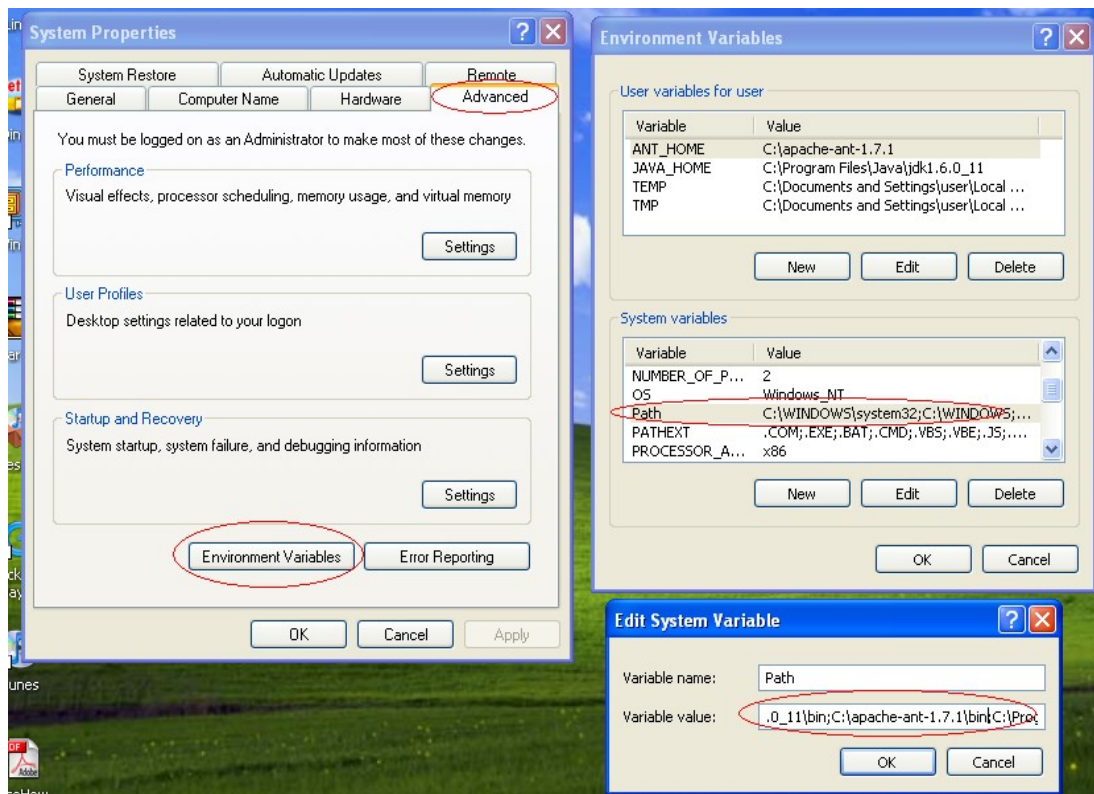


Figure 1: Setting up PATH variables

Step IV Setting up ANT_HOME & JAVA_HOME for Apache Ant and Java (User Variables)

1. Right click My Computer, click Properties, click Advanced, click Environment Variables, click “New” from **User Variables for user** and add the following and click OK

Variable name: ANT_HOME
Variable value: C:\apache-ant-1.7.1

Similarly add variable for Java

Variable name: JAVA_HOME
Variable value: C:\Program Files\Java\jdk1.6.0_11

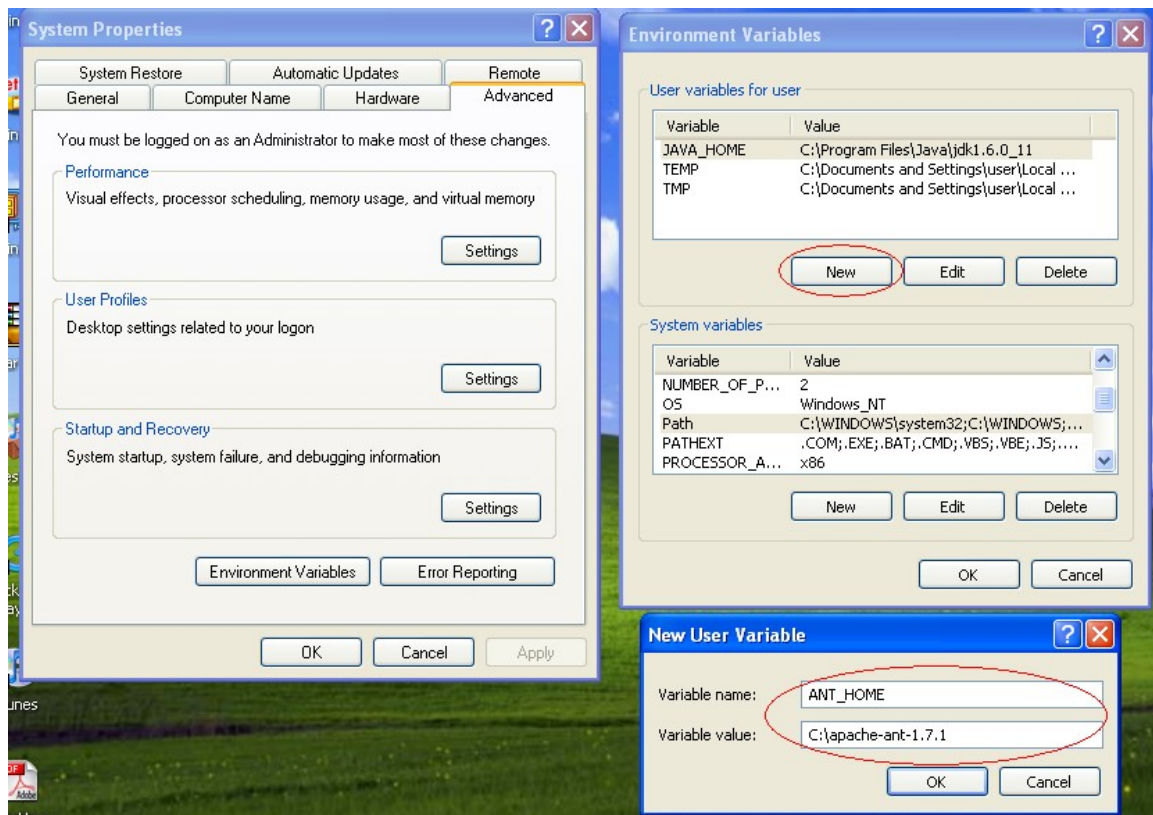


Figure 2: Setting up HOME variables

Step V

Checking the PATH and HOME variables

1. Go to command prompt (Click Start, click Run, type cmd)
2. In the command line type `mvn -version` (see the version displayed)
3. type `ant -version` (see the version displayed)

You must get something similar to the Figure 3: Otherwise check the previous steps

```

C:\WINDOWS\system32\cmd.exe


C:\Documents and Settings\user>mvn -version
Apache Maven 2.1.0 (r755702; 2009-03-19 00:40:27+0530)
Java version: 1.6.0_11
Java home: C:\Program Files\Java\jdk1.6.0_11\jre
Default locale: en_US, platform encoding: Cp1252
OS name: "windows xp" version: "5.1" arch: "x86" Family: "windows"
C:\Documents and Settings\user>ant -version
Apache Ant version 1.7.1 compiled on June 27 2008
C:\Documents and Settings\user>

```

Figure 3: Checking the variables

Step VI

Installing PostgreSQL and Creating dspace user

1. Double Click on  postgresql-8.3.7-1-windows to install PostgreSQL
2. follow the instructions, Provide “postgres” as password for postgres user
3. **Start pgAdminIII**

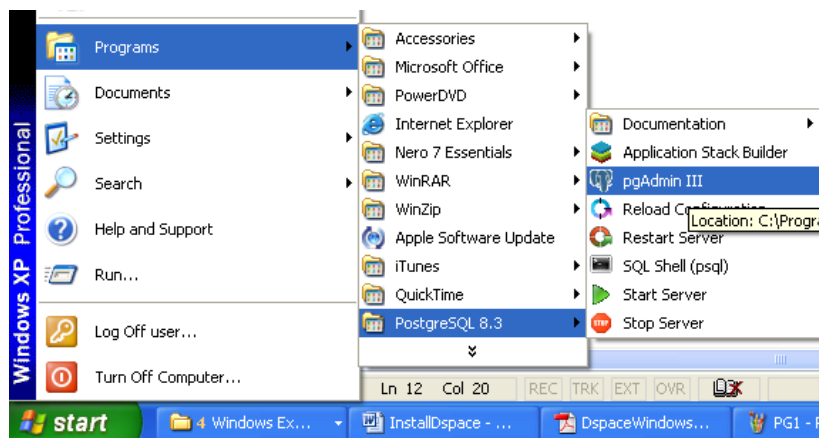


Figure 4: Starting pgAdmin III

4. Connect to the database by right clicking PostgreSQL 8.3 (localhost:5432) and clicking Connect. See Figure 5

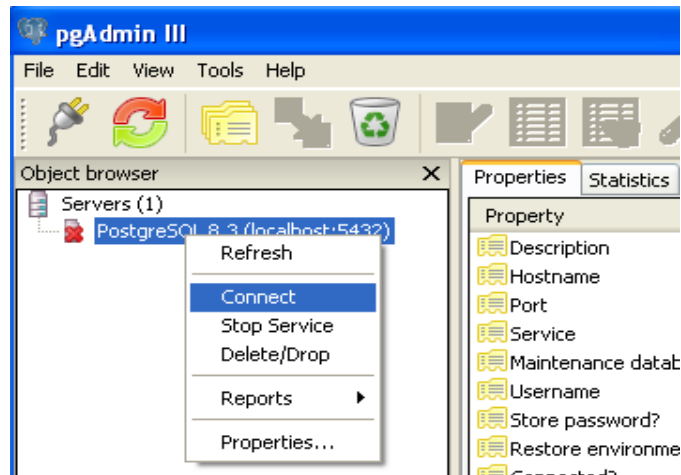


Figure 5: Starting PostgreSQL database

5. Add Login Role for “dspace” and Create database “dspace”

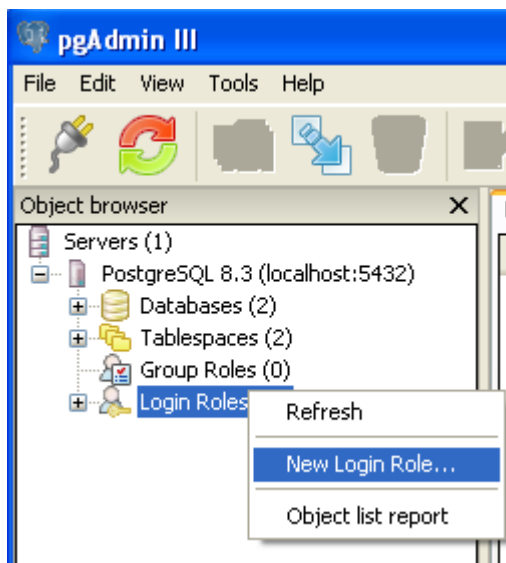


Figure 6 (a) : Creating Login Role

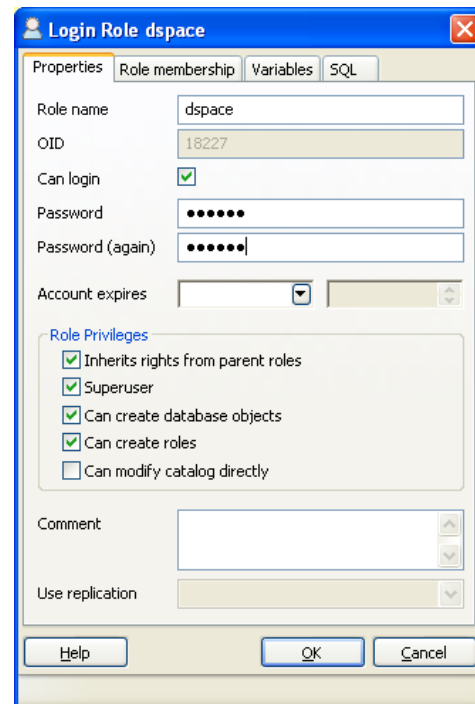


Figure 6 (b) : Creating Login Role

Create Login role as shown in Figures 6 (a) and 6 (b)
Provide password as “dspace”

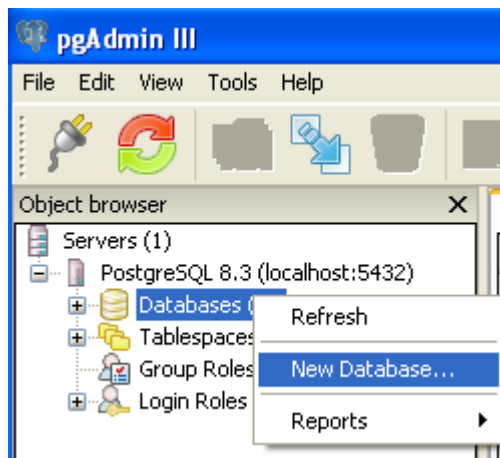


Figure 7 (a) : Creating database

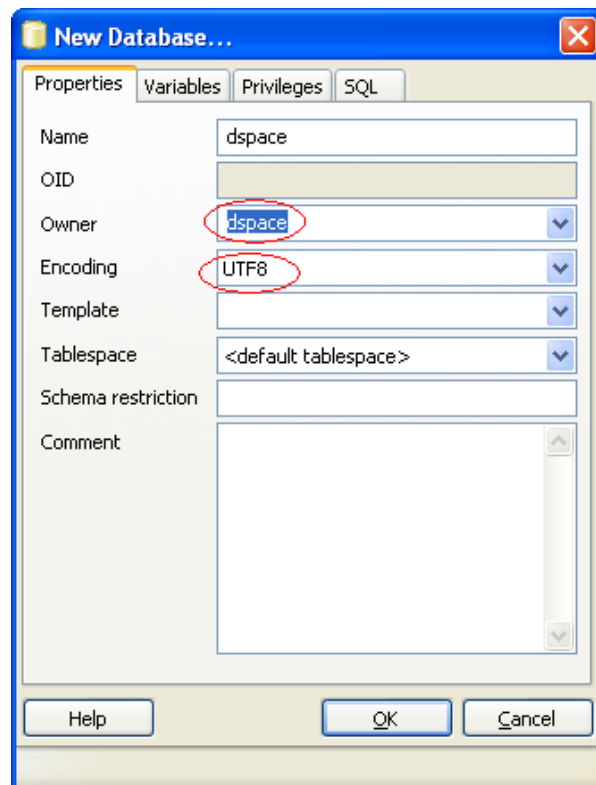


Figure 7 (b) : Creating database dspace

Create database by giving Name as dspace “**dspace**” [see figure 7 (b)]
 Encoding must be selected as **UTF 8**

6. Expand the item PostgreSQL 8.3 (localhost:5432) and see the dspace database and login role

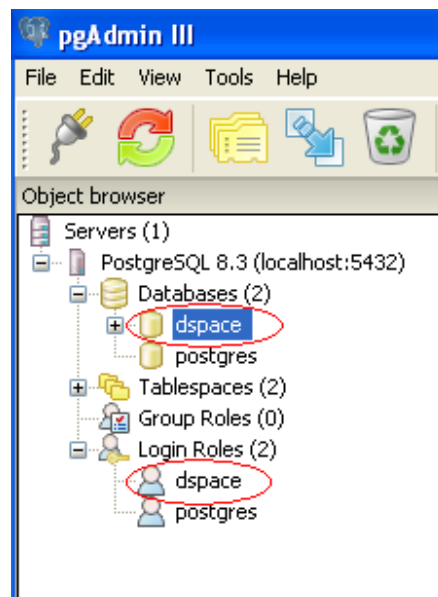


Figure 8: Database and Login Role of dspace

Step VII

Installing Apache Tomcat

1. Double click on



apache-tomcat-6.0.18
Apache Tomcat Installer
Apache Software Foundation


to install tomcat

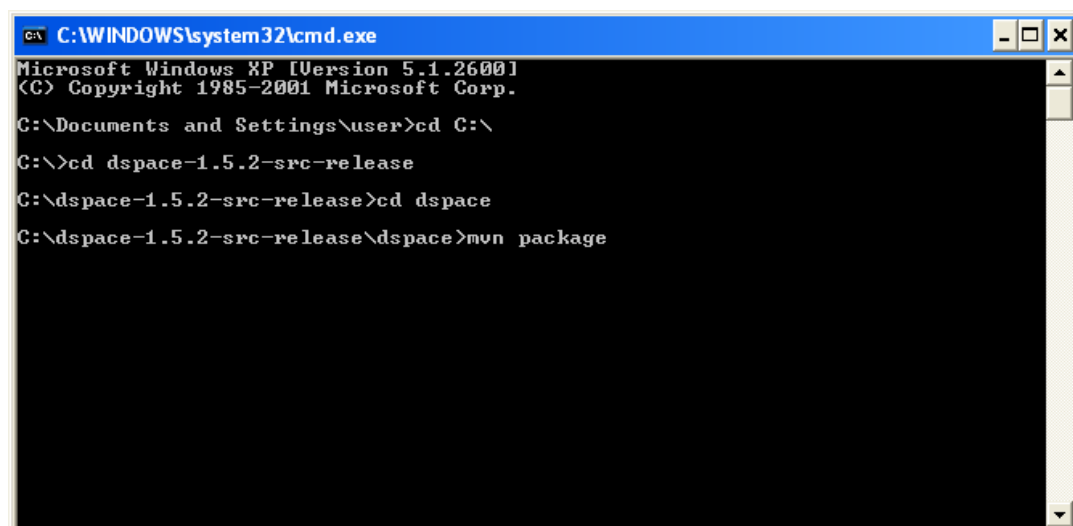
2. Follow the instructions and DO NOT change default values.
3. When Tomcat is running , you can see the icon of tomcat on systems tray area of windows. You can stop the service , start the service by right clicking this icon.



Step VIII

Compiling DSpace

1. Copy  dspace-1.5.2-src-release to C:\ [this is our source directory]
2. Create a directory with name “dspace” in C:\ [this is our installation directory]
3. Start the Postgres Service [Start > Programs > PostgreSQL 8.3 > Start Server]
4. Update paths in [dspace-source]\dspace\config\dspace.cfg. Note: Use forward slashes / for path separators, though you can still use drive letters, e.g.:
dspace.dir = C:/DSpace
5. Generate the DSpace installation package by running the following from commandline (cmd) from your [dspace-source]/dspace/ directory: and execute the command “**mvn package**”

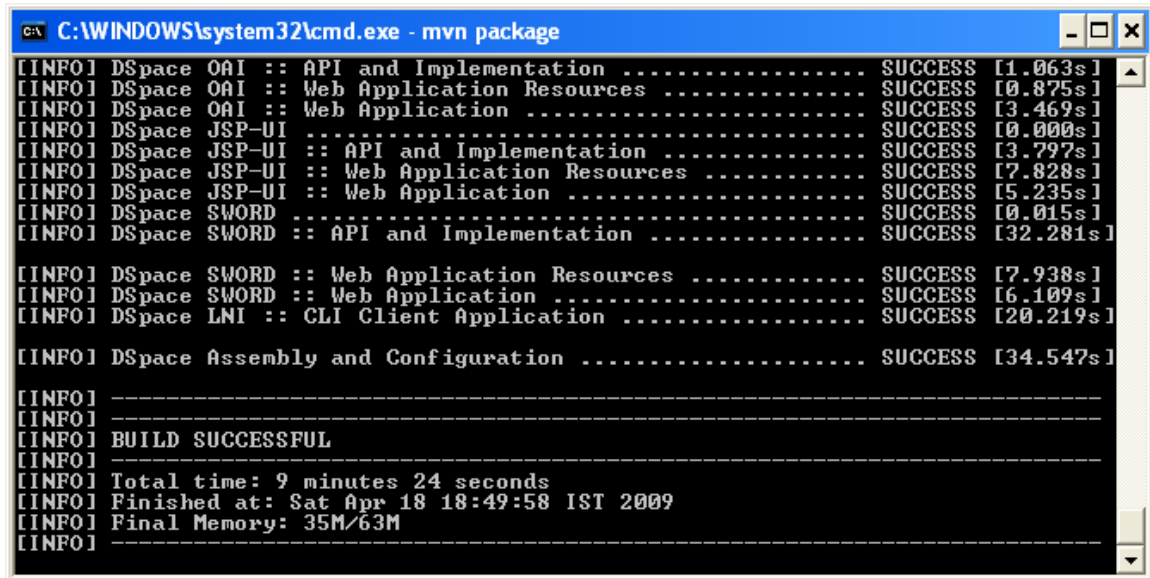


```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\user>cd C:\
C:\>cd dspace-1.5.2-src-release
C:\dspace-1.5.2-src-release>cd dspace
C:\dspace-1.5.2-src-release\dspace>mvn package
```

Figure 9: Installation Package creation

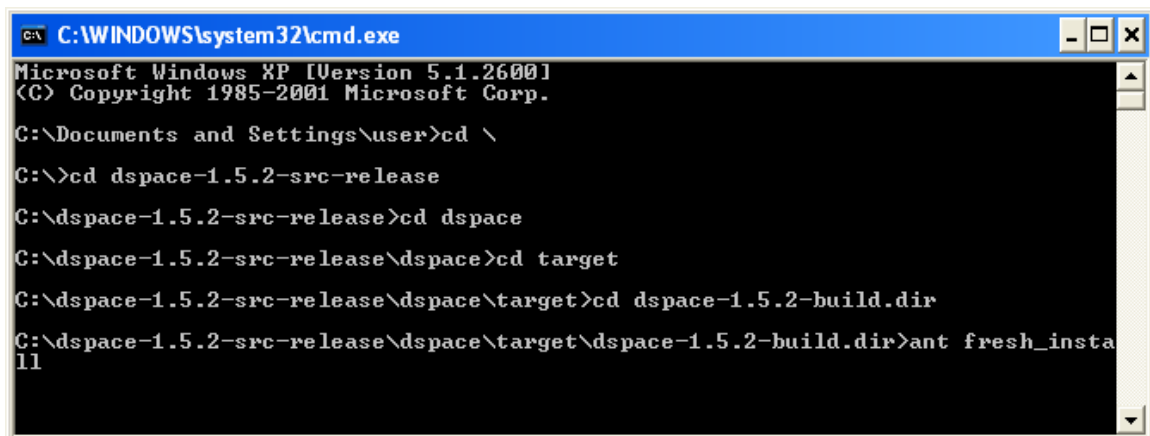
6. You will see lot of packages been downloaded and generates DSpace installation package in your [dspace-source]/dspace/target/dspace-[version]-build.dir/ directory.



```
C:\WINDOWS\system32\cmd.exe - mvn package
[INFO] DSpace OAI :: API and Implementation ..... SUCCESS [1.063s]
[INFO] DSpace OAI :: Web Application Resources ..... SUCCESS [0.875s]
[INFO] DSpace OAI :: Web Application ..... SUCCESS [3.469s]
[INFO] DSpace JSP-UI ..... SUCCESS [0.000s]
[INFO] DSpace JSP-UI :: API and Implementation ..... SUCCESS [3.797s]
[INFO] DSpace JSP-UI :: Web Application Resources ..... SUCCESS [7.828s]
[INFO] DSpace JSP-UI :: Web Application ..... SUCCESS [5.235s]
[INFO] DSpace SWORD ..... SUCCESS [0.015s]
[INFO] DSpace SWORD :: API and Implementation ..... SUCCESS [32.281s]
[INFO] DSpace SWORD :: Web Application Resources ..... SUCCESS [7.938s]
[INFO] DSpace SWORD :: Web Application ..... SUCCESS [6.109s]
[INFO] DSpace LNI :: CLI Client Application ..... SUCCESS [20.219s]
[INFO] DSpace Assembly and Configuration ..... SUCCESS [34.547s]
[INFO] -----
[INFO] BUILD SUCCESSFUL
[INFO] -----
[INFO] Total time: 9 minutes 24 seconds
[INFO] Finished at: Sat Apr 18 18:49:58 IST 2009
[INFO] Final Memory: 35M/63M
[INFO] -----
```

Figure 10: Screen shot after a successful Build

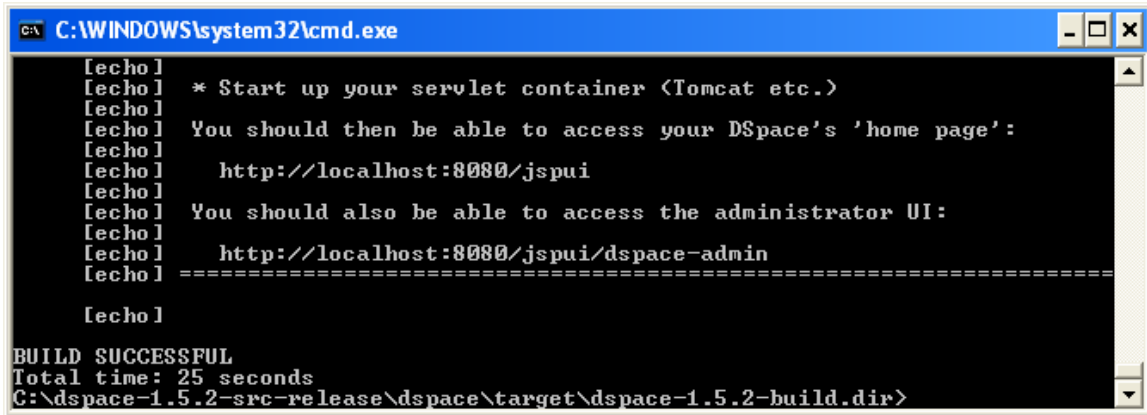
7. Initialize the DSpace database [see the **Step VI** and do procedures from 3-4]
8. Install DSpace to [dspace] (e.g. C:\DSpace) by running the following from commandline from your [dspace-source]/dspace/target/dspace-[version]-build.dir/ **ant fresh_install**
See the following Figure 10 (a)



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\user>cd \
C:\>cd dspace-1.5.2-src-release
C:\dspace-1.5.2-src-release>cd dspace
C:\dspace-1.5.2-src-release\dspace>cd target
C:\dspace-1.5.2-src-release\dspace\target>cd dspace-1.5.2-build.dir
C:\dspace-1.5.2-src-release\dspace\target\dspace-1.5.2-build.dir>ant fresh_install
```

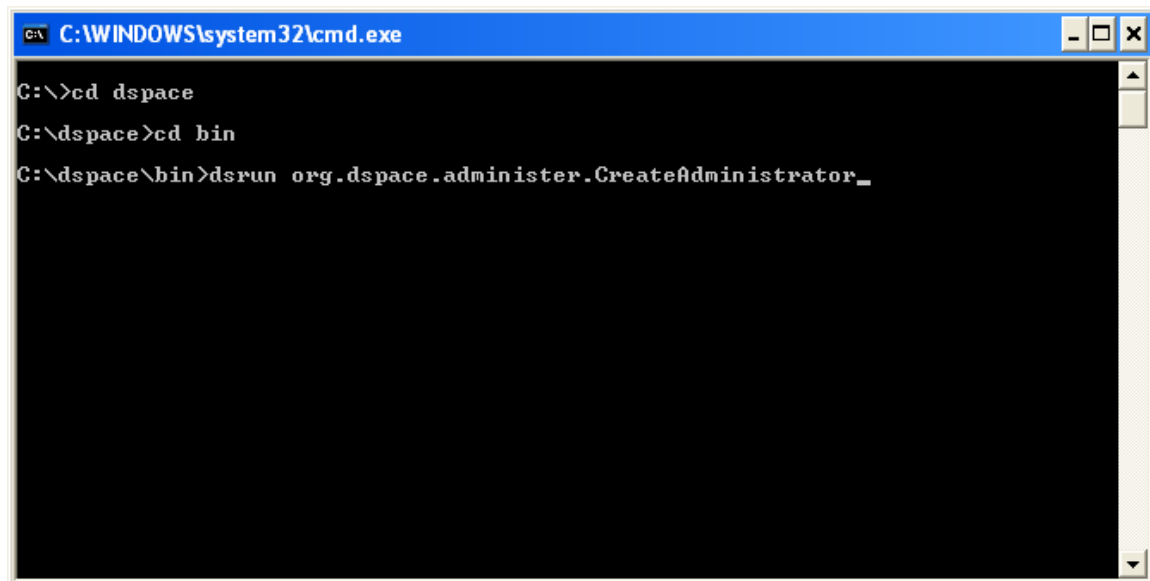
Figure 10 (a): Command for Installing DSpace



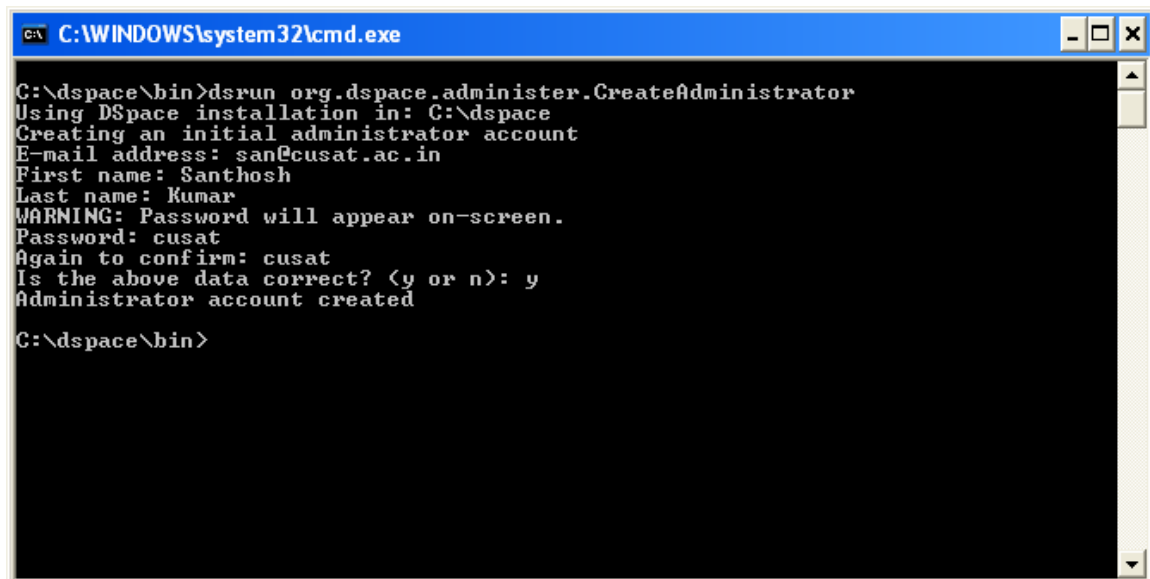
```
C:\WINDOWS\system32\cmd.exe
[echo]
[echo] * Start up your servlet container <Tomcat etc.>
[echo] You should then be able to access your DSpace's 'home page':
[echo] http://localhost:8080/jspui
[echo] You should also be able to access the administrator UI:
[echo] http://localhost:8080/jspui/dspace-admin
[echo] =====
[echo]
BUILD SUCCESSFUL
Total time: 25 seconds
C:\dspace-1.5.2-src-release\dspace\target\dspace-1.5.2-build.dir>
```

Figure 11: Screen shot after a successful Installation of DSpace

9. Create an administrator account, by running the following from your [dspace]
[dspace]\bin\dsrun org.dspace.administer.CreateAdministrator



```
C:\WINDOWS\system32\cmd.exe
C:\>cd dspace
C:\dspace>cd bin
C:\dspace\bin>dsrun org.dspace.administer.CreateAdministrator_
```



```
C:\WINDOWS\system32\cmd.exe
C:\dspace\bin>dsrun org.dspace.administer.CreateAdministrator
Using DSpace installation in: C:\dspace
Creating an initial administrator account
E-mail address: san@cusat.ac.in
First name: Santhosh
Last name: Kumar
WARNING: Password will appear on-screen.
Password: cusat
Again to confirm: cusat
Is the above data correct? <y or n>: y
Administrator account created
C:\dspace\bin>
```

Figure 12: Creating dspace administrator

10. Copy the Web application directories from [dspace]\webapps\ to Tomcat's webapps dir, which should be somewhere like C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps

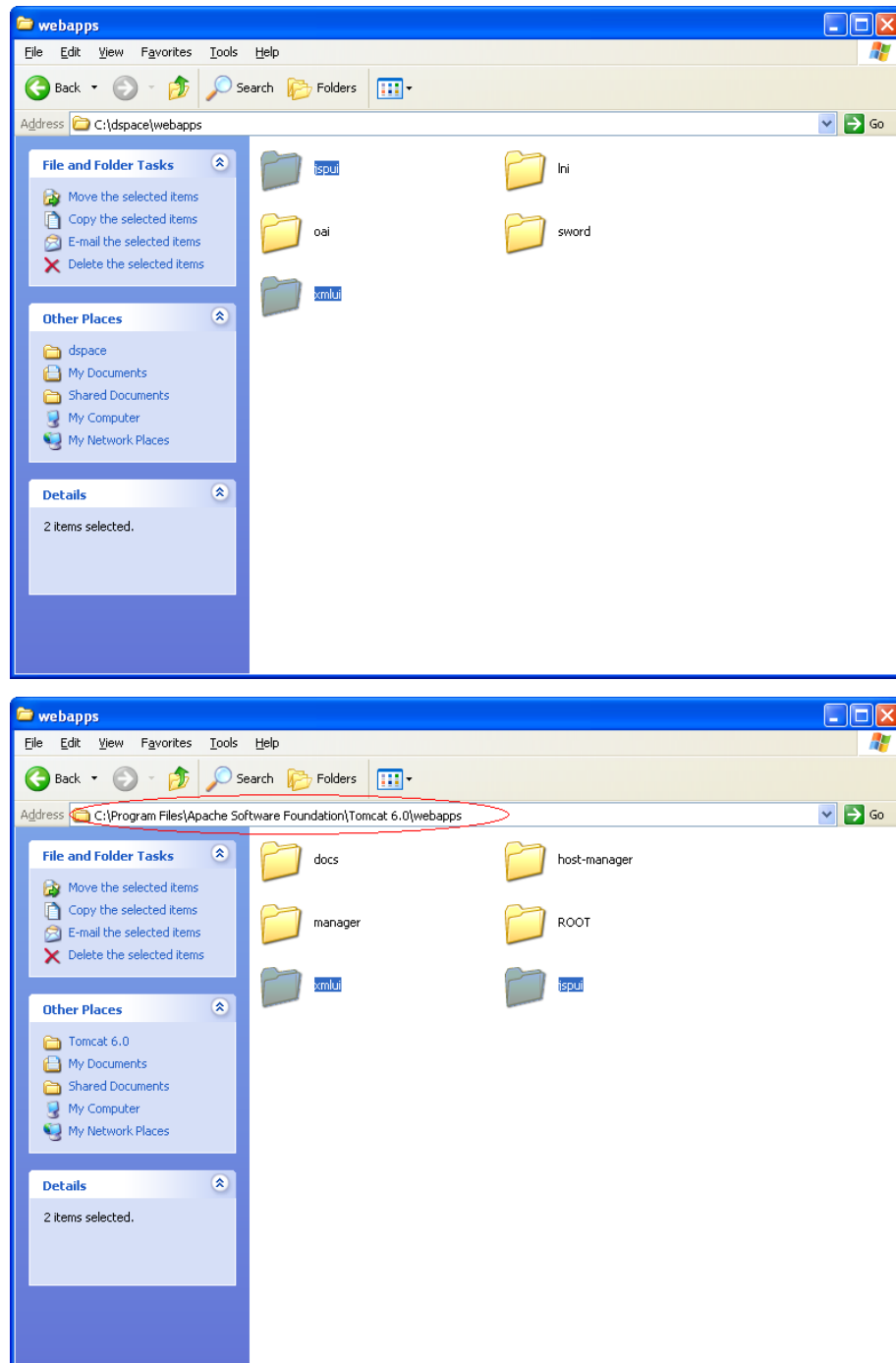
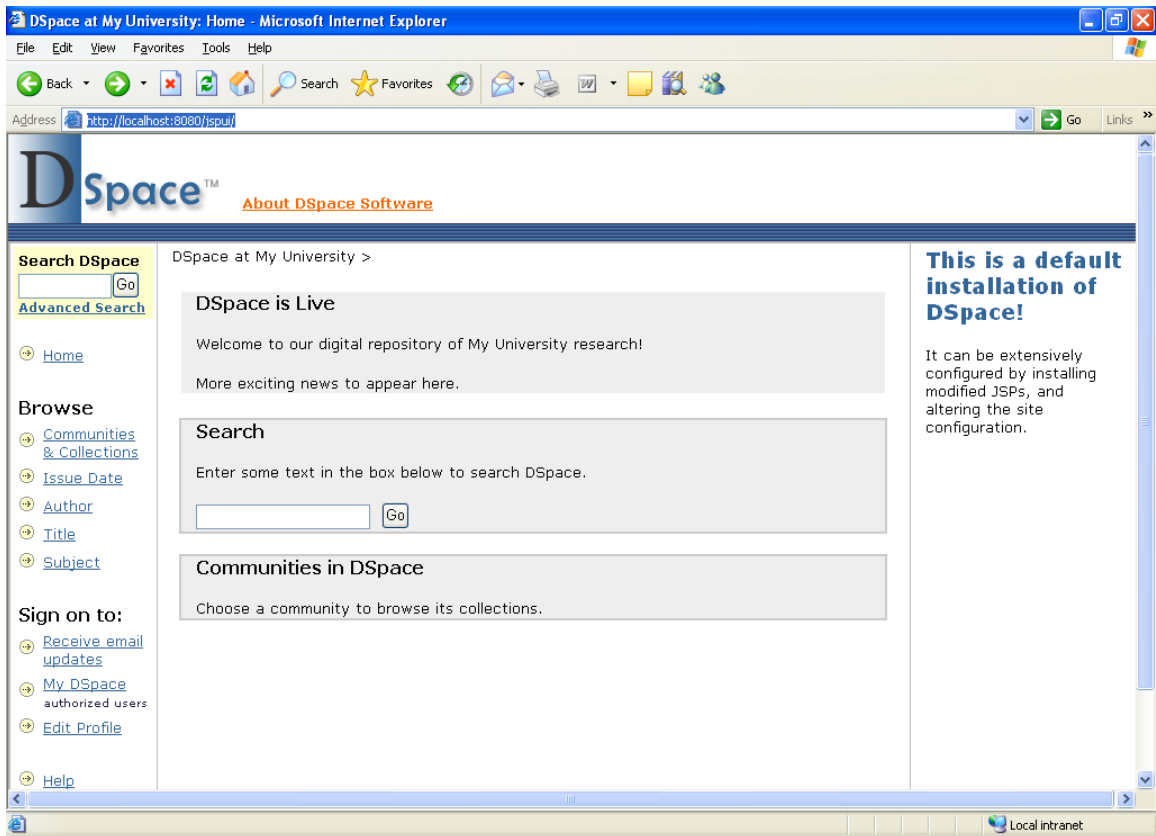
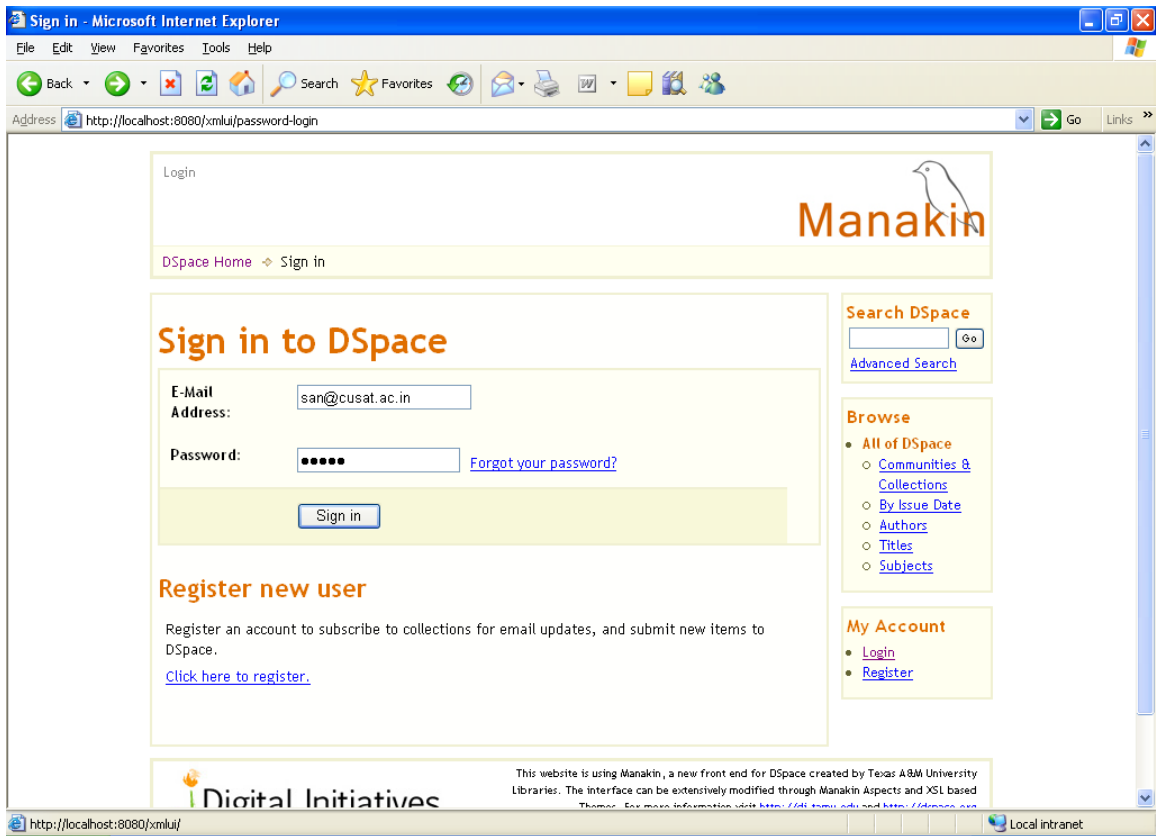


Figure 13: Web application directories C:\dspace\webapps\jspui and C:\dspace\webapps\xmlui Copied to C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps

11. Restart the Tomcat and see DSpace is running at <http://localhost:8080/jspui/> and <http://localhost:8080/xmlui/>



DSpace Customization

Introduction

This document discusses basic customization of DSpace. In this we will see how to customize the following

1. Logo of Dspace
2. Removing « About DSpace Software » Link
3. Putting a picture as Welcome Message
4. Change Color of Sidebar, Searchbox etc.
5. Enabling RSS Feeds
6. Change a form value (Type of Content)

A WORD OF CAUTION : In this we will edit files that are important to run DSpace. Care must be given while editing the files. **Any mistake** may result in misconfiguration of the DSpace installation and DSpace may **not work properly !**

STOP/START Apache Tomcat : See whether Tomcat is running or not. Check for the Tomcat icon in the systems tray



To Stop Tomcat

Rightclick on the icon >> Select Stop Service.

To start Tomcat

Rightclick on the icon >> Select Start Service.

CUSTOMIZATION 1 :

Task : To Change the Default Logo of DSpace (Dimension 198 X 79)



File to be changed : C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\jspui\image\ **dspace-blue.gif**

Make your own logo (Dimension 198 X 79) and replace the file **dspace-blue.gif**
Use MSPaint to create one.

Do **STOP/START Apache Tomcat** (Please refer above) step

CUSTOMIZATION 2 :

Task : To Remove **About DSpace Link** [About DSpace Software](#)

File to be changed : C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\jspui\layout\header-default.jsp

Open 'header-default.jsp' (right click and **open with WordPad**)

```
<!-- DSpace top-of-page banner -->
<!-- HACK: width, border, cellpadding, cellspacing: for n
<table class="pageBanner" width="100%" border="0" cellpadding

<!-- DSpace logo -->
<tr>
  <td>
    <a href="<%= request.getContextPath() %>/"><i>
  <td class="tagLine" width="99%"> <!-- Make as
    <a class="tagLineText" target="_blank" href="
  </td>
  <td nowrap="nowrap" valign="middle">
```

Remove the lines with in the **second circle**. Save the file and

Do **STOP/START Apache Tomcat** (Please refer above) step

CUSTOMIZATION 3 :

Task : Putting a picture as Welcome Message

File to be changed : C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\jspui\home.jsp

Open 'home.jsp' (right click and **open with WordPad**)

```
<dspace:layout locbar="nolink" titlekey="jsp.home.title" feedD:
<table class="miscTable" width="95%" align="center">
  <tr>
    <td class="oddRowEvenCol"><%= topNews %></td>
  </tr>
</table>
<br/>
```

Add the following **lines that are in bold** to the existing line

```
<td class="oddRowEvenCol">
<%= topNews %><center></center></td>
```

Save the file and

Do **STOP/START Apache Tomcat** (Please refer above) step

CUSTOMIZATION 4 :

Task : Change Color of Sidebar, Searchbox

Basic idea here is to change the background color of corresponding classes belong to each item

File to be changed : C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\jspui\styles.css.jsp

Class belong to Sidebar is **.sidebar**

Class belong to Searchbox is **.searchBox, .searchBoxLabel, .searchBoxLabelSmall**

Open 'styles.css.jsp' (right click and **open with WordPad**)

```
margin-left: 10px;
margin-right: 10px;

.sidebar { background: #ffd700;
          color: #000000 }
```

Change the color value to #ffd700, similarly change the values of .searchBox, .searchBoxLabel, .searchBoxLabelSmall to #ffd700

Save the file and

Do **STOP/START Apache Tomcat** (Please refer above) step

CUSTOMIZATION 5 :

Task : Enabling RSS Feeds

File to be changed : C:\dspace\config\dspace.cfg

Open 'dspace.cfg' (right click and **open with WordPad**)

```
#### Syndication Feed Settings #####
# enable syndication feeds - links dis
webui.feed.enable = false
# number of DSpace items per feed (the
```

Locate the webui.feed.enable field and set the value to **true**

Save the file and

Do **STOP/START Apache Tomcat** (Please refer above) step

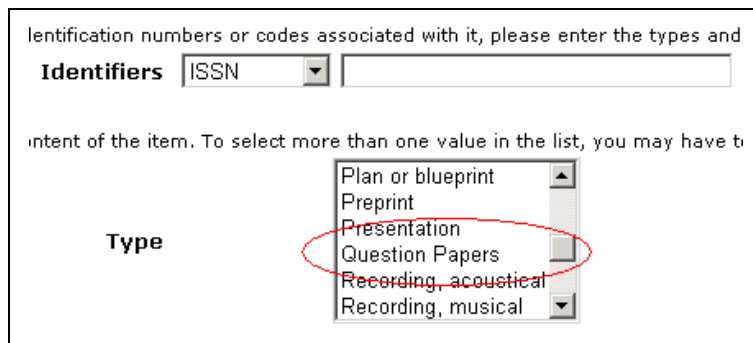


You can see the RSS Feeds in the side bar of home page.

CUSTOMIZATION 6 :

Task : Change a form value (Type of Content)

File to be changed : C:\dspace\config\input-forms.xml



Open 'input-forms.xml' (right click and **open with WordPad**)

```
<stored-value>Video</stored-value>
</pair>
<pair>
  <displayed-value>Working Paper</displayed-value>
  <stored-value>Working Paper</stored-value>
</pair>
<pair>
```

Add or change

```
<pair>
<displayed-value> Question Paper </ displayed-value >
<stored-value> Question Paper </stored-value>
</pair>
```

Save the file and

Do **STOP/START Apache Tomcat** (Please refer above) step

Contact us for further help ;

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