

# CCCU Conference uPortal Session

## From CSWiki

<http://www.ja-sig.org/wiki/display/JCON/uPortal+101>

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## Download List

- Gateway system
- Login, run ZISWIN, clear image data, reboot to get fresh image
- Set computer name to "gateway\_uportal"
- Download Eclipse 3.1.2
  - Go to the Eclipse Web Tools download page (<http://download.eclipse.org/webtools/downloads/>)
  - Click on the latest release number (1.0.2 as of this writing)
  - Scroll down to the **WebTools Platform; All-in-one** section
  - Select the download for your platform (Windows Platform  
(<http://www.eclipse.org/downloads/download.php?file=/webtools/downloads/drops/R-1.0.2-200604280245/wtp->  
)
- Download uPortal 2.5.2 stand-alone ([http://www.ja-sig.org/downloads/uportal/uPortal\\_rel-2-5-2.zip](http://www.ja-sig.org/downloads/uportal/uPortal_rel-2-5-2.zip))
- Download Sun's JDK 1.5.0 Update 7 (<http://java.sun.com/j2se/1.5.0/download.jsp>)

- Download Tomcat v 5.0.28 (<http://tomcat.apache.org/download-55.cgi#5.0.28>) (select one of the **Core** links)
- Download Ant v 1.6.5 (<http://ant.apache.org/bindownload.cgi>)
- Download Eclipse Tomcat plugin v 3.1 (<http://www.sysdeo.com/sysdeo/eclipse/tomcatplugin>)
- Download MySQL Essentials 5.0.22 (<http://dev.mysql.com/get/Downloads/MySQL-5.0/mysql-essential-5.0.22-win32.msi/from/pick#mirrors>) and MySQL J/Connector 3.1.12 (<http://dev.mysql.com/get/Downloads/Connector-J/mysql-connector-java-3.1.12.tar.gz/from/pick#mirrors>)

*For myVT mods:*

- Download MyVT Quick Start (<http://www.ja-sig.org/downloads/uportal/uportal-2-4-2-myvt-quick-start.zip>) (uPortal 2.4.2)
- Download MyVT 2.5.2 patch (<http://www.ja-sig.org/wiki/download/attachments/15131/myvt-2.5.2.diff>)
- If running on Windows, download Patch for Windows (<http://gnuwin32.sourceforge.net/downlinks/patch-bin-zip.php>) (v 2.5.9-6 as of this writing)

## Installation Steps

### JDK

- Create c:\java
- Run the jdk setup application
- Change the install path to c:\java\jdk1.5.0\_07

### Ant

- Extract the Ant zip to c:\java
- Rename c:\java\apache-ant-1.6.5 to c:\java\ant for simplicity

### Update Windows environment variables

- As an Administrative user, right-click **My Computer** and select **Properties**
- Click the **Advanced** tab
- Click the **Environment Variables** button
- Under the **System variables** box, double-click **Path** to edit it
- Add ;%ANT\_HOME%\bin to the end of the existing path
- Under the **System variables** box, click the **New** button
- Enter ANT\_HOME as the variable name and c:\java\ant as the variable value
- Under the **System variables** box, click the **New** button
- Enter JAVA\_HOME as the variable name and c:\java\jdk1.4.2\_11 as the variable value

### Eclipse

- Extract the Eclipse all-in-one zip to c:\ (the eclipse base folder is included in the zip)
- Extract the Eclipse Tomcat plugin into c:\eclipse\plugins

### uPortal

- Create c:\java\source
- Extract the uPortal 2.5.2 zip to c:\java\source

## MySQL

- As an Administrative user, run the MySQL install .msi file
- Skip sign-up
- Run the Configuration Wizard
  - Choose **Standard Configuration**
  - Install as a Windows Service
  - Root password: **r00tpass**
- After install is complete, go to Start -> All Programs -> MySQL -> MySQL Server 5.0 -> MySQL Command Line Client
- Login in using **r00tpass**
- Enter the following statement and hit ENTER: **create database portaldb;**
- Enter the following statement and hit ENTER: **quit**

## Tomcat

- Run the tomcat installer
  - Uncheck the "Examples"
  - Change install folder to **c:\java\tomcat**
  - Administrator password: **r00tpass**
  - Select the JDK that was just installed
- Since we are running this workshop under JDK 5.0 Update 7 we must **remove (!)** two jar files distributed with Tomcat 5.0.28. To do this go to c:\java\tomcat\common\endorsed and delete (or move) xml-apis.jar and xercesImpl.jar.

## Configuration

### Eclipse

#### Miscellaneous IDE Tweaks

- **File Encoding:** Text file encoding should be ISO-8859-1 for Java files.
  - In Eclipse, go to Window > Preferences > General > Editors
  - Under "Text file encoding", select "ISO-8859-1" from the the "Other" select box

#### JDK/JRE

- See <http://www.java-sig.org/wiki/display/UPC/Practical+uP25+XML+Changes>
- Go to window>preferences>Java>Installed JREs
- Verify that JDK 1.5.0 is selected
- If not...
  - Click the **Add** button
  - Click the **Browse** button
  - Locate the folder where you installed the JDK and click the **OK** button
  - Uncheck the **Use default system libraries ???**

#### Tomcat

- ■ Go to window>preferences>Tomcat and select Version 5.x and set Tomcat home to the location where you installed Tomcat.
- Go to window>preferences>Tomcat>JVM Settings

- Add the following JVM Parameters (necessary for RSS and portlets to get off campus http access from the server while on Cedarville's campus)

```
-DproxySet=true
-DproxyPort=8080
-DproxyHost=proxy.cedarville.edu
```

## Setup uportal project

- Start a new Eclipse project
  - Select **New** from the **File** menu
  - Select **Project...**
  - Select **Java Project**
  - Click the **Next** button
  - Project name: **uPortal**
  - Contents: Create new project in workspace (c:\eclipse\workspace)
  - JDK Compliance: Use default compiler compliance
  - Project Layout: Use project folder as root for sources and class files
  - Click the **Next** button (NOT FINISH)
  - Change default output dir (at bottom) to **uPortal/build/WEB-INF/classes**
  - Accept all other defaults
  - Click the **Finish** button
- Right-click uPortal project, Select **New, Source Folder** and name it **source**
- Right-click uPortal project and choose **Import**
  - Select **File System** as the Import Source
  - Browse to where you extracted uPortal source (c:\java\source\uportal-zzz)
  - Expand uportal source directory and select all folder checkboxes on the left and all file checkboxes on the right (basically every checkbox except the top-level folder)
  - Click the **Finish** button
- ?? *COPY MYSQL JAR to [uportal]\lib folder for the database driver*
- Right-click uPortal project and choose **Properties**
  - Click on **Java Build Path**
  - Click on **Libraries** tab
  - Click on **Add JARs** button
  - Expand the **uPortal** project
  - Expand the **lib** folder and all its subfolders
  - Highlight all the jar files, with the following exceptions: (**do not select the folders**)
    - xalan-2-6-0.jar
    - xml-apis.jar
    - do not select any jars in the JAXP folder
  - Click the **OK** button
  - Click on the **Order and Export** tab
    - Move **tidy.jar** below the **JRE System Library**
  - Click the **OK** button
- Click the **OK** button

## Hide jar files

- Click the context menu on the Package Explorer (white down-arrow) to reveal the menu
  - Select **Filters**
  - Check the box at the top next to **Name filter attens...**
  - Enter **\*.jar** (this will hide all jar files from our project view)
  - Click the **OK** button

## Hide warning messages

- Open **Problems** view (bottom)
- Click the **Filters** button
- Check the box beside **Where severity is:**
- Check the box beside **Error**
- Click the **OK** button

## Ant

- Select **Show View -- Ant** from the **Window** menu
- Click the **Add Buildfiles** button in the Ant view
- Drill down to your uPortal project and select its build.xml file

## uPortal

### copy jdbc driver

- Copy **mysql-connector-java-3.1.12-bin.jar** to [uportal]\lib folder

### [uportal]/build.properties

- change **server.home** to **/java/tomcat**
- change **jdbcDriver.jar=\${lib.path}/hsqldb.jar** to **jdbcDriver.jar=\${lib.path}/mysql-connector-java-3.1.12-bin.jar**
- *Optional:* change **webapp.docBase=uPortal** to **webapp.docBase=ROOT** to make uPortal the default application (make sure you remove the files under the [tomcat]/webapps/ROOT before deploying uportal)

### [uportal]/properties/Logger.properties

- change **log4j.appender.R.File=portal.log** to **log4j.appender.R.File=c:\\java\\portal.log**

### [uportal]/properties/personDirs.xml

- To use the default uportal database for person attribute information, no change is needed (this is what we are doing for now)
- As of uPortal 2.5, you can now use personDirectory.xml to implement a Spring-backed data store

### [uportal]/properties/rdbm.properties

- setup for use with mysql (see MySQL Configuration (<http://www.ja-sig.org/wiki/display/UPC/MySQL+Configuration>))
- Remove the hypersonic db section
- Create a new section for mysql (using the root password setup when installing mysql):

```

-----
!jdbcDriver=com.mysql.jdbc.Driver
!jdbcUrl=jdbc:mysql://localhost/PortalDb
!jdbcUser=root
!jdbcPassword=r00tpass
-----

```

## Compile and Use uPortal (from within Eclipse)

- General Notes from the uPortal wiki (using eclipse to do this varies from what those pages state):
  - Using the uPortal-only Distribution  
(<http://www.ja-sig.org/wiki/display/UPC/Using+the+uPortal-only+Distribution>)
  - Compiling Uportal (<http://www.ja-sig.org/wiki/display/UPC/Compiling+uPortal>)
- Open the Ant Perspective in Eclipse
- Double-click the **dbtest** target
  - this will prepare, compile, then run dbtest to verify connection to the database from the rdbm.properties data
- Double-click the **initportal** target
  - **WARNING: This will drop all your tables, delete all deployed data and start completely over!!**
- Choose **Start Tomcat** from the **Tomcat** menu
- Verify Tomcat is running: <http://localhost:8080/>
- Verify uPortal is running: <http://localhost:8080/uPortal>
  - uPortal logging will be found in **c:\java\portal.log** (as as set in Logger.properties)

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Categories: UPortal | Web Team

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