How to Install Magnolia CMS and Import iWrite e-Tutorial Package

What is iWrite?

iWrite is an initiative of the Faculty of Engineering and Information Technologies to support English academic writing in engineering. iWrite has been jointly developed by the Learning and Affect Technologies Engineering (LATTE) research group and the Learning Centre, University of Sydney and the Faculty of Engineering and Learning Centre, University of New South Wales. The development of iWrite has been supported by an Office for Learning and Teaching (OLT) grant.

For more information visit: www.iwrite.sydney.edu.au

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1. Server Configuration

1.1. System Requirements
OS: Linux/Windows
JAVA version: 7 or later
Tomcat: 7 or later

1.2. Install Tomcat7

In order to install Tomcat7 on Linux machine you need to download tar file. The version of the Tomcat file might be different. The latest version can be found at http://tomcat.apache.org/download-70.cgi.

```
sudo wget  http://mirror.rackcentral.com.au/apache/tomcat/tomcat-
7/v7.0.55/bin/apache-tomcat-7.0.55.tar.gz
```

Untar the file:
```
sudo tar xvzf apache-tomcat-7.0.55.tar.gz
```

Rename the folder:
```
sudo mv apache-tomcat-7.0.55 tomcat7
```


1.3. Configure Tomcat and server

1.3.1. Define User passwords
Make sure that you change the admin password.
```
sudo nano tomcat7/tomcat-users.xml
```
Edit file by adding manager-gui and admin roles and define new username and password:

```
<tomcat-users>
 <role rolename="manager"/>
 <role rolename="admin"/>
 <role rolename="manager-gui"/>
 <user username="admin" password="YOUR-PASSWORD" roles="manager,admin,manager-gui"
/>
</tomcat-users>
```

Press Ctrl + X to exit

1.3.2. Increase upload limit to upload war file
You need to edit web.xml file inside the manager webapps:
UBUNTU:
```
sudo nano /usr/share/tomcat7-admin/manager/WEB-INF/web.xml
```
REDHAT:
```
sudo nano tomcat7/webapps/manager/WEB-INF/web.xml
```

You can increase it into 150Mb:

```
<!- 50MB max ->
 <max-file-size>152428800</max-file-size>
 <max-request-size>152428800</max-request-size>
 <file-size-threshold>0</file-size-threshold>
 </multipart-config>
```

1.3.3. Increase java heaps

Adapt JVM heap size by editing the applicable file in the /bin directory in the Apache Tomcat directory:

On Unix, create and edit setenv.sh file and add:

UBUNTU:

```
sudo nano /usr/share/tomcat7/bin/setenv.sh
```

REDHAT:

```
sudo nano tomcat7/bin/setenv.sh
```

and add this to the file:

```
export CATALINA_OPTS="-server -Xmx1024m"
```

On Windows, create setenv.bat file in the Tomcat Bin folder

and add:

```
set CATALINA_OPTS=-server -Xmx768m -XX:PermSize=256m -XX:MaxPermSize=512m
export CATALINA_OPTS="-server -Xmx1024m"
```

1.4. Configure server

1.4.1. Install JAVA

Make sure that JAVA version 7 is installed on your machine.

1.4.2. Increase open files limit

Magnolia uses embedded Derby database. Derby opens several file handles and may run over the maximum limit set by the system. You need to increase this limit using following procedure:

1. Find the current maximum number of open files per user in a single session:

```
ulimit -n
```

By default the number is 1024 which is too small.

2. Edit the limits.conf file:

```
sudo nano /etc/security/limits.conf
```

3. Add the following lines to the file:

```
* soft nofile 10000
* hard nofile 50000
```

4. This sets for all users a soft limit of 10000 open files and a hard limit of 50000. These are just example numbers. Set them according to your system needs. Note that the wildcard option applies only to regular users, not to superuser. If you run Magnolia CMS as superuser replace the asterisk with root.

5. Save the file.

6. Edit the configuration file for session-related modules:

```
sudo nano /etc/pam.d/common-session
```

7. Add the following line to the file:

```
session required pam_limits.so
```

8. Save the file and restart Ubuntu.

9. Verify the new maximum number of open files:

```
ulimit -n
```

The command should now return 10000.

2. Install and Setup Magnolia

2.1. Download and Deploy Magnolia

Download Magnolia Community Edition version v. 5.2.2 from here: link
It is strongly recommended to download this file:

```
magnolia-bundled-webapp-5.2.2.war
```

Then rename it to ROOT.war and deploy it on Tomcat using Tomcat manager.
You need to deploy the same version on Production (Public) and Development (Authoring) servers.

The default Username/password for the superuser is:

```
Username: superuser
password: superuser
```

Change the password as soon as possible.

2.2. Convert Author Instance into Public Instance

The default setting for deployed Magnolia is an Author Instance. You need to change the setting of the Public Magnolia system following these steps:

1. Set Configuration /server/admin to false.
2. Grant public instance permissions to the anonymous role. Go to Security->Roles and edit **anonymous role**:
    a. In Access control lists:
        i. website workspace, grant read-only access to all website content.
        ii. dam workspace, grant read-only access to all dam content.

    b. In Web access, grant Get & Post access to all URLs but deny access to AdminCentral (/.magnolia & /.magnolia/*), the REST API (/.rest*) and members-only pages of your site (for example, /demo-project/members-area/protected*).
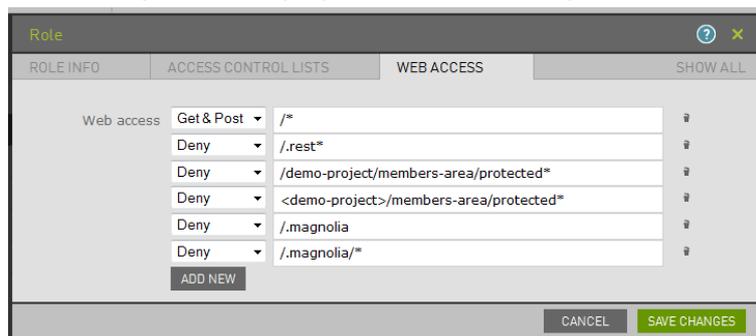
3. Assign public instance roles to the anonymous system user. Go to Security/System Users/anonymous/Roles and add the **public-user-registration-base** role. The other default roles are the same on both instances.
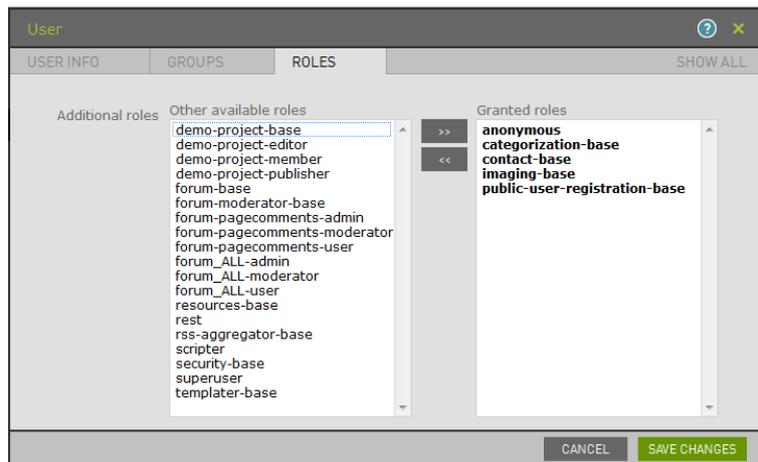
4. Set Configuration/modules/ui-admincentral/virtualURIMapping/default/toURI to your start page, for example. The system does not know which page, or which site in a multisite configuration, visitors should be directed to by default. Set toURI to the site root page or a page you want visitors to land on. For example, in the demo-project toURI is set to **redirect:/iwrite.html**. See URI mapping for help.
5. Go to the Tools->Cache tools and "**Flush all caches**".

You can find more information here: link

2.3. Connect the Author instance into the Public instance
Read this article: link

2.3.1. Create a new subscriber in Author instance
1. Open Configuration app in Author instance
2. Goto server/activation/subscribers
3. Open magnoliaPublic8080 node and set the active property to **False**.
4. Duplicate magnoliaPublic8080 node
5. Rename the new node into iWritePublic
6. Open iWritePublic node and set the URL property to your **Public Instance URL** (e.g. http://137.154.151.32) and set the active property to **True**.

2.3.2. Activate Subscription
To generate a new public key:
1. Open the Activation Tools app in Author instance.
2. Click **Generate new key**. This generates a new public key and registers it automatically on the author instance.
3. Copy the new key from the Current public key box.
4. Sign into the public instances and open the Configuration app.
5. Go to **Configuration >** server/activation/ and create or update "publicKey" on the public instance and paste the same key.
6. Now you can publish your contents from Author instance into Public instance.

3. Export/Import iWrite contents

3.1. Export iWrite Content

You can export various types of contents and nodes into XML files and import them into another Magnolia instance.

You can easily select the content and then click on the Export button in the right hand side menu. The most important things that you should import are:

What	How
Website : webpages	Go to Pages and select the website
Assets: images, videos, flash animations, etc.	Go to the Assets and select the folder
STK theme: template configurations	Go to STK -> themes and select specific theme (e.g., iwrite)
STK resources: CSS files	Go to STK -> Resources -> themplating-kit and select specific theme (e.g., iwrite)

3.2. Import iWrite Content

1. Go to the Pages and click on the Import button.
2. Select the XML file (*e.g., website.iwrite.xml*) and upload/import it.
3. Go to the Assets section and create a new folder.
4. Select the new folder and then click on the Import button.
5. Select the XML file (*e.g., dam.iwrite.xml*) and upload/import it.
6. Drag and Drop the imported folder into the upper level (root).
7. Enjoy it! The new website contains all webpages will be imported into your system.

You can download iwrite content from here: http://goo.gl/Csn6Yj

3.3. Import iWrite Theme resources

1. Go to the STK-> Themes and create a new folder.
2. Select the new folder and then click on the Import button.
3. Upload the XML file for the main theme (*e.g., config.modules.standard-templating-kit.config.themes.iwrite.xml*).
4. If there is another setting for the mobile themes upload the XML file for mobile devices (*e.g., config.modules.standard-templating-kit.config.themes.iwrite-mobile.xml*).
5. Drag and Drop the imported items into the upper level and delete the empty folder.
6. In order to import CSS files you need to go to the STK->Resources -> templating-kit -> themes.
7. Click on the Import button and import the corresponding XML file (*e.g., resources.templating-kit.themes.iwrite.xml*).
8. In the last step you need to change the theme of the website (section 3.4).

3.4. Change Theme

Go to the STK-> site definition -> theme and change "pop" to "iwrite"

3.5. Change Navigation levels

In order to have subsections in level 3 in the navigation bar you need to go to
STK-> site definition -> templates -> prototype -> navigation
And change the level of vertical navigation bar from 2 into 3 and the horizontal navigation from 1 to 2.

3.6. iWrite Resources

iWrite resources (content, images, css files, etc.) are available here: http://goo.gl/Csn6Yj
The resources folder contains following files which can be imported to the Magnolia instance.
You can download these files as a zip file: http://goo.gl/APoQIc

	File Name	Comment
1	*website.iwrite.xml*	Contains iwrite webpages. It needs to be imported in Magnolia Pages. (See section 3.2)
2	*dam.iwrite.xml*	Contains iwrite images, movies, flash animations. It needs to be imported in Magnolia Assets. (See section 3.2)
3	*config.modules.standard-templating-kit.config.themes.iwrite.xml*	It contains iwrite theme configuration. It needs to be imported in Magnolia STK->Themes. (See section 3.3)
4	*config.modules.standard-templating-kit.config.themes.iwrite-mobile.xml*	It contains iwrite **mobile** theme configuration. It needs to be imported in Magnolia STK->Themes. (See section 3.3)
5	*resources.templating-kit.themes.iwrite.xml*	It contains iwrite theme resources (CSS files). It needs to be imported in Magnolia STK->Resources. (See section 3.3)

4. Useful links

- Magnolia Learning : http://documentation.magnolia-cms.com/display/DOCS/Authoring
- Magnolia troubleshooting: http://documentation.magnolia-cms.com/display/DOCS/Known+issues
- How to install Linux for Magnolia: https://wiki.magnolia-cms.com/display/WIKI/Guide+-+How+to+install+your+perfect+linux+server+for+Magnolia
- iWrite Resources: http://goo.gl/SRoZb2