eduCommons 3.1.1-final Installation
Installation Instructions

Installation

This section describes how to install a server based instance of eduCommons on a UNIX based platform (linux, OSX).

Installation involves the following packages:

- Python-2.4.4.tar.gz (http://python.org/2.4.4/)
- Zope-2.10.5-final.tar.gz (http://www.zope.org/Products/Zope/2.10.5)

Python library packages:

- Imaging-1.1.6.tar.gz (http://www.pythonware.com/products/pil/)
- PyXML-0.8.4.tar.gz (http://sourceforge.net/project/showfiles.php?group_id=6473)
- elementtree-1.2.6.tar.gz (http://effbot.org/downloads/#elementtree)
- libxml2-python-2.6.15.tar.gz (ftp://xmlsoft.org/libxml2/python/)
- Beautiful Soup 3.0.4 (http://www.crummy.com/software/BeautifulSoup/download/)

Plone package:

- Plone-3.0.6.tar.gz (http://plone.org/products/plone/releases/3.0.6)

eduCommons-related Packages:
(Correct versions of these products are shipped in the eduCommons archive unless otherwise noted)

- eduCommons (3.1.0-final)
- leftskin (1.0.2-final)
- ContentLicensing (2.0.0)
- ZipFileTransport (2.0.1)
- IMSTransport (2.0.1)
- PloneBookmarklets (2.0.0)
- ProxyIndex (1.2.1)
- FileSystemStorage (2.6.2)
- LinguaPlone (2.0)
- easy_install (download here: http://peak.telecommunity.com/dist/ez_setup.py)
- collective.captcha (installed via easy_install)

I. Installation Steps

1. Installing Python:

   It is likely that the Python programming language is already installed on your server. Try typing:

   ```
   $ python
   ```

   on the command line to see what version you have installed (Ctrl-D will exit). You should see something like the following:

   ```
   Python 2.4.4 (#1, Oct  7 2006, 21:17:24)
   [GCC 3.4.6 20060404 (Red Hat 3.4.6-3)] on linux2
   Type "help", "copyright", "credits" or "license" for more informa-
   tion.
   >>>
   ```

   eduCommons and its supporting software requires version 2.4.4. If your server does not have Python, or if the version of Python installed is not 2.4.4, you will have to install a new version.

   Some platforms may have an updated version of Python available through their package managers (yum, apt, fink). If you can not find a suitable version, or if you prefer to build Python from source, simply download the source package and use a command line interface to type in the following instructions:

   ```
   tar -zxvf Python-2.4.4.tar.gz
   cd Python-2.4.4
   ./configure
   make
   sudo make install
   ```

   By default this will install a new version of Python in the /usr/local directory on your server.

2. Installing Python library packages

   Once you have Python installed it will be necessary to include a number of libraries that extend the functionality of your Python installation. If you have installed Python using a package manager, it may be likely that some (or all) of these packages may also be available for installation. As long as suitable library versions can be found, it should be fine to use them. In cases where it is not possible to load prebuilt packages, use the following instructions below:

   a. Installing Python Imaging Libary (PIL)

      PIL is now a required package for the latest version of Plone.

      Unpack and install Imaging-1.1.6:

      ```
      tar -zxvf Imaging-1.1.6.tar.gz
      cd Imaging
      /usr/local/bin/python setup.py build
      sudo /usr/local/bin/python setup.py install
      ```

      You may require additional packages to build the imaging library. See the PIL website for additional installation instructions.

   b. Installing PyXML

      Unpack and install PyXML:

```
tar -zxvf PyXML-0.8.4.tar.gz
cd PyXML-0.8.4
/usr/local/bin/python setup.py build
sudo /usr/local/bin/python setup.py install
```

c. Installing elementtree

elementtree is now a required dependency for the latest version of Plone.

Unpack and install elementtree:

```
tar -zxvf elementtree-1.2.6.tar.gz
cd elementtree-1.2.6
/usr/local/bin/python setup.py build
sudo /usr/local/bin/python setup.py install
```

d. Installing libxml2-python

If your target platform includes binary only distributions of libxml2 and libxslt, you may need to also include the development packages in order for the following to work.

Unpack and install libxml2-python:

```
tar -zxvf libxml2-python-2.6.15.tar.gz
cd libxml2-python-2.6.15
/usr/local/bin/python setup.py build
sudo /usr/local/bin/python setup.py install
```

e. Install Beautiful Soup

Unpack and install Beautiful Soup 3.0.4 into your python library.

```
tar -zxvf BeautifulSoup-3.0.4.tar.gz
cd BeautifulSoup-3.0.4
/usr/local/bin/python setup.py build
sudo /usr/local/bin/python setup.py install
```

f. Install Easy Install

Easy Install (easy_install) is a python module bundled with setuptools that lets you automatically download, build, install, and manage Python packages.

Download http://peak.telecommunity.com/dist/ez_setup.py and install it using the correct version of python:

```
/usr/local/bin/python ez_setup.py
```

g. Install collective.captcha

collective.captcha is a Python package that is installable via Easy Install

```
/usr/local/bin/easy_install collective.captcha
```

3. Installing Zope

Unpack, build and install Zope:

```
tar -zxvf Zope-2.10.5-final.tar.gz
cd Zope-2.10.5-final
./configure --with-python=/usr/local/bin/python --prefix /opt/Zope-
2.10.5
make
sudo make install
```

4. Create a Zope instance

Create an instance in your Zope install:

```
sudo /opt/Zope-2.10.5/bin/mkzopeinstance.py
```

When prompted for a directory enter in the following:

```
/opt/Zope-2.10.5/web
```

You can substitute the *web* directory for a name that better describes your site. The documentation will assume that you have chosen web as your instance directory.

When prompted for a username and password, enter in the username/password you will use for managing your Zope instance.

5. Install Zope Products

eduCommons relies on several Zope products in order to run. You will need to install the following packages in the following order. The commands listed below assume that you have the source tarballs in the root of your home account:

a. Plone-3.0.6

Install Plone into your Zope instance Products folder.lib/python directory

```
cd /opt/Zope-2.10.5/web/Products
sudo tar -zxvf ~/Plone-3.0.6.tar.gz
```

Once you have unpacked Plone you need to move the products back up to the Products directory as follows:

```
cd /opt/Zope-2.10.5/web/Products
sudo su
cd Plone-3.0.6
mv * ..
cd ..
sudo rm -rf Plone-3.0.6
```

The Plone tarball came with a lib/python directory. The contents of it need to go up one level, into the lib/python of your Zope install.

```
cd /opt/Zope-2.10.5/web/Products
cp -r lib/* ../lib/
sudo rm -rf /opt/Zope-2.10.5/web/Products/lib
```

The Plone tarball also contains a Products directory. The contents of it need to go up one level, into the web/Products directory of your Zope install.

```
cd /opt/Zope-2.10.5/web/Products
cp -r Products/* ../Products/
sudo rm -rf /opt/Zope-2.10.5/web/Products/Products
```

b. eduCommons

This is the eduCommons product source package. To install use the following:

```
cd /opt/Zope-2.10.5/web/Products
sudo tar -zxvf ~/eduCommons-3.1.1-final.tar.gz
```

eduCommons includes a number of products which need to be put in the root of the Products folder. To do this use the following:

```
cd /opt/Zope-2.10.5/web/Products
sudo mv eduCommons-3.1.1-final/* .
sudo rm -rf eduCommons-3.1.1-final
```

The products that now ship with eduCommons are as follows:

1. eduCommons

   A Plone product which implements the core functionality of eduCommons.

2. leftskin

   A Plone product which customizes the Plone layout.

3. ContentLicensing

   A Plone product that adds the ability to set copyright licenses on content objects. Auto installed with the eduCommons product.

4. ZipFileTransport

   A Plone product that adds the ability to import and export content via ZIP archives. Auto installed with the eduCommons product.

5. IMSTransport

   A Plone product that imports and exports contents in IMS content packages. Auto installed with the eduCommons product.

6. PloneBookmarklets

   A Plone product that adds the ability to integrate documents with popular social bookmarking sites.

7. ProxyIndex

   ProxyIndex is a plugin to zope catalog index.

8. FileSystemStorage

   FileSystemStorage is a product that provides the framework for content types to store data directly on the filesystem, rather than in the ZODB.

9. LinguaPlone

   A tool to manage and maintain multilingual Plone content.

6. Configure your Zope site

Now that all the necessary Zope products are installed it is time to clean up and configure the site. The first task is to create a zope user and group in which zope can run under. This can be done via the following:

```
sudo /usr/sbin/groupadd zope
sudo /usr/sbin/adduser -g zope -s /bin/false -d /opt/Zope-2.10.5 zope
```

Once that is done we can now set the proper permissions needed for Zope to run securely. This can be done via the following:

```
cd /opt/Zope-2.10.5/web/Products
sudo chgrp -R zope *
sudo chmod go-w *
```

FileSystemStorage comes with its own documentation and we recommend you read it (/opt/Zope-2.10.5/web/Products/FileSystemStorage/README.txt). Create folders for storage and backup. We suggest setting things up in the following way:

```
cd /opt/Zope-2.10.5/web/var
mkdir fss_storage
mkdir fss_backup
```

Now edit the filesystemstorage.conf.in configuration file for FileSystemStorage located in /opt/Zope-2.10.5/web/Products/FileSystemStorage/etc. There are several configuration options here (see README.txt), but most can be left at the default. We suggest a hierarchical file structure, which can be set up by uncommenting and editing this line:

```
# storage-strategy flat
change to:
storage-strategy site1
```

Zope needs to be able to write to the log directory, and its database files. To enable this enter the following:

```
cd /opt/Zope-2.10.5/web
sudo chgrp -R zope log var
sudo chmod -R g+w log var
```

The last bit of configuration that needs to be done is to edit the zope.conf file. found in the *etc/* directory of your Zope Instance. Uncomment and edit the following settings:

```
effective-user zope
```

And set the default port you want the Zope server to run on:

```
<http-server>
  # valid keys are "address and "force-connection-close"
  address 8080
  # force-connection-close on
</http-server>
```

7. Apply Security Patch

Plone's Security Panel is broken for Products that add Roles that come alphabetically before 'Anonymous'. eduCommons adds the Administrator Role, which breaks the Security Panel. This is a documented bug (http://dev.plone.org/plone/ticket/7690).

In order to remedy this problem, apply the patch found in the eduCommons/extras folder. Copy the patch to /opt/Zope-2.10.5/web/lib/python/plone/app/controlpanel.

```
cd /opt/Zope-2.10.5/web/lib/python/plone/app/controlpanel
cp /opt/Zope-2.10.5/web/Products/eduCommons/extras/plone.app.controlpanel.security.py.patch .
```

Apply the patch by running the following command:

```
patch -p0 < plone.app.controlpanel.security.py.patch
```

You may get this message: "can't find file to patch at input line 1 Perhaps you used the wrong -p or --strip option? File to patch:" Enter the following:

```
security.py
```

8. Overwrite Kupu's html2captioned transform

Kupu allows for dynamically generated captions on inserted images. eduCommons utilizes this feature to provide license and copyright holder information for embedded images in documents. In order for this functionality to occur, the default transformation must be customized

```
cp /opt/Zope-2.10.5/web/Products/eduCommons/extras/html2captioned.py /opt/Zope-2.10.5/web/Products/kupu/plone
```

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II. Configuration Steps

1. Launch Zope

   Once Zope has been properly configured it can then be launched via the following commands:

   ```
   cd /opt/Zope-2.10.5/web
   sudo bin/zopectl start
   ```

   You should now be able to open a browser and go to the ZMI with the following URL (assuming that you configured Zope to run on port 8080)

   ```
   http://<server name>:8080/manage
   ```

   You should then get a dialog prompt asking for your Zope admin username and password.

2. Install eduCommons Product

   Once you have logged into the ZMI via the management interface, you are now ready to create the site. Start by creating a plone site with the pull down menu in the top right corner. Give the plone site an ID and title. The ID will be used in the URL to access the site, so name it appropriately. The title will appear several places within the eduCommons install, and should be based on your group or institution.

   Under "Extension Profiles" you need to do a multi-select (hold down the CTRL or the Apple key). Select Working Copy Support (Iterate), ContentLicensing, IMSTransport, LinguaPlone, PloneBookmarklets, Zip File Transport, eduCommons, and Left Skin so they are all highlighted. Then click "Add Plone Site."

   Once the eduCommons instance has been created, you will need to QuickInstall the FileSystemStorage Product. In the ZMI:

   ```
   1. Navigate to your eduCommons instance
   2. Navigate to portal_quickinstaller
   3. Select the checkbox to the left of FileSystemStorage
   4. Click Install
   ```

   If you wish to localize content in other languages you will need to QuickInstall install LinguaPlone. This can be done either now from the ZMI or later, via Site Setup --> Add-on Products. In the ZMI:

   ```
   1. Navigate to your eduCommons instance
   2. Navigate to portal_quickinstaller
   3. Select the checkbox to the left of LinguPlone
   4. Click Install
   ```

   If you have installed LinguaPlone you will also need to select your supported languages. In the ZMI:

   ```
   1. Navigate to your eduCommons instance
   2. Navigate to portal_languages
   3. Select one or more Allowed languages (use the control or ap-
   ple key to multi-select)
   4. Click Save
   ```

   Additional instructions for localizing content using LinguaPlone are available in LOCALIZATION.txt.

   Finally, you need to reorder the Layers in your eduCommons Skins Selections. In the ZMI:

```
1. Navigate to your eduCommons instance
2. Navigate to portal_skins
3. Click on the Properties tab
4. Under the Skins Selections, in the Layers textbox for Left-
Skin, cut the LinguaPlone entry
    and paste it one a new line below the eduCommons entry
5. Click Save (be sure to click the Save button for the Skins selec-
tion section)
```

3. Configure eduCommons

   Additional configuration information is provided in SETUP.txt (or online at http://cosl.usu.edu/projects/educommons/
   This will help you to further customize eduCommons.

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