

Developers installation guide - OSX

This document is a step by step guide for setting up your Mac to run ICE2 as a developer. These instructions use MacPorts to assist installation, to install without MacPorts see the wiki for [alternative instructions](#)¹.

Note: Root access is required to complete the set-up.

1 Required software

OpenOffice.org 3.0

Download and install [OpenOffice.org 3.1](#)²

MacPorts

Download and install MacPorts from <http://www.macports.org>³

You should add /opt/local/bin and /usr/local/bin to your shell's path.

```
export PATH=$PATH:/opt/local/bin:/usr/local/bin
```

If you are behind a web proxy set the http_proxy environment variable e.g.

```
export http_proxy=http://hostname:port
```

or use the following structure to install packages:

```
sudo env http_proxy=http://proxyHostname:proxyPort port install  
$portName
```

Easy Install

Download and install easy_install

```
curl -O http://peak.telecommunity.com/dist/ez\_setup.py4  
sudo python ez_setup.py -U setuptools
```

2 Install packages

Before doing any installing make sure you have [Xcode](#)⁶ installed, it is available on your OS disk and is needed to build the packages.

```
sudo port selfupdate  
sudo port install subversion  
sudo port install python25  
sudo port install python_select  
sudo port install py25-hashlib  
sudo port install py25-libxml2  
sudo port install py25-setuptools
```

```
sudo port install py25-cheetah
sudo port install py25-paste
sudo port install py25-gdata
sudo port install py25-pil
```

If MacPorts fails

If an install fails using MacPorts:

```
sudo port clean $port-name
```

Set MacPorts python 2.5 as the default

```
sudo python_select python25
```

2.1 Other packages

PyLucene

Homepage: <http://pylucene.osafoundation.org/>⁷

This is required for searching.

1. Download and extract PyLucene 2.3.x source from <http://downloads.osafoundation.org/PyLucene/jcc/>⁸
2. Build and install JCC (included with PyLucene)

```
cd ${PYLUCENE_SRC_DIR}/jcc
python setup.py build
sudo python setup.py install
cd ${PYLUCENE_SRC_DIR}
```

3. Modify the Makefile for a MacPorts python 2.5 installation

Example Makefile configuration

```
# Mac OS X (MacPorts Python 2.5, Java 1.5)
PREFIX_PYTHON=/opt/local
ANT=ant
PYTHON=$(PREFIX_PYTHON)/bin/python
JCC=$(PYTHON) -m jcc
NUM_FILES=1
```

4. Make sure any proxy settings are registered in the `.subversion/servers` file in the user home directory.
5. Build and install PyLucene

```
make all
sudo make install
```

pysvn

Homepage: <http://pysvn.tigris.org/>⁹

1. Download and extract pysvn 1.6 source from http://pysvn.tigris.org/project_downloads.html¹⁰
2. Build and install pysvn

```
cd ${PYSVN_SRC_DIR}/Source

python setup.py configure

sed -i .backup -e "14s@\(.*\) /opt/local/lib/libsvn_ra_dav-
1.a \(.*\) /opt/local/lib/libdb-4.3.a \(.*\)@1 \2 \3

/opt/local/lib/libsvn_ra_neon-1.a

/opt/local/lib/libsvn_ra_serf-1.a /opt/local/lib/libserf-0.a

/opt/local/lib/libsvn_fs_util-1.a /opt/local/lib/db46/libdb-
4.6.a -lsasl2@" Makefile

make

sudo cp -r pysvn /opt/local/lib/python2.5/site-packages
```

py2app

Homepage: <http://www.undefined.org/python/>¹¹

This is only required for building the Mac OS X compiled binary.

1. Download and install py2app

```
sudo easy_install-2.5 -U py2app
```

openid

Homepage: <http://openidenabled.com/python-openid/>¹²

This is only required if openid is used.

1. Download and install openid

```
sudo easy_install-2.5 python-openid
```

textile

Homepage: <http://pypi.python.org/pypi/textile/>¹³

This is only required for conversion of wikitext to html

1. Download and install textile

```
sudo easy_install-2.5 textile
```

webDAV

Homepage: <http://sourceforge.net/projects/pywebdav/>¹⁴

This is only required if ICE content is exported directly to a webDAV location.

1. Download and install webDAV

```
sudo easy_install-2.5 python_webdav_library
```

pyPdf

1. Download and install pyPdf

```
sudo easy_install-2.5 pyPdf
```

curl

1. Download and install curl

```
sudo easy_install-2.5 pycurl
```

Reportlab

1. Download and install ReportLab

```
sudo easy_install-2.5 Reportlab
```

foresite

Homepage: <http://code.google.com/p/foresite-toolkit/>¹⁵

This is only required for constructing, parsing, manipulating and serializing OAI-ORE Resource Maps.

1. Download and install rdflib2.4.0

```
sudo easy_install-2.5 -U rdflib==2.4.0
```

2. Download and install lxml

```
sudo easy_install-2.5 -U lxml
```

3. Download and extract foresite-0.9 from

<http://foresite-toolkit.googlecode.com/files/foresite-0.9.tgz>¹⁶

4. Install foresite

```
cd ${FORESITE_SRC_DIR}
sudo python ./setup.py install
```

2.2 Verify the packages are installed

The Python packages can be verified by:

```
python
>>> import lxml
```

```

>>> import textile
>>> import openid
>>> import rdflib
>>> import foresite
>>> import gdata
>>> import libxml2
>>> import lucene
>>> import paste
>>> import py2app
>>> import pysvn
>>> import Cheetah
>>> import Image

```

3 Configure OOo

1. Open [Configure OpenOffice.org](http://www.openoffice.org)¹⁷
2. Click OK to enable macros.
3. Change Macro settings to Medium or Low
Tools > Options > Security > Macro Security > Select Medium or Low > OK
4. Restart OpenOffice
5. From the menu, select ICE...Change port
6. Enter 2002
7. Close the document
8. Restart the OpenOffice
9. To edit documents using ICE styles install the word processor toolbars.

4 Source code

1. Checkout the source code:

```
svn co http://ice.usq.edu.au/svn/ice/trunk/apps ice-source
```

2. Run ICE from the source

```
cd ice-source/apps/ice
./ice.sh
```

5 Configure ICE

ICE uses a subversion repository to access it's content for editing, you will need to have the URL for the location of the subversion repository before proceeding.

See how to setup an ICE repository.

5.1 Configure ICE

1. Start the ICE server – see 4 (above)
2. Go to <http://localhost:8000/edit-config>
Config editor page will load
3. Enter SVN URL in the ‘New repository URL:’ field or fill in the information required under ‘Advanced repository settings’
4. Click ‘Save’ and then click ‘Close editor’.
5. Enter your username and password for the SVN URL provided.
ICE will then checkout the content from the given SVN URL.

5.2 Add document templates

Before you can create documents using ICE you will need to add some ICE templates.

1. Create a folder called ‘templates’ in the root of your repository. For example if your content was located in `~\ICE\MyFiles` make the directory `~\ICE\MyFiles\templates`
2. Download either an OpenOffice.org template ([Default.odt](#)¹⁸) and/or Word template ([Default.doc](#)¹⁹) into the templates directory you just added. Change these files or add others into the template directory as required.

You should now be able to create new files using the “Add” tab in ICE.

- 1 <http://ice.usq.edu.au/trac/wiki/MacBuildVersion>
- 2 <http://openoffice.mirror.aussiehq.net.au/stable>
- 3 <http://darwinports.com/>
- 4 http://peak.telecommunity.com/dist/ez_setup.py
- 5 http://peak.telecommunity.com/dist/ez_setup.py
- 6 <http://www.apple.com/macosx/features/xcode/>
- 7 <http://pylucene.osafoundation.org/>
- 8 <http://downloads.osafoundation.org/PyLucene/jcc/>
- 9 <http://pysvn.tigris.org/>
- 10 http://pysvn.tigris.org/project_downloads.html
- 11 <http://www.undefined.org/python/>
- 12 <http://openidenabled.com/python-openid/>
- 13 <http://pypi.python.org/pypi/textile/>
- 14 <http://sourceforge.net/projects/pywebdav/>
- 15 <http://code.google.com/p/foresite-toolkit/>
- 16 <http://foresite-toolkit.googlecode.com/files/foresite-0.9.tgz>
- 17 <http://ice.usq.edu.au/svn/ice/trunk/templates/Configure-OOo.ott>
- 18 <http://ice.usq.edu.au/svn/ice/trunk/sample-content/templates/Default.odt>
- 19 <http://ice.usq.edu.au/svn/ice/trunk/sample-content/templates/Default.doc>