Blue DCS

BlueDynamics

BlueDynamics is a company based in Vienna. BlueDynamics possesses a team of confirmed developers, all European specialists of Python, Zope and Plone. BlueDynamics, with Pilot Systems, is at the origin of Objectis, a free service of Zope and Plone hosting.

BlueDynamics is the original author of BlueDCS.

Pilot Systems

Pilot Systems is a Free Software services provider based in Paris, specialised in Zope and Plone. It is running the Objectis service.

For BlueDCS, Pilot Systems is handling the product pages on plone.org, writing the documentation, contributing to the code and doing releases.

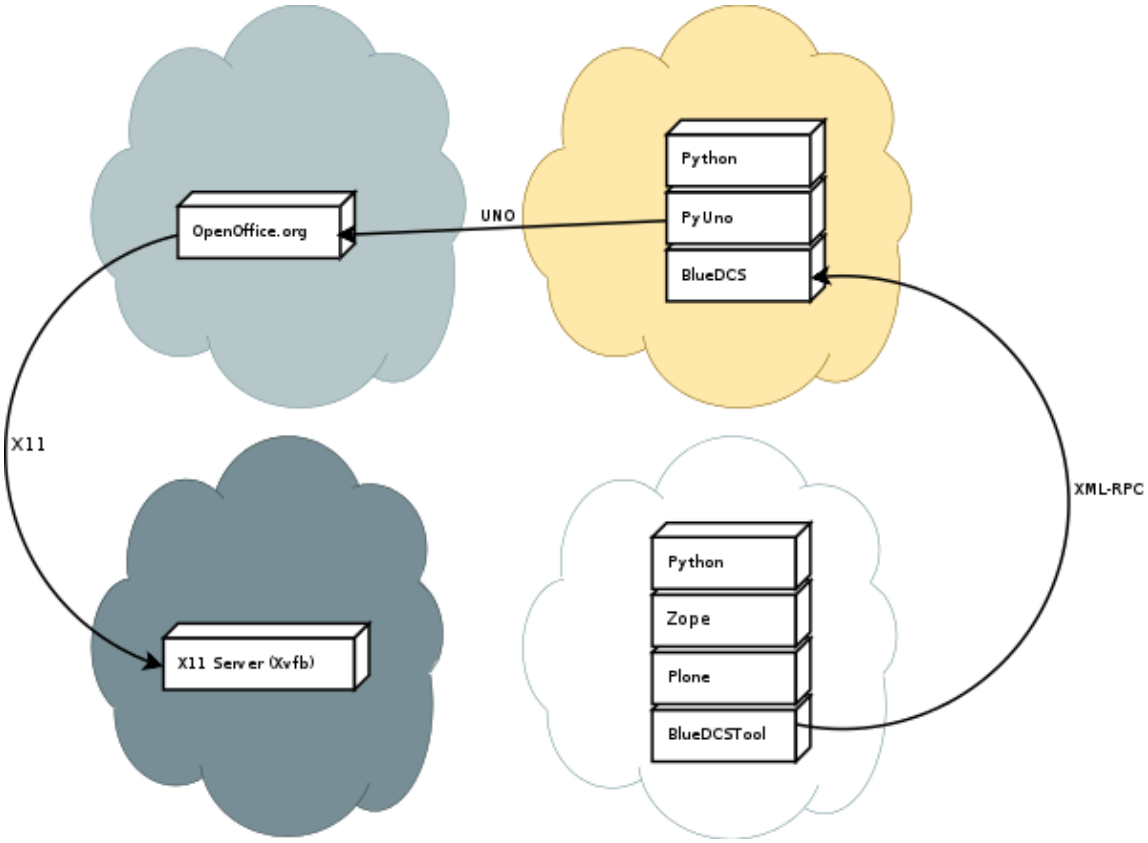
BlueDCS

BlueDCS is a Plone OpenOffice based Document Conversion Server. It allows you to use OpenOffice.org Writer as a conversion tool for Documents that are in a OpenOffice.org-File. It convert a document in valid XHTML and so enable to see directly the document in a Plone page.

BlueDCS uses a client-server technology to communicate with OpenOffice.org and to achive a minimal dependency on OOo and PyUNO dependencies inside Plone/Zope.

General architecture

Global view



OpenOffice in server mode

The UNO bridge of OpenOffice.org enable the use of Java or Python to create external scripts wich use the OpenOffice.org API. This very powerful approach allows to use OpenOffice.org as a server on which would come to connect customer scripts. The same architecture is used for running scripts on the local machine, too.

To use an external script (Python in our case) connecting to OpenOffice.org, this one has to be launched in "listening" mode.

Xvfb: X window virtual framebuffer. This is an X11 server that performs all graphical operations in memory, not showing any screen output. From the point of view of the client, it acts exactly like any other server, serving requests and sending events and errors as appropriate.

PyUno

The Python-UNO bridge allows to

- use the standard OpenOffice.org API from the well known Python scripting language.
- to develop UNO components in Python, thus Python UNO components may be run within the OpenOffice.org process and can be called from Java, C++ or the built in StarBasic scripting language.
- create and invoke scripts with the office scripting framework (OOo 2.0 and later).

BlueDCS

BlueDCS is a server in pure Python, listening to XML-RPC requests.

BlueDCSTool

BlueDCSTool is a Plone Tool for Plone 2.0 to 2.5. It makes the interface beetween Plone and the BlueDCS daemon.

Installation and configuration

Prerequired

You need both OpenOffice.org and Xfvb installed in your system.

Debian Installation

- `apt-get install openoffice.org`
- `apt-get install xvbf`

PyUno Installation

PyUno is very dependent on the system; it is usually bundled in OpenOffice.org, but not always.

With a Debian distribution: `apt-get install python-uno`

BlueDCS Configuration

There is a configuration file in `Products/BlueDCS/bluedcs.cfg`. It looks like:

```
[OpenOffice]

#openoffice-port: 2002

## Which user OpenOffice runs as
#openoffice-user: zope

## Automatically launch OpenOffice with bluedcs
openoffice-autostart: yes

## command line which start openoffice
openoffice-command: /usr/bin/ooffice

## command line which starts before openoffice
before-openoffice-command: Xvfb :5&

## command line parameters passed to openoffice, %s will be replaced by
## the openoffice-port
#openoffice-options: ['-invisible -headless "-accept=socket,host=localhost,port=%s;urp"']

[BlueDCS]

## Which port does the BlueDCS server listen at
bluedcs-port: 8888

## Location for the PID file
pidfile: ./bluedcs.pid

## Location for the log-file
logfile: ./bluedcs.log
```

```
## Location for the error log-file
errorlogfile: ./bluedcs-error.log
```

Xvfb and OOo manual start:

```
Xvfb:

 Xvfb :1 -screen 0 1600x1200x32
 The server will listen for connections as server number 1, and screen 0 will be depth 32 1600

 Xvfb :1 -screen 1 1600x1200x16
 The server will listen for connections as server number 1, will have the default screen confi

 We strongly recommend you to choose this configuration :

 Xvfb :5 -screen 0

OpenOffice:

 soffice "-accept=socket,host=localhost,port=2002;urp"
```

Xvfb and OpenOffice.org autostart:

In bluedcs.cfg , set the line `before-openoffice-command:` with `Xvfb`

In bluedcs.cfg , set the line `openoffice-autostart:` with `yes`

BlueDCSTool

BlueDCSTool is installed with the Plone quick-installer.

BlueDCSTool needs only one option to be configured : `Portal > site setup > Blue DCS` edit BlueDCSTool and put the url of the server in the field `DCS Server URL`.

The configuration of filters for HTML Tags is available on `portal_transforms/safe_html`. Each HTML tag can be activated or disactivated.

Case of use

Document Upload

This is the standard feature. There is a CSS bug with Plone version 2.1 to 2.5 with the upload field. That's why a directory `skins` is present on the BlueDCSTool product.

Preview

Preview of documents uploaded as Plone files is not available for now. This fonctionnality may be implemented in the future.

Search/indexation

BlueDCS could be used as an indexation engine, but it would be more heavy-weight than the `wvware` based solution used by TextIndexNg.

Limitations

- BlueDCS can't convert document in PDF format for now (due to the write-only support of PDF in OpenOffice.org).