

Build of Discretizer mesh program

Many dev libs has to be installed on your build system.

On ubuntu Edgy:

autoconf (version 2.60-1) will be installed
automake1.4 (version 1:1.4-p6-11) will be installed
autotools-dev (version 20060223.1) will be installed
libbz2-dev (version 1.0.3-3) will be installed
libc6-dev (version 2.4-1ubuntu12) will be installed
libgl1-mesa-dev (version 6.5.1~20060817-0ubuntu3) will be installed
libglu1-mesa-dev (version 6.5.1~20060817-0ubuntu3) will be installed
libjpeg62-dev (version 6b-13) will be installed
libpng12-dev (version 1.2.8rel-5.1ubuntu0.1) will be installed
libtiff4-dev (version 3.8.2-6) will be installed
libtiffxx0c2 (version 3.8.2-6) will be installed
libxau-dev (version 1:1.0.1-1) will be installed
linux-libc-dev (version 2.6.17.1-10.34) will be installed
m4 (version 1.4.4-1) will be installed
mesa-common-dev (version 6.5.1~20060817-0ubuntu3) will be installed
x11proto-core-dev (version 7.0.7-1) will be installed
x11proto-glx-dev (version 1.4.7-1) will be installed
x11proto-input-dev (version 1.3.2-3ubuntu1) will be installed
x11proto-randr-dev (version 1.1.2-3ubuntu1) will be installed
x11proto-render-dev (version 2:0.9.2-3ubuntu1) will be installed
x11proto-xext-dev (version 7.0.2-4ubuntu1) will be installed
zlib1g-dev (version 1:1.2.3-13ubuntu2) will be installed
libx11-dev (version 2:1.0.3-0ubuntu4) will be installed
libxdmcp-dev (version 1:1.0.1-1) will be installed
libxext-dev (version 2:1.0.1-1ubuntu1) will be installed
libxrandr-dev (version 2:1.1.1-0ubuntu1) will be installed
x11proto-kb-dev (version 1.0.3-0ubuntu1) will be installed
xtrans-dev (version 1.0.1-1) will be installed
libxcursor-dev (version 1.1.7-0ubuntu1) will be installed
libxfixedev (version 1:4.0.1-0ubuntu1) will be installed
libxrender-dev (version 1:0.9.1-0ubuntu1) will be installed
x11proto-fixedev (version 1:4.0-0.1ubuntu1) will be installed
libexpat1-dev (version 1.95.8-3.2) will be installed
libfontconfig1-dev (version 2.3.2-7ubuntu2) will be installed
libfreetype6-dev (version 2.2.1-5) will be installed
libxft-dev (version 2.1.10-1ubuntu1) will be installed
g++ (version 4:4.1.1-6ubuntu3) will be installed
g++-4.1 (version 4.1.1-13ubuntu5) will be installed
libstdc++6-4.1-dev (version 4.1.1-13ubuntu5) will be installed

If you are lucky you can use my build: <http://www.discretizer.org>

Build of FOX

Download Fox toolkit from: <http://www.fox-toolkit.org>

Direct link: <http://www.fox-toolkit.org/ftp/fox-1.6.20.tar.gz>

```
export DISCRETIZER=/opt/discretizer
./configure --prefix=$DISCRETIZER/fox/1.6.20 --with-xft
```

maybe also: --enable-release

```
#well, yes, FOX currently always includes debug symbols. strip
#--strip-debug libFOX.* should reduce the size to normal proportions.
```

```
# strip --strip-debug on the object file... lib/libFOX*
```

```
make
```

```
make install
```

Build of Ruby

Download Ruby from <http://www.ruby-lang.org>

Direct link: <ftp://ftp.ruby-lang.org/pub/ruby/1.8/ruby-1.8.5-p2.tar.gz>

```
./configure --prefix=$DISCRETIZER/ruby/1.8.5-p2
make
```

```
make install
```

Enable OpenGL on Ruby

Download from: <http://www2.giganet.net/~yoshi/>

Direct link: <http://www2.giganet.net/~yoshi/rbogl-0.32g.tar.gz>

```
$DISCRETIZER/ruby/$RUBYVER/bin/ruby extconf.rb
```

```
make
```

Build of Fxruby

Download FXRuby from <http://www.fxruby.org>

Direct link: <http://rubyforge.org/frs/download.php/15181/FXRuby-1.6.4.tar.gz>

```
ruby install.rb config -- --prefix=$DISCRETIZER/FXRuby/$FXRUBYVER
--with-fox-include=$DISCRETIZER/fox/$FOXVER/include/fox-1.6
--with-fox-lib=$DISCRETIZER/fox/$FOXVER/lib
```

```
ruby install.rb setup
```

```
ruby install.rb install
```

Build of Fxruby on Ubuntu with ruby, libfox 1.6 and ruby-opengl installed with debs

ruby install.rb config

Discretizer start script

This start script can be placed in \$DISCRETIZER/bin

```
-----discretizer start script: begin-----  
  
export DISCRETIZER=/opt/discretizer  
  
export RUBYVER=1.8.5-p2  
  
export FOXVER=1.6.20  
  
export FXRUBYVER=1.6.4  
  
export RUBYOPT=""  
  
export PATH=$PATH:$DISCRETIZER/ruby/$RUBYVER/bin  
  
export  
LD_LIBRARY_PATH=$DISCRETIZER/fox/$FOXVER/lib:$DISCRETIZER/ruby/$RUBYVER/lib:/lib:$DISCRET  
IZER/lib  
  
cd $DISCRETIZER/discretizer  
  
$DISCRETIZER/ruby/$RUBYVER/bin/ruby discretizer.rb  
  
-----discretizer start script: end-----
```

Menu entry

---Discretizer.desktop start---

```
[Desktop Entry]  
Version=0.01  
Encoding=UTF-8  
Name=Discretizer  
Type=Application  
Comment=A mesh program  
Exec=/opt/discretizer/bin/discretizer  
TryExec=  
Icon=/opt/discretizer/discretizer/icons/mesh.png  
Categories=Application;Physics;CFD  
X-GNOME-DocPath=  
Terminal=false  
GenericName=  
Comment=
```

---Discretizer.desktop end---

xdg-desktop-menu install --novendor Discretizer.desktop