

Anapaw installation

- Installation software & version
 1. Ubuntu 32bit v14.04.02 (if you choose 64bit, you can not run cernlib)
 2. g77_x86_debian_and_ubuntu.tar (fortran language)
 1. Installation (tar -zxvf g77 file -> cd -> ./install)
 3. cernlib (using apt-get)

```
dahee@ubuntu:~$ which cernlib  
/usr/bin/cernlib
```

the cernlib is located /usr/bin/cernlib then cernlib path is /usr/lib
 4. Xaw3dg, Xaw3dg-dev, tcsh, libreadline-dev (using apt-get)

Anapaw installation

- My anapaw is located in
 - `$HOME/usr/local/anapaw`
- Experiment file is located in
 - `$HOME/exp/o15/crib`

- Environment file

- `.bashrc`

```
# ANAPAW  
alias analogin="tcsh"
```

- `alias analogin="tcsh"`

- `.tcshrc`

- `alias analogin 'source $HOME/usr/local/anapaw/Setup/setupanapaw'`

- `analogin`

```
alias analogin 'source $HOME/usr/local/anapaw/Setup/setupanapaw'  
analogin
```

Anapaw installation

- \$HOME/usr/local/Setup/setupanapaw file code

```
#!/bin/csh -f

# Environments for ANAPAW

setenv CERNLIB /usr/lib
setenv ANAPAW_HOME $HOME/usr/local/anapaw
setenv ANAPAW_SOURCE $ANAPAW_HOME/src
setenv ANAPAW_LIB $ANAPAW_HOME/lib
setenv ANAPAW_MACROS $ANAPAW_HOME/Macros
setenv ANAPAW_DOCS $ANAPAW_HOME/Documents
setenv ANAPAW_SETUP $ANAPAW_HOME/Setup
setenv ANALOGON $ANAPAW_SETUP/analogon.kumac
setenv VIEWANA_SOURCE $ANAPAW_SOURCE/vana

setenv VIEWANA_PARAM ./viewana.prm
setenv VIEWANA_PID ./viewana.pid

setenv NTUPLE_DIR ./ntpl

setenv USER_LASTKUMAC ./anapaw_last.kumac
setenv USER_LASTKUMAC_OLD ./anapaw_last.kumacold

setenv ANAPAW_WORK $HOME/exp/o15/crib

# For using on local.
source $ANAPAW_SETUP/setup.local

# For using on experiment.
#setenv EXP_DIR $HOME/exp/r337n
#source $ANAPAW_SETUP/setup.exp

source $ANAPAW_WORK/setlocal

alias anapaw 'cd $ANAPAW_WORK;$USER_SOURCE/anapaw'
alias setana 'source $USER_SOURCE/setana'
alias acd 'cd $ANAPAW_WORK'
```

```
#
# Define ENVIRONMENTS for user source.
# ex.) FERA_MAP,FERA_PRM
# If you want to add ENVs, edit $USER_SOURCE/setana.
#
setana anapaw
#
# Print ENVs
#
setana chkenv
#
echo ' ===== NOTICE ! ===== '
echo ' '
echo ' If you change ihit_min0 in enc_fera, use setana.'
echo ' '
echo ' ex) > setana ihitmin 4'
echo ' '
echo ' To execute ANAPAW, type anapaw <CR>.'
echo ' '
echo ' If you change Local Environments, edit setlocal.'
echo ' '

cd $ANAPAW_WORK
```

- Then, analogin
- makelib
- makeana

Anapaw error fix

- cannot find -lreadline
 - Install libreadline-dev
- cannot find -lgcc_s
 - Install gcc-multilib (It does not work) -> next page
- cannot find crt1.o & crt1.o
: because of some bug in Ubuntu. It reads old path automatically so we have to change the path manually

- find crt1.o and crt1.o file

```
dahee@ubuntu:/usr$ sudo find /usr/ -name crt1.o
```

- The you can find the path

```
/usr/lib/i386-linux-gnu/crt1.o  
/usr/lib/debug/usr/lib/i386-linux-gnu/crt1.o
```

- Change the path in the .bashrc

```
LIBRARY_PATH=/usr/lib/i386-linux-gnu:$LIBRARY_PATH  
export LIBRARY_PATH
```

Anapaw error fix

- cannot find -lgcc_s
 - Install gcc-multilib (It does not work) -> next page
 - It linked to bad link so also we change the link
 - find gcc_s libraray `locate gcc_s`
 - upper line is bad link `/lib/i386-linux-gnu/libgcc_s.so.1`
`/usr/lib/gcc/i686-linux-gnu/4.8/libgcc_s.so`
 - lower line is good link
 - change the linking
 - (notice ! we set the library path before so good link should be in the library path)
 - `sudo ln -s /lib/i386-linux-gnu/libgcc_s.so.1 /usr/lib/i386-linux-gnu/libgcc_s.so`