

## Getting SeqExec Running on Linux

install tcl/tk and itcl/itk

I found ActiveTcl quite useful, since it includes everything we need. tcl/tk, itcl/itk, iwidgets and so on. You can get ActiveTcl from:

<http://www.activestate.com/Products/ActiveTcl>

I installed version 8.4.9.1 on my Fedora Core 3 Linux

If you do /usr/local/ActiveTcl/bin/tclsh you should be able to do package require Itcl

create a dev root somewhere

[add to rc file] export HLPG\_DEV\_BASE=/home/user/Projects/root

under the dev root, install drama 1.5.1 (I tried version 1.5.0, but with gcc-3.4.3 wouldn't compile)

cd \${HLPG\_DEV\_BASE}

get it from <ftp://ftp.ao.gov.au/pub/drama>

explode it under dev root

Edit file drama\_source/dul/dcpphandler.C and remove the missed ";" at the end of any method implementation. Do the same thing on drama\_source/git/gittask.C

On drama\_source/sds/arg.h make the copy constructor of the Arg class public instead of private

./drama\_make

[add to rc file] export DRAMA\_BASE=\${HLPG\_DEV\_BASE}/drama-v1.5.1

[add to rc file] export IMP\_LIB\_DIR=\${DRAMA\_BASE}/release/imp/r1\_6\_3\_21/linux\_x86

[add to rc file] export SDS\_LIB\_DIR=\${DRAMA\_BASE}/release/sds/r1\_4\_3\_20/linux\_x86

[add to rc file] export ERS\_LIB\_DIR=\${DRAMA\_BASE}/release/ers/r3\_4/linux\_x86

under the dev root, check out and build dhsClient (it's in the HL cvs server)

cd \${HLPG\_DEV\_BASE}

CVSROOT=... cvs co dhsClient

cd dhsClient

mkdir -p release/lib release/bin

./configure

make all install

[add to rc file] export DHS\_CLIENT\_BASE=\${HLPG\_DEV\_BASE}/dhsClient/release

[add to rc file] export DHS\_CLIENT\_LIB\_DIR=\${DHS\_CLIENT\_BASE}/lib

[add to rc file] export DYLD\_LIBRARY\_PATH=\${DYLD\_LIBRARY\_PATH}:  
\${HLPG\_LIB\_DIR}:\${DHS\_CLIENT\_LIB\_DIR}

[add to rc file] export DHS\_BASE=\${DHS\_CLIENT\_BASE}

[add to rc file] export DHS\_LIB\_DIR=\${DHS\_CLIENT\_LIB}

[add to rc file] export DHS\_DEV\_BASE=\${DHS\_CLIENT\_BASE}

source your rc file

under the dev root, build the EPICS base

```
cd ${HLPG_DEV_BASE}
fetch the source from http://www.aps.anl.gov/epics/base/R3-14/7.php
explode it in the dev root
[add to rc file] export EPICS_HOST_ARCH = linux-x86
source your rc file
make
```

at this point you need to define some environment variables

```
[add to rc file] export HOST_ARCH = linux-x86
[add to rc file] export HLPG_INSTALL_BASE=${HLPG_DEV_BASE}/ocsinstall
[add to rc file] export HLPG_EXTERNAL_BASE=${HLPG_DEV_BASE}/hlpgexternal
[add to rc file] export HLPG_LIB_DIR=${HLPG_INSTALL_BASE}/lib/${HOST_ARCH}
source your rc file
create the install and external dirs if they don't exist already
```

under the dev root, check out and build ocswish (also on HL cvs server)

```
cd ${HLPG_DEV_BASE}
CVSROOT=... cvs co ocswish
cd ocswish/conf
Edit gemini_env file, commenting the following lines:
#IMP_BASE=${DHS_BASE}/external
#IMP_BIN_DIR=${IMP_BASE}/bin/${HOST_ARCH}
#IMP_LIB_DIR=${IMP_BASE}/lib/${HOST_ARCH}
#IMP_BIN_DIR=${IMP_BASE}
#IMP_LIB_DIR=${IMP_BASE}
#SDS_LIB_DIR=${SDS_BASE}
#ERS_LIB_DIR=${ERS_BASE}
```

Also, make sure the version of tcl you are using is the correct one. In the same file, I had to put:

```
# TCL/Tk Installed system - should be linked to the correct TCL
TCL_VER=
TCL_BASE=/usr/local/ActiveTcl
TCL_LIB_DIR=${TCL_BASE}/lib
TCL_BIN_DIR=${TCL_BASE}/bin
Save the file, and run:
./Setup
mkdir -p ${HLPG_EXTERNAL_BASE}/epics
ln -s ${HLPG_DEV_BASE}/base-3.14.7/ ${HLPG_EXTERNAL_BASE}/epics/base
make
for some reason the exes we generate have .exe at the end .. it seems to be required in some cases.
cd ${HLPG_INSTALL_BASE}/bin/linux-x86
```

```
ln -s ocssh.exe ocssh  
ln -s ocswish.exe ocswish
```

under the dev root, check out and build ocssupport (on the RT server)

```
cd ${HLPG_DEV_BASE}  
CVSROOT=:pserver:gemvx@polaris.hi.gemini.edu:/usr/software/dev/cvsroot/rtcvsroot  
cvs co ocssupport
```

Remove all the directories there but seq and tcclib

Update the Makefile accordingly

Run:

make

under the dev root, check out and build seqexec

```
cd ${HLPG_DEV_BASE}  
CVSROOT=:pserver:gemvx@polaris.hi.gemini.edu:/usr/software/dev/cvsroot/rtcvsroot  
cvs co seqexec
```

Create a *config/CONFIG.Defs* containing:

```
APPLIC_TOP = ${HLPG_DEV_BASE}/seqexec  
APPLIC_SITE = CP
```

then you can

make

finally, you need to set some env variables for seqexec. this is assuming you are running wdba locally

```
[add to rc file] export OCSPROXY=http://127.0.0.1:9000/wdba/services/
```

```
[add to rc file] export OCSSUPPORT_DATASERVER=
```

source your rc file

```
cd ${HLPG_DEV_BASE}/seqexec
```

```
./seqexec
```