Getting Started with "Open Genie"

Open Genie can run under various flavours of UNIX (IRIX, LINUX, Digital UNIX, ULTRIX), but at ISIS it is primarily run under Digital UNIX[1] on a central server.

1. Obtaining an Account

As Genie is not being run as part of the VAX cluster, you will need to have an account created for you on the "Genie server" - contact ISIS computer support (support@isise.rl.ac.uk).

2(a) Starting Genie From a PC

You can start Open Genie directly from eXcursion by creating a new application and giving it the following information:

HOST: sutekh.nd.rl.ac.uk

APPLICATION: /usr/local/bin/vms_genie

This combination will search for a GENIEINIT.GCL file on USER$DISK when you start up genie. Not that you will need to supply a password - get SUPPORT to set this for you.

2(b) Starting Genie From a VMS window

Provided you have first run (or placed in you LOGIN.COM) the line

$ @SYS$PUBLIC:G3SETUP

You need only type:

$ SET DISPLAY/CREATE/NO=my.ip.address/TR=TCPIP

$ OPENGENIE

Note:

- Sometime the OPENGENIE command fails the first time you type it, but succeeds the second time. This is under investigation at present.
- You must use /TR=TCPIP - LAT and DECNET are not currently supported

2(c) Starting Genie from Elsewhere

If none of the above apply, you can always:

- Telnet to: sutekh.nd.rl.ac.uk
- Log in and set your DISPLAY environment variable by e.g. **setenv DISPLAY host:0.0**
- Type "genie"

[1] Formerly DEC OSF/1

3. Accessing files

Files in the ISIS VAXcluster are available via NFS - all you need do is change a few "[]." characters to "/", and add an appropriate prefix. For example:

VAX	UNIX
USER$DISK:[FAA.GENIE]TEST.GCL	/vax/user/faa/genie/test.gcl
SCRATCH$DISK:[FAA]junk.gcl	/vax/scratch/faa/junk.gcl
MARI$DISK0:[MARMGR.DATA]MAR12345.RAW	/vax/mari0/marmgr/data/mari12345.raw

All the instrument disks are available by this method - the rule is to strip out the "$DISK" part of the name, and add "/vax/" to the front.

4. What Directory will Genie be running in?

This depends on how you start it up.

- If you use method 2(c), genie will be running in whatever directory you happen to be in at the time you typed "genie", and will look in you UNIX home area for a GENIE-INT.GCL file
- If you used method 2(b) genie will be running in whatever VMS directory you are in when you type the OPENGENIE command, which allows you to use a separate VAX window and your favourite editor for creating/modifying GCL command files. A genie started this way will also look on USER$DISK for a GENIEINIT.GCL file rather than on the UNIX server itself.
- If you used method 2(a), uou will be in your USER$DISK area, where a GENIE-INIT.GCL will be searched for.

5. Where will I find Examples and Additional Documentation?

On the UNIX server:

/usr/local/genie/doc and /usr/local/genie/examples

On the VAXclutser:

SYS$PUBROOT:[OPENGENIE.EXAMPLES] and SYS$PUBROOT:[OPENGENIE.DOC]

Documentation and information is also available on the WWW - follow the "ISIS online help pages" link (note this link is not available to sites outside of RAL)

6. How do I use the command line editing features?

The genie command line is based on the GNU readline library and you will find that you can recall and edit previous commands by using the "arrow" cursor keys. There are a few additional features as well:

- Pressing **<TAB>** on a partially completed command will complete the command if it is unambiguous, otherwise pressing <TAB> a second time will list possible options.
- Pressing **<Ctrl>H** on a partially complete command will give a one line summary of all commands matching that pattern
- Pressing **<Ctrl>K** will start a "command keyword" help search
- Pressing **<Ctrl>R** will start an incremental reverse search of previously typed commands
- Pressing **<Ctrl>_** will undo a last edit/change you made
- Pressing **<Ctrl>X<Ctrl>U** will also undo the last edit/change
- Pressing **<Ctrl>U** will discard the line starting from the current cursor position
- Pressing **<Ctrl>A** will move to beginning of line
- **<Ctrl>E** will move to end of the current line
- **<Ctrl>L** will clear screen and redraw the current line at the top
- **!!** will redo last command
- **!srting** will execute the last command starting with "**string**"
- **!string:p** will find the last command starting with "**string**", but not execute it
- **!?string** will execute the last command containing "**string**"
- **<Ctrl>X(** will start saving text for a keyboard macro
- **<Ctrl>X)** will end a keyboard macro
- **<Ctrl>Xe** will execute the last saved keyboard macro