Ken's VAX Notes

VAX Logicals

Logicals can be chained in a list

Defining:

$ define logical_name value

$ define mydisk 1dia0:[000000]

Displaying Logical Names:

(in order of /process , /job , /group , /system logical name tables)

$ show logical mydisk

$ show logical/process sys$disk

Chaining - Defining Logical Names for use in a Search List

$ define xda_files xda_root:[data],xda_root:[user]

Deassigning Logical Names

$ deassign xda_files

VAX Symbols

Defining

$ symbol = expression *prompt level*

$ my_name = "kenfreed"

$ my_age = 24

$ undefine = "deassign"

$ @run_my_dcl *procedure level*

$ a_global_symbol = = 365 *global level*

Deleting

$ delete/symbol note

Vax Devices

SHOW DEVICES	Show all the devices in the system
SHOW DEVICES/FULL DIA0:	Show details on this device
SHOW DEVICES/FULL DIA	1DIA* device details will be displayed
SHOW DEVICES/REBUILD_STATUS	To see if anything needs rebuilding. P. 7-4 of the System Manager Essentials book shows what to do if a rebuild is needed.
SHOW DEV DISK$REL/FILES	To see if anyone has files open
SHOW MAGTAPE	
MOUNT MTA0:/FOREIGN	
SET MAGTAPE/REWIND MTA0:	

Vax System Startup

$ @sys$manager:ucx$startup	To start TCP/IP

Batch Job Management and Status

Note that VAX priorities are: 31 : highest priority (hardware interupts)
16 : highest operating system priority
7 : highest interactive user interface priority
4: highest batch job priority
1: lowest batch job priority

set proc/priv=altpri to get permission to change priority.

To check on the status of a running job:

sj | sho sys/b
Shows a list of the active batch jobs, their process id (pid) and queue entry numbers

sho process/id=<pid>**/acc**
Shows how long the job has been queued and its CPU time.

sho queue/full/all <queue name>
Shows real time information on the CPU processing for the queue.

To delete a job from running:

To stop a job from running, bascially you delete it from the queue. The command is:

delete/entry=<queue entry number>
Caution!: this could cause a hangup for the next compile or link. The semaphore file [.work]tpas.tmp must be deleted if present.

To check on the status of a completed job:

Check the log files for the finished jobs in the dev_root directory:
[dev]regenh1.log status for "regen f"
[dev]buildfh1.log status for "full" (link of the booked out area)
[dev]buildbh1.log status for "base" (link of the booked in area)

Check the log files for the finished jobs in the rel_root directory:
[release]regenf_pi9500_20903.log status for 2.09-03 full regen

Files

Change Directory

set def apache$common:[000000.mydir]

Displaying:

dir <filename>;/full displays whether the file is binary or ascii (important for reflections ftp transfers)

dir [000000.dev.*…]<filename> searches subdirectories for file

File Privileges Summary:

system owner group world

can be set to: read write execute delete

Setting the protection mask (e.g.):

set file xda_songs.ps /protection=(s:rwed, o:rwed, g:we, w:r)
set prot […]*.*/prot=(system:rwed, owner:rwed, group:rwed, world:rwed)

Displaying the protection mask (e.g.):

dir/owner/protection xda_songs.ps

Bypassing the protection mechanism:

set proc/priv=bypass

Creating a Directory, Changing a Password

Create/Directory disk$rel:[.tools] creates tools directory under where you are
Set Password use to change your password

Reflections ftp Modes

Binary file transfers are straight forward. Text file transfers have the following conventions:

1. On the VAX, a text line (in a text file) consists of:
   - +0 a two byte field denoting the starting position of the text
   - +2 a two byte field denoting the (byte/character) length of the string
   - +4… the ASCII text.
   - The file ends with (hex) 0000 FFFF
2. On the VAX, a text dump can be displayed by:
   - dump/page <filename>
   - note that the hex display is read right to left. It mirror images the ASCII part.
3. If a text file is transferred using Reflections ftp:
   - with a binary transfer, the leading four byte length fields will not be transferred.
   - with an ASCII transfer, a CR or CR-LF (it's an option under reflections) will be inserted at the end of each line.
4. Direct ftp transfers can be done between VAX'es. Some commands are:
   - ftp <servername> (opens <servername>)
   - binary (binary transfer)
   - cd [000000.dev.tools] (change directory you are retrieving from on pound)
   - cld [000000.dev.tools] (change local directory you are receiving to)
   - get <filename>
   - put <filename>
5. Note that Reflections has an option for translating "tab" (hex 09) characters into a given number of spaces.
6. Occasional Parser problem:
   - We have found that sometimes ftp transfers mess up the last line of <somefile>.ic. If this happens, change the last line (delete the line and retype it, put in some more/less spaces, etc.)

VMS "edit" Editor

Basic editor commands:

exit : what most other editors call file
write : what most other editors call save
quit : same as other editors

select key : selects text to put into the paste buffer.
remove key : puts the selected text into the past buffer.
insert here key : inserts the paste buffer text at the cursor location

get <*some other file*> *:* e.g.: get disk$dev[dev.pi9500.9.99.00]hstmon1.ps
show buf : shows the edit files you're working on.
one, two, other chooses between them.
two : splits the screen. gold(PF1)-Next|Prev changes screen
show buf puts another file into one of the two screens.

Searching Variable References

- To search the source code or listings in a given release area for a symbol, issue from among the VAX commands:

  search all_source:*.ps <*variable name*>
  search all_incl:*.* <*variable name*>
  search all_linc:*.* <*variable name*>
  search all_data:*.* <*variable name*>

  "Varlist.lst" has a list of every global variable in the system, and where it's defined. These utilities acutally search the "varlist.lst" file from the last system rebuild.

  search/output=myfile.pl all_source:*.ps <*variable name*> will output to a file.

- To search for a type definition, or a global variable (not sure of-check on), e.g.:

  typedef dev_incl:*.* <*variable name*>