Integrity Server Commands

EFI - SAC - HPUX Commands

Boot Commands

autoboot [on|off] | [time [value]]
time = 2 - 65535 second. *Also "My computer -> Properties Advanced -> Startup & Recovery" System startup options.*
bcfg boot [dump [-v]] | [add # file "desc"] | [rm#] | [mv # #]
"bcfg boot dump" then "bcfg boot mv ori new" | "bcfg boot add"
Easier to use "boot maintenance mgr." Type Shell> exit
Windows use fs#:\msutil\nvrboot.efi. Remember to change acpi.
boottest [on|off] | [[test] [on | off]
early_cpu, late_cpu, platform, chipset, io_hw, mem_init, mem_test
In hpux use "setboot -v" or setboot -T to change settings.
lanboot [select] Use "lanboot select" to search for lans
reconfigreset Same as MP>CM: RR *Use after cpu/cell config*
reset Resets the partition and boots to EFI. Same as MP>CM:RS.
help [-a] [cmd | class] - Displays help. ("cmd /?" also works).
search <cells> [pcislot] | all *Useful to find scsi targets*
cell = Cell number (0-15)
pcislot = pci slots (0-11) *Use "info io" to determine occupied slots.*
all : Load the drivers for all possible boot devices in the partition.

Configuration Commands

acpiconfig [windows | default]
default is for linux and hpux. *(Reset is required to take effect)*
cellconfig [cell] [on | off] *Note: MP>CM:mfg must be enabled*
cell = Cell number (0-15)
on|off : Specifes to configure or deconfgure a cell *(Reset required)*.
cpuconfig [cell] [module] [on | off]
cell = Cell number (0-15)d
module : Specifies which cpu module to configure (0-3)
on | off : Specifies to configure or deconfigure a cpu module
date [mm/dd/[yy]yy] - Display or set the date
dimmconfig [cell] [dimm] [on | off]
dimm = XY where X = Echelon (0-15) Y = Side format (a-f)
cell = Cell number (0-15)
err [errorlevel] - Display or set bitmask error reporting.
errdump <cell> | all <logtype> | clear | clear <logtype> [-n]
cell = Cell number (0-15)
all = Use all instead of cell # to retrieve/clear logs for all cells in pd.
logtype = mca, init, cmc, drr or all. d*rr is deadlock recovery reset*
-n = no interactive prompts
fru [cell] [frutype]
cell = Cell number (0-15) & frutype = only "mem" is available
info [cell] [target] cell = Cell number (0-15)
target = all, boot, cache, cell, chiprev, cpu, fabric, fw, io, mem, sys.
monarch [cell] [module] [cpu]
cell = Cell number (0-15) & module = module number (0-3)
cpu = which cpu on the module (0-1) *I think this is the case*
palproc - Make a PAL call (see help for additional info)
romdrivers - (see help) *shows vendor vs. hp partnumber*
rootcell [clear] [[c0] [c1] [c2] [c3]] c = Cell number (0-15)
salproc - Sal procedure call (see help for additional info)
tftp [select] Use select option to select a lan card.
time [hh:mm[:ss]] Display or set time *Accepts 24 hour format*
variable <-s | -r > [filename] *Similar to nvrboot export/import*
ver - Displays EFI, Sal, Pal and module version information

Device Commands

baud - *Unused on Superdome since CIO uart is disabled*
connect [-r] [-c] handle devicehandle driverhandle - Binds a driver to a specific handle and then starts the driver. See help for additional information.
dblk [lba] [blocks] - Displays contents of blocks from a block device.
devices [- | xxxx] [-b] - Devices that are being managed by EFI drivers.
devtree [-d] [- | xxxx] [devicehandle] [-b] - Display tree of devices.
dh [-d] [- | xxx] [-v] [handle] | [-p prot_it] [-b] - Displays all device handles.
disconnect devicehandle [driverhandle [childhandle]] | [-r]
Disconnects drivers from devices
drivers [-|XXX] [-b] - Display a list of EFI drivers.
drvcfg -s [Drv Ctrl] *Use Shell> drvcfg to display available controllers Then use "drvcfg -s drv ctrl" to start menu. Hit "esc" key to exit.*
drvdiag -s [Drv Ctrl]-Runs diags on controllers *Output is similar to devtree*
guid [-b] - Displays "Guid" info. "Global Universal ID's" (See "guid help")
lanaddress Displays mac address of Core Lan
load [-nc] file [file...] - Loads and EFI drviver
map [-r] [-v] -d [sname] [handle] [-b] - Displays/defines a mapping between a name and a device handle. *Use "map -r" when cd/dvd is replaced.*
openinfo handle - Diplays open protocol on a given handle.
pci [bus dev func] [-i] [-s [seg]]] - Displays pci info. Same as "info io".
reconnect devicehandle# [driverhandle# [childhandle#]] | -[r]
reconnects one or more drivers from a device
unload [-n] [-v] handleindex - Unloads an image from memory.

Filesystem Commands

Commands requrire to select a volume first. i.e. fs0:, fs1: fs2: or fs3:
attrib - Display attributes of directories of fs0: - fs3: *Shell>attrib fs1:\efi**
cd - Change directory. Cd by itself shows current working directory
comp file1 file2 - Compare two files
cp [-r] [-q] src dst - Classic cp command (-r recursive, -q quiet)
edit - text based editor (Esc 3 to quit)
eficompress [infile] [outfile] - Compresses "infile" to "outfile"
efidecompress [infile] [outfile] - Uncompresses "infile" to "outfile"
hexedit [[-f] [file | [-d diskname offset size] | [-m offset size]]
ls - list contents of directories (see "help ls" for options) S
mkdir name [name] - Create a directory
mount blkdevice [sname] - Mounts a fs on a block device
rm [-q] file | directory - Delete a file or directory
setsize newsize file - Changes the file size in bytes
touch [-r] file | directory - Updates a file or directory. Must exist first.
type [-a | -u] file [file...] -b Similiar to "cat" command. Use -b to pause.
vol [filesystem] [label] - Display or change name of filesystem volume

Memory Commands

default [clear] - Resets Nvram to default settngs. Including boot options.
dmem [address] [size] [:MMIO] - Display memory contents
dmpstore - View all of the EFI variables
memmap - Shows how physical memory is mapped out.
mm - Memory Modify (See "help mm" for complete details)
pdt [cell] [clear] - Display or clear the PDT table. Use "reset" afterwards.

Shell Commands

alias [-d | -v | -b] [sname] [value] - Displays/creates/del aliases.
cls [color #] Clears standard out and changes background color.
exit - Exits EFI shell and returns to EFI boot manager
getmtc - Diplays monotonic counter (See "help getmtc" for info)
help [-a] [cmdclass] - Displays help. ("cmd /?" also works).
set [-d | -v] [sname [value]] [-b] - Displays, changers or deletes variables.
xchar [on | off] - Display/set extended char. feature. Default is on.

SAC> Commands

ch - Lists all channels. *Use "cmd" first to create channel. See "ch -?"*
cmd - Creates a command prompt channel. "SAC> cmd" then ch -sn cmd0001"
d - Dump the current kernel log
f - Toggle detailed or abbreviated tlist info.
i | [<#> <ip> <subnet>] Display or set IP addr, subnet and gw info.
id - Display computer identification info. *Shows version and uptime.*
k <pid> - Kill the given process
l <pid> - Lower the priority of a processs to the lowest possible.
lock - Lock access to the Command Prompt channels
m <pid> <MB-allow> - Limit a process memory usage.
p - Toggle display paging. *Similar to "scroll on" in BCH*
r <pid> - Raise the priority of a process by one.
s | [mm/dd/yyyy hh:mm] - Set the time and date. *24 hour format.*
t - Thread list. *Nice! Sort of like hpux "ps -ef and swapinfo -tam" Also nice to use during headless install to view progress of "setup.exe" pid.*
restart - Restart the system immediately.
shutdown - Shutdown the system immediately.
crashdump - Crash the system. You must have crashdump enabled

HPUX> Bootloader Commands

boot [kernel] Boot hpux kernel. *Kernel can also be vmunix.prev*
help [-d] Show help. "-d" shows debug commands
ls [-b] [dir] List directory of /stand
ll [-b] [dir] Long listing of /stand directory
mmap Display current EFI memory map
setauto [-d] [str] Sets autofile. *Same as Shell> type \efi\hpux\auto*
showauto - Display contents of \efi\hpux\auto
ver - Shows bootloader, hpux, efi, fw vendor, fw rev and cpu rev
what - Shows vmunix details. *Use "what /stand/vmunix"*
exit - Exits back to Shell> or fs#:
hpux [-lm] [-vm] [-tm] [-lq] [-a [C|R|S|D] devicefile] [-fnumber] [-istring] [boot] [devicefile]
Refer to "man hpux" for details
lm = LVM, *vm* = VXVM and *tm* = Tunable maintenance mode
lq = Quroum overide
C = console, R = root, S = swap and D = dump

steven.wolff@hp.com - NA Superdome Support Team - 24Sept2003

MP:CM> COMMANDS

Single PD User - Commands unique to user *Serv*

BO - Boot Protection Domain-This command ensures that all the cells assigned to the target partition have valid complex profiles and then releases Boot-Is-Blocked (BIB).

CP - Cells Assigned by Partition-The CP command will display a table of cells assigned to partitions and arranged by cabinets.

DE - Display Entity Status- This command displays the specified entity's status: C-CLU, D-CIO, M-MP, P-PM, S-PDHC. *RP8400/7410*: B-BPS, U-CLU, A-CIO, G-MP, P-PM, H-PDHC

DF - Display FRUID- Displays the FRUID data of the specified FRU: A-ALL, B-CPB, C-CIO, D-DIMM, G-UGUY, H-SBCH, I-IOB M-PRM, O-IOPB, P-BPB, R-L(R)SB, S-SBC, T-PDH, W-CB, X-BPS, U-CPU (cpu only available on legacy pa-risc)
RP8400/7410: S-BACKPLANE, G-MP/CIO, P-PCI BACKPLANE, M-MASS STORAGE BACKPLANE, I-PCI POWER MODULE, B-BPS, C-CELL, D-DIMM, H-PDHC, U-CPU

DU - Display USB Topology- A "*" indicates communication with Gsp bus (usb - superdome) or (I2C -RP8400/7410). Cells must past IODISC for a "*" to appear in the MP *Core IOs* or *IO Chassis* field.

HE - Display Available Commands- Lists all commands available to the user level: Admin, Oper or Serv - if defined

ID - Configure System ID data- Configures system ID info: model number&string, serial # (see MP>he id). Use MP>CM:CC commad first.

LS - LAN Status- Displays all parameters and the current status of connections of the MP LAN ports. (cu lan = sbch, priv lan = sbc)

MA - Return to Main menu- The MA command returns the user from the command menu (MP>CM:) to their main menu (MP>).

PS - Power Status- Displays hardware status: B-CABINET*, C-CELL, G-MP, I-CIO. *8400/7410:* T-CABINET*, S-SYSTEM BACKPLANE, G-MP/CIO, P-IO CHASSIS, C-CELL (*cabinet option shows present, available, and power status of all entities - USEFUL!!)

RR - Reset Partition for Reconfiguration- Resets the specified partition but does not automatically boot it. Sets BIB flag.

RS - Reset Partition- Shutdown the OS before issuing this command Execution of this command halts all system processing and I/O activity and restarts the partition. (Similar to a power cycle - a hard reset)

TC - Partition Reset through INIT or TOC- Same effect as MP>CM:RS command but the processors are signaled to dump state on way down. (Replaces legacy TOC button)

SYSREV - System Revisions- Display revisions of all firmware entities in the complex. devices. RP8400/74xx requires Admin access.

MP> SL (Show Event Logs)

FPL - Forward progress log- Was activity log. Alerts 0 and up.

SEL - System event log- Was error log. Alerts 2 and up.

Note: (d)ump option is new. It cancels pager function and dumps from the current location to end of log. Use script or other logging command before using.

LIVE (U, K then P) Useful to determine partition heartbeat/status

Chassis Code format: *(Cabinet,Cell,Cpu)*

TE - Broadcast a Message to all Users at GSP(MP):CM> Up to 80 characters can be typed in and the message is broadcast to the other users in the command menu. Users in the main menu are not shown the message.

WHO - Display GSP Connected Users- Displays the login name of the connected console client user and the port on which they are connected. For LAN console clients the remote IP address is displayed.

MR - Modem Reset- This command sends an AT Z to the system modem connected to the remote port. Any modem connections will be lost.

MS - Modem Status- The MS command displays the state of the modem lines connected to the remote/modem serial port. Status signals DCD, CTS, DSR, RI and the last state of DTR, RTS are displayed. (Use "q" to exit)

IO - IO Chassis Display- Shows Cell to I/O chassis relationship to determine physica location of I/O chassis. Read line vertically under Cell Slot. For example Slot 0 is usually connected to cab 0, bay 1, chassis 3 -rear facing right.

OPER - Commands unique to *Oper* - includes *Serv* commands

CC - Complex Configuration- Used to create an single cell partition. "G" Uses lowest cell slot # connected to a I/O chassis with CIO. Cell must be at BIB. "L" or restore option retieves last successfully downoaded profile.

DI - Disconnect Remote/Modem or LAN Console- This command disconnect all remote/modem or LAN users from the MP. Caution!

IT - Inactivity Timeout Settings- This timeout prevents a user from inadvertently keeping the MP command menu locked in a MP>:CM command Default is 3 minutes (3-1440). Useful if extra time needed for ID command.

PARPERM - Enables or Disables partition (Npar) reconfiguration

PCIOLAD - Add/Insert or Remove/Eject a pci card. Cab-Bay-Ch-Slot

PD - Partition Number Default- The PD command sets the default partition number used by commands which require a partition number (e.g. RS). The user "serv" partition is default and cannot select other partitions.

PE - Power Entity- This command allows the user to switch the power ON or OFF to a cabinet, cell or an I/O chassis. B-CABINET, C-CELL, I-HIOB *RP8400/7410:* T-CABINET, C-CELL, D-DVD or TAPE, P-I/O CHASSIS (0 = Front Right, 1 = Front Left) **For I/O chassis always power cell off**

RE - Reset Entity- Resets the specified entity: C-CELL, I-HIOB, M-MAIN BACKPLANE. *RP8400/7410:* C-CELL, P-IO Chassis, S-SYSTEM BACKPLANE. Special use only - use RS or RR instead

RL - Rekey Complex Profile Lock- The RL command rekeys the complex profile lock. This command should only be used to recover from an error where the holder of the lock terminates before releasing the lock. Rarely used. A=Stable, B= Dymanic, C=Partition Config data.

XD - Diagnostics and/or Reset of MP- Diagnostics and/or Reset of GSP(MP). 1=Parameter Chksum, 2=Ping, R=Reset, *RP8400/7410*: 1 and 2 same as Superdome, 3=Soft Reset Master MP, 4=Soft Reset Slave MP. Note: bottom button on MP is reset. Holding button longer than five seconds resets LC and SO parameters.

ALERT LEVELS

0 = Minor fwd progress	**3** = Warning	**6** = Reserved
1 = Major fwd progress	**4** = Reserved	**7** = Fatal
2 = Informational	**5** = Critical	

ADMIN - Commands unique to *Admin* - includes *Serv* & *Oper*

AR - Automatic System Restart- ASR is triggered by timeout of a watchdog timer and resets the partition . Set by Alert level 13? Disabled by default. See "MP> he a" for details. N/A on RP8400/7410.

DATE - Change the MP Time and Date- Changes the value of the real time clock on the MP.This controls chassis log timestamps. Not DST aware so GMT time is used most.

CA - Configure Async local & remote parms- Changes the communications parameters of the local and remote RS232 ports.

DC - Reset Parameters to Default Configuration- The DC command can reset all or a subset of the following parameters: CA, EL, ER, IT, LC and SO. See "MP> he dc" for details.

SA - Display and set MP Remote Access
T - Enable or disable telnet access
M - Enable or disable modem access
N - Enable or disable network diagnostics
D - Enable or disable DIAG menu
I - Enable or disable IPMI lan access

EL - Enable LAN Console Access- Enables telnet access to MP LANs. Use ND to enable diag access over Lans also.

ER - Enable Remote Console Serial Port Access- Enable or disable remote console serial port access. Dome - Secure light on remote serial access denied. RP8400/7410 -Remote access is enabled.

IF - Network Interface Information- This command displays information about the network interfaces on the MP. Brief or Verbose. SBC = priv lan = Lan 1, SBCH = customer lan = Lan 0

LC- LAN Configurations- Modifies the LAN configuration for the MP LAN(s) The user can set the IP, hostname, mask and gateway.

ND - Enable/Disable Network Diagnostics- Enable to allow JUST/JET offline diags and FW(UU) to operate.

OSP - Onboard Scan Programming Utility- *RP8400/74xx only* Use "MP> he osp" for details**.**

PWRGRD - RP8400/74xx Pwr Grid- 1 = A0 + A1, 2 = B0 + B1, 3 = Both 1 & 2 *(74xx:4=A0+B0, 5=A1+B1)* **Rear View**: B1 A0 B0 A0

SO - Security Options and Access Control- Modifies security options and access control to the MP: 1=MP Wide Parameters 2=User Edit, Add or Delete Parameters. Users Admin and Oper are by default. User "Serv" has to be added.

MP MAIN MENU:- Two options only accessible by user Admin:
FW: Firmware Update (Connects to ftp server - usually SMS)
        Enter new server IP Address:
        Enter new firmware source directory:
        Ener new user name:
DIAG: Diagnostic Menu (Wtec can grant lockword on needed basis.)
        DM: Diagnostic Message Viewer
        DE: Diagnostic event viewer
        DS: Diagnostic shell
        Q: Quit

MFG - Enter Manu. Level Command Mode- These commands are intended for HP internal use only. Need lockword to access.