APPENDIX D

Expected Outputs

This appendix displays outputs for a system that is operating correctly. These known good system outputs serve as useful reference points when troubleshooting systems with problems.

VCO Subsystem

Boot

From C: drive

The following message output is the normal good output to the local console by the VCO CPU at 9.6 kBps upon system power up or reset *without* a floppy disk installed in the hard drive (i.e., booting off c:/). The local console must be set to "9600, N, 8, 1" in order to properly see this boot-up message sequence.

```
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MVME147 Monitor/Debugger Release 2.44 - 8/7/97
CPU running at 33 MHz

FPC  passed test
MMU  passed test
COLD Start

Onboard  RAM start = $00000000,  stop = $00FFFFFF

147-Bug> Searching for ROM Boot

147-Bug>G FFA0002C
Effective address: FFA0002C


SDS Initializing...
Hard disk mounted successfully
Hard disk dismounted successfully

A: drive has no floppy or Unreadable/Unformatted Floppy
Trying C drive
Reading boot file from disk device C:/boot/boot.sds
```

```
Loading file C:/boot/globals.exe
Loading file C:/boot/syswd.exe
Loading file C:/boot/hostmgr.exe
Loading file C:/boot/redmgr.exe
Loading file C:/boot/netmgr.exe
Loading file C:/boot/permgr.exe
Loading file C:/boot/snmp.exe
SW version loaded - Ver.Rev FSR : 5.1 002
Hard disk mounted successfully
Hard disk dismounted successfully

Loading File < syscnfg.TBL > ...
Loading File < card.TBL > ...
Loading File < port.TBL > ...
Loading File < hostcnfg.TBL > ...
Loading File < resgroup.TBL > ...
Loading File < supvtmpl.TBL > ...
Loading File < iprule.TBL > ...
Loading File < oprule.TBL > ...
Loading File < isdnsupv.TBL > ...
Loading File < isdnmsg.TBL > ...
Loading File < routesum.TBL > ...
Loading File < routetbl.TBL > ...
Loading File < exroute.TBL > ...
Loading File < nfascnfg.TBL > ...
Loading File < promptlb.TBL > ...
Loading File < subrate.TBL > ...
Loading File < motomap.TBL > ...
 Loading File < license.TBL > ...
```

Then the login screen appears.

Note The value for "`SW version loaded - Ver.Rev FSR :`" will vary according to the release that the system has installed on the hard drive.

The output shown above is standard for all 5.x Generic software versions.

There are a total of 19 .tbl files, but at boot-up, the file "`dbvers.tbl`" is not loaded into the CPU, by design. Only 18 .tbl files are loaded at time of boot-up. The file "`dbvers.tbl`" is only queried by the CPU at the time of a database conversion during manual and live upgrades.

From A: Drive with Generic Diskette #1 Installed

The following message output is the standard good output to the local console by the VCO CPU at 9.6 kBps upon system power up or reset *with* Generic floppy diskette 1 installed in the hard drive (i.e., booting from a:/). The local console must be set to "9600, N, 8, 1" in order to properly see this boot-up message sequence.

```
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MVME147 Monitor/Debugger Release 2.44 - 8/7/97
CPU running at 33 MHz

FPC  passed test
MMU  passed test
```

```
COLD Start

Onboard  RAM start = $00000000,  stop = $00FFFFFF

147-Bug> Searching for ROM Boot

147-Bug>G FFA0002C
Effective address: FFA0002C


SDS Initializing...
Hard disk mounted successfully
Hard disk dismounted successfully
Reading boot file from disk device A:/boot/boot.sds
Loading file A:/boot/install.exe
Hard disk mounted successfully
Hard disk dismounted successfully


          I N S T A L L A T I O N  U T I L I T I E S


      1) Install/Configure Basic System Software
      2) Incremental Install of Basic System Software
      3) Disk Utilities
      4) Install Another Software Option
      5) Database Conversion
      6) License Configuration
      7) Set Extended Operational Mode
      8) Enable C-Bus Mode
      X) Terminate Installation


      Enter Selection:
```

Note Output line "`1) Install/Configure Basic System Software`" will vary according to the type of installation diskette installed. The system can also be booted from the ETHERNET diskette, the TELEROUTER diskette, or one of the ISDN diskettes.

SS7 Subsystem

EBS and cktint Processes

Type **px** to look at all the processes relative to cktint and EBS software.

When EBS and cktint software are not started, the px output will look like the following:

```
%px
UID     PID     CMD
%
```

When only EBS is started, the px output will look like the following:

```
UID     PID     CMD
cktint  9461    /export/home/EBS/access/bin/spmd
cktint  9467    /export/home/EBS/access/bin/AccessAlarm
cktint  9469    /export/home/EBS/access/bin/upmd 0
cktint  9471    /export/home/EBS/access/bin/snmd 0
cktint  9473    /export/home/EBS/access/bin/AccessRd
cktint  9477    /export/home/EBS/access/bin/AccessISUP 0
cktint  9479    /export/home/EBS/access/bin/tli
%
```

Note AccessRd and tli processes only exist in a redundant environment. In a nonredundant system, these are not started.

After cktint is started, the following additional processes are started:

```
cktint  9510    _logger /export/home/cktint/sys/CktintAnEnv/log/cktint
cktint  9511    cktint
cktint  9513    _tcprcvclnt 16 1
cktint  9514    _tcptxsrvclnt 16 1
cktint  9522    _ssisan 16 2
cktint  9523    _ssisan 16 2
%
```

Note When cktint dies of unknown reason, then these cktint processes will disappear.

Once the host opens a socket connection to cktint (host is connected), the following additional processes are started:

```
%px
cktint  9538    _tcprcvsrv 16 3
cktint  9543    _tcptxsrvclnt 16 3
cktint  9544    _tcprcvclnt 16 1
```

When px is typed after the starting of EBS, cktint and the host connection is complete.

This is how the processes should look like in a redundant environment:

```
UID     PID     CMD
cktint  9461    /export/home/EBS/access/bin/spmd
cktint  9467    /export/home/EBS/access/bin/AccessAlarm
cktint  9469    /export/home/EBS/access/bin/upmd 0
cktint  9471    /export/home/EBS/access/bin/snmd 0
cktint  9473    /export/home/EBS/access/bin/AccessRd
cktint  9477    /export/home/EBS/access/bin/AccessISUP 0
cktint  9479    /export/home/EBS/access/bin/tli
cktint  9510    _logger /export/home/cktint/sys/CktintAnEnv/log/cktint
cktint  9511    cktint
cktint  9522    _ssisan 16 2
cktint  9523    _ssisan 16 2
cktint  9538    _tcprcvsrv 16 3
cktint  9543    _tcptxsrvclnt 16 3
cktint  9544    _tcprcvclnt 16 1
```

Note When cktint dies (cores), cktint process will disappear from the above list or sometimes you will observe <defunc> as follows:

```
UID     PID     CMD
cktint  9461    /export/home/EBS/access/bin/spmd
cktint  9467    /export/home/EBS/access/bin/AccessAlarm
cktint  9469    /export/home/EBS/access/bin/upmd 0
cktint  9471    /export/home/EBS/access/bin/snmd 0
cktint  9473    /export/home/EBS/access/bin/AccessRd
cktint  9477    /export/home/EBS/access/bin/AccessISUP 0
cktint  9479    /export/home/EBS/access/bin/tli
cktint  9510    _logger /export/home/cktint/sys/CktintAnEnv/log/cktint
cktint  9511    <defunc>
cktint  9522    _ssisan 16 2
cktint  9523    _ssisan 16 2
cktint  9538    _tcprcvsrv 16 3
cktint  9543    _tcptxsrvclnt 16 3
cktint  9544    _tcprcvclnt 16 1
```

When the host is disconnected, the processes _tcptxsrvclnt 16 3 and _tcprcvclnt 16 1 will disappear from the above list.