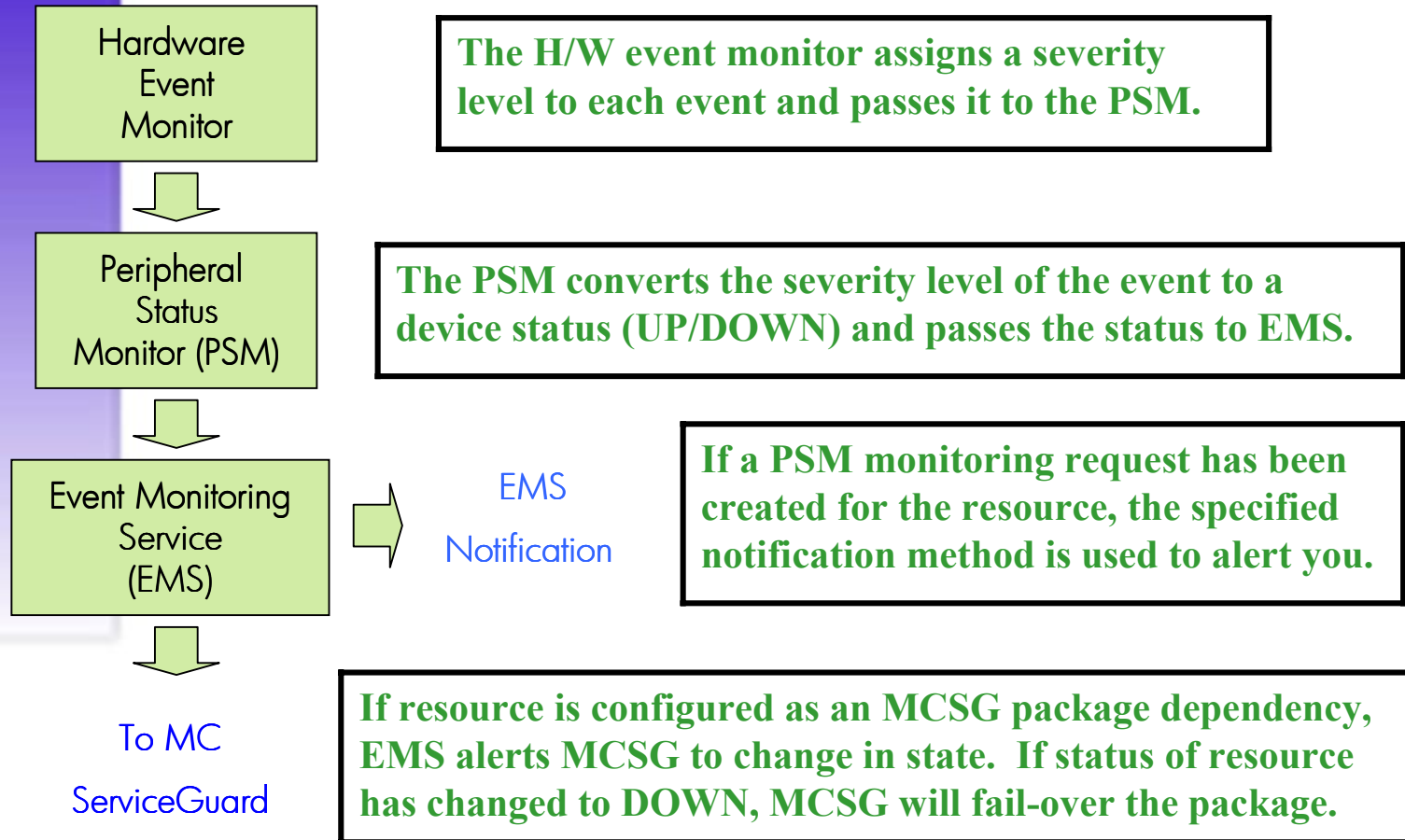# EMS Peripheral Status Monitor: Definition

- **An extension to hardware monitoring**
- **Installed as a part of the H/W monitor software**
- **Converts hardware events detected by the EMS H/W monitors to an "UP" or "DOWN" status, which is used by MC ServiceGuard in controlling package fail-over**
- **Interface between the H/W event monitors and MC ServiceGuard**
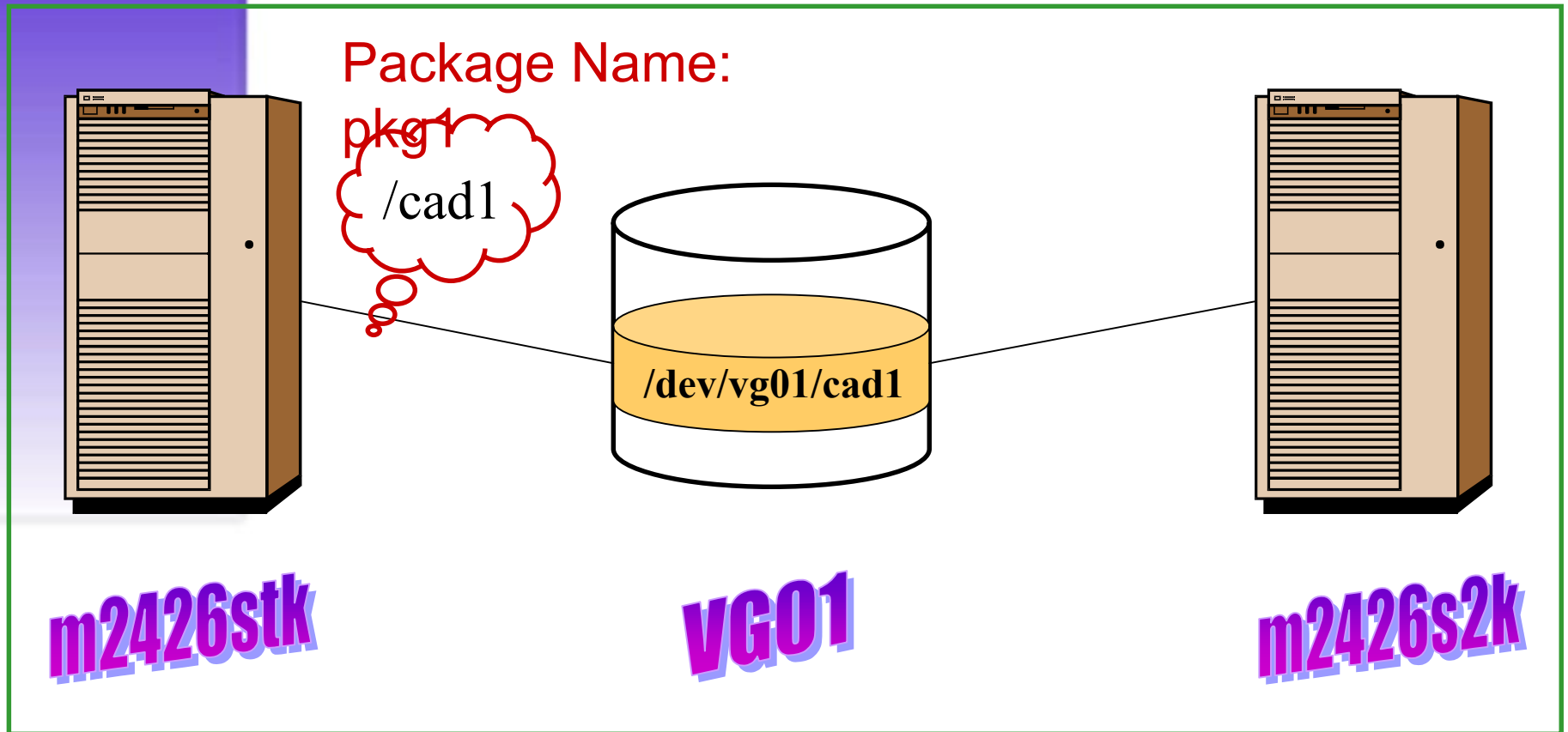
EMS Peripheral Status Monitor: Process

Hardware Event Monitor

The H/W event monitor assigns a severity level to each event and passes it to the PSM.

Peripheral Status Monitor (PSM)

The PSM converts the severity level of the event to a device status (UP/DOWN) and passes the status to EMS.

Event Monitoring Service (EMS)

EMS Notification

If a PSM monitoring request has been created for the resource, the specified notification method is used to alert you.

To MC ServiceGuard

If resource is configured as an MCSG package dependency, EMS alerts MCSG to change in state. If status of resource has changed to DOWN, MCSG will fail-over the package.

EMS Peripheral Status Monitor: States

Condition	Interpretation
Up	HW is operating normally
Down	An event has occurred that indicates a failure with the H/W
Unknown	Cannot determine the state of the H/W. This state is treated as DOWN by the PSM

EMS will cause a package failover only with a severity level of Critical or Serious

Cluster Name: cammi

Package Name:
pkg1

/cad1

/dev/vg01/cad1

m2426stk

VG01

m2426s2k

EMS Peripheral Status Monitor: m2426stk cmviewlcl & bdf output

scott1 - WordPad

File Edit View Insert Format Help

```
CLUSTER          STATUS
cammi            up

   NODE          STATUS          STATE
   m2426s2k      up              running

      Network_Parameters:
      INTERFACE    STATUS       PATH         NAME
      PRIMARY      up           12.1         lan0
      PRIMARY      up           16.1         lan1

   NODE          STATUS          STATE
   m2426stk      up              running

      Network_Parameters:
      INTERFACE    STATUS       PATH         NAME
      PRIMARY      up           8.1          lan1
      PRIMARY      up           4.1          lan0

      PACKAGE      STATUS       STATE        PKG_SWITCH   NODE
      pkg1         up           running      enabled      m2426stk

      Policy_Parameters:
      POLICY_NAME       CONFIGURED_VALUE
      Failover          configured_node
      Failback          manual

      Node_Switching_Parameters:
      NODE_TYPE    STATUS       SWITCHING    NAME
      Primary      up           enabled      m2426stk      (current)
      Alternate    up           enabled      m2426s2k
```

For Help, press F1   NUM

scott2 - WordPad

File Edit View Insert Format Help

```
Filesystem              kbytes      used     avail %used Mounted on
/dev/vg00/lvol3         143360     31193    105221   23% /
/dev/vg00/lvol1          83733     28877     46482   38% /stand
/dev/vg00/lvol8         512000    391965    112727   78% /var
/dev/vg00/lvol7         614400    451827    152414   75% /usr
/dev/vg00/lvol4          65536      4164     57569    7% /tmp
/dev/vg00/lvol6         512000    441708     65948   87% /opt
/dev/vg00/lvol5         512000    108531    378438   22% /home
/dev/vg01/cad1          102400      4562     91786    5% /cad1
```
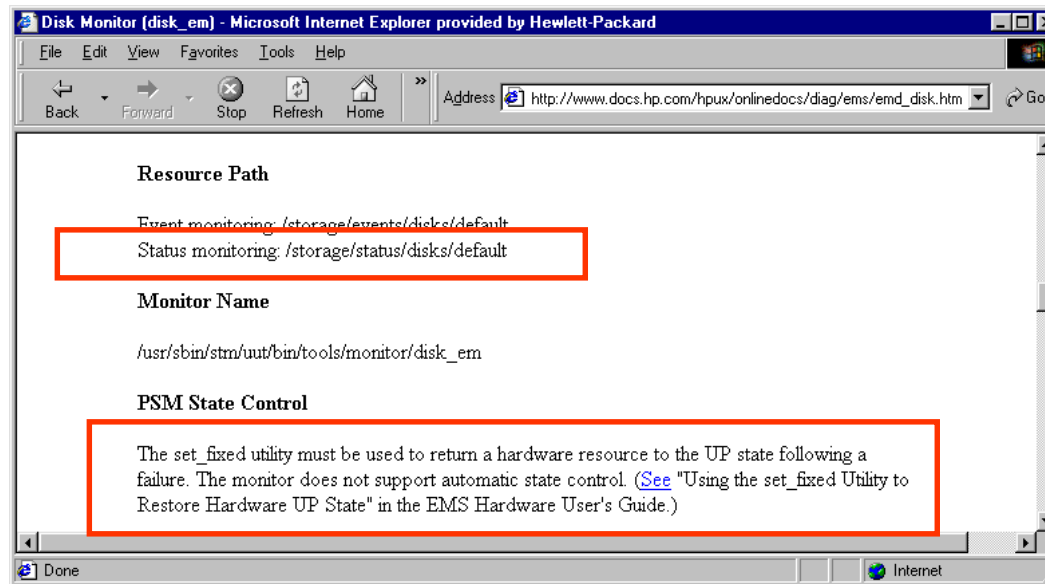
For Help, press F1   NUM

EMS Peripheral Status Monitor:
Creating package dependency on root disk   52.6.0

```
Telnet - m2426stk.nsr.hp.com

Connect  Edit  Terminal  Help

For /storage/events/disks/default/52.5.0:
 Events =  5 (CRITICAL) Goto TCP; host=m2426stk.nsr.hp.com port=49196
 Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/resmon/log/event.log
 Events >= 3 (MAJOR WARNING) Goto SYSLOG
 Events >= 3 (MAJOR WARNING) Goto EMAIL; addr=root
 Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/pred/emslog
 Comment: Predictive Monitor Request
For /storage/events/disks/default/52.6.0:
 Events =  5 (CRITICAL) Goto TCP; host=m2426stk.nsr.hp.com port=49196
 Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/resmon/log/event.log
 Events >= 3 (MAJOR WARNING) Goto SYSLOG
 Events >= 3 (MAJOR WARNING) Goto EMAIL; addr=root
 Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/pred/emslog
 Comment: Predictive Monitor Request
```

EMS Peripheral Status Monitor: disk_em data sheet

Disk Monitor (disk_em) - Microsoft Internet Explorer provided by Hewlett-Packard

Address: http://www.docs.hp.com/hpux/onlinedocs/diag/ems/emd_disk.htm

EMS Hardware Monitors

Disk Monitor (disk_em)

Disk Monitor (disk_em) - Microsoft Internet Explorer provided by Hewlett-Packard

Address: http://www.docs.hp.com/hpux/onlinedocs/diag/ems/emd_disk.htm

Resource Path

Event monitoring: /storage/events/disks/default

Status monitoring: /storage/status/disks/default

Monitor Name

/usr/sbin/stm/uut/bin/tools/monitor/disk_em

PSM State Control

The set_fixed utility must be used to return a hardware resource to the UP state following a failure. The monitor does not support automatic state control. (See "Using the set_fixed Utility to Restore Hardware UP State" in the EMS Hardware User's Guide.)

EMS Peripheral Status Monitor:
Add PSM Package Dependencies
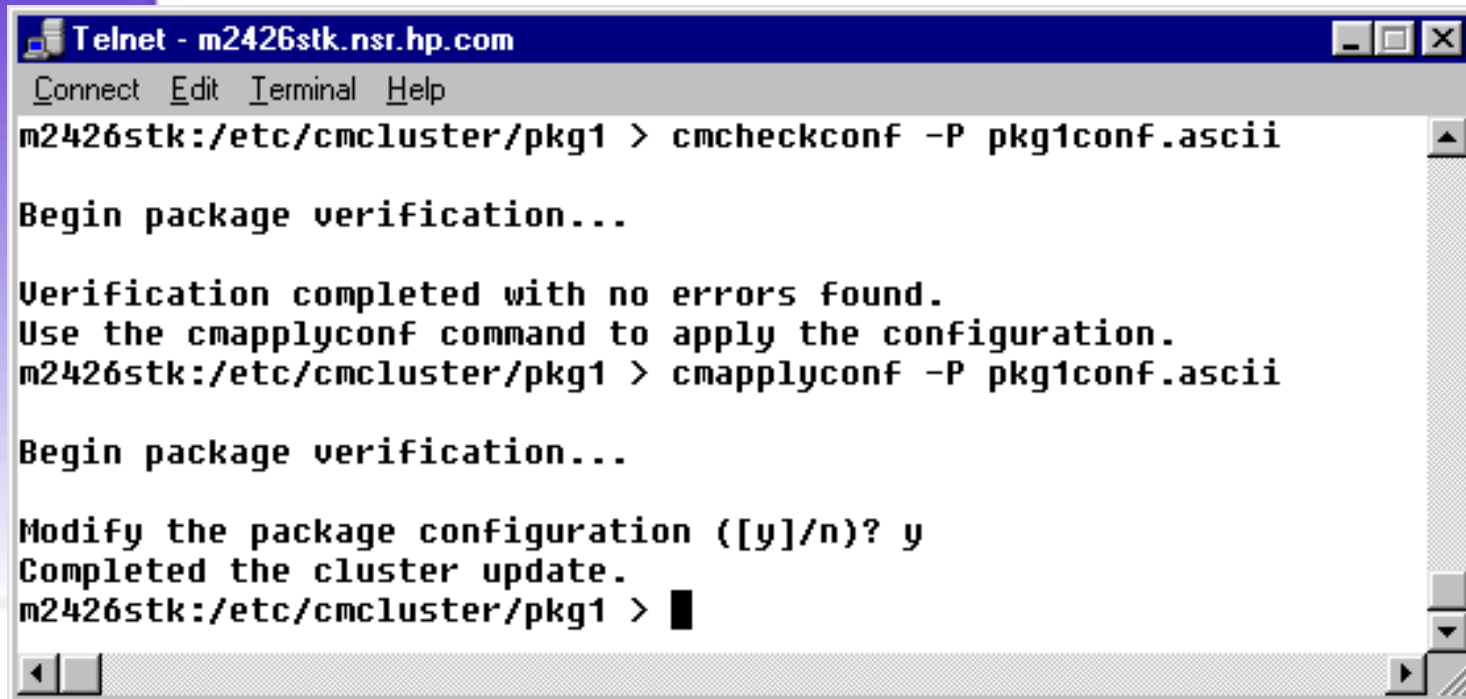
```
Telnet - m2426stk.nsr.hp.com                         _ □ ×

Connect  Edit  Terminal  Help

m2426stk:/etc/cmcluster/pkg1 > ls
pkg1.sh          pkg1.sh.log      pkg1conf.ascii
m2426stk:/etc/cmcluster/pkg1 > vi pkg1conf.ascii
```

Package dependencies can be configured via SAM or manually

```
Telnet - m2426stk.nsr.hp.com                         _ □ ×

Connect  Edit  Terminal  Help

#
# Uncomment the following lines to specify Package Resource Dependencies.
#
#RESOURCE_NAME               <Full_path_name>
#RESOURCE_POLLING_INTERVAL   <numeric_seconds>
#RESOURCE_START              <AUTOMATIC/DEFERRED>
#RESOURCE_UP_VALUE           <op> <string_or_numeric> [and <op> <numeric>]

RESOURCE_NAME               /storage/status/disks/default/52.6.0
RESOURCE_UP_VALUE           = UP
```

EMS Peripheral Status Monitor:
Verify and apply package configuration

```
Telnet - m2426stk.nsr.hp.com                                    _ □ ×

Connect   Edit   Terminal   Help

m2426stk:/etc/cmcluster/pkg1 > cmcheckconf -P pkg1conf.ascii

Begin package verification...

Verification completed with no errors found.
Use the cmapplyconf command to apply the configuration.
m2426stk:/etc/cmcluster/pkg1 > cmapplyconf -P pkg1conf.ascii

Begin package verification...

Modify the package configuration ([y]/n)? y
Completed the cluster update.
m2426stk:/etc/cmcluster/pkg1 > █
```

EMS Peripheral Status Monitor: m2426stk cmviewlcl & bdf output

1scott - WordPad

File Edit View Insert Format Help

```
CLUSTER        STATUS
cammi          up

   NODE          STATUS        STATE
   m2426s2k      up            running

      Network_Parameters:
      INTERFACE     STATUS       PATH         NAME
      PRIMARY       up           12.1         lan0
      PRIMARY       up           16.1         lan1

   NODE          STATUS        STATE
   m2426stk      up            running

      Network_Parameters:
      INTERFACE     STATUS       PATH         NAME
      PRIMARY       up           8.1          lan1
      PRIMARY       up           4.1          lan0

      PACKAGE       STATUS       STATE        PKG_SWITCH     NODE
      pkg1          up           running      enabled        m2426stk

         Policy_Parameters:
         POLICY_NAME      CONFIGURED_VALUE
         Failover         configured_node
         Failback         manual

         Script_Parameters:
         ITEM       STATUS    MAX_RESTARTS   RESTARTS    NAME
         Resource   up                                  /storage/status/disks/default/52.6.0

         Node_Switching_Parameters:
         NODE_TYPE     STATUS       SWITCHING    NAME
         Primary       up           enabled      m2426stk      (current)
         Alternate     up           enabled      m2426s2k
```

For Help, press F1   NUM

2scott - WordPad

File Edit View Insert Format Help

```
Filesystem             kbytes      used     avail %used Mounted on
/dev/vg00/lvol3        143360     31065    105341   23% /
/dev/vg00/lvol1         83733     28877     46482   38% /stand
/dev/vg00/lvol8        512000    391934    112756   78% /var
/dev/vg00/lvol7        614400    451827    152414   75% /usr
/dev/vg00/lvol4         65536      4159     57574    7% /tmp
/dev/vg00/lvol6        512000    441708     65948   87% /opt
/dev/vg00/lvol5        512000    108531    378438   22% /home
/dev/vg01/cad1         102400      4562     91786    5% /cad1
```

For Help, press F1   NUM

EMS Peripheral Status Monitor:
Test EMS PSM MCSG PKG Failover

```
Telnet - m2426stk.nsr.hp.com                              _ □ ×
Connect  Edit  Terminal  Help
m2426stk:/etc/cmcluster/pkg1 > /opt/resmon/bin/send_test_event -av disk_em ▮  ▲

◄ │                                                              ►
```

```
Telnet - m2426stk.nsr.hp.com                              _ □ ×
Connect  Edit  Terminal  Help
   m2426stk        up              running

   Network_Parameters:
   INTERFACE      STATUS          PATH            NAME
   PRIMARY        up              8.1             lan1
   PRIMARY        up              4.1             lan0

   PACKAGE        STATUS          STATE           PKG_SWITCH      NODE
   pkg1           halting         halting         enabled         m2426stk

     Policy_Parameters:
     POLICY_NAME       CONFIGURED_VALUE
     Failover          configured_node
     Failback          manual

     Script_Parameters:
     ITEM          STATUS    MAX_RESTARTS    RESTARTS      NAME
     Resource      down                                   /storage/status/disks/default
/52.6.0

     Node_Switching_Parameters:
     NODE_TYPE      STATUS          SWITCHING       NAME
     Primary        up              enabled         m2426stk        (current)
     Alternate      up              enabled         m2426s2k
m2426stk:/etc/cmcluster/pkg1 > ▮
```

cmviewcl -v output
while package is
failing over

70

EMS Peripheral Status Monitor:
m2426stk cmviewlcl & bdf output


```
3scott - WordPad

File  Edit  View  Insert  Format  Help

CLUSTER        STATUS
cammi          up

  NODE         STATUS          STATE
  m2426s2k     up              running

    Network_Parameters:
    INTERFACE    STATUS        PATH         NAME
    PRIMARY      up            12.1         lan0
    PRIMARY      up            16.1         lan1

    PACKAGE      STATUS        STATE        PKG_SWITCH   NODE
    pkg1         up            running      enabled      m2426s2k

      Policy_Parameters:
      POLICY_NAME       CONFIGURED_VALUE
      Failover          configured_node
      Failback          manual

      Script_Parameters:
      ITEM         STATUS    MAX_RESTARTS   RESTARTS   NAME
      Resource     up                                 /storage/status/disks

      Node_Switching_Parameters:
      NODE_TYPE    STATUS        SWITCHING    NAME
      Primary      up            enabled      m2426stk
      Alternate    up            enabled      m2426s2k       (current)

  NODE         STATUS          STATE
  m2426stk     up              running

    Network_Parameters:
    INTERFACE    STATUS        PATH         NAME
    PRIMARY      up            8.1          lan1
    PRIMARY      up            4.1          lan0

For Help, press F1                                            NUM
```

```
4scott - WordPad

File  Edit  View  Insert  Format

Filesystem            kbytes     used     avail %used Mounted on
/dev/vg00/lvol3       143360    31193    105221   23% /
/dev/vg00/lvol1        83733    28877     46482   38% /stand
/dev/vg00/lvol8       512000   391965    112727   78% /var
/dev/vg00/lvol7       614400   451827    152414   75% /usr
/dev/vg00/lvol4        65536     4162     57571    7% /tmp
/dev/vg00/lvol6       512000   441708     65948   87% /opt
/dev/vg00/lvol5       512000   108531    378438   22% /home

For Help, press F1                                            NUM
```

m2426stk bdf output /cad1 directory is no longer mounted

EMS Peripheral Status Monitor:
m2426s2k bdf output

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
m2426s2k:/ > bdf
Filesystem          kbytes      used     avail %used Mounted on
/dev/vg00/lvol3     143360     33787    102738   25% /
/dev/vg00/lvol1      83733     28856     46503   38% /stand
/dev/vg00/lvol8     512000    374883    128551   74% /var
/dev/vg00/lvol7     614400    452347    151962   75% /usr
/dev/vg00/lvol4      65536      3687     58021    6% /tmp
/dev/vg00/lvol6     512000    437636     69762   86% /opt
/dev/vg00/lvol5     512000     99410    386861   20% /home
/dev/vg01/cad1      102400      4562     91786    5% /cad1
m2426s2k:/ >
```

/cad1 directory
is now mounted
on system m2426s2k

EMS Peripheral Status Monitor: configuration file .psmcfg

- **/var/stm/config/tools/monitor/monitor_name. psmcfg**

- **Existence determine whether or not status monitoring is supported**

- **Defines event to state/status correlation**

    SERIOUS and CRITICAL events usually map to DOWN status

- **Determines what action, if any, is required to return the H/A to UP status**

PSM does not have the ability to determine when a device's status has been returned to UP.   Therefore the set_fixed command must be executed

EMS Peripheral Status Monitor: set_fixed command

```
X  hpterm (m2426s2k.nsr.hp.com via TELNET)          _ □ ×
# set_fixed -l
/storage/status/disks/default/8.0.0                    UP    TRUE
/storage/status/disks/default/8.2.0                    UP    TRUE
/storage/status/disks/default/8.4.0                    UP    TRUE
/storage/status/disks/default/52.1.0                   UP    TRUE
/storage/status/disks/default/52.5.0                   UP    TRUE
/storage/status/disks/default/52.6.0                   UP    TRUE
/system/status/core_hw/core_hw                         DOWN  TRUE
/system/status/memory/63                               UP    TRUE
/adapters/status/scsi123_em/52                         UP    TRUE
/adapters/status/scsi123_em/8                          UP    TRUE
/system/status/system_status/ui_host/m2426s2k.nsr.hp.com  UP  TRUE
#
```

- **-l option shows the devices current status**

```
X  hpterm (m2426s2k.nsr.hp.com via TELNET)          _ □ ×
# set_fixed -n /system/status/core_hw/core_hw

# set_fixed -l
/storage/status/disks/default/8.0.0                    UP    TRUE
/storage/status/disks/default/8.2.0                    UP    TRUE
/storage/status/disks/default/8.4.0                    UP    TRUE
/storage/status/disks/default/52.1.0                   UP    TRUE
/storage/status/disks/default/52.5.0                   UP    TRUE
/storage/status/disks/default/52.6.0                   UP    TRUE
/system/status/core_hw/core_hw                         UP    TRUE
/system/status/memory/63                               UP    TRUE
/adapters/status/scsi123_em/52                         UP    TRUE
/adapters/status/scsi123_em/8                          UP    TRUE
/system/status/system_status/ui_host/m2426s2k.nsr.hp.com  UP  TRUE
#
```

- **-n option sets the device to an UP status**

- **-n option and * sets all devices to an UP status**

```
X  hpterm (m2426s2k.nsr.hp.com via TELNET)          _ □ ×
# set_fixed -n \*
```

EMS H/A Monitor
Definition

- Set of monitors that poll a local system or application resource and sends messages when events occur

- Send events to a wide variety of software using multiple protocols

- Configuration interface is SAM

EMS H/A Monitor
Overview
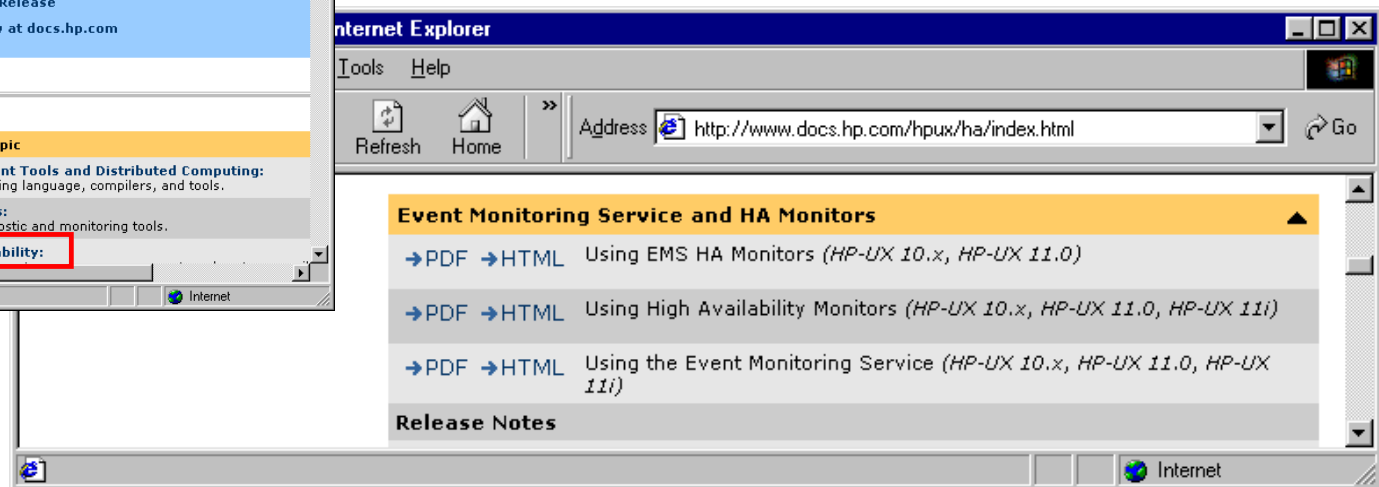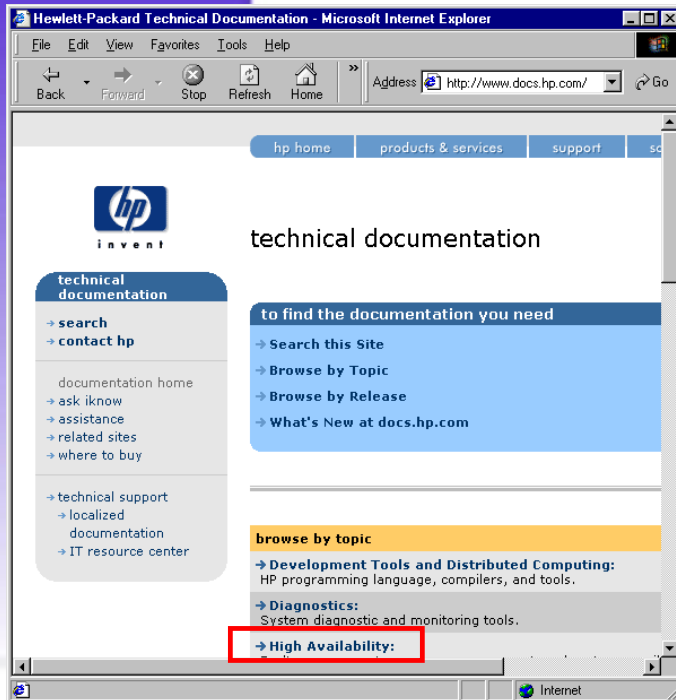
EMS H/A Monitor
Resource Classes

- Disk Monitor   Monitors LVM Disks

- Cluster Monitor   MC ServiceGuard

- Network Monitor   LAN Interface

- System Monitor   User, Job Queue, F/S

- Database Monitor   Database Resources

- **Physical Volume Status**

  ➢ *summary status of all physical volumes in a volume group*

  ➢ *useful for monitoring physical volume groups (PVGs)*

- **Physical Volume and Physical Volume Link Status**

  ➢ *the status of a individual physical volumes and physical volume links (PV Links)*

  ➢ *used to calculate physical volume status*

Both help to provide status on the accessibility of both active and inactive volume groups and logical volumes

- **Logical Volume Summary**

  ➢ *summary status of all logical volumes in an active volume group*

  ➢ *determines accessibility of data … sometimes the physical connection is working but the application cannot read or write data*

- **Logical Volume Status**
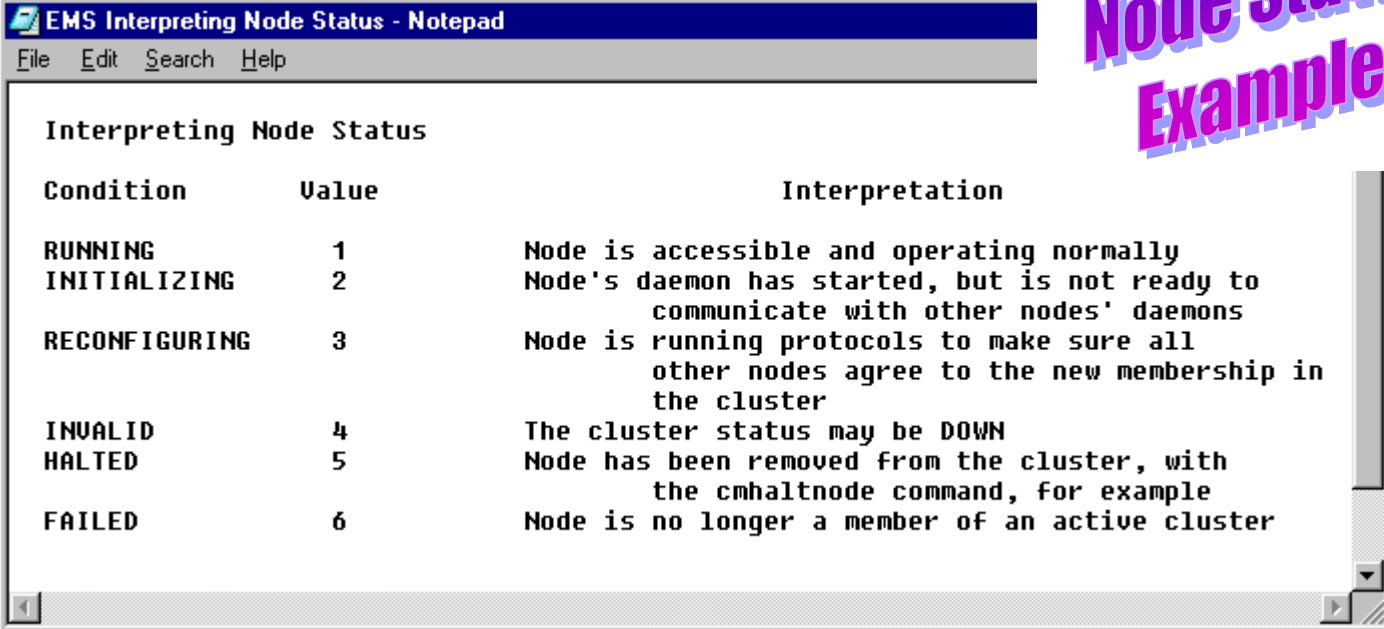
  ➢ *status of each logical volume in a volume group*

  ➢ *determines which specific logical volumes have failed*

- **Logical Volume Copies**

  ➢ *the number of copies of data in a volume group*

  ➢ *useful for monitoring mirrored disk configuration*

  (MirrorDisk/UX)

EMS H/A Monitor
Cluster Monitor

- **Cluster Status** — *node accessing cluster*

- **Local Node Status** — *see example below*

- **Package Status** — *running on local node*

Node Status Example

```
EMS Interpreting Node Status - Notepad
File   Edit   Search   Help

Interpreting Node Status

Condition          Value              Interpretation

RUNNING             1          Node is accessible and operating normally
INITIALIZING        2          Node's daemon has started, but is not ready to
                                      communicate with other nodes' daemons
RECONFIGURING       3          Node is running protocols to make sure all
                                      other nodes agree to the new membership in
                                      the cluster
INVALID             4          The cluster status may be DOWN
HALTED              5          Node has been removed from the cluster, with
                                      the cmhaltnode command, for example
FAILED              6          Node is no longer a member of an active cluster
```

• **Status of whether or not the LAN interface is up or down**

• **MC ServiceGuard standby LANs are reported as** DOWN **unless they have been activated to replace a failed LAN interface**

- **Status of Number of Users**

  - ➢ *Total number of users logged on the system*

- **Status of Job Queues**

  - ➢ *Average number of jobs in the queue in the last minute*

  - ➢ *Average number of jobs in the queue in the last 5 minutes*

  - ➢ *Average number of jobs in the queue in the last 15 minutes*

- **File System Available space**

  - ➢ *checks number of megabytes available for use*

  - ➢ *file system must be mounted*
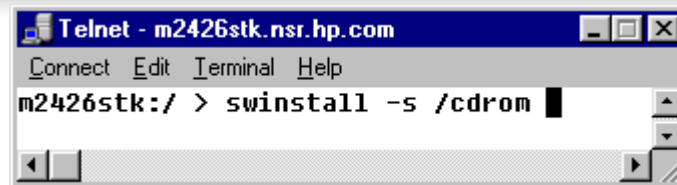
EMS H/A Monitor
Database Monitor

- **Database status**

- **Allocated disk space for the database**

- **Percentage and amount of disk space used within the database**

- **Number of transactions completed by server**

- **Current number of connections to the server**

- **Peak connections made since server started**
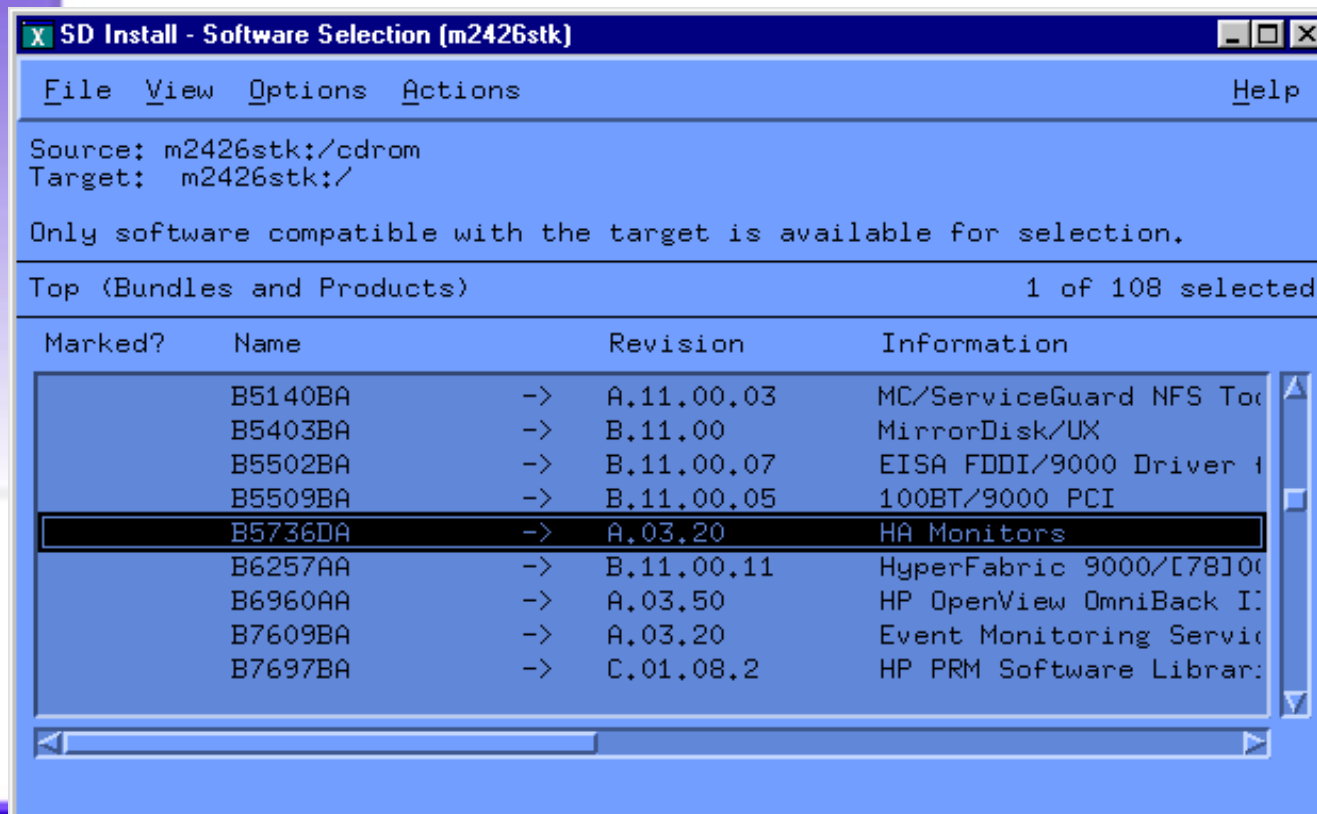
EMS H/A Monitor Requirements

- **Install off of the Application CDROM**

- **Must match Diagnostics and EMS version**

- **Applicable patches**

EMS H/A Monitor
Install

Telnet - m2426stk.nsr.hp.com

Connect Edit Terminal Help

```
m2426stk:/ > swinstall -s /cdrom █
```

SD Install - Software Selection (m2426stk)

File   View   Options   Actions   Help

Source: m2426stk:/cdrom
Target: m2426stk:/

Only software compatible with the target is available for selection.

Top (Bundles and Products)   1 of 108 selected

Marked?	Name		Revision	Information
	B5140BA	->	A.11.00.03	MC/ServiceGuard NFS Too
	B5403BA	->	B.11.00	MirrorDisk/UX
	B5502BA	->	B.11.00.07	EISA FDDI/9000 Driver
	B5509BA	->	B.11.00.05	100BT/9000 PCI
	B5736DA	->	A.03.20	HA Monitors
	B6257AA	->	B.11.00.11	HyperFabric 9000/[78]0(
	B6960AA	->	A.03.50	HP OpenView OmniBack I:
	B7609BA	->	A.03.20	Event Monitoring Servi(
	B7697BA	->	C.01.08.2	HP PRM Software Librar:

EMS H/A Monitor
Install

```
SD Install - Software Selection (m2426stk)

File   View   Options   Actions                              Help

Source:  m2426stk:/cdrom
Target:   m2426stk:/
Only software contained in the parent bundle is shown.
Only software compatible with the target is available for selection.

Products:B5736DA                                  0 of 3 selected

Marked?      Name                   Revision     Information

..(go up)
            EMS-DiskMonitor    ->    A.03.20     EMS Disk Resource Monit
            EMS-MIBMonitor     ->    A.03.20     EMS MIB Resource Monit
            EMS-RdbmsMon       ->    A.03.20     EMS Database Monitor
```

EMS H/A Monitor
Configure Network Monitor

EMS H/A Monitor
Configure Network Monitor

EMS H/A Monitor
Configure Network Monitor

EMS H/A Monitor
OpenView Operations Configuration

```
X hpterm (m2426stk.nsr.hp.com via TELNET)          _ □ ×
m2426stk:/ > swinstall -s /cdrom ▌
```

```
X SD Install - Software Selection (m2426stk)                        _ □ ×

 File   View   Options   Actions                                    Help

Source:  m2426stk:/cdrom
Target:  m2426stk:/

Only software compatible with the target is available for selection.

Top (Bundles and Products)                         1 of 109 selected

Marked?    Name              Revision      Information

           B6061AA     ->    B.07.00       HP MLIB Math Software Library for HP-UX :
           B6192AA     ->    B.11.00.10    DCE/9000 Programming & Administration Too
           B6264BA     ->    A.01.01       SRDF Disaster Recovery Toolkit
           B6323BA     ->    B.06.03       CXperf Performance Analyzer
           B6733AA     ->    B.11.00.10    DCE/9000 Kernel Threads Support
           B6816AA     ->    B.11.00.12    SCR & DMI - HPUX
           B7659BA     ->    A.01.01       HP Continental Clusters
           B8109BA     ->    A.00.03       MetroCluster with Continuous Access XP To
           B8313AA     ->    B.01.00.02    Netscape Enterprise Server
```

```
X Install Window (m2426stk)                                         _ □ ×

Press 'Product Summary' and/or 'Logfile' for more target information.

Target            :  m2426stk:/
Status            :  Completed
Percent Complete  :  100%
Kbytes Installed  :  20695 of 20695
Time Left (minutes):  0
Loading Software  :

      Product Summary...      Logfile...

 Done                                                     Help
```

EMS H/A Monitor
OpenView Operations - Adding Node
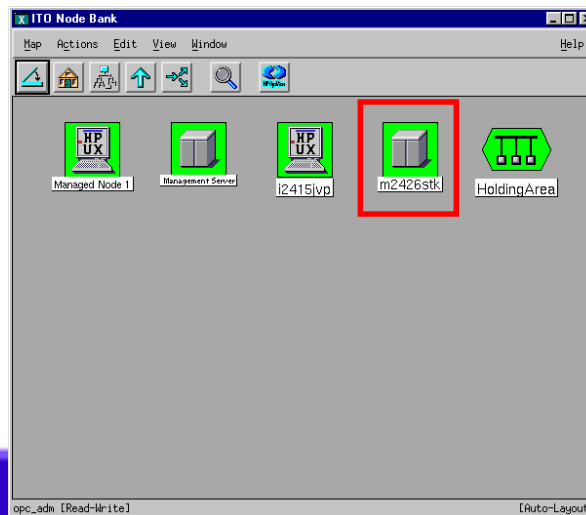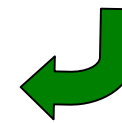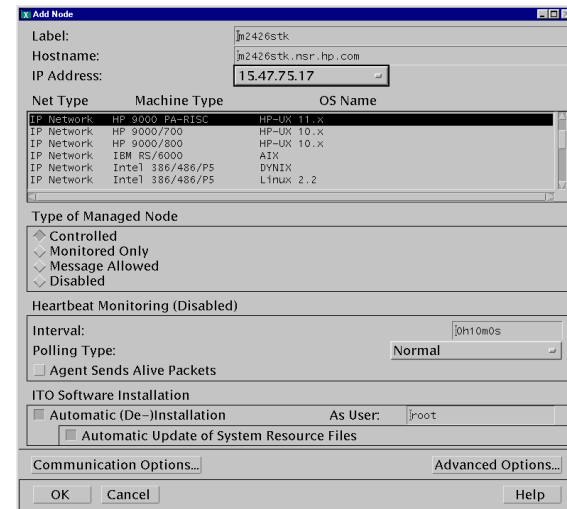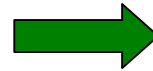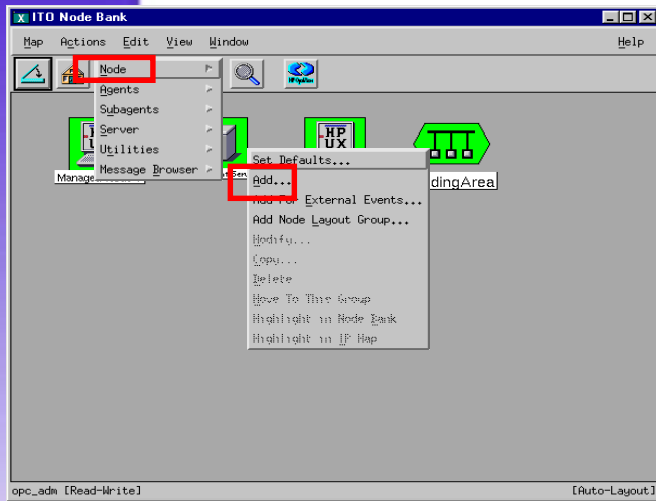
EMS H/A Monitor
OpenView Operations – Adding Agent
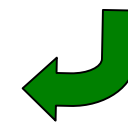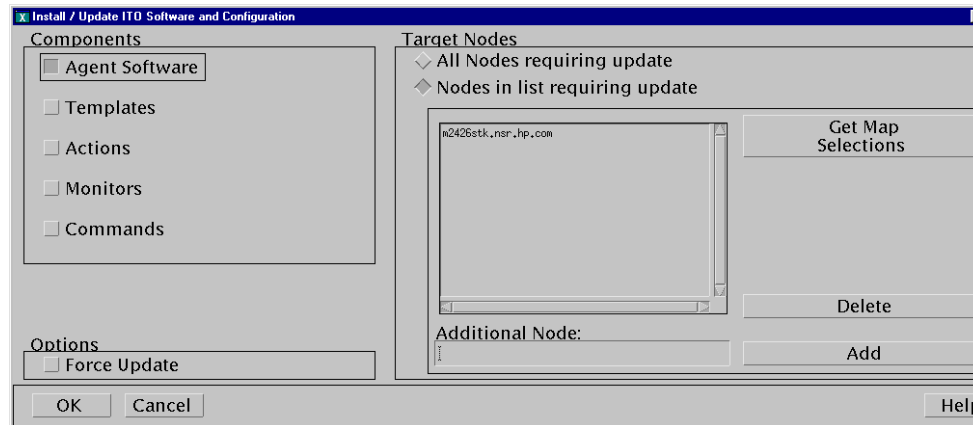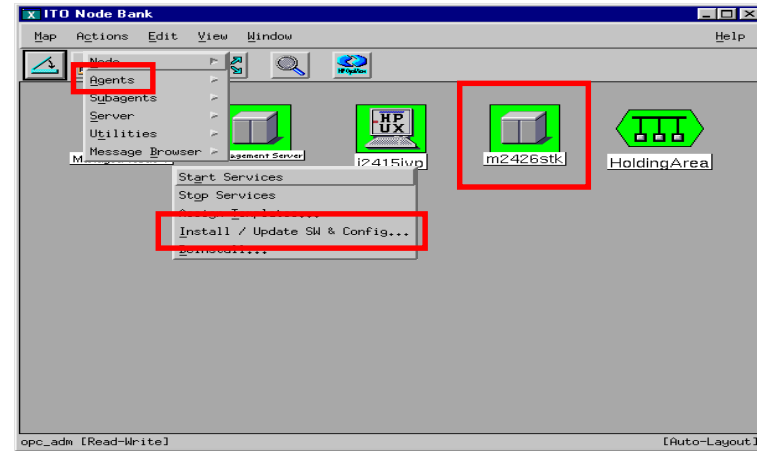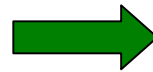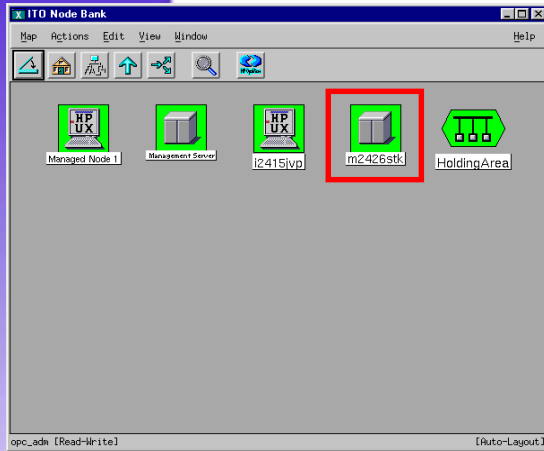
EMS H/A Monitor
OpenView Operations – Installing Templates
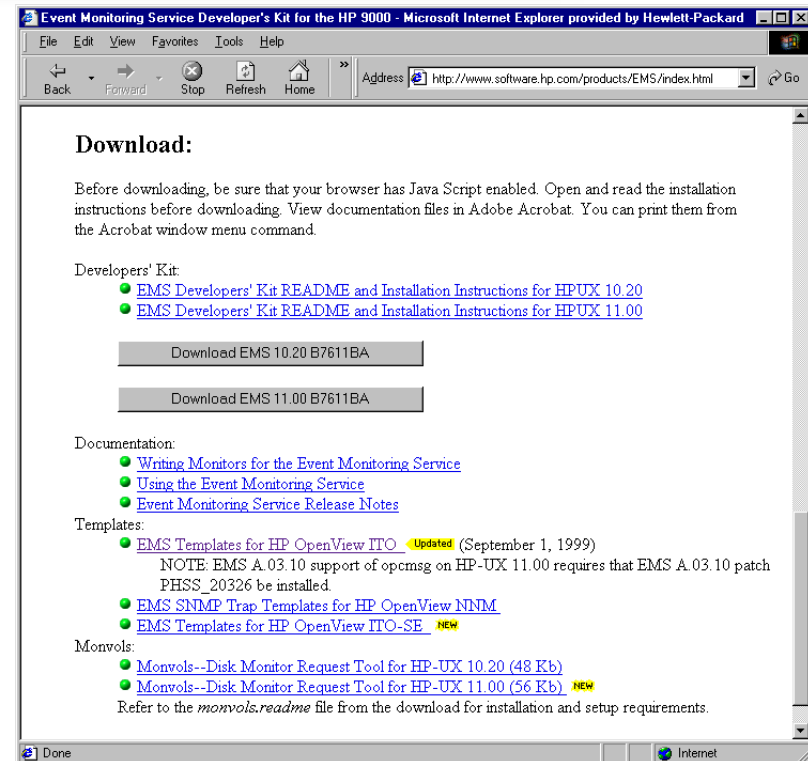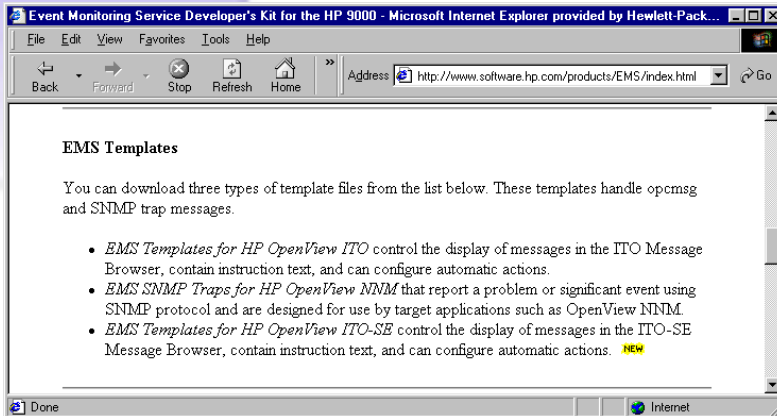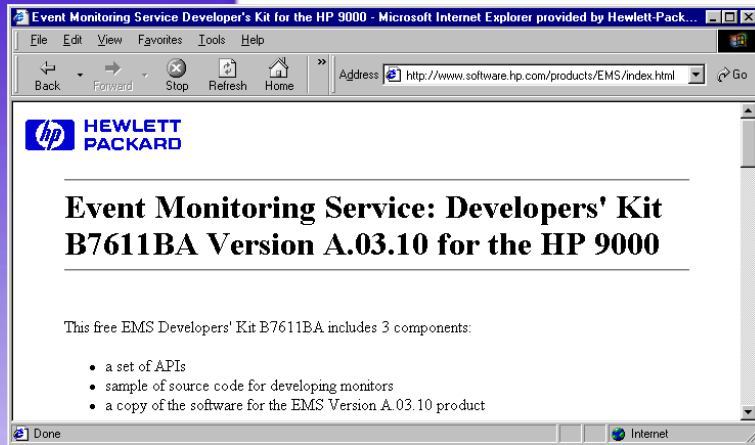
- **Physically disconnected lan0 cable**

- **Executed command:**

  ifconfig lan1 down

EMS HA Montor
LAN Card Errors

EMS H/A Monitor
OpenView Operations EMS Integration

ITO Node Bank

Map Actions Edit View Window   Help

Root
Home
Parent
Quick Navigator

Node Bank
Node Hierarchy Bank
Node Group Bank
Message Group Bank
Application Bank
User Bank
User Profile Bank
Message Source Templates

Message Browser

Managed Node 1   Management   m2426stk   HoldingArea

opc_adm [Read-Write]   [Auto-Layout]
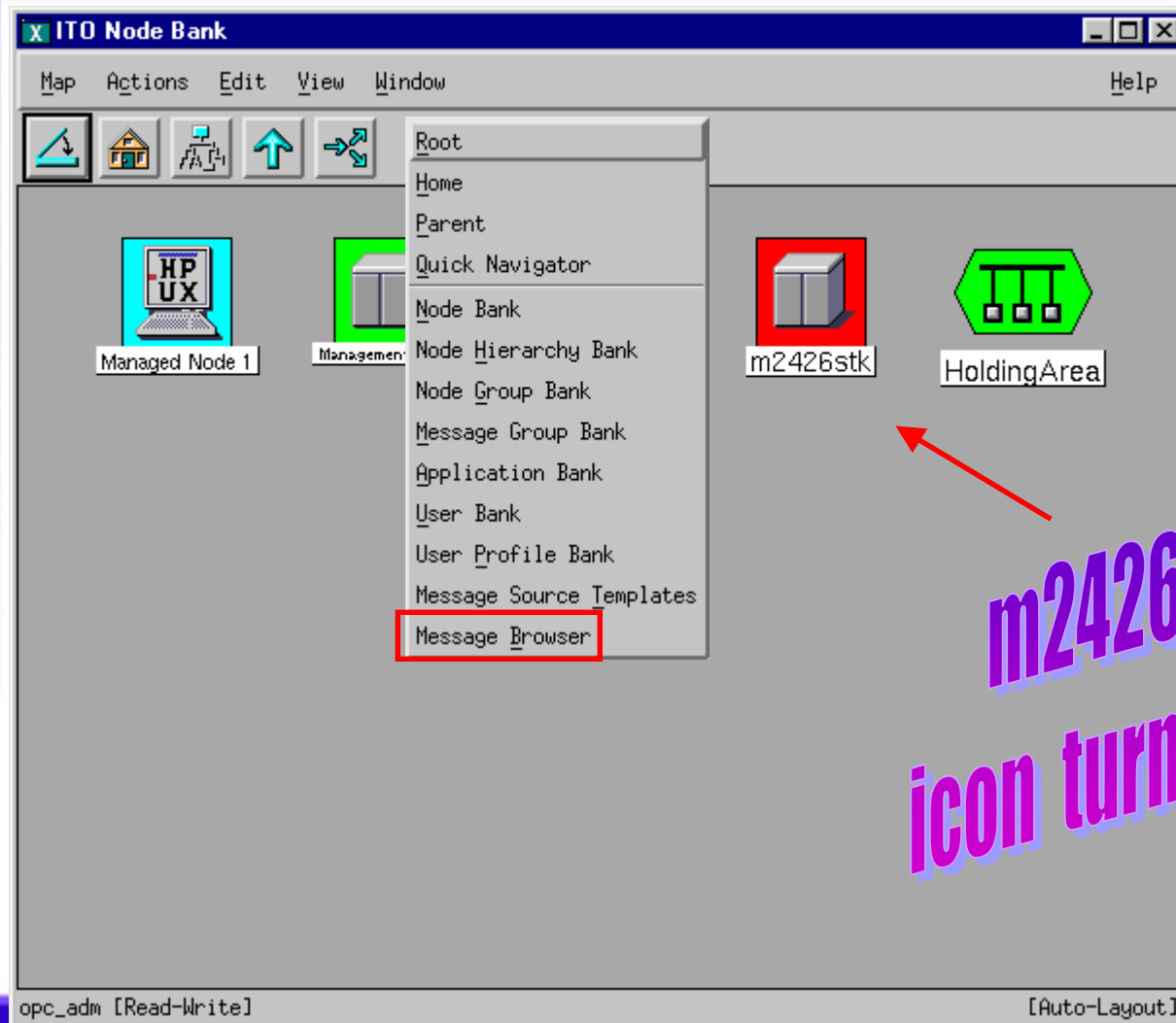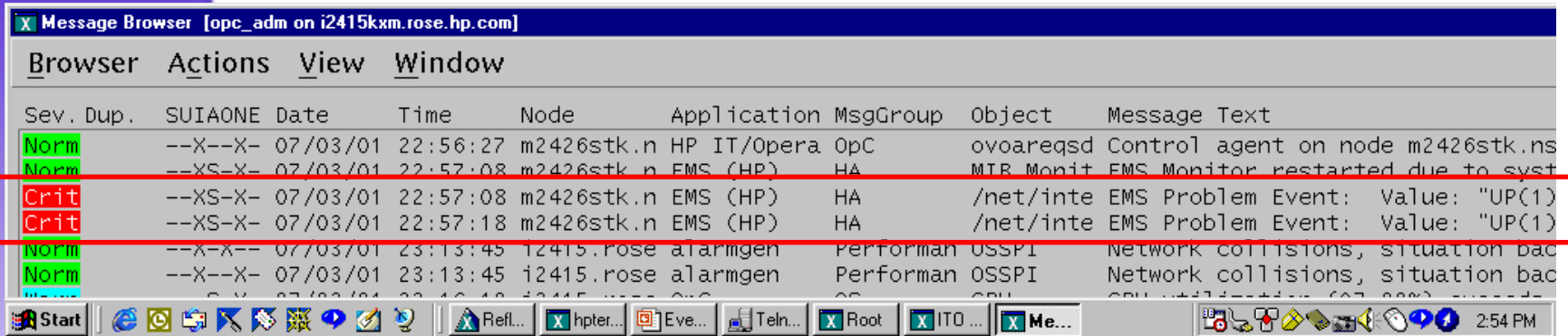
m2426stk icon turned red

EMS H/A Monitor
OpenView Operations EMS Integration

X Message Browser [opc_adm on i2415kxm.rose.hp.com]

Browser   Actions   View   Window

Sev. Dup.	SUIAONE	Date	Time	Node	Application	MsgGroup	Object	Message Text
Norm	--X--X-	07/03/01	22:56:27	m2426stk.n	HP IT/Opera	OpC	ovoareqsd	Control agent on node m2426stk.ns
Norm	--XS-X-	07/03/01	22:57:08	m2426stk.n	EMS (HP)	HA	MIB Monit	EMS Monitor restarted due to syst
Crit	--XS-X-	07/03/01	22:57:08	m2426stk.n	EMS (HP)	HA	/net/inte	EMS Problem Event: Value: "UP(1)
Crit	--XS-X-	07/03/01	22:57:18	m2426stk.n	EMS (HP)	HA	/net/inte	EMS Problem Event: Value: "UP(1)
Norm	--X-X--	07/03/01	23:13:45	i2415.rose	alarmgen	Performan	OSSPI	Network collisions, situation bac
Norm	--X-X--	07/03/01	23:13:45	i2415.rose	alarmgen	Performan	OSSPI	Network collisions, situation bac

Start | Refl... hpter... Eve... Teln... Root ITO... Me...   2:54 PM

1st   Critical Message: disconnected lan0 cable

2nd Critical Message: ifconfig lan1 down

EMS H/A Monitor
OpenView Operations EMS Integration

Message Details

Node	m2426stk.nsr.hp.com
Application	EMS (HP)
Message Group	HA
Object	/net/interfaces/lan/status/lan0
Source	Message:EMS opcmsg
Annotations	2
Attributes	
Message ID	bc858e-7a32-71d5-0b4a-c21a04030000
Forwarding Manager	

Severity	Critical
Service Name	
Message Key	
Message Type	
Time Created on Managed Node	
Time Received on Mgmt. Server	
Number of Duplicates	
Time Last Received on Mgmt. Server	
Owned by	

Message Text

EMS Problem Event: Value: "UP(1)" For Resource: "/net/interfaces/lan/status/lan0" (Threshold

Actions

	Status	Node	
Automatic	successful	m2426stk.nsr.hp.com	/net/interfaces/l
Operator Initiated			
Notification			
Trouble Ticket	No		

Escalations

Escalated to		by		at	

Instructions...	Show Original Message...	Own
Close	Highlight	Annotations...	Acknowledge

Select Annotations To See Customized EMS Message
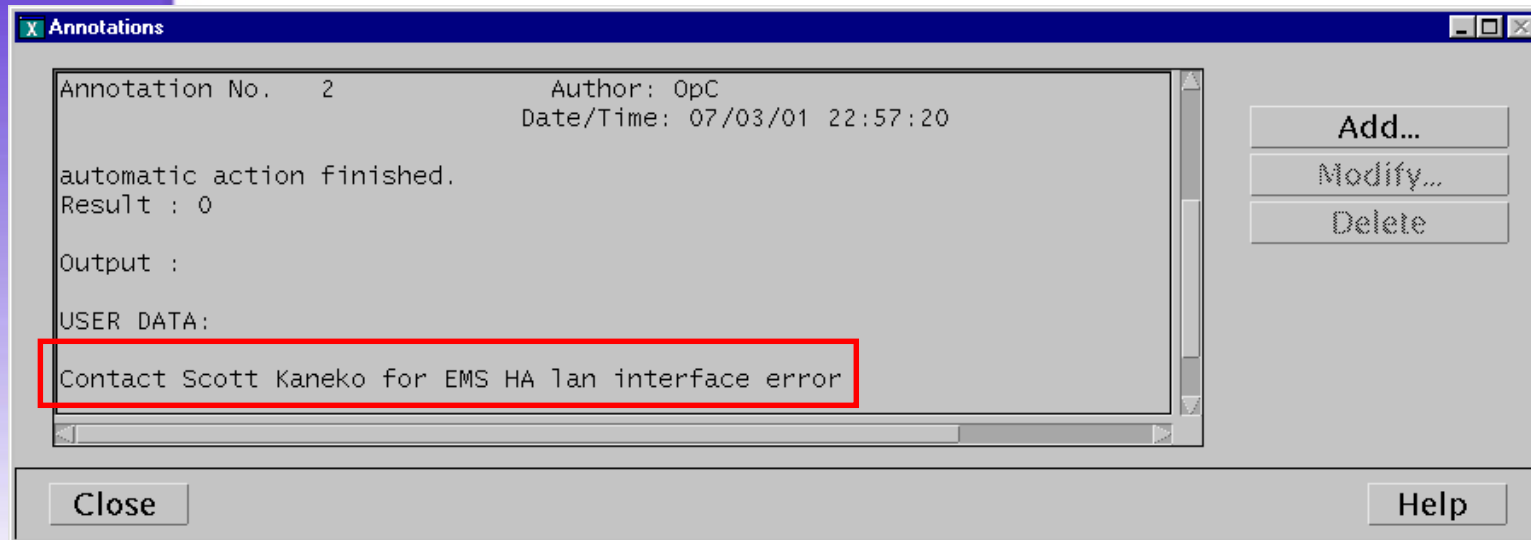
99

EMS H/A Monitor
OpenView Operations EMS Integration

- **Disable Entire EMS Monitor**

- **Disable EMS Events**

- **Disable EMS Instance**

EMS Additional Notes
Steps To Disable Entire EMS Monitor

1) **Disable monitoring**

2) **Move the executable**

3) **Move the dictionary entry**

4) **Move the .hwa existence file**

5) **Enable monitoring**

6) **Verify**

EMS Additional Notes
Disable Entire EMS Monitor

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help

=====================================================================
==============     Monitoring Request Manager Main Menu     ==============
=====================================================================


Select:
    (S)how monitoring requests configured via monconfig
    (C)heck detailed monitoring status
    (L)ist descriptions of available monitors
    (A)dd a monitoring request
    (D)elete a monitoring request
    (M)odify an existing monitoring request
    (E)nable Monitoring
    (K)ill (disable) monitoring
    (H)elp
    (Q)uit
    Enter selection: [s] c █
```

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help

>/system/events/core_hw ... OK.
 For /system/events/core_hw/core_hw:
   Events >= 4 (SERIOUS) Goto TCP; host=m2426stk.nsr.hp.com port=49198
   Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/resmon/log/event.log
   Events >= 3 (MAJOR WARNING) Goto SYSLOG
   Events >= 3 (MAJOR WARNING) Goto EMAIL; addr=root
```

EMS Additional Notes
Disable Entire EMS Monitor

```
Telnet - m2426stk.nsr.hp.com                          _ □ ✕
Connect  Edit  Terminal  Help
=================================================================
==================      Event Monitoring Service    ==================
==================      Monitoring Request Manager   ==================
=================================================================


  EVENT MONITORING IS CURRENTLY ENABLED.
  EMS Version : A.03.20
  STM Version : A.25.00


=================================================================
==============      Monitoring Request Manager Main Menu   ==============
=================================================================

Select:
   (S)how monitoring requests configured via monconfig
   (C)heck detailed monitoring status
   (L)ist descriptions of available monitors
   (A)dd a monitoring request
   (D)elete a monitoring request
   (M)odify an existing monitoring request
   (E)nable Monitoring
   (K)ill (disable) monitoring
   (H)elp
   (Q)uit
   Enter selection: [s] k ▮
```

```
Telnet - m2426stk.nsr.hp.com                          _ □ ✕
Connect  Edit  Terminal  Help
=================================================================
======================      Disable Monitoring      ======================
=================================================================


Hardware event monitoring watches the system for hardware problems.  If
 you shut this facility down, the system will no longer be able to alert
 you to many hardware problems.
 In addition, if ServiceGuard is configured to use hardware event monitoring
 to determine the health of your system, then disabling monitoring may cause
 it to consider this system as having failed.  This will result in a package
 failover.  Type "h" for help to find out more about the implications of
 shutdown on ServiceGuard.
 Furthermore, if you have used the Event Monitoring Service (EMS) Graphical
 User Interface (GUI) within the System Administration Manager (SAM) to
 configure the event monitors, this configuration will not be saved, and no
 actual monitoring will take place until hardware event monitoring is
 re-enabled and you add the monitoring requests back again using the EMS
 GUI.  Event monitoring resources show up in the EMS GUI under the resource
 class "status".



 Are you sure you wish to disable event monitoring?
    {(Y)es,(N)o,(H)elp} [n] y ▮
```

```
Telnet - m2426stk.nsr.hp.com                          _ □ ✕
Connect  Edit  Terminal  Help
  EVENT MONITORING IS CURRENTLY DISABLED.



=================================================================
==============      Monitoring Request Manager Main Menu   ==============
=================================================================

Select:
   (S)how monitoring requests configured via monconfig
   (C)heck detailed monitoring status
   (L)ist descriptions of available monitors
   (A)dd a monitoring request
   (D)elete a monitoring request
   (M)odify an existing monitoring request
   (E)nable Monitoring
   (K)ill (disable) monitoring
   (H)elp
   (Q)uit
   Enter selection: [s] ▮
```

EMS Additional Notes
Disable Entire EMS Monitor

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
m2426stk:/ > cd /usr/sbin/stm/uut/bin/tools/monitor
m2426stk:/usr/sbin/stm/uut/bin/tools/monitor > mkdir org
m2426stk:/usr/sbin/stm/uut/bin/tools/monitor > mv dm_core_hw org
m2426stk:/usr/sbin/stm/uut/bin/tools/monitor > █
```

Move Executable File

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
m2426stk:/ > cd /etc/opt/resmon/dictionary/
m2426stk:/etc/opt/resmon/dictionary > mkdir org
m2426stk:/etc/opt/resmon/dictionary > mv dm_core_hw.dict org
m2426stk:/etc/opt/resmon/dictionary > █
```

Move Dictionary File

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
m2426stk:/ > cd /var/stm/data/tools/monitor
m2426stk:/var/stm/data/tools/monitor > mkdir org
m2426stk:/var/stm/data/tools/monitor > mv dm_core_hw.hwa org
m2426stk:/var/stm/data/tools/monitor > █
```

Move Existence File

EMS Additional Notes
Disable Entire EMS Monitor

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
===========================================================================
==================      Event Monitoring Service      ==================
==================      Monitoring Request Manager    ==================
===========================================================================


 EVENT MONITORING IS CURRENTLY DISABLED.
 EMS Version : A.03.20
 STM Version : A.25.00


===========================================================================
==============      Monitoring Request Manager Main Menu    ==============
===========================================================================


Select:
   (S)how monitoring requests configured via monconfig
   (C)heck detailed monitoring status
   (L)ist descriptions of available monitors
   (A)dd a monitoring request
   (D)elete a monitoring request
   (M)odify an existing monitoring request
   (E)nable Monitoring
   (K)ill (disable) monitoring
   (H)elp
   (Q)uit
   Enter selection: [s] e █
```

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
Waiting for changes in monitoring requests or in hardware configuration
to take effect...


  EVENT MONITORING IS CURRENTLY ENABLED.



===========================================================================
==============      Monitoring Request Manager Main Menu    ==============
===========================================================================


Select:
   (S)how monitoring requests configured via monconfig
   (C)heck detailed monitoring status
   (L)ist descriptions of available monitors
   (A)dd a monitoring request
   (D)elete a monitoring request
   (M)odify an existing monitoring request
   (E)nable Monitoring
   (K)ill (disable) monitoring
   (H)elp
   (Q)uit
   Enter selection: [s] █
```

EMS Additional Notes
Disable Entire EMS Monitor

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help

========================================================================
==============     Monitoring Request Manager Main Menu     ============
========================================================================


Select:
   (S)how monitoring requests configured via monconfig
   (C)heck detailed monitoring status
   (L)ist descriptions of available monitors
   (A)dd a monitoring request
   (D)elete a monitoring request
   (M)odify an existing monitoring request
   (E)nable Monitoring
   (K)ill (disable) monitoring
   (H)elp
   (Q)uit
   Enter selection: [s] c █
```

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help

>/system/events/core_hw ... NOT MONITORING.
   (Possibly there is no hardware to monitor.)

>/connectivity/events/hubs/FC_hub ... NOT MONITORING.
   (Possibly there is no hardware to monitor.)
```

EMS Additional Notes
Disabling EMS

- **Disable Entire EMS Monitor**

- **Disable EMS Events**

- **Disable EMS Instance**

Left Notepad window — "Untitled - Notepad"

```
>------------ Event Monitoring Service Event Notification ------------<

Notification Time: Tue Jun 19 02:09:41 2001

system1 sent Event Monitor notification information:

/system/events/core_hw/core_hw is >= 3.
Its current value is SERIOUS(4).

Event data from monitor:

Event Time..........: Tue Jun 19 02:09:41 2001
Severity............: SERIOUS
Monitor.............: dm_core_hw
Event #.............: 51
System..............: system1.company1.com

Summary:  I/O power supply 14 failure in compute cabinet

Description of Error:  An I/O power supply has failed.

Probable Cause / Recommended Action:

      The power supply is not connected to a working AC power source.
Verify that the power supply is connected properly.  The power supply
is disabled.  If present, verify that the switch on the front of the
power supply is in the "On" position.
      The power supply has failed.  Repair or replace the power supply.
```

Right Notepad window — "Untitled - Notepad"

```
Additional Event Data:
      System IP Address...: 1.2.3.4
      Event Id............: 0x3b2f16d500000000
      Monitor Version.....: B.01.00
      Event Class.........: System
      Client Configuration File...........:
      /var/stm/config/tools/monitor/default_dm_core_hw.clcfg
      Client Configuration File Version...: A.01.00
            Qualification criteria met.
               Number of events..: 1
      Associated OS error log entry id(s):
            None
      Additional System Data:
            System Model Number.............: 9000/800
            EMS Version.....................: A.03.20
            STM Version.....................: A.24.00
      Latest information on this event:
            http://docs.hp.com/hpux/content/hardware/ems/dm_core_hw.htm#51

ʊ-ʊ-ʊ-ʊ-ʊ    D E T A I L S    ʊ-ʊ-ʊ-ʊ-ʊ

Device identification information:

      Number of failed power supplies..........: 1
      Location of failed power supplies........: compute cabinet
      Failed power supply number(s)............: 14

>---------- End Event Monitoring Service Event Notification ----------<
```

ONLY APPLIABLE TO SYSTEMS (N AND L CLASS)
LOADED FROM DECEMBER 2000 SUPPORT PLUS CD-ROM

Untitled - Notepad

File Edit Search Help

```
>------------ Event Monitoring Service Event Notification ------------<

Notification Time: Tue Jun 19 02:09:42 2001

system1 sent Event Monitor notification information:

/system/events/core_hw/core_hw is >= 3.
Its current value is SERIOUS(4).

Event data from monitor:

Event Time.........: Tue Jun 19 02:09:42 2001
Severity...........: SERIOUS
Monitor............: dm_core_hw
Event #............: 55
System.............: system1.company1.com

Summary:  Backplane power board 8,9,13,16,18,19 failure in compute
          cabinet

Description of Error:  An Backplane power board has failed.

Probable Cause / Recommended Action:

      The power board is not connected to a working AC power source.
Verify that the power board is connected properly.
      The power board has failed.  Repair or replace the power board.
```

Untitled - Notepad

File Edit Search Help

```
Additional Event Data:
      System IP Address...: 1.2.3.4
      Event Id............: 0x3b2f16d600000000
      Monitor Version.....: B.01.00
      Event Class.........: System
      Client Configuration File...........:
      /var/stm/config/tools/monitor/default_dm_core_hw.clcfg
      Client Configuration File Version...: A.01.00
            Qualification criteria met.
                Number of events..: 1
      Associated OS error log entry id(s):
            None
      Additional System Data:
            System Model Number..............: 9000/800
            EMS Version......................: A.03.20
            STM Version......................: A.24.00
      Latest information on this event:
            http://docs.hp.com/hpux/content/hardware/ems/dm_core_hw.htm#55

ʊ-ʊ-ʊ-ʊ-ʊ   D E T A I L S   ʊ-ʊ-ʊ-ʊ-ʊ

Device identification information:

      Number of failed power boards............: 6
      Location of failed power boards..........: compute cabinet
      Failed power board number(s).............: 8,9,13,16,18,19

>---------- End Event Monitoring Service Event Notification ----------<
```
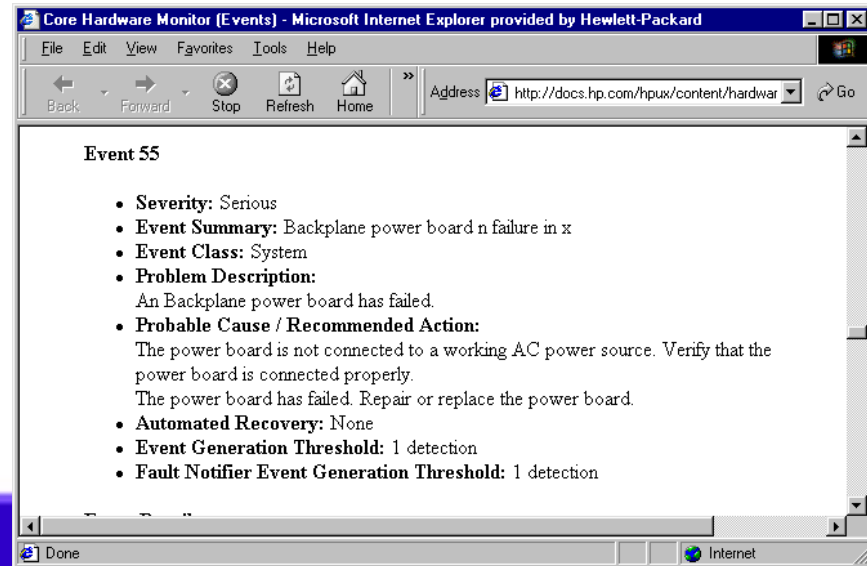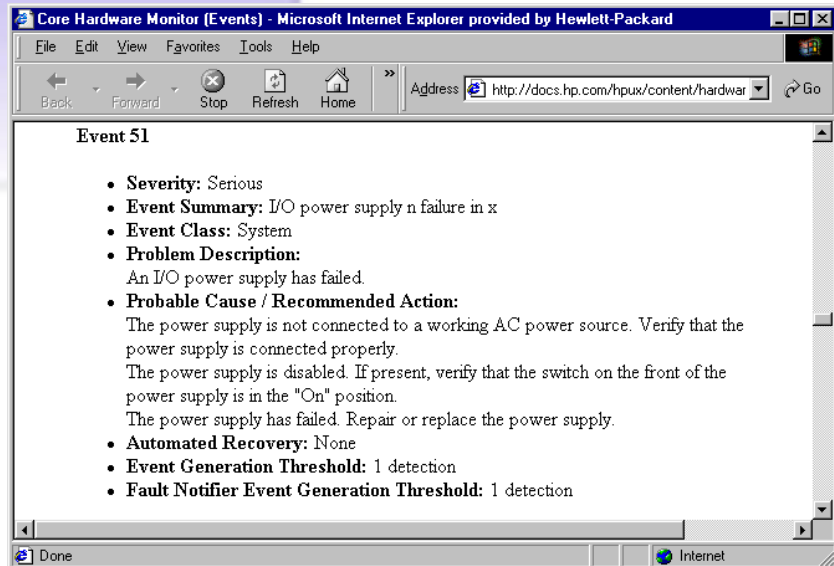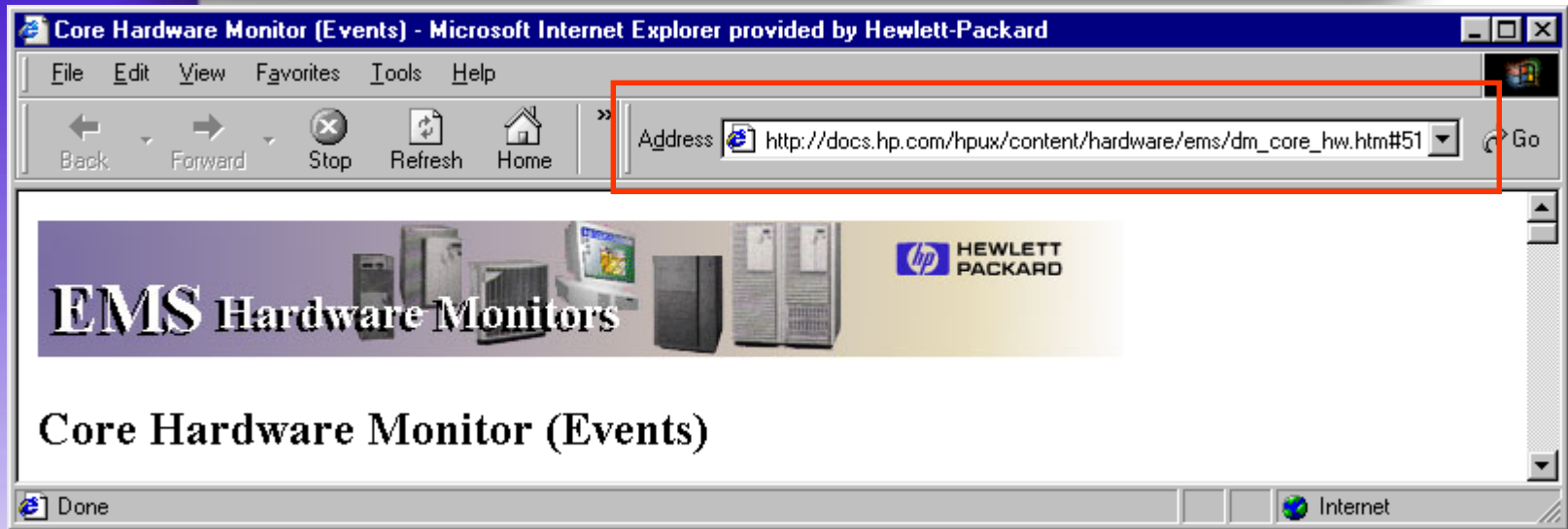
ONLY APPLIABLE TO SYSTEMS (N AND L CLASS)
LOADED FROM DECEMBER 2000 SUPPORT PLUS CD-ROM

EMS Additional Notes
dm_core_hw events 51 & 55

Core Hardware Monitor (Events) - Microsoft Internet Explorer provided by Hewlett-Packard

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home

Address http://docs.hp.com/hpux/content/hardware/ems/dm_core_hw.htm#51 Go

EMS Hardware Monitors

HEWLETT PACKARD

Core Hardware Monitor (Events)

Done   Internet

Core Hardware Monitor (Events) - Microsoft Internet Explorer provided by Hewlett-Packard

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home

Address http://docs.hp.com/hpux/content/hardwar

Event 51

- **Severity:** Serious
- **Event Summary:** I/O power supply n failure in x
- **Event Class:** System
- **Problem Description:**
  An I/O power supply has failed.
- **Probable Cause / Recommended Action:**
  The power supply is not connected to a working AC power source. Verify that the power supply is connected properly.
  The power supply is disabled. If present, verify that the switch on the front of the power supply is in the "On" position.
  The power supply has failed. Repair or replace the power supply.
- **Automated Recovery:** None
- **Event Generation Threshold:** 1 detection
- **Fault Notifier Event Generation Threshold:** 1 detection

Done   Internet

Core Hardware Monitor (Events) - Microsoft Internet Explorer provided by Hewlett-Packard

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home

Address http://docs.hp.com/hpux/content/hardwar

Event 55

- **Severity:** Serious
- **Event Summary:** Backplane power board n failure in x
- **Event Class:** System
- **Problem Description:**
  An Backplane power board has failed.
- **Probable Cause / Recommended Action:**
  The power board is not connected to a working AC power source. Verify that the power board is connected properly.
  The power board has failed. Repair or replace the power board.
- **Automated Recovery:** None
- **Event Generation Threshold:** 1 detection
- **Fault Notifier Event Generation Threshold:** 1 detection

Done   Internet

EMS Additional Notes
Steps To Disable EMS Events

1) **Disable monitoring**

2) **Change directory to var/stm/config/tools/monitor**

3) **Edit the appropriate .clcfg file**

4) **Enable monitoring**

5) **Verify**

EMS Additional Notes
Disable EMS Events


```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help

m2426stk:/ > cd /var/stm/config/tools/monitor
m2426stk:/var/stm/config/tools/monitor > ls default_dm_core*
default_dm_core_hw.clcfg
m2426stk:/var/stm/config/tools/monitor > cp default_dm_core_hw.clcfg \
> default_dm_core_hw.orig
m2426stk:/var/stm/config/tools/monitor > vi default_dm_core_hw.clcfg ▮
```

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
#
# EVENT_CAB_POWER_REDUNDANT
EQ:50    :INFORMATION  :TRUE  :9999999  :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_FAIL
EQ:51    :SERIOUS      :TRUE  :1440     :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_NOT_REDUNDANT
EQ:52    :SERIOUS      :TRUE  :1440     :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_NOT_REDUNDANT_OK
EQ:53    :INFORMATION  :TRUE  :9999999  :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_REDUNDANT
EQ:54    :INFORMATION  :TRUE  :9999999  :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_BP_PS_FAIL
EQ:55    :SERIOUS      :TRUE  :1440     :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
```

```
Telnet - m2426stk.nsr.hp.com
Connect  Edit  Terminal  Help
#
# EVENT_CAB_POWER_REDUNDANT
EQ:50    :INFORMATION  :TRUE   :9999999  :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_FAIL
EQ:51    :SERIOUS      :FALSE  :1440     :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_NOT_REDUNDANT
EQ:52    :SERIOUS      :TRUE   :1440     :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_NOT_REDUNDANT_OK
EQ:53    :INFORMATION  :TRUE   :9999999  :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_IO_POWER_REDUNDANT
EQ:54    :INFORMATION  :TRUE   :9999999  :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
# EVENT_BP_PS_FAIL
EQ:55    :SERIOUS      :FALSE  :1440     :ANY  :1  :NONE  :NO_OP:NO_OP:NONE
#
```

EMS Additional Notes
Disable EMS Events .clcfg Definitions

```
Untitled - Notepad
File  Edit  Search  Help

#
# : event:severity      :en_flg:supp_time:window:thr:val_th1:opr 1:opr 2:val_th2
# :------:--------------:------:---------:------:---:-------:-----:-----:-------
#
# EVENT_IO_POWER_FAIL
EQ:51     :SERIOUS       :FALSE  :1440     :ANY    :1  :NONE    :NO_OP:NO_OP:NONE
#
# EVENT_BP_PS_FAIL
EQ:55     :SERIOUS       :FALSE  :1440     :ANY    :1  :NONE    :NO_OP:NO_OP:NONE
#
```

```
Untitled - Notepad
File  Edit  Search  Help

#
# event_number : the number of the event
#
# severity : the severity of the event.  Valid values are:
# severity : the severity of the event.  Valid values are:
#         CRITICAL
#         SERIOUS
#         SERIOUS
#         MAJOR_WARNING
#         MINOR_WARNING
#         INFORMATION
#
# enable flag : whether the event is enabled.  Valid values are:
#         TRUE  - event is enabled
#         FALSE - event is not enabled
#
# suppression time : time, in minutes, to suppress generation and trending
# for this event after generating the event.
# Valid values are:
#         NOT_USED - Never suppress the event
#         1 - maxint - number of minutes to suppress
#         9999999 - This value is used so that an event will only be generated
#                   once.  In the dm_core_hw monitor, informational events
#                   stating that a component is OK use this value.  The event
#                   will be cleared if a failure occurs, so that the event
#                   will be re-generated when the problem is fixed.
#
# time window: amount of time, in minutes, event must be seen to
# qualify event.  Valid values are:
#         NOT_USED - time window thresholding not used
#         ANY - time window thresholding used but no time window specified
#         1-maxint - time need to see threshold events to qualify
#
```

```
Untitled - Notepad
File  Edit  Search  Help

#
# threshold : number of times in time window event must be seen to qualify
# event.  Valid values are:
#         1-maxint
# NOTE: to configure event to always be generated every time it is seen,
# threshold should be set to 1 and time window should be set to "ANY"
# value threshold X, operator X : value thresholds to qualify event.
# Valid values for value threshold depend on the type of value associated
# with the event.  However, predefined value of "NONE" means this value
# threshold is not used.  Valid values for operator X are:
#         NO_OP - this operator not used
#         >, < , >=, <=,==, !=.
# These values are used to qualify the event using the following logic:
#  value threshold 1 operator 1 value operator 2 value threshold 2
# For example, if the value is an integer and want to qualify event if
# value is between 60 and 70, inclusive, the entry would be:
# 60 : <= : <= 70.  If the value is an integer and want to qualify event
# if value is > 70, the entry would be : NONE : NO_OP : > : 70.
#
```
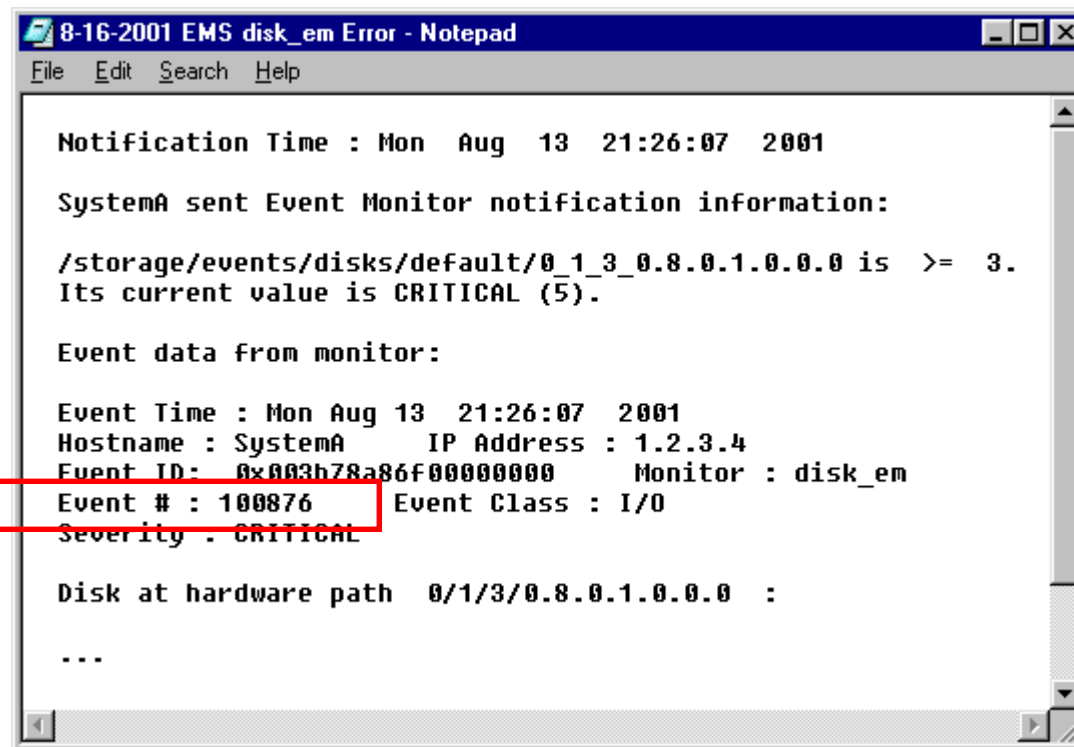
114

What if the appropriate .clcfg file doesn't exist?

If the .clcfg file doesn't exist then the monitor is not predictive enabled and therefore the .cfg file must be modified

EMS Additional Notes – Another Example
Disable EMS Events


```
8-16-2001 EMS disk_em Error - Notepad
File   Edit   Search   Help

Notification Time : Mon   Aug   13   21:26:07   2001

SystemA sent Event Monitor notification information:

/storage/events/disks/default/0_1_3_0.8.0.1.0.0.0 is   >=   3.
Its current value is CRITICAL (5).

Event data from monitor:

Event Time : Mon Aug 13   21:26:07   2001
Hostname : SystemA       IP Address : 1.2.3.4
Event ID:   0x003b78a86f00000000       Monitor : disk_em
Event # : 100876       Event Class : I/O
Severity : CRITICAL

Disk at hardware path   0/1/3/0.8.0.1.0.0.0   :

...
```

EMS Additional Notes – Another Example
Steps To Disable EMS Events

cd /var/stm/config/tools/monitor

cp disk_em.cfg disk_em.cfg.orig

Modify the disk_em.cfg file:

Add the following line to the end of the file:

DEFINE_EVENT 100876 CRITICAL   IGNORE   # msg num127

EMS Additional Notes
Disabling EMS

- **Disable Entire EMS Monitor**

- **Disable EMS Events**

- **Disable EMS Instance**

EMS Additional Notes
Steps To Disable EMS Instance

```
Untitled - Notepad                                    _ □ ✕
File   Edit   Search   Help

>------------ Event Monitoring Service Event Notification ------------<

Notification Time: Fri Aug 10 19:43:19 2001

abc sent Event Monitor notification information:

/storage/events/disks/default/1_8_0_0.2.17.0.0.0.6 is >= 4.

Its current value is SERIOUS(4).

Event data from monitor:

Event Time..........: Fri Aug 10 19:43:19 2001
Severity............: SERIOUS
Monitor.............: disk_em
Event #.............: 100376
System..............: abc

Summary:
      Disk at hardware path 1/8/0/0.2.17.0.0.0.6 : Software configuration error

Description of Error:

      The device was unsuccessful in processing the current request message
      because the message contained an invalid command operation code. The
      request was not processed.

Probable Cause / Recommended Action:

      The error most likely indicates that the device is not fully supported by
      the current driver. This may or may not cause a problem in the operation
      of the device.
```

Bogus Message

EMC Generated EMS Message

EMS Additional Notes
Steps To Disable EMS Instance

1) **Disable monitoring**

2) **Edit the instance file:**
   /var/stm/data/tools/monitor/disabled_instances

3) **Add disk resource name**

4) **Enable monitoring**

5) **Verify**

EMS Additional Notes
Steps To Disable EMS Instance

Output from main menu monconfig
Select (C) heck detailed monitoring status

```
Telnet - m2426s2k.nsr.hp.com
Connect  Edit  Terminal  Help
  Events >= 3 (MAJOR WARNING) Goto EMAIL; addr=scott_kaneko@hp.com
  Comment: Scott Kaneko EMS Notification
For /storage/events/disks/default/8.4.0:
  Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/resmon/log/event.log
  Events >= 3 (MAJOR WARNING) Goto SYSLOG
  Events >= 3 (MAJOR WARNING) Goto EMAIL; addr=root
  Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/pred/emslog
  Comment: Predictive Monitor Request
  Events =  5 (CRITICAL) Goto TCP; host=m2426s2k.nsr.hp.com port=55382
  Events >= 3 (MAJOR WARNING) Goto EMAIL; addr=scott_kaneko@hp.com
  Comment: Scott Kaneko EMS Notification
For /storage/events/disks/default/52.1.0:
  Events >= 1 (INFORMATION) Goto TEXTLOG; file=/var/opt/resmon/log/eve...log
  Events >= 3 (MAJOR WARNING) Goto SYSLOG
```

Example: Disable This Instance

```
Telnet - m2426s2k.nsr.hp.com
Connect  Edit  Terminal  Help
# vi /var/stm/data/tools/monitor/disabled_instances
```

EMS Additional Notes
Steps To Disable EMS Instance

```
Telnet - m2426s2k.nsr.hp.com
Connect  Edit  Terminal  Help
# characters.
#
# When changes are made to this file, the user should run monconfig and
# enable monitoring to make changes in this file take effect.
#
# NOTE: entries in this file do NOT cause a monitor to stop polling an
# instance or stop the PSM monitor from marking an instance as DOWN, it
# just stops the notification of events based on entries in the *.sapcfg
# files for this instance.

/storage/events/disks/default/8.4.0

:wq
~
```
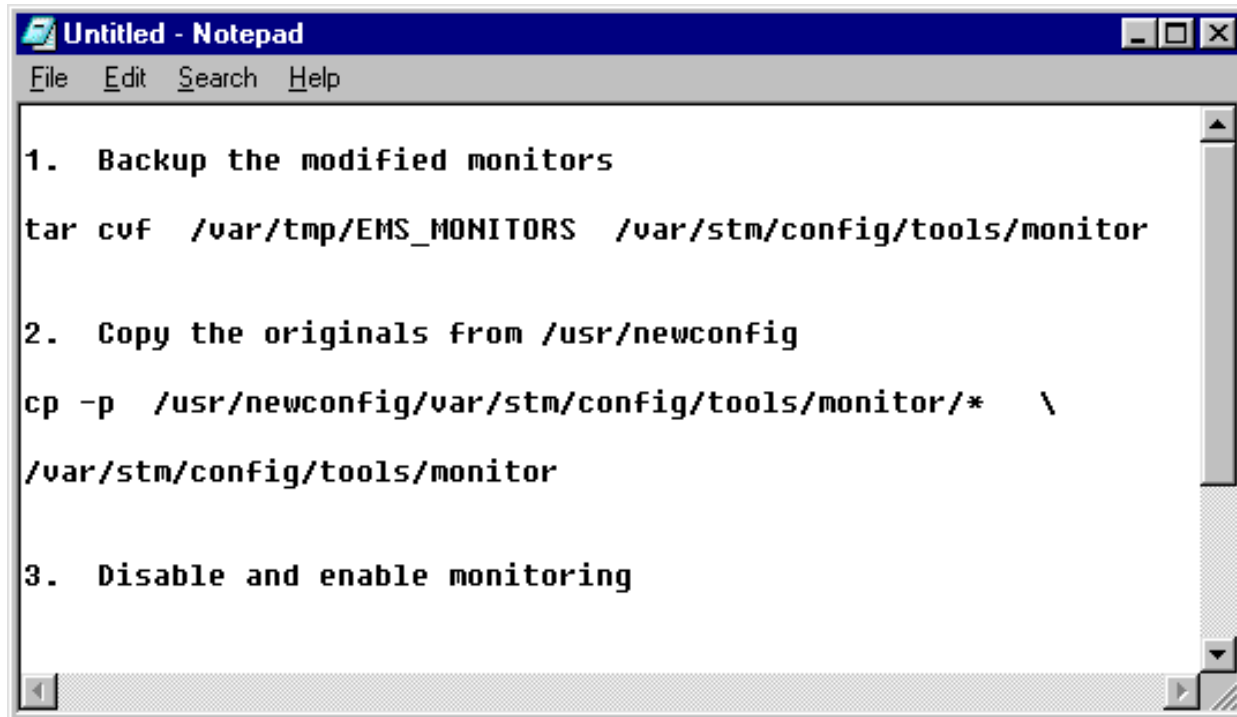
Output from main menu monconfig
Select (C) heck detailed monitoring status

```
Telnet - m2426s2k.nsr.hp.com
Connect  Edit  Terminal  Help
  Comment: Predictive Monitor Request
  Events =  5 (CRITICAL) Goto TCP; host=m2426s2k.nsr.hp.com port=53464
For /storage/events/disks/default/8.4.0:
  Events =  5 (CRITICAL) Goto TCP; host=m2426s2k.nsr.hp.com port=53464
For /storage/events/disks/default/52.1.0:
  Events >= 3 (MAJOR WARNING) Goto EMAIL; addr=scott kaneko@hp.com
```

Verified:
Instance Is Disabled

EMS Additional Notes
Restoring EMS To Defaults

```
Untitled - Notepad
File  Edit  Search  Help

1.   Backup the modified monitors

tar cvf  /var/tmp/EMS_MONITORS  /var/stm/config/tools/monitor


2.   Copy the originals from /usr/newconfig

cp -p  /usr/newconfig/var/stm/config/tools/monitor/*   \

/var/stm/config/tools/monitor


3.   Disable and enable monitoring
```