# Exemplar Diagnostics and Exemplar Convex Scan Test (Cst) V8.2 Release Notice / Hard drive and memory upgrade

## Contents

**Hewlett-Packard Part Number :** B5655-96056

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## Announcements

This Exemplar Diagnostics and Exemplar Convex Scan Test (Cst) V8.2 release supports all Exemplar SPP1200, and SPP1600 hardware configurations. This version of Diagnostics and Scan Test (Cst) software is **Year-2000** compliant.

## What's In This Version?

Benefits

- All firmware tested for Year-2000 compliance.
- All diagnostic software tested and updated for Year-2000 compliance.
- Supports the following Exemplar hardware configurations:
  - SPP1200
  - SPP1600

## Compatibility and Installation Requirements

Software requirements:

- Software Distributor (SD) tools.

Hardware requirements:

- Testing and qualification of this release was performed using the following test station: an HP 9000/712 running at a 60MHZ, with 32MB of memory and a HP9000/712 running at 100MHZ, with 32Mb of memory.
- **Note:** Upgrades to this release will require a memory upgrade to 32 MB
- A DAT tape drive attached to test station will also be needed.

Operating system platform, version compatibility:

- Test station must be running at least **`version XSW700CR1020 B.10.20.38`** (which is Extension Software Patch Bundle dart 38).
- **`Year-2000 bundle Y2K-1020S700`** must be installed.
- Patch **PHCO_13632** (csh) must also be installed.
- The **SPP1200/1600 node** must contain the following: **B5655-60029 SPP-UX/OPTIONAL PRODUCTS V5.3** and **B5655-10071 SPP-UX ENV. PATCH V5.3.128.**

Disk space requirements:

- A new installation requires a minimum of 75MB of disk space for program files. Log files will consume additional space.
- An upgrade installation requires a minimum of 10M additional space.

Other requirements:

- The node(s) should be at the OBP prompt.
- The node(s) will require one power cycle and two resets.
- The install must be done with the test station in single-user state.
- The test station will require a reboot.
- Save information for network configuring for the test station.
- All products in the /spp and /users/sppuser subdirectories are overwritten when the Test Station Software is installed. If any of the files in those directories have been customized, they must first be saved and then restored after completion of the install.
- Knowledge in the use of the spp utilities ccmu and sn_cnsl is required.

Installation information:

- The time required to perform the complete installation is about 1 hour and 30 minutes.

## Installation Procedure For 1200/1600 With New Hard Disk and/or Memory

IMPORTANT - Since the following procedure involves replacing the test station disk please take the necessary steps to save the data. You must have at least a 2 Gig hard disk and 32 meg. of memory. If you do not need to install a new disk or memory skip to **step 28.**

**Step 1** Shutdown SPP-UX on all node(s). From the Exemplar system console window for node 0, enter the following command:

```
# /etc/shutdown -h
```

You will be prompted to enter y to continue, after your response you should see something similar to the following:

```
System shutdown time has arrived
[73000001 000d24da 0:7] Syncing disks on node 0
[73000001 0010f882 0:7] Fast_sync...
[73000001 000d25b2 0:3] done
[73000001 000d27b6 0:3] Rebooting
[72000001 00285a14 0:3] CPU halted
```

**NOTE:** If auto-boot is set the node will boot after a power cycle or when a do_reset is issued. To disable auto-boot do the following:

Issue a do_reset. Move your cursor to the system console window.

Press and hold the ESCAPE key when the message prompts you to stop the auto-boot. At the [Ok] prompt type:

setenv auto-boot? false

**Step 2** As superuser shutdown HP-UX on the test station with the following command:

```
# /etc/shutdown -h now
```

You will be prompted about displaying information.

Test station will display to screen when it is OK to power it off.

**Step 3** Power off test station, the monitor, and any peripheral devices.

**Step 4** Remove all external cables connected to the rear of the test station.

**Step 5** Lay the test station base unit on a flat surface, such as a table top.

Note - ESD PRECAUTION!

Attach the static-grounding wrist strap by following the instructions on the package. The wrist strap was shipped with the test station. Attach the sticky end of the wrist strap to the bare metal of the test station unit.

**Step 6** Release the top cover of test station by pushing the two locking tabs at the rear of the test station toward the outside of the unit and then push top cover forward.

**Step 7** Slide the cover forward about two inches, then carefully lift to remove it.

**Step 8** Skip to **step 10** if memory upgrade is not needed.

**Step 9** Remove the two 8Mb simms from the ESD packaging. Angle the memory simm with top edge toward the rear of the system unit, and insert it into the connector labeled "slot 2". Snap the board into place by moving it to a vertical position. If the simm is aligned properly, the plastic alignment pins on either end of the connector align with the holes on the memory board. Repeat the same steps for "slot 3".

**Step 10** If you are not installing a hard drive skip to **step 17**. Remove the disk retaining bracket by lifting the end closest to the rear of the test station unit and rotating it toward the front of the system unit.

**Step 11** Remove the HP PAC (Styrofoam bracket) from the top of the disk drive.

**Step 12** Disconnect the SCSI and power cables from the hard disk.

**Step 13** Lift the drive straight up, and set aside.

**Step 14** The replacement disk drive is pre-loaded with 10.20.38 HP-UX. Remove it from the ESD packaging and insert it in place of the old disk drive such that the scsi connector faces the rear of the test station unit and the label on top of the disk faces up.

**Step 15** Install the SCSI and power cables to the hard disk.

**Step 16** Reinstall the HP PAC and disk retaining bracket.

**Step 17** Reinstall the top cover.

**Step 18** Reinstall the test station cables that were removed. Insert Dart cable into lan1. Lan1 is the RS-232 connector that is on the left side of test station when viewing it from the rear. Connect the global network cable to lan0.

**Step 19** Power on the test station unit, monitor and any peripheral devices.

**Step 20** When the test station reboots, a set system parameters window will appear. **The information that is now entered will vary depending on your networking preferences, consult with your system administrator.**

**Step 21** After all system parameters are entered the test station will finish the initialization process. When the CDE window appears login as root.

**Step 22** Close windows that appear after login.

**Step 23** Bring up a terminal window.

**Step 24** Insert the DAT cartridge into the DAT drive on the test station.

**Step 25** Use the *swinstall* command to install patch PHCO_13632. Enter the following command:

**#/usr/sbin/swinstall -s /dev/rmt/0m -x mount_all_filesystems=false PHCO_13632**

The nsswitch.conf file may need to be set up. This information could vary depending on how your networking preferences were set. Enter the following command to enable communication with the node(s):

**# cp /usr/examples/nsswitch/nssw.filesdns /etc/nsswitch.conf**

**Step 26** Verify that the correct software exists on test station, by entering the following command:

**#/usr/sbin/swlist**

Verify that the following products and bundles are loaded.

**XSW700CR1020 B.10.20.38 Extension Software Patch Bundle**

**Y2K-1020S700 B.10.20.A0608 HP-UX Core OS Year 2000 Patch Bundle**

| | | |
|---|---|---|
| B5655-10070 | 2.0.4 | OBP Secondary Loader |
| B5655-10072 | 8.2 | HP Exemplar Diagnostics |
| B5655-10073 | 8.2 | HP Exemplar Scan Test |
| B5655-10075 | 5.3.1 | SPP-UX Test Station Non-2000 Series |
| PHCO_13632 | B.10.00.00.AA | csh(1) cumulative patch |

**Step 27** If a new hard disk was installed skip to **step 35.**

## Test Station Software Installation

Start here to install the *Exemplar Diagnostics, Exemplar Scan Test (CST)* and *Exemplar OBP Firmware* from DAT tape to the test station.

**Step 28** Shutdown SPP-UX on all nodes. From the Exemplar system console window for node 0, enter the following command:

```
# /etc/shutdown -h
```

**Step 29** Login to the test station as *root* and bring the test station to single-user mode using the following command:

```
# /etc/shutdown now
```

You will be prompted about displaying information.

**Step 30** Insert the DAT cartridge into the DAT drive on the test station.

**Step 31** Check to see if `swagentd` daemon is running by typing the following command.

```
# ps -ef | grep  swagentd
```

The following is an example of what should be displayed if the daemon is running:

```
root    435    1  0   Mar 23   ?    0:01 /usr/sbin/swagentd
```

**Step 32** If not already running, start the `swagentd` daemon by entering the following command:

```
# /usr/sbin/swagentd
```

**Step 33** Use the *swinstall* command to install the Exemplar Test Station Software onto the test station. Enter the following command:

```
# /usr/sbin/swinstall -x source_type=tape \*
```

This should take about 15-20 minutes to complete.

**Step 34** Verify that the correct test station software has been installed, by entering the following command:

```
#/usr/sbin/swlist
```

You should look for the following bundles.

| | | |
|---|---|---|
| XSW700CR1020 | B.10.20.38 | Extension Software Patch Bundle |
| Y2K-1020S700 | B.10.20.A0608 | HP-UX Core OS Year 2000 Patch Bundle |
| A-PHCO-13632 | B.10.00.00.AA | csh(1) cumulative patch |
| B565AA | V5.3.1 | Exemplar Test Station Diagnostic Bundle |

**Step 35** Execute these commands to configure the diagnostic environment of the test station: (Note: Dart cable should be attached to lan1.)

```
# cd /spp/scripts/inst
```

```
# ./ts.install
```

`ts.install` will query the user for the interface to use for the DaRT LAN, the addresses of the test station and the nodes on the DaRT LAN. It will offer the existing values as defaults. You can use the following instructions to assist you with the use of ts.install.

---

Please refer to these instructions to guide you through the ts.install script. The following is a transcript of what the ts.install script displays and notes about what should be entered.

---

Exemplar Test Station Diagnostic Setup and SW Installation Script.

This script performs software installation of the Exemplar Diagnostic Test Station Software. If this is not an initial install, this script may be exited now.

Do you wish to continue (y/n [n]) >

**NOTE: select yes**

The next section of this script performs the configuration necessary to allow the workstation to run the Diagnostic software and communicate with Exemplar Nodes.

To accomplish this, various site specific information is needed. For this release, the following information is required:

The system name, which will be used as the hostname for the DaRT network. All Exemplar nodes must be connected to this network port.

The internet address for the DaRT ethernet. You may choose to use default addresses for test station and all nodes.

The netmask for the DaRT ethernet. If you selected the default internet address for the test station, this will be defaulted.

Sixteen internet addresses for MU boards on each of the possible Exemplar node numbers. If the only things connected to DaRT (the ethernet port) are the nodes and the test station, default addresses may be used. It is not possible in this release to assign names to the individual Exemplar nodes - the default names must be used. If you selected the default internet address for the (DaRT) ethernet interface, default MU addresses will automatically be selected.

The hostname for the optional second ethernet that may connect the test station to the outside world and allow the DaRT connection to be used for DaRT traffic only. A hostname is required whether the interface exists or not.

The internet address for the outside ethernet.

The netmask for the outside ethernet.

The address of the router (gateway) on the outside ethernet.

Do you wish to continue (y/n [n]) >

**NOTE: select yes**

Do you want to use lan0 or lan1 as the DaRT interface?

Use lowercase entries. Default is' lan1 ' >

**NOTE: select lan1**

Enter the test stations name on the DaRT network ('hostname' command).

This will be for machine name. Default is [hostname] >

**NOTE: Hostname for the dart interface refers to lan1.**

Do you wish to use default addresses for the DaRT (lan1) network

and all Exemplar nodes (y/n [y]) >

**NOTE: Select yes**

Looking for possible default for hostname on outside LAN

Enter the name of the test station on the secondary outside network.

Hostname the 'outside world' will know. Default is [hostname] >

**NOTE: This should be the hostname for lan0 (global network).**

'ifconfig lan0' returns:

lan0:

flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST>

inet xx.xx.xx.xx netmask ffffff00 broadcast xx.xx.xx.255

Enter the FULL internet address of the TS on the secondary network

('inet' entry from '/etc/ifconfig lan0' command)

Default is xx.xx.xx.xx >

**NOTE: This should be the IP address for the global network.**

Enter the broadcast address on secondary (lan0) network

('broadcast' entry from '/etc/ifconfig lan0' command)

(X.Y.Z.255 or X.Y.255.255) Default is xx.xx.xx.255 >

**NOTE: This is the broadcast address for lan0 (global network).**

Enter the netmask for the secondary (lan0) network

('netmask' entry from '/etc/ifconfig lan0' command)

(255.255.255.0 or 255.255.0.0) Default is 255.255.255.0 >

**NOTE: This is the netmask for lan0 (global network).**

getting possible gateway addresses.

# ROUTE_GATEWAY: Gateway IP address in decimal-dot notation.

ROUTE_GATEWAY[0]="xx.xx.xx.254"

Enter the FULL address of the gateway (router) on the secondary network

The gateway (router) connects this subnet to other subnets.

(something like W.X.Y.Z) Default is xx.xx.xx.254 >

**NOTE: This is the gateway router for lan0 (global network).**

Enter the number of 'hops' to reach the router. This is the last number on the above line from /etc/netlinkrc Default is 1. >

**NOTE: Hops is normally set to1.**

You have specified the following:

DaRT network name (also machine name): [hostname]
DaRT internet address: 192.168.128.99
DaRT broadcast address: 192.168.128.255
DaRT network netmask: 255.255.255.0
Secondary network name: [hostname]
Secondary internet address: xx.xx.xx.xx
Secondary broadcast address: xx.xx.xx.255
Secondary network netmask: 255.255.255.0
Secondary network gateway address: xx.xx.xx.254
Secondary network hops to gateway: 1
Exemplar node 0 address: 192.168.128.100
Exemplar node 1 address: 192.168.128.101
Exemplar node 2 address: 192.168.128.102
Exemplar node 3 address: 192.168.128.103
Exemplar node 4 address: 192.168.128.104
Exemplar node 5 address: 192.168.128.105
Exemplar node 6 address: 192.168.128.106
Exemplar node 7 address: 192.168.128.107
Exemplar node 8 address: 192.168.128.108
Exemplar node 9 address: 192.168.128.109
Exemplar node 10 address: 192.168.128.110
Exemplar node 11 address: 192.168.128.111
Exemplar node 12 address: 192.168.128.112
Exemplar node 13 address: 192.168.128.113
Exemplar node 14 address: 192.168.128.114
Exemplar node 15 address: 192.168.128.115
Is this information correct (y/n [n]) >

**Note: If above information is correct select y.**

**Step 36** Now reboot the test station using the following command:

```
# /etc/reboot
```

**Step 37** Login as *sppuser* to start up the diagnostic environment.

**Step 38** Verify that the node(s) and the test station can communicate, using the *node_info* command. Verify this matches your hardware configuration.

NOTE: Wait for the sppdsh prompt and database generation to complete. This may take 7 minutes. Errors will be displayed to sppdsh window while the test station and node are establishing communication.

```
sppdsh> node_info
```

If the node IP address is incorrect use the *node_ip_set* command to correct any wrong information:

```
sppdsh> node_ip_set <serial_num> <node_id> <IP_addr>
<UDP_base_port>
Example for node 0
node_ip_set 201xxxx 0 192.168.128.100 675
Example for node 1
node_ip_set 201xxxx 1 192.168.128.101 675
Example for node 2
node_ip_set 201xxxx 2 192.168.128.102 675
Example for node 3
node_ip_set 201xxxx 3 192.168.128.103 675
```

Repeat the *node_ip_set* command for each node.

This will take a few minutes to complete. The system console window will appear.

**Step 39** Hardware configurations and OBP configurations will be recorded to a file for future reference.

Reset the system to bring up the OBP prompt.

```
sppdsh> do_reset
```

Verify the expected configuration using the `node_info` command:

```
sppdsh> node_info
```

Start a script command to record the output of the subsequent commands:

Wait a few minutes for do_reset to complete.

```
sppdsh> script
```

All commands entered from this point will be recorded to the file

`typescript` in the current directory.

Save the hardware configuration by entering the following `ccmu` command:

```
sppdsh> ccmu up : get usememsize usecachesize initwhat
```

Save the OBP configuration. Connect to the complex console using the following command:

```
sppdsh> sn_cnsl -F 1
```

For each node on the system, enter the following OBP commands to retrieve and record the configuration of that node:

`[0:0] ok nodeid` **`node`**

**Note:** `nodeid in document represents node number.`

Select a node to display the configuration from.

`[0:0] ok` **`show-map`**

Display the mappings.

`[0:0] ok` **`devalias`**

Display the device aliases.

`[0:0] ok` **`boot-device type`**

Display the boot device path. Only information from node 0 is required.

`[0:0] ok` **`printenv`**

Display the OBP environment settings. The following parameters are required: `cluster-boot?, boot-device, boot-directory, DNS-ip# and OBP-ip#.`

**NOTE:** If this is a multinode system select the next node to retrieve configuration information from.

Exit the `sn_cnsl` command. Exit the script command.

To exit `sn_cnsl` type **`(cntl)e c .`**

To exit `script` command type `the following:`

`sppdsh>` **`exit`**

**Step 40** Use the `pce_util` command (with no options) to verify the system is powered on. If it is not, power it on by resetting the system.

`sppdsh>` **`pce_util`**

**Step 41** For each node present, load the firmware and program loader, using the following commands:

`Where nodeid represents the node number.`
`Ex.(load_obp 0)`

`sppdsh>` **`load_obp`** `nodeid`

`sppdsh>` **`load_mufw`** `nodeid`

`sppdsh>` **`load_pl`** `nodeid`

**Step 42** Reconfigure the system using the following command. Note that all fields must be separated by white space (spaces):

**`ccmu pull : up : auto : down : push`**

Verify that the parameters match the ones saved in the 'typescript' file earlier. Use the following command:

`sppdsh>` **`ccmu up : get usememsize usecachesize initwhat`**

If the parameters are incorrect, use the ccmu put command to correct the values. An example (updating the initwhat value):

`sppdsh>` **`ccmu up : put initwhat 0x588xxxx : down : push`**

Valid values for `usecachesize` are (for a single node system, `usecachesize` should always be 0):

0x00000000 - 0 MB per slice

0x00000001 - 4 MB per slice

0x00000002 - 8 MB per slice

0x00000003 - 16 MB per slice

0x00000004 - 32 MB per slice

0x00000005 - 64 MB per slice

0x00000006 - 128 MB per slice

0x00000007 - 256 MB per slice

Valid values for `usememsize` are:

0x00000005 - 1024 MB board

0x00000004 - 512 MB board

0x00000003 - 256 MB board

0x00000002 - 128 MB board

0x00000001 - 64 MB board

**Step 43** Reset the system to force it to read the new firmware:

```
sppdsh> do_reset 1
```

Very occasionally, the system reset may fail after new firmware is loaded. If the system reset fails, do a default level system reset

```
sppdsh> do_reset
```

If this system reset fails, something is wrong with either the system or the configuration, otherwise the first failure may be ignored.

**Step 44** Use the *node_info* command to verify that all nodes are now running the new MU firmware and primary loader:

```
sppdsh> node_info
```

The following information shows what should be displayed:

```
Node Serial              UDP
ID  Number   IP Address   Base Port   MU & PL Firmware Version String
---- -------- ------------- -------- ------------------------------
 0 xxxxxxx 192.168.128.100    675  "MU:CONVEX Version Info:  8.2"
                                    "PL:CONVEX Version Info:  8.2"
```

**Step 45** With some releases of OBP, the OBP parameter cluster-boot? is set to true. This will cause a console window to be started for each node. If this is not the desired behavior, the following details how to change it, otherwise you may skip to **step 46**.

In a sppdsh window, start up a console using the following command:

```
sppdsh> sn_cnsl -F 1
```

At the OBP prompt for node 0, enter the following command to set `cluster-boot?` to false:

```
[0:0] ok setenv +g cluster-boot? false
```

Verify the `boot-device` setting from the parameters recorded in the file `typescript` earlier from **step 39**. If the `boot-device` needs to be set, use the following command at the OBP prompt (using the value for your boot device):

```
[0:0] ok setenv boot-device
/mbus@0,ffec0000/sbus@f,fcffff00/Convex,afws@1,10000:
narow/sd2@0,0:a
```

Verify the `boot-directory` setting from the recorded parameters. If `boot-directory` needs to be set, use the following command at the OBP prompt (using the value for your boot directory):

```
[0:0] ok setenv boot-directory /stand/spp1
```

The remaining nodes need to have `cluster-boot?` set to false. This is done by opening a console on each of the nodes, using `sn_cnsl`. Open a console window on each node in sequence:

```
sppdsh> sn_cnsl -F cnslid
```

where `cnslid` is the node # + 1.

At the OBP prompt for node n, change the value of `cluster-boot?` by entering the following:

```
[nodeid:0] ok setenv cluster-boot? false
```

and exit the console. Repeat for each node in the complex.

Once the `cluster-boot?` variable has been updated on all nodes, reset the complex by executing the following command:

```
sppdsh> do_reset
```

**Step 46** Restore the OBP environmental variables, mappings and aliases that were recorded earlier in **step 39**. To do this, connect to the system console, using the sn_cnsl command:

```
sppdsh> sn_cnsl -F 1
```

At the OBP prompt, select node 0:

```
[0:0] ok 0 node
```

You are now in the OBP environment for node 0. Using the information saved in **step 39**, re-enter any OBP maps, environmental variables and aliases for this node. Be sure to map any tape devices, network devices, and your boot device. The boot may not need to be set for node 0 if you executed **step 45** above.

When you have re-entered all the information for node 0, change to node 1, and re-enter mappings, environmental variables, and aliases. Do this for each node in the system.

To move between nodes, use the following command:

```
[0:0] ok n node
```

where n is the node number.

Once all the settings have been re-entered for each node, save all OBP settings by moving back to node 0 and resetting the system. The following commands will move you back to node 0 and reset the system:

```
[0:0] ok 0 node
[0:0] ok reset
```

Exit `sn_cnsl`. `(control) e c .`

**Step 47** Reset the system. After the system completes the reset, it is ready to boot SPP-UX.

```
sppdsh> do_reset
```

## Known Problems and Workarounds

This section describes problems in *Exemplar Diagnostics* and *Exemplar Scan Test (Cst)* V8.2 that are known at this time. There are no serious problems with the release. There are some features of this and previous versions that may require note, and there are some minor problems that need elaboration.

- sppring Class 10

  sppring class 10 consists of very specialized multi-node subtests that are not run by default, and are intended only for experienced users. As class 10 subtests may aid in the debugging of hardware problems in the field, they have been included in the released software.

  In addition to not being run by default, most class 10 subtests are written to deliberately push the system beyond its design limits. Because of this, some of the subtests may fail even when there is not a real hardware problem. These subtests are further disabled such that they will not run unless the -D option is specified. To run all or specific class 10 subtests, use the -D option in conjunction with the -c and -s options, as in 'sppring -D -c 10' or 'sppring -D -s 10070-10150'.

  Note that the SPP1200 is the system most likely to hit one of these problems, and the SPP1600 least likely. Also, note the following important notes about the sppring class 10 subtests in the following configurations

  - 10000 - may fail after 20+ loops on certain configuration SPP1200's. Should be loopable on all SPP1600 systems.
  - 10030 - will likely fail on an SPP1200. Actually, the software problem that makes this subtest fail may show up on any class 10 subtests, however it is extremely rare for the other subtests.
  - 10160 - 10170 - will likely fail on an SPP1200. Both should pass on SPP1600.
  - 10500 - will likely fail on systems with greater than two nodes. Chances are SPP1200 systems of two or more noes will fail. SPP1600' will often pass.

- 'Train Wrecks'

  When clocks stop on one node of a multi-node system, it is possible that other nodes will pull errors. When this occurs, it is possible that between the OS, MU, and test station software, dozens of events get reported to the event_log on the test station, and that multiple nodes may pull a hard error. Generally, the event log on the test station will give a clue as to what caused the *train wreck*. Often it is as simple as scanning a node due to a hard error, or even turning power off on a node.

- Duplicate Node Numbers/new_broadcast_to_mu Error

  If an MU or DaRT is exceptionally busy when ccmd verifies connectivity, it is possible for a broadcast message or response to get dropped. This is not an error, and may safely be ignored.

  When this happens, the following events (with different specific data) will appear in the event log:

```
+++> 166
<Wed Jun 28 03:41:37 1995>warning:0x65660417
/spp/bin/ccmd:7.0.0.0:../main.c:604
broadcast response not received from node 0
attempt count is now 1
***
+++> 210
<Wed Jun 28 03:41:42 1995> warning:0x656a0448
/spp/bin/ccmd:7.0.0.0:../broadcast.c:412
new_broadcast_to_mu: recv illegal packet.
type: 0x80000041 len 0x24 act_id 0x13c9 exp_id 0x13ca
***
+++> 185
```

```
<Wed Jun 28 03:41:45 1995> warning:0x65670445
/spp/bin/ccmd:7.0.0.0:../main.c:454
check_node_numbers: received unknown response type
0x100000444 to GET_NODE_ID_REQUEST
***
+++> 307
<Wed Jun 28 03:41:45 1995> warning: 0x65670446
/spp/bin/ccmd:7.0.0.0:../main.c:480
MU serial # 2010173 has a duplicate node # of 2
MU serial # 2010173 has a duplicate node # of 2
errors MUST be corrected before the database can be
generated
use ccmu assign command to correct this error
***
```

- Assigning Complex Serial Numbers

  When assigning a complex serial number to a node in ccmu, the database information is not updated until the next time the database is generated. To force a database update, use pce_util to turn power off on the node, wait a few seconds, and turn power back on.

## Patches and Fixes in this Version

Fixes:

- `event_browser` now understands two digit years less than 90 as being after year 2000.

Patches:

- There are no patches for Exemplar Diagnostics and Exemplar Scan Test (Cst) V8.2.

## Software Availability in Native Languages

There is no information on non-English languages for Exemplar Diagnostics and Exemplar Scan Test (CsT) V8.2 release.

## Product Release Matrix

## Associated Documentation

The following documents provide information about *Exemplar Diagnostics and Exemplar Scan Test (CST)*:

## Trademark Notices

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