

The Open Group
COE Platform Certification Program
Chapter 12
Network File System (NFS)
Validation Procedure

Posix-Based Platform Compliance (PPC)

COE Kernel revision level 4.5p6

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1. Overview

1.1 Introduction

This chapter defines the Network File System (NFS) Manual Validation Procedure and is part of the required set of test procedures to be used in the certification of products to the Open Brand COE Platform Product Standard¹.

2. Test Procedure

2.1 Scope:

This demonstration provides a first order verification of TCP/IP interoperability and basic BSD sockets API support for the Candidate Platform. The demonstration also provides some assurance of application level interoperability for key Network File System (NFS) services and protocols. The demonstration suite for NFS uses a file located on the Validation Host and on the Candidate Platform. A volume located on the remote Validation Host is mounted on the Candidate Platform, and key NFS client capabilities are exercised from the Candidate Platform. A volume located on the Candidate Platform is then mounted on the Validation Host, and key NFS server capabilities of the Candidate Platform are exercised from the Validation Host.

2.2 Description of test items

The following functions will be exercised:

- A. Login
- B. Set Up Test Data and Confirm Validation Cell Configuration
- C. Exercise NFS Client Operations Initiated on the Candidate Platform
 - C.1. Use NFS to Mount the Validation Host (Remote) File System onto the Candidate Platform (Local) File System
- D. Exercise NFS Server Operation Provided by the Candidate Platform to a Remote Client
 - D.2. Log On the Validation Host as Sysadmin
 - D.3. Use NFS to Mount a Candidate Platform File System on the Validation Host File System
 - D.3. Use NFS to 'unmount' the Candidate Platform File System from the Validation Host File System

¹ See <http://www.opengroup.org/openbrand/coe/>

- E. Cleanup of Validation Host
- F. Remove KPC_NFS from the Candidate Platform Export List
- G. Re-establish the standard Candidate Platform configuration
- Z. Logout

2.3 Test Data/Media Required

The following test file is required: "nfsfl.txt". Test data is available on the Validation Host in the "/kpc/nfs" sub-directory.

To determine if the NFS services (daemons) are running, use the system "ps -ef | grep nfs"

Server Deamons: In order for a machine to share resources over the network, it must be running the /usr/lib/nfs/mountd and /usr/lib/nfs/nfsd daemons.

Client Deamons: In order for a machine to mount networked resources, it must be running the /usr/lib/nfs/lockd and /usr/lib/nfs/statd deamons.

2.4 Setup/Equipment Required

The COE Validation Host must be running the NFS Service and must be available to the Candidate Platform. The directory "/kpc" must be NFS exported from the Validation Host with world write-able privileges. The Candidate Platform must be running the NFS Service and must be available to the Validation Host. The Candidate Platform has no file systems exported

The server directory "/kpc" is NFS mounted on the Candidate Platform as "/KPC". The destination subdirectories for file transfers are "/KPCTEST" for the Validation Host, and "/KPC_NFS" for the Candidate Platform

2.5 Required Personnel

A single (1) tester will be required. The tester must be familiar with POSIX/UNIX application platforms, but need not be familiar with the Common Operating Environment (COE).

2.6 Change History

June 02, 2003

Initial Release

3. Test Procedure Submission Form

Test Title: Network File System (NFS) Interoperability Demonstration Validation Procedure

Candidate Platform: _____	Date: _____	
Tester: _____	Estimated Runtime: <u>1 hours</u> _____	
Start Time: _____	End Time: _____	Actual Runtime: _____
Test Site/Organization: _____	Overall Test Result (Circle One): PASS / FAIL	

Configuration Validated

Hardware Platform: _____	System Software: _____
Network Type: _____	Printer: _____
Local Devices (if any): _____	

Start of Validation Procedure

4. Test Procedure

Step	Operator Action	Expected Result	Observed Result
A.	4.1 Power-Up and Verify <code>sysadmin</code> Login (Optional: Use if not already powered up or logged in.)		
A.1.	Verify <code>sysadmin</code> Login		
A.1.1.	Power up the Candidate Platform and verify that the COE Login screen opens.	The COE login screen opens with the DoD security-warning message and the "Please enter your user name" text box.	Setup
A.1.2.	In the "Please enter your user name" text box enter: <code>sysadmin</code>	The password screen opens with the "Please enter your password" text box.	Setup
A.1.3.	In the "Please enter your password" text box enter the password for <code>sysadmin</code> : <code>password</code>	An Informational Message dialog box opens confirming the COE login process is complete.	Setup

Step	Operator Action	Expected Result	Observed Result
A.1.4.	Click: OK	The dialog box closes and the menu bar, security classification and CDE are displayed.	Setup
B.	4.2 Set Up Test Data and Confirm Validation Cell Configuration		
B.1.	Set Up Test Data on Candidate Platform.		
B.1.1.	On the Candidate Platform (kpccp) right click anywhere on the desktop click: Applications > Application Manager > DII_APPS > SysAdm.	The Wokspace menu window opens. The Application Manager - SysAdm window opens with the following icons: (go up), Adm Tool, Change Machine ID, Create Action, DTterm, Disk Manager, Edit Local Hosts, Network Installation Server, Reboot System, Segment Installer, Set DNS, Set Routes, Set System Time, Shutdown System, Text Edit, Xterm.	Circle one: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
B.1.2.	Double-click: Disk Manager.	The Disk Manager window opens. The Disk Manager window displays a list of all mounted file systems. The file system column contains kpchost: If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
B.1.3.	"Unmount" all NFS mounted volumes, if any. In the Disk Manager window, select an NFS mounted volume, and then select "unmount". Repeat until all NFS volumes are "unmounted". A dialog box may open for each "unmount", asking if you wish the unmount to be permanent. Answer "Yes" in all cases, except for "/kpc".	The NFS mounted volume(s) closes from the Disk Manager window. The Candidate Platform is running the NFS service, but has no remote volumes mounted. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle one: PASS / FAIL
B.1.4.	Open an XTerm window right click anywhere on the desktop click: Tools > Terminal	The Wokspace menu window opens. The tools window opens. A Terminal window opens with a system prompt.	Circle one: PASS / FAIL
B.1.5.	At the system prompt enter: su -root	The Password prompt returns.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
B.1.6.	At the Password prompt enter the root password enter: Password	The system prompt returns.	Circle One: PASS / FAIL
B.1.7.	At the system prompt enter: csh	The system prompt returns.	Circle One: PASS / FAIL
B.1.8.	To change to root directory at the system prompt enter: cd /	The system prompt returns.	Circle One: PASS / FAIL
B.1.9.	Create a new directory for NFS export at the system prompt enter: mkdir KPC_NFS	The system prompt returns.	Circle One: PASS / FAIL
B.1.10.	Change the permissions of the KPC_NFS directory to be world write-able at the system prompt enter: chmod 777 /KPC_NFS	The system prompt returns.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
B.1.11.	Confirm the change to permissions of the KPC_NFS directory at the system prompt enter: <pre>ls -l /</pre>	Directory listing shows that directory KPC_NFS has world write-able privileges. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
B.1.12.	Relinquish super-user privileges at the system prompt enter: <pre>Exit</pre>	The system prompt returns.	Circle One: PASS / FAIL
C.	4.3 Exercise NFS Client Operations Initiated On the Candidate Platform		
C.1.	Use NFS to Mount the Validation Host (Remote) File System onto the Candidate Platform (Local) File System.		
C.1.1.	On the Validation Host (kpchost) right click anywhere on the desktop click: <pre>Applications > Application Manager > DII_APPS > SysAdm.</pre>	The Wokspace menu window opens. The Application Manager - SysAdm window opens with the following icons: (go up), Adm Tool, Change Machine ID, Create Action, DTterm, Disk Manager, Edit Local Hosts, Network Installation Server, Reboot System, Segment Installer, Set DNS, Set Routes, Set System Time, Shutdown System, Text Edit, Xterm.The Application Manager - SysAdm window opens.	Circle one: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.1.2.	Open an Xterm window right click anywhere on the desktop click: Tools > Terminal	The Wokspace menu window opens. The tools window opens. A Terminal window opens with a system prompt.	Circle one: PASS / FAIL
C.1.3.	At the system prompt enter: su -root	The Password prompt returns.	Circle One: PASS / FAIL
C.1.4.	At the Password prompt enter the root password enter: Password	The system prompt returns.	Circle One: PASS / FAIL
C.1.5.	At the system prompt enter csh	The system prompt returns.	Circle One: PASS / FAIL
C.1.6.	Change to root directory at the system prompt enter: cd /	The system prompt returns.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.1.7.	Change the permissions of the /kpc directory to be world write-able at the system prompt enter: <pre>chmod 777 /kpc</pre>	The system prompt returns.	Circle One: PASS / FAIL
C.1.8.	Confirm the change to permissions of the /kpc directory. At the system prompt enter: <pre>ls -l /</pre>	Directory listing shows that directory /kpc has world write-able privileges. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.1.9.	Relinquish super-user privileges at the system prompt enter: <pre>Exit</pre>	The system prompt returns.	Circle One: PASS / FAIL
C.1.10.	Right click anywhere on the desktop click: <pre>Applications > Application Manager > DII_APPS > SysAdm</pre>	The Wokspace menu window opens. The Application Manager - SysAdm window opens with the following icons: (go up), Adm Tool, Change Machine ID, Create Action, DTterm, Disk Manager, Edit Local Hosts, Network Installation Server, Reboot System, Segment Installer, Set DNS, Set Routes, Set System Time, Shutdown System, Text Edit, Xterm. The Application Manager - SysAdm window opens.	Circle one: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.1.11.	Double-click: Disk Manager	kpchost : /kpc opens in the Disk Manager window. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.1.12.	Select the row containing "/" in the Mounted On column.	The row is highlighted.	Circle One: PASS / FAIL
C.1.13.	Click: Export FS	The Export/Unexport File Systems dialog box opens.	Circle One: PASS / FAIL
C.1.14.	In the options text box enter: rw=kpccp Pathname "/kpc/nfs"	A dialog box opens asking "Export this directory permanently? yes or no." If the dialog box opens as described above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.1.15.	Click: Export	A confirmation dialog box opens asking if the directory should be exported permanently.	Circle One: PASS / FAIL
C.1.16.	Click: Yes	The dialog boxes closes.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.1.17.	Double-click: Disk Manager	kpchost : /kpc does not appear in the Disk Manager window. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.1.18.	On the Candidate Platform (kpccp) right click anywhere on the desktop click: Applications > Application Manager > DII_APPS > SysAdm.	The Wokspace menu window opens. The Application Manager - SysAdm window opens with the following icons: (go up), Adm Tool, Change Machine ID, Create Action, DTterm, Disk Manager, Edit Local Hosts, Network Installation Server, Reboot System, Segment Installer, Set DNS, Set Routes, Set System Time, Shutdown System, Text Edit, Xterm.	Circle One: PASS / FAIL
C.1.19.	Double-click: Disk Manager	The Disk Manager window opens.	Circle One: PASS / FAIL
C.1.20.	Click: Mount New	The Mount File System dialog box opens.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.1.21.	In the "FILE SYSTEM" text box enter: kpchost : /kpc/nfs In the "MOUNT POINT" text box enter: /kpc/nfs	kpchost : /kpc opens in the text box. If the text box opens as described above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.1.22.	Click: MOUNT	A Confirmation dialog box opens asking if the directory should be mounted permanently.	Circle One: PASS / FAIL
C.1.23.	Click: Yes	The dialog box closes.	Circle One: PASS / FAIL
C.1.24.	Double-click: Disk Manager	kpchost : /kpc opens in the Disk Manager window. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.2.	Exercise Disk Related Operations		
C.2.1.	Open an Xterm window right click anywhere on the desktop click: Tools > Terminal	The Wokspace menu window opens. The tools window opens. A Terminal window opens with a system prompt.	Circle one: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.2.2.	At the system prompt enter: <code>su -root</code>	The Password prompt returns.	Circle One: PASS / FAIL
C.2.3.	At the Password prompt enter the root password enter: Password	The system prompt returns.	Circle One: PASS / FAIL
C.2.4.	Read a file from the remote volume and display enter: <code>cat /kpc/nfs/nfsfl.txt</code>	If the output opens as in attachment 1 (see below), the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.2.5.	Copy a file from the remote volume to the local disk. In the Xterm window enter: <code>cp /kpc/nfs/nfsfl.txt</code> <code>/KPC_NFS/NFStest1.txt</code>	The system prompt returns.	Circle One: PASS / FAIL
C.2.6.	Validate the successful file copy operation enter: <code>cat /KPC_NFS/NFStest1.txt</code>	If the output opens as in attachment 1 (see below), the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.2.7.	Copy a file from the local volume to remote volume enter: <pre>cp /KPC_NFS/NFStest1.txt /kpc/NFStest2.txt</pre>	The system prompt returns.	Circle One: PASS / FAIL
C.2.8.	Validate a successful file copy operation enter: <pre>cat /kpc/NFStest2.txt</pre>	If the output opens as in attachment 1 (see below), the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.2.9.	Append input to a file on the remote volume. In the Xterm window enter: <pre>vi /kpc/NFStest2.txt</pre>	The vi editor displays NFStest2.txt in the Xterm window.	Circle One: PASS / FAIL
C.2.10.	In the Xterm window, move the cursor to the end of the file (after "END OF TEST FILE TEXT"). Insert the phrase "Data has been appended to this file". Save the change enter: <pre><ESC>:wq!</pre>	The system prompt returns.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.2.11.	Validate a successful file update operation enter: <pre>cat /kpc/NFStest2.txt</pre>	Output should appear as in Attachment 1 with the phrase "Data has been appended to this file" appended. If the output opens as described, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.3.	Use NFS to 'unmount' the Remote Validation Host File System from the Candidate Platform (Local) File System		
C.3.1.	In the Disk Manager window click on the row containing the <code>kpchost:/kpc</code> file system: <pre>kpchost:/kpc</pre>	The row is highlighted.	Circle One: PASS / FAIL
C.3.2.	Click: UNMOUNT	A dialog box opens asking "Do you want to permanently unmount this file system?". If the dialog box opens as described above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.3.3.	Click: Yes	kpchost:/kpc volume is removed from the Disk Manager window. The Candidate Platform is running the NFS service, but has no remote volumes mounted. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
C.3.4.	Validate a successful "unmount" operation enter: <pre>ls -al /kpc/NFStest2.txt</pre>	A warning message indicates file not found. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
C.3.5.	Relinquish super-user privileges at the system prompt enter: <pre>Exit</pre>	The system prompt returns.	Circle One: PASS / FAIL
D.	4.4 Exercise NFS Server Operations Provided by the Candidate Platform to a Remote Client		
D.1.	Export the Candidate Platform File System		
D.1.1.	On the Candidate Platform , in the Disk Manager window, select [EXPORTFS]. Select the line with the root / file system.	An "Export/Unexport" dialog box opens. If the dialog box opens as described above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.1.2.	In the "Export/Unexport" dialog box, in the "pathname" text box enter: <pre>rw=kpchost /KPC_NFS</pre> Click: <pre>EXPORT</pre>	A dialog box opens asking "Export this Directory Permanently?" If the dialog box opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.1.3.	In the Yes/No dialog box click: Yes	The Disk Manager window lists all mounted file systems. kpcpp: /kpc opens in the Disk Manager window.	Circle One: PASS / FAIL
D.1.4.	In the Disk Manager window confirm that the file system is exported click: EXPORTFS	The "Export/Unexport" dialog box opens. If the dialog box opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.1.5.	In the "Export Dialog box" click: CURRENT	An "Exported File Systems" dialog box opens. "/KPC_NFS" opens in the list of exported file systems. Qualifiers "rw" appear after the file system. If file system is listed in the dialog box as described above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.1.6.	In the "Export Dialog box" click: CANCEL	The "Exported File Systems" dialog box closes.	Circle One: PASS / FAIL
D.2.	On the Validation Host, Login as sysadmin		
D.2.1.	In the "Please enter your user name" text box enter: sysadmin	The password screen opens with the "Please enter your password" text box.	Circle one: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.2.2.	In the “Please enter your password” text box enter the sysadmin password: Password	An INFORMATIONAL MESSAGE dialog box opens confirming that DII COE LOGIN processing is complete.	Circle one: PASS / FAIL
D.2.3.	Click: OK	The dialog box closes and the Menu bar, security classification and CDE are displayed.	Circle One: PASS / FAIL
D.2.4.	Open an Xterm window right click anywhere on the desktop click: Tools > Terminal	The Wokspace menu window opens. The tools window opens. A Terminal window opens with a system prompt.	Circle One: PASS / FAIL
D.2.5.	At the system prompt enter: su -root	The Password prompt returns.	Circle One: PASS / FAIL
D.2.6.	At the Password prompt enter the root password enter: Password	The system prompt returns.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.2.7.	Create the KPCTEST directory enter: <code>mkdir /KPCTEST</code>	The system prompt returns.	Circle One: PASS / FAIL
D.2.8.	Change to the KPCTEST directory enter: <code>cd /KPCTEST</code>	The system prompt returns.	Circle One: PASS / FAIL
D.2.9.	Change file permissions to world-writable enter: <code>chmod 777 /KPCTEST</code>	The system prompt returns.	Circle One: PASS / FAIL
D.3.	Use NFS to Mount a Candidate Platform File System on the Validation Host File System		
D.3.1.	On the Validation Host (kpchost) right click anywhere on the desktop click: <code>Applications > Application Manager > DII_APPS > SysAdm.</code>	The Wokspace menu window opens. The Application Manager - SysAdm window opens with the following icons: (go up), Adm Tool, Change Machine ID, Create Action, DTterm, Disk Manager, Edit Local Hosts, Network Installation Server, Reboot System, Segment Installer, Set DNS, Set Routes, Set System Time, Shutdown System, Text Edit, Xterm.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.3.2.	Double-click: Disk Manager	The Disk Manager window opens.	Circle One: PASS / FAIL
D.3.3.	In the Disk Manager window click: MOUNT NEW	A “mount” dialog box opens.	Circle One: PASS / FAIL
D.3.4.	In the “MOUNT POINT” text box enter: /KPC_NFS	“kpcnp:/KPC_NFS” opens in the Disk Manager window. Disk Manager window lists mounted file systems. If the file system opens as described above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.3.5.	Click: MOUNT	A Confirmation dialog box opens asking if the directory should be mounted permanently.	Circle One: PASS / FAIL
D.3.6.	Click: Yes	The dialog box closes.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.3.7.	Double-click: Disk Manager	kpchost : /kpc opens in the Disk Manager window. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.4.	Exercise Disk Related Operations.		
D.4.1.	In the Xterm window read and display a file from the remote volume enter: cat /KPC_NFS/NFStest1.txt	If the output opens as in attachment 1 (see below), the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.4.2.	In the Xterm window copy a file from the remote volume to local disk enter: cp /KPC_NFS/NFStest1.txt /kpc/NFStest3.txt	The system prompt returns.	Circle One: PASS / FAIL
D.4.3.	In the Xterm window verify a successful file copy operation enter: cat /kpc/NFStest3.txt	If the output opens as in attachment 1 (see below), the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.4.4.	In the Xterm window copy a file from the local volume to the remote volume enter: <pre>cp /kpc/NFStest3.txt /KPC_NFS/NFStest4.txt</pre>	The system prompt returns.	Circle One: PASS / FAIL
D.4.5.	In the Xterm window validate a successful file copy operation enter: <pre>cat /KPC_NFS/NFStest4.txt</pre>	If the output opens as in attachment 1 (see below), the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.4.6.	In the Xterm window append input to a file on the remote volume enter: <pre>vi /KPC_NFS/NFStest4.txt</pre>	The vi editor displays NFStest4.txt in the Xterm window.	Circle One: PASS / FAIL
D.4.7.	In the Xterm window move the cursor to the end of the file (after "END OF TEST FILE TEXT"). Insert the phrase "This file has more data". Save the change by entering: <pre><ESC> :wq!</pre>	The system prompt returns.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.4.8.	In the Xterm window verify a successful file update operation enter: <pre>cat /KPCTEST/NFStest4.txt</pre>	The output should appear as in attachment 1 with the phrase, “This file has more data” appended. If the output opens as described, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.5.	Use NFS to ‘unmount’ the Candidate Platform File System from the Validation Host File System. NOTE: When unmounting any system, there can be no processes (including X/Dtterm windows) using files inside the directory to be removed in question. If there are, terminate them or this will fail.		
D.5.1.	In the Disk Manager window click on the row containing the <code>kpccp:/KPC_NFS</code> file system: <pre>kpccp:/KPC_NFS</pre>	The row is highlighted.	Circle One: PASS / FAIL
D.5.2.	Click: UNMOUNT	A dialog box opens asking “Do you want to permanently unmount this file system?”.	Circle One: PASS / FAIL
D.5.3.	Click: Yes	The “kpccp:/KPC_NFS” volume is removed from the Disk Manager window. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
D.5.4.	In the Xterm window verify a successful "unmount" operation enter: <pre>ls -al /KPCTEST/NFStest4.txt</pre>	A message indicates the file was not found. If a message opens as above , the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
D.5.5.	Relinquish super-user privileges at the system prompt enter: <pre>Exit</pre>	The system prompt returns.	Circle One: PASS / FAIL
E.	4.5 Cleanup of Validation Host		
E.1.	Delete all "NFStestN.txt" files from the Validation Host.		
E.1.1.	Open an Xterm window right click anywhere on the desktop click: <pre>Tools > Terminal</pre>	The Wokspace menu window opens. The tools window opens. A Terminal window opens with a system prompt.	Cleanup
E.1.2.	At the system prompt enter: <pre>su -root</pre>	The Password prompt returns.	Cleanup

Step	Operator Action	Expected Result	Observed Result
E.1.3.	At the Password prompt enter the root password enter: Password	The system prompt returns.	Cleanup
E.1.4.	Delete the test file NFStest2.txt enter: rm /kpc/NFStest2.txt	The system prompt returns.	Cleanup
E.1.5.	Delete the test file NFStest3.txt enter: rm /kpc/NFStest3.txt	The system prompt returns.	Cleanup
E.1.6.	Remove the /KPCTEST directory enter: rmdir /KPCTEST	The directory is removed and the system prompt returns.	Cleanup
E.1.7.	Verify the /KPCTEST directory was deleted enter: ls -l /	The listing displayed does not include /KPCTEST. The system prompt returns.	Cleanup
E.2.	Verify sysadmin Logout of the Validation Host.		
E.2.1.	Logout of the Validation Host as sysadmin	The menu bar, security classification and CDE desktop appear.	Cleanup

Step	Operator Action	Expected Result	Observed Result
E.2.2.	Click: EXIT	Logout confirmation window opens.	Cleanup
E.2.3.	Click: CONTINUE	System exits and the COE LOGIN screen opens.	Cleanup
E.3.	NFS mount /kpc on the Candidate Platform		
E.3.1.	Open a Terminal window right click anywhere on the desktop click: Tools > Terminal	The Wokspace menu window opens. The tools window opens. A Terminal window opens with a system prompt.	Circle One: PASS / FAIL
E.3.2.	At the system prompt enter: su -root	The Password prompt returns.	Circle One: PASS / FAIL
E.3.3.	At the Password prompt enter the root password enter: Password	The system prompt returns.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
E.3.4.	On the Candidate Platform , in the Disk Manager window click: MOUNT NEW	A “Mount” dialog box opens.	Circle One: PASS / FAIL
E.3.5.	In the “MOUNT” dialog box, in the file system text box enter: kpchost : /kpc	A dialog box opens asking “Do you want to permanently mount this file system?”.	Circle One: PASS / FAIL
E.3.6.	In the MOUNT POINT text box enter: /kpc	“/kpc” opens in the Disk Manager window. Disk Manager window lists mounted file systems. If the file system opens as described above, the test step result is PASS, otherwise the test step result is FAIL.	Circle One: PASS / FAIL
E.3.7.	Click: MOUNT	A Confirmation dialog box opens asking if the directory should be mounted permanently.	Circle One: PASS / FAIL
E.3.8.	Click: Yes	The Disk Manager window lists mounted file systems. kpchost : /kpc opens in the Disk Manager window.	Circle One: PASS / FAIL

Step	Operator Action	Expected Result	Observed Result
E.3.9.	In the Disk Manager window click: EXIT	The Disk Manager window closes.	Circle One: PASS / FAIL
E.3.10.	List the contents of the /kpc subdirectory enter: ls -al /kpc	A directory list opens including the directory “nfs”.	Circle One: PASS / FAIL
E.3.11.	Relinquish super-user privileges at the system prompt enter: Exit	The system prompt returns.	Circle One: PASS / FAIL
E.3.12.	Exit from the Xterm window enter: Exit	The Xterm window closes.	Circle One: PASS / FAIL
F.	4.6 Remove KPC_NFS from the Candidate Platform export list.		
F.1.	Remove KPC_NFS		
F.1.1.	In the Disk Manager window highlight the root / file system and click: Exportfs	An “Export/Unexport” dialog box opens.	Cleanup

Step	Operator Action	Expected Result	Observed Result
F.1.2.	In the "pathname" text box enter: /KPC_NFS	/KPC_NFS should be displayed in the pathname text box.	Cleanup
F.1.3.	Click: UNEXPORT	A dialog box opens asking "Unexport this Directory Permanently?" If the dialog box opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Cleanup
F.1.4.	Click: Yes	The Disk Manager window lists mounted file systems. kpcpp: /kpc opens in the Disk Manager window.	Cleanup
F.1.5.	Confirm that the file system is un-exported in the Disk Manager window click: EXPORTFS	The "Export/Unexport" dialog box opens.	Cleanup
F.1.6.	In the "Export/Unexport" dialog box click: CURRENT	An "Exported File Systems" dialog box opens. /KPC_NFS does not appear. If the file system opens as above, the test step result is PASS, otherwise the test step result is FAIL.	Cleanup

Step	Operator Action	Expected Result	Observed Result
F.1.7.	In the "Export Dialog Box"click: CANCEL	The "Exported File Systems" dialog box closes.	Cleanup
G.	4.7 Re-establish the Standard Candidate Platform Configuration.		
G.1.	Delete "NFStestN.txt" files		
G.1.1.	Open an Xterm window right click anywhere on the desktop click: Tools > Terminal	The Wokspace menu window opens. The tools window opens. A Terminal window opens with a system prompt.	Cleanup
G.1.2.	At the system prompt enter: su -root	The Password prompt returns.	Cleanup
G.1.3.	At the Password prompt enter the root password enter: Password	The system prompt returns.	Cleanup
G.1.4.	Delete the test file NFStest1.txt enter: rm /KPC_NFS/NFStest1.txt	The system prompt returns.	Cleanup

Step	Operator Action	Expected Result	Observed Result
G.1.5.	Delete the NFStest4 file enter: <code>rm /KPC_NFS/NFStest4.txt</code>	The system prompt returns.	Cleanup
G.2.	Remove the Temporary Test Directory.		
G.2.1.	Change to the root / directory enter: <code>cd /</code>	The system prompt returns.	Cleanup
G.2.2.	Remove the KPC_NFS subdirectory enter: <code>rmdir KPC_NFS</code>	The system prompt returns.	Cleanup
G.2.3.	Verify that the KPC_NFS subdirectory has been removed enter: <code>ls /KPC_NFS</code>	System message indicates file not found.	Cleanup
G.2.4.	Relinquish super-user privileges at the system prompt enter: <code>Exit</code>	The system prompt returns.	Cleanup

Step	Operator Action	Expected Result	Observed Result
Z.	4.8 Logout (Optional: Use if no further validation is to be done.)		
Z.1.	Unmount NFS filesystems		
Z.1.1.	Optional: Use if any NFS file systems are mounted. In the Application Manager – SysAdmin window double click: Disk Manager.	The Disk Manager window list mounted file systems.	Cleanup
Z.1.2.	Optional: Use if any NFS file systems are mounted. Repeat until all NFS volumes are unmounted. In the Disk Manager window click: UNMOUNT	The NFS mounted volume(s) closes from the Disk Manager window. A dialog box opens asking “Do you want to permanently unmount this file system?”.	Cleanup
Z.1.3.	Click: Yes	The dialog box closes.	Cleanup
Z.2.	Verify sysadmin Logout on Candidate Platform		

Step	Operator Action	Expected Result	Observed Result
Z.2.1.	Log out as sysadmin and exit the CDE click: EXIT	The menu bar, security classification and CDE desktop are displayed. A Logout Confirmation window opens.	Shutdown
Z.2.3.	Click: OK	System exits and the DII COE LOGIN screen opens.	Shutdown

End of Test Validation Procedure