

The Open Group
COE Platform Certification Program
Chapter 2
Print Services

Posix-Based Platform Compliance (PPC)
COE Kernel revision level 4.5p6

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Revision 1.0

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1. Overview

1.1 Introduction

This chapter defines the Print Services 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 test procedure demonstrates the ability of the Candidate Platform to print ASCII text and postscript graphics to both a locally attached printer and a printer attached directly to the network.

2.2 Description of test items

The following functions will be exercised:

- A. Power Up and Login (Optional)
- B. Attach a Printer to the Candidate Platform
- C. From the GUI Desktop, Add a Locally Attached Printer to the Candidate Platform
- D. From the Command Line, Print Text and Graphics to the Locally Attached Printer.
- E. From the GUI Desktop, Add a Network Printer to the Candidate Platform
- F. From the Command Line, Print Text and Graphics to the Network Printer.
- G. From the GUI Desktop, Delete the Network and Locally Attached Printers from the Candidate Platform.
- H. Detach the Printer from the Candidate Platform
- Z. Logout (Optional)

2.3 Test Data/Media Required

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

Two files: "print_tx.txt" and "print_ps.ps" located in the "/kpc/Printtest" directory on the Validation Host. This directory will be NFS mounted on the Candidate Platform in order to make the KPC test data files available on the Candidate Platform. Attachments 1 and 2 provide a visual reference for how the printed ASCII text and postscript graphics files should appear when printed.

2.4 Setup/Equipment Required

The Validation Host must be running the Printer Services available to the Candidate Platform. The Candidate Platform must have at least one printer that can be attached to the appropriate port e.g. a serial or parallel port. The Candidate Platform should have a root, System Administrator, secman and a regular User account created before the validation test run and must be network ready.

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: Print Services Validation Procedure

Candidate Platform: _____ Date: _____
Tester: _____ Estimated Runtime: 1.5 hours _____
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

	Operator Action	Expected Result	Observed Result
A	4.1 Power-Up and Login		
A.1	Power-Up the Candidate Platform (Optional: Use if not already powered up.)		
A.1.1	Power up the Candidate Platform and verify that the DII COE Login screen appears.	The DII COE login screen appears with the DoD security warning message and the Please enter your user name text box.	Setup
A.2	Login to sysadmin (Optional: Use if not already logged in.)		
A.2.1	In the Please enter your user name text box, type: sysadmin[r]	The password screen appears with the Please enter your password text box.	Setup
A.2.2	In the Please enter your password text box type the password for the sysadmin account and press [RETURN].	An Informational Message dialog box appears confirming that COE login processing is complete.	Setup
A.2.3	Click OK in the Informational Message dialog box.	The dialog box disappears. The menu bar, security classification and CDE desktop appear.	Setup

	Operator Action	Expected Result	Observed Result
A.3	Mount the KPC Test Data. (Optional: Use if files not already NFS mounted.)		
A.3.1	Export the /kpc filesystem on kpchost.	System returns a command prompt.	Setup
A.3.2	NFS mount /kpc directory from the Validation Host to the Candidate Platform. Type: <pre>su - root mount kpchost:/kpc [s] /kpc exit</pre>	A message confirms that the filesystem has been mounted. The /kpc directory is exported by the Validation Host.	Setup
A.3.3	Copy both "print_tx.txt" and "print_ps.ps" into the "/h/USERS/local/sysadmin/Scripts" directory. Type: <pre>su - root cp /kpc/Printtest/* [s] /h/USERS/local/sysadmin/Scripts exit</pre>	System returns a command prompt.	Setup

	Operator Action	Expected Result	Observed Result
B	4.2 Attach a Printer to the Candidate Platform		
B.1	Physically Connect Printer to Candidate Platform		
B.1.1	<p>Use cable to attach the Printer parallel port to the Candidate Platform parallel port.</p> <p>NOTE: This step documents the procedure for the KPC "Reference Platform". KPC vendors should submit a modification to this step if their procedure differs. Any connection technology may be used.</p>	Printer connectivity with Candidate Platform is established.	Setup
B.2	Add System Software Support for Locally Attached Printer		

	Operator Action	Expected Result	Observed Result
B.2.1	<p>Add printer driver (if needed - None needed for Sun Solaris, so this step may be ignored for that platform)</p> <p>NOTE: This step documents the procedure for the KPC reference platform. KPC vendors should submit a modification to this step if their procedure differs.</p>	Successful installation and initialization of printer driver is confirmed.	Circle one: PASS / FAIL
C	4.3 From the GUI Desktop, Add a Locally Attached Printer to the Candidate Platform		
C.1	Set up a Local printer Using the new Printer Domain Name		
C.1.1	<p>Open an Xterm window and enter the following command to determine the correct port to use.</p> <pre>ls /dev grep pp</pre>	The system returns the name of the local parallel port in the /dev directory.	Circle one: PASS / FAIL
C.1.2	Right click on desktop to make menu appear. Select SysAdm > Admintool: Printers > Browse > Printers	The Admintool: Printers window appears.	Circle one: PASS / FAIL
C.1.3	Select Edit > Add > Local Printer from the Admintool: Printers window.	The Add Printer window appears.	Circle one: PASS / FAIL

	Operator Action	Expected Result	Observed Result
C.1.4	<p>In the Add Printer box, type the following information:</p> <p>Printer Name: KPCparallel Description: Parallel Printer Printer Port: /dev/<Results of Step C.1.1> Printer Model Type: Postscript File Type: Postscript Default Printer: Check Box</p> <p>Click [OK] when complete.</p>	<p>The new printer appears in the Admintool : Printers window.</p> <p>Printer Name: KPCparallel Server: kpccp Description: Parallel Printer</p>	Circle one: PASS / FAIL
D	4.4 From the Command Line, Print Text and Graphics to the Locally Attached Printer		
D.1	Open an Xterm		
D.1.1	<p>On the Candidate Platform, Right Click on the desktop and select the following menu items: Tools> Terminal</p>	An Xterm window appears.	Circle one: PASS / FAIL
D.2	Print an ASCII Text file to the Locally Attached Printer		
D.2.1	Type: lp /kpc/Printttest/print_tx.txt	Print output appears as shown in Attachment 1.	Circle one: PASS / FAIL
D.3	Print a Postscript graphics file to the Locally Attached Printer		
D.3.1	Type: lp /kpc/Printttest/print_ps.ps	Print output appears as shown in Attachment 2.	Circle one: PASS / FAIL

	Operator Action	Expected Result	Observed Result
	Note: Other print invocation methods, e.g. "Drag and Drop" printing, may be added.		
E	4.5 From the GUI Desktop, add a Network Printer to the Candidate Platform.		
E.1	Add a Network Printer to the Candidate Platform.		
E.1.1	Select SysAdm > Admintool: Printers > Browse > Printers	Admintool: Printers window appears.	Circle one: PASS / FAIL
E.1.2	Select Edit > Add > Access to Printer from the Admintool: Printers window	Add Printer window appears.	Circle one: PASS / FAIL
E.1.3	<p>In the Access to Printer box, type the following information:</p> <p>Printer Name: kpccp</p> <p>Print Server : kpcnetlp</p> <p>Description: Network Printer</p> <p>Check the box marked "System Default Printer".</p> <p>Click [OK] when complete.</p>	<p>The Add Printer box will disappear, leaving the ASCII printer appearing in the Admintool: Printers window.</p> <p>Printer Name: kpccp</p> <p>Server: kpcnetlp</p> <p>Description: Network Printer</p>	Circle one: PASS / FAIL

	Operator Action	Expected Result	Observed Result
F	4.6 From the Command Line, Print Text and Graphics to the Network Printer		
F.1	Print an ASCII Text file to the Network Printer		
F.1.1	Type: <pre>lp /kpc/Printtest/print_tx.txt</pre> <p style="text-align: center;">or</p> <pre>/usr/lib/lp/postscript/postprint [s] /kpc/Printtest/print_tx.txt lp</pre> <p style="text-align: center;">or</p> drag the file from the file manager to the printer icon at the bottom of the screen.	Print output appears as shown in Attachment 1.	Circle one: PASS / FAIL
F.2	Print a Postscript graphics file to the Network Printer		

	Operator Action	Expected Result	Observed Result
F.2.1	Type: lp /kpc/Printtest/print_ps.ps or drag the file from the file manager to the printer icon at the bottom of the screen.	Print output appears as shown in Attachment 2.	Circle one: PASS / FAIL
F.3	Close the Xterm		
F.3.1	On the Candidate Platform, double-click the top left corner to close the Xterm window.	The Xterm window disappears.	Circle one: PASS / FAIL
	Note: Other print invocation methods, e.g."Drag and Drop" printing, may be added.		
G	4.7 From the GUI Desktop, Delete the Network and Locally Attached Printers from the Candidate Platform		
G.1	Open Printer Administration Dialog Box		
G.1.1	Select SysAdm > Admintool: Printers > Browse >Printers	The Admintool: Printers window opens.	Circle one: PASS / FAIL
G.2	4.7.1.1.1 Delete Locally Attached Printer from the Candidate Platform		
G.2.2	Click on local printer "KPCparallel".	The "KPCparallel" is selected	Circle one: PASS / FAIL

	Operator Action	Expected Result	Observed Result
G.2.3	Select Edit > Delete from the Admintool: Printers window.	A question will appear to confirm deletion.	Circle one: PASS / FAIL
G.2.4	When the question appears: "Do you really want to Delete Printer KPCparallel?" Click [Delete].	The message appears: "delete printer failed".	Circle one: PASS / FAIL
G.2.5	Click OK.	The Admintool closes.	Circle one: PASS / FAIL
G.2.6	Select SysAdm > Admintool:Printers > Browse > Printers	The Admintool:Printers window opens.	Circle one: PASS / FAIL
G.2.7	Verify the local printer does not appear.	The local printer does not appear.	Circle one: PASS / FAIL
G.3	Delete Network Printer from the Candidate Platform		
G.3.2	Click on network printer "kpccp".	The "kpccp" is selected	Circle one: PASS / FAIL
G.3.3	Select Edit > Delete from the Admintool: Printers window.	A question will appear to confirm deletion.	Circle one: PASS / FAIL
G.3.4	When the question appears: "Do you Really want to Delete Printer "kpccp?" Click [Delete].	The "kpccp" disappears indicating that the printer is deleted.	Circle one: PASS / FAIL
G.4	Close Printer Administration Dialog Box		
G.4.1	Select Exit on the Admintool: Printers dialog.	The Admintool: Printers window disappears.	Circle one: PASS / FAIL
H	4.8 Detach the Printer from the Candidate Platform		
H.1	Disconnect the Printer from the Candidate Platform		

	Operator Action	Expected Result	Observed Result
H.1.1	<p>Disconnect the cable used to attach the Printer parallel port to the Candidate Platform parallel port.</p> <p>NOTE: This step documents the procedure for the KPC "Reference Platform". KPC vendors should submit a modification to this step if their procedure differs. Any connection technology may be used.</p>	Printer connectivity with Candidate Platform is eliminated.	Setup
H.2	Remove System Software Supporting the Locally Attached Printer		
H.2.1	<p>Removed printer driver (if needed - None needed for Sun Solaris, so this step may be ignored for that platform).</p> <p>NOTE: This step documents the procedure for the KPC "Reference Platform". KPC vendors should submit a modification to this step if their procedure differs.</p>	Successful installation and initialization of printer driver is confirmed.	Circle one: PASS / FAIL

	Operator Action	Expected Result	Observed Result
Z	4.9 Logout (Optional: Use if no further validation is to be done.)		
Z.1	Unmount the KPC Test Data		
Z.1.1	To mount and unmount type: su root	System returns a command prompt.	Shutdown
Z.1.2	Unmount the KPC Test Data on the Candidate Platform . Type: umount /kpc	System returns a command prompt.	Shutdown
Z.2	Verify sysadmin Logout		
Z.2.1	Log into the Candidate Platform as sysadmin.	The menu bar, security classification and DCE desktop appear.	Shutdown
Z.2.2	Select [EXIT] button from CDE.	Logout confirmation window appears.	Shutdown
Z.2.3	Select [OK]	System exits and the DII COE login screen appears.	Shutdown

End of Test Validation Procedure