OS/2 PCM Compatibility Test Program
Version 4.6

23 Sep 2002

Note:

Before using this information and the product it supports, be sure to read the general information under Appendix H, "Notices".

September 2002

Contents

About This Book

This book describes the OS/2 PCM Compatibility Testkit, a software package provided with the OS/2 PCM Compatibility Test Program that lets personal computer hardware manufacturers (PCMs) perform self-testing to be listed in IBM's list of compatible systems.

Who Should Read This Book

This book is for testers who want to ensure that their products are compatible with IBM's OS/2 Warp products.

Skills Required

To use the information in this book, you need the following skills:

- Familiarity with the OS/2 Warp Desktop
- Access to and ability to use an ASCII editor
- Familiarity with commands such as cd, fdisk, and xcopy
- A basic understanding of networks
- Some basic network hardware skills such as cabling computers in a network and installing and configuring network cards

Documentation Conventions

This book uses the following conventions:

- All system names, addresses, user names, and passwords are case-sensitive and must be typed exactly as shown.
- Variable names, such as names of adapters, are shown in italics. For example, *adapter_name*.

Chapter 1. Introduction to the OS/2 PCM Compatibility Test Program

This chapter provides installation instructions, an overview of the OS/2 PCM Compatibility Test Program, lists new features available with this release, and describes how you get information and support for your participation in the program and use of the OS/2 PCM Compatibility Testkit.

Installing OS/2 PCM Compatibility Testkit

To install the OS/2 PCM Compatibility Testkit base test cases on your computer:

1. Run install.cmd from the \pcm_inst directory of the CDROM.
   This command creates a shortcut group on your desktop.
   The **PCM Testing Setup – Main Menu** window opens:

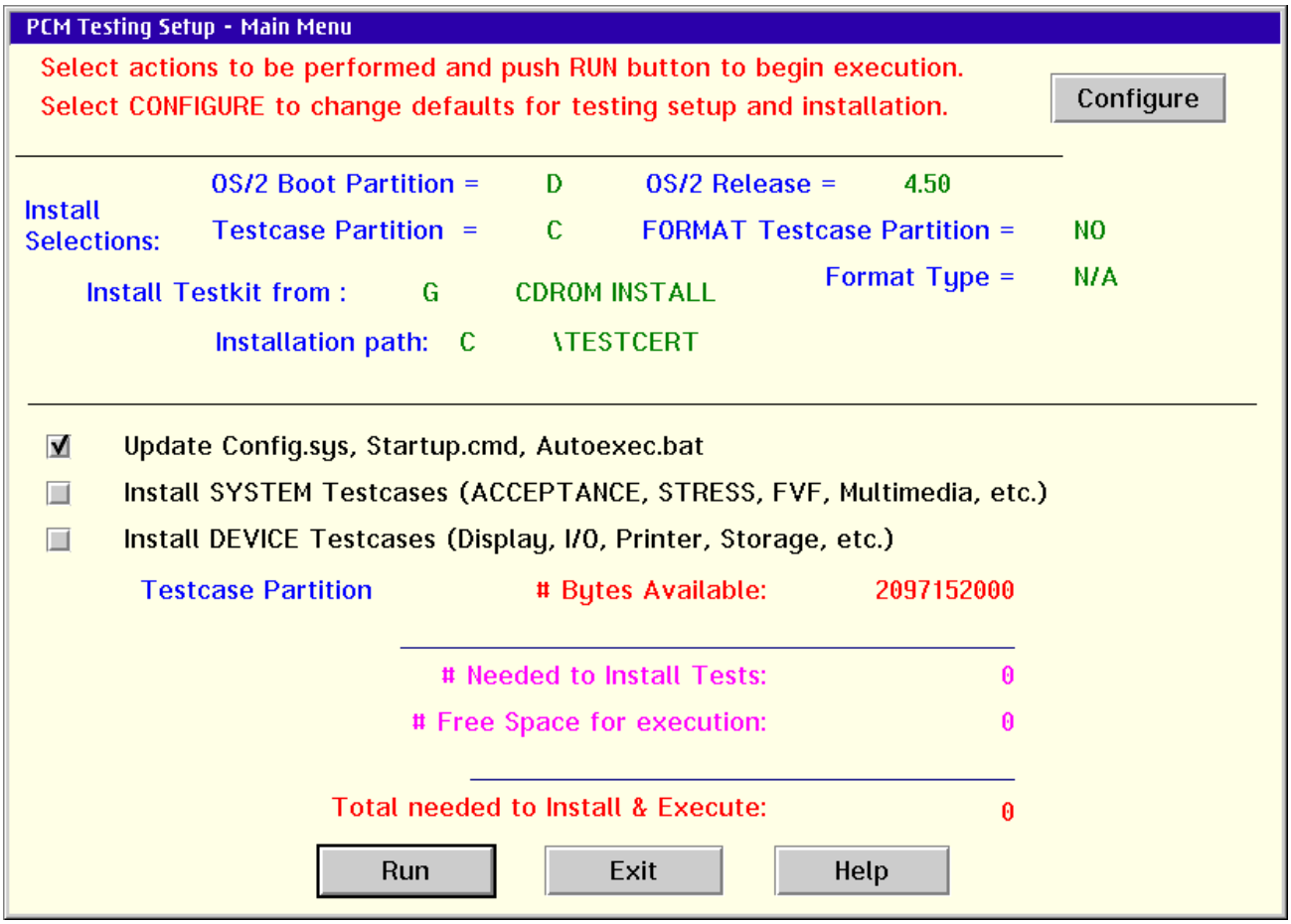

Figure 1. PCM Testing Setup - Main Menu

2. Click on **Configure** to change defaults for testing setup and installation.
   The **PCM Testing Configuration** window opens:

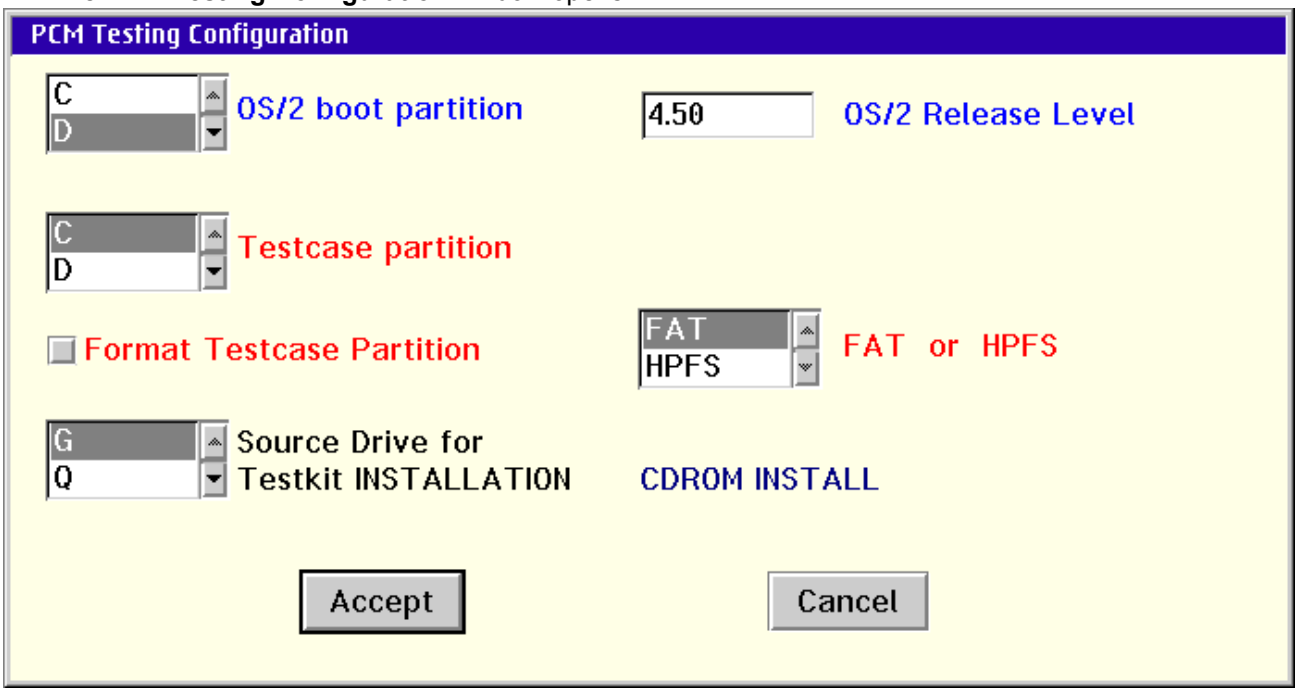

Figure 2. PCM Testing Configuration

   a. Select the OS/2 boot partition.
   b. Enter the OS/2 Release Level.
   c. Select the testcase partition.
   d. Select **Format Testcase Partition** if you want to format the testcase partition.
   e. Select FAT or HPFS as a file system.
   f. Select the Source Drive for Testkit installation.
   g. Click on **Accept** to save changes or on **Cancel** to discard changes.

3. Select the appropriate check boxes to make your choice to:
   - update Config.sys, Startup.cmd, and Autoexec.bat
   - install system testcases
   - install device testcases

4. Click on **Run** to start the installation process or click on **Exit** to exit without installing.

5. The **CDROM or NETWORK Installation** window appears:
   - For a CDROM install, insert OS/2 WARP PCM Compatibility Testkit CDROM version 4.6 and click on **Enter**.
   - For a network install, click on **Enter**.

The installation process begins and the OS/2 PCM Compatibility Testkit is installed on your computer.

To install the OS/2 PCM Compatibility Testkit LAN test cases on your computer:

1. Run install.cmd from the \lan_inst directory of the CDROM.
   The installation process begins and the OS/2 PCM Compatibility Testkit LAN test cases are installed on your computer.

Overview of OS/2 PCM Compatibility Test Program

The OS/2 PCM Compatibility Test Program offers a self-test process that lets hardware manufacturers ensure that their systems are compatible with OS/2 Server and Client products.

The steps involved in the OS/2 PCM Compatibility Test Program are:

1. Enrolling in the OS/2 PCM Compatibility Test Program
2. Running the OS/2 PCM Compatibility Testkit test suites
3. Submitting the results to the OS/2 PCM Compatibility Test Program Office
4. Receiving confirmation from the OS/2 PCM Compatibility Test Program Office that the system has passed the compatibility tests.

After your compatibility testing has been confirmed, the OS/2 PCM Compatibility Test Program Office sends you a completion letter and adds the system to the list of compatible systems maintained in IBM's Web pages.

You may use the completion letter to show that your product is compatible with OS/2 Warp and is listed.

What's New in This Release

With Version 4.6, Convenience Package for OS/2 Warp Version 4 and Convenience Package for OS/2 Warp Server for e-business are added to the list of OS/2 products covered.

In addition, there is enhanced information and support for the OS/2 PCM Compatibility Testkit on the World Wide Web. "Web Sites" lists related Web sites you may want to visit.

Web Sites

These Web pages provide information about the OS/2 PCM Compatibility Test Program and OS/2 PCM Compatibility Testkit:

http://www.software.ibm.com/os/warp/hw-cert

This Web page helps you find devices compatible with OS/2 Warp, and information on the OS/2 compatibility programs by providing links to:

- PC systems and devices that are compatible with OS/2 Warp
- OS/2 device drivers you can download
- Information about OS/2 PCM Compatibility Test Programs
- A link to the OS/2 compatibility programs
- An explanation of the benefits of the compatibility programs
- Information to help you decide which compatibility program is right for you
- Links to Web pages for those programs

http://www.software.ibm.com/os/warp/hw-cert/pcm/pcm_tkit.htm

The OS/2 PCM Compatibility Testkit Program home page contains:

- A form for enrolling in the OS/2 PCM Compatibility Test Program and ordering the testkit
- Hints and tips for using the testkit
- Access to Frequently Asked Questions (FAQs) about the testkit
- A customer satisfaction survey
- Program Office contact information

- A form for reporting problems with the testkit

Submitting PCM Test results to the OS/2 PCM Compatibility Test Program Office.

Enrolling in the OS/2 PCM Compatibility Test Program

To enroll in the OS/2 PCM Compatibility Test Program and obtain the OS/2 PCM Compatibility Testkit, fill out the testkit order form on the OS/2 PCM Compatibility Testkit Web page. The OS/2 PCM Compatibility Testkit and its documentation will be sent to you.

Program Office

The OS/2 PCM Compatibility Test Program Office can help you:

- Answer questions about OS/2 PCM Compatibility Test Program
- Resolve problems you encounter while running the OS/2 PCM Compatibility Testkit

When you have completed your testing, the OS/2 PCM Compatibility Test Program Office reviews your test results, sends a confirmation e-mail testing report, and adds your system to the listings published on the WEB.

The OS/2 PCM Compatibility Test Program Web site has more details about the services provided by the Program Office, and tells you how to contact the Program Office that serves your country.

Chapter 2. Overview of the OS/2 PCM Compatibility Testkit

The OS/2 PCM Compatibility Testkit is a set of automated test cases that verify that your hardware is compatible with OS/2 Warp. The OS/2 PCM Compatibility Testkit Version 4.6 tests the networking capabilities of the system. Personal computer manufacturers must establish network compatibility before a system can be added to the list of compatible systems.

This chapter describes:

- The high-level flow of the test process
- The skills required to use the OS/2 PCM Compatibility Testkit
- What you get with the OS/2 PCM Compatibility Testkit
- The test environment, including the hardware and software required to create the environment
- Which tests you need to run for your specific hardware and software configuration

Using the Testkit

A good way to create your test environment is to start with systems that you know are compatible with OS/2 Warp and run all the tests in that environment. If a test case fails in an environment that is known to be compatible with OS/2 Warp, troubleshooting is not complicated by having a new system that may or may not be compatible with OS/2 Warp.

The steps involved in using the OS/2 PCM Compatibility Testkit are:

1. Obtaining the necessary hardware and operating system software
2. Connecting and configuring the machines to create a stable test environment (see Chapter 3, "Building the Test Environment")
3. Testing your machine in the stable environment by doing the following:
   - If you want your system listed as a compatible server:
     1. Test your machine in the role of an additional server and gather results.
     2. Test your machine in the role of a domain controller and gather results.
   - If you want your system listed as a compatible client:
     1. Test your machine in the role of client 1 and gather results.
     2. Test your machine in the role of client 2 and gather results.

   (See Chapter 6, "Using Your System in the Stable Test Environment" for detailed information.)

   Note: If your system supports different LAN adapters, you can have your system listed with up to two different LAN adapters by testing with different LAN adapters when moving a system from one role to another. If you change LAN adapters, be sure to list both in the system hardware configuration PCM_HDW on panel 3.

1. Submitting the results to the OS/2 PCM Compatibility Test Program Office
2. Receiving email or fax confirmation from the OS/2 PCM Compatibility Test Program Office that your hardware has passed the test and will be added to the lists of compatible systems

This document provides detailed instructions to guide you through these procedures.

OS/2 PCM Compatibility Testkit Materials

The OS/2 PCM Compatibility Testkit Version 4.6 consists of:

- A PCM Version 4.6 Testkit CD containing the software, documentation, and file templates needed to perform the compatibility tests
- Viewable and printable documentation about the OS/2 PCM Compatibility Testkit
- A license agreement for OS/2 PCM Compatibility Testkit
- A Welcome Letter, which includes instructions for printing this document

Which Tests are Required

To be placed in the list of compatible systems your hardware must pass:

- The base test suite, which tests whether your machine is compatible with the OS/2 operating system in a non-networked environment
- The network test suite, which tests the networking features of OS/2

See Chapter 8, "PCM Base Test Case Details" and Chapter 9, "LAN Test Case Details" for a complete listing of the test cases.

Base Tests

You must perform the OS/2 base compatibility tests on all systems, whether they are designated as client or server systems. The OS/2 base compatibility tests consist of:

- **Required tests**, which must be run on all systems. These tests include installation and initialization of OS/2, batch testing, stress testing, hardware interface tests, and special function tests, such as multimedia.
- **Additional tests**, which test specific hardware interfaces. You need to run these tests only if your system's shipped configuration supports these features:
  - Advanced Power Management
  - Symmetric MultiProcessing (SMP)
  - PCMCIA
  - Speech Recognition
  - Capability to boot from partition the begins or extends beyond 8.3GB (cylinder 1024).
  - Journaled File System (JFS) - required for OS/2 Warp Server for e-business.

    These tests will be required for compatibility only if the system that is being tested will support the specific function.

Running the entire set of base tests takes approximately one and one half days. This includes time for setup and results processing.

Network Tests

In addition to the base tests, your hardware must pass the network tests, which verify networking functions. A system may be tested as a client system, as a server system, or both.

Testing as a Server

If you want your system included in the list of compatible server systems, you must test it in both the additional server and domain controller roles as shown in Figure 3. You must submit a test results diskette showing that your system has passed the base tests and the network tests. Base system testing must be

done only once using the additional server role. Network testing must be done for both the additional server and domain controller roles.

Testing as a Client

If you want your system included in the list of compatible client systems, you must test it in both client 1 and client 2 roles as shown in Figure 3. You must submit a test results diskette showing that it has passed the base tests and the network tests. Base system testing must be done only once using the client 1 role. Network testing must be done for both the client 1 and client 2 roles.

Testing as Both Client and Server

If you want your system included in both lists, compatible client systems and compatible server systems, you must perform all the tests and submit *two* test results diskettes, one from server testing and another from client testing.

Base testing is required in both client and server roles because the OS/2 base differs between the client and server products.

Duration of the Tests

The network tests take approximately two days to complete, including setting up the test environment, running the test cases, and collecting the results.

You should allow at least four days for the network tests to allow time to resolve problems and to rerun test cases after you fix problems discovered during the tests. This document describes an environment that can eliminate or minimize setup problems. If you choose to use a different configuration, troubleshooting might be more difficult.

The Test Environment

The test environment consists of a network of systems configured as shown in the following figure:

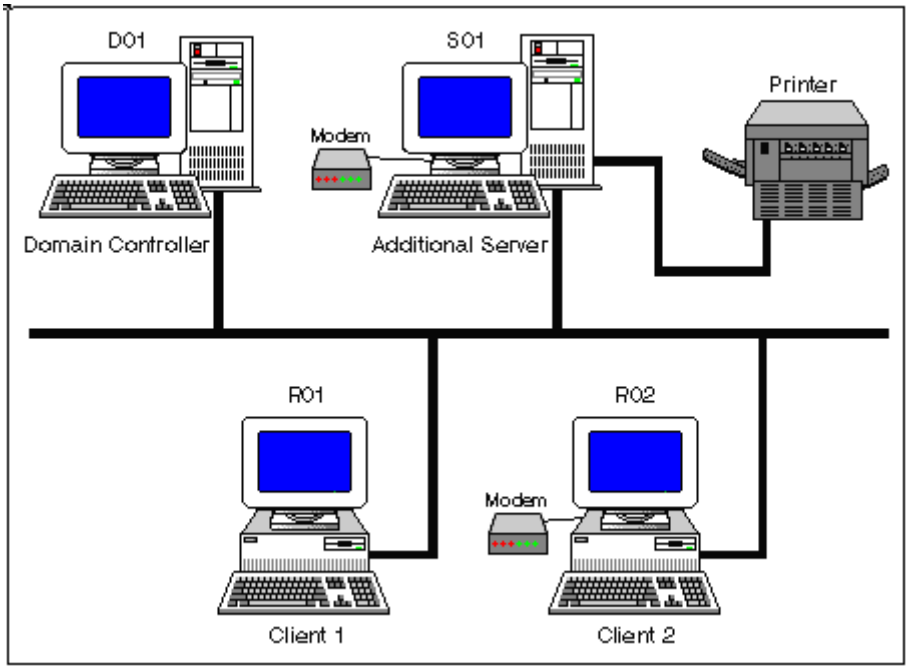

Figure 3. The OS/2 PCM Compatibility Testkit Test Environment

The systems in this environment are:

- The domain controller

  This server system controls access by users, manages the resources of your network, and controls the sharing of resources.
- An additional server

  This system handles other server functions, such as file access, remote connections, and network printing.
  The test cases require both domain and server tests to verify that your system correctly handles the handshaking between the domain and server systems.
- Client 1 and client 2

  These systems act as requesters of services provided by the domain controller and the additional server, and test the peer-to-peer networking features of OS/2 Warp Version 4.

To set up this environment, you need:

- Two server systems (see "Server Hardware Requirements")
- Two client systems (see "Client Hardware Requirements")
- One printer (network or locally attached to the additional server) and the appropriate OS/2 driver

  Note: PCM compatibility testing requires only two client systems in the test environment. However, to meet certain requests from your customers, you may need to test server systems with more than two clients. See Appendix G, "Testing with Additional LAN Clients" for more information.
- Four LAN adapter cards with the appropriate driver and NIF files (see "Selecting LAN Adapter Cards")
- Two modems that are supported by LAN Distance (see "Finding a Supported Modem")
- Two analog phone lines.

  Note: If analog phone lines are not available, you can choose to test with a Null Modem cable instead of using modems.
- Ethernet hub or token ring MAU and category 5 cabling
- Three to four blank 3.5" high-density diskettes

Server Software Requirements

Installation materials (CD and diskettes) for the server operating system. This can be any of the following:

- OS/2 Warp Server for e-business
- Convenience package for OS/2 Warp Server for e-business

Server Hardware Requirements

The minimum hardware for each server is:

- System unit uses at least an Intel® 486 processor
- System unit has at least 32 MB RAM
- Hard drive with at least 1 GB capacity (at least 3 drives for RAID setup, and 1 additional drive for OS/2 Warp Server for e-business JFS volume spanning testcase).
- CD-ROM drive

- OS/2 boot partition with a minimum of 500 MB free space, which includes a minimum of 50 MB for swapper.dat. This also includes space for the network test cases, but not for the base test cases.
- For additional server, a PCMTEST partition with at least 230 MB free space for base test cases. This may be the boot partition or another local (non-network) drive.
- For domain controller, a SADUMP partition of at least 20 MB larger than installed memory. This can be the same space allocated for the PCMTEST partition.
- A Journaled File System (JFS) partition. To test volume spanning, two physical disks are required.
- The printer device driver for the printer in your test environment.
- If your machine supports multimedia, you need the appropriate multimedia hardware:
    - Sound card
    - Speakers
    - CD-ROM drive
    - An audio (music) CD

Client Software Requirements

You may install one of these operating systems on a client system:

- OS/2 Warp Version 4
- Convenience Package for OS/2 Warp Version 4

Client Hardware Requirements

The minimum hardware for each client is:

- System unit uses at least an Intel 486sx processor. If you plan to run the speech recognition tests, the system unit must have at least an Intel Pentium® processor, 90 MHz or faster.
- System unit has at least 16 MB RAM
- Hard drive with at least 1 GB capacity
- OS/2 boot partition with a minimum of 400 MB free space, which includes a minimum of 50 MB for swapper.dat. The networking test cases are installed on the boot drive.
- At least 230 MB free space for installing the base test cases. This may be the boot partition or another local (non-network) drive.
- CD-ROM drive
- Printer support should be installed even if no printer is attached.
- If your system supports multimedia, you need the appropriate multimedia hardware:
    - Sound card
    - Speakers
    - CD-ROM drive
    - An audio (music) CD
- If your system supports speech recognition, you need:

- A microphone compatible with OS/2 Warp Version 4
- Sound card
- Speakers

Selecting LAN Adapter Cards

- The LAN adapter cards should be either all token ring or all Ethernet. It is helpful if all four adapters are the same kind or at least use the same driver. Using the same driver will save some setup time later on. However, it is possible to mix adapter cards, as long as they are all of the same type, either all Ethernet or all token ring.
- Use one of the adapters supported by OS/2, information on supported adapters can be found in the online guides:
  - For OS/2 Warp Server products, see the *MPTS Configuration Guide*.
  - For OS/2 Warp 4, see the *Network Adapters and Protocol Services Guide*.

    Note: Additional information on LAN Adapters supported can be found on the WEB at: http://service.software.ibm.com/os2ddpak/html/index.htm.

- The choice of LAN adapter for the additional server is of particular importance because that adapter is used by the Remote Connection Server. Select an adapter from the list of Tested and Approved adapters that passed the Remote Connections testing. If you are using a Token Ring as the LAN type and the adapter being used uses the IBMTOK driver, then you have an adapter that should work.
- For LAN adapter cards not listed, check with the adapter manufacturer for driver availability, and any setup or configuration requirements that may be needed for OS/2 and LAN Distance.

Finding a Supported Modem

Use a modem that is supported by LAN Distance. A list of supported modems is provided in the online *IBM Remote Access Guides*.

Chapter 3. Building the Test Environment

These procedures assume that you already have the four systems required to create the initial stable test environment, that they are connected together with either Ethernet or token ring cabling, and that each has an operational monitor, keyboard, and mouse.

This test environment should be isolated from other LAN segments. Although an isolated environment is not required, it is easier to troubleshoot problems in an isolated environment. In addition, network traffic from other systems on the network can sometimes interfere with your tests.

Installation of Server systems

In setting up your PCM test environment, you need to install two server systems, one as the Domain Controller, the second as the Additional Server. For instructions on how to install and configure the domain and server systems in the PCM testing environment, refer to the following Appendix's:

- For OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, refer to: **Appendix A, "Install and Configure OS/2 Warp Server for e-business or Convenience Package for OS/2 Warp Server for e-business"**.

Installation of Client systems

In setting up your PCM test environment for OS/2 Warp Version 4, you need to install two client systems, one as LAN Requester #1, the second Remote Requester #2. In setting up your PCM test environment for Convenience Package for OS/2 Warp Version 4, you need to install two client systems as LAN Requester #1 and LAN Requester #2. For instructions on how to install and configure the client systems in the PCM testing environment, refer to the following Appendix's:

- For OS/2 Warp Version 4, refer to: **Appendix B, "Install and Configure OS/2 Warp Version 4"**.
- For Convenience Package for OS/2 Warp Version 4, refer to: **Appendix C, "Install and Configure Convenience Package for OS/2 Warp Version 4"**.

Chapter 4. Running and Verifying the Base Test Cases

This chapter explains how to run the base test cases. Use this information in the following sequence:

1. Record your configuration from the PCM HDW icon.
2. Select and run the base tests from the PCM TEST icon.
3. Run individual base tests, as required.
4. Create the results diskette.
5. Rerun any failed or missing tests as individual tests. See Chapter 8, "PCM Base Test Case Details" for information about the individual tests. Also, additional information is available from the PCM WEB site TIPS page.
6. Update the results diskette.
7. Continue to LAN testing. See Chapter 5, "Running and Verifying the Network Test Cases".
8. See Chapter 7, "Collecting and Submitting Test Results" for information about submitting test results.

Recording and Verifying Your Configuration

You must supply information about the system configuration being tested for either server or client compatibility. You can fill in this information after you run all the test cases. To record the information, do the following steps:

1. Double-click on the **PCM KIT** folder on the Desktop and then double-click on **PCM HDW**.
2. Click on **Update System Information** and complete each of the hardware information panels.
3. Click on **Continue** to display subsequent panels.
4. When complete, click on **Save and Exit**.

The hardware information is saved in c:\pcmlogs\machine.txt. If you need to change the information, rerun PCM HDW.

Selecting Base Test Cases

You run the base test cases at the additional server or at client 1. The base test GUI lets you select the tests you need to run. Several tests, however, might require initiation from the command line due to hardware configuration limitations. The instructions below take you through the steps for running the tests in the most automated sequence.

If your system fails any test, you can run each test individually by following the directions in Chapter 8, "PCM Base Test Case Details".

In the **PCM KIT** folder, double-click on the **PCM TEST** icon. The Test Selection & Control window is displayed.

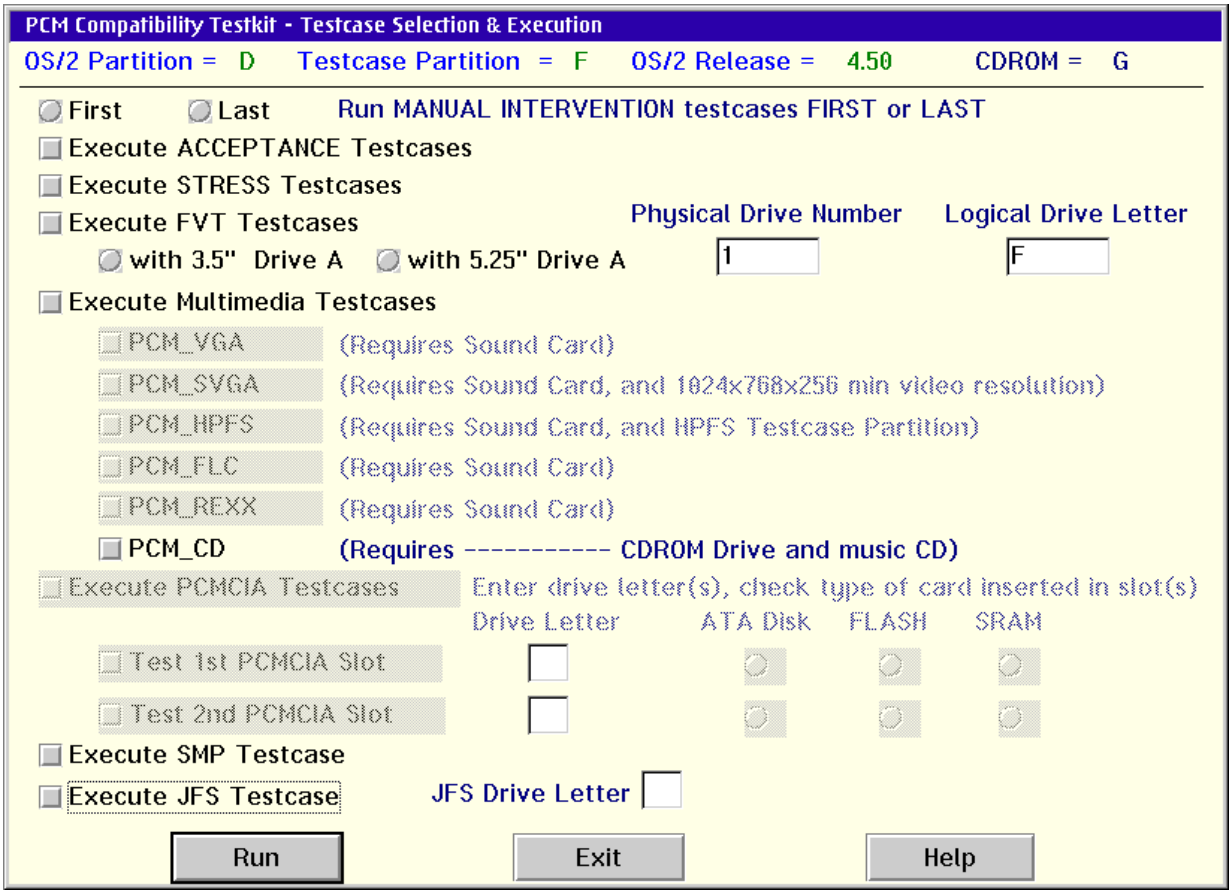

Figure 4. The Base Test GUI

Always run the selectable tests from this GUI, unless you are rerunning an individual test after a failure.

Click on **Help** if you need more information about the selection choices.

Click on **Run** to start running the selected the tests.

Click on **Exit** to leave the program without running any test cases.

The GUI lets you select the tests to run, and whether to run tests requiring user input first or last. Select **First** or **Last** to indicate when, within the testing, you want to run the test cases requiring user input. These tests run quickly, you should run them first.

A suggested sequence is:

1. Select and run the acceptance test cases, FVT test cases, the multimedia cases, and, if applicable to your system, PCMCIA and SMP. The acceptance and FVT tests require user input and run quickly. The multimedia test takes longer and requires user input at the completion of PCM_REXX.
2. When these tests are complete, use the GUI again to start the stress test, which takes a long time and requires no user input.
3. If your shipped system supports speech, run the speech test. The speech test must be run individually. See "Speech Recognition (SPEECH)" for instructions.
4. If your shipped system supports Advanced Power Management, run the APM test. The APM test must be run individually. See "Advanced Power Management Test (APM)" or "Advanced Power Management Test (APM) for Desktop Systems" for instructions.

Attention: Do not use the keyboard or the mouse while the tests are running. Wait until control is returned to you before opening or closing windows. After the tests requiring user input have completed, ignore other windows that seem to request input.

The system reboots between several of the tests. This is normal behaviour.

Running the Base Tests

This section tells what you need to run the tests, what you see on the screen, and how to respond when prompted for input. The section assumes you selected **FIRST** for the test cases requiring user input.

The tests are grouped by category. Each category may consist of several tests, started automatically when you select that category.

Acceptance Tests

Requirement Required on all systems

User Input Watch screen and respond at end of this sequence:

1. The initial test runs in the Logical Screen Group-1 window, and then the screen starts flashing multiple colors and characters.
2. Wait five minutes while the screen flashes, and then press Q to end the flashing.
3. No other user input is required.

Duration About 30 minutes for both the user input and automated tests.

Log file Enter **type d:\batch\pcmaccpt.sum** to check the log file.

Detailed description See Chapter 8, "PCM Base Test Case Details" for details.

Stress Tests

Requirement Required on all systems

Supplies required One blank diskette

User Input If prompted, insert the diskette in drive a: and press Enter.

Duration About 6 hours. You can run this test last and leave the system unattended until it completes.

Log file Enter **type d:\logm1\pcmmed01.sum** to check the log file.

Detailed description See "Stress Test (PCMMED01)" for details.

FVT Tests

Requirement Required on all systems

Information required
- Diskette size used by drive a:, 3.5" or 5.25"
- Physical drive number of any local drive
- Logical drive letter of any local drive

Supplies required One blank diskette

User Input Insert diskette when requested, check printer output.

1. Enlarge the window to see the questions on the screen.
2. Do not respond until prompted.
3. When prompted, follow the instructions on the screen to enter the keystrokes as requested.

Duration About 1 hour

Log file Enter **type d:\logf\fvtsect2.sum** to check the log file.

Detailed description See "FORMAT Utility Test (FORMAT)" for details.

Multimedia Tests

The multimedia tests are divided into individual tests for the various types of multimedia available.

Requirement Required on all systems shipped with either a sound card or a CD-ROM drive.

If you added a CD-ROM drive to the system, or used a CD-ROM drive connected to the parallel port to install OS/2, you must still install multimedia and run the multimedia PCM_CD test case, even if the CD-ROM drive is not part of the shipped configuration.

Note: The CDROM support cannot be removed from the Multimedia Configuration if OS/2 was installed from a CDROM drive. Once support is installed it cannot be removed by updates to config.sys or through selective un-install.

Test selection Use the following table to select the specific tests required:

Table 1. Selecting Multimedia Tests

Your system supports	Test to select	Required
VGA video, resolution **less than** 1024 × 768 × 256	PCM_VGA	Select this or PCM_SVGA
SVGA video, resolution at least 1024 × 768 × 256	PCM_SVGA	Select this or PCM_VGA
Always	PCM_FLC	Yes

Always	PCM_REXX	Yes
Regular CD-ROM drive	PCM_CD	Yes

User input None required

Supplies required Music CD (not a software CD)

User Input Yes, the PCM_REXX test requires user input to close windows when it completes.

Duration About 2 hours for all tests

Log files Each multimedia test has its own log file in the d:\results\mmepcm\svtraw directory.

Detailed description See "OS/2 Multimedia Tests" for details.

PCMCIA Tests

Requirement Required on all systems shipped with PCMCIA support

Information required For each slot, the drive letter, and the type of PCMCIA card used in that slot.

User Input None

Note: Some systems do not reboot with PCMCIA cards installed, or might leave the cards unusable they are installed while the system is rebooted. If this occurs with the system being tested, run PCMCIA tests from an OS/2 command line. See the directions in "PCMCIA".

Duration About 15 to 30 minutes depending on the storage capacity of the cards used.

Log file The log files are in the d:\pcmcia directory.

Detailed description See "PCMCIA" for details.

SMP Tests

Select this test only if the shipped system supports multiple processors, and Convenience Package for OS/2 Warp Server for e-business or OS/2 Warp Server for e-business

Requirement	Required for systems with Convenience Package for OS/2 Warp Server for e-business or OS/2 Warp Server for e-business software
User input	None
Duration	About five minutes
Log file	The log files are in the d:\smp directory.
Detailed description	See "SMP Verification Test" for details.

JFS Tests

Select this test only for OS/2 Warp Server for e-business

Requirement	Required for systems with OS/2 Warp Server for e-business software
User input	None
Duration	About 30 minutes
Log file	The logfile is in **d:\jfstest\jfstest.log**.
Detailed description	See "OS/2 Journaled File System Test (PCMJFS)" for details.

Chapter 5. Running and Verifying the Network Test Cases

This chapter explains how to run the network test cases. Use this information in the following sequence:

1. Select and run the network tests by double-clicking on the LAN TEST icon.
2. Run individual network tests, as required.
3. Update the results diskette. Be sure to use the same results diskette used earlier when running the base tests.
4. Rerun any failed or missing tests as individual tests, with the following exceptions:
   - ITLLS56 and ITLLS57 (these tests cannot be run individually and must be run on three test machines to exercise either the domain controller or the additional server)
   - ITLPEER (this test cannot be run individually and must be run on the additional server and client 2 systems to exercise client 1)
5. Update the results diskette.
6. Check to make sure all tests were run and passed.
7. See Chapter 7, "Collecting and Submitting Test Results" for information about submitting test results.

Running the Network Test Cases

To run the network tests, do the following on each of the four test machines simultaneously or sequentially within a short period of time (not exceeding two minutes).

1. Open the PCM Compatibility Testkit Version 4.6 folder.
2. Double-click on LAN TEST. The LAN Testcase Selection & Execution window is displayed as shown in Figure 5.
   The **Workstation currently configured as:** field indicates which machine the tests are being started from. For example, in Figure 5, the test cases are being started from client 2.

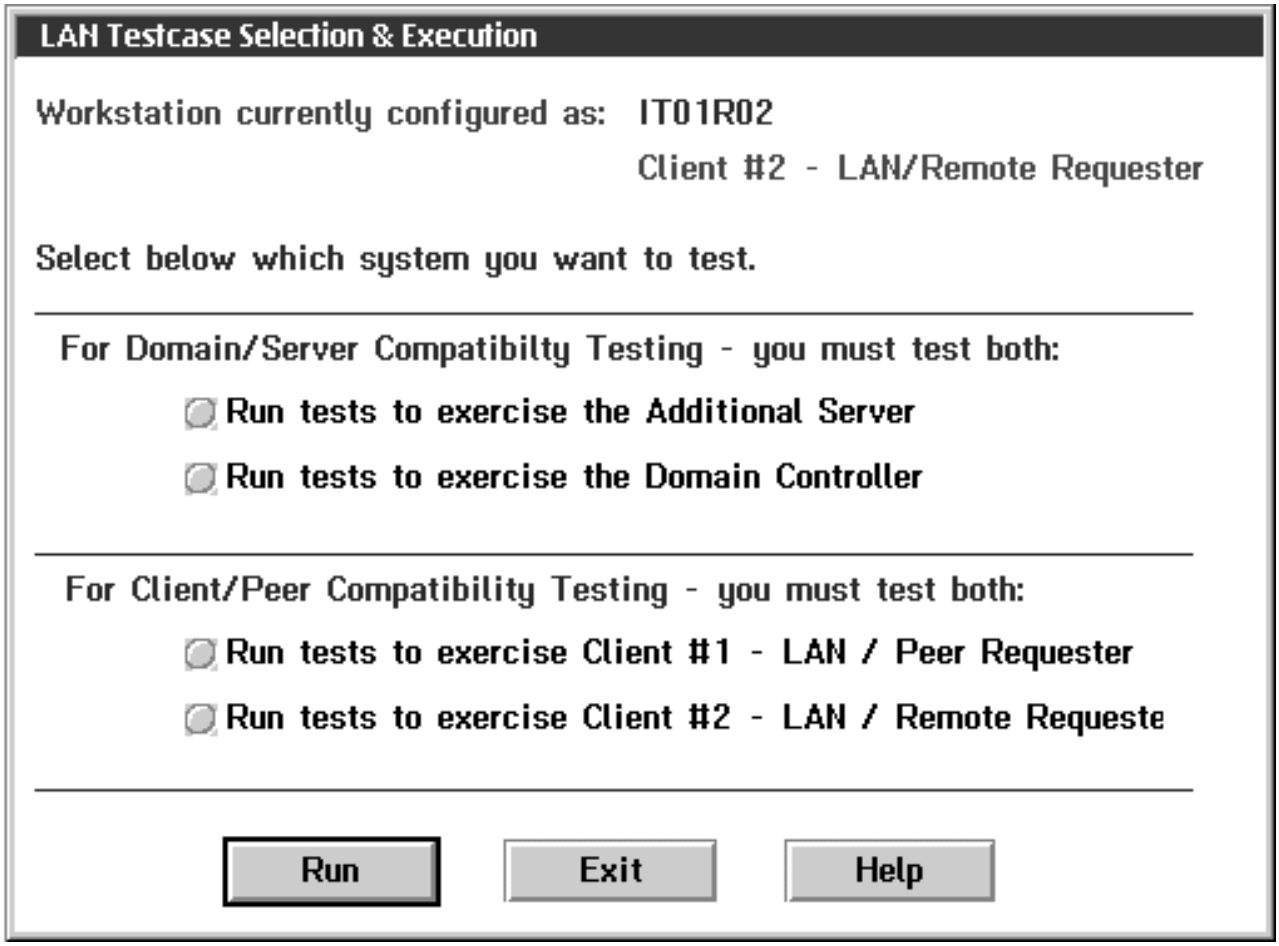

Figure 5. LAN Testcase Selection and Execution

3. Select one of the following testing options:
   - Run tests to exercise the Additional Server
   - Run tests to exercise the Domain Controller
   - Run tests to exercise Client #1 - LAN/Peer Requester
   - Run tests to exercise Client #2 - LAN/Remote Requester
4. Click on **Run**.

   The test cases will begin running. Information is displayed in an OS/2 window on each of the machines as the test cases are processed.

   Attention: Do not use the keyboard or mouse while the tests are running.

   When each of the test cases completes, the results are copied to a log file on the machine where the test was started in addition to a log file on the appropriate target machine, depending on which testing option you selected. The log files are located on the boot drive in the following directories:

   \d01logs On the domain controller

   \s01logs On the additional server

   \r01logs On client 1

   \r02logs On client 2

The log files are named *testcase.xxx*, where *testcase* represents the name of the individual test case (for example, itlls57, itlftp01, and so on) and *xxx* represents the machine where the test case was run from as follows:

File Extension	Test Case Run From
D01	Domain controller
S01	Additional server
R01	Client 1
R02	Client 2

If your system fails any test, you can rerun the test individually following the steps in Chapter 9, "LAN Test Case Details".

Running the Manual Intervention Network Test Cases

The following test cases must be run individually on the domain controller.

- "OS/2 Dump Test Case (ITLDUMP)"
- "Personal Safe and Sound (ITLPSNS)"
- "SystemView Raid Information (ITLRAID)"

The following test cases must be run individually on the additional server.

- "Group Management (ITLSV00)"
- "Monitor Remote System's Resources (ITLSV06)"
- "Hardware Inventory (ITLSV07)"
- "Software Inventory (ITLSV08)"
- "System Information Tool (ITLSV11)"
- "Print Service Facilities (ITLPSF00)"

For detailed information describing these test cases, see the sections listed above.

For an overview of which test cases need to be run to test the different systems and which systems those test cases are run from, see Appendix E, "LAN Test Case Groupings, Execution, and Output".

Chapter 6. Using Your System in the Stable Test Environment

This section explains how to substitute your test system into the stable four-machine test environment created in Chapter 3, "Building the Test Environment", to test it in each role as domain controller, additional server, client 1, and client 2.

For a review of the role each system plays in the test environment, refer to Chapter 3, "Building the Test Environment".

Server Testing

Do the server testing the in the following order:

1. Test your system as additional server.
2. Test your system as domain controller.

Testing Your System as the Additional Server

This is the state of the machines in your test environment:

- Original domain controller is powered on.
- Original additional server is powered on and cabled into the network.
- Original client 1 and client 2 are powered on.
- Test system is powered off, not yet configured, but cabled into the network.

To exercise your test system as an additional server:

1. Power off or remove the original additional server from the network.
2. If the original server is not powered off or disconnected from the network, "duplicate netbios name" errors create problems during the installation.
3. Power on your test system and follow the appropriate instructions to prepare your test system for the role of additional server.
   - For OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, see: **Appendix A, "Install and Configure OS/2 Warp Server for e-business or Convenience Package for OS/2 Warp Server for e-business"**.
   - Be sure to select the option that formats the hard drive during installation.
   - On each of the four systems that are powered on, use the PCM TEST and LAN TEST GUIs to run the tests for the additional server as described in:
   - Chapter 4, "Running and Verifying the Base Test Cases".
   - Chapter 5, "Running and Verifying the Network Test Cases".
4. After all the tests are complete, collect the results as described in Chapter 7, "Collecting and Submitting Test Results". Review and analyze any problems seen in the test report.
5. Shut down and power off the test system currently playing the role of additional server.
6. Power on the original additional server.
7. Issue the **resync** command on the original additional server.

Testing Your System as the Domain Controller

This is the state of the machines in your test environment:

- Original domain controller is powered on and cabled into the network.
- Original additional server is powered on and cabled into the network.
- Original client 1 and client 2 are powered on and cabled into the network.
- Test system is powered off, cabled into the network, and currently configured for role of domain controller.

To exercise your test system as a domain controller:

1. Shut down and power off all four systems in the original test environment.
   If the original domain controller is not powered off or disconnected from the network, "duplicate netbios name" errors create problems during the installation.
   You may leave the original domain controller attached to the network if it remains powered off while you test the new system.
2. Power on your test system and follow the appropriate instructions to prepare your test system for the role of domain controller.
   - For OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, see: **Appendix A, "Install and Configure OS/2 Warp Server for e-business or Convenience Package for OS/2 Warp Server for e-business"**
   - Be sure to select the option that formats the hard drive during installation.
3. After the new domain controller is ready, power on the original additional server.
4. From an OS/2 command prompt on the additional server, issue the **resync** command from the \itlutil directory on the server.
5. On the additional server, run the **lansetup** command file in the \os2 directory. This command redefines the shared resources on the server to the domain that were lost when the original domain controller was replaced with the system being tested.
6. The system under test is now operating as the environment's domain controller.
7. Power on both client systems.
8. On each of the four systems that are powered on, use the LAN TEST GUI to run the test cases for the domain controller as described in:
   - Chapter 5, "Running and Verifying the Network Test Cases".
9. After all the tests are complete, collect the results as described in Chapter 7, "Collecting and Submitting Test Results". Review and analyze any problems seen in the test report.
10. Do problem resolution and rerun tests as required.
11. After all the appropriate tests have passed, shut down and power off all four systems.

Client Testing

Do the client testing the in the following order:

1. Test your system as client 1.
2. Test your system as client 2.

Testing Your System as Client 1

This is the state of the machines in your test environment:

- Original domain controller is powered on and cabled into the network.
- Original additional server is powered on and cabled into the network.
- Original client 1 and client 2 systems are powered on and cabled into the network.
- Test system is powered off, not yet configured, but cabled to the network.

To exercise your test system as client 1:

1. Shut down client 1 and power it off.
   If the original client 1 is not powered off or disconnected from the network, "duplicate netbios name" errors create problems during the installation.
2. Power on your test system and follow the appropriate instructions to prepare your test system for the role of client 1.
   - For OS/2 Warp Version 4, see: Appendix B, "Install and Configure OS/2 Warp Version 4".
- For Convenience Package for OS/2 Warp Version 4, see: **Appendix C, "Install and Configure Convenience Package for OS/2 Warp Version 4"**.
   - Be sure to select the option that formats the hard drive during installation.
3. On each of the four systems that are powered on, use the PCM TEST and LAN TEST GUIs to run the tests for client 1 as described in:
   - Chapter 4, "Running and Verifying the Base Test Cases".
   - Chapter 5, "Running and Verifying the Network Test Cases".
4. After all the tests have completed, collect the test results. Review and analyze any problems seen in the test report.
5. When all appropriate tests have passed, shut down and power off client 1 (your test system).
6. Power on the original client 1.

Testing Your System as Client 2

This is the state of the machines in your test environment:

- Original domain controller is powered on and cabled into the network.
- Original additional server is powered on and cabled into the network.
- Original client 1 and client 2 systems are powered on and cabled into the network.
- Test system is powered off, cabled into the network, and currently configured for role of client 1.

To exercise your test system as client 2:

1. Shut down client 2 and power it off.
   If the original client 2 is not powered off or disconnected from the network, "duplicate netbios name" errors create problems during the installation.
2. Power on your test system and follow the appropriate instructions to prepare your test system for the role of client 2.
   - For OS/2 Warp Version 4, see: Appendix B, "Install and Configure OS/2 Warp Version 4".
- For Convenience Package for OS/2 Warp Version 4, see: **Appendix C, "Install and Configure Convenience Package for OS/2 Warp Version 4"**.
   - Be sure to select the option that formats the hard drive during installation.
3. On each of the four systems that are powered on, use the LAN TEST GUI to run the tests for client 2 as described in:

- Chapter 5, "Running and Verifying the Network Test Cases".

4. After all the tests have completed, collect the test results. Review and analyze any problems seen in the test report.
5. When all appropriate tests have passed, shut down and power off client 2 (your test system).
6. Power on the original client 2.

Chapter 7. Collecting and Submitting Test Results

This chapter explains how to collect the results of the tests and prepare them for submission to the Program Office.

When you have completed the tests, you are ready to collect the results. You can collect results after all the tests or after rerunning an individual test. The results program collects the results of the tests, analyzes the results, and stores the results on diskettes; one for server tests, and one for client tests.

System Hardware Information

You must complete entering your system's hardware configuration information before you collect the test results. If the information is not complete, the System Hardware Configuration (SNF001) test shows an error in the results.

You can enter the system hardware information either before or after you do the testing. To start or update the hardware information, double-click on the **PCM KIT** folder on your Desktop and then double-click on **PCM HDW**. The System Hardware Information screen is displayed as shown in Figure 6.

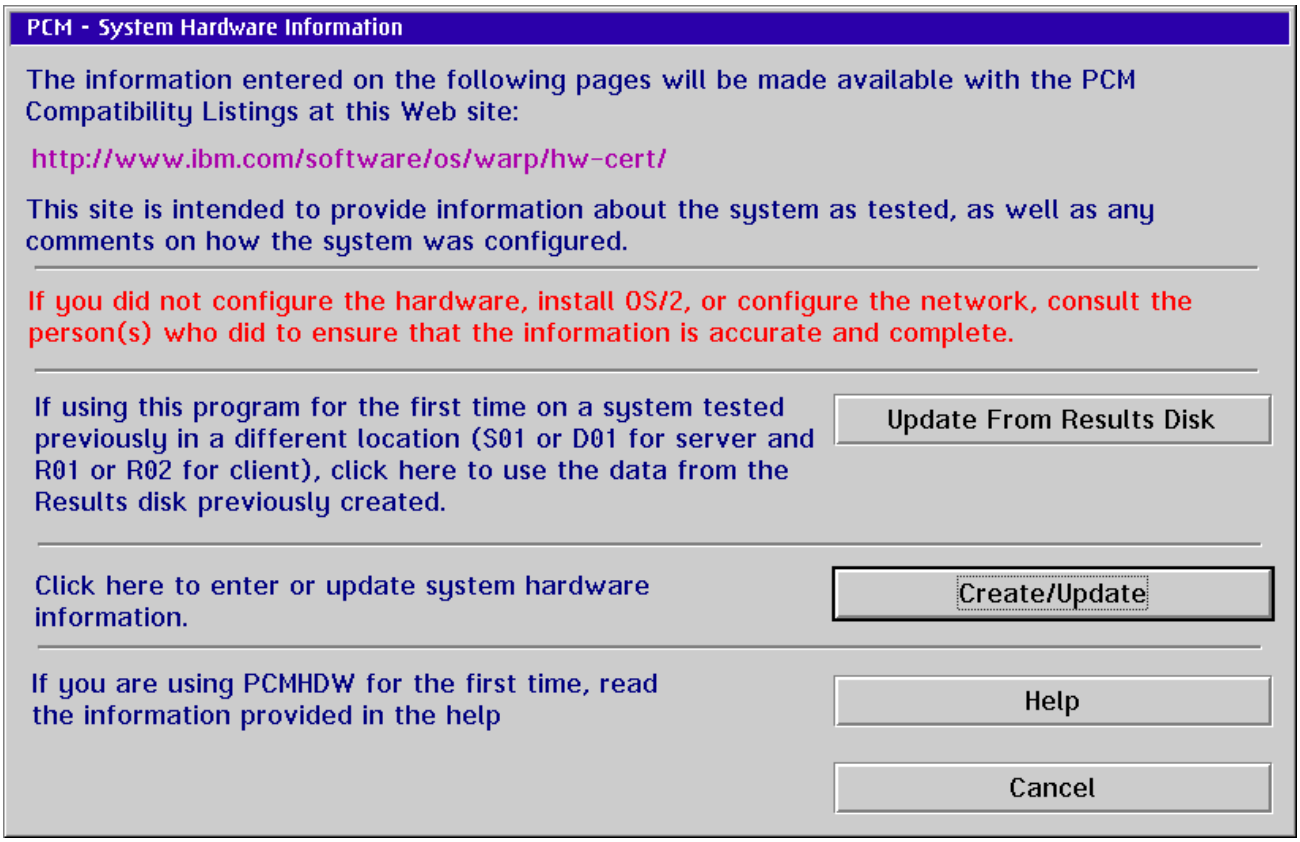

Figure 6. System Hardware Information

Click on **Update System Information** to enter new information or to update existing information. Appendix D, "Hardware Information Components" shows each of the five hardware information panels. You can use this information as a reference to collect the details that you will need before completing your system's hardware configuration information.

Collecting Test Results

On the Desktop, double-click on the **PCM KIT** folder, and then double-click on **PCM RSLT**, which opens the PCM Compatibility Testkit - Results Processing window as shown in Figure 7.

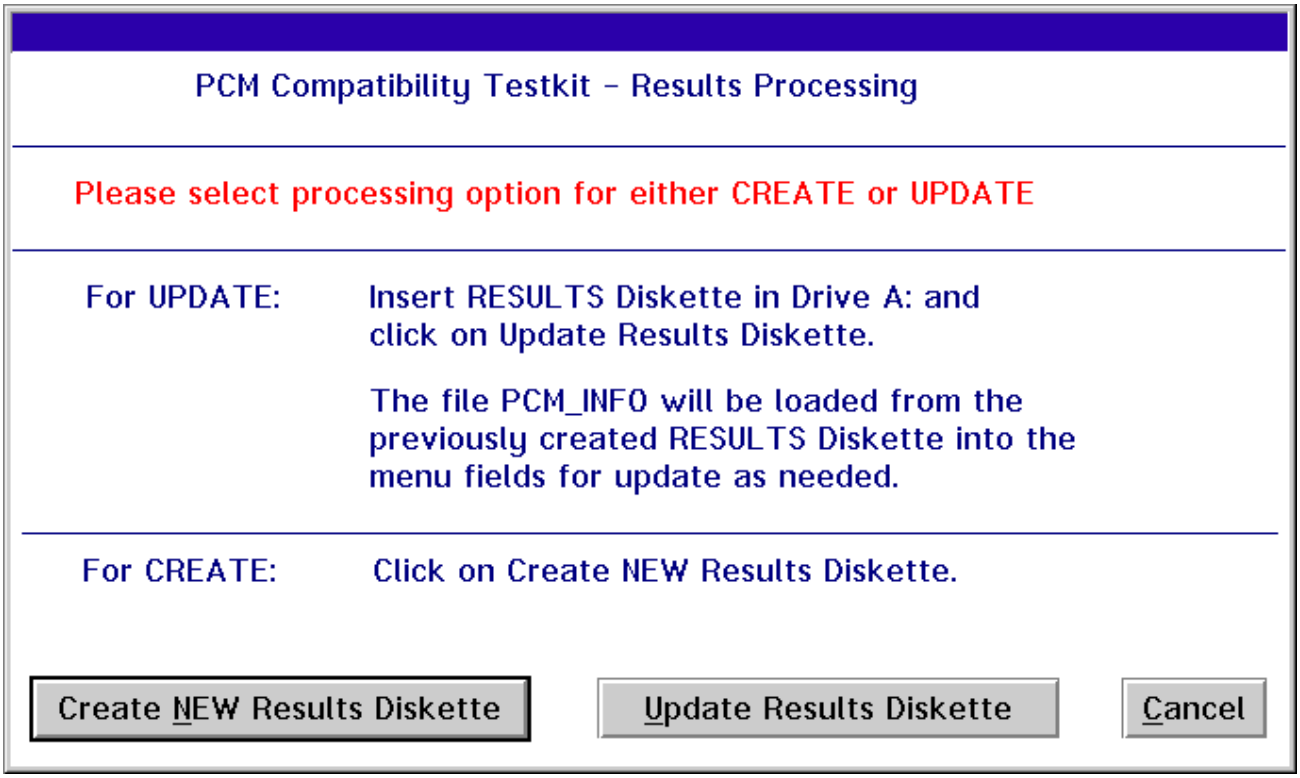

Figure 7. Results Processing Window

Creating a New Results Diskette

To create a new results diskette:

1. Click on Create NEW Results Diskette.
2. Label a blank, formatted diskette. The diskette label should contain the following information. Print or type the label clearly.
   - Manufacturer of the system tested
   - Model name or number of the system tested
   - Server test results or client test results
   - Tester's name (can be different from the contact person)
   - Tester's Phone and Fax numbers
   - Date
3. Insert the blank diskette.
   You must provide identification on the diskette about your product and identify the person who should be contacted by the Program Office.
4. Fill in the information in the Results Processing window, which is shown in Figure 8.

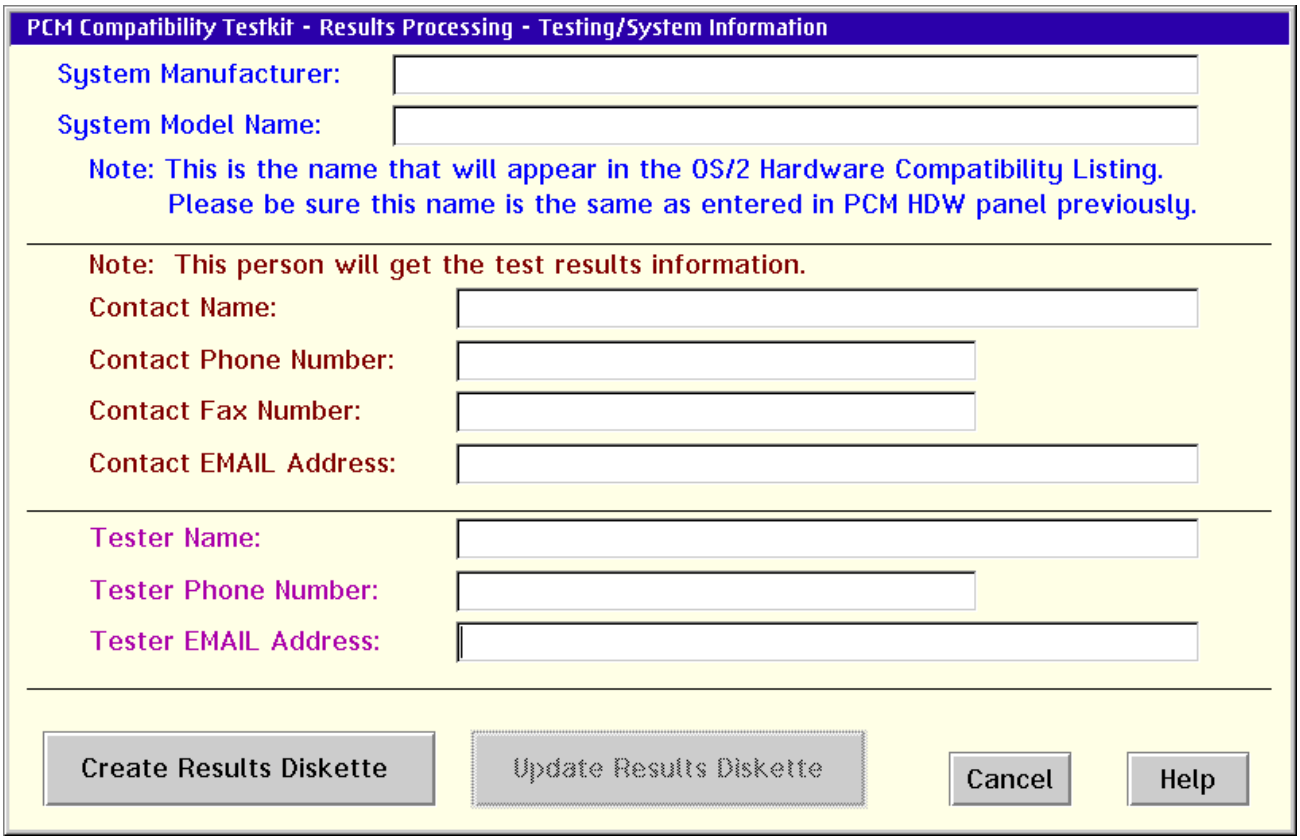

Figure 8. Results Processing

Attention: Follow these instructions exactly to make sure your product is listed correctly. The information you submit is used exactly as you entered it.

- The system manufacturer and model name used for the Test Report are published in the Web compatibility list. These names appear exactly the way you entered them. Please check the names for accuracy because the names cannot be altered after they are published.
- Do not use internal product code names as part of the system model name. Use the model name that the system is marketed as.
- The contact person receives the reports provided by the program. If you are tester, but want the report to go to another person at your installation, provide that person's name as the contact name.

Running the Create Results Program

Click on **Create Results Diskette** to have the program analyze the files created by the tests and build the results files on the diskette.

Select the appropriate operating system and whether you are preparing results for a server or client system in the panel shown in Figure 9.

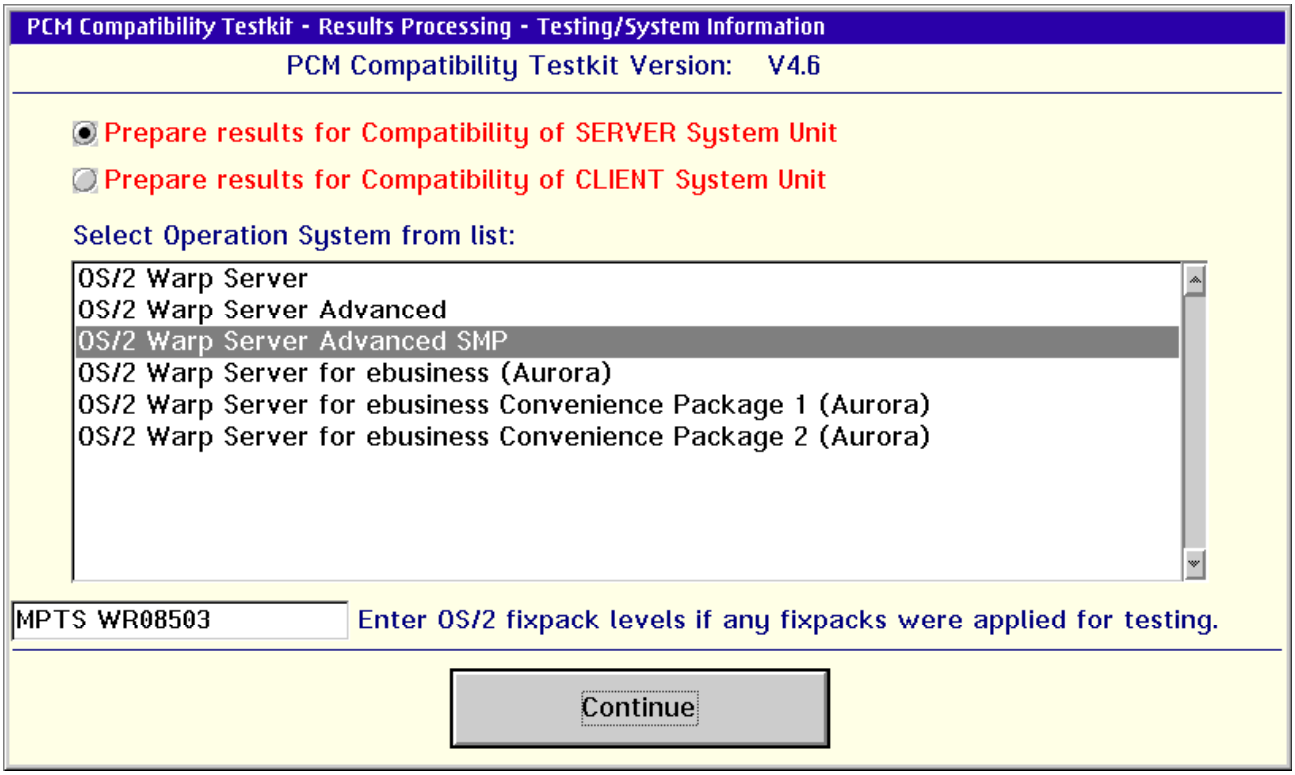

Figure 9. Results Processing

Click on **Continue** and wait while the program writes pcmscore.txt on the results diskette.

The program creates the following files:

- testbad on diskette, if any tests fail or are missing
- pmscore.txt on the results diskette
- c:\pcmlogs\pcmscore.txt on your hard disk

Updating a Results Diskette

To update a results diskette:

1. On the Desktop, double-click on the PCM KIT folder, and then double-click on PCM RSLT, which opens the PCM Compatibility Testkit - Results Processing window as shown in Figure 5.
2. Click on **Update Results Diskette**.
3. Insert the diskette you want to update.

The existing information from the pcm_info.txt file on the diskette is displayed. You can update the information if necessary.

Checking Your Results

Check your results as follows:

1. Review pcmscore.txt for any tests that are marked "fail" or "missing".
2. If a test is marked "fail", examine the testbad file on the results diskette. The testbad file gives more detail about which test to rerun.
3. Rerun the failed test:
   - Rerun base system tests either from the PCM TEST icon, or as described in Chapter 4, "Running and Verifying the Base Test Cases".
   - Rerun network tests either from the LAN TEST icon, or as described in Chapter 5, "Running and Verifying the Network Test Cases".
4. Update the results diskette; click on PCM RESULTS.
5. Recheck the results in pcmscore.txt
6. When all the required tests are marked "PASS", make a copy of the diskettes for your records.

Submitting Test Results Diskettes

Do not submit your test results until all the tests required for your hardware configuration are marked "PASS" in pcmscore.txt, unless instructed to do so by the Program Office.

If you tried several times to complete a test successfully, refer to Appendix F, "Troubleshooting" for help. Also, you can download tips files from the PCM Compatibility Program WEB site for additional information. If this help is not sufficient, use the Problem Report Form on the Web to request help from the Program Office.

Refer to the PCM Web pages to get utilities and detailed instructions for submitting test results via EMAIL. If you are sending the diskette through the mail, enclose a business card or other identification.

Chapter 8. PCM Base Test Case Details

Use the instructions in this chapter to run those tests that must be run individually or to rerun individual tests.

The following information is included, where appropriate, for each test:

- The name of the test, or part of the test
- A description of the test
- The steps to run the test
- The test results
- The test duration

Base Test Summary

The following table lists the tests in the base testkit, where to get the details about each test case, and the approximate run time.

Table 2. Summary of Base Tests

Test	Description	Approximate Run Time
SNF001	OS/2 System Installation and Initialization on page 40	60 Minutes
SNF002	File I/O Using Semaphores Test on page 41	10 Minutes
SNF006	Code Page Switching (VIDEO/PRINTER) Test on page 41	5 Minutes
SNF007	Shared Segments Test on page 42	5 Minutes
SNFBPB	High Performance File System Test on page 42	5 Minutes
SNFREXX	Batch Processing and REXX Calls on page 42	3 Minutes
SNFMVDM	Automated Tests to Stress the Base System on page 44	15 Minutes
SNFWIN	Your DOS/Windows Applications Test on page 44	30 Minutes
PCMMED01	Stress Test on page 45	6 Hours
KBD	Keyboard Device Driver Test on page 46	5 Minutes
FVTDISK	Disk Multitasking Test on page 47	20 Minutes

FORMAT	Format Utility Test on page 48	15 Minutes
TIMERDD	Timer Device Driver Test on page 48	10 Minutes
PRINTDD	Printer Device Driver Test on page 49	20 Minutes
PCM_VGA PCM_SVGA PCM_HPFS PCM_CD PCM_FLC PCM_REXX	OS/2 Multimedia Test on page 50	10-20 Minutes Each
SNFAPM	APM Test on page 53	60 Minutes
SNFPCM	PCMCIA TEST on page 55	30 Minutes
SNFSMP	OS/2 for SMP Test on page 56	2 Minutes
SPEECH	Voice Navigation on page 57	30 Minutes
JFSTEST	Test JFS File System on page 52	30 Minutes

System Hardware Configuration (SNF001)

You must include a definition of your hardware in the material submitted to the Program Office on the results diskette. The RESULTS process checks for this information. An error will be posted for Test # 1.

Creating the Hardware Information

Double-click on the PCM KIT icon, and then double-click on the PCM HDW icon.

The System Hardware Information window is displayed. Click on **Update System Information** and complete each of the hardware information component. (See Appendix D, "Hardware Information Components" for a representation of each panel.)

When complete, click on **Save and Exit**. After you complete a page and continue to the next page or have saved and exited, you can modify the entries by restarting PCM HDW. You can then update the displayed information.

Results

The machine.txt file is created and saved in the \snf001 subdirectory for all the system configuration data.

You can enter this information before or after running any tests. However, it must be created before you collect your results as described in Chapter 7, "Collecting and Submitting Test Results".

File I/O Using Semaphores (SNF002)

This is a test of semaphores, video I/O, file I/O, and interprocess communications. It also tests for semaphores output from the kernel test.

SNF002 Test Steps

1. At an OS/2 command line, change to the d: drive.
2. Type **cd batch** and press Enter.
3. Type **SNF002** and press Enter.
4. The test displays:
   ```
   ------------------------------------
   Scanning output log \ACCEPT\CORE\SNF002.LOG for "PASS"
   ------------------------------------
   There should be 59 entries
   D:\ACCEPT\CORE\SNF002.LOG: 59
   ```
5. You are returned to the test drive prompt.

Results of SNF002

Check the d:\accept\core\snf002.log file. If there are not 59 entries, check the log to see which files did not pass.

If any file shows "FAIL", shut down and reboot the system; then, rerun the entire test.

Run Time

The test takes approximately five minutes.

Code Page Switching (Video/Printer) (SNF006)

This is a comprehensive test of objects within folders, and the display of ASCII codes with a range of different background colors.

Check the Desktop for the printer icon. A printer needs to be installed for this test even if no printer is attached to the system.

SNF006 Test Steps

1. Open an OS/2 Full Screen session and change to the d: drive.
2. Type **cd batch** and press Enter.
3. Type **snf006** and press Enter.
4. The test displays all the ASCII characters and begins to change colors.
5. The test returns to the d:\batch directory at completion.

Results of SNF006

The test results are stored in the following files in the d:\nlscpa directory:

- fontd
- printd
- cpalog
- switch_6

Each file ends with `PASS`, `SUCCESSFUL`, or `FAIL`.

Note: If this test is run in SVGA mode, the cpalog file will show up to 39 lines of: `Font_Demon found wrong code page`, and will end with CPALOG FAILED. This is a successful run for SVGA.

Run Time

Approximately five minutes.

Shared Segments Test (SNF007)

This is a test of multiple memory allocation calls

SNF007 Test Steps

1. At an OS/2 command line, change to the d: drive.
2. Type **cd batch** and press Enter.
3. Type **snf007** and press Enter.
4. The test runs and returns to the test drive prompt.

Results of SNF007

Check the d:\loga\switch_7 file for `PASS` or `FAIL` information for:

- M32SHR
- NAMESHR
- GIVESHR
- GETSHR

Run Time

Approximately 10 minutes.

High Performance File System Test (SNFBPB)

This is a test of the HPFS file system.

SNFBPB Test Steps

1. At an OS/2 command prompt, type **chkdsk c: /f: 3**. Verify that there are no disk errors for each HPFS partition before starting the test. The test might fail otherwise.
2. Change to the d: drive.
3. Type **cd batch** and press Enter.
4. Type **SNFBPB** and press Enter.

   Note: The snfbpb.cmd command looks at c:, d:, e: and f: for the first HPFS partition it finds. If all these partitions are FAT, the test ends and OS/2 returns to the d:\batch subdirectory.

5. If an HPFS partition is found, the test verifies that the directory displays long file names, because HPFS allows file names up to 256 characters.
6. The test ends and returns to an OS/2 command line.

Results of SNFBPB

The batch\snfbpb_l log file indicates `PASS`, `FAIL`, or `NO HPFS`.

Run Time

Approximately five minutes.

Batch Processing and REXX Calls (SNFREXX)

This test verifies the REXX language with OS/2.

SNFREXX Test Steps

1. At the OS/2 command line, change to the d: drive.
2. Type **cd batch** and press Enter.
3. Type **snfrexx** and press Enter.
4. Two system errors (sys 1041) are displayed during the test. They are designed to fail, and do not indicate test failure.
5. You are returned to the OS/2 command line.

Results of SNFREXX

1. At test end, a message is displayed: `scanning output log REXX_LOG for "OK"`
2. `d:\rexx\rexx_log: 71` is displayed.

The rexx_log file is in the \rexx directory. If there are not 71 entries, type **type rexx_log |more** and inspect each command line for `BAD`.

Run Time

Approximately three minutes.

Automated VDM Test (SNFMVDM)

This is a collection of small tests. You must have a mouse attached to the system.

SNFMVDM Test Process

1. At an OS/2 command line, change to the d: drive.
2. Type **cd batch** and press Enter.
3. Type **snfmvdm** and press Enter.
4. Do not touch the keyboard or mouse until Logical Screen Group 1 is visible on the Desktop with flashing colors and characters.

   Note: The box with the flashing colors appears once on the Desktop, goes away momentarily, and then appears again. This might happen rather quickly, depending upon the speed of the machine.

5. After the second window of flashing colors appears for a full five minutes, press Q to end the video part of the test.
6. The test ends, the window closes, and you are returned to the OS/2 command line.

Results of SNFMVDM

At the end of the test, the message is displayed:

```
Checking output logs under \vdm for "PASS"
There should be 6 files with PASS
```

The results files in the \vdm directory are:

- SWITCH_V
- VDM1 (partial is OK)
- VVTATXM4
- FLT018
- MAT015
- CTTCLOCK

Run Time

Approximately 15 minutes.

Your DOS/Windows Applications Test (SNFWIN)

This is a test of your Windows 3.1 and 3.11 compatible applications.

To be able to run this test, you must first load your Windows applications in the d:\window directory.

Windows applications are not provided with this test package. You must provide your own DOS/Windows applications.

SNFWIN Test Steps

There are two ways to get a Windows environment. Do one of the following:

- Select WIN-OS/2 Full Screen in the Command Prompts folder, which is located in the OS/2 System folder.
- Type **winos2** from an OS/2 full screen session.

Either method results in a Windows Program Manager screen.

Do the following steps:

1. Select **File** from the Program Manager action bar.
2. Select **Run** from the pull-down menu. (Select **Exit Win-OS/2** to return to an OS/2 session.)
3. Type the name of the Windows program you want to run and press Enter.
4. (If you press Ctrl+Esc, the Task List window is displayed where you can select **Desktop** to return to an OS/2 session.)

Results of SNFWIN

Your Windows application should run without errors.

Because this test is visually verified by the tester, no specific output files are generated.

After completing this test you will need to modify the log file, c:\pcmlog\snfwin.txt with the results.

You also need to add the applications and the version that was used in the testing to this log.

Run Time

The run time depends upon your applications.

Stress Test (PCMMED01)

This set of tests collectively tests the major functions of the OS/2 operating system in an environment that introduces an element of demand by dynamically starting and ending tests while other tests are permitted to execute over a period of time.

This test runs for approximately six hours. After you start this test, the test systems should be left alone until the test completes. These tests might fail if there is other activity on the system while these tests are running or if the system has not been shut down and restarted prior to this test.

PCMMED01 Stress Test Steps

1. Shut down and reboot the system.
2. After restarting, the PCM TEST screen is displayed.
3. Press Alt+Esc to go back to the Desktop to let the system open completely before going to the PCM TEST session to start test cases. This should be done every time the system is restarted.
4. At an OS/2 command prompt, type **d:\log** and press Enter.
5. Type **run** and press Enter. (The PCMMED01 test script is run.)
6. After a few moments, the screen clears and then displays three bars.

7. Insert a blank diskette and press any key to continue.

   Note: Press Ctrl+C to terminate the test here if you do not want to continue.

8. When the stress test is running, numerous parallel processes will be executing at the same time.
9. At test completion you are returned to an OS/2 full screen session or to the Desktop.

Results of PCMMED01

Errors encountered that prevent test completion as well as errors reported in the summary file could indicate test failure.

At completion time, go to an OS/2 command prompt and change to the d:\log directory. Type **type pcmmed01.sum** and press Enter.

After successful execution of this stress test, the last line of the summary file, pcmmed01.sum, should reflect the following:

PCMMED01 PASS 68 FAIL 0 PARTIAL 0 MISSING 0

In some cases the dswitchm or cube files will report a <PARTIAL>. This is acceptable; your passing count will be one or two less. The <PARTIAL> is caused if the switcher script stops the test before completion.

Note: If partials are detected other than in dswitchm or cube, rerun the individual testcase.exe with the same parameters as used in PCMMED01. Then run strlog.cmd to update the summary file.

Rerunning the Stress Test

If you do not achieve the desired test results described above, do one of the following:

- Make certain the test system does not have other activity while running the stress test.
- Rerun the stress test.
- Reload the stress tests and rerun the stress test.
- Refer to the STRESS HELP file on the Web Tips page for help solving individual file failures, or refer to the data in the document on the bulletin board information.

Run Time

The stress test takes approximately six hours.

Keyboard Device Driver Tests (KBD)

These tests exercise the USB keyboard and non-USB keyboard device driver.

KBD Test Steps

1. Open an OS/2 window session.

   Note: The testcase should not be run in full screen mode.

2. Enlarge the OS/2 window so that you can see the questions on the screen as they are presented.
3. Do not enter any keystrokes until prompted.

4. At an OS/2 command prompt, change to the \kbd directory on the d: drive.
5. At the command prompt, type:
   vio.cmd
6. Follow the instructions on the display to select the keyboard type and enter the keystrokes when prompted.
7. When the test is complete, you are returned to d:\kbd directory.

Results of KBD

The test writes its results in the following log files:

- d:\kbd\kbd.log for standard keyboard
- d:\kbd\kbd1.log and d:\kbd\kbd2.log for USB keyboard

To determine if the tests were successful, search the file for the status indicators.

To verify that the vio.cmd test for standard keyboard was successful, type:

```
grep "STATUS KBD" kbd.log
```

The output should be similar to the following:

```
STATUS .... RUN 35....PASS 35...FAIL 0...AUTOFAIL 0
```

To verify that the vio.cmd test for USB keyboard was successful, type:

```
grep "STATUS KBD" kbd1.log
grep "STATUS KBD" kbd2.log
```

The output should be similar to the following:

```
STATUS .... RUN 35....PASS 35...FAIL 0...AUTOFAIL 0
```

Run Time

The total run time for the KBD test is approximately 5 minutes.

Disk Multitasking Test (FVTDISK)

This test exercises the file system's use of drive d:.

FVTDISK Steps

From an OS/2 command prompt, change to the \cmd directory, type **fvtdisk** and press Enter.

Note:
- All the parameters for FVTDISK are in fvtdisk.cmd
- The defaults for FVTDISK are logical drive c: when running FVT from the PCM TEST icon. These are changed automatically to the values entered on the menu.

Results of FVTDISK

FVTDISK creates log files named d:\logf\dasdstd1.log and d:\logf\dasdstd2.log.

Run Time

Approximately 15 minutes.

FORMAT Utility Test (FORMAT)

This test verifies the FORMAT function for various diskette types.

The FORMAT utility tests run both the OS/2 .cmd test cases and the DOS .bat test cases.

Note: This test program can test both 5.25-inch and 3.5-inch diskettes.

FORMAT Test Steps

1. Shut down and reboot the system.
2. The tests assume that the 1.44 MB or the 1.2 MB drive is the a: drive. If your configuration is different, edit the .inp file and change the drive letter on both the command line and FTEST line of the input files.
3. Open an OS/2 full screen session (change to the PCM TEST window if active).
4. Place a blank diskette in the a: drive.
5. If drive a: is 1.44 MB diskette drive then:
   - Type **cd format** and press Enter.
   - Type **tst1_44.cmd** and press Enter.
6. If drive a: is 1.2 MB diskette drive then:
   - Type **cd format** and press Enter.
   - Type **tst1_2.cmd** and press Enter.

Results of Format

The output .log files are scanned using grep.exe to look for the STATUS lines to provide summary PASS/FAIL status. At the end of each .log file, a summary status is presented showing the number of variations run, variations pass, and variations fail.

Change to the d:\logf directory.

- Type type flop144.log or type flop525.log.
- Type type dsktrslt.log.

Run Time

Approximately 20 minutes for each drive media.

Timer Device Driver Test (TIMERDD)

The timer device driver consists of one testcase:

- DH calls functions provided in the timex1.sys to test DevHlp_SetTimer, DevHlp_ResetTimer, and DevHlp_TickCount at task and interrupt time. This test contains 18 variations.

Attention: If your test system is connected to a network, some tests might not be successful. For example, you might notice some timer handlers between 18 through 25 are not set. This is acceptable. There can be

up to 10 timer handlers that may not be set and not affect OS/2 compatibility. However, if you have more than 10 timer handlers not set, it might be necessary to shut down the other processes and rerun the test.

TIMERDD Test Steps

1. At an OS/2 command line, type **cd timerdd** and press Enter.
2. Type **timer** and press Enter.
3. Control is returned to the d:\timerdd directory.

Results of TIMERDD

DH test results are stored in the timerdd\dh\dh directory.

Type **type dh.log |more** and press Enter.

Look at each file for each of the 18 variations to determine success or failure. They will not run consecutively.

Run Time

Approximately five minutes for the dh.exe test.

Printer Device Driver Test (PRINTDD)

This is a test for printer device drivers to the parallel ports LPT1, LPT2, or LPT3. You can test these ports individually or collectively.

PRINTDD Test Steps

Connect a printer to the LPT ports you want to test.

OS/2 Full Screen Printer Testing

1. Open an OS/2 full screen session.
2. Change to the \printdd directory on the d: drive
   - To test LPT1 only, type **print1.cmd** and press Enter. This test is required.
   - To test LPT2 only, type **print2.cmd** and press Enter. This test is optional.
   - To test LPT3 only, type **print3.cmd** and press Enter. This test is optional.
   - To test LPT1 and LPT2, type **print1_2.cmd** and press Enter. This test is optional.
   - To test LPT1 and LPT3, type **print1_3.cmd** and press Enter. This test is optional.
   - To test LPT2 and LPT3, type **print2_3.cmd** and press Enter. This test is optional.
   - To test LPT1, LPT2, and LPT3, type **printall.cmd** and press Enter. This test is optional.
3. At test end, control is returned to the OS/2 full screen session.

DOS Printer Testing

1. Open a DOS full screen session.
2. Change to the \printdd directory on the d: drive.

- To test LPT1 only, type **print1.bat** and press Enter. This test is required.
- To test LPT2 only, type **print2.bat** and press Enter. This test is optional.
- To test LPT3 only, type **print3.bat** and press Enter. This test is optional.
- To test LPT1 and LPT2, type **print1_2.bat** and press Enter. This test is optional.
- To test LPT1 and LPT3, type **print1_3.bat** and press Enter. This test is optional.
- To test LPT2 and LPT3, type **print2_3.bat** and press Enter. This test is optional.
- To test LPT1, LPT2 and LPT3, type **printall.bat** and press Enter. This test is optional.

3. At test end, press Ctrl+Esc to open the Task List window and click on waiting DOS PRINT test.
4. All tests are done when the DOS test is completed.

Results of PRINTDD

To view test output, type the file you want to check. For example, type **type prt1os.log** to display `PASSED IF ALL CHARACTERS WERE PRINTED`.

- prt1os.log - Logs print1.cmd results
- prt2os.log - Logs print2.cmd results
- prt3os.log - Logs print3.cmd results
- prt12os.log - Logs print1_2.cmd results
- prt13os.log - Logs print1_3.cmd results
- prt23os.log - Logs print2_3.cmd results
- prtallos.log - Logs printall.cmd results
- prt1dos.log - Logs print1.bat results
- prt2dos.log - Logs print2.bat results
- prt3dos.log - Logs print3.bat results
- prt12dos.log - Logs print1_2.bat results
- prt13dos.log - Logs print1_3.bat results
- prt23dos.log - Logs print2_3.bat results
- prtaldos.log - Logs printall.bat results.

Run Time

Approximately 10 minutes.

OS/2 Multimedia Tests

These tests verify the functions of the various Multimedia Presentation Manager/2 (MMPM/2) components. They are a minimal representative test for multimedia usability in which they exercise the wave audio, MIDI, CD and digital video devices.

Multimedia Requirements

This test is required if the test system is shipped with either sound support or a CD-ROM.

Automated Test Steps

The Multimedia tests run unattended if selected from the Selection & Execution GUI screen.

If the test system has sound support:

- If Testkit drive is HPFS, you must run PCM_HPFS.
- If your video is VGA (resolution less than 1024 × 768 × 256), you must run PCM_VGA.
- If your video is SVGA (resolution at least 1024 × 768 × 256), you must run PCM_SVGA.
- You must run PCM_FLC.
- You must run PCM_REXX.

These test selections require a music CD in the CD-ROM drive.

- If the test system has a CD-ROM, you must run PCM_CD.
- When all tests have been selected, click on **RUN**.

Note: If the test system has sound support and a CD-ROM that supports streaming, then you can also run PCM_CDS. This test is optional, and should not be run until required testing has completed, and the results diskette is ready for submission.

Individual Test Steps

Before running these tests, type **buc** and press Enter to change to the cd\build\src\svt\buckcmd directory.

If the test system has sound support:

- For PCM_HPFS, type **pcm_hpfs.cmd** and press Enter.
- For PCM_VGA, type **runmme pcm_vga** and press Enter.
- For PCM_SVGA, type **runmme pcm_svga** and press Enter.
- For PCM_FLC, type **runmme pcm_flc** and press Enter.
- For PCM_REXX, type **pcm_rexx.cmd** and press Enter.

The next test selections require a music CD in the CD-ROM drive.

- For PCM_CD, type **runmme pcm_cd** and press Enter.
- For PCM_CDS, type **runmme pcm_cdst** and press Enter.
- As each test ends, the script file returns to an OS/2 full screen session.

Test Results

The test results are in the d:\results\mmepcm\svtraw directory. Log files are in the d:\results\mmepcm\svtlog directory and have the same name as the output files but end with the .log extension.

- The pcm_svga.ra_ file contains the SVGA results.
- The pcm_vga.ra_ file contains the VGA results.
- The pcm_hpfs.ra_ file contains the HPFS results.
- The pcm_cd.ra_ file contains the CD Music results.
- The pcm_cds.ra_ file contains the CDS Music results.
- The pcm_flc.ra_ file contains the FLC results.

- The rexxrsp.out file contains the PMREXX results.

Note: There will be a total of:

- 11 TESTS for PCM_VGA
- 12 TESTS for PCM_SVGA
- 1 TEST for PCM_HPFS
- 2 TESTS FOR PCM_FLC
- 7 TESTS for PCM_CD
- 6 TESTS for PCM_CDS

If this test is run more than once, the output files will be appended with the new test results. To prevent this file from getting very large, run the **resetlog** command from the d:\util directory. This .cmd file deletes all files generated by these tests.

Run Time

Test duration is approximately 30 minutes for each test.

OS/2 Journaled File System Test (PCMJFS)

This test is run on the Additional Server (S01).

This is a test of the OS/2 Journaled File System (JFS) that is run only when testing OS/2 Warp Server for e-business which implements JFS support. Do not run this testcase with other OS/2 products. This is a testcase that uses a REXX command file to format the JFS partition, and run a series of file system commands on the JFS file partitiion. The default drive letter is E: as specified by system installation instructions which would have the assigned the E: drive letter to the JFS Volume/Partition under LVM.

This testcase will also cover LVM functions of having volumes span disk partitions on the same disk drive, or on 2 different disk drives.

If you run the PCMJFS testcase from the PCM_TEST PM GUI, you can specify a different drive letter as the JFS Volume/Partition to be tested.

Note: This will format the drive letter provided, be sure it is the drive letter for the JFS Volume/Partition that was setup during OS/2 installation.

PCMJFS Test Steps

1. At an OS/2 command line, change to the d: drive.
2. Type **cd batch** and press Enter.
3. Type **pcmjfs e** and press Enter.
4. The test runs and returns to the test drive prompt when through.
5. The command Line parameters for PCMJFS.CMD have been hard coded to call the test routine \JFSTEST\FLSPGM1.CMD as follows:

- **/H:MB** (File size to be created: KB or MB or GB or #bytes)
- **/per:90** (Percentage of freespace to be filled: 0->100 Default 90%)
- **/num:1** (number of drives: Default is 1)
- **/dl:E** (JFS Drive letter, Default is E)
- **/FSDir:JDIR** (Dir name to create: Default is DIR)
- **/FName:JFILE** (File name to create: Default is FILE)
- **/iter:1** (no of iterations: Default is 1)

Results of PCMJFS

This test is successful if the system successfully formats and exercises the JFS Volume (spanning 2 partitions, which can be on different disks).

Check the **d:\jfstest\jfstest.log** for `PASS` or `FAIL` information for the testcase.

Run Time

Approximately 30 minutes.

Advanced Power Management Test (APM)

The APM test is intended for portable systems that utilize batteries for power.

This test tests both APM hardware and aspects of the PM user interface including:

- Power state definitions
- APM installed correctly and power object found
- Power object shows correct status for battery or A/C power and battery life remaining
- Standby and Suspend/Resume modes work correctly
- Power object refresh functions work correctly

Note: Non-APM Supporting Hardware: If Selective Install is used to force APM installation on a system and the Power object is opened, the following message may occur: "The system cannot load the APM feature". This can be caused by your system not supporting this feature or because the APM device driver was not installed.

APM Test Steps

The following set of APM test steps describes a brief test of the APM functions installed on a system with the OS/2 operating system.

1. Make sure the battery is fully charged.
2. Set hardware timers for screen blanking to three to five minutes and suspend timer to 15 minutes or more.
3. Verify the following are present in config.sys.
   OS/2 Warp Version 4.0
   - DEVICE=C:\OS2\BOOT\APM.SYS
   - DEVICE=C:\OS2\MDOS\VAPM.SYS
4. Verify that Power Object is in System Setup folder.
5. Open an OS/2 window and insert a scratch diskette in the a: drive. From the d:\cmd directory, type **drain.cmd**.

6. Open the OS/2 System Setup folder and double-click on the Power Object.
7. Verify that the system shows "AC Powered" and "Battery State High."
8. Unplug A/C Charger.
9. Click on system menu for Power Object and select **Refresh Now**.
10. Verify that system shows "Battery Powered" and "Battery State High."
11. Allow the system time to enter standby mode (screen blanks).
12. Press any key to bring system out of standby mode, and verify that drain.cmd is still running (let it run for a couple of minutes).
13. Click on system menu for Power Object and select **Suspend**. Select **Yes** on the pop-up menu to continue suspend operation.
14. Press any key to bring system out of suspend mode, verify that the Desktop is OK, and that drain.cmd continues running.
15. Click on system menu for Power Object and select **Refresh** to bring up the submenu, and select **On** to set up automatic refresh.
16. Open the Power Object Settings/Properties. Click on the **View** tab, set refresh on, and refresh rate to 1-2 minutes.
17. Let the system run for 30 minutes, verify that the battery life bar shows an indication of battery drain.
18. Plug in A/C charger, wait for automatic refresh to occur (1-2 minutes) and verify that Power Object now shows "AC powered."
19. Stop drain.cmd in OS/2 window by pressing Ctrl+Break.
20. Let battery charge for 30 minutes or more.
21. Verify that Power Object battery life indicates increased charge.
22. Close Power Object.
23. Update the file \APM\APM.TXT on the testcase partition.

Results of APM

Because this test is verified by the tester, no specific output files were generated. To obtain OS/2 Compatibility for Advanced Power Management, complete the information in the apm.txt file. You can print the apm.txt file to check off during the test and to update the file after completion.

Advanced Power Management Test (APM) for Desktop Systems

This test tests both APM hardware and aspects of the PM user interface including:

- APM installed correctly and power object found
- Power object shows correct status for A/C power
- Standby and Suspend/Resume modes work correctly
- Power off mode work correctly

Note: Non-APM Supporting Hardware: If Selective Install is used to force APM installation on a system and the Power object is opened, the following message may occur: "The system cannot load the APM feature". This can be caused by your system not supporting this feature or because the APM device driver was not installed.

APM Test Steps for Desktop Systems

The following set of APM test steps describes a brief test of the APM functions installed on a *Desktop* system with the OS/2 operating system.

1. Set hardware timers for screen blanking to 3-5 minutes and suspend timer to 15min or more.
2. Verify the following are present in config.sys.
   OS/2 Warp Version 4.0
   - DEVICE=C:\OS2\BOOT\APM.SYS
   - DEVICE=C:\OS2\MDOS\VAPM.SYS
3. Verify that Power Object is in System Setup folder.
4. Open the OS/2 System Setup folder and double click on the Power Object.
5. Verify that the system shows "AC Powered".
6. Allow the system time to enter standby mode (screen blanks).
7. Touch key(s) to bring system out of standby mode.
8. Click on system menu for Power Object and select "Suspend", answer "Yes" on pop-up menu to continue suspend operation.
9. Touch key(s) to bring system out of suspend mode.
10. Click on system menu for Power Object and select "Power off", answer "Yes" on pop-up menu to continue shutdown operation.
11. Write result to apmdesk.txt file.

Results of APM for Desktop Systems

Because this test is verified by the tester, no specific output files were generated. To obtain OS/2 Compatibility for Advanced Power Management, complete the information in the apmdesk.txt file. You can print the apmdesk.txt file to check off during the test and to update the file after completion.

PCMCIA

This is a test of the OS/2 interface for PCMCIA slots and devices.

The test case sections assume that the C and D partitions are defined on the hard disk and the test system has two PCMCIA slots.

Note:
1. During Phase 3 of OS/2 installation (selective install), be sure to install all PCMCIA options (DISK, FLASH, MODEM).
2. Double-click on the Drives icon to determine the drive letters assigned.

PCMCIA Test Steps

The PCMCIA test cases exercise the three layers of OS/2 PCMCIA support. The system unit, socket services, and card services layers are exercised with each of the PCMCIA SVT test cases.

1. At an OS/2 command line, change to the d: drive.
2. Type **cd pcmcia** and press Enter.
3. Insert the PCMCIA card to be tested in the PCMCIA slot (ATA DISK, FLASH, SRAM).

Type the appropriate command for the PCMCIA card to be tested: (Parameters are drive letters)

- ATA Drives

  Run Command Examples: **pcmcia_a e** or **pcmcia_a f**
- FLASH Drives

  Run Command Examples: **pcmcia_f g** or **pcmcia_f i**
- SRAM

  Run Command Examples: **pcmcia_s g** or **pcmcia_s i**

Results of PCMCIA

Output Logs:

\pcmcia\ata-disk.log - should find 6 pass

\pcmcia\pcmcia_a.log

\pcmcia\fscpyata.log

\pcmcia\fsdelata.log

\pcmcia\fsdirata.log

\pcmcia\flashcrd.log - should find 4 pass

\pcmcia\sramcrd.log - should find 4 pass

SMP Verification Test

This test determines the number of processors in the SMP system and verifies that the processors are enabled. This test is required only for SMP systems.

You must install OS/2 Warp Server for e-business with SMP support or the Convenience Package for OS/2 Warp Server for e-business with SMP support on your system prior to running the test.

If OS/2 Warp Server for e-business with SMP support on the Convenience Package for OS/2 Warp Server for e-business with SMP support has not been installed, do not run this test.

Hardware and Software Requirements

- An SMP system with at least two processors installed and enabled
- OS/2 Warp Server for e-business with SMP support or the Convenience Package for OS/2 Warp Server for e-business with SMP support installed

Installation

After the operating system has been installed, install the SMP test case. Run PCMSETUP to install the testcase if not previously installed and select the SMP test cases.

SMP Test Steps

1. At an OS/2 full screen prompt, change to the d: drive, type **cd smp**, and press Enter.
2. Type **smptst** and press Enter.
3. Control returns to an OS/2 command prompt.

Results of SMP

Test results are written to the d:\smp directory in the smptest.log file.

The following is an example of the smptest.log output file on an SMP system that has two processors that are both enabled.

```
SMP001 testing starting.........
system has 2 processors
*** Processor 1 Status is enabled. ***
*** Processor 2 Status is enabled. ***
testing status on processor 0.
test passed, anticipated error occurred.
testing status on a processor beyond actual number of processors.
test passed, anticipated error occurred.
testing status on processor 0.
test passed, anticipated error occurred.
testing status on a processor beyond actual number of processors.
test passed, anticipated error occurred.
testing status of null.
test passed, anticipated error occurred.
testing status greater than 1.
test passed, anticipated error occurred.
SMP testing ended..............
```

Examine the output smptest.log file for any messages that may indicate test failure by comparing the sample output to your output file.

Run Time

Less than one minute.

Speech Recognition (SPEECH)

System Requirements

- Intel Pentium 90 MHz or faster
- 16 MB memory
- 300 MB OS/2 boot partition
- Sound card (refer to the OS/2 Warp 4.0 readme for a list of supported cards)
- Speakers
- Microphone

Installation Verification

1. Double-click on the Programs icon on Desktop.

2. Verify that the VoiceType folder is present. Open the folder.
3. Verify that the following icons are in VoiceType folder:
   h. Dictation Window
   i. Dictation Macro Editor
   j. Enrollment
   k. VoiceType Users Guide (shadow icon)
   l. States Game
   m. Migrate User Information
   n. Optional Vocabularies Install/Uninstall
   o. Check Installation
   p. Voice Manager
4. Check Installation:
   a. Double-click on Check Installation icon.
   b. Enter user name and click on **Create**.
   c. Click on **OK** in pop-up window indicating that new user has been created successfully.
   d. Click on **Start Test**. Repeat the words presented in the display area. Continue until all seven test words have been spoken and recognized. The test will stop when all seven are completed. Click on **OK** in pop-up window indicating that the test completed successfully.
   e. Click on **Check Speakers**. Let recording play for at least five seconds and then click on **OK** to stop.
   f. Click on **Record**. The pop-up will request that you read at least eight words, using consistent volume. Then, click on **OK**. Speak at least eight words (a sentence) into microphone. Click on **Stop**, and then click on **Play** to play back the recording.
   g. Click on **Exit** to close.
   h. Click on **YES** to save input and match level established.

Voice Test

1. Click on **States Game**. Wait for application and Voice Manager to open and initialize.
2. Click on **Microphone** in Voice Manager to activate.
3. Say the names of several states and verify that they are highlighted.

   Note:
   1. The **Help** button provides a list of state names and indicates which have been spoken and recognized.
   2. It might be necessary to modify the voice settings for match. To do this, click on the Voice Manager icon to the left of the help icon. Click on the **Audio** tab and go to the second page. Adjust the slide bar for sound match to the left for more approximate match. Then retry the States Game.

4. Close the States Game.
5. Verify that the microphone in Voice Manager is still active.

Desktop Navigation Test:

1. Say "Jump to Command Prompts."
2. Verify that the Command Prompts folder opens on the Desktop.
3. Say Up/Down/Left/Right as needed to highlight OS/2 window.
4. Say "Open," and verify that an OS/2 window opens.
5. Say "Close" and when pop-up panel is displayed, say "Yes" to continue closing.

Results of SPEECH Tests

Update the file \SPEECH\SPEECH.TXT on the testcase partition.

Because this test is verified by the tester, no specific output files were generated. To obtain OS/2 Compatibility for Speech Recognition, complete the information in the speech.txt file. You can print the speech.txt file to check off during the test and to update the file after completion.

Chapter 9. LAN Test Case Details

The individual test cases in this chapter can be used when rerunning a single test manually. This may be necessary after a test failure has been corrected. These tests are run by typing the appropriate command from the command line.

Note: Copies of the log files will be located in the \xxxlogs directory on each system that the individual tests were started on.

The following information is included, where appropriate, for each test:

- The name of the test, or part of the test
- A description of the test
- The steps to run the test
- The test results
- The test duration

LAN Test Case Summary

The following table lists the test cases in the LAN testkit, where to get the details about each test case, and the approximate run time.

Table 3. Summary of LAN Tests

Test	Description	Approximate Run Time
ITLDUMP	OS/2 Dump Utility on page 71	15 Minutes
ITLLS56.CMD	LAN Server Exerciser for Domain on page 61	2 Hours
ITLLS57.CMD	LAN Server Exerciser for Server on page 61	2 Hours
ITLFTP01.CMD	FTP Server/Ping Exerciser of S01 on page 64	2 Hours
ITLFTP02.CMD	FTP Server/Ping Exerciser of D01 on page 64	2 Hours
ITLTCP01.CMD	TCP/IP Remote Execution on R01 on page 64	15 Minutes
ITLALERT.CMD	Alert Reporting on S01 on page 63	15 Minutes
ITLLD.CMD	LAN Distance Connection to S01 on page 63	2 Hours
ITLMSG.CMD	LAN Messaging on page 62	1 Hour
ITLPEER.CMD	PEER Services Exerciser on page	2 Hours

	62	
ITLPSF00	Advanced Print Services on page 70	1 Hour
ITLPSNS00	Backup/Restore on page 69	30 Minutes
ITLRAID	SystemView RAID Information on page 71	30 Minutes
ITLSV00	Group Management on page 64	15 Minutes
ITLSV06	Monitor Remote Workstation on page 65	30 Minutes
ITLSV07	Hardware Inventory (Group) on page 66	15 Minutes
ITLSV08	Software Inventory (Group) on page 67	15 Minutes
ITLSV11	S01-System Information Tool on page 68	10 Minutes

LAN Server Exerciser (ITLLS56, ITLLS57)

This test case will generate network traffic by creating a link between multiple requesters and a file server.

The itlls56.cmd test runs on S01, R01, and R02. The itlls57.cmd test runs on D01, R01, and R02.

ITLLS56 and ITLLS57 Test Steps

1. Open an OS/2 window.
2. Type **net name** and press Enter to verify the system is logged on to the domain controller. If the system is not logged on, type the following:
3. logon IT01xxxU /d:IT01D01A /p:UPW01xxx /v:d
4. where *xxx* is the system name (D01, S01, R01, R02).
5. To test the domain controller, type **itlls56.cmd** on systems S01, R01, and R02. This test must be started on all three systems at the same time. Log files for itlls56 will be copied to the \d01logs directory on the domain controller.
   To test the additional server, type **itlls57.cmd** on systems D01, R01, and R02. This test must be started on all three systems at the same time. Log files for itlls57 will be copied to the \s01logs directory on the additional server.

Results of ITLLS56 and ITLLS57

This test is successful if all three of the requesters are able to connect to the domain controller or additional server and are able to run the tests for a minimum of two hours without a failure.

Peer Services (ITLPEER)

This test case will exercise the OS/2 Peer function by sharing a local subdirectory with the network. The test case runs on the additional server (S01) and client 2 (R02).

ITLPEER Test Steps

Start the test case from client 2 and the additional server by typing the command **itlpeer.cmd**.

Note: If problems occur from the remote workstation while trying to access the shared resource, verify that the correct access is being granted for this resource. In order to run the test case, the resource needs to be given read/write access. To verify the access, double-click on the Sharing and Connecting icon. Clicking on this icon will open a notebook. Select the **Access controls** tab, the specific resource, and then click on the **Set Access Permissions** button.

This test will run for approximately two hours. The log file itlpeer.xxx will be copied to \r01logs on client 1.

Results of ITLPEER

This test is successful if both the additional server (S01) and the client 2 (R02) systems are able to access the Peer workstation (client 1) and run ITLPEER a minimum of two hours without a failure.

LAN Messaging (ITLMSG)

This test will generate light messaging traffic on the network. This test is run from the domain controller and client 1 systems.

ITLMSG Test Steps

1. Enter the following command on the domain controller or client 1:

   itlmsg

   If the target workstation is busy, this test case might stop with a message indicating the workstation is busy or not responding. This is normal if the workstation getting the message is running multiple test cases.

   Notes:

   - This executable will send a message to the target systems once every 30 seconds. 120 messages will run for little more than a hour.
   - NETPOPUP Service should be running on the domain controller and can be stopped by typing **net stop netpopup**. To restart, type **net start netpopup**.

2. To view the log on the target systems, open the IBM LAN Services folder and double-click on the Network Messaging icon.

Results of ITLMSG

This test is successful if the test case runs to completion without a failure. This test should run for a minimum of one hour.

LAN Alerts (ITLALERT)

The purpose of this test is to generate an FFST/2 alert on the additional server (S01). To generate this alert, available space on the c: drive is reduced to less than 15,000,000 bytes. Run this test on the additional server (S01).

ITLALERT Test Steps

1. Make sure that the LAN Server was started as follows (this should be in the startup.cmd file):
2. net start server /e:1 /alerts:1 /alertn:IT01S01 /di:15000
3. net start alerter
4. net start genalert
5. On the additional server:
   a. Type **itlalert** at the c: drive. This command will build a temporary directory and fill it with test data files. When the available space is less than 15 MB, the program will sleep for two minutes before the test data files are erased and the \temp directory is removed. The amount of free disk space will dictate how long the executable will take.

      Note: A drive with 180 MB of free space will be filled up in approximately 10 minutes.

   b. You should receive a pop-up message when the alert is detected. You can check the message log to determine if the message was received. Open the IBM LAN Services folder on the Desktop, and then select Network Messaging. From here you can review all messages.

Results of ITLALERT

This test is successful if the FFST alert is successfully posted in a pop-up window.

LAN Distance Exerciser (ITLLD)

The LAN Distance tests are run on the LAN Distance Remote Requester (client 2).

Note: For OS/2 Warp Version 4 clients only

They include LAN exerciser, LAN messaging, FTP traffic, and LAN NetBIOS traffic.

ITLLD Test Steps

The OS/2 LAN Distance Remote Requester is connected to the Connection Server (the additional server) using a modem, which should already be installed on both systems.

LAN Distance Connection Server

1. Press Ctrl+Esc to open the Window List and verify if LAN Distance has been started. If not, type **ldstart** at an OS/2 command prompt.
2. Wait until the LAN Distance window is displayed.

LAN Distance Remote Requester (Client 2)

1. Open an OS/2 window.
2. Type **lanrboot.cmd** and press Enter.
   This command will back up startup.cmd and replace it with the startup.cmd for LAN Distance testing. It will also issue the **ldshuttl remote** command and reboot the system. On reboot, the itlld.cmd test case will be started automatically.
   When itlld.cmd completes successfully, the original startup.cmd is restored, the command **ldshuttl lan** is issued and the system automatically reboots to resume regular LAN connection.

Results of ITLLD

This test is successful if the tests complete the appropriate number of successful passes without a failure.

TCP/IP FTP to Host and Ping (ITLFTP01, ITLFTP02)

This test case will ftp to a remote host and ping the host before sleeping. This test case is run on client 1 and client 2.

ITLFTP01 and ITLFTP02 Test Steps

1. Open an OS/2 window.
2. To test the domain controller, type **itlftp01.cmd** on client 1.
   To test the additional server, type **itlftp02.cmd** on client 2.

Results of ITLFTP01 and ITLFTP02

This test is successful if the FTP test case is able to run on both requesters for a minimum of two hours without a failure.

TCP/IP Remote Execution (ITLTCP01)

This test case will run commands on a remote host, sleep, and then continue looping. This test case is run on the domain controller.

ITLTCP01 Test Steps

1. Open an OS/2 window.
2. Type itltcp01.

Results of ITLTCP01

This test is successful if the REXEC test case is able to run for a minimum of two hours without a failure.

Group Management (ITLSV00)

This test case verifies Netfinity functions in the creation of several groups of managed systems based on communication protocol, and operating system.

This test is run on the additional server.

- With OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, **Netfinity** is used.

1. Open the **Netfinity**, folder on the desktop.
2. Open the **Netfinity** Service Manager icon.
3. Open the Remote System Manager icon.

   Note: If a group **ALL** already exists, then continue with step 6 to add systems to the group.

4. From the **Group** pull down menu, select **Add Group**, and enter **ALL** for the group name. Then click on **Add** to close the window.

   Note: No keywords are used for this group.

5. Click on the **ALL** group once with the right mouse button and then select **Discovery Filters**. Highlight the **TCP/IP** and **NETBIOS** protocols, and click on **Save**.
6. In the System Group Management window, double-click on **All** to open the Group window.
7. From the **Systems** pull down menu, select **Discover Systems**.

   Note: This should fill the window with systems as they are being discovered. It should find two entries for systems D01, S01, and R02, and one entry for R01. When all systems are found, close the Group window.

8. Create two additional groups following step 4 above and name them NETBIOSWS and TCPIPWS.

   Note: No keywords are used for either group.

9. Click on each group once with the right mouse button and then select **Discovery Filters**. Select the appropriate protocol for each group and click on **Save**.
10. Then use steps 6 and 7 above to discover systems for each group.

Results of ITLSV00

Demonstrate that the correct systems are discovered in each of the defined groups.

- In the **All** group, you should see two icons for D01, S01, and R02, and one icon for R01.
- In the **NETBIOSWS** group, you should see one icon for each of the systems.
- In the **TCPIPWS** group, you should see one icon for D01, S01, and R02, and no icon for R01.

Monitor Remote System's Resources (ITLSV06)

This test case verifies Netfinity functions for remote monitoring of a managed system.

This test must run after ITLSV00 because it relies on having groups of systems already defined.

This test is run on the additional server.

- With OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, **Netfinity** is used.

ITLSV06 Test Steps

1. Open the **Netfinity**, folder on the desktop.
2. Open the **Netfinity** Service Manager icon.

3. Open the Remote System Manager icon.
4. From the **System Groups** window, double-click on the **ALL** group to open it. Active workstations will have a green screen on their icon.
5. Double-click on one of the active systems to open the Remote Service window for that system.
6. Double-click on the **System Monitor** icon to bring up the window that shows CPU utilization.
7. From the **System Monitor Service** panel, use the **Windows** pull down menu and select **Show Monitors**.
8. CPU Utilization should already be highlighted, highlight one or two other resources to monitor from the list and click on **Accept** to begin monitoring the highlighted selections.
9. Let the monitor run for at least 30 minutes.
10. From the **System Monitor Service** panel, use the **Windows** pull down menu and select **Export to database**.
11. Click on **OK** to accept the defaults on the Database selection panel.
12. Click on **OK** to accept the defaults on the Export to File panel.
13. Click on **OK** on the Data Base Status pop-up panel.
14. Close the Monitor and all folders.

Results of ITLSV06

This test is successful if the **Netfinity** Managing system can monitor the target system without errors. Monitoring should take place in 30 minute intervals.

For OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, the file **IT01____.DBF**, will be created in the \NETFIN directory on the OS/2 Boot Drive.

The appropriate file will be verified during results processing.

Hardware Inventory (ITLSV07)

This test case verifies Netfinity functions to collect hardware information from all clients and store the information in files on the additional server.

This test must run after ITLSV00 because it relies on having groups of systems already defined.

This test is run on the additional server.

This test case is set up to run one time.

- With OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, **Netfinity** is used.

ITLSV07 Test Steps

1. Open the **SystemView / TME10 / Netfinity**, folder on the desktop.
2. Open the **SystemView / Netfinity** Service Manager icon.
3. Open the Remote System Manager icon.
4. Open the **Event Scheduler** icon.
5. Click on **New** and enter the event name HW_INVENTORY.
6. Highlight **System Information Tool** and click on **Groups**. This will open the Schedule Groups or Systems window.

7. Highlight **TCPIPWS** from the Groups listbox, this will fill in the Systems listbox with a highlighted entry for three systems (R01 is not discovered under TCPIP).
8. Click on **Schedule**.
9. **Create Print Output or History File** should already be selected with the history file directory. Click on **Save**.
10. The **Schedule Time and Date** panel is displayed. Click on the **one time** radio button and choose a time of at least 10 minutes from the current time.
11. Click on **Save**.

From the **Scheduler Service** panel, The event HW_INVENTORY will show as scheduled.

Wait for the event time to pass, then click on **View Log** to verify that the events were executed and successful.

Results of ITLSV07

This test is successful if at least three successful events were executed and the results are in the specified files.

For OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, the files **IT01____.HST**, will be created in the \NETFIN directory on the OS/2 Boot Drive.

The appropriate file will be verified during results processing.

Software Inventory (ITLSV08)

This test case verifies Netfinity functions to collect software inventory from all clients and store the information in files on the additional server.

This test must run after ITLSV00 because it relies on having groups of systems already defined.

This test is run on the additional server.

This test case is set up to run one time.

- With OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, **Netfinity** is used.

ITLSV08 Test Steps

1. Open the **Netfinity**, folder on the desktop.
2. Open the **Netfinity** Service Manager icon.
3. Open the Remote System Manager icon.
4. Open the **Event Scheduler** icon.
5. Click on **New** and enter the event name SW_INVENTORY.
6. Highlight **Software Inventory** and click on **Groups**. This will open the Schedule Groups or Systems window.
7. Highlight **NETBIOSWS** from the Groups listbox, this will fill in the Systems listbox with a highlighted entry for all four systems.
8. Click on **Schedule**.
9. Click on **OK** to accept the default to generate system reports.
10. The **Schedule Time and Date** panel is displayed. Click on the **one time** radio button and choose a time of at least 10 minutes from the current time.

11. Click on **Save**.

From the **Scheduler Service** panel, The event SW_INVENTORY will show as scheduled.

Wait for the event time to pass, then click on **View Log** to verify that the events were executed and successful.

Results of ITLSV08

This test is successful if at least four successful events were executed and the results are in the specified files.

For OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, the files **IT01____.INV**, will be created in the \NETFIN directory on the OS/2 Boot Drive.

The appropriate file will be verified during results processing.

System Information Tool (ITLSV11)

This test case verifies SystemView / TME10 / Netfinity functions of correctly identifing a systems hardware information.

This test must run after ITLSV00 because it relies on having groups of systems already defined.

This test is run on the additional server.

- With OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, **Netfinity** is used.

ITLSV11 Test Steps

1. Open the Netfinity, folder on the desktop.
2. Open the Netfinity Service Manager icon.
3. Open the Remote System Manager icon.
4. Open the System Information icon. This will bring up information about the local machine.
5. Verify the memory, adapter card, and CPU information is correctly identified in that view.
6. From the File pull down menu, select Save to file or Print All System Data To File, depending on the OS/2 version being tested.
7. Accept the default file name and directory.
8. If a completion pop-up panel is displayed, click on OK to close.
9. Close all folders.

Results of ITLSV11

This test is successful if the System Information tool correctly gathers hardware information for the target machine.

For OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, the file **sysinfo.rpt**, will be created in the \NETFIN directory on the OS/2 Boot Drive.

The appropriate file will be verified during results processing.

Personal Safe and Sound (ITLPSNS)

This test case will exercise some of the basic functions provided with the Personal Safe and Sound backup and restore utility provided with OS/2 Warp Server. This test is run on the domain controller.

ITLPSNS Test Steps

1. At an OS/2 command prompt, net use to the directory where the backup will be stored by typing the following:
2. net use x: s01util
3. Open the OS/2 Warp Server PSNS Backup/Restore folder and click on the Backup/Restore icon, and then click on the **Move on** button and the **Done for now** button.
4. From the Tools pull-down menu, select **Storage Devices**. This will list available devices that the backup can be created upon.
5. Click on the button in the upper-left corner of the screen and select **New**. Select **Remote Disk**.
6. On Storage Device Remote Disk select the remote drive and directory name, which should be psns5bkp, and click on **OK**. Then close the Storage Devices window.
7. From the Tools pull-down menu, select **Backup Sets**. Click on the button in the upper-left corner of the screen, select **Available Sets**, and click on **New**. For Name, type: **Backup of ITLUTIL on S01**. For Storage Device, select the drive letter (**x:**) you created using the net use command earlier. Click on **OK**.
8. You will be prompted to enter another description. Enter a description and then click on **OK**. Close the Backup Sets window.
9. From the Tools pull-down menu, select **Backup Methods**. This will list the defined (default) ways in which the backup can be run. Click on the button in the upper-left corner of the screen and select **New**. Enter the following information from the example provided:
   Description: Backup of ITLUTIL directory on Additional Server
   Source: Select "Only allow backup of files below"
   Select the C drive and for directory, type: ITLUTIL
   Compression: Select for no compression
   Preview: By pass this section (click on red arrow)
   Backup Set: Select the name "Backup of ITLUTIL on S01"
10. At this point, click on **Save As** at the bottom of the screen and type **Backup of ITLUTIL on S01**. Close the Backup Methods window.
11. Click on the clock icon on the PSNS screen.
12. From the schedule window, click on the button in the upper-left corner and select **Active Events**.
13. Click on **New** and then click on **Daily Event**. For Backup Method, select **Backup of ITLUTIL on S01**. For time, select a time of at least five minutes from the current time. When complete, click on **OK**.
14. When the backup has been accomplished, the restore functions must be exercised. From the PSNS screen, select **Restore** and then select **Everything**.

    Note: It is necessary to build a Restore method first by doing the following:

    a. Select **RESTORE** from the pull-down menu.
    b. Select **EDIT A NEW METHOD** from the selection presented.
    c. Provide a description (your choice) in the description field.
    d. Select the backup set name you used when defining the backup.
    e. Bypass the preview selection.
    f. Click on **Save as** and give it a name of your choice. This is the name you will select to initiate the restore. Click on **OK**. This will take you back to the original PSnS menu.
    g. Select **RESTORE** from the pull-down menu and click on the restore name you

supplied to start the restore.

15. Update the file \ITLUTIL\ITLPSNS.TXT with results.

Results of ITLPSNS

This test is successful if the backup/restore exercises have been run and files have been restored to the domain controller.

Print Service Facilities (ITLPSF00)

This test case will exercise some of the basic functions provided with the Print Services Facility provided by OS/2 Warp Server to print a postscript file on a non-postscript printer. Use the following steps to configure PSF/2 to output to the printer that was setup and installed in the PCM Test environment.

ITLPSF00 Test Steps

1. Open the **PSF/2** icon on the desktop.
2. Open the PSF/2 Control Panel icon.
3. From the **PROFILE** pull down menu, select **NEW**.
4. For **Device name**, enter ENVPRT2. This name should be different than the name of the printer setup for the PCM Test environment.
5. Highlight **PARALLEL** attachment type and click on **SETTINGS**.
6. For **Data Stream**, select the data stream type supported as the default mode for the printer.

   Note: Check the documentation for your system to verify the default mode, and the modes that the printer can be set to. The data stream mode must be supported by your printer for this testcase to function properly.

7. **Printer port** should be LPT1. Accept the other defaults and click on **OK**.
8. Click on **CREATE**.
9. The next set of steps set up queue and transform options. This can be done from within the PSF/2 folder.
10. From the **OPTIONS** pull down menu, select **SETUP QUEUES**.
11. For **Queue name**, enter PSFQUE, and for **Description**, enter PSF PRINTER QUEUE, and click on **SETUP**.
12. From the **PROFILE** pull down menu, select **Change**, and then Select **Transform Options**.
13. On the **Transform Options** panel, double-click on **POSTSCRIPTS 4019, 4029, and HP-LJ**, this will add it to the Transform Sequence listbox.
14. Click on **Change**.
15. Close all the folders and reboot the system.
16. Use the **aprint** command to print an ASCII and PostScript file. The \itlutil\reados2.ps file is provided for PostScript print test. At an OS/2 command prompt, type **aprint c:\itlutil\reados2.ps**.
17. Update the file \ITLUTIL\ITLPSF00.TXT with results.

Alternatively, you can use the PSF/2 print submitter icon in the PSF/2 folder to be presented with a directory from which you can choose a file to print.

Results of ITLPSF00

This test is successful if files print successfully.

OS/2 Dump Test Case (ITLDUMP)

This test case will verify the ability of a hardware system to take a successful system dump. This test is run on the domain controller (d01).

ITLDUMP Test Steps

1. Create a FAT partition that is at least 1 MB larger than the amount of system memory. Format the partition and call it SADUMP.
2. Edit config.sys by adding `TRAPDUMP=ON,x:` where *x* is the drive letter for the FAT partition that was just created.
3. Shut down and reboot the system.
4. Edit config.sys and remove the TRAPDUMP line.
5. Shut down the system a second time and when you see the Ctrl+Alt+Del window, press Ctl+Alt+NumLock+NumLock.
   This will start a dump of memory to the FAT partition. When it is complete the system should reboot.
6. Update the file \ITLUTIL\ITLDUMP.TXT with results.

Results of ITLDUMP

This test is successful if the system successfully reboots and the SADUMP partition is loaded with dump data.

Netfinity Raid Information (ITLRAID)

This test case will verify the ability of Netfinity to recognize that a system under test has a RAID driver, and that an alert is generated when a device fails, is replaced and rebuilt.

Depending on the RAID adapter, it may be necessary to add the RAID Support/Configuration Utilities to the system under test.

Setup of RAID-1 or RAID-5 must have been completed before installation of OS/2 as defined "Setting Up the Domain Controller".

ITLRAID Test Steps

1. With OS/2 Running, install the RAID Support/Configuration Utilities for the RAID adapter. Shutdown and reboot only if required by the RAID Support Utility installation.
2. Create a disk failure:
   - If disks are Hot-Swappable:
     - Remove 1 RAID drive while system is running.
     - Wait for alert pop-up before continuing.
   - If disks are NOT Hot-Swappable:
     - Shutdown OS/2 - but do not reboot yet.
     - Remove 1 RAID drive.

    - Reboot OS/2
    - Wait for alert pop-up before continuing.
3. Close the Alert pop-up by double clicking on the system icon in the left corner of the title bar.
4. Replace the failed drive:
    - If disks are Hot-Swappable:
        - Re-insert the RAID drive while the system is running.
    - If disks are NOT Hot-Swappable:
        - Shutdown OS/2 - but do not reboot yet.
        - Re-insert the RAID drive.
        - Reboot OS/2
5. Rebuild the RAID drive using the RAID Support Utilities for the Adapter. If the RAID adapter can only be re-built during with a standalone boot utility, shutdown OS/2 and rebuild the drive.

Note: Alerts should be generated when the drive is removed and flagged as failing, when the drive has been placed in rebuild status (if rebuild support utility runs while OS/2 is booted), and when the drive is placed back online following successful rebuild.

To check the alerts generated, do the following:

1. Open the Netfinity folder on the desktop.
2. Open the Netfinity Service Manager.
3. Open the Alert Manager.

Results of ITLRAID

This test is successful if the alerts are generated and the system continued to operate after a drive was removed, replaced, and rebuilt.

The alerts are written to \netfin\alerts.log and checked during results processing for alerts expected.

Chapter 10. Uninstalling the OS/2 PCM Compatibility Testkit

To uninstall the OS/2 PCM Compatibility Testkit, type **remvkit** at an OS/2 command prompt. This removes the OS/2 PCM Compatibility Testkit code and all log files.

If you need to rerun all of the base tests, for example after a processor upgrade, use the **clearpcm** command, which will remove only the base test case log files. If you need to rerun all of the network tests, for example after a system upgrade or if a different LAN card is used, use the **clearlan** command on all four systems, which will remove only the network test case log files.

Appendix A. Install and Configure OS/2 Warp Server for e-business or Convenience Package for OS/2 Warp Server for e-business

This appendix details the steps needed to install your domain controller and additional server with OS/2 Warp Server for e-business or Convenience Package for OS/2 Warp Server for e-business for testing with the OS/2 PCM Compatibility Testkit Version 4.6.

Setting Up the Domain Controller

Setting up the domain controller consists of:

- Loading the domain controller
- Configuring the domain controller
- Installing the network test cases

Note: All system names, addresses, user names, and passwords are case-sensitive and must be typed exactly as shown.

Note: If the system supports RAID disks, configure the machine with a minimum of three physical disks and set up the RAID controller for RAID-1 or RAID-5 configuration. See "Netfinity Raid Information (ITLRAID)" for additional information.

Load the domain controller with **OS/2 WARP Server for e-business or Convenience Package for OS/2 Warp Server for e-business**.

The following steps walk through the installation of the operating system on the system destined to be the domain controller.

1. If there are any files on the hard drive of the system that you want to keep, make a copy of them now. This procedure will delete all files on the hard drive.
2. Shut down or power off all four systems in your test environment (the domain controller you are about to load, the additional server, and both client systems). Make sure the additional server and both clients remain shut down or powered off while you load the domain controller.
3. Insert the OS/2 Installation diskette in the a: drive.
4. Power on or restart the system.
5. When prompted for the OS/2 Diskette 1, insert the diskette and the OS/2 CD, and press Enter.
6. When prompted for the OS/2 Diskette 2, insert the diskette and press Enter.
7. At the Welcome screen, press Enter to start loading from the CD.
   If the Welcome screen is not displayed, see "Resolving Problems during Installations".
8. The screen OS/2 Warp Server for e-business Installation is displayed, press Enter.
   If there are no volumes or partitions defined:
   - The **Volumes Too Small** screen is presented, press Enter.
   - If there are partitions defined, but no volumes defined:
   - The "Volume Conversion Utility" (VCU) will convert disk partitions that do not have volumes defined to compatibility volumes. Drive letters will be assigned to any partition that would be visible under previous versions of OS/2. Hidden partitions (2nd primary partition on a drive) will not be converted.
   - The VCU conversion screen will be presented indicating the number of compatibility volumes created, and prompt you to reboot using the installation diskettes.

   If there are volumes and partitions defined:

- The **Installation Volume Selection** screen will be displayed.
- Highlight 2. Specify your own installation volume, and press Enter.

9. A **Modifying Volumes Warning** is displayed indicating all data on the volumes will be lost. Be sure there is nothing left on the drive(s) that might still be needed, and then press **Enter** to start the Logical Volume Managment Tool (LVM).
10. If the message **A volume of the following minimum size must be set installable: 120megabytes** is displayed, press Enter.
    If needed, press F3 to exit the installation and back up any necessary data.

    Note: If the system has both IDE and SCSI/RAID disks, and the IDE disk is in the boot sequence before the SCSI/RAID, then install OS/2 Boot manager and create the SADUMP partition on the IDE disk. The OS/2 boot partition, and at least one of the JFS partitions should be created on the SCSI/RAID disks.

    Note: If the system has more than 1 disk of a pariticular type, then define JFS logical partitions on at least 2 disks that can be used for testing the LVM function of having JFS volumes span physical disks. However, if the system has only 1 disk drive, then 2 partitions can be defined on the drive for testing LVM volume spanning.

    Note: **If you know the system bios supports booting from a partition that begins or extends beyond 8.3GB (cylinder 1024) on large drives**, then create a partition on the disk beyond the 8.3GB range for the OS/2 bootable volume. You can create a filler partition to take up the free space not allocated or required for PCM testing.

    Note: When using LVM to modify partitions and volumes, you must first delete the volumes and partitions and then re-create them.

11. The **Logical Volume Management Tool - Logical View** screen is displayed. Setup the disk partitions and volumns as follows:
    h. Install OS/2 Boot Manager
       - In the **Logical Volume** section at the top, the entry [CDROM-1], may be the only entry, and the **Disk Partition** section at the bottom will be blank.
       - Press Enter to bring up the **Options** screen.
       - Highlight **Install boot manager** and press Enter.

    i. Press **F5** to change to the physical view.
    j. Define Physical Partition for OS/2:
       - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for OS/2 installation.
       - Tab down to the **Disk Partition** section, and highlight **[free space 1]**.
       - Press Enter to bring up the **Options** menu.
       - Highlight **Create a new partition**, and press Enter.
       - Highlight **Primary Partition**, and press Enter.

         Note: **If you know the system BIOS supports booting from a partition that begins or extends beyond 8.3GB (1024 cylinders)**, then in the next step, select **create at end of free space**, otherwise select **create at beginning free space**.

       - Highlight Create at the beginning of free space, and press Enter.
       - Clear the entry field, and enter Warp Server for the partiton name, and press Enter.
       - Set the size of the boot partition to 500 MB, and press Enter.

k. Define Physical Partition for SADUMP:
   - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for the SADUMP partition.
   - Tab down to the **Disk Partition** section, and highlight **[free space 1]**.
   - Press Enter to bring up the **Options** menu.
   - Highlight **Create a new partition**, and press Enter.
   - Highlight **Logical Partition**, and press Enter.
   - Highlight **Create at beginning of free space** and press Enter.
   - Clear the entry field presented, and enter **SADUMP** for the partiton name, and press Enter.
   - Set the size of the dump partition to at least 20MB greater than installed memory, and press Enter.

l. Define Physical Partition for JFS:
   - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for the Journaled File System (JFS).
   - Tab down to **Disk Partition** section, and highlight **[free space 1]**.
   - Press enter to bring up the **Options** menu.
   - Highlight **Create a new partition**, and press Enter.
   - Highlight **Logical Partition**, and press Enter.
   - Highlight **Create at the end of free space**, and press Enter.
   - Clear the entry field, and enter **JFS Drive1** for the partiton name, and press Enter.
   - Set the size of the JFS partition to 100 MB, and press Enter.

     Note: If you have more than 1 disk, and the above JFS partition was created on the first disk, then use the steps from above to create a JFS partition on the second disk. This allows testing of volumes that span physical disks. Enter the second partition name as **JFS Drive2**, and set the size to 100MB. Otherwise, if you only have 1 disk, define the 2nd JFS partition on the same drive, and when the JFS Volume is setup it will span partitions.

m. Press F5 to change to the Logical Volume Management Tool - Logical View.

n. Define OS/2 Boot Volume:
   - Press Enter for the **Options** menu.
   - Highlight **Create a new volume**, and press Enter.
   - Highlight **Create a volume that can be made bootable**, and press Enter.
   - Highlight **C:** and press Enter.
   - Type **WSVR for e-business** as the volume name, and press Enter.
   - A pop-up panel asks you to choose the disk for creating the volume, press Enter.
   - Highlight the disk drive selected for OS/2 installation, and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[Warp Server 500]**, and press Enter.
   - The partition name **Warp Server** is presented, press Enter to accept.

o. Add OS/2 Boot Volume to Boot Manager:
   - Highlight the volume **WSVR for e-business**.
   - Press Enter for the **Options** menu.
   - Highlight **Set Boot Manager startup values**, and press Enter.
   - Highlight **Default boot selection** field, and press Enter.
   - Highlight **Save the changes**, and press Enter.

p. Define SADUMP volume:
   - Press Enter for the **Options** menu.
   - Highlight **Create a new volume**, and press enter.
   - Highlight **Create a volume that does not need to be bootable**, and press Enter.
   - Highlight **Create a compatibility volume** and press Enter.
   - Highlight **D:** and press Enter.
   - Type **SADUMP** as the volume name, and press Enter.
   - A pop-up panel asks you to choose the disk for creating the volume, press Enter.
   - Highlight the disk drive selected for SADUMP, and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[SADUMP nnn]**, and press Enter.
   - The partition name **SADUMP** is presented, press Enter to accept.

q. Define JFS (Journaled File System) volume:
   - Press Enter for the **Options** menu.
   - Highlight **Create a new volume**, and press enter.
   - Highlight **Create a volume that does not need to be bootable**, and press Enter.
   - Highlight **Create an LVM volume** and press Enter.
   - Highlight **E:** and press Enter.
   - Type **JFS Volume** as the volume name, and press Enter.
   - A pop-up panel asks you to choose a disk for creating the volume, and then press F6 to complete creation of the volume. Only press Enter for now.
   - Highlight the disk drive selected for JFS Drive1, and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[JFS Drive1 nnn]**, and press Enter.
   - The partition name **JFS Drive1** is presented, press Enter to accept.

     Note: If you have more that 1 physical disk installed, and created a second logical partition **JFS Drive2**, then continue to setup the JFS volume to span physical disk partitions. Otherwise, press **F6** now to finish the LVM volume definition.

   - Highlight the physical disk that **JFS Drive2** was created on and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[JFS Drive2 nnn]**, and press Enter.
   - The partition name **JFS Drive2** is presented, press Enter to accept.
   - Press **F6** to finish the LVM volume definition.

r. The rest of the disks can be left as free space for now.
s. Press **F3** to exit.
t. Highlight **Save the changes and exit**, and press Enter.

12. If disk partitions were modified, follow the instructions to reboot the system using the new disk partitions. Use the same installation diskettes as before.
    - At the **Welcome** screen, press Enter.
    - The OS/2 Warp Server for e-business installation screen is presented, press Enter.
    - The **Installation Volume Selection** screen is presented, and the message in the middle of the screen should say **OS/2 Warp Server for e-business will be installed on: Volume C.** Highlight option **1. Accept the volume**, and press Enter.

      Note: It will be the boot drive that was set as installable with LVM.

13. Select **2. Format the Partition** on the Formatting the Installation Partition screen.

    Note: When disk partitions have been modified, the boot partition will be unformatted and this screen will not be presented.

14. The **Formatting the Installation Volume** screen is presented. Select option **1. Perform a long format**, and press Enter.
15. On the Select the File System screen, highlight option 1. High Performance File System, and press Enter.

    Note: There are test cases that require HPFS in order to use file names greater than eight characters long.

    Note: If the boot volume is currently formatted, a warning screen is displayed indicating that the hard disk might contain data. Press **Enter** to continue with formatting.

The system starts copying data from the CD to the system's hard disk. A progress bar displays the status of this activity.

16. When loading is complete, an all blue screen is displayed requesting you to remove the diskette from the a: drive, and press Enter to reboot the system.

When the system boots this time, it is booting from the hard drive. The system automatically opens the System Configuration screen. The following steps identify how the system should be configured.

17. On the **System Configuration** screen, click on **Next**.
18. The **System Configuration(cont.)** screen is presented. Click on **Next**.
19. The **Country Information** screen is presented, choose the **United States**, and select codepage **(437,850)** and click on **OK**
20. The **Select System Default Printer** screen is displayed.
21. Select **Do not install default printer** and click on **OK**.
22. If your system recognizes a sound card, it opens the **Multimedia Device Settings** screen. Click on **Selections** to verify the adapter settings, and then click on **OK**.
23. In the **Primary Display Driver Install** screen, the video driver is already selected. Click on **OK** to accept the default.
24. The **OS/2 Warp Server for e-business Setup and Installation** screen is presented. Accept the defaults and click on **Next**.
25. The **Installing IBM OS/2 Warp Server for e-business** screen is displayed. Click on **Next**.
26. The **Information** screen is displayed, **DO NOT ADD ANY INFORMATION ON THIS SCREEN**, click on **Next**.
27. On the **Select the services to install** screen, check the following items:

- File and Print Sharing Services
  - Click on **more** button and turn on check box for **Generic Alerter Service**, and click on **OK**.
- TCP/IP Services
  - Click on **more** button and turn on check box for **Network File System (NFS) Support**, and click on **OK**.
- Netscape Communicator
- Tivoli Management Agent
- PSnS Backup and Recovery
- Advanced Print Services (**Note**: On OS/2 Warp Server for e-business systems only)
  - Click on more button and turn on the check boxes for Parrallel Port Attachment, and Print Postscript on non-Postscript printers, then click on OK.

28. Click on **Next**. The **Configuration** screen is displayed.

The next set of steps configure the characteristics of the domain controller. The test cases depend on this information. If you do not follow these instructions exactly, test cases might fail. On the left side of the screen is a list of the components to configure.

29. **OS/2 Warp Server for e-business** - explains the color codes of the check marks and needs no input.

30. Click on **File and Print Sharing Services** - do the following:
    - Verify that the **Domain controller** radio button is selected.

      Enter a Server name: IT01D01

      Enter a Domain name: IT01D01D

31. Click on **Network Adapters for File and Print Sharing** - this will have been filled out already if OS/2 was able to detect the network adapter card installed in the system. If no information is displayed, or the wrong adapter is listed, then the installed network adapter needs to be identified to OS/2. Follow the instructions in step 41 to identify the network adapter and load the driver, then return to this step and continue.

32. Click on **Autostart** - in addition to the items already selected, also select the following:
    - Alerter
    - Generic Alerter

    If this item is disabled, then the **Generic Alerter** service was not selected when File and Print Services was selected for installation (see step 27).

33. Click on **User ID and Password** - enter **USERID** for the user ID and **PASSWORD** for the password.

34. Click on **TCP/IP Services** - enter the following information:

    TCP/IP address 10.3.227.78

    Subnet Mask 255.255.254.0

    Router 10.3.226.1

    Host Name it01d01

    TCP/IP Domain Name test.company.com

    Name Server 10.3.199.2

    You must use the TCP/IP addresses shown. If other addresses are used, the test cases that rely on the TCP/IP addresses will fail.

If the network being used is not isolated from other LAN segments the TCP/IP information here will not be valid with the existing network. This is why it is important to isolate this test environment if at all possible.

35. Click on **Netscape Communicator**, accept the defaults.
36. Click on **Tivoli Management Agent**, accept the defaults.
37. Click on **PSnS Backup and Recovery** - accept the defaults.
38. Click on **Advanced Print Services** - accept the defaults **Note**: On OS/2 Warp Server for e-business systems only.
39. Click on **Books** - accept the defaults.
40. Click on **Error Logging Services** - enter the following information:

    Route Alerts to: IBM LAN Network Manager

    Workstation ID: IT01D01

41. Click on Network Adapters and Protocol Services
    - If the system displays the adapter as selected, skip to step 42.
    - If OS/2 did not detect the adapter card, the **Add Adapter** push button is displayed. Do the following steps to define the adapter. The following directions assume the adapter's device driver and Network Information File (NIF) are on a diskette. For example, the IBM token ring adapter has a device driver named ibmtok.os2 and a NIF file named ibmtok.nif.
      1. Click on **Other Adapter**. The Network Adapter Driver Disk panel is displayed.
      2. Insert the diskette with the OS/2 driver and NIF files in the a: drive and specify the directory where the system can find those files.
      3. Click on **OK**. The Drivers Found panel is displayed. Select the adapter that is installed and make sure the correct LAN type is selected (Ethernet or Token-Ring).
      4. Click on **OK**. The files are copied to the hard drive.
      5. Remove the diskette and click on **OK**. The Configuration panel is displayed showing the adapter that was selected.
42. If OS/2 detected an adapter card in the system, the Configuration panel is displayed with the adapter selected. Set the address on the network card to 4000AC010001 using the following steps: *(Ref #1.)*
    a. Click on **Settings**. The Parameters for *adapter_name* Adapter panel is displayed.
    b. Select Node Address/Network adapter address and click on **CHANGE**. The Change Configuration panel is displayed.

       Note: Not all adapter cards allow you to define the network address for the LAN adapter. Having a defined network address makes the isolation of problems easier. If your adapter does not let you change the network address, skip this step.

    c. Enter the following value for the node address: 4000AC010001
    d. Click on **OK**. The Parameters for *adapter_name* Adapter panel is displayed.
    e. Click on **OK**. The Configuration panel is displayed.

All of the items should be selected with colored check marks indicating all the parameters have been provided to finish the installation of the domain controller.

43. Click on **Install**. A Configuration pop-up panel is displayed asking if it is OK to start the installation.
44. Click on **OK** The system begins the installation. A progress bar is displayed as the installation progresses. Load time is less than one hour. The system will reboot automatically when the installation is complete.
45. If the **Monitor Configuration/Selection Utility** panel is displayed, accept the defaults for monitor type and click on **OK**.
46. If the **Select Display Resolution** panel is displayed, click on **OK** to accept the default selection.

After the installation completes, the system automatically reboots and an **OS/2 Warp Server for e-business** registration screen is displayed. Click on **Exit** to close the registration screen.

Installing Netfinity V5.2xx from CDROM

With OS/2 Warp Server for e-business, the Netfinity product is shipped on a separate CDROM. The Netfinity replaces previous versions of systems management that shipped on OS/2 Warp Server CDROMS, and needs to be installed on the domain controller and additional server following OS/2 installation.

The following steps outline installation and setup of Netfinity 5.2xx on the Domain Controller:

1. Insert the Netfinity CDROM in the CD drive.
2. Open an OS/2 Window session.
3. Change to **F:** (F: will be the CDROM drive if only the partitions needed for testing have been setup according to documentation.)
4. Change to F:\OS2\SERVICES
5. Type **Install** and press Enter.
6. The Netfinity Install screen is displayed, accept the defaults and click on **OK**
7. On the pop-up that says C:\NETFIN does not exist and will be created, click on **OK**.
8. Highlight Active Client Operation.
9. Turn on all check boxes under **Optional services**, and click on **Install**
10. When copying from the CDROM is finished, the **Network Driver Configuration** screen is displayed.
11. Enter **IT01D01** as the System Name.
12. Highlight NetBIOS <disabled>, and click on Driver Enabled.
13. Enter **AC010001** as the Network Address.
14. Highlight TCP/IP <disabled>, and click on Driver Enabled.
15. Enter **engineering** for System Keyword.
16. Click on **Options** button to display Netfinity Options menu.
17. Turn on check boxes for **Service Execution Alerts** and **Show Support Program**, leave the others off, click on **OK**.
18. Click on **Save** button, and on **OK** button on pop-up panel.
19. Click on **Exit** button.
20. A **Change CONFIG.SYS** panel will be presented, click on **YES** to have the installation automatically update config.sys.
21. A **FFST/2** panel will be presented, click on **No** to not have alerts routed to the Netfinity Manager.
22. Click on **OK** on pop-up Netfinity Install Complete!.

Installing the Network Test Cases on the Domain Controller

To install the network test cases:

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 CDROM.
2. Open an OS/2 window.
3. Change to the appropriate drive.
4. The installation program requires that your current drive be the one containing the Version 4.6 CDROM.

5. Type the following commands to install the network test cases:
   cd lan_inst
   install
6. When installation of the test cases has completed, remove the CDROM from the drive, and then shut down and restart the system.
   The OS/2 PCM Compatibility Testkit Version 4.6 folder is added to the Desktop.

Setting Up the Additional Server System

Setting up the additional server consists of:

- Loading the additional server
- Configuring the additional server
- Installing the base test cases
- Installing the network test cases

Note: All system names, addresses, user names, and passwords are case-sensitive and must be typed exactly as shown.

Note: If the system supports RAID disks, configure the machine with a minimum of three physical disks and set up the RAID controller for RAID-1 or RAID-5 configuration. See "Netfinity Raid Information (ITLRAID)" for additional information.

Load the additional server with **OS/2 WARP Server for e-business or Convenience Package for OS/2 Warp Server for e-business**.

The following steps walk through the installation of the operating system on the system destined to be the additional server.

1. If there are any files on the hard drive of the system that you want to keep, make a copy of them now. This procedure will delete all files on the hard drive.
2. Leave the domain controller on. (The additional server is currently shut down or powered off.)
3. Insert the OS/2 Installation diskette in the a: drive.
4. Power on or restart the system.
5. When prompted for the OS/2 Diskette 1, insert the diskette and the OS/2 CD, and press Enter.
6. When prompted for the OS/2 Diskette 2, insert the diskette and press Enter.
7. At the Welcome screen, press Enter to start loading from the CD.
   If the Welcome screen is not displayed, see "Resolving Problems during Installations".
8. The screen OS/2 Warp Server for e-business Installation is displayed, press Enter.
   If there are no volumes or partitions defined:
   - The **Volumes Too Small** screen is presented, press Enter.

   If there are partitions defined, but no volumes defined:
   - The "Volume Conversion Utility" (VCU) will convert disk partitions that do not have volumes defined to compatibility volumes. Drive letters will be assigned to any partition that would be visible under previous versions of OS/2. Hidden partitions (2nd primary partition on a drive) will not be converted.
   - The VCU conversion screen will be presented indicating the number of compatibility volumes created, and prompt you to reboot using the installation diskettes.

   If there are volumes and partitions defined:

- The **Installation Volume Selection** screen will be displayed.
- Highlight 2. Specify your own installation volume, and press Enter.

9. A **Modifying Volumes Warning** is displayed indicating all data on the volumes will be lost. Be sure there is nothing left on the drive(s) that might still be needed, and then press **Enter** to start the Logical Volume Management Tool (LVM).
10. If the message **A volume of the following minimum size must be set installable: 120megabytes** is displayed, press Enter.
    If needed, press F3 to exit the installation and back up any necessary data.

    Note: If the system has both IDE and SCSI/RAID disks, and the IDE disk is in the boot sequence before the SCSI/RAID, then install OS/2 Boot manager and create the PCMTEST partition on the IDE disk. The OS/2 boot partition, and at least one of the JFS partitions should be created on the SCSI/RAID disks.

    Note: If the system has more than 1 disk of a pariticular type, then define JFS logical partitions on at least 2 disks that can be used for testing the LVM function of having JFS volumes span physical disks. However, if the system has only 1 disk drive, then 2 partitions can be defined on the drive for testing LVM volume spanning.

    Note: **If you know the system bios supports booting from a partition that begins or extends beyond 8.3GB (cylinder 1024) on large drives**, then create a partition on the disk beyond the 8.3GB range for the OS/2 bootable volume. You can create a filler partition to take up the free space not allocated or required for PCM testing.

    Note: When using LVM to modify partitions and volumes, you must first delete the volumes and partitions and then re-create them.

11. The **Logical Volume Management Tool - Logical View** screen is displayed. Setup the disk partitions and volumns as follows:
    a. Install OS/2 Boot Manager
       - In the **Logical Volume** section at the top, the entry [CDROM-1], may be the only entry, and the **Disk Partition** section at the bottom will be blank.
       - Press Enter to bring up the **Options** screen.
       - Highlight **Install boot manager** and press Enter.

    b. Press **F5** to change to the physical view.
    c. Define Physical Partition for OS/2:
       - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for OS/2 installation.
       - Tab down to the **Disk Partition** section, and highlight **[free space 1]**.
       - Press Enter to bring up the **Options** menu.
       - Highlight **Create a new partition**, and press Enter.
       - Highlight **Primary Partition**, and press Enter.

         Note: **If you know the system BIOS supports booting from a partition that begins or extends beyond 8.3GB (1024 cylinders)**, then in the next step, select **create at end of free space**, otherwise select **create at beginning free space**.

       - Highlight **Create at the beginning of free space**, and press Enter.
       - Clear the entry field, and enter **Warp Server** for the partiton name, and press Enter.
       - Set the size of the boot partition to 500 MB, and press Enter.

d. Define Physical Partition for PCMTEST:
   - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for the PCMTEST partition.
   - Tab down to the **Disk Partition** section, and highlight **[free space 1]**.
   - Press Enter to bring up the **Options** menu.
   - Highlight **Create a new partition**, and press Enter.
   - Highlight **Logical Partition**, and press Enter.
   - Highlight **Create at beginning of free space** and press Enter.
   - Clear the entry field presented, and enter **PCMTEST** for the partition name, and press Enter.
   - Set the size of the pcmtest partition to at least 230MB, and press Enter.

e. Define Physical Partition for JFS:
   - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for the Journaled File System (JFS).
   - Tab down to **Disk Partition** section, and highlight **[free space 1]**.
   - Press enter to bring up the **Options** menu.
   - Highlight **Create a new partition**, and press Enter.
   - Highlight **Logical Partition**, and press Enter.
   - Highlight **Create at the end of free space**, and press Enter.
   - Clear the entry field, and enter **JFS Drive1** for the partition name, and press Enter.
   - Set the size of the JFS partition to 100 MB, and press Enter.

     Note: If you have more than 1 disk, and the above JFS partition was created on the first disk, then use the steps from above to create a JFS partition on the second disk. This allows testing of volumes that span physical disks. Enter the second partition name as **JFS Drive2**, and set the size to 100MB. Otherwise, if you only have 1 disk, define the 2nd JFS partition on the same drive, and when the JFS Volume is setup it will span partitions.

f. Press F5 to change to the Logical Volume Management Tool - Logical View.

g. Define OS/2 Boot Volume:
   - Press Enter for the **Options** menu.
   - Highlight **Create a new volume**, and press Enter.
   - Highlight **Create a volume that can be made bootable**, and press Enter.
   - Highlight **C:** and press Enter.
   - Type **WSVR for e-business** as the volume name, and press Enter.
   - A pop-up panel asks you to choose the disk for creating the volume, press Enter.
   - Highlight the disk drive selected for OS/2 installation, and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[Warp Server 500]**, and press Enter.
   - The partition name **Warp Server** is presented, press Enter to accept.

h. Add OS/2 Boot Volume to Boot Manager:
   - Highlight the volume WSVR for e-business.
   - Press Enter for the Options menu.
   - Highlight Set Boot Manager startup values, and press Enter.
   - Highlight Default boot selection field, and press Enter.
   - Highlight Save the changes, and press Enter.

i. Define PCMTEST volume:
   - Press Enter for the **Options** menu.
   - Highlight **Create a new volume**, and press enter.
   - Highlight **Create a volume that does not need to be bootable**, and press Enter.
   - Highlight **Create a compatibility volume** and press Enter.
   - Highlight **D:** and press Enter.
   - Type **PCMTEST** as the volume name, and press Enter.
   - A pop-up panel asks you to choose the disk for creating the volume, press Enter.
   - Highlight the disk drive selected for PCMTEST, and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[PCMTEST nnn]**, and press Enter.
   - The partition name **PCMTEST** is presented, press Enter to accept.

j. Define JFS (Journaled File System) volume:
   - Press Enter for the **Options** menu.
   - Highlight **Create a new volume**, and press enter.
   - Highlight **Create a volume that does not need to be bootable**, and press Enter.
   - Highlight **Create an LVM volume** and press Enter.
   - Highlight **E:** and press Enter.
   - Type **JFS Volume** as the volume name, and press Enter.
   - A pop-up panel asks you to choose a disk for creating the volume, and then press F6 to complete creation of the volume. Only press Enter for now.
   - Highlight the disk drive selected for JFS Drive1, and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[JFS Drive1 nnn]**, and press Enter.
   - The partition name **JFS Drive1** is presented, press Enter to accept.

     Note: If you have more that 1 physical disk installed, and created a second logical partition **JFS Drive2**, then continue to setup the JFS volume to span physical disk partitions. Otherwise, press **F6** now to finish the LVM volume definition.

   - Highlight the physical disk that **JFS Drive2** was created on and press Enter.
   - Highlight **Use existing partition**, and press Enter.
   - Highlight **[JFS Drive2 nnn]**, and press Enter.
   - The partition name **JFS Drive2** is presented, press Enter to accept.
   - Press **F6** to finish the LVM volume definition.

k. The rest of the disks can be left as free space for now.
l. Press **F3** to exit.
m. Highlight **Save the changes and exit**, and press Enter.

12. If disk partitions were modified, follow the instructions to reboot the system using the new disk partitions. Use the same installation diskettes as before.
    - At the **Welcome** screen, press Enter.
    - The OS/2 Warp Server for e-business installation screen is presented, press Enter.
    - The **Installation Volume Selection** screen is presented, and the message in the middle of the screen should say **OS/2 Warp Server for e-business will be installed on: Volume C.** Highlight option **1. Accept the volume**, and press Enter.

      Note: It will be the boot drive that was set as installable with LVM.

13. Select **2. Format the Partition** on the Formatting the Installation Partition screen.

    Note: When disk partitions have been modified, the boot partition will be unformatted and this screen will not be presented.

14. The Formatting the Installation Volume screen is presented. Select option 1. Perform a long format, and press Enter.
15. On the Select the File System screen, highlight option 1. High Performance File System, and press Enter.

    Note: There are test cases that require HPFS in order to use file names greater than eight characters long.

    Note: If the boot volume is currently formatted, a warning screen is displayed indicating that the hard disk might contain data. Press **Enter** to continue with formatting.

The system starts copying data from the CD to the system's hard disk. A progress bar displays the status of this activity.

16. When loading is complete, an all blue screen is displayed requesting you to remove the diskette from the a: drive, and press Enter to reboot the system.
    When the system boots this time, it is booting from the hard drive. The system automatically opens the System Configuration screen. The following steps identify how the system should be configured.
17. On the System Configuration screen, click on Next.
18. The System Configuration(cont.) screen is presented. Click on Next.
19. The Country Information screen is presented, choose the United States, and select codepage (437,850) and click on OK
20. The Select System Default Printer screen is displayed.
    - If you have a parallel attached printer, highlight the printer model in the printers listbox, or if needed, use a printer driver diskette to install the printer and drivers now.
    - If you have a network TCP/IP connected printer, choose **Do not install default printer** now, and follow the instructions later for defining and setting up the network attached printer.
21. If your system recognizes a sound card, it opens the **Multimedia Device Settings** screen. Click on **Selections** to verify the adapter settings, and then click on **OK**.
22. In the **Primary Display Driver Install** screen, the video driver is already selected. Click on **OK** to accept the default.
23. The **OS/2 Warp Server for e-business Setup and Installation** screen is presented. Accept the defaults and click on **Next**.
24. The **Installing IBM OS/2 Warp Server for e-business** screen is displayed. Click on **Next**.
25. The **Information** screen is displayed, **DO NOT ADD ANY INFORMATION ON THIS SCREEN**, click on **Next**.

26. On the **Select the services to install** screen, check the following items:
    - File and Print Sharing Services
        - Slist bClick on **more** button and turn on check box for **Generic Alerter Service**, and click on **OK**.
    - TCP/IP Services
        - Click on **more** button and turn on check box for **Network File System (NFS) Support**, and click on **OK**.
    - Remote Access Services
    - Netscape Communicator
    - Tivoli Management Agent
    - PSnS Backup and Recovery
    - Advanced Print Services
        - Click on more button and turn on the check boxes for Parrallel Port Attachment, and Print Postscript on non-Postscript printers, then click on OK.
27. Click on **Next**. The **Configuration** screen is displayed.
    The next set of steps configure the characteristics of the additional server. The test cases depend on this information. If you do not follow these instructions exactly, test cases might fail. On the left side of the screen is a list of the components to configure.
28. **OS/2 Warp Server for e-business** - explains the color codes of the check marks and needs no input.
29. Click on **File and Print Sharing Services** - do the following:
    - Select the **Additional Server** radio button. (note it defaults to Domain Controller)

      Enter a Server name: IT01S01

      Enter a Domain name: IT01D01D

30. Click on **Network Adapters for File and Print Sharing** - this will have been filled out already if OS/2 was able to detect the network adapter card installed in the system. If no information is displayed, or the wrong adapter is listed, then the installed network adapter needs to be identified to OS/2. Follow the instructions in step 41 on page 80 to identify the network adapter and load the driver, then return to this step and continue.
31. Click on **Autostart** - in addition to the items already selected, also select the following:
    - Alerter
    - Generic Alerter

    If this item is disabled, then the **Generic Alerter** service was not selected when File and Print Services was selected for installation (see step 26).
32. Click on **Remote Access Services** - enter the following information:
    - Configure port now - select YES
    - COM port: set to COM1 (if COM1 is used for the mouse, then select COM2)
    - If testing with analog phone lines and modems:
        - Modem type: select the modem being used.

          Note: Be sure to use a modem that is supported by LAN Distance. Using an unsupported modem may cause problems while testing. See "Finding a Supported Modem" for more information.
    - If testing with Null-Modem cable:
        - Modem type: select the null modem.

          Note: Be sure follow the instructions in "Setting up LAN Distance Remote Services" step 9 for completing null modem testing setup.

- LAN type: select **Ethernet** if using Ethernet; otherwise, select **Other**.

  Note: You may need to reposition the Disk Space panel to select the LAN type.

33. Click on **User ID and Password** - enter **USERID** for the user ID and **PASSWORD** for the password.
34. Click on **TCP/IP Services** - enter the following information:

TCP/IP address	10.3.227.79
Subnet Mask	255.255.254.0
Router	10.3.226.1
Host Name	it01s01
TCP/IP Domain Name	test.company.com
Name Server	10.3.199.2

    You must use the TCP/IP addresses shown. If other addresses are used, the test cases that rely on the TCP/IP addresses will fail.
    If the network being used is not isolated from other LAN segments the TCP/IP information here will not be valid with the existing network. This is why it is important to isolate this test environment if at all possible.
35. Click on **Netscape Communicator**, accept the defaults.
36. Click on **Tivoli Management Agent**, accept the defaults.
37. Click on **PSnS Backup and Recovery** - accept the defaults.
38. Click on **Advanced Print Services** - accept the defaults. **Note**: On OS/2 Warp Server for e-business systems only.
39. Click on **Books** - accept the defaults.
40. Click on **Error Logging Services** - enter the following information:

    Route Alerts to: IBM LAN Network Manager

    Workstation ID: IT01S01

41. Click on Network Adapters and Protocol Services
    - If the system displays the adapter as selected, skip to step 42.
    - If OS/2 did not detect the adapter card, the **Add Adapter** push button is displayed. Do the following steps to define the adapter. The following directions assume the adapter's device driver and Network Information File (NIF) are on a diskette. For example, the IBM token ring adapter has a device driver named ibmtok.os2 and a NIF file named ibmtok.nif.
      1. Click on **Other Adapter**. The Network Adapter Driver Disk panel is displayed.
      2. Insert the diskette with the OS/2 driver and NIF files in the a: drive and specify the directory where the system can find those files.
      3. Click on **OK**. The Drivers Found panel is displayed. Select the adapter that is installed and make sure the correct LAN type is selected (Ethernet or Token-Ring).
      4. Click on **OK**. The files are copied to the hard drive.
      5. Remove the diskette and click on **OK**. The Configuration panel is displayed showing the adapter that was selected.
42. If OS/2 detected an adapter card in the system, the Configuration panel is displayed with the adapter selected. Set the address on the network card to 4000AC010101 using the following steps: *(Ref #2.)*
    a. Click on **Settings**. The Parameters for *adapter_name* Adapter panel is displayed.

b. Select Node Address/Network adapter address and click on **CHANGE**. The Change Configuration panel is displayed.

   Note: Not all adapter cards allow you to define the network address for the LAN adapter. Having a defined network address makes the isolation of problems easier. If your adapter does not let you change the network address, skip this step.

c. Enter the following value for the node address: 4000AC010101
d. Click on **OK**. The Parameters for *adapter_name* Adapter panel is displayed.
e. Click on **OK**. The Configuration panel is displayed.

All of the items should be selected with colored check marks indicating all the parameters have been provided to finish the installation of the additional server.

43. Click on **Install**. A Configuration pop-up panel is displayed asking if it is OK to start the installation.
44. Click on **OK** The system begins the installation. A progress bar is displayed as the installation progresses. Load time is less than one hour. The system will reboot automatically when the installation is complete.
45. If the **Monitor Configuration/Selection Utility** panel is displayed, accept the defaults for monitor type and click on **OK**.
46. If the **Select Display Resolution** panel is displayed, click on **OK** to accept the default selection.

After the installation completes, the system automatically reboots and an **OS/2 Warp Server for e-business** registration screen is displayed. Click on **Exit** to close the registration screen.

47. At an OS/2 command prompt, go to the boot drive and change to the \wal directory. Using an editor, open the wcllocal.ini file. This file contains the keywords [TOKENRINGMACS] and [ETHERNETMACS], followed by a list of NIF files. Be sure the NIF file for the adapter card in this server is listed in the appropriate section (either the tokenringmacs or ethernetmacs). If it is not listed, then add the NIF file to the appropriate list. **It is important to do this before LAN Distance is started.**

Installing Netfinity V5.2xx from CDROM

With OS/2 Warp Server for e-business and Convenience Package for OS/2 Warp Server for e-business, the Netfinity product is shipped on a separate CDROM. The Netfinity replaces previous versions of systems management that shipped on OS/2 Warp Server CDROMS, and needs to be installed on the domain controller and additional server following OS/2 installation.

The following steps outline installation and setup of Netfinity 5.2xx on the Additional Server:

1. Insert the Netfinity CDROM in the CD drive.
2. Open an OS/2 Window session.
3. Change to **F:** (F: will be the CDROM drive if only the partitions needed for testing have been setup according to documentation.)
4. Change to F:\OS2\MANAGER
5. Type **Install** and press Enter.
6. The Netfinity Install screen is displayed, accept the defaults and click on **OK**
7. On the pop-up that says C:\NETFIN does not exist and will be created, click on **OK**.
8. Turn on all check boxes under **Optional services**, and click on **Install**
9. When copying from the CDROM is finished, the **Network Driver Configuration** screen is displayed.
10. Enter **IT01S01** as the System Name.
11. Highlight NetBIOS <disabled>, and click on Driver Enabled.
12. Enter **AC010101** as the Network Address.
13. Highlight NetBIOS [alternate adapter], and click on Driver Enabled.

14. Enter **AC010101** as the Network Address.
15. Highlight TCP/IP <disabled>, and click on Driver Enabled.
16. Enter **engineering** for System Keyword.
17. Click on **Options** button to display Netfinity Options menu.
18. Turn on check boxes for **Service Execution Alerts** and **Show Support Program**, leave the others off, click on **OK**.
19. Click on **Save** button, and on **OK** button on pop-up panel.
20. Click on **Exit** button.
21. A **Change CONFIG.SYS** panel will be presented, click on **YES** to have the installation automatically update config.sys.
22. A **FFST/2** panel will be presented, click on **No** to not have alerts routed to the Netfinity Manager.
23. Click on **OK** on pop-up Netfinity Install Complete!.

Setting Up LAN Distance Remote Services on the Additional Server

Depending on the LAN adapter installed, you may need to modify the Remote Connection setup before using the additional server as a Remote Connection Server. The adapter card in the Remote Connection Server is unique because it acts as a bridge to pass traffic from those remote workstations dialing it, to the local LAN. This adapter *must* be a supported adapter.

Select an adapter from the list of Tested and Approved adapters that passed the Remote Connections testing. A list of supported adapters is provided with the LAN Distance product on OS/2 Warp Server. See "Supported Network Adapters" in the online *Network Adapters and Protocol Services Guide* and "Supported Hardware" in the *LAN Distance Server Guide*.

Although you specified what modem and COM port to use during the installation process, additional steps are necessary to enable this server to act as a LAN Distance Remote Services server. Start the LAN Distance product and allow it to configure the transports for bridging, following these steps:

1. Double-click on the **Remote Access Services** icon on the Desktop and then double-click on the **IBM Remote Access** icon to start LAN Distance.
   - A pop-up panel indicates that the LAN Distance product is starting and eventually a LAN Distance-Workstations panel is displayed with the IT01S01 server icon highlighted. If the network is not isolated, there might be other servers displayed in this panel.
   - An error message indicating a failure to start the modem could be caused by any number of problems including:
     - The modem is not supported by LAN Distance.
     - The cable or modem is failing.
     - The computer's COM port might be disabled.
     - The com.sys driver might be missing from the config.sys file.
2. From the menu, click on **Selected**, **Open as**, and then **Settings**.
3. Enter **USERID** for the user ID and **PASSWORD** for the password. (These are the values you set earlier in the installation process and must be entered in uppercase.)
4. You are then prompted for a new password for **USERID**. Enter a new password of **passphrase** (use lowercase).
5. The IT01S01 - Settings panel displays the IBM LAN Distance Settings Notebook.
6. Click on the **ADDRESS/LAN** tab. The **Adapter for bridging:** field is displayed and after a few seconds an adapter will be highlighted in the list box. This should be the adapter that is being used in the system. Nothing needs to be selected here.

7. Click on the right arrow at the bottom of the Settings notebook until the **Security** tab is displayed and then click on the **Security** tab.
8. Click on **Enable LAN Distance Security** to turn off the checkbox.
9. If using a Null-Modem cable instead of analog phone lines and modems, then you must follow these steps to complete LAN Distance setup.
   - Click on **Modems** tab.
   - Click on **Change** to bring up the Null Modem Settings panel.
   - Click on **Change**
   - Select Nonswitched
   - Click on **Ok** to return to the Null Modem Settings panel.
   - Click on close from the system menu on the Null Modem Settings panel.
   - Click on the left arrow at the bottom of the Settings notebook unitl the **Answer** is displayed.
   - Click on Add to bring up the Answer Mode Criteria, New Entry Settings panel.
   - **PSTN** should be selected for Network Type.
   - **NonSwitched** should be selected for Line Type.
   - Click on **OK** to bring up the Answer Mode, New Entry Settings panel.
   - Enter **NULLSVR** for the Answer Mode Name.
   - Click on Enable answer mode on startup.
   - Click on close from the system menu symbol to return to the settings notebook.
10. Close the Settings notebook. A message is displayed providing the option to save the new notebook values.
11. Click on **YES**. A message is displayed indicating a shutdown of the system might be necessary.
12. Click on **OK**. Close the LAN Distance - Workstations panel. Click on **YES** to close the confirmation panel.
13. Shut down and reboot the server.
14. If using analog phone lines and modems for LAN Distance, then follow these steps when the system reboots.
    - Start LAN Distance by double-clicking on the LAN Distance Remote Access icon, and then double-clicking on the IBM Remote Access icon. The LAN Distance - Workstations panel is displayed with IT01S01 selected.
      1. Test the modem by clicking on **Selected**, **Open as**, and then **Phone Book**.
      2. In the IT01S01 - PhoneBook notebook, enter a phone number in the **Number:** field and click on **Dial**. If the modem attempts to dial, it is working correctly.
    - Close the LAN Distance product.

Adding a Network Shared Printer to the Additional Server

This server is the print server for your test environment. The printer must be defined to the network and accessible from all four systems.

If you have a parallel attached printer, and you have already selected and installed the printer during OS/2 installation, then all that is needed here is to define the printer as a shared resource on the network.

Be sure to cable the printer into the parallel port of the additional server.

If you have a network TCP/IP attached printer, then you need to add the printer to your desktop, and install the printer drivers. Then continue to define the printer as a shared resource on the network.

If the printer is not already supported by the operating system, have the OS/2 printer driver handy to use when installing the printer.

Note: When inserting a test system into the additional server location of an already stable test environment, the "Net Start Server" command in startup.cmd may fail to start, leaving only requester services started. The server services needs to be started in order to setup the printer as a shared resource, follow the steps listed here to verify that server services have started, and if needed to synchronize the

server with the stable environment domain controller and start the server services.

1. Open an OS/2 window session.
2. Type **net start**, and press Enter.

   Note: The server service should be in the list displayed of services started. If not, then issue the command **net start server**. If the server service does not start, continue with the following steps below to synchronize the additonal server with the domain controller and start the server. If the server service is started, skip to step 7 below.

3. Type logon it01s01a /d:it01d01d /p:apw01s01 /v:d and press Enter.
4. Type net use x: domroot and press Enter.
5. Type x:\resync and press Enter.
6. Type net use x: /d and press Enter.

   Note: You can now continue with defining and adding the network printer.

7. If you did not install the printer during OS/2 installation, then follow these steps to install the printer and drivers now. If the printer has already been installed, then skip to 1.
   - Double-click on the OS/2 System icon on the Desktop. The OS/2 System - Icon View is displayed.
   - Double-click on Templates. The Templates - Icon View is displayed.
   - Drag the Printer icon to the Desktop. The Create a Printer panel is displayed.
   - Type **ENVPRT** in the **Name:** field and then click on **Install New Printer Driver**. The Install new printer driver panel is displayed listing all of the print drivers defined for this release of OS/2.
   - Select the printer that is attached to this workstation and click on **Install**. A panel is displayed requesting the path to the OS/2 drivers. Because you loaded this system from the CD and the CD is still in the CD-ROM drive, it is likely the default path provided by OS/2 is correct. As long as the OS/2 Warp CD is still in the CD-ROM drive, click on **OK**. A pop-up panel will indicate a successful installation.
   - Click on **OK**. The Create a Printer panel is displayed with the driver that was just loaded highlighted.
   - Be sure the LPT1 port is selected along with the driver you just loaded and click on **Create**. You should see the printer that you just defined on the Desktop.
   - Close the Templates icon view, and the OS/2 System icon view.

Now that the printer is defined on the Desktop, set it up as a shared resource by doing the following:

1. Double-click on **LAN Services File and Print** on the Desktop. The LAN Services File and Print - Icon View panel is displayed.
2. Double-click on the **LAN Server Administration** icon. Click on **OK** when the license panel is displayed.
3. If you were not already logged on to the system, you will need to enter a user ID and password. Use **IT01S01A** for the user ID and **APW01S01** for the password. The LAN Server Administration - Icon View panel is displayed.
4. Double-click on the IT01D01D icon. The IT01D01D - Icon View is displayed.
5. Double-click on the **Printer Resource Definitions** icon. The Printer Resource Definitions - Icon View panel is displayed.

   Note: When inserting a test system into the additional server location of an already stable test environment, the domain controller will already have an ENVPRT icon in the Printer Resource Definitions icon view. Double-click on the ENVPRT icon to open the setting view and continue with step 8 below.

6. Drag the Printer Template to a blank spot in the Printer Resource Definitions panel. The Printer Alias - Create panel is displayed.

7. Provide the following information:
   - Alias: **ENVPRT**
   - Description: Printer for Network
   - Server name: **IT01S01** (can be selected from the pull-down menu)
   - Spooler queue name: **ENVPRT** (can be selected from the pull-down menu.)

     Note: If printer installed during OS/2 installation, use pull-down menu to select the queue name already created for the printer.

8. Click on **Create**. The Access Control Profile Does Not Exist panel is displayed.
9. Click on **OK**. The Access Controls Profile - Settings View is displayed.
10. Click on the **Permissions** tab, and then click on **Add**. The Add Access Control Entries panel is displayed.
11. Scroll to the bottom of the **Entries** listbox and highlight **USERS Group** in the list box, highlight **Create and Permissions** in the Permissions list box, and then click on **OK**. The Access Controls Profile - Settings View is displayed so you can review your selections.
12. Click on **Create**. The Resource Definitions - Icon View panel is displayed showing the printer icon that was just created (ENVPRT).
13. Close the remaining panels. The shared network printer is defined and ready to use.

Installing the Base Test Cases on the Additional Server

IMPORTANT: When loading test cases, load all of the test cases at the same time.

The tests in the PCM Testkit can be installed on any local (non-network) drive, however, the drive partition defined for the base test cases should be used. The d: drive is used for all examples in the documentation. The selected PCM Testkit drive can be reformatted with this process. The config.sys file is modified during PCM Testkit installation, which will require the system to be shut down and rebooted after the test cases are loaded.

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 in the CD-ROM drive.
2. Open an OS/2 window.

   Note: If the d: drive is unformatted, format it now before continuing with installation of the base testcases. The drive can be formatted as either FAT or HPFS. For example:

   ```
   format d: /fs:fat
   ```

   or

   ```
   format d: /fs:hpfs
   ```

3. Change to the \pcm_inst directory on the CDROM and type **install**.
4. Wait for the PCM Testing Setup - Main Menu window to open.
   On this screen the default selections are:
   - OS/2 Boot Partition = C
   - Test Case Partition = D
   - OS/2 Release = 4.5
   - Format Testcase Partition = NO (Change to YES only if you are reformatting this partition)
   - Format Type = FAT (or HPFS)
   - Install PCM Testkit From: (CDROM or LAN Drive)

5. To change the defaults, select **CONFIGURE** to open the PCM Testing Configuration window. On this panel the default selections can be changed for:
   - OS/2 Boot Partition
   - Test Case Partition
   - OS/2 Release/Driver Level
   - Format Testcase Partition
   - FAT or HPFS
   - Source Drive for PCM Testkit INSTALLATION
6. Click on **ACCEPT** to save your changes and return to the main menu. Verify your selections.
7. Select Update CONFIG.SYS, STARTUP.CMD, AUTOEXEC.BAT.
8. Select all applicable test cases.

   Note: Do not select the PCMCIA, APM, SPEECH, and SMP tests if your system's shipped configuration does not support these features.

9. Click on **RUN** when you have completed all selections.

   After each of the test cases is installed, a message is displayed to confirm completion. Verify your test case selections as these messages are displayed.
10. After the selected test cases are installed, click on **DONE**.
11. Click on **OK** in the PCMSETUP Activity Completed window.
12. Click on **EXIT** or select additional test cases to load.
13. Click on **OK**.
14. Shut down and reboot the system.

Installing the Network Test Cases on the Additional Server.

To install the network test cases:

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 CDROM into the CD-ROM drive.
2. Open an OS/2 window.
3. Change to the appropriate drive.
   The installation program requires that your current drive be the one containing the Version 4.6 CDROM.
4. Type the following commands to install the network test cases:
   ```
   cd lan_inst
   install
   ```
5. When installation of the test cases has completed, remove the CDROM or diskette from the drive, and then shut down and restart the system.

The OS/2 PCM Compatibility Testkit Version 4.6 folder is added to the Desktop.

Appendix B. Install and Configure OS/2 Warp Version 4

This appendix details the steps needed to install your Requester #1 and Requester #2 systems with OS/2 Warp Version 4 for testing with the OS/2 PCM Compatibility Testkit Version 4.6

Setting Up Client 1

Setting up client 1 consists of:

- Loading OS/2 Warp Version 4 on client 1
- Configuring client 1
- Installing the base test cases
- Installing the network test cases

Loading OS/2 Warp Version 4 on Client 1

Follow these steps to install OS/2 Warp Version 4 on client 1:

Note: All system names, addresses, user names, and passwords are case-sensitive and must be typed exactly as shown.

1. If there are any files on the hard drive of the system that you want to keep, make a copy of them now. This procedure will delete all files on the hard drive.
2. Make sure the machine is powered off.
3. Insert the OS/2 Warp Version 4 Installation Diskette in the a: drive.
4. Power on or restart the system.
5. When prompted for OS/2 Warp Version 4 Diskette 1, insert the diskette and press Enter.
6. When prompted for OS/2 Warp Version 4 Diskette 2, insert the diskette and the OS/2 Warp Version 4 CD and press Enter.
   If the Welcome screen reading "OS/2 WARP Version 4 Installation" is not displayed, see "Resolving Problems during Installations".
7. At the Welcome screen, press Enter to start loading from the CD.
8. Select **2. Advanced Installation** and press Enter.
9. Select **2. Specify a different drive or partition** and press Enter.
   A warning message is displayed indicating all data on the hard drive will be lost. Be sure there is nothing left on the drive that might still be needed, and then press Enter to start the FDISK utility.
   Otherwise, press F3 to exit the installation and back up any necessary data.
10. Using FDISK, partition the disk as follows:
    - Create a c: drive as the primary partition, with a minimum of 350 MB.
    - Set the partition as installable. When prompted for a name, use a name of your choice.
    - Create a d: drive as an extended logical partition with a minimum of 230 MB for base test cases.
    - The rest of the drive can be left as free space for now.
    - Press F3 twice to save and exit from the FDISK utility.

    Note: When using FDISK to modify a partition, you must first delete the partition and then re-create it.

11. If disk partitions were modified, follow the instructions to reboot the system using the new disk partitions. Use the same installation diskettes as before.
    - At the Welcome window, press Enter.
    - Select **2. Advanced Installation** and press Enter.
    - Select **1. Accept the drive** on the Installation Drive Selection screen and press Enter. (It should be the boot drive that was set as installable with FDISK.)
12. Select **2. Format the Partition** on the Formatting the Installation Partition screen.

    Note: When disk partitions have been modified, the boot partition will be unformatted and this screen will not be presented.

13. Select **1. High Performance File System** on the Select the File System screen and press Enter. Some of the test cases require HPFS in order to use file names greater than eight characters long.

    Note: If the boot partition is currently formatted, a warning screen is displayed indicating that the hard disk might contain data. Press **Enter** to continue with formatting.

The system starts copying data from the CD to the system's hard disk. A progress bar displays the status of this activity. When loading is complete, an all blue screen is displayed requesting that the diskette be removed from the drive.

14. When loading is complete, remove the diskette from the a: drive and press Enter to reboot the system.

When the system boots this time, it is booting from the hard drive. The system automatically opens the System Configuration screen. The following steps identify how the system should be configured.

15. Click on **Next**.
16. Click on **Next** again and the Select System Default Printer window is displayed.
17. Select the type of printer that will be connected to client 1 for PCM base testing and click on **OK**.
18. If your system recognizes a sound card, it opens the Multimedia Device Settings window. Click on **Selections** to verify the adapter settings, and then click on **OK**.
19. In the Display Driver Install window, the video driver is already selected. Click on **OK** to accept the default.
20. The OS/2 Setup and Installation window displays the features that can be installed. The features selected for installation are marked with a check mark. Accept the defaults by clicking on **Next**.
21. In the Advanced Options window, turn off all options and click on **OK**.
22. In the OS/2 Warp Setup and Installation window, make sure the following services are selected:
    - File and Print Client
    - TCP/IP Services
    - System Management Client

    Click on **Next** the Configuration window is displayed.
23. Click on **File and Print Sharing** and provide the following information:

    Workstation name: IT01R01

    Workstation description: Requester #1

    Domain name: IT01D01D

    Select Install LAN Server Administration

    Select Install sharing

24. Click on **Network Adapters for File and Print Sharing** - will have been filled out already if OS/2 was able to detect the adapter card installed in the system. If no information is displayed, the adapter being used has to be identified to OS/2. This is done in step 28.
25. Click on **User ID and Password**. Enter **USERID** for the user ID and **PASSWORD** for the password.
26. Click on **TCP/IP Services** and enter the following information exactly as shown:

TCP/IP address	10.3.227.80
Subnet mask	255.255.254.0
Router	10.3.226.1
Host Name	it01r01
TCP/IP Domain Name	test.company.com
Name Server	10.3.199.2

27. Click on **System Management Client** and enter the following information:

System name	it01r01
Select NetBIOS protocol	
Network Address	AC010201
System Keywords	engineering

28. Click on Network Adapters and Protocol Services.
    - If the system displays the adapter as selected, skip to step 29.
    - If OS/2 Warp did not detect the adapter card, the **Add Adapter** push button is displayed. Do the following steps to define the adapter. The following directions assume the adapter's device driver and Network Information File (NIF) are on a diskette. For example, the IBM token ring adapter has a device driver named ibmtok.os2 and a NIF file named ibmtok.nif.
        1. Click on **Other Adapter**. The Network Adapter Driver Disk window is displayed.
        2. Insert the diskette with the OS/2 driver and NIF files in the a: drive and specify the directory where the system can find those files.
        3. Click on **OK**. The Drivers Found window is displayed. Select the adapter that is installed and make sure the correct LAN type is selected (Ethernet or Token-Ring).
        4. Click on **OK**. The files are copied to the hard drive.
        5. Remove the diskette and click on **OK**. The Configuration window is displayed showing the adapter that was selected.
29. If OS/2 Warp detected an adapter card in the system, the Configuration window is displayed with the adapter selected. Set the address on the network card to 4000AC010201 using the following steps:
    a. Click on **Settings**. The Parameters for *adapter_name* Adapter window is displayed.
    b. Select Node Address/Network adapter address and click on **CHANGE**. The Change Configuration window is displayed.

       Note: Not all adapter cards allow you to define the network address for the LAN adapter. Having a defined network address makes the isolation of problems easier. If your adapter does not let you change the network address, skip this step.

    c. Enter the following value for the node address: 4000AC010201

d. Click on **OK**. The Parameters for *adapter_name* Adapter window is displayed again.
e. Click on **OK**. The Configuration window is displayed again.

If any item does not have a check mark next to it, go back and make sure that the configuration information was entered correctly.

30. Click on **Install**.
31. Make sure the information displayed in the configuration window is correct. When you are ready to start the installation, click on OK.
    A progress indicator displays the status of the installation as files are copied from the CD to the hard drive. This process typically takes about 10 minutes.
32. If the Monitor Configuration/Selection Utility window is displayed, **Install using default for monitor type** should already be selected.
33. Click on **OK** to continue installing.
34. If the Select Display Resolution window is displayed, click on **OK** to accept the default selection.

This portion of the installation typically takes between 20 and 45 minutes, depending on the hardware and software peripherals you selected earlier.

35. When the installation is complete, the system automatically reboots.
36. When the system restarts, the Welcome to OS/2 window is displayed. Close this Welcome window.
37. From the Desktop, open the Programs folder.
38. Open the Utilities folder.
39. Scroll down through the Utilities folder and open the TME 10 NetFinity System Management Client folder.
40. Double-click on the TME 10 NetFinity Service Manager icon.
41. Double-click on the Security Manager icon.
    a. Turn off the **Security Manager Access** check box.
    b. Click on **Select All** under Services.
    c. Click on **Set**.
    d. Click on **Exit**.
    e. Close all folders.

Installing the Base Test Cases on Client 1

IMPORTANT: When loading test cases, load all of the test cases at the same time.

The tests in the PCM Testkit can be installed on any local (non-network) drive, however, the drive partition defined for the base test cases should be used. The d: drive is used for all examples in the documentation. The selected PCM Testkit drive can be reformatted with this process. The config.sys file is modified during PCM Testkit installation, which will require the system to be shut down and rebooted after the test cases are loaded.

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 in the CD-ROM drive.
2. Open an OS/2 window.

   Note: If the d: drive is unformatted, format it now before continuing with installation of the base testcases. The drive can be formatted as either FAT or HPFS. For example:

   ```
   format d: /fs:fat
   ```

   or

   ```
   format d: /fs:hpfs
   ```

3. Change to the \pcm_inst directory on the CDROM and type **install**.
4. Wait for the PCM Testing Setup - Main Menu window to open.

On this screen the default selections are:

- OS/2 Boot Partition = C
- Test Case Partition = D
- OS/2 Release = 4.5
- Format Testcase Partition = NO (Change to YES only if you are reformatting this partition)
- Format Type = FAT (or HPFS)
- Install PCM Testkit From: (CDROM or LAN Drive)

5. To change the defaults, select **CONFIGURE** to open the PCM Testing Configuration window. On this panel the default selections can be changed for:
   - OS/2 Boot Partition
   - Test Case Partition
   - OS/2 Release/Driver Level
   - Format Testcase Partition
   - FAT or HPFS
   - Source Drive for PCM Testkit INSTALLATION
6. Click on **ACCEPT** to save your changes and return to the main menu. Verify your selections.
7. Select Update CONFIG.SYS, STARTUP.CMD, AUTOEXEC.BAT.
8. Select all applicable test cases.

   Note: Do not select the PCMCIA, APM, SPEECH, and SMP tests if your system's shipped configuration does not support these features.

9. Click on **RUN** when you have completed all selections.

   After each of the test cases is installed, a message is displayed to confirm completion. Verify your test case selections as these messages are displayed.
10. After the selected test cases are installed, click on **DONE**.
11. Click on **OK** in the PCMSETUP Activity Completed window.
12. Click on **EXIT** or select additional test cases to load.
13. Click on **OK**.
14. Shut down and reboot the system.

Installing the Network Test Cases on Client 1

To install the network test cases:

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 CDROM into the CD-ROM drive.
2. Open an OS/2 window.
3. Change to the appropriate drive.
4. The installation program requires that your current drive be the one containing the Version 4.6 CDROM.
5. Type the following commands to install the network test cases:
   ```
   cd lan_inst
   install
   ```
6. When installation of the test cases has completed, remove the CDROM from the drive, and then shut down and restart the system.

The OS/2 PCM Compatibility Testkit Version 4.6 folder is added to the Desktop.

Setting Up Client 2

Client 2 is an OS/2 Warp Version 4 system. Although it is possible to install client 2 from a CD, you should use a network load to test the network hardware and software connections. This process consists of the following steps:

- Creating remote boot diskettes on the client 1 machine
- Using these diskettes on client 2 to create a network connection with client 1 and to load the operating system from the remote system
- Configuring the remote access phone book on client 2

Note: All system names, addresses, user names, and passwords are case-sensitive and must be typed exactly as shown.

Creating Remote Boot Diskettes on Client 1

To create boot diskettes, perform the following steps on client 1:

1. Have three high-density diskettes available. Label them "Remote Installation diskette," "OS/2 Diskette 1," and "OS/2 Diskette 2."
2. On the OS/2 Desktop of client 1, double-click on the **OS/2 System** icon.
3. Double-click on the **System Setup** icon.
4. Double-click on the **Install/Remove** icon.
5. Double-click on OS/2 Warp Remote Install icon.
6. In the OS/2 Warp Remote Install Setup - OS/2 Warp Installation window, click on **Next**.
7. Insert the OS/2 Warp 4 CD in the CD-ROM drive of client 1 and click on **OK**.
8. In the Remote Installation Diskettes window, click on **Next** to create the boot diskettes.
9. Select the network adapter that is installed in client 2.

If the adapter is not in the list, follow the directions to add the adapter that is in the target system. In order to complete these steps the adapter's OS2 driver and NIF files will be needed. After the adapter's driver is copied it can be highlighted in this list of adapters. The correct adapter should be highlighted before continuing on to the next step.

10. Click on **Next** to open the Create Installation Diskettes window.
11. Insert the "Remote Installation diskette" in the diskette drive. Click on **OK**.
12. When the diskette has been created and you are prompted to remove the diskette from the a: drive, do so and click on **Next**.
13. Insert the "OS/2 Diskette 1" diskette in the diskette drive. Click on **OK**.
14. When prompted to remove OS/2 Diskette 1, do so, and click on **Next**.
15. Insert the "OS/2 Diskette 2" diskette in the diskette drive. Click on **OK**.
16. After the diskette is created, the system prompts you to remove the diskette from the a: drive. Do that now.
17. The Create Installation Diskettes window is displayed. Reinsert OS/2 Diskette 1 in the a: drive and click on **OK**.
18. When prompted, remove the diskette and click on **Next**.
    The remote installation diskettes are now ready for use on client 2.

    Note: You can use this set of diskettes to load OS/2 Warp Version 4 on any system that has the type of

network adapter card you specified when created the diskettes.

19. The Remote Installation Status window is displayed on client 1. This window indicates the number of OS/2 workstations connected to client 1. It shows zero connections until client 2 makes a network connection when you restart it using the remote boot diskettes.
    This window should also show connection status as "Available". If not, you cannot continue.
20. Take the diskettes to client 2 and follow the instructions in "Loading Client 2 over the Network" to use the diskettes to boot that system.

Leave the OS/2 Installation CD in the CD-ROM drive on client 1 and the Remote Installation Status window open on client 1 until you have finished installing client 2.

Loading Client 2 over the Network

On client 1, the OS/2 installation CD should already be in the CD-ROM drive, and the Remote Installation Status window should be open.

To load client 2 over the network from client 1, follow these steps on client 2:

1. If there are any files on the hard drive of the system that you want to keep, make a copy of them now. This procedure will delete all files on the hard drive.
2. Make sure the machine is powered off.
3. Insert the Remote Installation diskette in the a: drive of client 2.
4. Power on or restart the system.
5. When prompted for OS/2 Warp Version 4 Diskette 1, insert the OS/2 Diskette 1 made on client 1, and press Enter.
6. When prompted for OS/2 Warp Version 4 Diskette 2, insert the OS/2 Diskette 2 made on client 1, and press Enter.
   If the system responds that OS/2 Warp is already installed on your system, highlight Reinstall OS/2 Warp with Networking, and press Enter.
   If the Welcome screen reading "OS/2 WARP Version 4 Installation" is not displayed, and instead a window is displayed that specifies that it cannot find the CD-ROM drive, client 2 was not able to connect with client 1. See "Resolving Network Problems" for suggestions.
7. At the Welcome screen, press Enter to start loading from the CD on client 1.
8. Select 2. Advanced Installation and press Enter.
9. Select 2. Specify a different drive or partition and press Enter.
   A warning message is displayed indicating all data on the hard drive will be lost. Be sure there is nothing left on the drive that might still be needed, and then press Enter to start the FDISK utility.
   Otherwise, press F3 to exit the installation and back up any necessary data.
10. Using FDISK, partition the disk as follows:
    - Create a c: drive as the primary partition, with a minimum of 350 MB.
    - Set the partition as installable. When prompted for a name, use a name of your choice.
    - The rest of the drive can be left as free space for now.
    - Press F3 twice to save and exit from the FDISK utility.

    Note: When using FDISK to modify a partition, you must first delete the partition and then re-create it.

11. If disk partitions were modified, follow the instructions to reboot the system using the new disk partitions. Use the same installation diskettes as before.

- At the Welcome window, press Enter.
- Select **2. Advanced Installation** and press Enter.
- Select **1. Accept the drive** on the Installation Drive Selection screen and press Enter. (It should be the boot drive that was set as installable with FDISK.)

  Note: A warning screen indicating IBM LAN Distance (Remote Access Client) Detected will be displayed if installing on a system which had the LAN Distance Client product previously installed with OS/2. Since you will be re-formatting the boot partition in the following steps, press **Enter** to continue the installation.

12. Select **2. Format the Partition** on the Formatting the Installation Partition screen.

    Note: When disk partitions have been modified, the boot partition will be unformatted and this screen will not be presented.

13. Select **1. High Performance File System** on the Select the File System screen and press Enter. Some of the test cases require HPFS in order to use file names greater than eight characters long.

    Note: If the boot partition is currently formatted, a warning screen is displayed indicating that the hard disk might contain data. Press **Enter** to continue with formatting.

The system starts copying data from the CD to the system's hard disk. A progress bar displays the status of this activity. When loading is complete, an all blue screen is displayed requesting that the diskette be removed from the drive.

14. When loading is complete, remove the diskette from the a: drive and press Enter to reboot the system.

When the system boots this time, it is booting from the hard drive. The system automatically opens the System Configuration window. The following steps identify how the system should be configured.

If the CD-ROM drive in client 2 was not detected and it is a SCSI CD-ROM, click on the CD icon. Select **SCSI II CD-ROM**. After installation has completed, you can add the driver for the SCSI adapter as outlined in step 43.

15. Click on **Next**.
16. Click on **Next** again and the Select System Default Printer window is displayed.
17. Select **Do not install default printer** and click on **OK**.
18. If your system recognizes a sound card, it opens the Multimedia Device Settings window. Click on **Selections** to verify the adapter settings, and then click on **OK**.
19. In the Display Driver Install window, the video driver is already selected. Click on **OK** to accept the default.
20. The OS/2 Setup and Installation window displays the features that can be installed. The features selected for installation are marked with a check mark. Accept the defaults by clicking on **Next**.
21. In the Advanced Options window, turn off all options and click on **OK**.
22. In the OS/2 Warp Setup and Installation window, make sure the following services are selected:
    - File and Print Client
    - TCP/IP Services
    - Remote Access Client
    - System Management Client

    Click on **Next** the Configuration window is displayed.
23. Click on **File and Print Sharing** and provide the following information:

Workstation name:	IT01R02
Workstation description:	Requester #2

Domain name: IT01D01D

Select Install LAN Server Administration

Select Install sharing

24. Click on **Network Adapters for File and Print Sharing** - will have been filled out already if OS/2 was able to detect the adapter card installed in the system. If no information is displayed, the adapter being used has to be identified to OS/2. This is done in step 29.
25. Click on **User ID and Password**. Enter **USERID** for the user ID and **PASSWORD** for the password.
26. Click on **Remote Access Client** - enter the following information:
    - If testing with analog lines and modems:
      - Enter the phone number for the modem connected to the additional server (S01). This is required for the LAN Distance tests.
      - Modem type: select the modem being used

        Note: Be sure to use a modem that is supported by LAN Distance. Using an unsupported modem may cause problems while testing. See "Finding a Supported Modem" for more information.
    - If testing with Null-Modem cable:
      - Modem type: select the null modem.

        Note: Be sure follow the instructions in "Setting up LAN Distance for NULL Modem testing on Client 2" for completing null modem testing setup.
    - COM port: set to COM1 (if COM1 is used for the mouse, then select COM2)
    - LAN type: select **Ethernet** if using Ethernet, otherwise select **Other**.
27. Click on **TCP/IP Services** and enter the following information exactly as shown:

    TCP/IP address 10.3.227.81

    Subnet mask 255.255.254.0

    Router 10.3.226.1

    Host Name it01r02

    TCP/IP Domain Name test.company.com

    Name Server 10.3.199.2

28. Click on **System Management Client** and enter the following information:

    System name it01r02

    Select NetBIOS protocol

    Network Address AC010202

Select TCP/IP protocol

System Keywords engineering

29. Click on Network Adapters and Protocol Services.
    - If the system displays the adapter as selected, skip to step 30.
    - If OS/2 Warp did not detect the adapter card, the **Add Adapter** push button is displayed. Do the following steps to define the adapter. The following directions assume the adapter's device driver and Network Information File (NIF) are on a diskette. For example, the IBM token ring adapter has a device driver named ibmtok.os2 and a NIF file named ibmtok.nif.
        1. Click on **Other Adapter**. The Network Adapter Driver Disk window is displayed.
        2. Insert the diskette with the OS/2 driver and NIF files in the a: drive and specify the directory where the system can find those files.
        3. Click on **OK**. The Drivers Found window is displayed. Select the adapter that is installed and make sure the correct LAN type is selected (Ethernet or Token-Ring).
        4. Click on **OK**. The files are copied to the hard drive.
        5. Remove the diskette and click on **OK**. The Configuration window is displayed showing the adapter that was selected.
30. If OS/2 Warp detected an adapter card in the system, the Configuration window is displayed with the adapter selected. Set the address on the network card to 4000AC010202 using the following steps:
    a. Click on **Settings**. The Parameters for *adapter_name* Adapter window is displayed.
    b. Select Node Address/Network adapter address and click on **CHANGE**. The Change Configuration window is displayed.

       Note: Not all adapter cards allow you to define the network address for the LAN adapter. Having a defined network address makes the isolation of problems easier. If your adapter does not let you change the network address, skip this step.

    c. Enter the following value for the node address: 4000AC010202
    d. Click on **OK**. The Parameters for *adapter_name* Adapter window is displayed again.
    e. Click on **OK**. The Configuration window is displayed again.

If any item does not have a check mark next to it, go back and make sure that the configuration information was entered correctly.

31. Click on **Install**.
32. Make sure the information displayed in the configuration window is correct. When you are ready to start the installation, click on **OK**.
    A progress indicator displays the status of the installation as files are copied from the CD to the hard drive. This process typically takes about 10 minutes.
33. If the Monitor Configuration/Selection Utility window is displayed, **Install using default for monitor type** should already be selected.
34. Click on **OK** to continue installing.
35. If the Select Display Resolution window is displayed, click on **OK** to accept the default selection.

This portion of the installation typically takes between 20 and 45 minutes, depending on the hardware and software peripherals you selected earlier.

36. When the installation is complete, the system automatically reboots.
37. When the system restarts, the Welcome to OS/2 window is displayed. Close this Welcome window.
38. From the Desktop, open the Programs folder.
39. Open the Utilities folder.
40. Scroll down through the Utilities folder and open the TME 10 NetFinity System Management Client folder.
41. Double-click on the TME 10 NetFinity Service Manager icon.

42. Double-click on the Security Manager icon.
    a. Turn off the Security Manager Access check box.
    b. Click on Select All under Services.
    c. Click on Set.
    d. Click on Exit.
    e. Close all folders.
43. Open the Drives folder to verify that the CD-ROM drive was identified.

    Note: If the CD-ROM drive is a SCSI drive, make sure the device driver for the SCSI adapter is installed on the system and that config.sys contains the appropriate information. Copy the device driver file to the c:\os2\boot directory and add

    ```
    BASEDEV=xxx.ADD
    ```

    to config.sys, where *xxx* is the name of the device driver.

Setting up LAN Distance for NULL Modem testing on Client 2

Follow these steps to change the remote access phone book on client 2 when testing with a Null Modem cable instead of analog phone lines and modems.

1. Open an OS/2 window.
2. Type **ldshuttl remote** and press Enter.
3. Shutdown and reboot.
4. On reboot, open the **Connections** folder.
5. Double click on **Network** to open the icon view.
6. Open the **Network Services** folder.
7. Open **Remote Access Client**, MyWorkStation is highlighted.
8. Click on Selected, then Open As the Settings
9. Click on **Phone Book** tab, DIAL LOCATION is highlighted.
10. Click on **Delete**, and click on **OK** to confirm.
11. Click on **Modems** tab.
12. Click on **Change** to bring up the Null Modem settings window.
13. Click on **Change**
14. Select Nonswitched
15. Click on **OK**
16. Click on close from the system menu on the Null Modem settings window.
17. Click on **Phone Book** tab.
18. Click on **Add**
19. Select **PSTN** for Network Type.
20. Select **Nonswitched** for Line Type.
21. Click on **OK**, the Phone Book New Entry Settings window is displayed.
22. Type the name **DIAL LOCATION** for the Entry Name.
23. Click on close from the system menu on the phone book new entry window.
24. Click on close from the system menu on the MyWorkstation settings window.
25. Click on **Yes** to save LAN Distance settings.

26. Click on **OK** to continue closing.
27. Close the "LAN Distance Workstations" folder.
28. On the "LAN Distance Shuttle Option" window, select **LAN Workstation** and click on **OK**.
29. Close all folders.
30. Shutdown and reboot.

Installing the Network Test Cases on Client 2

To install the network test cases:

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 CDROM into the CD-ROM drive.
2. Open an OS/2 window.
3. Change to the appropriate drive.
4. The installation program requires that your current drive be the one containing the Version 4.6 CDROM.
5. Type the following commands to install the network test cases:
   ```
   cd lan_inst
   install
   ```
6. When installation of the test cases has completed, remove the CDROM from the drive, and then shut down and restart the system.

The OS/2 PCM Compatibility Testkit Version 4.6 folder is added to the Desktop.

Appendix C. Install and Configure Convenience Package for OS/2 Warp Version 4

This appendix details the steps needed to install your Requester #1 and Requester #2 systems with Convenience Package for OS/2 Warp Version 4 for testing with the OS/2 PCM Compatibility Testkit Version 4.6.

Setting Up Client 1 or Client 2

Setting up the client 1 or client 2 consists of:

- Loading Convenience Package for OS/2 Warp Version 4 on client 1 or client 2
- Configuring client 1 or client 2
- Installing the base test cases
- Installing the network test cases

Note: All system names, addresses, user names, and passwords are case-sensitive and must be typed exactly as shown.

Load client 1 or client 2 with **Convenience Package for OS/2 Warp Version 4**.

The following steps walk through the installation of the operating system on the system destined to be the client 1 or client 2.

1. If there are any files on the hard drive of the system that you want to keep, make a copy of them now. This procedure will delete all files on the hard drive.
2. Shut down or power off your system.
3. Insert the OS/2 Installation diskette in the a: drive.
4. Power on or restart the system.
5. When prompted for the OS/2 Diskette 1, insert the diskette and the OS/2 CD, and press Enter.
6. When prompted for the OS/2 Diskette 2, insert the diskette and press Enter.
7. At the Welcome screen, press Enter to start loading from the CD.
8. If the Welcome screen is not displayed, see "Resolving Problems during Installations".
9. The screen OS/2 Warp Version 4 Installation is displayed, press Enter.
   If there are no volumes or partitions defined:
   - The **Volumes Too Small** screen is presented, press Enter.
   - If there are partitions defined, but no volumes defined:
   - The "Volume Conversion Utility" (VCU) will convert disk partitions that do not have volumes defined to compatibility volumes. Drive letters will be assigned to any partition that would be visible under previous versions of OS/2. Hidden partitions (2nd primary partition on a drive) will not be converted.
   - The VCU conversion screen will be presented indicating the number of compatibility volumes created, and prompt you to reboot using the installation diskettes.
   - If there are volumes and partitions defined:
   - The **Installation Volume Selection** screen will be displayed.
   - Highlight 2. Specify your own installation volume, and press Enter.
10. A **Modifying Volumes Warning** is displayed indicating all data on the volumes will be lost. Be sure there is nothing left on the drive(s) that might still be needed, and then press **Enter** to start the Logical Volume Managment Tool (LVM).

11. If the message **A volume of the following minimum size must be set installable: 120megabytes** is displayed, press Enter.
    If needed, press F3 to exit the installation and back up any necessary data.
12. The **Logical Volume Management Tool - Logical View** screen is displayed. Setup the disk partitions and volumns as follows:
    a. Install OS/2 Boot Manager
        - In the **Logical Volume** section at the top, the entry [CDROM-1], may be the only entry, and the **Disk Partition** section at the bottom will be blank.
        - Press Enter to bring up the **Options** screen.
        - Highlight **Install boot manager** and press Enter.
    b. Press **F5** to change to the physical view.
    c. Define Physical Partition for OS/2:
        - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for OS/2 installation.
        - Tab down to the **Disk Partition** section, and highlight **[free space 1]**.
        - Press Enter to bring up the **Options** menu.
        - Highlight **Create a new partition**, and press Enter.
        - Highlight **Primary Partition**, and press Enter.

          Note: If you know the system BIOS supports booting from a partition that begins or extends beyond 8.3GB (1024 cylinders), then in the next step, select **create at end of free space**, otherwise select **create at beginning free space**.

        - Highlight **Create at the beginning of free space**, and press Enter.
        - Clear the entry field, and enter Warp Version 4 for the partition name, and press Enter.
        - Set the size of the boot partition to 500 MB, and press Enter.
    d. Define Physical Partition for PCMTEST:
        - Tab up to the **Physical Disks** section, and highlight the disk drive to be used for the PCM Testkit partition.
        - Tab down to the **Disk Partition** section, and highlight **[free space 1]**.
        - Press Enter to bring up the **Options** menu.
        - Highlight **Create a new partition**, and press Enter.
        - Highlight **Logical Partition**, and press Enter.
        - Highlight **Create at beginning of free space** and press Enter.
        - Clear the entry field presented, and enter **PCMTEST** for the partition name, and press Enter.
        - Set the size of the pcmtest partition to at least 230MB, and press Enter.
    e. Press F5 to change to the Logical Volume Management Tool - Logical View.
    f. Define OS/2 Boot Volume:
        - Press Enter for the **Options** menu.
        - Highlight **Create a new volume**, and press Enter.
        - Highlight **Create a volume that can be made bootable**, and press Enter.
        - Highlight **C:** and press Enter.
        - Type **Warp Version 4** as the volume name, and press Enter.
        - A pop-up panel asks you to choose the disk for creating the volume, press Enter.

- Highlight the disk drive selected for OS/2 installation, and press Enter.
- Highlight **Use existing partition**, and press Enter.
- Highlight **[Warp Version 4 500]**, and press Enter.
- The partition name **Warp Version 4** is presented, press Enter to accept.

g. Add OS/2 Boot Volume to Boot Manager:
- Highlight the volume Warp Version 4.
- Press Enter for the Options menu.
- Highlight Set Boot Manager startup values, and press Enter.
- Highlight Default boot selection field, and press Enter.
- Highlight Save the changes, and press Enter.

h. Define PCMTEST volume:
- Press Enter for the **Options** menu.
- Highlight **Create a new volume**, and press enter.
- Highlight **Create a volume that does not need to be bootable**, and press Enter.
- Highlight **Create a compatibility volume** and press Enter.
- Highlight **D:** and press Enter.
- Type PCMTEST as the volume name, and press Enter.
- A pop-up panel asks you to choose the disk for creating the volume, press Enter.
- Highlight the disk drive selected for PCMTEST, and press Enter.
- Highlight **Use existing partition**, and press Enter.
- Highlight **[PCMTEST 500]**, and press Enter.
- The partition name **PCMTEST** is presented, press Enter to accept.

i. The rest of the disks can be left as free space for now.
j. Press F3 to exit.
k. Highlight **Save the changes and exit**, and press Enter.

13. If disk partitions were modified, follow the instructions to reboot the system using the new disk partitions. Use the same installation diskettes as before.
- At the **Welcome** screen, press Enter.
- The OS/2 Warp Version 4 installation screen is presented, press Enter.
- The **Installation Volume Selection** screen is presented, and the message in the middle of the screen should say **OS/2 Warp Version 4 will be installed on: Volume C.** Highlight option **1. Accept the volume**, and press Enter.

Note: It will be the boot drive that was set as installable with LVM.

14. Select **2. Format the Partition** on the Formatting the Installation Partition screen.

Note: When disk partitions have been modified, the boot partition will be unformatted and this screen will not be presented.

15. The **Formatting the Installation Volume** screen is presented. Select option **1. Perform a long format**, and press Enter.

16. On the Select the File System screen, highlight option 1. High Performance File System, and press Enter.

Note: There are test cases that require HPFS in order to use file names greater than eight characters long.

Note: If the boot volume is currently formatted, a warning screen is displayed indicating that the hard disk might contain data. Press **Enter** to continue with formatting.

The system starts copying data from the CD to the system's hard disk. A progress bar displays the status of this activity.

17. When loading is complete, an all blue screen is displayed requesting you to remove the diskette from the a: drive, and press Enter to reboot the system.

When the system boots this time, it is booting from the hard drive. The system automatically opens the System Configuration screen. The following steps identify how the system should be configured.

18. On the System Configuration screen, click on Next.
19. The System Configuration(cont.) screen is presented. Click on Next.
20. The Country Information screen is presented, choose the United States, and select codepage (437,850) and click on OK
21. The Select System Default Printer screen is displayed.
22. Select the type of printer that will be connected to client 1 for PCM base testing and click on OK.
23. If your system recognizes a sound card, it opens the Multimedia Device Settings screen. Click on Selections to verify the adapter settings, and then click on OK.
24. In the Primary Display Driver Install screen, the video driver is already selected. Click on OK to accept the default.
25. The OS/2 Warp Version 4 Setup and Installation screen is presented. Accept the defaults and click on Next.
26. The Installing IBM OS/2 Warp Version 4 screen is displayed. Click on Next.
27. The Information screen is displayed, DO NOT ADD ANY INFORMATION ON THIS SCREEN, click on Next.
28. On the Select the services to install screen, check the following items:
    - File and Print Sharing Services
    - TCP/IP Services
    - Netscape Communicator
    - Tivoli Management Agent
29. Click on **Next**. The **Configuration** screen is displayed.

The next set of steps configure the characteristics of the domain controller. The test cases depend on this information. If you do not follow these instructions exactly, test cases might fail. On the left side of the screen is a list of the components to configure.

30. **OS/2 Warp Version 4** - explains the color codes of the check marks and needs no input.
31. Click on **File and Print Sharing Services** - do the following:
    - Select Install LAN Server Administration
    - Select Install sharing.

    Enter a Workstation name: IT01R01 for client 1 or IT01R02 for client 2

    Enter a Domain name: IT01D01D

32. Click on **Network Adapters for File and Print Sharing** - this will have been filled out already if OS/2 was able to detect the network adapter card installed in the system. If no information is displayed, or the wrong adapter is listed, then the installed network adapter needs to be identified to OS/2. Follow the instructions in step 37 to identify the network adapter and load the driver, then return to this step and continue.
33. Click on **User ID and Password** - enter **USERID** for the user ID and **PASSWORD** for the password.

34. Click on **TCP/IP Services** - enter the following information:

TCP/IP address	10.3.227.80 for client 1 or 10.3.227.81 for client 2
Subnet Mask	255.255.254.0
Router	10.3.226.1
Host Name	it01r01 for client 1 or it01r02 for client 2
TCP/IP Domain Name	test.company.com
Name Server	10.3.199.2

    You must use the TCP/IP addresses shown. If other addresses are used, the test cases that rely on the TCP/IP addresses will fail.
    If the network being used is not isolated from other LAN segments the TCP/IP information here will not be valid with the existing network. This is why it is important to isolate this test environment if at all possible.

35. Click on **Netscape Communicator**, accept the defaults.
36. Click on **Tivoli Management Agent**, accept the defaults.
37. Click on Network Adapters and Protocol Services
    - If the system displays the adapter as selected, skip to step 43.
    - If OS/2 did not detect the adapter card, the **Add Adapter** push button is displayed. Do the following steps to define the adapter. The following directions assume the adapter's device driver and Network Information File (NIF) are on a diskette. For example, the IBM token ring adapter has a device driver named ibmtok.os2 and a NIF file named ibmtok.nif.
38. Click on **Other Adapter**. The Network Adapter Driver Disk panel is displayed.
39. Insert the diskette with the OS/2 driver and NIF files in the a: drive and specify the directory where the system can find those files.
40. Click on **OK**. The Drivers Found panel is displayed. Select the adapter that is installed and make sure the correct LAN type is selected (Ethernet or Token-Ring).
41. Click on **OK**. The files are copied to the hard drive.
42. Remove the diskette and click on **OK**. The Configuration panel is displayed showing the adapter that was selected.
43. If OS/2 detected an adapter card in the system, the Configuration panel is displayed with the adapter selected. Set the address on the network card to 4000AC010201 for client 1 or 4000AC010202 for client 2 using the following steps: *(Ref #1.)*
    l. Click on **Se**ttings. The Parameters for adapter_name Adapter panel is displayed.
    m. Select Node Address/Network adapter address and click on **CHANGE**. The Change Configuration panel is displayed.

        Note: Not all adapter cards allow you to define the network address for the LAN adapter. Having a defined network address makes the isolation of problems easier. If your adapter does not let you change the network address, skip this step.

    n. Enter the following value for the node address: 4000AC010201 for client 1 or 4000AC010202 for client 2.
    o. Click on OK. The Parameters for adapter_name Adapter panel is displayed.
    p. Click on OK. The Configuration panel is displayed.

All of the items should be selected with colored check marks indicating all the parameters have been provided to finish the installation of the domain controller.

44. Click on **Install**. A Configuration pop-up panel is displayed asking if it is OK to start the installation.

45. Click on **OK** The system begins the installation. A progress bar is displayed as the installation progresses. Load time is less than one hour. The system will reboot automatically when the installation is complete.
46. If the **Monitor Configuration/Selection Utility** panel is displayed, accept the defaults for monitor type and click on **OK**.
47. If the **Select Display Resolution** panel is displayed, click on **OK** to accept the default selection.

After the installation completes, the system automatically reboots and an **OS/2 Warp Version 4** registration screen is displayed. Click on **Exit** to close the registration screen.

Installing the Base Test Cases on Client 1 or Client 2

IMPORTANT: When loading test cases, load all of the test cases at the same time.

The tests in the PCM Testkit can be installed on any local (non-network) drive, however, the drive partition defined for the base test cases should be used. The d: drive is used for all examples in the documentation. The selected PCM Testkit drive can be reformatted with this process. The config.sys file is modified during PCM Testkit installation, which will require the system to be shut down and rebooted after the test cases are loaded.

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 CDROM in the CD-ROM drive.
2. Open an OS/2 window.

   Note: If the d: drive is unformatted, format it now before continuing with installation of the base testcases. The drive can be formatted as either FAT or HPFS. For example:

   ```
   format d: /fs:fat
   ```

   or

   ```
   format d: /fs:hpfs
   ```

3. Change to the \pcm_inst directory on the CDROM and type **install**.
4. Wait for the PCM Testing Setup - Main Menu window to open.
   On this screen the default selections are:
   - OS/2 Boot Partition = C
   - Test Case Partition = D
   - OS/2 Release = 4.5
   - Format Testcase Partition = NO (Change to YES only if you are reformatting this partition)
   - Format Type = FAT (or HPFS)
   - Install PCM Testkit From: (CDROM or LAN Drive)
5. To change the defaults, select **CONFIGURE** to open the PCM Testing Configuration window. On this panel the default selections can be changed for:
   - OS/2 Boot Partition
   - Test Case Partition
   - OS/2 Release/Driver Level
   - Format Testcase Partition
   - FAT or HPFS
   - Source Drive for PCM Testkit INSTALLATION
6. Click on **ACCEPT** to save your changes and return to the main menu. Verify your selections.
7. Select Update CONFIG.SYS, STARTUP.CMD, AUTOEXEC.BAT.
8. Select all applicable test cases.

   Note: Do not select the PCMCIA, APM, SPEECH, and SMP tests if your system's shipped configuration does not support these features.

9. Click on **RUN** when you have completed all selections.

   After each of the test cases is installed, a message is displayed to confirm completion. Verify your test case selections as these messages are displayed.

10. After the selected test cases are installed, click on **DONE**.
11. Click on **OK** in the PCMSETUP Activity Completed window.
12. Click on **EXIT** or select additional test cases to load.
13. Click on **OK**.
14. Shut down and reboot the system.

Installing the Network Test Cases on Client 1 or Client 2

To install the network test cases:

1. Insert the OS/2 PCM Compatibility Testkit Version 4.6 CDROM into the CD-ROM drive.
2. Open an OS/2 window.
3. Change to the appropriate drive.
4. The installation program requires that your current drive be the one containing the Version 4.6 CDROM.
5. Type the following commands to install the network test cases:
   ```
   cd lan_inst
   install
   ```
6. When installation of the test cases has completed, remove the CDROM from the drive, and then shut down and restart the system.

The OS/2 PCM Compatibility Testkit Version 4.6 folder is added to the Desktop.

Appendix D. Hardware Information Components

The following figures show the hardware information components. You can use this information as a reference to collect the details that you need before completing your system's hardware configuration information.

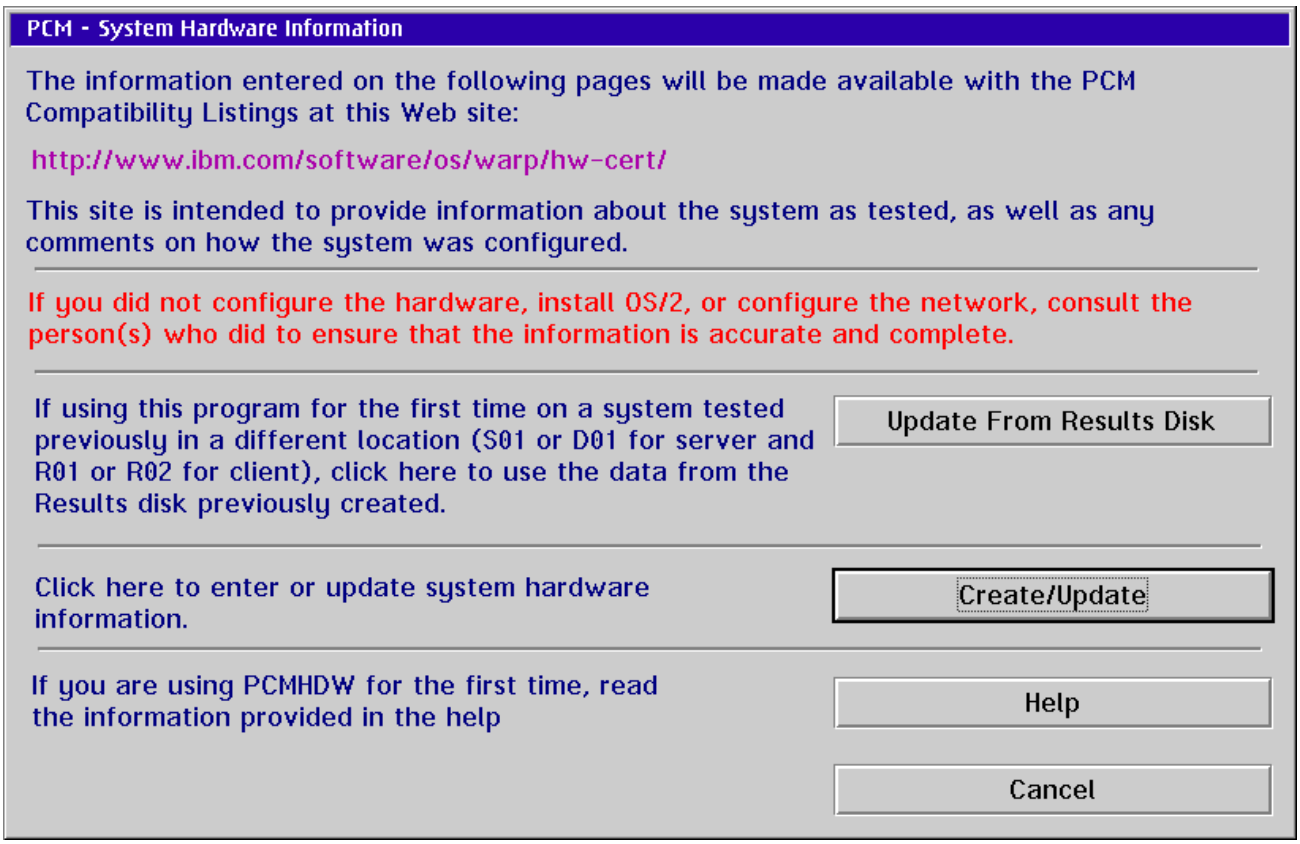

Figure 10. PCM - System Hardware Information

1. Click on **Create/Update** to create new or modify existing system hardware information.
   The **System Hardware Configuration** window appears, as described on page 115.
2. Click on **Update From Results Disk** to load system hardware information from the results disk created earlier.

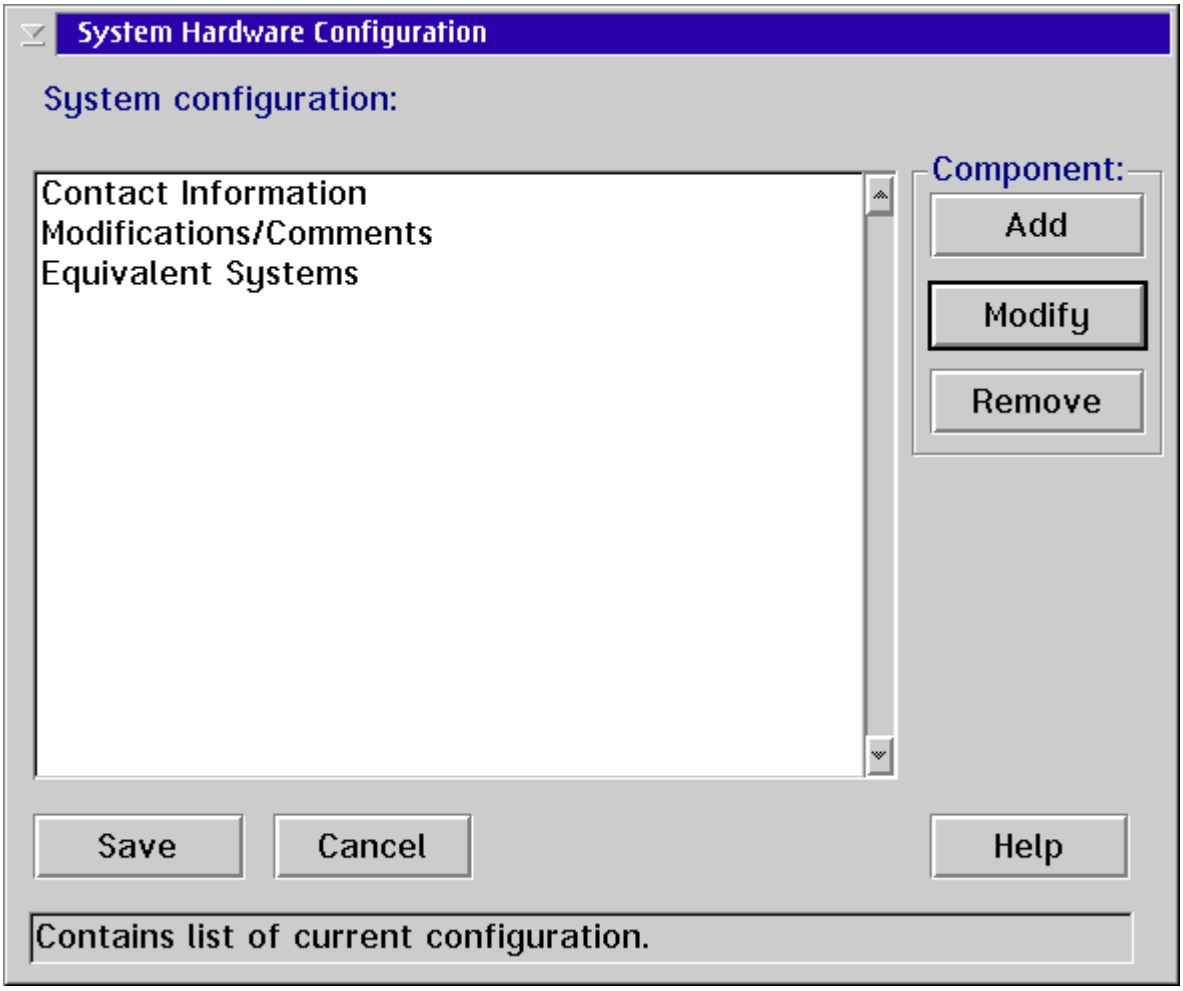

Figure 11. System Hardware Information

There are three default components for entering your system hardware configuration.

1. Select the component you want to modify and click on **Modify**.
   An alternative method is to double-click the component.
   See the following figures for more details.
2. Click on **Add** to add a new system hardware component.
   See Add Component on page 119 for more details.

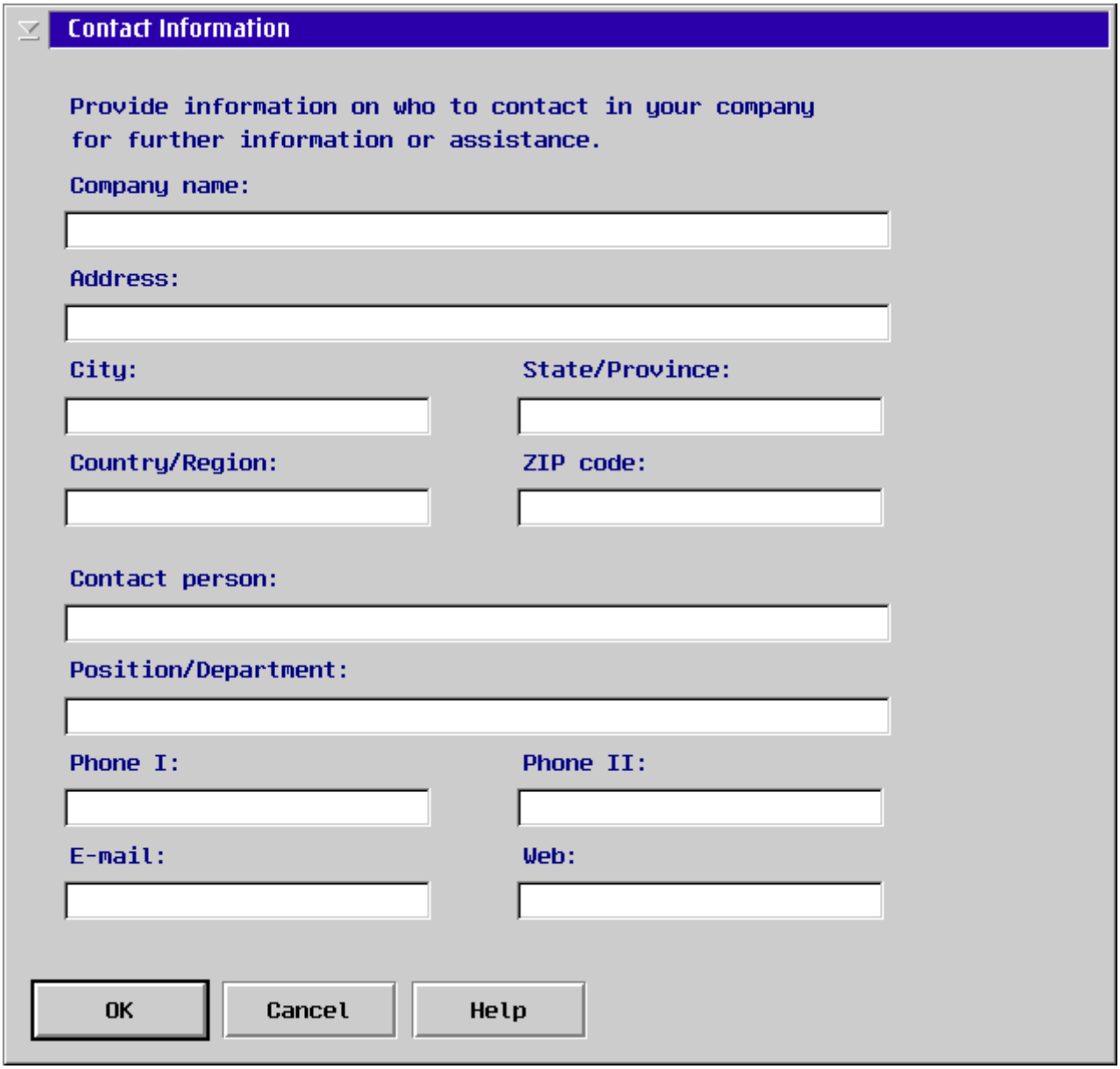

Figure 12. Contact Information

1. To modify contact information, provide the contact information of the person in your company to contact for further information or assistance.
2. Click on **OK** to save the information or click on **Cancel** to close this window without saving the changes.

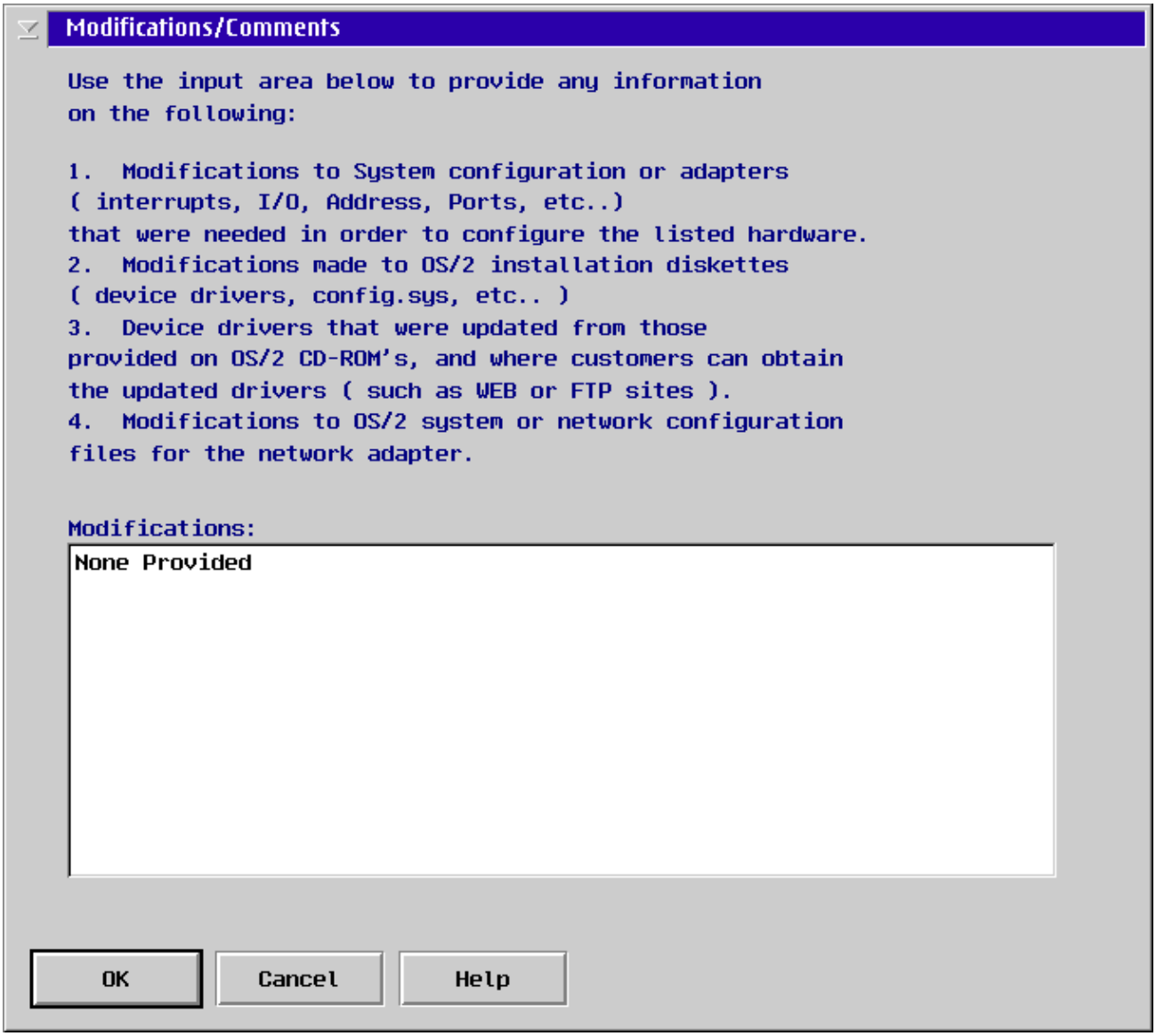

Figure 13. Modifications/Comments

1. To enter modifications or comments, enter the required information in the text field. This information records the initial modifications for the system.
2. Click on **OK** to save the information or click on **Cancel** to close this window without saving the changes.

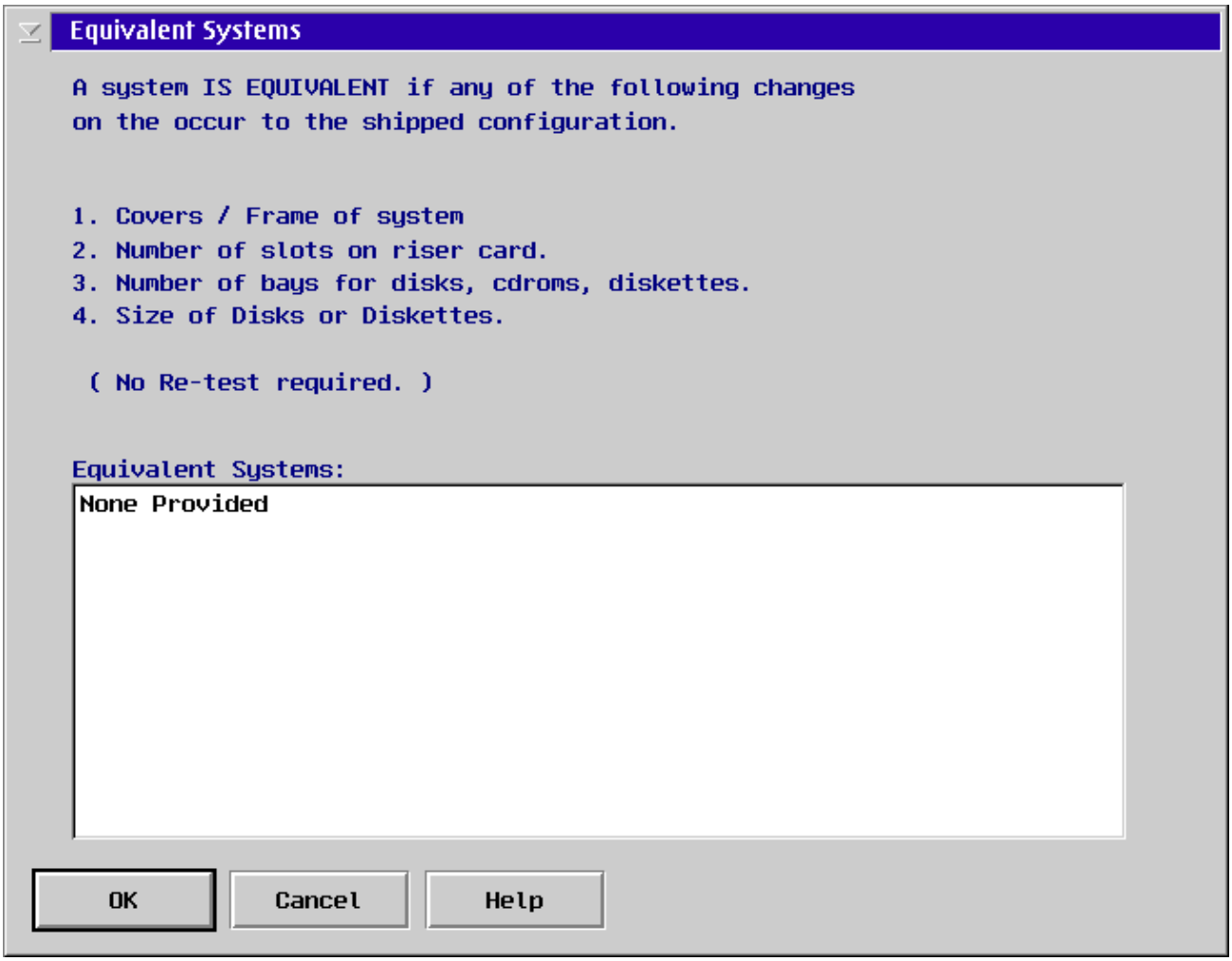

Figure 14. Equivalent Systems

1. To enter equivalent systems, enter names of the systems that are equivalent and do not require retesting.
2. Click on **OK** to save the information or click on **Cancel** to close this window without saving the changes.

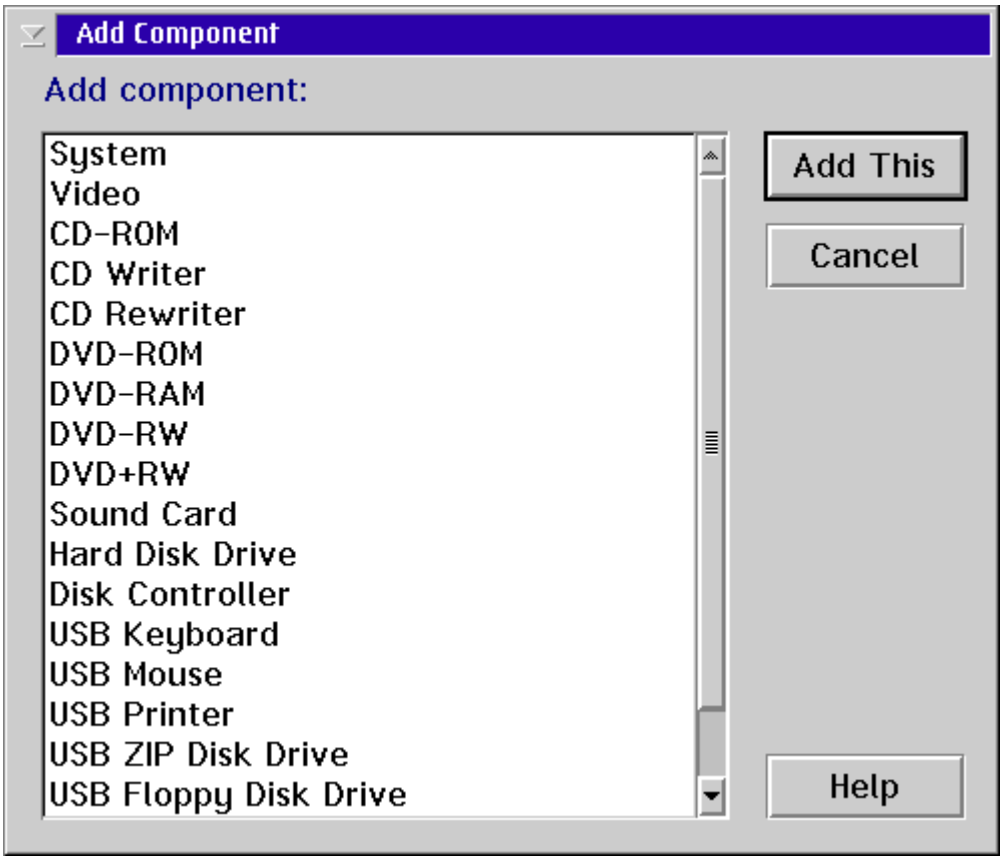

Figure 15. Add Component

Select a component to add and click on **Add This** or click on **Cancel** to close this window without saving the changes.

The selected component is added to the list in the System Hardware Information window.

Note: The equivalency guidelines are available from the PCM Program WEB site. The TIPS page on the WEB contains the latest updates and requirements for listing equivalent systems.

Appendix E. LAN Test Case Groupings, Execution, and Output

For OS/2 Warp Server products listing, a system must be tested in domain and server roles.

For OS/2 Warp Client products listing, a system must be tested in both client 1 and client 2 roles.

Table 4. Testing of Domain Controller D01 (Test Case Logs in \d01logs)

Test Case	Description	Execution From	Output
CD-ROM Install	OS/2 Warp Server (SMP, Adv, Entry)	manual script	none
ITLDUMP	Dump Utility	manual script	Dumpfile, itldump.txt
ITLPSNS00	Backup/Restore	manual script	itlpsns.txt
ITLLS56.CMD	LAN Exerciser for D01	---, S01, R01, R02	itlls56.xxx
ITLMSG.CMD	LAN Messaging	D01, ---, R01, ---	itlmsg.xxx
ITLFTP02.CMD	FTP Server/Ping Exerciser of D01	---, ---, ---, R02	itlftp02.xxx
ITLTCP01.CMD	TCP/IP Remote Execution on R01	D01, ---, ---, ---	itltcp01.xxx
ITLRAID	SystemView RAID Information	manual script	alerts.log

Table 5. Testing of Additional Server S01 (Test Case Logs in \s01logs)

Test Case	Description	Execution From	Output
CD-ROM Install	OS/2 Warp Server (SMP, Adv, Entry)	manual script	none
ITLSV00	Group Management	manual script	none
ITLSV06	Monitor Remote Workstation	manual script	xxxxxxxx.DBF
ITLSV07	Hardware Inventory (Group)	manual script	xxxxxxxx.hst
ITLSV08	Software Inventory (Group)	manual script	xxxxxxxx.inv
ITLSV11	S01-System Information Tool	manual script	sysinfo.rpt
ITLPSF00	Advanced Print Services	manual script	itlpsf00.txt
ITLLS57.CMD	LAN Exerciser for S01	D01, ---, R01, R02	itlls57.xxx
ITLFTP01.CMD	FTP Server/Ping Exerciser of S01	---, ---, R01, ---	itlftp01.xxx
ITLALERT.CMD	Alert Reporting on S01	---, S01, ---, ---	itlalert.xxx
ITLLD.CMD	LAN Distance Connection Server S01	---, ---, ---, R02	itlld.xxx
ITLCLIENT1	Client Load from Server	manual script	none

Table 6. Testing of Client 1 R01 (Test Case Logs in \r01logs)

Test Case	Description	Execution From	Output
CD-ROM Install	OS/2 Warp Connect, OS/2 Warp V4	manual script	none
ITLPEER.CMD	PEER Services Exerciser	---, S01, ---, R02	itlpeer.xxx
ITLLS56.CMD	LAN Exerciser for D01	---, ---, R01, ---	itlls56.xxx
ITLLS57.CMD	LAN Exerciser for S01	---, ---, R01, ---	itlls57.xxx
ITLMSG.CMD	LAN Messaging	D01, ---, R01, ---	itlmsg.xxx
ITLFTP01.CMD	FTP and Ping Testing to S01	---, ---, R01, ---	itlftp01.xxx

Table 7. Testing of Client 2 R02 (Test Case Logs in \r02logs)

Test Case	Description	Execution From	Output
ITLCLIENT2	Client Load from PEER	manual script	none
ITLLS56.CMD	LAN Exerciser for D01	---, ---, ---, R02	itlls56.xxx
ITLLS57.CMD	LAN Exerciser for S01	---, ---, ---, R02	itlls57.xxx
ITLFTP02.CMD	FTP and Ping Testing to D01	---, ---, ---, R02	itlftp02.xxx
ITLLD.CMD	LAN Distance Connection to S01	---, ---, ---, R02	itlld.xxx

Appendix F. Troubleshooting

This appendix provides information to assist you with problem analysis and reporting.

Resolving Problems during Installations

The following information can be used to solve problems you might encounter during installation.

The System Hangs during the Boot Up Sequence

This can be caused by any number of problems.

A common problem is that there is an IRQ conflict caused by the cards installed in the system. To investigate this, reboot the machine. When the white box and the words "OS/2" are displayed in the left-hand corner of the screen, press Alt+F2. (You have only a few seconds to press Alt+F2.) The system then shows the drivers as they are being loaded, which might help identify what is happening when the system hangs.

The System Keeps Asking For the OS/2 Warp Server CD-ROM

It is an indication that the system does not recognize the CD-ROM. First, check to make sure the CD is in the CD-ROM drive. Otherwise, this is most likely caused by the lack of a device driver on the boot diskettes that enables the system to recognize the CD-ROM. Determine the controller driver required for the CD-ROM and add that driver to the config.sys file on the second OS/2 boot diskette. For example, the Compaq Proliant system requires having the cpq53cx.add driver loaded in order to use the CD-ROM in that system. So a BASEDEV=cpq53cx.add statement is added to the config.sys file on the boot diskette along with adding the driver itself to the boot diskette.

Note: If you add a device driver to diskette-1 remember to update the config.sys file with the appropriate BASEDEV=device driver name and also add SET CopyFromFloppy=1. This will cause a prompt for diskette-1 to be re-inserted later in the installation process so the BASEDEV driver can be copied.

Server Does Not Start or Net Logon Fails to Start

This may indicate that the additional server system is not synched with the domain controller. Run the **resync** command from an OS/2 command prompt on the additional server to resync the server with the domain controller.

Resolving Network Problems

This section describes problems you might have installing OS/2 Warp.

If you have problems while loading client 2 remotely from client 1 or if client 2 was not able to connect with client 1, possible causes include:

- The OS/2 Warp CD is not in the CD-ROM drive of client 1.
- The diskette might specify an incorrect network adapter card. On OS/2 Diskette 1, check the lantran.log file for error messages that might indicate a problem with the driver or protocol.ini file.
- The adapter card is not configured correctly. For example, there may be an IRQ conflict or the card may be configured to use the BNC connection when the card is using an RJ45 connector.
- The cabling may be broken or not connected. Try using another cable.
- The card may be bad. Try using another card. If that fails to correct the problem, run adapter card diagnostics as described in the documentation that came with your adapter card.

The os2ping utility can be used to help isolate the problem. This tool, located in the c:\wal directory, does a NetBIOS ping of an adapter card address. For example, this command pings the additional server, which we assigned the network address 4000AC010101. (See the step describing the network adapter card configuration for the system setup as the additional server)

```
os2ping -a=4000ac010101
```

For more information about the os2ping command, type the following:

```
os2ping ?
```

If you are using Ethernet connections, the network address is different. Look in the lantran.log file for the network address specified as the "token ring format" address. This part of a lantran.log file shows the correct address for this on an Ethernet network.

Look at the lantran.log file in the \ibmcom directory or on OS/2 Diskette 1 for LAN load of clients. In that file you might see an error message similar to `Adapter failed to respond in time` (indicating a problem with the target's adapter).

Unknown Error 205 Generating Response Files

This error message is seen when trying to load a requester from the OS/2 Warp requester. Look for a file called mkrsp.log on the client machine. The system may be trying to generate a response file for an adapter that is not in the machine. This log could indicate the system could not find a .nif or .os2 file on the server.

Look at the config.sys file on the second boot diskette. Near the bottom of the file there should be "SET ADAPTER" and "SET ADAPTER_INFO" lines and they should match the adapter installed in the system. There should also be a DEVICE=*xxxx*.OS2 where *xxxx* is the adapter driver being used.

On the client 1 system, look in the directory specified in mkrsp.log. It will be a subdirectory of the c:\grpware directory. This error has been known to happen if the adapter specified in the "SET ADAPTER_INFO" line of config.sys is not found in this directory.

Reporting Problems

Meaningful analysis, resolution, and disposition of problems is most effectively accomplished when the problem can be replicated on a local system where OS/2 testers and code developers can experience the problem first hand.

Problem resolution will most likely require the problem to be repeatable on a system that is the same or similar to the system on which the problem first occurred.

In the event that problem analysis fails to resolve a test failure, problem resolution might require that the test system be sent to the IBM OS/2 Compatibility Lab for problem re-creation.

When problems are encountered, please debug the problem as far as possible prior to submitting a problem report form. Furthermore, all the tests, or as many as possible, should be attempted prior to reporting problems.

Refer to Hints & Tips on the OS/2 PCM Compatibility Testkit Program home page (at http://www.software.ibm.com/os/warp/hw-cert/pcm/pcm_tkit.htm) for additional information.

In the event that you need to re-install the Testkit to restore a "pristine install", refer to Chapter 10, "Uninstalling the OS/2 PCM Compatibility Testkit".

Problem Reporting Forms

For reporting problems, use the problem report form located on the Testkit home page.

Level 1 Support

Level 1 support begins with problem notification. The problem re-creation team receives the Web problem report form that clearly characterizes the problem. Remember to provide your e-mail address and phone number. The Program Office might request additional information as needed for analysis.

Level 2 Support

Level 2 is problem analysis and a sizing of the effort to replicate the problem.

Level 3 Support

Level 3 support, if required, will be problem re-creation, debug, and resolution followed by notification.

At all levels of support, there might be the need for a member of the support team to contact the originator of the problem for additional information. Please be sure this information is provided on the problem report form.

Appendix G. Testing with Additional LAN Clients

For OS/2 Server Compatibility testing, only two clients systems (R01 and R02) are required in the test environment. However, to meet certain requests from your customers, you might need to test server systems with more than just two clients. To facilitate this, the PCM Compatibility Testkit LAN setup utilities, network files, test selection program, and test cases provide the ability to add clients R03 through R12.

Installation

Systems R03 through R12 are used as regular LAN Requester clients and can be installed as follows:

Note: Refer to the tables in "Tables for R03 through R12" for the system names, TCP/IP addresses, and network adapter addresses that have been predefined for clients R03 through R12 in the PCM LAN testing environment.

1. Installation of OS/2 Warp Version 4 or Convenience Package for OS/2 Warp Version 4 on systems R03 through R12:
   Follow the instructions outlined in "Setting Up Client 1" for installing and configuring the systems, but substitute the values from the tables in the network configuration section as appropriate.

Running Tests on R03 through R12

Using the "LAN Test Selection and Control" GUI on clients R03 through R12, you can select to run tests to exercise either the additional server (S01) or the domain controller (D01).

1. When you select **Run tests to exercise the Additional Server**, test cases itlls57.cmd and itlftp01.cmd are run.
2. When you select **Run tests to exercise the Domain Controller**, test cases itlls56.cmd and itlftp02.cmd are run.
   The test case log files are located in the *xxx*logs directory on each system (where *xxx* is R03 through R12). When the test cases complete, the log files are copied to the log file directory on the system that was selected (\s01logs on the additional server, \d01logs on the domain controller).

Testkit Results Processing will not use these log files and they will not be copied to the results diskette. To verify if the test cases have completed successfully, issue the following commands.

1. On the additional server in the \s01logs directory, type:
   grep "ITLLS57 Completed successfully" itlls57.*
   and
   grep "ITLFTP01 Completed successfully" itlftp01.*
2. On the domain controller in \d01logs directory, type:
   grep "ITLLS56 Completed successfully" itlls56.*
   and
   grep "ITLFTP02 Completed successfully" itlftp02.*

When running the manual intervention test cases on the additional server in an environment with R03 through R12 systems, you should see the following results:

ITLSV00 - Group Management

R03 through R12 systems installed by following the instructions for client 1 installation will show one icon for each system in the All Systems group, and one icon for each system in the NETBIOSWS group. There should not be an icon in the TCPIPWS group.

R03 through R12 systems installed by following the instructions for client 2 installation will show two icons for each system in the All Systems group, and one icon each in the the NETBIOSWS and TCPIPWS groups.

ITLSV08 - Software Inventory and ITLSV11 - Hardware Inventory

If systems R03 through R12 are selected when running this test case, files will be created on the additional server, and will be copied to the results diskette during results processing, but not used in results analysis.

Tables for R03 through R12

Table 8. Predefined Values for Network Configuration

Workstation Name or Host Name or System Name	Workstation Description	TCP/IP Address	Network Adapter Address	Network Address for System Management
IT01R03	Requester #3	10.3.227.82	4000AC010203	AC010203
IT01R04	Requester #4	10.3.227.83	4000AC010204	AC010204
IT01R05	Requester #5	10.3.227.84	4000AC010205	AC010205
IT01R06	Requester #6	10.3.227.85	4000AC010206	AC010206
IT01R07	Requester #7	10.3.227.86	4000AC010207	AC010207
IT01R08	Requester #8	10.3.227.87	4000AC010208	AC010208
IT01R09	Requester #9	10.3.227.88	4000AC010209	AC010209
IT01R10	Requester #10	10.3.227.89	4000AC010210	AC010210
IT01R11	Requester #11	10.3.227.90	4000AC010211	AC010211
IT01R12	Requester #12	10.3.227.91	4000AC010212	AC010212
IT01S02	N/A	10.3.227.92	4000AC010102	AC010102

Note: The following values are not used during OS/2 installation or network configuration but are provided as additional information for R03 through R12 as defined in the PCM testing environment.

Table 9. User IDs and Passwords Defined during LAN Setup

User ID	Password
IT01R03U	UPW01R03
IT01R04U	UPW01R04
IT01R05U	UPW01R05
IT01R06U	UPW01R06
IT01R07U	UPW01R07
IT01R08U	UPW01R08
IT01R09U	UPW01R09
IT01R10U	UPW01R10
IT01R11U	UPW01R11
IT01R12U	UPW01R12
IT01S02A	APW01S02

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