

PCSA

Server Management with the Menu

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About This Manual

Manual Objectives

The purpose of this manual is to help the system administrator maintain the server using a menu-based management interface called the PCSA Manager Menu.

It is assumed that:

- The network, including all cables, workstations, VAX computers, and other hardware, is connected. For information on connecting the network, see the network documentation, hardware documentation, and the *Network Troubleshooting Guide*.
- The server software has been installed. To install the PCSA system server software, see the *Installation Guide: VMS Services for PCs*. To install the PCLAN/Server VMS software, see *Installing and Configuring PCLAN/Server*.
- You have installed the client software and DOS. To complete these procedures, see *Installation and Configuration Guide: DECnet PCSA Client for DOS (VMS Media)*.
- You are familiar with the associated documentation:
 - Overview*
 - Installation and Configuration Guide: DECnet PCSA Client for DOS (VMS Media)*
 - Server Administration with Commands*, if you use the PCSA Manager commands.
 - PC DECwindows User's Guide*, if you use DECwindows.

Intended Reader

This manual is intended to help system administrators maintain the server for:

- PCLAN/Server systems
- VMS Services for PCs

The system administrator should be an experienced user of the MS-DOS operating system.

Manual Organization

This manual is divided into two sections. The first section, called "Server Setup," describes how to use the PCSA Manager Menu, how to set up application and printer services, and how to add users. The second section, called "Server Maintenance," describes maintenance procedures.

The guide includes a total of ten chapters, three appendixes, and an index.

- | | |
|------------|---|
| Chapter 1 | Describes how to use the PCSA Manager Menu. |
| Chapter 2 | Describes procedures for setting up and installing applications. |
| Chapter 3 | Describes how to set up printer services for different types of printers. |
| Chapter 4 | Describes how to add user profiles. |
| Chapter 5 | Describes procedures for maintaining services. |
| Chapter 6 | Describes procedures for maintaining users. |
| Chapter 7 | Describes how to maintain workstations. |
| Chapter 8 | Describes how to send and receive broadcast messages. |
| Chapter 9 | Describes how to use the log file. |
| Chapter 10 | Describes menu options that are only valid for PCLAN/Server systems. |
| Appendix A | Includes a diagram of the PCSA Manager Menu tree. |
| Appendix B | Contains a form for you to use when you collect information to register a user. |
| Appendix C | Demonstrates the setup of a sample server and client network. |

Related Documents

If you need more detailed information about the topics listed in the following table, refer to the associated document.

Topic	Document
PCSA Manager commands	<i>Server Administration with Commands</i>
PCSA Manager broadcast command	<i>Server Administration with Commands</i>
Editing STARTNET.BAT	<i>Memory Solutions</i>
Log messages	<i>Server Administration with Commands</i>
Backing up PCSA	<i>VMS Backup Utility Manual</i>

Conventions Used

Follow these conventions while using this manual:

Convention	Meaning
Ctrl/C	While you hold down the Ctrl key, press the C key.
Ctrl/Alt/Del	While you hold down the Ctrl and Alt keys, press the Del key.
/	A forward slash (/) indicates that a command qualifier follows.
Return	Press the Return or Enter key on your keyboard.
black type	In examples of dialog between you and the PC workstation, what the workstation displays on the screen is printed in black.
red type	In examples of dialog between you and the PC workstation, red type indicates information that you must enter from the keyboard. For online versions, user input is shown in bold.
case	You can enter commands and parameters in uppercase or lowercase letters, or in a combination of both.
enter	Enter all letters, spaces, and punctuation marks exactly as they are printed. Then press the Return or Enter key, as appropriate.
numbers	All numbers shown in this manual are in decimal form, unless otherwise noted.

Convention	Meaning
two-line commands	<p>Some commands are continued on a second line. In VMS, a continued command may be indicated by a hyphen (-) at the end of the first line. Enter the hyphen, and press Return. The system displays the _\$ prompt. Continue entering the text that follows the _\$ prompt in your manual.</p> <p>In DOS, no hyphen is displayed at the end of the first line. Continue entering text without pressing the Return key.</p>
NOTE	Contains information of special importance.
CAUTION	Contains information to prevent damage to equipment or software.
WARNING	Contains information essential to the safety of personnel.

Using the PCSA Manager Menu

The main purpose of the PCSA Manager Menu is to help you manage services and register users. Services are important because they make network applications, printer, and common file directories available to workstation users. Use the menu to register users with the server, to create disk, file, and printer services, and to handle other administrative tasks.

After these jobs are completed, users have access to services, and they can also share their files with other users.

The PCSA Manager Menu is an easy-to-use tool that is organized by menu. The menu prompts you for the information required to complete a task and is especially suited to system administrators who are familiar with DOS but unfamiliar with VMS.

Using the menu saves you time and eliminates possible mistakes made by entering long command lines.

PCSA Manager commands, entered on the command line, can also be used to maintain the server. In addition to serving as an alternative to the PCSA Manager Menu, these commands provide some advanced functions not available with the menu. PCSA Manager commands are documented in *Server Administration with Commands*.

Before you can set up the server with the PCSA Manager Menu, you must complete these steps:

1. Connect the network, including all cables, workstations, VAX computers, printers, and other hardware.
2. Install the server and client software.
3. Make an initial connection from the workstation to the server.
4. Load DOS.
5. Use the Netsetup utility to configure workstations for local or remote boot.

1-2 Using the PCSA Manager Menu

The remainder of this chapter describes how to:

- **Log in to the SYSTEM account**
- **Enter the menu**
- **Exit the menu**
- **Move around the menu**
- **Determine the appropriate menu selection for the task**
- **Set up the server**

Figure 1-1 and Figure 1-2 represent the flow of tasks required to install and configure the server and client.

Figure 1-1 Installation and Configuration Tasks

	TASK	WHERE	BOOK
	Install Server	Server	VMS Services for PCs
	Install Client	Server	Installation and Configuration Guide: DECnet PCSA Client for DOS (VMS)
	Prepare to Install DOS	Workstation	Installation and Configuration Guide: DECnet PCSA Client for DOS (VMS)
	Install DOS	Workstation	Installation and Configuration Guide: DECnet PCSA Client for DOS (VMS)

Figure 1-2 Installation and Configuration Tasks - Continued

TASK	WHERE	BOOK
	Workstation	Installation and Configuration Guide: DECnet PCSA Client for DOS (VMS)
<p>Configure for Local Boot</p> <p>or</p> <p>Configure for Remote Boot</p>	Workstation	
	Server	Server Management with the Menu
Set Up Applications		
	Server	Server Management with the Menu
Set Up Printer Services		
	Server	Server Management with the Menu
Add Users		

Logging In to the SYSTEM Account

To log in to the SYSTEM account, enter the following at the login prompt:

Username: SYSTEM

Password: (enter your password)

NOTE

If you have not changed the password for the system administrator account on a PCLAN/Server system from WELCOME, you should do so now.

Entering the PCSA Manager Menu

The method of entering the PCSA Manager Menu depends on whether you have a PCLAN/Server system or a PCSA system.

If you have a PCLAN/Server system, the main menu is displayed automatically after you log in to the SYSTEM account.

If you have a PCSA system, the VMS operating system prompt (\$) is displayed after you log in to the SYSTEM account. You can enter the PCSA Manager Menu from the PCSA_MANAGER prompt or from the VMS operating system prompt.

- Enter:

\$ ADMINISTER/PCSA

NOTE

Or shorten the ADMINISTER/PCSA command to ADMIN/PC.

- Enter the following at the PCSA_MANAGER prompt:

PCSA_MANAGER> MENU

- You can combine both steps by entering:

\$ ADMIN/PC MENU

Exiting the PCSA Manager Menu

To exit the PCSA Manager Menu, choose one of the following:

- Select the **Exit Menu** option with the arrow keys and then press **Return**.
- Press **Ctrl/Z**.

When you exit the PCSA Manager Menu, the following prompt is displayed:

```
PCSA_MANAGER>
```

NOTE

If you entered the PCSA Manager Menu by entering **ADMIN/PC MENU** at the VMS operating system prompt (**\$**), the **PCSA_MANAGER** prompt is not displayed when you exit. Instead, you return directly to the VMS operating system prompt (**\$**).

From the **PCSA_MANAGER** prompt, you can do any of the following:

- Reenter the PCSA Manager Menu by entering:

```
PCSA_MANAGER> MENU 
```

- Issue **PCSA_MANAGER** commands
- Exit the PCSA Manager Menu by entering:

```
PCSA_MANAGER> EXIT 
```

When you exit the PCSA Manager Menu, the VMS operating system prompt (**\$**) displays.

To reenter the PCSA Manager Menu from the VMS operating system prompt, enter:

```
$ ADMIN/PC MENU 
```

Moving Around the PCSA Manager Menu

The first time you enter the menu, the **Exit** selection is highlighted. After you select a menu item, a submenu is displayed and the **Exit** selection again is highlighted.

Figure 1-3 is the top level selection with the **EXIT** option highlighted.

Figure 1-3 PCSA Manager Menu

PCSA Manager Menu

```
Utility Options
Service Options
Printer Queue Options
Workstation Options
User Options
EXIT Menu
```

Use the arrow keys to make a selection, then press RETURN

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To move around the PCSA Manager Menu, follow these guidelines:

- **Selecting items**

Use the arrow keys to highlight your selection, and then press Return.

NOTE

You can use the Select, Enter or Do keys instead of the Return key. You also can move to the first menu item by pressing the Gold/PF1 and the up arrow and to the last menu item by pressing the Gold/PF1 and the down arrow.

After you select a Main Menu item, a submenu is displayed.

- **Scrolling**

To scroll through a selection list that is too large to fit on a single screen, press and release the down arrow key repeatedly.

CAUTION

Do not hold the down arrow key continuously. Holding the down arrow key continuously to scroll through a large list of selections can stop the PCSA Manager Menu.

- **Returning to previous menu**

You have two options:

- **Select Return to Previous Menu.**
- **Press Ctrl/Z.**

- **Canceling an option**

To cancel an option, press Ctrl/Z.

If you cancel an option in the middle of a task, none of the information you entered prior to canceling is saved.

If you press Ctrl/Z after you have answered all of the prompts and the PCSA Manager Menu has displayed success messages, the work you entered prior to pressing Ctrl/Z is saved. In this case, pressing Ctrl/Z returns you to the previous menu.

Determining the Appropriate Menu Selection

Table 1-1 matches tasks you may need to perform with the appropriate PCSA Manager Menu selection.

Table 1-1 Determining the Appropriate Menu Selection

If you want to...	Select...	And then select...
Add a common file service	Add Service from the Service Options menu	Common File Service
Add a service for applications	Add Service from the Service Options menu	Either Application File Service or Application Disk Service
Add a network printer service for a supported printer	Add a Printer Queue from the Printer Queue Options menu	
Add a network printer service for a printer with established VMS printer queues	Add Service from the Service Options menu	Printer Service
Add a user	Add a User from the User Options menu	

Table 1-1 (Cont.) Determining the Appropriate Menu Selection

If you want to...	Select...	And then select...
Back up files for the PCSA Manager Menu system (PCLAN/Server systems only)	Backup/Restore Options from the Utility Options menu	The appropriate option
Create or recreate a printer startup file	Create Printer Startup File from the Printer Queue Options menu	
Deny all users access to a file or printer service	Deny Public Access from the Service Options menu	
Deny an individual user access to a file or printer service	Deny User Access from the Service Options menu	
Grant all users access to a file or printer service	Grant Public Access from the Service Options menu	
Grant an individual user access to a file or printer service	Grant User Access from the Service Options menu	
List file, disk, or printer services	List Services from the Service Options menu	The appropriate option
List each DOS installed on the system virtual disk	Client Operating System Options from the Workstation Options menu	List Client Operating Systems
List or print the messages describing network events	File Server Log Options from the Utility Options menu	The appropriate option
Modify a disk	Modify Disk Services from the Service Options menu	
Modify a user	Modify a User from the User Options menu	
Remove a common file service	Delete Service from the Service Options menu	Common or Application File Service
Remove an application disk service	Delete Service from the Service Options menu	Application Disk Service

Table 1-1 (Cont.) Determining the Appropriate Menu Selection

If you want to...	Select...	And then select...
Remove an application file service	Delete Service from the Service Options menu	Common or Application File Service
Remove a printer service	Delete Service from the Service Options menu	Printer Service
Remove a printer queue	Delete a Printer Queue from the Printer Queue Options menu	
Remove DOS	Client Operating System Options from the Workstation Options menu	Delete Client Operating System
Restore a corrupted DECnet database file	Restore Boot Database from the Workstations Options menu	
Send a Broadcast message from the server	Send Broadcast Message from the Utility Options menu	
Shut down the server (PCLAN/Server systems only)	Shutdown/Reboot Server from the Utility Options menu	

Refer to Appendix A for a diagram of the PCSA Manager Menu tree.

Setting Up the Server

The PCSA Manager Menu makes it easy for you to add users and applications to the server. Use the menu selections to create services and make them available to registered users. Follow these steps to set up users, services, and applications on the server.

1. Add common file services.

NOTE

For PCLAN/Server systems, the common directory, PCCOMMON, is automatically set up and made available as a part of the server software installation. You can add additional common directories for users.

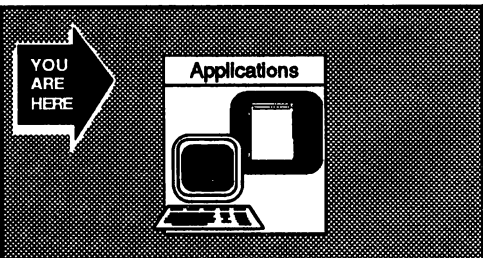
2. **Set up applications on your server by:**
 - a. **Adding one or more application disk or file services.**
 - b. **Installing applications.**
3. **Add printer services.**
4. **Register users with the server.**

All of these steps are described in the chapters that follow.

Appendix C shows how the PCSA Manager Menu can be used to set up the server.

Setting Up Applications

Figure 2-1 You Are Here: Set Up Applications

	TASK	WHERE	BOOK
	Set Up Applications	Server	Server Management with the Menu

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The PCSA Manager Menu provides an easy way for you to manage file and disk services. To make an application or common file directory available to clients on the network, you must follow these steps in the listed order:

1. Determine where to store applications (file or disk service)
2. Add a file or disk service
3. Install the application from the workstation

To access an application after it is installed, users can connect to the application service.

For example, you can use the PCSA Manager Menu to create an application file service for a DOS application, such as Lotus 1-2-3. When you use the menu to create an application file service, the service is also added to the server's database, and users are granted access to it.

After you add the service, you can install the application according to its accompanying documentation.

This chapter describes:

- Guidelines to help you determine where to store applications
- Procedures for adding file and disk services
- Steps involved in installing applications

Determining Where to Store Applications

To make applications available to users on the network, you can install them on an application virtual disk or an application file service. Keep in mind that virtual disk services are faster than file services. Try to store MS-DOS applications on application virtual disk services whenever possible.

Use the following guidelines when adding services and installing applications:

- Group commonly used applications together on one application disk or file service.
- Some software license agreements specify that the application should be installed on a file server. Check your software license agreements.
- Applications designed to be installed on a local hard disk can usually be installed on a virtual disk service.
- Some applications are designed to write back to the directory they are stored on. To store these applications on a virtual disk service for multiple users, you need to set up each application so its data files are stored in a file service directory.

Some applications offer a feature that lets you redirect their data files to another directory. If the application offers such a feature, use it to redirect the data files to the user's personal file service.

If the application does not offer a feature to redirect data files, try adding a path name to the append path in the user's profile. Make sure the application works correctly, then add the path name to each user profile set up to access the application.

If you are unable to set up the application so its data files are stored in a separate directory, store the application in a file service.

- Store application files that can be accessed by MS-DOS and VMS operating systems on a file service. For example, if you share WPS-PLUS files between MS-DOS and VMS, you must store the data files in a file service so MS-DOS and VMS can recognize them.

Table 2-1 summarizes when to use a file service for an application and when to use a virtual disk service.

Table 2-1 Determining Where to Store Applications

If the application...	Then...
Has a licensing agreement requiring that the application be installed on a file server	Use a file service.
Is designed to be installed on a local hard disk	You should be able to install it on a virtual disk service.
Requires read-only access	Use a virtual disk service. Multiple users have fast access to read-only virtual disk services.
Requires read and write access and will be offered to more than one user at a time	Try to set up the application so its data files will be stored in a separate file service directory, and use a virtual disk service for the application. If you are unable to redirect the data files to a different directory, use a file service and change the access rights from read-only to read/write. To change access rights to a file service for all users, you must deny public access to the service, and then grant public access to the service, specifying read/write access. For more information on denying and granting public access to a file service, see Chapter 5.
Requires read and write access and will be offered to only one user at a time	Use a virtual disk service. You can set up virtual disk services to allow many users at a time to read files on the disk or allow only one user at a time to read and write to files.

Adding Application Services

This section describes how to add common and application file services, and application disk services. The following list describes the different types of services:

- A common file service contains directories of data files you can share with other users. These files have VMS protection.
- An application file service contains an application you frequently use, such as Symphony. The application's files are accessible to all users.

2-4 Setting Up Applications

- An application disk service is often faster than a file service and provides read-write access to files to one user at a time.

These functions are choices available from the following Service Options Menu.

Figure 2-2 Service Options Menu

Service Options

```
Add Service
Delete Service
Modify Disk Service
List Services
Grant Public Access
Deny Public Access
Grant User Access
Deny User Access
Return to Previous Menu
```

Use the arrow keys to make a selection, then press RETURN

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Adding a Common File Service

Create a common file service to make directories of data and text files accessible to all users. When you add the service, a directory is automatically created. The files in the directory have standard VMS protection. You can use VMS protection categories to restrict access to individual files.

Use a common file service to store popular applications such as spreadsheets or word processors.

NOTE

The common directory, PCCOMMON, is automatically set up and made available for PCLAN/Server systems as a part of the server software installation. You can add additional common directories for users.

Procedure

To create a common file service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Add Service** from the Service Options menu.
3. Select **Common File Service** from the Add Service menu.
4. Enter a unique 1- to 25-character name when prompted for the name of the common file service and press Return.

Common file service name (Example: PCCOMMON) :

The PCSA Manager Menu displays messages while it:

- Creates the directory for the common service
- Adds the service to the file server's service database
- Grants all users read, write, and create access to the service

For example, after adding the common file service **MY_APP**, the PCSA Manager Menu displays the following messages:

```
%PCSA-I-DIRCREATED, directory SYS$SYSDEVICE:[MY_APP] created
%PCSA-I-ACLCREATED, ACL created on SYS$SYSDEVICE:[000000]MY_APP.DIR
%PCSA-I-SERADDED, service "MY_APP" added
%PCSA-I-SERGRANTED, service "MY_APP" granted to user/group "PUBLIC"
```

You can change access rights to the service with one of the **Service Options, Grant/Deny Public or User Access**. For common services, security is also controlled by the user's VMS access rights.

Adding an Application File Service

You can store MS-DOS applications, such as Symphony, on an application file service. Use an application file service instead of a common file service when you want all users to be able to access the application's files. All files are automatically created with the identifiers **PCFS\$READ** and **PCFS\$UPDATE**.

Procedure

To add an application file service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Add Service** from the Service Options menu.
3. Select **Application File Service** from the Add Service menu.

2-6 Setting Up Applications

4. The PCSA Manager Menu prompts you for:

a. The name of the application file service

Application file service name (Example: MYAPP) :

Enter a unique 1- to 25-character name for the application file service, then press Return.

b. The VMS name for the user to whom you are granting read, write, and create access to the application file service

VMS username to be granted RWC access (Default: SYSTEM) :

By default, the PCSA Manager Menu grants read, write, and create access to the system administrator's account, SYSTEM. To accept the default, press Return.

Enter the user name, and press Return to specify a different user with read, write, and create access to the service. This user should be the system administrator or another individual who has system privileges.

The PCSA Manager Menu then displays messages while it:

- Creates the file service for the application
- Adds the service to the file server's service database
- Grants all users read access to the service

To change access rights to the service, use one of the Service Options, Grant Public Access, Deny Public Access, Grant User Access, or Deny User Access.

- Grants the specified user read, write, and create access to the service

For example, after adding the application file service TEST_APP, the PCSA Manager Menu displays the following messages:

```
*PCSA-I-DIRCREATED, directory SYSSYSDEVICE:[PCSA.TEST_APP] created
*PCSA-I-ACLCREATED, ACL created on SYSSYSDEVICE:[PCSA]TEST_APP.DIR
*PCSA-I-SERADDED, service "TEST_APP" added

*PCSA-I-SERGRANTED, service "TEST_APP" granted to user/group "PUBLIC"
*PCSA-I-SERGRANTED, service "TEST_APP" granted to user/group "SYSTEM"
```

You can change public access rights to the service with the Service Options, Deny Public Access and Grant Public Access. You can change access rights to the service for individual users with the Service Options, Grant User Access and Deny User Access.

Adding an Application Disk Service

You can use an application virtual disk to store MS-DOS application software. In a network environment, you can copy application software to a virtual disk and offer it as a read-only service to multiple workstations.

If an application requires read-write access to the disk on which it is stored, only one user at a time can access the virtual disk. For applications that require read-write access by more than one user, use a file server.

Procedure

To add an application virtual disk service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Add Service** from the Service Options menu.
3. Select **Application Disk Service** from the Add Service menu.
4. The PCSA Manager Menu prompts you for the following:

- a. Name of the application disk service

Application disk service name (Example: MYAPP) :

Enter a unique 1- to 25-character name for the application virtual disk service, then press Return.

- b. Password for the service

Password for this service (Default: No Password) :

A password allows you to restrict access to the application virtual disk service. If you want to restrict access to the service, enter a password. The server stores the password in the database. When users try to access the service, they are prompted for the password.

The default is no password. No password means that everyone using the server has access to the application(s) on the disk service. To accept the default for no password, press Return.

c. Size of the virtual disk

Select the size of an application virtual disk according to the number of software applications you install on the disk and the size of each application.

Refer to the documentation accompanying the applications to determine the space requirements for the application virtual disk service you are creating.

You can specify one of the following sizes:

- 360 KB
- 720 KB
- 1.2 MB
- 1.44 MB
- 5 MB
- 10 MB
- 20 MB
- 32 MB

Use the arrow keys to select the virtual disk size for the application virtual disk service.

The PCSA Manager Menu displays messages while it does the following:

- Creates and mounts the application virtual disk service with read/write access
- Adds the service to the disk server's service database

For example, after adding the application disk service PC_APP, the PCSA Manager Menu displays the following messages:

```
*PCSA-I-CREATEDISK, creating SYS$SYSDEVICE:[PCSA.LAD]PC_APP.DSK
*PCSA-I-FORMATDISK, formatting disk, Size = 1.2MB, Allocation = 2400/2400
*PCSA-I-DISKCREATED, SYS$SYSDEVICE:[PCSA.LAD]PC_APP.DSK created

*PCSA-I-DISKMOUNTED, SYS$SYSDEVICE:[PCSA.LAD]PC_APP.DSK;1 mounted
*PCSA-I-MOUNTINFO, service name = PC_APP, server node = LETTER

*PCSA-I-APPDISKMNTED, application disk service PC_APP mounted R/W
*PCSA-I-APPDISKINST, please install your software, and remount the service
read-only
```

When you create an application disk service, it is initially mounted with read-write access, and only one user at a time can access the virtual disk. To allow multiple users to access the application virtual disk, you must dismount it and then remount it with read-only access. See Chapter 5, *Modify Disk Service*, for more information.

Installing Applications from a Workstation

To install an application on your server/client network:

1. Create a backup copy of the application by copying the application diskettes as instructed by the manufacturer.
2. Use the menu to add the application service.
3. Connect to the application service from a workstation with the **USE** command.
4. From the workstation, install the application to the application service. Follow the application's instructions.
5. Before running applications, make sure you have set up appropriate printer services on the server.

Most applications can work with a network printer. Some, however, require that you use a local printer for the application to print correctly. Others print only to the logical device, LPT1.

For more information on setting up printer services, see Chapter 3.

NOTE

Some applications require a program diskette to run. In this case, each user needs a program diskette in drive A to run the application.

The following sections describe installing applications on:

- Common File Services
- Application File Services
- Application Disk Services

Installing an Application on a Common File Service

After you add the common file service, do the following to install an application on the service:

- Connect to the common file service from the workstation with the **USE** command:

```
USE ? : \\server_name\common_service_name
```

Where:

server_name Is the name of the server where you want to install the application

common_service_name Is the name of the common file service on the server

For example, use the following command to connect the workstation to the common file service, **MY_APP**, on the server node **LETTER**:

```
USE ? : \\LETTER\MY_APP
```

the workstation displays:

```
Device K: connected to \\LETTER\MY_APP
```

- Install the application from the workstation. Follow the application's installation instructions.

Installing an Application on an Application File Service

After you add the application file service, do the following to install the application on the service:

- Connect to the application file service from the workstation with the **USE** command:

```
USE ? : \\server_name\application_service_name#user_name password
```

Where:

server_name Is the name of the server where you want to install the application

application_service_name Is the name of the application file service on the server

user_name Is the VMS name for the user to whom you are granting read, write, and create access to the application file service

password

Is the password for the VMS account. You can also use an asterisk (*) in place of the password. Using an asterisk causes the server to prompt you for the password.

For example, the following command attaches your workstation to the application file service, TEST_APP, on the server named LETTER:

```
USE ? : \\LETTER\TEST_APP%SYSTEM *
```

- Install the application from the workstation. Follow the application's installation instructions.

Installing An Application on an Application Disk Service

After you add the application virtual disk service, do the following to install an application on the disk:

1. Connect to the application virtual disk service from a workstation with the USE command:

```
USE ? : \\server_name\disk_service_name /virtual
```

Where:

server_name Is the name of the server where you want to install the application

disk_service_name Is the name of the disk service on the server

For example, use the following command to connect to the application disk service, PC_APP, on the server node LETTER:

```
USE ? : \\LETTER\PC_APP /virtual
```

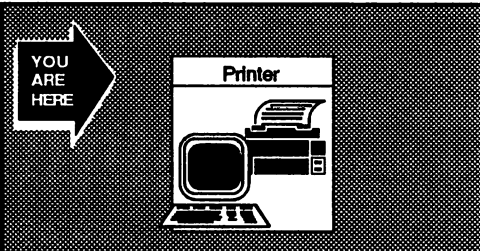
The workstation displays:

```
Device I: connected to \\LETTER\PC_APP
```

2. Install the application from the workstation. Follow the application's installation instructions.
3. Change the access rights from read/write to read only. Refer to Chapter 5.

Setting Up Printer Services

Figure 3–1 You Are Here: Set Up Printer Services

TASK	WHERE	BOOK
 <p>YOU ARE HERE</p> <p>Printer</p>	Set Up Printer Services	Server Management with the Menu

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This chapter describes the basic steps you use to set up printer services for remote printers on a VMS server. Once you complete these steps, users can access remote printers from their workstations by connecting to a printer service.

Use the PCSA Manager Menu to set up the printer queues and define the printer services for most remote printers. A separate printer service is required for each *form*, portrait or landscape, that you use with a printer. For example, you have to add two printer services for an LN03 printer that is used for portrait and landscape printing.

PCSA printer services on VMS servers use the underlying mechanisms of the VMS operating system to set up printers. Before you set up a PCSA printer service, you need to understand the VMS concepts used to establish a printer service. These concepts are explained in the next section.

This chapter describes:

- VMS concepts used for printer services
- Types of printers
- Procedures to set up printer queues and services for each printer type

VMS Concepts for Printer Services

When you create a PCSA printer service, the following are created on the VMS operating system:

- Physical queue

A *physical queue* is a name that corresponds to the physical terminal line for the printer port.

- Generic queue

A *generic queue* is a logical device for a physical queue. The generic queue channels a print job to the physical queue. Separating the physical queue from the generic queue makes it easy to redirect print jobs when a physical device fails. For example, a job you print on the physical queue MMJ1 can be redirected to another physical queue by using a generic queue.

- Form

The *form* specifies the physical layout of the page on which a file is printed, including the width of the page. Examples of forms are landscape or portrait. The form name is used as a prefix for print files. A form name is a 1- to 31 character name you assign to a form.

- Spool subdirectory

A *spool subdirectory*, created for each service, stores files before they are printed. Once the file is printed, it is deleted from the subdirectory.

- Device control library

A *device control library* is a VMS text library that contains two or more files, one of which contains a unique sequence of characters that resets the printer (sets it to default mode), and the remaining files contain a unique sequence of characters that establish a specific mode for a printer (for example: landscape or portrait). The system administrator creates or uses an existing device control library.

- **Printer startup file**

A *printer startup file* is a VMS file that runs automatically when the VMS operating system boots. The printer startup file starts all the printers defined in the file.

Types of Printers

The steps you use to set up a printer service depend on whether the printer is one of the following:

- One of the following *supported* or *unsupported* printers being set up for the first time:
 - LN03 printer
 - LN03 Plus printer
 - LA50 printer
 - LA75 Companion printer
 - LJ250 Companion Color printer
 - HP Laserjet (unsupported)
- A supported or unsupported printer with an existing VMS print queue
- An unsupported printer without a VMS print queue

Table 3-1 lists the types of printer services and the tool to use to set up each type. The procedures that follow describe how to set up each type of printer listed in Table 3-1.

Table 3-1 Tools to Set Up PCSA Printer Services

For these printers...	Use this tool...	And these options
Supported and new	PCSA Manager Menu	Add Printer Queue
Supported or unsupported, with VMS printer queue	PCSA Manager Menu	Add Printer Service
Unsupported without VMS printer queue	1. Digital Command Language (DCL); and 2. PCSA Manager Menu	Add Printer Service

3-4 Setting Up Printer Services

NOTE

In the examples, a printer service name is a 1- 25 character name you give to a printer service.

To set up a printer service, you must have OPER and SYSPRV privileges.

Proceed to the section that corresponds to the type of printer you are setting up.

Setting Up Printer Services for New Supported Printers

To set up printer services for supported printers for the first time, you need to set up a queue. After you add the printer queue, the PCSA Manager Menu automatically adds a printer service for each form.

Figure 3-2 displays the menu selection.

Figure 3-2 Printer Queue Options Menu

Printer Queue Options

```
Add a Printer Queue
Delete a Printer Queue
List Registered Printer Queues
Create Printer Startup File
Return to Previous Menu
```

Use the arrow keys to make a selection, then press RETURN

MR-5785-GPA

Procedure

To add a printer queue:

1. Select **Printer Queue Options** from the PCSA Manager Menu.
2. Select **Add a Printer Queue** from the Printer Queue Options menu.

Figure 3-3 displays the next menu selection.

Figure 3-3 Add a Printer Queue Menu

Printer Queue Options

Add a Printer Queue

Select a printer type to add

```

LN03P
LA50
LA75
LJ250
HP LaserJet (UNSUPPORTED)

```

Use the arrow keys to make a selection, then press RETURN, or Ctrl/2 to cancel

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The PCSA Manager Menu prompts you for:

1. The type of printer to be added

Select the printer type.

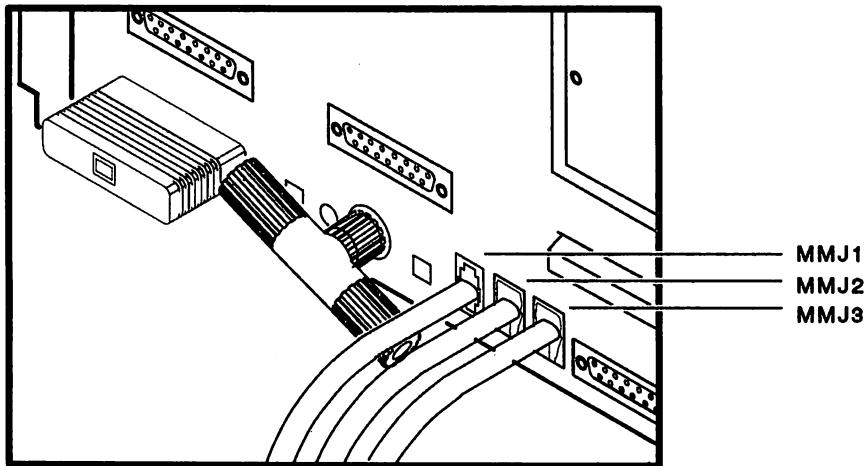
2. The physical line name for the printer

Enter the terminal line to which your printer is connected. When you press Return, the prompt is displayed again.

If you are adding a second printer of the same type, enter the terminal line name for the second printer. Otherwise, press Return again.

Valid terminal line names vary depending on your hardware configuration. If you have a PCLAN/Server system, the terminal line can be MMJ1, MMJ2, or MMJ3. Figure 3-4 shows the names for the terminal lines for the PCLAN/Server system.

Figure 3-4 MicroVAX 3100 Terminal Line Names



MR-3482-TI

The PCSA Manager Menu:

- Creates the physical and generic queues for the printer

The *physical queue name* is the server node name followed by \$ and the terminal line name. For example, LETTER\$MMJ1 is a valid physical queue name on a server that has the node name LETTER.

The *generic queue name* is PCFS\$ followed by the printer type. For example, the generic queue name for an LN03 Plus printer is PCFS\$LN03P.

- Defines the default forms for the printer
Table 3-2 lists the default forms for each printer type.
- Creates a subdirectory for each printer service in the directory known as PCFS\$SPOOL

The subdirectory name is the same as the service name and the form. See the third column in Table 3-2 for the subdirectory names for each printer type.

- Adds a printer service for each form to the service database
The service name is the same as the form and the subdirectory name. Table 3-2 lists the default service name for each supported printer type.
- Users can connect to the service using the USE command.
- Grants all users access to the service
- Automatically creates or updates the printer startup file, `SYS$MANAGER.PCFS_PRINT.COM`

Table 3-2 Default Names for Generic Queues, Forms, Subdirectories, and Services

Printer	Generic Queue Name	Form, Subdirectory, and Service Names	Output Mode
LN03	PCFS\$LN03	LN03_DPORT	Digital Portrait
		LN03_DLAND	Digital Landscape
LN03 Plus	PCFS\$LN03P	LN03P_DPORT	Digital Portrait
		LN03P_DLAND	Digital Landscape
		LN03_SPORT	Standard Portrait
		LN03_SLAND	Standard Landscape
LA50	PCFS\$LA50	LA50_D80	Digital 80-column
		LA50_D132	Digital 132-column
LA75 Companion	PCFS\$LA75	LA75_D80	Digital 80-column
		LA75_D132	Digital 132-column
		LA75_S80	Standard 80-column
		LA75_S132	Standard 132-column

Table 3-2 (Cont.) Default Names for Generic Queues, Forms, Subdirectories, and Services

Printer	Generic Queue Name	Form, Subdirectory, and Service Names	Output Mode
LJ250	PCFS\$LJ250	LJ250_D80	Digital 80-column
		LJ250_D132	Digital 132-column
HP Laserjet	PCFS\$HPLASERJET	HP_LASERJET_PORT	Standard Portrait
		HP_LASERJET_LAND	Standard Landscape

Setting Up Printers with a VMS Queue

To make a printer with an existing VMS queue available on the network, follow the directions in this section.

- Add a printer service to any printer that already has a queue. Remember to add a separate printer service for each form you use with a printer.
- Create a printer startup file.

Procedure

To add a printer service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Add Service** from the Service Options menu.
3. Select **Printer Service** from the Add Service menu.
4. The PCSA Manager Menu prompts you for:
 - a. The name of the printer service you are adding
Enter a unique 1- to 25-character name for the printer service, then press Return.

b. The queue for the service

Enter the name of either the generic or physical queue, then press Return.

- If you use a generic queue name, enter the name of a generic queue you created. The *generic queue name* is PCFS\$ followed by the printer type. For example, the generic queue name for an LN03 Plus printer is PCFS\$LN03P.
- The *physical queue name* is the server node name followed by \$ and the terminal line name.

For example, LETTER\$MMJ1 is a valid physical queue name on a server that has the node name LETTER.

c. Form name to use with the service

The *form* specifies the width and length of the paper, the type of paper stock, and the printing format, such as portrait or landscape.

- To accept the VMS default form, press Return.
- To specify a different form name, enter the name of the form you defined for the printer.

The PCSA Manager Menu displays messages while it creates the printer service and automatically grants public access.

To change access rights to a service, refer to Chapter 5.

After you add the printer service, be sure to create the startup file.

Creating a Printer Startup File

The *printer startup file* defines the forms a printer uses and starts the printer queues each time the server is booted. Follow this procedure to create or recreate a printer startup file for a printer service added to the server using the Add a Printer Queue option.

Procedure

1. Select **Printer Queue Options** from the PCSA Manager Menu.
2. Select **Create Printer Startup File** from the Printer Queue Options menu.

The PCSA Manager Menu displays messages while it automatically creates a startup file, SYS\$MANAGER:PCFS_PRINT.COM.

Setting Up an Unsupported Printer Without VMS Queues

To set up an unsupported printer for the first time, you need to:

1. Use VMS commands to:

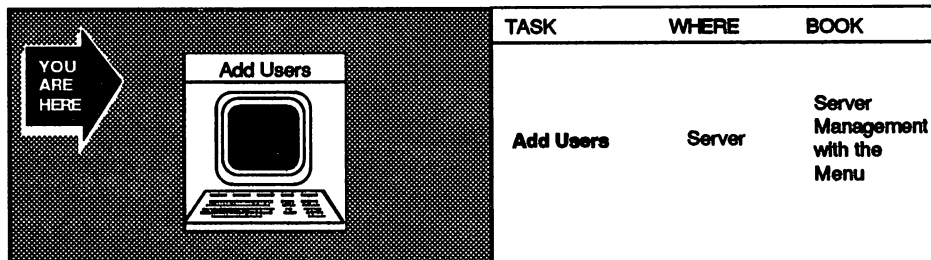
- Create a device control library
- Define the form
- Set up printer queues
- Modify the `SYSSTARTUP_V5.COM` file to add printer queue startup commands.

VMS commands for setting up printer services are described in *Server Administration with Commands*.

2. Add a printer service using the PCSA Manager Menu.

Adding User Profiles

Figure 4-1 You Are Here: Add Users



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Before a user can access network services, you must add the user's profile to the server's database. A user profile defines connections to file, disk, and printer services. You need to add a user when the following situations occur:

- You have finished running the Netsetup configuration utility on a workstation and are ready to provide the user with access to services.
- A new employee has joined your department and needs access to services. If the new person has a workstation, you have probably run Netsetup and can now add the user.

If the user is sharing a workstation that is already configured, just add the user to the server.

A user profile is required for each network user. Appendix B contains a sample User Profile Form that you can use as a guide to collect necessary information about the user.

4-2 Adding User Profiles

When you add a user profile, the user account and the AUTOUSER.BAT file are created. This file contains specific DOS commands and is stored in the root directory of the user's personal service. It can be edited to set up connections to resources on the network, such as application or printer services.

Figure 4-2 shows the menu selections.

Figure 4-2 User Options Menu

User Options

```
Add a User
Delete a User
Modify a User
List Registered Users
Return to Previous Menu
```

Use the arrow keys to make a selection, then press RETURN

MR-3787-BA

Adding a User

Procedure

To add a user profile:

1. Select **User Options** from the PCSA Manager Menu.
2. Select **Add a User** from the User Options menu.

The PCSA Manager Menu:

1. Prompts you for the user's name. Enter the VMS name for the user, then press Return.
2. Prompts you for the user's password

You can accept the default password, WELCOME, and have individual users set their own password.

3. Prompts you to enter the path for the user's account

The path for the account consists of a device name followed by a directory name.

To accept the default path for the account, press Return. To specify a different path, use the form device:[directory]. For example, to specify a path with the device name LETTER and the directory name NOAH, enter:

```
LETTER: [NOAH]
```

4. Prompts you for the file version limit for the user's account

The file version limit is the number of versions of the user's personal file service directory that are saved. The default is 1. You can accept the default, or you can specify a file version limit from 1 through 32,767.

5. Asks whether you want to allow interactive logins.

This prompt is not displayed for the PCLAN/Server system.

Interactive login allows the user to log in to any terminal connected to VMS. For example, interactive login allows the user to run the terminal emulator and log into his or her account.

6. Prompts you to select a common directory for the user

The list of common file directories displayed includes any common file services you added to the server. If there are no common file services, NONE is displayed.

NOTE

For PCLAN/Server systems, the common file service PCCOMMON is automatically added to the server as part of the installation procedure and is included in this list.

4-4 Adding User Profiles

Use the arrow keys to select the common directory you want the user to be able to access and use, then press Return. Select NONE, if you do not want the user to have access to a common directory. Then press Return.

To add a common directory that is offered on a different server on the network, select -Other Service-.

If you select -Other Service-, the PCSA Manager Menu prompts you for the:

a. Service's node name

Enter the node name for the server that offers the common file service you want the user to be able to access, then press Return.

b. File service name

Enter the name of the common file service you want the user to be able to access, then press Return.

7. Prompts you to select file service application(s) for the user

The list of applications displayed includes any application file services you added to the server using the Add Service option, Application File Service.

Use the arrow keys to select the application file service on the server. After each selection, press Return.

To select an application file service that is offered on a different server on the network, select -Other Service-.

If you select -Other Service-, the PCSA Manager Menu prompts you for the:

a. Service's node name

Enter the node name for the server that offers the application file service you want the user to be able to access, then press Return.

b. File service name

Enter the name of the application file service you want the user to be able to access, then press Return.

When you have finished, select **Finished selecting applications**, then press Return.

8. Prompts you to select disk service application(s) for the user

The list of applications displayed includes any application disk services you added to the server using the Add Service option, Application Disk Service.

Use the arrow keys to select the application disk service on the server that you want the user to be able to access and use. After each selection, press Return.

To select an application disk service that is offered on a different server on the network, select -Other Service-.

If you select -Other Service-, the PCSA Manager Menu prompts you for the:

a. Service's node name

The service's node name is not required for application disk services.

To specify the service's node name, enter the node name of the server which offers the application disk service you want the user to be able to access, then press Return.

b. Application disk service name

Enter the name of the application disk service you want the user to be able to access, then press Return.

When you have finished, select **Finished selecting applications**, then press Return.

9. Prompts you to select printer services for LPT1

This prompt also is displayed for LPT2 and LPT3.

Use the arrow keys to select the printer service for the logical device LPT1, then press Return.

The list of printer services displayed includes those you added with the Add Service option, Printer Service.

To add a printer service that is offered on a different server on the network, select -Other Service-.

If you select **-Other Service-**, the PCSA Manager Menu prompts you for the:

a. **Service's node name**

Enter the node name for the server that offers the printer service you want the user to be able to access, then press Return.

b. **Service name**

Enter the name of the printer service you want the user to be able to access, then press Return.

NOTE

To allow workstation users to print screen graphics using the Shift and Prt Sc (Print Screen) keys, you must edit the GRAPHICS command line in the AUTOEXEC.BAT file to include the printer type.

For information on the GRAPHICS command, see your DOS manual.

10. Prompts you to invoke EDT to allow customization of the AUTOUSER.BAT file, created by the system.

If you do not want to change the file, press Return to exit back to the Add A User menu selection. You can continue to add users.

If you do want to edit the AUTOUSER.BAT file, enter YES and press Return. You can add services, paths, and commands as required. Press CTRL/Z and enter EXIT to save the edits and return to the Add A User menu selection.

If you are an experienced VMS user and have your own EDT initialization file, you can define the logical PCSA\$EDITOR_COMMAND and add it to your LOGIN.COM.

5

Maintaining Services

You can use the PCSA Manager Menu to check a list of available services and to delete services that are no longer required. You also can change the access rights to file, printer, and disk services.

This chapter describes how to:

- List available services
- Change access rights to services
- Delete services that are no longer needed

Figure 5-1 displays these menu selections.

Figure 5-1 Service Options Menu

Service Options

```
Add Service
Delete Service
Modify Disk Service
List Services
Grant Public Access
Deny Public Access
Grant User Access
Deny User Access
Return to Previous Menu
```

Use the arrow keys to make a selection, then press RETURN

MSI-3700-FA

Listing Services

View lists of services to find names of available applications. You can obtain a list of the following:

- Registered file, disk, and printer services
- Authorized file and printer services
- Registered printer queues

Registered services include all services in the service database. A list of registered services includes services to which no users have access, as well as those to which one or more users have access.

Authorized services are those services to which one or more users have access. A list of authorized services includes only those services to which access is granted.

Listing Registered Disk Services

Procedure

A list of mounted disk services is displayed when you select this option. This list includes network key disks.

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **List Services** from the Service Options menu.
3. Select **List Registered Disk Services** from the List Services menu.

The list of registered disk services includes services added to the network with the following:

- Add Service option, Application Disk
- PCSA_MANAGER command CREATE DISK and mounted with the PCSA_MANAGER command MOUNT DISK
- The system virtual disk service, PCSA\$DOS_SYSTEM_V30, which contains subdirectories for each DOS installed on your server

Figure 5-2 shows a sample list of registered disk services.

Figure 5-2 Sample List of Registered Disk Services

Service name	Type	Server	Limit	Users	Acc	Rating	Status
01-11-11-11-11-11 (TEST01)							
		BOOT APPLE	1	0	RW	1	MNT PERM
		Container File: SYS\$SYSDEVICE:[LADBOOT]TEST01.DSK;1					
02-00-0A-FF-02-46 (STUFF2)							
		BOOT ORANGE	1	0	RW	1	MNT PERM
		Container File: SYS\$SYSDEVICE:[LADBOOT]STUFF2.DSK;1					
02-11-11-11-11-11 (STUFF3)							
		BOOT GRAPE	1	0	RW	1	MNT PERM
		Container File: SYS\$SYSDEVICE:[LADBOOT]STUFF3.DSK;1					
03-00-0A-FF-02-46 (STUFF4)							
		BOOT RAZZY	1	0	RW	1	MNT PERM
		Container File: SYS\$SYSDEVICE:[LADBOOT]STUFF4.DSK;1					

Press RETURN to continue...

The following information is displayed for each disk service:

- Service name** Is the service name for the disk service.
- Type** Identifies the type of service, such as application, boot, user, or system service.
- Server** Is the name of the server offering the disk service.
- Limit** Is the maximum number of workstation connections possible to the disk service. If users have write access to a disk service, only one user can connect at a time. A value of 1 prevents further connections to the service. When you add disk services using the PCSA Manager Menu, 30 connections are possible.
- Users** Is the number of users accessing the disk service.
- Acc** Is the access rights for the corresponding user.
Where:
 - RO Is read-only access.
 - RW Is read/write access.
- Rating** Is the service rating value, which can be 0 through 65535. The default value is 1. A workstation uses the service rating to determine which service to connect to when multiple virtual disk services with the same name are available on the network. The workstation connects to the service with the highest rating.

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Status Is the disk service status. Disk service status can be permanent (MNT PERM) or not permanent (MNT). When you add disk services using the PCSA Manager Menu, the service is mounted, or made available, with permanent status. Permanent disk service status means the disk service is automatically remounted when the server is started.

If the disk service is not permanently mounted, you must remount the service each time the server is started using the Modify Disk Service option. See Modifying Disk Services in this chapter.

Listing Registered File Services

Procedure

To list registered file services:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **List Services** from the Service Options menu.
3. Select **List Registered File Services** from the List Services menu.

The list of file services registered includes services added to the file server's service database with either of the following Add Service options:

- Common File
- Application File

Any file services added with the PCSA_MANAGER command PCSA ADD SERVICE/DIRECTORY are also listed.

Figure 5-3 shows a sample list of registered file services.

Figure 5-3 Sample List of Registered File Services

Service name	Root directory	Service type	Att/Len	Limit
BILL	SYSSSYSDEVICE: [BILL]	COMMON	STR/EST	NONE
HERAPP	SYSSSYSDEVICE: [PCSA.HERAPP]	APPLICATION	STR/EST	NONE
JOE	SYSSSYSDEVICE: [JOE]	COMMON	STR/EST	NONE
MYAPP	SYSSSYSDEVICE: [PCSA.HERAPP]	APPLICATION	STR/EST	NONE
SAM	SYSSSYSDEVICE: [SAM]	COMMON	STR/EST	NONE
SEDT	WORK: [SEDT.DOS]	APPLICATION	STR/EST	NONE
TCOMMON	SYSSSYSDEVICE: [TCOMMON]	COMMON	STR/EST	NONE

Press RETURN to continue . . .

The following information is displayed for each file service:

Service name	Is the service name for the file service.
Root directory	Is the full VMS directory specification for the file service.
Service type	Identifies whether the service is a common or application file service.
Att/Len	<p>Identifies the type of record access control and how the file server determines the length of the file service.</p> <p>Att refers to file attributes associated with record access control. Access can be stream (STR) or sequentially fixed (SEQ). When you add file services using the PCSA Manager Menu, file services are created with stream access.</p> <p>Len shows whether the file server determines the length of the file service by actual (ACT) length or estimated (EST) length:</p> <ul style="list-style-type: none"> • ACT length means that the file server determines the file length in actual bytes. • EST length means that the file server determines the file length based on the position of the end-of-file pointer. <p>Estimated file length is the default. Actual length detracts from server performance.</p>
Limit	Is the maximum number of workstation connections allowed to the service. When you add file services using the PCSA Manager Menu, there is no limit to the number of workstation connections and NONE is displayed in this column.

Listing Registered Printer Services

You can view a list of the printer services registered in the service database. This list includes printer services to which no users have access, as well as those to which one or more users have access.

Procedure

To list registered printer services:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **List Services** from the Service Options menu.
3. Select **List Registered Printer Services** from the List Services menu.

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The list of registered printer services includes services added to the network with the following:

- Printer option on the Add a Service menu
- ADMIN/PC ADD SERVICE/PRINTER command

Figure 5-4 shows a sample list of registered printer services.

Figure 5-4 Sample List of Registered Printer Services

Service name	Spool directory	Queue name	Form name	Limit
LASER	SYS\$\$SYSDEVICE: [PCFS_SPOOL.LN03_DPORT]	PCF\$\$LN03	LN03_DPORT	NONE
LINEPRINTER	SYS\$\$SYSDEVICE: [PCFS_SPOOL.LN03P_DLAND]	SYS\$LN03P		NONE
POSTSCRIPT	SYS\$\$SYSDEVICE: [PCFS_SPOOL.SYS\$PRINT]	SYS\$SYSPRINT		NONE

Press RETURN for menu....

The following information is displayed for each printer service:

Service name Is the 1- to 25-character service name for the printer service.

Spooler directory Is the service directory in which files wait to print.

Queue name Is the queue name for the printer service.

Form name Is the form in the device control library that controls the printer output.

Limit Is the maximum number of connections workstations can make to the service. When you add printer services using the PCSA Manager Menu, no limit is set for the number of workstations that can connect to the service.

Listing Authorized File and Printer Services

Procedure

To display all file and printer services to which one or more users have access:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **List Services** from the Service Options menu.
3. Select **List Authorized File and Printer Services** from the List Services menu.

Figure 5-5 shows a sample list of authorized file and printer services.

Figure 5-5 Sample List of Authorized File and Printer Services

User name	Alias name	Service name	Access	RMS protection
-----	-----	-----	-----	-----
PUBLIC	GENERICWRD	GENERICWRD	RWC	S:RWED,O:RWED,G:,W:
PUBLIC	GENERICPAGE	GENERICPAGE	RWC	S:RWED,O:RWED,G:,W:
PUBLIC	LASER	LASER	RWC	S:RWED,O:RWED,G:,W:
PUBLIC	LINEPRINTER	LINEPRINTER	RWC	S:RWED,O:RWED,G:,W:

Press RETURN for menu...

The following information is displayed for each file or printer service:

- User name** Is the user with authorized right to the service. The user PUBLIC represents all users.
- Alias name** Is the 1- to 25-character name by which users know the service. The alias name for a service added with the PCSA Manager Menu is the same as the service name.
- Service name** Is the 1- to 25-character service name for the service.
- Access** Is the access rights for the corresponding user.
Where:
 - RO Is read-only access.
 - RW Is read/write access.
 - RWC Is read/write/create access.
- RMS protection** Is the Record Management Services protection set for the service.

Listing Registered Printer Queues

Procedure

To list registered printer queues and generic queue names:

1. Select **Printer Queue Options** from the PCSA Manager Menu.
2. Select **List Registered Printer Queues** from the Printer Queue Options menu.

Figure 5-6 shows a sample list of registered printer queues.

Figure 5-6 Sample List of Registered Printer Queues

Generic queue	Printer queues
PCFS\$LN03	LETTER\$MMJ1
PCFS\$LN03P	LETTER\$MMJ3

Press RETURN to continue...

The following information is displayed for each printer queue:

Generic queue	Is the name of the generic queue. The generic queue name is PCFS\$ followed by the printer type.
Printer queues	Is the physical printer queue name, which is the server node name followed by \$ and the terminal line to which the printer is connected.

Granting and Denying Access to File and Printer Services

Public access is automatically assigned to a file or print service when you create it. If you want to reserve a particular service for a specific user, however, you can deny public access and then grant individual user access.

You also can deny an individual user access to a file service. Or you can deny public access and then regrant it with different access rights, such as read only or read/write.

To check assigned access rights to file and printer services, use the Service Options, List Authorized File and Printer Services.

To restrict access to disk services, use the Service Options, Modify Disk Services.

The following sections describe how to:

- Grant public and user access to file and printer services
- Deny public and user access to file and printer services

Granting Public Access

Procedure

To grant all users access rights to a file or printer service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Grant Public Access** from the Service Options menu.
3. The PCSA Manager Menu:
 - a. Displays a list of existing file and printer services
Use the arrow keys to select the file or printer service to which you want to grant public access.
 - b. Displays the different types of access rights to the service you can grant
Using the arrow keys, select the access rights you want to grant to all users, then press Return. You can grant any one of the following kinds of access:
 - Read
 - Read/Write
 - Read/Write/Create

Messages are displayed as the PCSA Manager Menu grants public access to the file service.

Granting User Access

Procedure

To grant an individual user access to a file or printer service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Grant User Access** from the Service Options menu.
3. The PCSA Manager Menu:
 - a. Displays a list of existing file and printer services
Use the arrow keys to select the file or printer service to which you want to grant a user access.
 - b. Prompts you for the VMS name of the user to whom you are granting access
Enter the VMS name and press Return.

- c. Displays the different types of access rights to the service you can grant the user

Using the arrow keys, select the access rights you want to grant to the user, then press Return. You can grant any one of the following kinds of access:

- Read
- Read/Write
- Read/Write/Create

The PCSA Manager Menu displays messages when it grants the user access to the file or printer service.

Denying Public Access

Procedure

To deny public access to a file or printer service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Deny Public Access** from the Service Options menu.
3. The PCSA Manager Menu displays a list of existing file and printer services.

Use the arrow keys to select the file or printer service to which you want to deny public access.

Messages are displayed as the PCSA Manager Menu denies public access to the file service.

Denying User Access

Procedure

To deny an individual user access to a file or printer service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Deny User Access** from the Service Options menu.

3. The PCSA Manager Menu:

- a. Displays a list of existing file and printer services

Use the arrow keys to select the file or printer service to which you want to deny a user access, then press Return.

- b. Prompts you for the user's VMS name

Enter the name and press Return.

Messages are displayed as the user is denied access to the file service.

Modifying Disk Services

Use the Modify Disk Service selection to mount and dismount the virtual disk, as required. You also can use this function to change access rights to disk services.

When you add an application virtual disk service using the PCSA Manager Menu, the access rights are automatically set as read/write.

For multiple users to have access to applications on a disk service, you must change the access rights to the service from read/write to read-only access.

Procedure

To change the access rights to the service, first you must dismount the disk service, and then you can remount it with read-only access.

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Modify Disk Service** from the Service Options menu.
3. Select **Dismount Disk** from the Modify Disk Service menu.
4. The PCSA Manager Menu:
 - a. Prompts you for the service name.
Enter the name of the application disk service you are dismounting.
 - b. Asks if you want to dismount the service from the cluster. (This prompt is displayed only if the node is part of a cluster.)
Enter YES or NO. NO is the default.

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- c. Asks if you want to dismount the service permanently.
Enter YES or NO. NO is the default.
- d. Asks if you want to purge the service from the service database.
Enter YES or NO. NO is the default.
- e. Asks for confirmation to dismount the disk.

The DISMOUNT DISK command disconnects all clients and closes the virtual disk service.

Procedure

Remount the disk service with read-only access.

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Modify Disk Service** from the Service Options menu.
3. Select **Mount Disk** from the Modify Disk Service menu.
4. The PCSA Manager Menu:
 - a. Prompts you for disk service's file name, such as MYAPP.
 - b. Prompts you for the service name.
The service name defaults to the file name specified in step a.
 - c. Prompts you for the password.
The default is no password.
 - d. Asks if you want to mount the service clusterwide. (This prompt is displayed only if the node is part of a cluster.)
Enter YES or NO. NO is the default.
 - e. Asks if you want to mount the service with write access.
Enter YES or NO. NO is the default.
 - f. Asks if you want to mount the service permanently.
Enter YES or NO. NO is the default.

- g. Prompts you for the service rating.
The range is 0 to 65535.
- h. Prompts you for the number of connections. This question is asked only if you answered NO to 4e.
The range is 1 to 65535.
- i. Prompts you for the service type.
A menu is displayed with the following types: Application, Boot, System, or User. Using the arrow keys, select the service type you are mounting.
- j. Prompts you to confirm to proceed to mount the disk.
The MOUNT DISK command makes the disk available to clients as a service.

Before Deleting Services

Before you delete a service you should:

- Send a Broadcast message to all workstation users to let them know you will be deleting the service. See Chapter 8.
- Make a backup copy of the executable and data files for the service.

For more information on making backups for the PCLAN/Server system, see Chapter 10. For information on making backups for a PCSA system, see the *VMS Backup Utility Manual*.

Keep in mind that after you delete the service, workstation users cannot access the service from the network.

Deleting a Common or Application File Service

Procedure

To delete either a common or application file service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Delete Service** from the Service Options menu.
3. Select **Common or Application File Service** from the Delete Service menu.

4. **The PCSA Manager Menu:**

- a. **Displays a list of common and application file services that exist on the server**

Use the arrow keys to select the common or application file service you want to delete, then press **Return**.

- b. **Asks if you want to delete all files for the service**

When you delete a common or application file service, you remove the network availability of files and directories associated with the service. You can, however, keep the files and directories and access them through the VMS operating system or associate them with a different service.

The PCSA Manager Menu displays messages while it does the following:

- **Denies access to the service**
- **Removes the service from the file server's service database**
- **Deletes the directory and files, if you chose to delete them**

Deleting an Application Disk Service

Procedure

To delete an application virtual disk service:

1. **Select *Service Options* from the PCSA Manager Menu.**
2. **Select *Delete Service* from the Service Options menu.**
3. **Select *Application Disk Service* from the Delete Service menu.**
4. **The PCSA Manager Menu displays a list of application disk services that exist on the server.**

Use the arrow keys to select the service you want to delete, then press **Return**.

The PCSA Manager Menu displays messages while it does the following:

- **Denies access to the application virtual disk service**
- **Removes the service from the disk server's service database**
- **Deletes all files in the service**

Deleting a Printer Service

Delete a printer service when it is no longer needed for printing files. You can also delete any files that are still in the queue waiting to print.

When you delete a printer service, the physical device, such as printer port MMJ1, is still associated with the printer and the printer spool.

Procedure

To delete a printer service:

1. Select **Service Options** from the PCSA Manager Menu.
2. Select **Delete Service** from the Service Options menu.
3. Select **Printer Service** from the Delete Service menu.

4. The PCSA Manager Menu:

- a. Displays a list of printer services that exist on the server

Use the arrow keys to select the printer service you want to delete, then press Return.

- b. Asks if you want to delete all files for the service

When users send a file to print, the system queues the file in the printer service subdirectory associated with the printer. If you want to delete the subdirectory and any files in the subdirectory that are still waiting to print, press Return to accept the default, Y.

To save the printer service files and directories, enter N and press Return.

Deleting a Printer Queue

Delete a printer queue when you want to deallocate the physical device, such as MMJ1. All forms associated with the device are removed.

When you delete the printer queue, the physical device is deallocated and all forms associated with the device are removed.

Procedure

To delete a printer queue:

1. Select **Printer Queue Options** from the PCSA Manager Menu.
2. Select **Delete a Printer Queue** from the Printer Queue Options menu.

3. The PCSA Manager Menu prompts you for:

a. The type of printer to delete

With the arrow keys, select your printer type and press Return.

b. The physical line name for the printer

Enter the terminal line to which your printer is connected. For example, the terminal line name for the PCLAN/Server can be MMJ1, MMJ2, or MMJ3.

To delete all printer queues for the same type of printer, enter the asterisk (*).

When you press Return, the prompt is displayed again. If you are deleting a second printer of the same type, enter the terminal line name for the second printer. Otherwise, press Return.

The PCSA Manager Menu displays messages while it deletes the printer queue. When it deletes the printer queue, it does the following:

- Removes the printer queues for the printer you select
- Deletes the directory for the printer
- Removes the printer services from the service database
- Updates the printer startup file, SYS\$MANAGER:PCFS_PRINT.COM.

6

Maintaining User Profiles

You can use the PCSA Manager Menu to modify user profiles. You also can view a list of registered users to check definitions or to delete a specific user. This chapter describes the procedures you need to follow to modify, delete, or list user profiles,

Modifying a User

Procedure

To modify a user profile:

1. Select **User Options** from the PCSA Manager Menu.
2. Select **Modify a User** from the User Options menu.

The PCSA Manager Menu:

1. Prompts you for the user's name

Enter the name of the user whose user profile you want to change.

2. Prompts you to invoke EDT to allow customization of the AUTOUSER.BAT file.

The default is NO. Press Return to exit back to the menu.

Enter YES and press Return to modify the file and change services, paths, or commands. Press CTRL/Z and enter EXIT to save the edits and return to the menu.

Deleting a User

Procedure

To delete a user profile:

1. Select **User Options** from the PCSA Manager Menu.
2. Select **Delete a User** from the User Options menu.

The PCSA Manager Menu:

1. Prompts you for the user's name

Enter the name of the user whose profile you want to delete, then press Return.

If you enter a name that is not registered as a user, the PCSA Manager Menu displays the message, "User not registered". The original prompt for the user name is displayed again. Enter a valid name or press Ctrl/Z to cancel.

2. Asks if you are sure you want to delete the profile for the user you entered in response to the previous prompt

If you want to cancel the deletion of the user profile, press Return. Otherwise, enter Y and press Return to delete the profile.

3. Asks if you want to delete the user's directory and files

When you delete a user profile, you remove the user's entry in the user authorization file (UAF). You can, however, keep the directory and files and access them through the VMS operating system or associate them with a different user.

If you want to delete the directory and files associated with the user profile, press Return.

If you do not want to delete the directory and files, enter N, then press Return.

Listing Registered Users

Procedure

Select this option to obtain a list of registered users.

1. Select **User Options** from the PCSA Manager Menu.

2. Select **List Registered Users** from the User Options menu.

The list of registered users includes user profiles added to the server with the following:

- The Add a User option
- PCSA_MANAGER command ADD USER

Figure 6-1 shows a sample list of registered users.

Figure 6-1 Sample List of Registered Users

Registered users:

User name	UIC	Logins	Directory
SARRO	[301,323]	Disabled	USER1:[SARRO]
CHUNG	[320,324]	Disabled	USER:[CHUNG]
TEXAN	[330,325]	Disabled	USER1:[TEXAN]

Press RETURN to continue...

The following information is displayed for each user:

- User name** Is the VMS name for the user.
- UIC** Is the user identification code.
- Logins** Displays whether interactive login is enabled or disabled for the user's account.
- Directory** Is the path for the user's account. The path for the account consists of a device name followed by a directory name.

7

Maintaining Workstations

Workstations are configured with the Netsetup utility. However, some additional tasks are required to set up workstations for specific jobs. For example, if your workstation is going to be used to run VMS applications, you must add its DECnet node name and address to the server.

Maintenance tasks, such as deleting old DOS versions or remote boot workstations, also need to be done on a regular basis.

The PCSA Manager Menu makes it easy for you to do these kinds of jobs. This chapter explains how to:

- Add and delete nodes
- List and delete client operating systems
- List and delete remote boot workstations
- Restore a boot database

Figure 7-1 displays the menu selections that access these options.

Figure 7-1 Workstation Options Menu

Workstation Options

```
Client Operating System Options
Node Registration Options
Remote Boot Workstation Options
Return to Previous Menu
```

Use the arrow keys to make a selection, then press RETURN

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Adding a Node

You have to add a node name to a workstation if it is going to run a VMS application or a DECnet utility that asks for a node name and address. Otherwise you do not have to add nodes to the server on a PCSA network.

Procedure

To add another workstation to the DECnet node database on your server, select this option.

1. Select **Workstation Options** from the PCSA Manager Menu.
2. Select **Node Registration Options** from the Workstation Options menu.
3. Select **Add a Node** from the Node Registration Options menu.
4. The PCSA Manager Menu prompts you for:
 - a. The name of the node to be added

Enter the unique 1- to 6-character node name for the node you are adding, then press the Return key.

If you enter an invalid node name, such as a node name longer than 6 characters, the PCSA Manager Menu displays a message and redisplay the prompt. Reenter a node name of up to 6 characters.

- b. The DECnet address of the node to be added

Enter the DECnet node address for the node you are adding, then press Return.

If you enter an invalid node address, the PCSA Manager Menu displays a message. Press Return to redisplay the prompt. Enter the node name again, and a valid node address.

The PCSA Manager Menu displays messages while it adds the node name and address you entered to the DECnet database.

Deleting a Node

Procedure

To remove a workstation from the DECnet node database, select this option.

1. Select **Workstation Options** from the PCSA Manager Menu.
2. Select **Node Registration Options** from the Workstation Options Menu.
3. Select **Delete a Node** from the Node Registrations Options menu.
4. When prompted for the name or address of the node to be deleted, enter either the 1- to 6-character DECnet node name or the node address of the node you want to delete, then press Return.

If you enter a valid node name, the PCSA Manager Menu uses the node name to search the DECnet database. It displays a success message that includes the node address. If you enter the node address, the PCSA Manager Menu uses the node address to search the database and displays a success message that includes the node name.

If you enter an invalid node name or address, such as a node name longer than 6 characters, the PCSA Manager Menu displays a message and redisplay the prompt. Reenter a valid node name or node address.

The PCSA Manager Menu displays messages while it removes the node from the DECnet node database.

Deleting a Client Operating System

Use this option to delete old client operating system software from the system virtual disk service.

The Delete Client Operating System selection:

- Displays a list of installed operating systems so that you can select the one you want to delete
- Dismounts the system virtual disk service
- Deletes the operating system files
- Remounts the system virtual disk service

Procedure

Before you select Delete Client Operating System, which dismounts the system virtual disk, send a Broadcast message to all the workstation users that you are going to take the operating system disk off line.

1. Select **Workstation Options** from the PCSA Manager Menu.
2. Select **Client Operating System Options** from the Workstation Options menu.
3. Select **Delete Client Operating System** from the Client Operating System Options menu.
4. The PCSA Manager Menu:
 - a. Asks if you want to continue dismounting the system virtual disk
To dismount the system virtual disk so you can delete the client operating system, press Return.
To stop the deletion process, enter N, then press Return. The Service Options menu is displayed again.
 - b. Prompts you to select the operating system you want to delete
A list and description of the client operating systems on the system virtual disk are displayed. To delete an operating system, use the arrow keys to select the operating system you want to delete, then press Return.
 - c. Asks if you want to delete the operating system
This is the last time you can stop the deletion process. To stop the deletion process, press Return. To continue the deletion process, type Y, then press Return.

The PCSA Manager Menu displays messages as it deletes the operating system files from the virtual system disk and remounts the disk.

You should send a Broadcast message to all workstation users when the system virtual disk is available again.

Listing Client Operating Systems

Procedure

Use this option to list all client operating systems on the system virtual disk service.

1. Select **Workstation Options** from the PCSA Manager Menu.
2. Select **Client Operating System Options** from the Workstation Options menu.
3. Select **List Client Operating Systems** from the Client Operating System Options menu.

The PCSA Manager Menu displays a list of each DOS operating system installed on the server.

Deleting a Remote Boot Workstation

Procedure

To delete a remote boot workstation:

1. Select **Workstation Options** from the PCSA Manager Menu.
2. Select **Remote Boot Workstation Options** from the Workstation Options menu.
3. Select **Delete Remote Boot Workstation** from the Remote Boot Workstation Options menu.
4. The PCSA Manager Menu:
 - a. Prompts you for the workstation node name

Enter the 1- to 6-character node name for the workstation you want to delete.

- b. Asks if you are sure you want to delete the workstation with the node name you entered in response to the previous prompt

If you want to cancel the deletion, press Return. Otherwise, enter Y, then press Return to delete the workstation.

The PCSA Manager Menu displays messages while deleting the workstation profile.

Listing Remote Boot Workstations

Procedure

For a list of all workstations registered for remote boot with the DECnet database on the server, select this option.

1. Select **Workstation Options** from the PCSA Manager Menu.
2. Select **Remote Boot Workstation Options** from the Workstation Options menu.
3. Select **List Remote Boot Workstations** from the Remote Boot Workstation Options menu.

Figure 7-2 shows a sample list of workstations registered for remote boot.

Figure 7-2 Sample List of Remote Boot Workstations

Name	HW Address	Address	Load File	Size	Comment
ROSE1	22-00-0A-FF-02-46	13.434	LOAD.TSK	1.2MB	SERVICE DESK PC
FERN	66-00-2A-FF-90-87	13.450	LOAD.TSK	1.2MB	
MUMS	32-08-3A-FF-31-01	13.526	LOAD.TSK	1.2MB	

Total of 3 workstations listed

The following information is displayed for each workstation listed:

Name	The DECnet node name for the workstation.
HW Address	The hardware address for the Ethernet controller.
Address	The node address of the workstation
Load File	The name of the load file. The load file is used for remote boot and reflects the type of Ethernet controller on the workstation.
Size	The size of the virtual disk, which is selected when the workstation profile is added.

Restoring a Boot Database

The DECnet database file contains the appropriate NCP commands needed to boot remote workstations. If this file is destroyed, you need to recreate it.

Procedure

To restore a DECnet database file:

1. **Select Workstation Options** from the PCSA Manager Menu.
2. **Select Remote Boot Workstation Options** from the Workstation Options menu.
3. **Select Restore Boot Database** from the Remote Boot Workstation Options menu.
4. **The PCSA Manager Menu:**
 - a. Prompts you for the type of Ethernet controller for the server
 - b. Asks whether you want to run the command file now

To run the command file that recreates the DECnet database file, press Return.

If you want to run the command file at another time, enter N, then press Return. Later, to run the command file, enter the following at the VMS prompt:

```
$ @SYS$MANAGER:PCSA$REMOTE_BOOT.COM
```

Using the Broadcast Utility

Use the Broadcast utility to send messages from the server to workstations. You can, for example, let users know about important server information, such as available new services or offline maintenance times.

The PCSA Manager Menu provides an easy way to send messages. Broadcast messages from the menu can be sent only from the server to workstations. This chapter explains how to send a Broadcast message from the server to the workstation.

When you make a change to services available to workstation users, you can send a Broadcast message explaining the change. For example, if you plan to perform a backup, send a Broadcast message telling users that they should disconnect from the services.

You can send as many messages as you need from the server. However, workstations can only store a maximum of ten messages at a time.

When there are new messages in the buffer, Broadcast displays the number of new messages. After a user reads a message, it is deleted from the buffer. If the buffer is full when a new message is received, Broadcast deletes the oldest message and stores the new one. For this reason, limit the number of messages you send until you are confident that users have had enough time to read the messages they have already received.

You can use Broadcast to send messages to:

- All workstations
- Specific workstations

Figure 8–1 shows a typical Broadcast message as it is displayed at the workstation.

Figure 8-1 Sample Broadcast Message

- ① From - LETTER::SYSTEM
- ② I am taking the LN03 printer off line
at noon for one hour.
- ③ (Alt Q Quit)

The numbers in Figure 8-1 label the parts of a Broadcast message. A description of each part follows:

① Header information

Broadcast automatically adds a header to the message you send. The header includes the server node name and user name. In a network including more than one server, the sender's node name and user name tells the workstation user which server is the source of the message.

② Message text

A Broadcast message issued from the PCSA Manager Menu can be up to 80 characters long.

You can use alphanumeric and special characters in your message.

③ Command line

The command line at the bottom of the Broadcast message tells workstation users how to read new messages or how to stop reading messages.

Procedure

To send a Broadcast message:

1. Select **Utility Options** from the PCSA Manager Menu.
2. Select **Send Broadcast Message** from the Utility Options menu.
3. The PCSA Manager Menu prompts you for:

- a. The name of the node to which you want to send a message

To send a Broadcast message to a particular workstation, enter the DECnet node name of the workstation, then press Return. The prompt is repeated so you can send the message to multiple workstations. When you have named all the nodes to which you want to send a Broadcast message, press Return.

To send a Broadcast message to all workstations on the network, enter *, then press Return.

- b. The message to send

Enter the Broadcast message you want to send, then press Return. The message you send using the PCSA Manager Menu can be up to 80 characters long.

NOTE

Workstations can only store up to 10 messages at a time. Try to limit the number of messages you send until you are confident that users have had enough time to read the received messages.

You can modify the STARTNET.BAT file to change the default Broadcast values. Refer to *Network Commands Reference Manual* for a list of these values.

9

Using the Log

The log file lists all events that occur on the server. It provides an easy way for you to keep track of network events because it includes error and informational messages. You can print the log and keep hard copies for reference in case you need to track specific events.

Use the log to monitor connections, file accesses, and illegal file access attempts. For example, the log file can help you trace what happened to a connection or a file.

You can check for invalid user names. You also can look at the log to check the number of users who opened and changed a particular file.

This chapter describes how to use the PCSA Manager Menu to view and print the log file and to start a new file. Figure 9-1 shows the menu selection.

Figure 9-1 Utility Options Menu

Utility Options

Send Broadcast Message
File Server Log Options
Return to Previous Menu

Use the arrow keys to make a selection, then press RETURN

MF-5785-IRA

The *file server log file* is a standard text file that contains messages describing network events.

The file server updates the log file once every 60 seconds. After an event occurs, the event is logged within the next minute.

Printing the Log File

Procedure

To print the file server log file:

1. Select **Utility Options** from the PCSA Manager Menu.
2. Select **File Server Log Options** from the Utility Options menu.
3. Select **Print the Log File** from the File Server Log Options menu.
4. The PCSA Manager Menu prompts you to select:
 - a. A queue to which to print the log file

Use the arrow keys to select the printer queue to which to print the log file, then press Return.

- b. A form on which to print the log file

A list of valid forms for the selected printer queue is displayed. Use the arrow keys to select the form, then press Return.

Viewing the Log File

Procedure

To list the messages in the log file:

1. Select **Utility Options** from the PCSA Manager Menu.
2. Select **File Server Log Options** from the Utility Options menu.
3. Select **View the Log File** from the File Server Log Options menu.

Figure 9-2 shows a sample list of file server events.

Figure 9-2 Sample Log File

```
7-Jan-90 23:05:18 (netio) Server started on node WRITER
7-Jan-90 23:05:27 (netio) Unit 163 (WRITER): link aborted
7-Jan-90 23:05:37 (Negotiate Protocol) Invalid protocol from client WRITER
7-Jan-90 23:05:49 (netio) Unit 169 (WRITER): link aborted
7-Jan-90 23:05:56 (netio) Unit 165 (WRITER): link aborted
7-Jan-90 23:09:00 (netio) Unit 171 (WRITER): link aborted
```

Press RETURN for menu . . .

Sometimes a log file contains a number of "link aborted" messages. You do not have to respond to these messages unless users are complaining about losing links to the server.

Starting a New Log File

Procedure

To close the current version of the file server log file and create a new one:

1. Select **Utility Options** from the PCSA Manager Menu.
2. Select **File Server Log Options** from the Utility Options menu.
3. Select **Start a New Log File** from the File Server Log Options menu.

The PCSA Manager Menu displays the following message and starts logging file server events:

```
%PCSA-I-LOGCHARSET, server logging characteristics set
```

10

Maintaining a PCLAN/Server System

This chapter describes some tasks you need to do to maintain a PCLAN/Server System. These include:

- Backing up an entire disk
- Restoring disks
- Backing up PCSA and user accounts
- Restoring PCSA and user accounts
- Shutting down the server
- Rebooting the server
- Listing nodes

Except for restoring the server disk, you can perform all of these tasks using options available from the PCSA Manager Menu.

NOTE

These options only are valid on PCLAN/Server Systems and most are available from the Utility Options menu. Figure 10–1 shows the menu choices.

Figure 10-1 Utility Options Menu for PCLAN/Server

Utility Options

```
Send Broadcast Message
File Server Log Options
Backup/Restore Options
Shutdown/Reboot Server
Return to Previous Menu
```

Use the arrow keys to make a selection, then press RETURN

MF-5764-RA

Backing Up and Restoring Data

As part of maintaining the PCLAN/Server system, you need to make routine backups of stored data.

The following sections describe:

- Backing up an entire disk
- Restoring disks
- Backing up PCSA and user accounts
- Restoring PCSA and user accounts

A *backup* is a copy of the contents of an entire server disk, a directory, or a file. You make the copy on a tape. Then, if necessary, you can *restore*, or copy back, the files to the server in case the original is accidentally corrupted or destroyed.

Backing Up an Entire Disk

To guard against possible data loss, back up the server system disk at least once every month or when you make a change to the system.

When you back up a server system disk, you save copies of all files that are on the server, including volatile data, such as application and user files, and more stable system data, such as system software.

Backing up an entire system disk terminates all workstation connections to the server. Users cannot connect to the server until the backup procedure is completed.

In the event of a system failure, you can restore your system using the backup media for your PCLAN/Server system. For instructions on restoring the disk, see Restoring the Server Disk in this chapter.

Procedure

To back up an entire disk:

1. Send a Broadcast message to all users notifying them that the server will be unavailable.
2. Select **Utility Options** from the PCSA Manager Menu.
3. Select **Backup/Restore Options** from the Utility Options menu.
4. Select **Backup Entire Disk** from the Backup/Restore Options menu.
5. The PCSA Manager Menu:
 - a. Displays a screen asking you to select the device to be backed up. To back up the system server disk, use the arrow keys to select the disk, DISK\$PCLAN_SYS. Or you can select another disk to back up.

The PCSA Manager Menu displays this message.

```
This action will terminate all client
workstation connections to the server.
Do you wish to proceed [YES or NO]:
```

To continue the backup procedure, enter YES, then press Return. If you respond YES, the following message is displayed.

```
%PCSA-I-DSVRSTOPPED, all connections stopped, LAD$KERNEL process terminated
```

```
%PCSA-I-DSVRSTOPPED, File Server process terminated
```

Insert a scratch tape in tape drive and place drive on-line.

Press RETURN when ready or Ctrl/Z to cancel:

Place a blank TK50 tape cartridge in the TK50 tape drive. Place the tape drive online by pushing the load/unload button on the TK50 tape drive to the in (load) position. For more information on loading a tape cartridge, see *Installing and Configuring PCLAN/Server*.

The program copies any VMS system files, user accounts, file services, and disk services that exist on that disk, to the TK50 tape and displays the names of the files being copied.

If you respond NO to cancel the procedure, you are prompted to press Return. You are returned to the Backup/Restore Options menu.

b. Identifies the name of the backup log file

The backup log file is named in the form:

```
SYS$COMMON:[PCSA]devicename_dd-mmm-yyyy_IMAGE.LIS
```

Where:

devicename Is the device name for the server disk. For example, the device name might be DUA0 or DKA1.

dd Is the day of the backup.

mmm Is the month of the backup.

yyyy Is the year of the backup.

c. Asks if you want to print the backup log file

If you do not want to print the backup log file, press Return to accept the default, NO. If you answer NO, the PCSA Manager Menu prompts you to press Return and then returns to the Backup/Restore Options menu.

If you want to print the backup log file, enter YES, then press Return.

6. If you chose to print the backup log file, the PCSA Manager Menu:

- a. Asks if you want to delete the log after printing

To delete the backup log file after printing, enter YES, then press Return. To keep the log file, press Return to accept the default, NO.

- b. Prompts you to select a printer queue to which to print the backup log file

Use the arrow keys to select the printer queue, then press Return.

- c. Prompts you to select a form on which to print the backup log file

A list of valid forms for the selected printer queue is displayed. Use the arrow keys to select the form, then press Return.

7. Remove the TK50 tape cartridge from the TK50 tape drive and label it. For example:

```
PCLAN_SYS Disk backup, Save set 10-SEP-1989
```

Restoring Disks

This section describes the procedures for restoring:

- An entire server system disk
- Other types of virtual disks

Restore the contents of a server system disk using VMS Standalone Backup.

When you restore an entire server system disk, you must shut down the system. To shut down the system, refer to Shutting Down the Server in this chapter. The shutdown procedure automatically sends a messages to all users notifying them that the system will be unavailable. Allow one to two hours to restore an entire server disk.

- To restore an entire server system disk:

1. After shutting down the system, stop the server by pressing the Halt button on the rear of the system unit.
2. Place the TK50 tape cartridge that contains the PCLAN/Server kit, which was shipped with your system, in the TK50 tape drive. Place the drive online by pushing the load/unload button on the TK50 tape drive to the in (load) position. For more information on loading a tape cartridge, see *Installing and Configuring PCLAN/Server*.
3. At the console terminal, load the backup function from the PCLAN/Server VMS tape into memory by entering one of the following commands:

```
>>> B MUA0:  [on a PCLAN/Server 2000]
```

```
>>> B MKB500:  [on a PCLAN/Server 3100]
```

4. Enter the date.

When the prompt (\$) appears, place the TK50 tape that contains the files you want to restore in the TK50 tape drive. Place the drive online by pushing load/unload button on the TK50 tape drive to the in (load) position.

5. Copy the save set from the TK50 tape to your server disk by entering:

```
$ BACKUP/IMAGE/LOG Tape_device_name: Disk_device_name:
```

Where:

Tape_device name Is either MUA0: for a PCLAN 2000 or MKB500: for a PCLAN 3100 system.

Disk_device name Is the device name for the server disk you are restoring.

6. When the backup is complete, the following message is displayed:

If you do not want to perform another standalone BACKUP operation, use the console to halt system.

If you do want to perform another standalone BACKUP operation, ensure the standalone application volume is online and ready. Enter "YES" to continue:

- a.. Remove the TK50 tape cartridge from the tape drive.
- b. Stop the server by pressing the Halt button on the rear of the system unit.

c. At the console prompt, enter:

```
>>> B Return
```

This command starts the VMS operating system.

- To restore other types of virtual disks:
 1. Dismount the disk that has to be restored and then remount it.


```
$ DISMOUNT disk_name
$ MOUNT/for disk_name
```
 2. Place the TK50 tape that contains the files to be restored into the TK50 drive and enter:


```
$ MOUNT/for tape_device
```
 3. Enter the backup command:


```
$ BACKUP/IMAGE/LOG tape_device: disk_device
```

When the backup is complete, the dollar sign prompt returns.
 4. Dismount the tape device.


```
$ DISMOUNT tape_device
```
 5. Use the PCSA Manager Menu to reboot the system. See *Rebooting the Server* in this chapter.

Backing Up PCSA and User Accounts

Back up PCSA disk and file services and user accounts at least once a week. You can back up volatile data and one or more files on the disk.

Volatile data includes:

- PCSA disk services
- PCSA file services
- User files

You can back up:

- An application or user directory
- A subdirectory
- A selection of files
- A single file

In the event of file corruption, you can restore one or more files using the Restore PCSA and User Accounts option from the Backup/Restore Options menu.

Backup Procedure

To back up PCSA services and/or user accounts on the server disk:

1. Select **Utility Options** from the PCSA Manager Menu.
2. Select **Backup/Restore Options** from the Utility Options menu.
3. Select **Backup PCSA and User Accounts** from the Backup/Restore Options menu.
4. Using the arrow keys, select the DISK\$PCLAN_SYS disk or the disk you want the PCSA accounts backed up from.
5. The PCSA Manager Menu selects all files on the disk and asks if you want to modify the list of selected files.
 - If you want to back up all user accounts, file services, and disk services on the disk, press Return to accept the default, NO. Go to step 7.
 - If you want to select particular user accounts, file services, or disk services to back up, enter YES, then press Return. Go to step 6.
6. If you chose to modify the list of selected files, the PCSA Manager Menu:
 - a. Displays a list of all the directories on the disk and prompts you to choose a path.

Use the keyboard arrow keys to select the directory that contains the file or files you want to back up.
 - b. Displays the directory you selected and asks if the path is correct.

The directory you selected is displayed and is followed by VMS wildcard characters (*.;*). The wildcard characters represent all subdirectories and files in the directory.

If the directory displayed is the directory you want to back up or contains the file or files you want to back up, press Return to accept the default, YES. Go to step 6c.

If the directory displayed is incorrect, enter NO, then press Return. The PCSA Manager Menu displays the list of directories on the disk again. Return to step 6a.

- c. Asks if you want to edit the path.

If you want to back up all subdirectories and files in the directory displayed, press Return to accept the default, NO. Go to step 7.

If you do not want to back up all subdirectories and files in the directory, enter YES, then press Return. Go to step 6d.

- d. Prompts you to enter the subdirectory if you chose to edit the path.

You have two choices:

- Enter the full path name for the file or files you want to back up.
- Enter the next portion of the path name for the file or files you want to back up.

When you press Return, the subdirectory prompt is displayed again. Continue entering portions of the path name at the prompt until the full path name is displayed.

- e. Prompts you to enter the file name if you chose to edit the path.

You have two choices:

- Press Return to back up all files in the path.
- Enter the name of the file you want to back up, then press Return.

- f. Displays the edited path and asks if it is correct.

If the edited path is correct, press Return to accept the default, YES. Go to step 6g.

If the path is incorrect, enter NO, then press Return. The PCSA Manager Menu asks if you want to edit the path again. You have two choices:

- Press Return if you want to edit the path again. Return to step 6d.
- Enter NO if you do not want to edit the path again. Return to step 6a.

g. Displays the list of directories on the disk again. You have two choices:

- Select another path for backup and return to step 6b.
- Select DONE and go to step 7.

7. The PCSA Manager Menu asks if you want to verify the selections.

To verify the selections for backup, press Return to accept the default, YES. Go to step 8.

If you do not want to verify the selections, enter NO, then press Return. Go to step 9.

8. If you chose to verify the selections, the PCSA Manager Menu:

- a. Displays a list of files to copy to the TK50 tape.
- b. Asks if you want to continue the operation.

If the selections are correct and you want to continue with the backup, press Return to accept the default, YES. Go to step 9.

If you want to cancel the backup procedure, enter NO, then press Return. The PCSA Manager Menu returns to the Backup/Restore Options menu.

9. The PCSA Manager Menu:

- a. Prompts you to insert a blank tape in the tape drive and place the drive online.

Place a blank TK50 tape cartridge in the TK50 tape drive. Place the tape drive online by pushing the load/unload button on the TK50 tape drive to the in (load) position.

To continue the backup procedure, press Return.

The PCSA Manager Menu copies the user accounts, file services, and disk services to the TK50 tape and displays the names of the files being copied.

To cancel the procedure, press Ctrl/Z.

- b. Identifies the name of the backup log file.

The backup log file is named in the form:

```
SYS$COMMON:[PCSA]devicename_dd-mmm-yyyy_SELECTIVE.LIS
```

Where:

devicename Is the device name for the server disk. For example, the device name might be DUA0 or DKA300.

dd Is the day of the backup.

mmm Is the month of the backup.

yyyy Is the year of the backup.

- c. Asks if you want to print the backup log file.

If you do not want to print the backup log file, press Return to accept the default, NO. If you answer NO, the PCSA Manager Menu prompts you to press Return and then returns to the Backup/Restore Options menu. Go to step 11.

If you want to print the backup log file, enter YES, then press Return. Go to step 10.

- 10. If you chose to print the backup log file, the PCSA Manager Menu:

- a. Asks if you want to delete the log after printing.

To delete the backup log file after printing, enter YES, then press Return.

To retain the log file, press Return to accept the default, NO.

- b. Prompts you to select a printer queue to which to print the backup log file.

Use the arrow keys to select the printer queue, then press Return.

- c. Prompts you to select a form on which to print the backup log file.

A list of valid forms for the selected printer queue is displayed. Use the arrow keys to select the form, then press Return.

- d. The PCSA Manager Menu returns to the Backup/Restore Options menu. Go to step 11.

- 11. Remove the TK50 tape cartridge from the TK50 tape drive and label it. For example:

```
PCLAN_SYS Disk backup: User files, 10-SEP-1989
```

Restoring PCSA and User Accounts

To restore volatile data from a TK50 tape to a server disk, use the Restore PCSA and User Accounts option. Volatile data includes:

- PCSA disk services
- PCSA file services
- User files

Use this option only if you need to recreate a file or files on the disk as they were when you performed the backup. For example, you may need to recreate files because of a system failure.

Procedures

To restore PCSA and user accounts on the server disk:

1. **Select Utility Options from the PCSA Manager Menu.**
2. **Select Backup/Restore Options from the Utility Options menu.**
The PCSA Manager Menu displays a screen requesting that you select a disk device. Use the arrow keys to make your selection.
3. **Select Restore PCSA and User Accounts from the Backup/Restore Options menu.**
4. **The PCSA Manager Menu prompts you to insert a backup save set in the tape drive and place the drive online.**

Place the TK50 tape cartridge that contains the files you want to restore in the TK50 tape drive. Place the tape drive online by pushing the load/unload button on the TK50 tape drive to the in (load) position. For more information on loading a tape cartridge, see *Installing and Configuring PCLAN/Server*.

To continue restoring PCSA and user files, press Return. The PCSA Manager Menu retrieves information about the save set from the backup tape. A save set is a collection of files that have been backed up.

To cancel the procedure, press Ctrl/Z. The PCSA Manager Menu returns to the Backup/Restore Options menu.

5. The PCSA Manager Menu:

- a. Identifies the name of the save set that is on the backup tape you inserted in the tape drive and asks if it is correct

The name of the save set file is the device name, followed by the date of backup. A save set name is in the form:

devicename_dd-*mmm*-yy

Where:

devicename Is the device name for the server disk. For example, the device name might be DUA0 or DKA300.

dd Is the day of the backup.

mmm Is the month of the backup.

yy Is the year of the backup.

If the save set that has been retrieved is correct, press Return to accept the default, YES. Go to step 5b.

If the wrong save set has been retrieved, enter NO, then press Return. The PCSA Manager Menu returns to the Backup/Restore Options menu.

- b. Asks if you want to modify the list of selected files
- If you want to restore all of the files in the save set, press Return to accept the default, NO. Go to step 7.
 - If you want to select particular files to restore, enter YES, then press Return. Go to step 6.

6. If you chose to modify the list of files to restore, the PCSA Manager Menu:

- a. Displays a list of all the directories in the save set and prompts you to choose a path

Use the keyboard arrow keys to select the directory that contains the file or files you want to restore.

- b. Displays the directory you selected and asks if the path is correct

The directory you selected is displayed, followed by VMS wildcard characters (*.*;*). The wildcard characters represent all subdirectories and files in the directory.

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If the directory displayed is the directory you want to restore or contains the file or files you want to restore, press Return to accept the default, YES. Go to step 6c.

If the directory displayed is incorrect, enter NO, then press Return. The PCSA Manager Menu displays the list of directories on the disk again. Return to step 6a.

c. Asks if you want to edit the path

If you want to restore all subdirectories and files in the directory displayed, press Return to accept the default, NO. Go to step 7.

If you do not want to back up all subdirectories and files in the directory, enter YES, then press Return. Go to step 6d.

d. Prompts you to enter the subdirectory if you chose to edit the path

You have two choices:

- Enter the full path name for the file or files you want to restore.
- Enter the next portion of the path name for the file or files you want to restore.

When you press Return, the subdirectory prompt is displayed again. Continue entering portions of the path name at the prompt until the full path name is displayed.

e. Prompts you to enter the file name if you chose to edit the path

You have two choices:

- Press Return to restore all files in the path.
- Enter the name of the file you want to restore, then press Return.

f. Displays the edited path and asks if it is correct

If the edited path is correct, press Return to accept the default, YES. Go to step 7.

If the path is incorrect, enter **NO**, then press **Return**. The **PCSA Manager Menu** asks if you want to edit the path again. You have two choices:

- Press **Return** if you want to edit the path again. Return to step 5d.
 - Enter **NO** if you do not want to edit the path again. Return to step 5a.
- g. Displays the list of directories in the save set again. You can either:
- Select another path to restore and return to step 6a.
 - Select **DONE** and go to step 7.

7. The **PCSA Manager Menu** asks if you want to verify the selections.

To verify the selections to restore, press **Return** to accept the default, **YES**. Go to step 8.

If you do not want to verify the selections to restore, enter **NO**, then press **Return**. Go to step 9.

8. If you chose to verify the selections to restore, the **PCSA Manager Menu**:

- a. Displays a list of files to copy to the server disk
- b. Asks if you want to continue the operation

If the selections are correct and you want to continue to restore them, press **Return** to accept the default, **YES**. Go to step 9.

If you want to cancel the procedure, enter **NO**, then press **Return**. The **PCSA Manager Menu** returns to the **Backup/Restore Options** menu.

9. The **PCSA Manager Menu** restores the files to the server disk and returns to the **Backup/Restore Options** menu.

Remove the **TK50** tape cartridge from the **TK50** tape drive.

The screen displays a "Restore Complete" message when the restore is finished and requests that you press **Return**.

Shutting Down the Server

You need to shut down the system during emergency weather situations or when you want to perform housekeeping functions. These include:

- Preventive maintenance
- Changing system parameters
- Stopping batch and output queues
- Dismounting volumes

The Shutdown selection ensures an orderly shutdown because it automatically sends a broadcast message to users, stops batch and device queues, disconnects all services, and stops user processes. It allows you to define a specific time period before the shutdown actually begins and then shuts down the server for the specified time period.

Press the halt button on the back of your server and boot the server.

Procedure

To shut down the server for the PCLAN/Server system:

1. Select **Utility Options** from the PCSA Manager Menu.
2. Select **Shutdown/Reboot Server** from the Utility Options menu.
3. Select **Shutdown** from the Shutdown/Reboot Server menu.
4. The PCSA Manager Menu asks you how many minutes you want to wait before starting the system shutdown.
 - If you want to wait five minutes before beginning to shut down the system, press Return to accept the default.
 - If you want to specify a different length of time to wait before beginning to shut down the system, enter the number of minutes, then press Return.

After you press Return, the system displays messages advising you that all clients have been notified, that the server is shutting down, and that users should log off.

CAUTION

While it is possible to cancel the Shutdown option by pressing Ctrl/C, you should not do so. If you press Ctrl/C after the shutdown procedure has begun, you can leave the server in an indeterminate state.

Rebooting the Server

When you change VMS system parameters, you need to reboot the system to bring the new parameters into effect. Use the Reboot option from the Shutdown/Reboot Server menu to shut down the server and then automatically reboot it.

The Reboot option automatically sends a Broadcast message to all users advising them of the system shutdown.

When you select Reboot, the PCSA Manager Menu disconnects all services, shuts down the VMS system, and then automatically reboots the server.

Procedure

To shut down and automatically reboot the server:

1. Select **Utility Options** from the PCSA Manager Menu.
2. Select **Shutdown/Reboot Server** from the Utility Options menu.
3. Select **Reboot** from the Shutdown/Reboot menu.
4. The PCSA Manager Menu asks you how many minutes you want to wait before starting the system shutdown.
 - If you want to wait five minutes before beginning to shut down the system, press Return to accept the default.
 - If you want to specify a different length of time to wait before beginning to shut down the system, enter the number of minutes, then press Return.

After you press Return, the system displays messages advising you that all clients have been notified, that the server is shutting down, and that users should log off.

CAUTION

While it is possible to cancel the Reboot option by pressing Ctrl/C, you should not do so. If you press Ctrl/C after the shutdown procedure has begun, you can leave the server in an indeterminate state.

Listing Nodes

PCLAN users have one additional selection from the PCSA Manager Menu. To view a list of all nodes included in the DECnet database on the server, choose List Nodes. Workstation and nonworkstation nodes, such as other servers, are included in the list.

Procedure

To list all workstation and nonworkstation nodes:

1. Select **Workstation Options** from the PCSA Manager Menu.
2. Select **Node Registration Options** from the Workstation Options menu.
3. Select **List Nodes** from the Node Registration Options menu.

See Figure 10-2 for an example of the List Nodes display.

Figure 10-2 Sample Listing of Known Nodes

Known Node Permanent Summary as of 1-MAY-1989 08:09:10

Executor node = 4.15 (MILTON)

State = on

Remote node = 3.33 (BRONTE)
No information available

Remote node = 4.33 (WOOLFE)
No information available

Remote node = 5.33 (AUSTEN)
No information available

The list of nodes includes the DECnet node address for the executor node, which is the server from which you issue the command. The node name for the executor node is displayed in parentheses. Listed below the executor node is the node address and node name (in parentheses) for each remote node listed in the DECnet database for the server.

NOTE

Once you select the List Nodes option and press Return, you cannot stop or cancel the display.

When the end of the database is reached, press Return to return to the workstation menu.

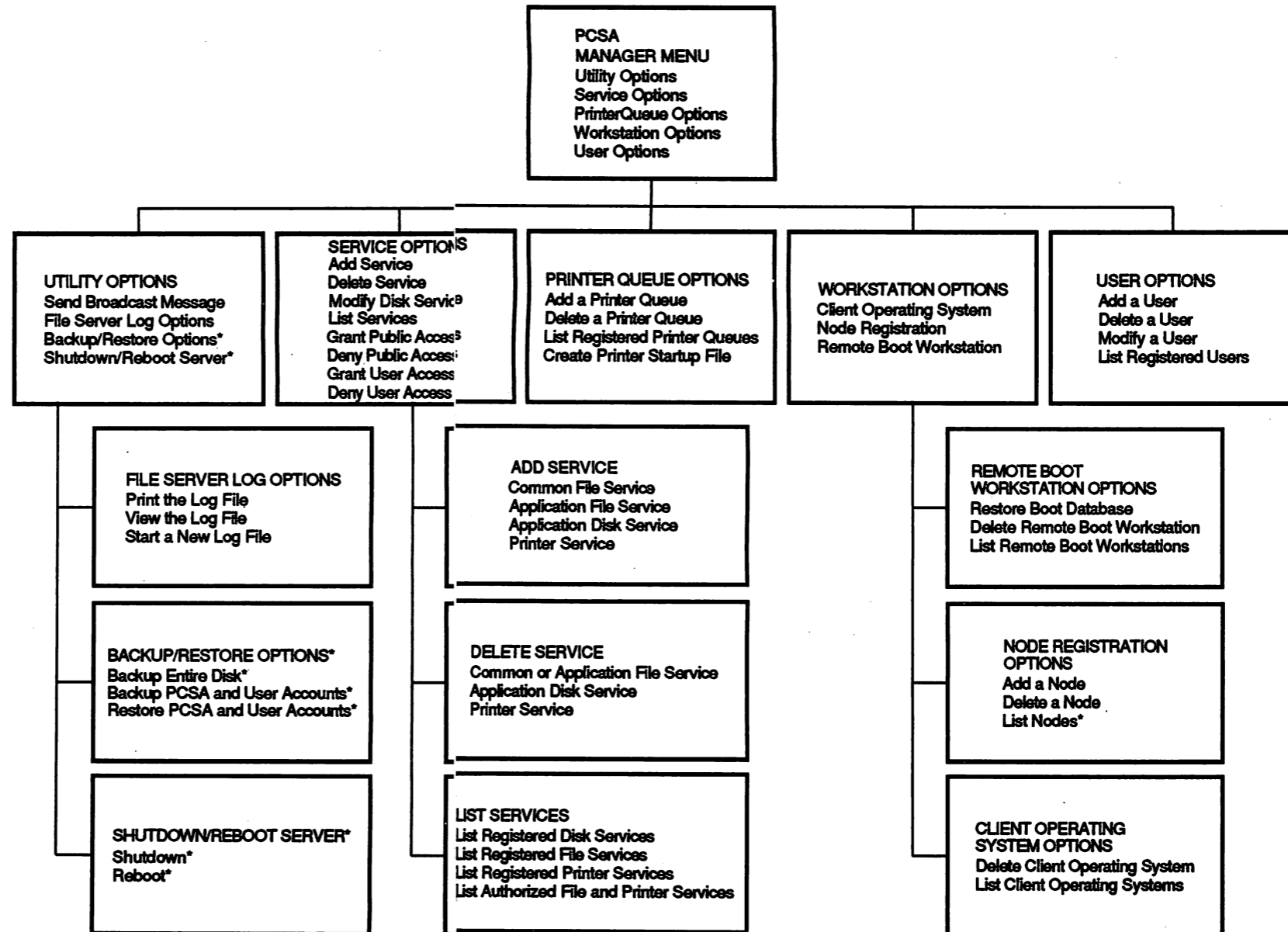
A

PCSA Manager Menu Tree

The PCSA Manager Menu has five main selections. Figure A-1 shows the top level menu and submenu selections.

A-2 PCSA Manager Menu Tree

Figure A-1 PCSA Manager Menu Tree



* Option Displays Only for PCLAN/Server VMS System

B

User Profile Form

User's name: _____

User's password (Default: WELCOME): _____

Path for user's account: _____

File version limit (Default: 1): _____

Allow interactive login? [Y N]

Common directory: _____

File service application(s): _____

Disk service application(s): _____

Printer services for LPT1: _____

Printer services for LPT2: _____

Printer services for LPT3: _____

Sample Server Setup

This appendix demonstrates how to use the PCSA Manager Menu to set up a sample server network. Server setup includes setting up network services and user profiles.

This sample represents a typical system configuration. Although your actual configuration is likely to differ, the steps that you follow will be similar.

Sample Configuration

In this sample, the system has the following parts:

- PCLAN/Server system
- LN03 Plus printer installed on the server
- Four PC workstations
- The following types of workstation applications:
 - Word processing, for installation on an application file service
 - Spreadsheet, for installation on an application virtual disk service

The following sections outline each step in setting up the sample network and demonstrate how you would use the PCSA Manager Menu. Selections made by the system administrator are indicated by **boldface** print.

Step 1: Add Common File Services

Add any additional common file services you want to make available to users.

NOTE

For PCLAN/Server systems, the common file service, **PCCOMMON**, is automatically set up as part of the server installation procedure.

C-2 Sample Server Setup

To add a common file service, use the PCSA Manager Menu and select:

1. **Service Options** from the PCSA Manager Menu
2. **Add Service** from the Service Options menu
3. **Common File Service** from the Add Service menu

Figure C-1 shows how you would respond to the prompts to add the common file service SALESCOMMON for the sample network.

Figure C-1 Adding a Sample Common File Service

```
Common file service name (Example: PCCOMMON): SALESCOMMON 
%PCSA-I-DIRCREATED, directory SYS$SYSDEVICE:[SALESCOMMON] created
%PCSA-I-ACLCREATED, ACL created on SYS$SYSDEVICE:[360]SALESCOMMON.DIR
%PCSA-I-SERADDED, service "SALESCOMMON" added
%PCSA-I-SERGRANTED, service "SALESCOMMON" granted to user/group "PUBLIC"
Press RETURN to continue... 
Common file service name (Example: PCCOMMON): Ctrl/Z
```

Step 2: Set Up Application Services

You must add an application service before you install the application.

You can add either an application disk service or application file service. For more information on determining whether to use a disk service or a file service, see Chapter 2.

To add an application file service, use the PCSA Manager Menu and select:

1. **Service Options** from the PCSA Manager Menu
2. **Add Service** from the Service Options menu
3. **Application File Service** from the Add Service menu

Figure C-2 shows how you would respond to the prompts to add the application file service GENERICWRD for this sample network.

Figure C-2 Adding a Sample Application File Service

Application file service name (Example: MYAPP): `GENERICWRD`

VMS username to be granted RWC access (Default: SYSTEM)

```
%PCSA-I-DIRCREATED, directory SYSSYSDEVICE:[PCSA.GENERICWRD] created
%PCSA-I-ACLCREATED, ACL created on SYSSYSDEVICE:[PCSA]GENERICWRD.DIR
%PCSA-I-SERADDED, service "GENERICWRD" added
```

```
%PCSA-I-SERGRANTED, service "GENERICWRD" granted to user/group "PUBLIC"
```

```
%PCSA-I-SERGRANTED, service "GENERICWRD" granted to user/group "SYSTEM"
```

Press RETURN to continue...

Application file service name (Example: MYAPP): `Ctrl/Z`

To add an application disk service, use the PCSA Manager Menu and select:

- 1. Service Options from the PCSA Manager Menu**
- 2. Add Service from the Service Options menu**
- 3. Application Disk Service from the Add Service menu**

Figure C-3 shows how you would respond to the prompts to add the application disk service GENERICSPRDSHT for this sample network.

Figure C-3 Adding a Sample Application Disk Service

Application disk service name (Example: MYAPP): `GENERICSPRDSHT`

Password for this service (Default: No Password):

Select virtual disk size for GENERICSPRDSHT, `Ctrl/Z` cancels

```
360KB
720KB
1.2MB
1.44MB
5MB
10MB
20MB
32MB
```

```
%PCSA-I-CREATEDISK, created SYS$DEVICE:[PCSA.LAD]GENERICSPRDSHT.DSK
%PCSA-I-FORMATDISK, formatting disk, size=5MB, Allocation = 20480/20480
%PCSA-I-DISCREATED, SYS$DEVICE:[PCSA.LAD]GENERICSPRDSHT.DSK created
```

```
%PCSA-I-DISKMOUNTED, SYS$DEVICE:[PCSA.LAD]GENERICSPRDSHT.DSK;1 MOUNTED
%PCSA-I-MOUNTINFO, service name = GENERICSPRDSHT, server node = MOUSES
```

Figure C-3 Cont'd. on next page

Figure C-3 (Cont.) Adding a Sample Application Disk Service

%PCSA-I-APPDISKMNTED, application disk service GENERICSPRDSHT mounted R/W
%PCSA-I-APPDISKINST, please install your software, and remount the service R/O

Press RETURN to continue...

Application disk service name (Example: MYAPP): Ctrl/Z

Step 3: Install Applications

After you add the application service, connect to it from a workstation. Install the application according to the documentation that accompanies the software.

Step 4: Add Printer Services

Some printers already have a device control library, a form, and printer queues set up. You need to create these for other printers before you can set up a printer service. For more information on adding a printer queues and services, see Chapter 3.

The sample printer is an LN03 Plus printer, for which the device control library, form, and printer queues are already available.

To add the printer queue and all associated printer services for the sample LN03 Plus printer, use the PCSA Manager Menu and select:

1. **Printer Queue Options** from the PCSA Manager Menu
2. **Add a Printer Queue** from the Printer Queue Options menu

Figure C-4 shows how to add the printer queue for the sample LN03 Plus printer.

Figure C-4 Adding a Printer Queue for a Sample LN03 Plus Printer

Select a printer type to add

```
LN03
LN03P
LA50
LA75
LJ250
HP Laserjet
```

Enter physical line name for LN03P printer (Example: MMJ1): *MMJ1*

Step 5: Add User Profiles

Create a user profile for each network user. A user profile defines the user's connections to disk services, file services, and printer services.

To create a user profile, use the PCSA Manager Menu and select:

1. **User Options** from the PCSA Manager Menu
2. **Add a User** from the User Options menu

Figure C-5 shows how to create a user profile for a sample user.

Figure C-5 Adding a Sample User Profile

Enter user's name: *BRONTE*

Enter user's password (Default: Welcome): *WELCOME*

Enter file version limit for this account (Default: 1):

Select a common directory for the user:

```
- NONE -
PCCOMMON
SALESCOMMON
```

Select file service application(s) for the user:

```
- Finished selecting applications -
GENERICWRD
- Other Service -
```

Select file service application(s) for the user:

```
- Finished selecting applications -
GENERICWRD
- Other Service -
```

Select disk service application(s) for the user:

Figure C-5 Cont'd. on next page

C-6 Sample Server Setup

Figure C-5 (Cont.) Adding a Sample User Profile

- Finished selecting applications -
GENERICSPRDSHT
- Other Service -

Select disk service application(s) for the user:

- Finished selecting applications -
GENERICSPRDSHT
- Other Service -

Select printer services for LPT1:

- NONE -
LASER
LINEPRINTER
POSTSCRIPT

Select printer services for LPT2:

- NONE -
LASER
LINEPRINTER
POSTSCRIPT

Select printer services for LPT3:

- NONE -
LASER
LINEPRINTER
POSTSCRIPT

User: BRONTE
Password: WELCOME
Version limit for user's account: 1
Common directory: PCCOMMON
Applications: GENERICWRD GENERICSPRDSHT
Printer LPT1: LASER connected to HP LASERJET+
Printer LPT2: connected to NONE
Printer LPT3: connected to NONE

This is the user profile. Is this correct? (Default: Y):

The sample network is now set up. Additional applications, common directories, printer services, and user profiles can be added as needed.

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