

WordPerfect[®]

for VAX/VMS Systems

System Manager's Guide

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WordPerfect Corporation • 1555 N. Technology Way • Orem, Utah 84057 U.S.A.
Telephone: (801) 222-5500 • Telex: 820618 • FAX: (801) 222-5577

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Introduction

The System Manager's Guide is divided into six parts.

Product Licensing Key

You should have received, along with your software, a sheet entitled *Product Licensing Key*. This document and any other information pertinent to your product license can be stored behind the Product Licensing Keys tab in this binder.

Installation

Provides two step-by-step guides on how to install WordPerfect 5.0 and the WPCorp environment on your system. The first is a simplified version containing few explanations; the second provides detailed explanations about the installation process.

System Setup and Customization

Explains how to use the Global Setup Utility to customize WordPerfect 5.0 for specific systems, groups, or users. Also includes information about different keyboard setup options and how to maintain multiple WPCorp products on your system.

Printer Information

Contains a step-by-step guide and reference information on how to set up printers for use with WordPerfect 5.0. Also explains how to set up initialization modules to take advantage of WordPerfect's extensive font capabilities.

Technical Reference

Contains important information about performance issues and terminal specifications. Also includes details about WordPerfect files, logicals, and startup options, as well as a section on troubleshooting.

Product Update Notices

From time to time, as changes or enhancements are made to the software, you may receive update notices from WordPerfect Corporation explaining these changes. This information, as you receive it, can be stored behind the Product Update Notices tab in this binder.

Technical Support

WordPerfect is backed by a support system designed to offer you prompt, courteous service. If you need assistance beyond what the documentation can provide, follow these steps:

- Try to duplicate the problem, keystroke by keystroke, to see exactly what was done.
- Contact your authorized VAX reseller or the dealer from whom you purchased WordPerfect.

- If you are unable to get the assistance you need, call WPCorp's VAX Technical Support department at (801) 226-4180. Support lines are answered from 8:00 a.m. to 5:00 p.m. (Mountain Time), Monday through Friday.

Or you can write to:

VAX Technical Support
WordPerfect Corporation
1555 North Technology Way
Orem, Utah 84057

Conventions

In the documentation, commands appear bolded in numbered steps. Although the commands are displayed in uppercase letters, they can be entered in either uppercase or lowercase.

The following words have specific meanings:

Enter

Type the bolded characters, then press **Return**.

<**PROMPT**>

If you see an italicized word inside angle brackets when entering a command, you are being asked to respond to a context-sensitive prompt. For example, if you see the prompt <*QUEUE NAME*>, you should respond by entering the name of a specific print queue in place of the prompt. Do not type the italicized word or the angle brackets.

Rewrite

While working with any software program, the screen display may be modified by a power fluctuation, error condition, or system message. In such an eventuality, you can press Ctrl-w to rewrite the screen.

WPCorp Command

Please note that throughout this documentation, wherever the WPCORP command verb is referred to, it is done with the assumption that you answered Yes to the "Add WPCORP Command to System DCL Tables" question during the installation procedure. By answering Yes to this question, the WPCORP command verb will execute WordPerfect 5.0, and all references to this command in this documentation are correct.

However, if you also use WordPerfect 4.2 on your system, and you answer Yes during the installation of an update of version 4.2, *WPCORP* will automatically become the command to execute WordPerfect 4.2, and *WP50* will automatically become the command to execute WordPerfect 5.0. In this case, you should substitute *WP50* wherever the WPCORP command is referred to in the documentation.

For example, to access the WordPerfect 5.0 Global Setup Utility, you would need to enter WP50/GLOBAL_SETUP instead of WPCORP/GLOBAL_SETUP. The same is true for all startup options, as well as when using the Document Accounting feature or the Speller Management Utility.

For more information on customizing the installation on systems where multiple WPCorp products are installed, see *Maintaining WPCorp Products on your System* in *System Setup and Customization*.

Installation

Installation Overview

The tape you received with your order includes the WPCorp environment (ENV000) and WordPerfect 5.0 (WPC050). *These are two separate products.* Regardless of whether this is the initial installation of WordPerfect 5.0, both products should be installed.

When you begin the installation of the WPCorp environment (sometimes referred to as the *ENV*), the system is checked to determine whether the ENV is already on the system, and if so, whether it needs to be updated. If the ENV is not found, or if it needs to be updated, VMSINSTAL proceeds to install the new ENV. If the ENV does not need to be updated, VMSINSTAL terminates the installation of the ENV and proceeds with the installation of WordPerfect 5.0.

VMSINSTAL will install the ENV if the executable date of the ENV currently on your system is the same as or previous to the date of the ENV on the tape.

The WPCorp environment contains all files, logicals, and images *shared* by WPCorp products. The initial installation of the ENV with WordPerfect 5.0 creates a separate directory for all shared files, and stores them in this directory so they can be accessed by other WPCorp products.

While you can install the two products separately, the *Installation* section of the System Manager's Guide is written with the assumption that you want to install ENV000 and WPC050 together.

Before Beginning the Installation

Before performing the installation, you should read *System Requirements* in *Installation* to be sure that your system has sufficient resources and is ready to perform a successful installation.

System Requirements

WPCorp Environment

The following system requirements are needed to install the ENV:

- Install under SYSTEM account.
- All users logged off WPCorp products.

For best results, we recommend that users be logged off the system entirely.

- 1500 blocks of free disk space on the system disk and 1000 blocks of free disk space on the destination disk. Each supplementary language requires approximately 200 additional blocks.
- Approximately 635 global pages and 8 global sections before startup.
- VAX/VMS version 4.6 or later.

WordPerfect 5.0

The following system requirements are needed to install WordPerfect 5.0:

- Install under SYSTEM account.
- All users logged off WPCorp products.

For best results, we recommend that users be logged off the system entirely.

- Most current WPCorp environment.
- 23,500 blocks of free disk space on the system disk and 23,000 blocks of free disk space on the destination disk. Each supplementary language requires approximately 2400 additional blocks.

***Important:** The block quantities listed above include the disk requirements for the WPRINT.ALL files, which contain the drivers for approximately 400 printers. After you have defined your printers, those drivers you do not need can be deleted.*

- Approximately 1855 global pages and 11 global sections after installation.
- VAX/VMS version 4.6 or later.

WordPerfect should be installed so that no special privileges are needed to execute it.

VMSINSTAL Procedure (Summarized)

This information is for System Managers who are familiar with using VMSINSTAL and who need a minimum amount of explanation about the installation procedure. For details on using VMSINSTAL to install WordPerfect 5.0, turn to the expanded guide on the next page.

The following list summarizes the requirements for a successful installation.

- All users must be logged off WPCorp products and it is strongly recommended that they also be logged off the system; otherwise, WPCorp cannot guarantee the integrity of the installation.
- WordPerfect 5.0 and the WPCorp environment are *two separate products*. You can install them together, however, by entering both product names when prompted during the VMSINSTAL procedure. The product names are **ENV000** for the WPCorp environment and **WPC050** for WordPerfect 5.0.
- During the installation, a menu of default installation options will be displayed for both the ENV and WordPerfect. To accept the default options and proceed with the installation, enter **c**. The ENV installation will take only a few minutes. The WordPerfect 5.0 installation may take up to 20 minutes or more.
- You will need your Product Licensing Key to complete the installation. You should have received it along with your software. The Product Licensing Key contains your company name (as it will appear on the WordPerfect logo screen) and your authorization code, which must be entered *exactly* as indicated on the key.
- After you have completed the installation, you need to run the `SYSS$MANAGER:WPCORP_STARTUP.COM` procedure. This command procedure automatically performs the startup for all WPCorp products on your system (including the ENV), and also integrates the print queues. For more information, refer to *Startup Command* under *Additional Installation Information*. The WPCORP startup command should also be placed in your system startup procedure so that all images and logicals will be automatically restored whenever the system is rebooted.

Important: Make sure that the WPCORP_STARTUP.COM command procedure is the only startup command for the WPCORP products in your system startup command procedure. (All individual WPCORP product startups should be deleted.)

- For more information about specific aspects of the installation, refer to *Installation Options* in *Installation*.

VMSINSTAL Procedure (Expanded)

The information on the following pages explains in detail how to install WordPerfect 5.0 and the WPCorp environment on your system using the VMSINSTAL utility. After providing VMSINSTAL with the necessary information for beginning the installation, you are presented with a menu of options for each product that specifies how the installation will be completed. You can accept the default choices or make any necessary changes using the displayed menus. When you continue, VMSINSTAL will complete the installation without asking any further questions.

Before Installation

All users must be logged off any WPCorp products currently on your system. It is also strongly recommended that they be logged off the system. In addition, all batch queues should be stopped before you begin the installation procedure. If any user or batch processes are still active, WPCorp cannot guarantee the integrity of the installation. It is also suggested that a backup of the system disk be made prior to the installation.

***Important:** If you are on a cluster network, be sure you are logged in on the node where SYSSCOMMON resides.*

Run VMSINSTAL

From the SYSTEM account of the node on which WordPerfect is to be installed,

1 Enter @SYSSUPDATE:VMSINSTAL

Depending on which version of VMS you are using and whether there are users on the system, you may receive one or both of the following messages:

%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
(List of active processes)

The following prompt appears: "*Do you want to continue anyway [NO]?"

2 Enter y to continue the installation.

The following prompt appears: "Are you satisfied with the backup of your system disk [YES]?"

3 Press Return to continue.

or

Enter n to discontinue the installation.

The following prompt appears: "*Where will the distribution volumes be mounted:"

4 Enter the device name where the tape is loaded (e.g., MUA0).

The following prompt appears: **"*Enter the products to be processed from the first distribution volume set. *Products:"**

5 Enter ENV000,WPC050

If you are using VMS version 5.0 or later, you are prompted to enter any VMS installation options you want to use. If no options are required, press Return to continue. See your VMS reference manuals for information about the VMSINSTAL options.

If you are installing from a tape, the following prompt appears: **"Please mount the first volume of the set on <NAME OF SPECIFIED DEVICE>:. *Are you ready?"**

When the tape is loaded and you are ready to proceed,

6 Enter y

After a few seconds, VMSINSTAL displays a message indicating that the installation is beginning. After a few moments, the Environment Installation Questions menu appears on your screen.

WPCorp Environment Installation Questions

1 Run the IVP	YES
2 Purge Files Replaced by the Installation	YES
3 Default Language of the WPCorp Environment	ENGLISH
4 Location of the WPCorp Environment Directory	SYS\$COMMON

Enter an option number to change a default or enter a question mark (?) for help.

Enter c to continue the installation, or press Ctrl-c to cancel.

If you want to make any changes, you can enter the number(s) of the option(s) to be changed before continuing the installation. If a YES or NO answer is required, you can make a change by simply entering the option number. If text is required, VMSINSTAL prompts you for your input. To display help information about the installation options, enter a question mark (?).

For an explanation of each of the options on the menu, refer to Installation Options at the end of Installation.

When the installation options you want to use are displayed,

7 Enter c to continue the installation.

VMSINSTAL displays a message indicating that the installation is proceeding and that no further questions will be asked.

As the installation proceeds, VMSINSTAL checks to see if the WPCorp environment is already on the system. If the ENV is found, and if it is newer than the version on the tape, a message that the

environment will not be installed appears, along with a note that this is a normal successful completion. In this case, VMSINSTAL terminates the ENV installation and proceeds with the installation of WordPerfect 5.0.

If the environment was not found, or if the version on your system is older than or has the same date as the version on the tape, the ENV installation proceeds without interruption. A series of messages is displayed on the screen to keep you informed of the progress of the installation.

When the installation is finished, VMSINSTAL displays a message that the installation is complete and then begins moving the ENV files to their target directories.

Once the files have been moved, if you chose to run the IVP, a message will appear, indicating that the Installation Verification Procedure is beginning. After a few moments, another message will appear, indicating whether the IVP completed successfully.

After a few moments, VMSINSTAL displays a message indicating that the installation of WordPerfect 5.0 is beginning. At this point, the installation checks to see if WordPerfect 4.2 is on the system. If so, a message appears, indicating that an integrated environment will be created so that both WordPerfect 4.2 and 5.0 can run at the same time. You are then asked if you want to continue. Press Return to proceed with the installation.

If WordPerfect 4.2 was not found on the system, the installation proceeds without interruption.

Next, the WordPerfect 5.0 Installation Questions menu appears on your screen, together with the default installation options.

WordPerfect 5.0 Installation Questions	
1 Run the IVP	YES
2 Purge Files Replaced by the Installation	YES
3 Expand Text Libraries	YES
4 Add WordPerfect DCL Help to System Help	YES
5 Add WPCORP Command to System DCL Tables	YES
6 Default Language of WordPerfect	ENGLISH
7 Location of the WordPerfect Directory	SYSS\$COMMON
Enter an option number to change a default or enter a question mark (?) for help.	
Enter c to continue the installation, or press Ctrl-c to cancel.	

If you want to make any changes, you can enter the number(s) of the option(s) to be changed before continuing the installation. If a YES or NO answer is required, you can make a change by simply entering the option number. If text is required, VMSINSTAL prompts you for your input. To display help information about the installation options, enter a question mark (?).

For an explanation of each of the options on the menu, refer to Installation Options at the end of Installation. If you have both WordPerfect 4.2 and WordPerfect 5.0 on your system, you should pay particular attention to the note under Add WPCORP Command to System DCL Tables.

When the installation options you want to use are displayed,

8 Enter **c** to continue the installation.

The following prompt appears: "Do you want to see the release notes [YES]?". Any significant information not included in the documentation is in the product's release notes. The options provided let you display, print, or save the release notes to a file.

9 Press **Return** to see the release notes options.

The Release Notes Options menu appears.

10 Select an option from the menu.

At the conclusion of the release notes, the "Do you want to continue the installation [N]?" prompt appears.

11 Enter **y** to continue the installation.

or

Press **Return** to discontinue the installation.

If you chose to continue, the WPCorp licensing procedure begins and you are prompted to enter your company name and authorization code as they appear on the Product Licensing Key you received with your tape.

If you are installing an update to WordPerfect 5.0 and you did not receive a new Product Licensing Key, you should use the same one you used when you originally installed WordPerfect 5.0.

12 Enter your company name and authorization code.

Be sure to enter the information exactly as indicated. If you make any errors, the installation may seem to complete successfully but WordPerfect will not run. For information on making corrections to the license and authorization codes, see *Licensing Procedure* in *Technical Reference*.

VMSINSTAL displays a message indicating that the installation is proceeding and that no further questions will be asked. As the installation continues, a series of status messages is displayed on your screen to inform you of the progress of the installation. This portion of the installation will take 10-15 minutes or more, depending upon your system.

When the installation is finished, VMSINSTAL displays a message that the installation is complete and then begins moving the WordPerfect files to their target directories.

Once the files have been moved, if you chose to run the IVP, a message will appear, indicating that the Installation Verification Procedure is beginning. After a few moments, another message will appear, indicating whether the IVP completed successfully.

At the conclusion of the installation, you are prompted to enter the name of the next product to be installed. If you have no other products to install, press Ctrl-z to exit VMSINSTAL.

Startup Procedure

After you have completed the installation, you need to run the system-level WPCorp startup procedure. The startup procedure creates the logicals, installs the images, and integrates the print queues for all WPCorp products on your system.

To run the startup command,

- 1 Enter **@SYS\$MANAGER:WPCORP_STARTUP** at the DCL prompt.

This command should also be placed in your system startup command procedure so that the required logicals and images will be restored each time the system is rebooted. Because the WPCORP_STARTUP command procedure also integrates the print queues for use with all WPCorp products, when adding it to your system startup procedure, it should be placed at a location *after* the Queue Manager startup and any other printer initialization that needs to be performed prior to the WPCorp queue integration.

If you have other WPCorp products on your system and still have their individual startup commands in your system startup procedure, these commands should all be deleted.

For more information on the startup command procedure, refer to *Startup Command* in *Additional Installation Information*.

Testing the Installation

After you complete the installation and execute the startup procedure, you should test the installation by starting WordPerfect.

- 1 Log in on an unprivileged account.
- 2 Enter **WPCORP** at the DCL prompt.

The *Troubleshooting* section in *Technical Reference* explains some of the most common problems that might occur and offers suggestions for remedying them.

Installation Options

During the installation of both the WPCorp environment and WordPerfect 5.0, VMSINSTAL displays a menu of installation options. You can accept the displayed default choices or make any necessary changes before continuing the installation. Each of these options is described below.

Run the IVP

The Installation Verification Procedure (IVP) checks all the files and structures of the directories to see if everything is correct. If an error is found, a message will be displayed at the conclusion of the installation to indicate where the problem is. Otherwise, a message indicating that the IVP has confirmed that the installation was successful will be displayed.

Purge Files Replaced by the Installation

This will cause previous versions of files replaced by the installation to be deleted, leaving only the latest file version.

Default Language of the WPCorp Environment

This allows you to specify a default language other than English for the WordPerfect environment. If you have requested other languages, the files for those languages are included on your tape.

The language abbreviations include DAN (Danish), DUT (Dutch), ENG (English), FRE (French), FIN (Finnish), GER (German), ICE (Icelandic), ITA (Italian), NOR (Norwegian), SPA (Spanish), and SWE (Swedish).

Location of the WPCorp Environment Directory

If you want to locate the environment files in a directory other than the default (SYS\$COMMON:[WPCORP.ENV000]), you can specify the location here. If WordPerfect 4.2 is also on the system, the environment files will be stored in SYS\$COMMON:[WRDPER].

Expand Text Libraries

The WordPerfect text libraries are distributed in DATA=REDUCED format. This reduces magnetic media usage and file transfer time. If the libraries are left in reduced format, user access time will be slower.

You can manually expand the libraries after the installation by entering **LIBRARY/TEXT/DATA=EXPAND/OUTPUT=<SOURCE FILESPEC> <DESTINATION FILESPEC>** at the DCL prompt. Filespec is the file specification of the library, excluding the version number.

The format for *<FILESPEC>* is WPCORP\$WP50DIR:WPCORP_WP50_<LNG>.TLB, where *<LNG>* is the three-character abbreviation of the language name. See *Default Language of the Environment* above for the abbreviations that can be used.

Add WordPerfect DCL Help to System Help

If the setting for this option is YES, an entry will be created in the system help library which explains the WPCORP command and its qualifiers.

Add WPCORP Command to System DCL Tables

If the setting for this option is YES, the calling command for WordPerfect will be placed in the system DCL tables so WordPerfect can be started from any process on the node. If the installation found WordPerfect 4.2 on the system, by default the WPCORP command will execute version 4.2 and the WP50 command will execute version 5.0. If WordPerfect 4.2 was not found on the system, by default the WPCORP command will execute version 5.0.

If you have WordPerfect 4.2 on your system but you want the WPCORP command to execute version 5.0, you can select this option and enter 5.0. In this case, the WP42 command will execute WordPerfect 4.2.

Default Language of WordPerfect

This allows you to specify a language other than English as the primary language for WordPerfect (regardless of the environment language). When the global images are created, only the primary language files are installed as global images. If you have requested other languages, the files for those languages are included on your tape. See *Environment Language* above for the abbreviations that can be used when specifying a language other than English.

Location of the WordPerfect Directory

To install WordPerfect 5.0 in a directory other than the SYS\$COMMON default directory, or in a device root directory, you must use a logical defined as a concealed device that points to that directory.

Important: If your system operates on a cluster, WordPerfect must be installed in SYS\$COMMON in order to make the WordPerfect directory accessible to all satellite nodes.

Additional Installation Information

Startup Command

The WPCORP_STARTUP command procedure (SYS\$MANAGER:WPCORP_STARTUP.COM) described at the end of *VMSINSTAL PROCEDURE (Expanded)* starts up all WPCorp products on your system and performs the WPCorp queue integration. The individual startup commands are listed below.

WPCORP\$WP50DIR:WPC050_STARTUP.COM
(WordPerfect 5.0 startup)

WPCORP\$ENVDIR:ENV000_STARTUP.COM
(WPCorp environment startup)

WPCORP\$WPDIR:WPC042_STARTUP.COM
(WordPerfect 4.2 startup)

WPOFFICE:[WPOEXE]OFF020_STARTUP.COM
(WordPerfect Office 2.0 startup)

WPCORP\$PLDIR:PLN030_STARTUP.COM
(PlanPerfect 3.0 startup)

WPCORP\$PTRDIR:WPCORP_PTR_QUEUES.COM
(WPCorp queue integration)

If you want to prevent any of the startups, you can define a process logical that will prevent that startup prior to running the WPCORP_STARTUP procedure, as described below. To prevent the execution of any of the startup procedures, at the DCL prompt, enter **DEFINE WPCORP_STARTUP\$\$<STARTUP CODE> NO**

The following startup codes can be used:

WPC050 (WordPerfect 5.0)
ENV000 (WPCorp environment)
PTR_QUEUES (WPCorp queue integration)
WPC042 (WordPerfect 4.2)
OFF020 (WordPerfect Office 2.0)
PLN030 (PlanPerfect 3.0)

For example, to define a process logical that will prevent the startup of WordPerfect 5.0,

- 1 Enter **DEFINE WPCORP_STARTUP\$\$WPC050 NO** at the DCL prompt.

If you want to prevent one of these startups from being executed whenever your system is restarted, you should define this logical in your system startup command procedure somewhere before the @SYS\$MANAGER:WPCORP_STARTUP command.

Deinstallation

If at any time after the installation you need to deinstall WordPerfect from your system, you can use the deinstall command procedure. To deinstall WordPerfect 5.0, you first need to deintegrate the print queues. To deintegrate the print queues, at the DCL prompt,

1 Enter **@WPCORP\$PTRDIR:WPCORP_PTR_QUEUES
DEINTEGRATE**

Once the queues have been deintegrated, you can run the deinstall procedures for WordPerfect 5.0 and the WPCorp environment. To deinstall WordPerfect 5.0,

2 Enter **@WPCORP\$WP50DIR:WPC050_STARTUP DEINSTALL
ALL**

To deinstall the WPCorp environment,

3 Enter **@WPCORP\$ENVDIR:ENV000_STARTUP DEINSTALL
ALL**

To deinstall WordPerfect 4.2 or any other WPCorp product, follow the instructions for deinstallation in *Additional Installation Information* in the *System Manager's Guide* for that product.

Parameters

The following is a description of the parameters that can be used with the above startup command procedures.

<p1> INSTALL, REINSTALL, or DEINSTALL. (Default is INSTALL.)

<p2> Specifies what is to be installed or deinstalled. Accepted values are FULL (All logicals, images, directories, and files), ALL (logicals and images only), LOGICALS (logicals only), and IMAGES (images only). (Default is ALL.)

<p3> Language to be installed or deinstalled. Include the first three letters of the primary language you want to use. The language abbreviations are DAN (Danish), DUT (Dutch), ENG (English), FRE (French), FIN (Finnish), GER (German), ICE (Icelandic), ITA (Italian), NOR (Norwegian), SPA (Spanish), and SWE (Swedish). (Default is ENG.)

<p4> Country code for System file to be installed or deinstalled. The country codes are 001 (US), 002 (Denmark), 003 (Holland), 004 (Finland), 005 (France), 006 (Germany), 007 (Iceland), 008 (Italy), 009 (Norway), 010 (Portugal), 011 (Spain), 012 (Sweden), 013 (Canada), 014 (UK), 015 (Switzerland), and 016 (Belgium). (Default is 001.)

<p5> YES or NO. Sets VERIFY to output execution of command procedure to the screen. (Default is NO.)

System Setup and Customization

WordPerfect Global Settings

After WordPerfect 5.0 has been installed on your system, and before proceeding to set up printers, you need to read and understand the information in this section. If, after reading this information, you have questions or do not understand how the WordPerfect Global Setup Utility functions, call your authorized VAX reseller or dealer or WPCorp's VAX Technical Support department.

The WordPerfect Global Setup Utility enables the System Manager to:

- Restrict or prevent user access to most WordPerfect features.
- Change WordPerfect default options and force new settings for all users, any individual user, or any group of users.

Important: When you set up your printers for your users, you must do so inside the Global Setup Utility.

While you can lock most WordPerfect features, some of the simple features (e.g., Bold, Underline, Tab, etc.), as well as those features considered essential (e.g., Exit, Setup, Cancel, etc.), cannot be locked.

Running the Global Setup Utility

To start the Global Setup Utility,

- 1 Enter **WP50/GLOBAL_SETUP** at the DCL prompt.

When you start a WordPerfect session using the GLOBAL_SETUP qualifier, WordPerfect displays a Lock Options menu each time you select a feature that can be locked or for which a default setting can be created. To continue to subordinate menus or options, you must choose an Unlock option.

Important: Before you lock a given menu or option, you should make sure that all settings on subordinate menus or options are set the way you want them to be. Then, after specifying all settings, return to the appropriate menus or options and select the lock status you want to use. If you lock a menu or option first, you will be unable to enter the menu to define new settings.

Lock Options Menus

Depending upon the menus or features you access, WordPerfect will display one of three Lock Options menus. The menu that appears depends on which feature is being accessed, and whether there are additional menus under that feature. The differences between the Lock Options menus are explained below.

Option: 1 Lock; 2 Unlock

This menu appears when you press a function key that displays any WordPerfect menus or executes any features you can prevent users from accessing. For example, if you want to prevent users from accessing the Merge/Sort feature, you can press Merge/Sort and select Lock (1). Then, when a user presses Merge/Sort, WordPerfect will sound a beep and remain in the document screen. To continue to a subordinate menu or option, you must select Unlock (2).

Option/Settings: 1 Lock/Force; 2 Unlock

This menu appears with features *where there are submenus containing settings stored in the settings (.VSET) file*. You can restrict all users to all existing subordinate settings by selecting Lock/Force (1). Since the options are also locked, users cannot change the settings. To continue to a subordinate menu or option, you must select Unlock (2).

Option/Settings: 1 Lock/Force; 2 Unlock/Force; 3 Unlock/Default

This menu appears with features *where WordPerfect accesses a specific setting from the settings (.VSET) file*. Lock/Force (1), as on the previous Lock Options menu, forces the existing setting for users and prevents the setting from being changed. Unlock/Force (2) forces a new setting to replace the existing one but still allows users to change it. Unlock/Default (3) preserves the settings of those users who have created their own personal defaults, but allows you to create new default settings for any new WordPerfect users.

This menu will also appear when you are accessing the Print: Select Printer menu to specify lock options for modifying the list of printers. In this context, Lock/Force (1) replaces users' printer lists with the System Manager's list and prevents them from adding to or editing any printer definitions. Unlock/Force (2) also replaces the users' printer lists but allows users to add other printers to the list. Unlock/Default (3) simply adds the System Manager's printer list to each user's printer list.

WordPerfect Global Settings File

The settings generated when you run the Global Setup Utility are saved in a file named WPCORP_GLOBALSET.VSET. This file is pointed to by the WPCORP_WP50_GLOBALSET logical, and is created the first time you run the Global Setup Utility. Once this file has been created, all users on the system are subject to the settings it contains.

The first time a user enters WordPerfect, a copy of the global settings file is made for that user. The copy is stored in the user's SYS\$LOGIN directory, with the WPCORP_LOCALSET.VSET filename. From then on, whenever the user starts WordPerfect, any changes the System Manager makes to the global settings file are automatically merged into the user's local settings file. The local settings file also contains any settings the user has created in the WordPerfect Setup menus.

For example, to set up printer definitions that will be accessible to all users,

- 1** Enter WP50/GLOBAL_SETUP at the DCL prompt to start WordPerfect under the Global Setup Utility.
- 2** Follow the steps described in *Selecting and Setting Up Printers in Printer Information* to set up your printers.

When you have finished defining all printers,

- 3** Return to each menu or option you want to limit or lock and select the appropriate option from the displayed Lock Options menu.

When you have finished selecting lock options,

4 Exit WordPerfect.

The new settings are saved to the WPCORP_GLOBALSET.VSET file and become the new settings for all WordPerfect users on the system. The printers you defined now appear on the screen when users access the Select Printer menu.

Creating Additional Settings Files

You can define the WPCORP_WP50_GLOBALSET logical *for a specific UIC group or user* to point to a different copy of the global settings file, and then run the Global Setup Utility again. By selecting options from the Lock Options menus, you can limit or prevent access to specific features and/or menu options. Since the changes are stored in a different copy of the global settings file, only those users who have the logical that points to this file will have these settings. By defining the logical for specific UIC groups, you can assign different users and groups their own WordPerfect settings.

By default, all WordPerfect features and menus are unlocked and available to all users. To create group-specific settings files, you first need to decide what limitations (if any) you want to place on specific groups or users. Next, you need to define the logicals that will direct user processes to their specific settings files. Finally, you need to re-enter the Global Setup Utility and create the settings for each group. This process is described below in detail.

Full Access

By default, users have full access to all WordPerfect features and menus, and they can create and edit their own Printer Resource (.PRS) files. Users that are allowed to make printer definitions need to understand VMS queues and System forms. If they want to use soft fonts, they also need to understand how to create and use WordPerfect initialization modules. Any setup changes made by individual users are stored in their own local settings file (SYS\$LOGIN:WPCORP_LOCALSET.VSET).

Limited Access

You can also create settings files that allow users limited access to features and menus. For example, you can create a settings file that prevents a specific group of users from creating or editing their own printer definitions and limits them to selecting from the printers you have defined. Users who access this settings file will not be able to access the menus and options for creating new .PRS files or selecting additional fonts. You can create specific settings files for any group or user on the system.

Before entering the Global Setup Utility to create a new settings file, you need to define a logical that will point to the file with the appropriate settings; otherwise, the limited settings would apply to all users. In addition, a copy of the global settings file, which will contain the new settings, needs to be made. This procedure is explained below.

Creating a Settings File with Medium Limits

You can create a settings file that allows a group of users to select from a predefined list of printers but prevents them from creating additional printer definitions. To do this, you first need to define a logical to point to the appropriate settings file. From the DCL prompt,

- 1 Enter **DEF <GROUP1 LOGICAL> WPCORP\$ENVDIR:
WPCORP_<GROUP1 NAME>_GLOBALSET**

Then, to create a copy of the global settings file that can be modified for Group 1,

- 2 Enter **COPY WPCORP\$ENVDIR:WPCORP_GLOBALSET.VSET
WPCORP\$ENVDIR:WPCORP_<GROUP1 NAME>_
GLOBALSET.VSET**

Now that a logical has been defined and a copy of the global settings file created for the new group, you can return to the Global Setup Utility and limit users to the printers you have defined. You can then lock the menus that allow users to create their own .PRS files.

- 3 Enter **WP50/GLOBAL_SETUP=<GROUP1 LOGICAL>**

When you include the name of the logical after the /GLOBAL_SETUP qualifier, the settings will be saved in the file pointed to by that logical.

- 4 Press **Print (PF1,F13)**, and then press **Return** to leave the Print menu unlocked.

Remember that when WordPerfect is running under the Global Setup Utility, you must select an Unlock option from the displayed Lock Options menu to continue to subordinate menus and features.

- 5 Choose **Select Printer (S)** and press **Return** to leave the Select Printer option unlocked.

The Print: Select Printer menu appears, together with the list of printers you have defined for system-wide use.

- 6 Select **Additional Printers (2)**.
- 7 Select **Lock/Force (1)** to lock this option and make the displayed list of printers the only printers available to users.
- 8 Press **Exit (F13)** to return to the Print menu.
- 9 Choose **Select Printer** and press **Return** to leave the Select Printer option unlocked.

10 Highlight the name of the printer you want to designate as the default printer.

11 Choose **Select (1)** to display the Lock Options menu.

12 Select **Unlock/Force (2)** to make the highlighted printer the default printer (users will still be able to select a different printer).

13 Press **Exit** to return to the document screen.

***Important:** If you want to allow users to select new printers (using the **Select Printer: Additional Printers** menu), they will need to go to the **Setup: Location of Auxiliary Files** menu, select **Printer Files (5)**, and change the specified logical from **WPCORP\$PTRDIR** to **WPCORP\$PTRPATH**.*

You can now exit the Global Setup Utility or continue to choose lock options for other WordPerfect features.

Creating a Settings File with Maximum Limits

You can also create a settings file that will limit a group of users to one printer you designate. To do this, you first need to define a logical to point to the appropriate copy of the settings file. From the DCL prompt,

1 Enter **DEF <GROUP2 LOGICAL> WPCORP\$ENVDIR:
WPCORP_<GROUP2 NAME>_GLOBALSET**

Then, to create a copy of the global settings file that can be modified for Group 2,

2 Enter **COPY WPCORP\$ENVDIR:WPCORP_GLOBALSET.VSET
WPCORP\$ENVDIR:WPCORP_<GROUP2 NAME>_
GLOBALSET.VSET**

Now that a logical has been defined and a copy of the global settings file has been created for the new group, you can return to the Global Setup Utility and limit users to the specific printer you designate.

3 Enter **WP50/GLOBAL_SETUP=<GROUP2 LOGICAL>**

*When you include the name of the logical after the **GLOBAL_SETUP** qualifier, the settings will be saved in the file pointed to by that logical.*

4 Press **Print (PF1,F13)**, and then press **Return** to leave the Print menu unlocked.

*Remember that when WordPerfect is running under the Global Setup Utility, you must select an **Unlock** option from the displayed Lock Options menu to continue to subordinate menus and features.*

5 Choose **Select Printer (S)** and press **Return** to continue to the Select Printer menu.

- 6** Highlight the name of the printer you want to designate as the only available printer for Group 2 and choose Select (1).
- 7** Select Unlock/Force (2) to make the highlighted printer the current printer.
- 8** Press **Exit** (F13) to return to the Print menu.
- 9** Choose Select Printer to display the Lock Options menu.
- 10** Select Lock/Force (1) to lock this option and force the current printer to become the only available printer.
- 11** Press **Exit** to return to the document screen.

You can now exit the Global Setup Utility or continue to choose lock options for other WordPerfect features.

Assigning Logicals to UIC groups

Whenever you create a new global settings file, you need to place a command in the SYS\$SYLOGIN.COM file to direct the processes of users in specific UIC groups to the logical that points to the appropriate settings file.

For example, the following IF statements would need to be added to the SYS\$SYLOGIN.COM file for the settings files created in the above examples.

For the group with medium limits,

```
$ IF F$GETJPI("", "GRP") .EQ. %0<GROUP1> THEN DEF/JOB
WPCORP_WP50_GLOBALSET -
WPCORP$ENVDIR:WPCORP_<GROUP1 NAME>_GLOBALSET
```

For the group with maximum limits,

```
$ IF F$GETJPI("", "GRP") .EQ. %0<GROUP2> THEN DEF/JOB
WPCORP_WP50_GLOBALSET -
WPCORP$ENVDIR:WPCORP_<GROUP2 NAME>_GLOBALSET
```

You may also want to define a logical for the different settings files in your LOGIN.COM file so you can easily edit any settings file with the WPC/GLOBAL_SETUP=<LOGICAL> command.

WordPerfect Keyboard Definitions

New Keyboard Definition

In an effort to make WordPerfect 5.0 for VAX/VMS more versatile, as well as more compatible with the IBM PC version, a new keyboard definition has been included as the default keyboard for WordPerfect 5.0. The keyboard template reflects this new definition. You can display a keyboard template by pressing Help twice and then selecting a template style from the menu on the screen.

The following is a list of the changes made to the WordPerfect key assignments (as compared to WordPerfect 4.2) for VT200/300 series terminals.

An illustration of the standard VT100 and VT200/300 series keyboards and some of their key assignments is included in this section under WordPerfect Keyboard Illustrations.

- The key assignments for Cancel and Escape have been reversed. Escape is now on F6 while Cancel is mapped to F7.
- You can access Reveal Codes by pressing F19 as well as PF3,F9.
- You can access Block by pressing F20 as well as PF3,F10.
- Features previously assigned to F19 and F20 have been moved to the keypad. For example, PgUp and PgDn have been moved to [9] and [3], respectively. Typeover/Insert is now found on [0].
- To access the features on the keypad, WordPerfect must be set to *Applications mode*. If a flashing "N" appears in the bottom right corner of your screen, the terminal is set to *Numeric mode*. To toggle between the two modes, press Num Lock (PF1,PF1) or Ctrl-k. You can permanently set a terminal to applications mode by including the SET TERMINAL/APPLICATIONS command in the user's LOGIN.COM file.

Keycaps for the WordPerfect functions on the keypad are available from WordPerfect Corporation.

VT100 Users

For VT100 users, WordPerfect 5.0 features are accessed either by selecting the WPCORP_42_DEFAULT keyboard (see *4.2-Style Keyboard* below) or by using the Compose Function feature. When the 4.2-Style keyboard is selected, 5.0 features are mapped to the keypad, as with WordPerfect 4.2. Consequently, 5.0 cursor keys mapped to the keypad (e.g. Home, End, Arrow keys, PgUp, PgDn, etc.) are not available. By using Compose Function, however, the keypad is available for cursor movement because all 5.0 features are accessed directly from the alphabetic keys instead of from the keypad.

To access WordPerfect features directly from the alphabetic keys, press Compose Function and then type the appropriate two-letter combination. For example, to access List Files,

- 1 Press Compose Function (Ctrl-f).

- 2 Enter LF.

For a comprehensive list of the two-letter combinations for all WordPerfect features, see *Compose Function* in the *Appendix* in the *WordPerfect Reference Manual*.

4.2-Style Keyboard

If they prefer, users can select the old (4.2-style) keyboard definition. To use the WordPerfect 4.2 keyboard definition,

- 1 Start WordPerfect.

- 2 Press Setup (PF1,F7).

- 3 Select Keyboard Layout (5).

- 4 Place the cursor on WPCORP_WP42_DEFAULT and choose Select (1).

- 5 Press Exit (F13) to return to the document screen.

Other Keyboard Definitions

In addition to the WordPerfect 4.2 keyboard, several sample keyboard files are included with your software. Whenever a new keyboard definition is selected, the Help screens can be made to display the keystrokes for the new definitions.

For more information on keyboard definitions, see *Keyboard Layout* in the *WordPerfect Reference Manual*.

Shift and PF1

You can make the Shift key function exactly like the PF1 key so that Shift can be used (in addition to PF1) to access any WordPerfect features normally accessed with PF1. This can be done by downloading the file specified below to the user's terminal.

Once the file has been downloaded, any other Shift,<Function Key> definitions the user may have for use outside of WordPerfect are overridden.

To download the file,

- 1 Enter

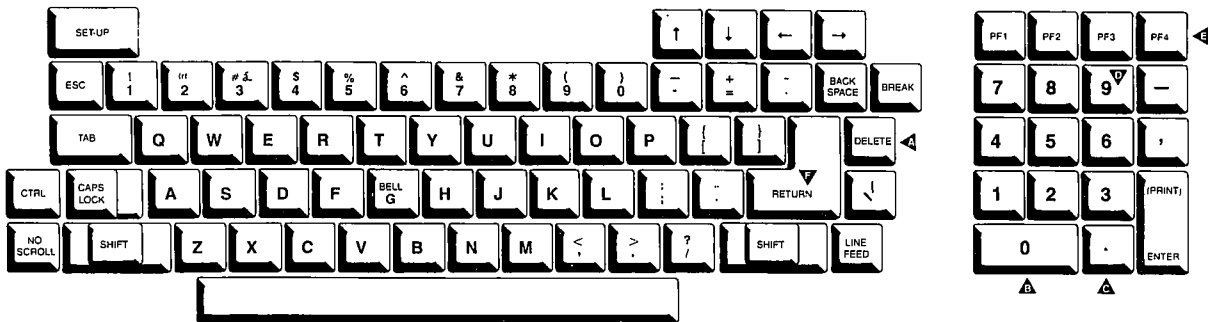
TYPE WPCORP\$ENVDIR:WPCORP_ENV_INIT_SHIFT_
FUNCTION_KEYS.TXT at the DCL prompt.

Although the new values are only temporary, you can make them permanent by saving the terminal setup, or by placing the above TYPE command in the user's login command procedure so the key values are reloaded whenever the user logs in.

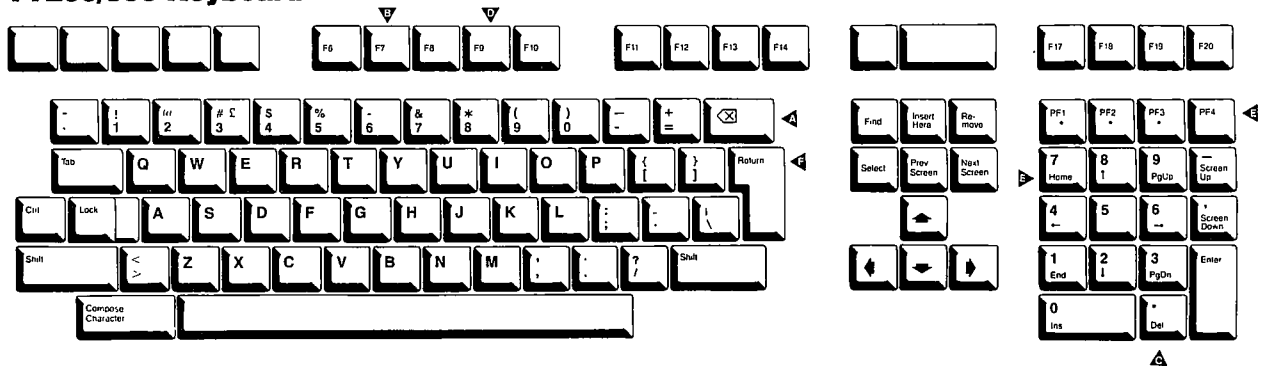
WordPerfect Keyboard Illustrations

The illustrations below identify the keys used by WordPerfect 5.0 on the two standard VAX keyboards.

VT100 Keyboard



VT200/300 Keyboard



-  BACKSPACE
-  CANCEL
-  DELETE
-  HELP
-  HOME
-  RETURN

Maintaining WPCorp Products on your System

With the release of WordPerfect 5.0 for VAX/VMS, it became necessary to change the directory structure of the various WPCorp products. In the past, each product shared several files, all of which were stored in the directory pointed to by the WPCORP\$WPDIR logical (SYS\$COMMON:[WRDPER] by default). In the new structure, all environment and printing files will be stored in separate directories.

Releases of WordPerfect 4.2 and PlanPerfect 3.0 with executable dates after 21-SEP-1989 are shipped with the new directory structure. WordPerfect Office will conform to the new directory structure with the release of version 3.1. The diagrams on the following pages illustrate the differences between the two directory structures.

Because of these changes, the procedures for running the product startups and queue integrations, as well as for deinstalling and updating WPCorp products have changed. The information below has been included to assist you in maintaining and updating WPCorp products in the future.

Startup Commands

All WPCorp products in the former directory structure required their own startup command procedures. With the release of WordPerfect 5.0, a new, more versatile startup command procedure was created. The new procedure (SYS\$MANAGER:WPCORP_STARTUP.COM) automatically runs the individual startups for all WPCorp products on the system and integrates the print queues for both 5.0-level and 4.2-level printing. This eliminates the need for placing the individual startup commands for each product in your system startup command procedure. You should delete any of the old startup commands from your system startup command procedure and use only the WPCORP_STARTUP command.

For information on deinstalling or restarting individual WPCorp products, see *Additional Installation Information* at the end of *Installation*.

WPCorp Environment

The System Manager's Guide frequently makes reference to the WPCorp environment (sometimes abbreviated as the ENV). Specifically, the ENV is composed of the files, logicals, and images that are shared by *all* WPCorp products, and which enable WPCorp products to interact with the VMS operating system.

Although the ENV was initially developed for WordPerfect 4.08 (and later version 4.2), when Office 2.0 and PlanPerfect 3.0 were released, they were developed to operate within the WPCorp environment. Instead of requiring multiple copies of the ENV files on the system, links were created in other WPCorp products so they could access the required ENV files (located in the WRDPER directory). During the installation of either Office or PlanPerfect, the system was checked to see whether the WPCorp environment was already present on the

system. If not, the installation automatically created the WRDPER directory and installed the ENV files there. If the WRDPER directory already existed, the new ENV files were simply copied "on top of" the ones already present.

In the new directory structure, the ENV files are stored in the new ENV000 directory instead of in the WRDPER directory. The environment is now a separate product, and although included with every copy of WordPerfect, PlanPerfect, and Office, it is installed *separately*. Whenever you receive an update of a WPCorp product, you should always install the ENV as well as the product itself to ensure you have the most up-to-date environment.

4.2 and 5.0-level Printing

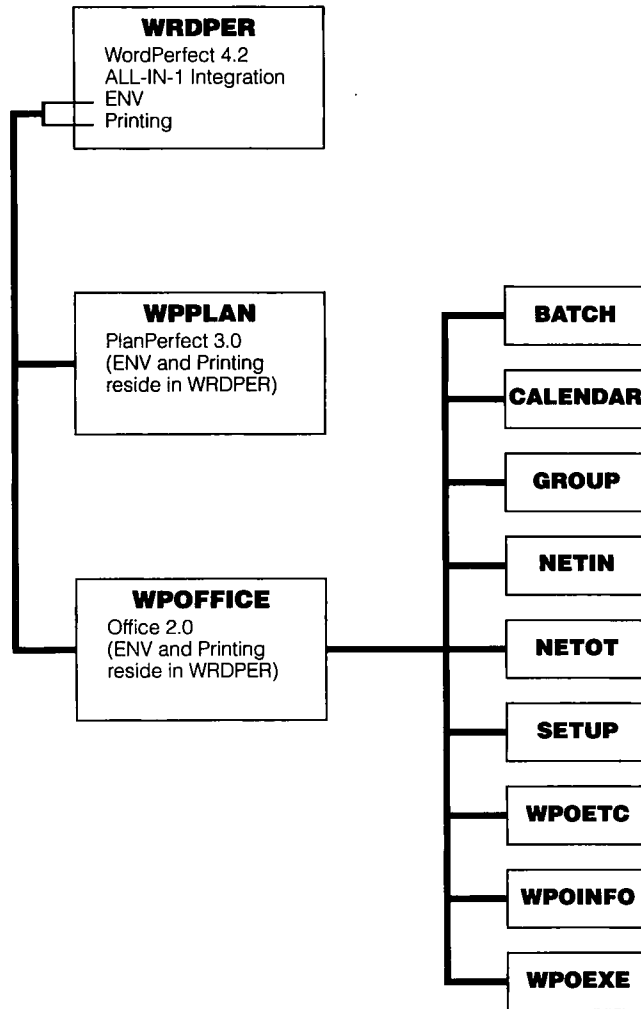
The conditions explained under *WPCorp Environment* above also apply in many respects to printing. Office 2.0 and PlanPerfect 3.0 both access the printing files in the WRDPER directory. However, since printing was completely restructured for WordPerfect 5.0, two different directories are now used for printing files. 4.2-level printing files remain in the WRDPER directory, while all printing files required by WordPerfect 5.0 are stored in the new PTR000 directory. This enables both 4.2-level printing and 5.0-level printing to be accessible on the system at the same time. Future upgrades of WPCorp products will use 5.0-level printing, and will also access the PTR000 directory.

Although the queue integration is performed automatically by the WPCORP_STARTUP command procedure, you can use the WPCORP\$PTRDIR:WPCORP_PTR_QUEUE.COM command procedure if at some point you need to manually reintegrate your print queues. For more information see *Queue Integration in Printer Configuration*.

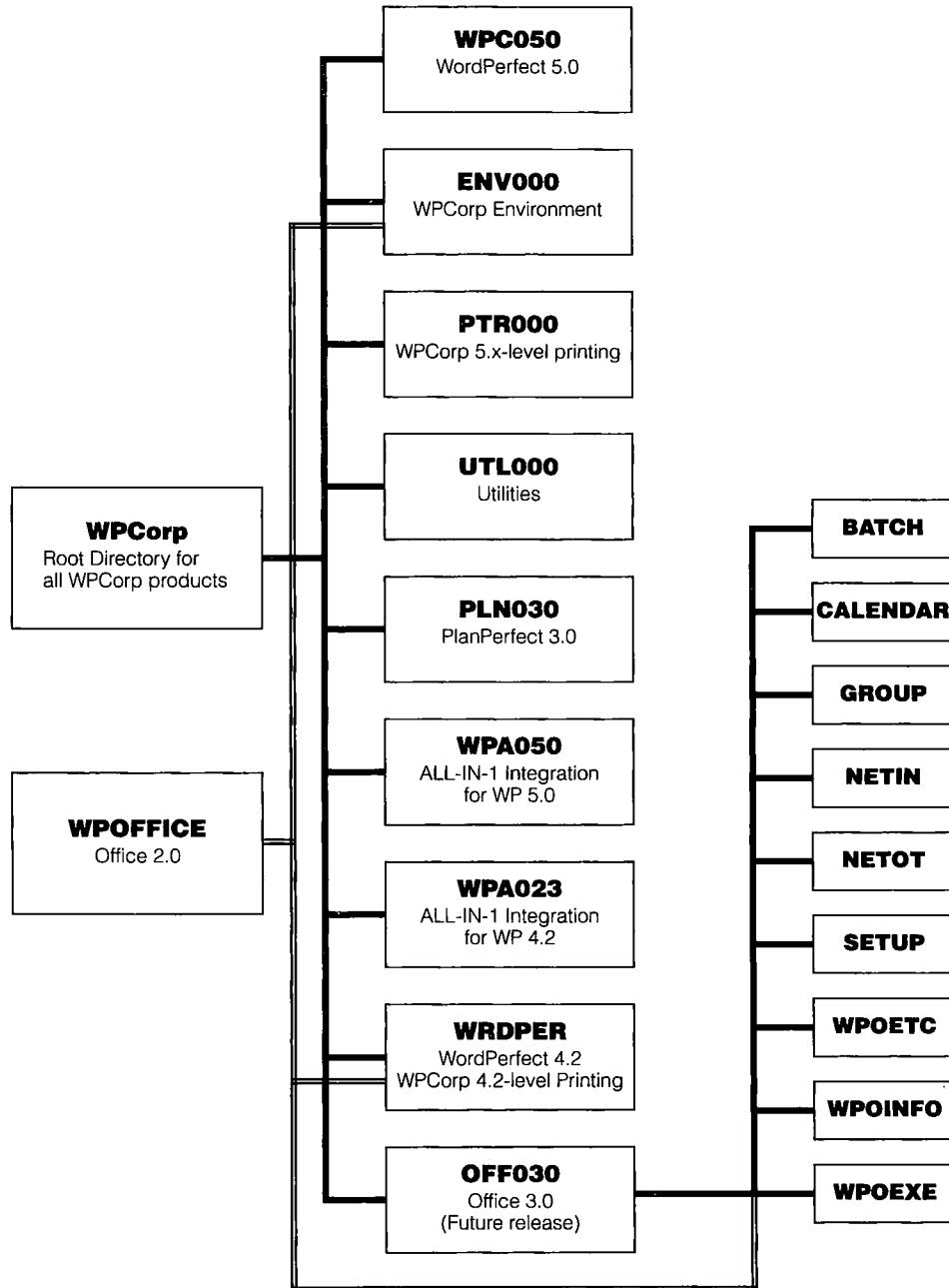
WPCORP Command

During the installation of WordPerfect 5.0 you are asked whether you want to add the WPCORP command to your system DCL tables. If you answer Yes to this question, "WPCORP" becomes the command to execute WordPerfect 5.0. Then, if you later update your copy of WordPerfect 4.2 you will again be asked the same question during the installation. If you answer Yes, your DCL tables will be *automatically* updated so that the WPCORP command will execute WordPerfect 4.2, and it will become necessary to enter "WP50" to execute WordPerfect 5.0. If you answer No to this question when installing WordPerfect 4.2, the WPCORP command will remain in effect for WordPerfect 5.0, and users will need to execute WordPerfect 4.2 by entering "WP42."

Former WPCorp Directory Structure



New WPCorp Directory Structure



Printer Information

Introduction

Before you can set up your printers to print from WordPerfect 5.0, you need to have normally functioning VMS print queues. Since most of the printer setup takes place within the WordPerfect print menus, WordPerfect 5.0 needs to have already been installed on your system.

The information in *Selecting and Setting Up Printers* tells how to set up WordPerfect 5.0 to print using two common laser printers, the Digital LN03 and the HP LaserJet Series II. The *Using Soft Fonts* section describes how you can take advantage of the extensive soft font capabilities in WordPerfect 5.0. Since it is neither possible nor practical to describe every situation, you should use this information only as a model to help you understand the steps that may need to be performed to set up your own printers.

Using the Global Setup Utility, you can set up printers for system-wide, group, or individual user access. The information in *Printer Setup (Summarized)* describes some of the steps you may need to take, depending upon the requirements of your system.

If you need help in setting up your printers beyond what this documentation provides, call your Authorized VAX Reseller or Dealer. If you are unable to get the assistance you need, call WPCorp's VAX Technical Support.

Printer Setup (Summarized)

The following information is an overview of the steps you may need to perform to set up your printers, depending upon the requirements of your system.

- 1** WordPerfect 5.0 must be installed and operational.
- 2** Before WordPerfect 5.0 can print, you must have normally functioning VMS print queues, and the Queue Manager needs to have been started on your system.
- 3** Your print queues need to have been integrated for use with WordPerfect 5.0.

If you ran the WPCORP STARTUP command after completing the installation, the queue integration has already been done. If not, turn to Queue Integration/Deintegration and follow the steps outlined.

- 4** If you want to allow users to set up their own printers and create their own printer resource (.PRS) files, they can follow the instructions provided in *Selecting and Setting Up Printers*, disregarding any reference to the Global Setup Utility. After completing these procedures, these users should be able to print with WordPerfect 5.0.
- 5** If you plan to set up a common list of printers that can be accessed either by all users or only specific users on the system, you first need to read and become familiar with *WordPerfect Global Settings* in *System Setup and Customization*. Then you should turn to *Selecting and Setting Up Printers* and perform the steps described, with WordPerfect running under the Global Setup Utility. After completing these procedures, users should be able to print with WordPerfect 5.0.
- 6** If you plan to use soft fonts, you should read and follow the steps described in *Using Soft Fonts*. This also must be done within the Global Setup Utility.

If you have problems printing from any WPCorp product after completing the above tasks, turn to *Troubleshooting* in *Technical Reference*.

Selecting and Setting Up Printers

When you have installed WordPerfect 5.0 on your system, *and* you have run the WPCORP_STARTUP command procedure to start up WordPerfect 5.0 and integrate your queues, you are ready to select and set up your printers.

You can choose whether you want to set up printers for your users or whether you want to allow them to do this for themselves. If your users will be setting up their own printers, they can follow the instructions below, disregarding any reference to the Global Setup Utility. If, however, you plan to set up printers for your users, *you must set up your printers inside the Global Setup Utility.*

From the DCL prompt,

- 1 Enter **WP50** to start WordPerfect as normal (if the printers to be set up are for one user only).

or

Enter **WP50/GLOBAL_SETUP** to start WordPerfect under the Global Setup Utility (if you want to set up printers for your users).

- 2 Press **Print (PF1,F13)** to display the Print menu.

If you started WordPerfect under the Global Setup Utility, each feature menu is preceded by a Lock Options menu. Whenever a Lock Options menu appears, press Return or select one of the Unlock options to continue to the feature menu.

- 3 Choose **Select Printer (S)**.

The **Print: Select Printer** menu appears. Since you are setting up your printers for the first time, there are no printers currently available.

- 4 Select **Additional Printers (2)**.

The **Select Printer: Additional Printers** menu appears, and a list of all printers supported by WordPerfect 5.0 is displayed. (You can scroll through the list using the Up/Down Arrow keys, Screen Up/Down, Page Up/Down, etc.)

- 5 Select **Name Search (N)** and type **digi**.

Selecting your Printer

The cursor highlights the first printer name that starts with the letters you typed.

- 6 With the cursor on **Digital LN03**, press **Return** to end the name search.

- 7** Press **Return** or choose **Select (1)** to begin setting up the Digital LN03 printer.

The "Printer filename: DIGILN03.PRS" prompt appears.

- 8** Press **Return** to confirm the displayed filename and create a *PRS file* for the Digital LN03 printer.

For each printer you select, WordPerfect creates a Printer Resource (PRS) file. This file contains all information needed to print documents with WordPerfect 5.0, including fonts and font attributes, portrait or landscape orientation, sheet feeder information, etc.

The Printer Helps and Hints screen appears, displaying useful information about the printer you have selected. A message also appears momentarily on the status line, indicating that the available resident fonts for that printer are being placed in the PRS file.

- 9** Press **Exit (F13)** to exit the Helps and Hints screen.

The **Select Printer: Edit** menu appears. The options on this menu are used to define the various print options for the printer you are currently setting up.

Printer Output Type

Next, you need to tell WordPerfect which output type this printer definition will use.

- 10** Select **Output Type (2)**.

- 11** Select **System Queue (1)** from the menu at the bottom of the screen.

- 12** Select **Queue Name (1)** from the **Output Type: System Queue** menu.

- 13** Enter the name of the print queue.

After you enter a queue name, WordPerfect displays default settings for the remaining four options. If you do not want to make any changes to the displayed settings, skip to step 16.

- 14** Select **Form Name (2)**.

- 15** Enter the name of the system form you want to use.

System forms define various format settings such as top and bottom margins, truncating, paper width, etc. Although WordPerfect ignores these settings and uses its own default format settings in their place, the form description is used by WordPerfect when you create initialization modules (see *Creating an Initialization Module in Cartridges and Soft Fonts*). If you included a description when defining the form, that description appears in the box at the middle of your screen. You can display a list of the available System forms by entering **SHOW QUEUE/FORM/FULL** at the **DCL** prompt.

For information on VMS queues and forms, refer to your DCL Dictionary or other appropriate VMS documentation.

Integrated WordPerfect Queue

The default setting is for the VMS queue to be integrated with WordPerfect. To specify a non-integrated queue, select this option and type **n**.

Important: If you are using VMS version 4.7 or earlier, you must change this option to NO.

User-Controlled Printing

If you specified non-integrated above, you can change the setting for this option to YES. When you select user-controlled printing, WordPerfect runs the WPCORP_PTR_USER_CONTROL.COM command procedure, which spawns a process that takes over the processing of the print job. This command procedure sends the print job to the queue with a set of pre-defined parameters, enabling the user to control how WordPerfect processes the print job.

Included with your software is a default WPCORP_PTR_USER_CONTROL.COM file, which contains default parameters for three different printer types. By editing this file, you can tailor it to the needs of a variety of print queues.

Bypass System Formatting (/PASSALL)

Selecting this option has the same effect as sending the print job from VMS with the /PASSALL qualifier specified. (Use of the /PASSALL qualifier causes the symbiont to ignore all other qualifiers affecting formatting.)

User-controlled Printing (4) can be selected only when Integrated WordPerfect Queue (3) is set to NO.

When you have finished defining the System Queue settings,

16 Press **Exit** (F13) to return to the Select Printer: Edit menu.

Steps 17-19 describe how to define a sheet feeder. If you do not need to set up a sheet feeder, skip to step 20.

Sheet Feeders

17 Select Sheet Feeder (3).

The Select Printer: Sheet Feeder menu appears, together with the names of the sheet feeders available for the printer you are setting up.

18 Highlight the name of the sheet feeder you want to use and press **Return**.

The Sheet Feeder Helps and Hints screen for the sheet feeder you selected appears.

When you have finished defining your sheet feeder,

19 Press **Exit** to return to the Select Printer: Edit menu.

Forms

WordPerfect forms refer specifically to paper size and type, print orientation (portrait or landscape), and page print offset distance. You can add new forms to those available by default, or you can delete or edit any of the existing forms. If you do not need to set up any additional WordPerfect forms, skip to step 23.

20 Select Forms (4).

The Select Printer: Forms menu appears.

21 Highlight the form you want to modify and select an option.

When you have finished defining WordPerfect forms,

22 Press **Exit** to return to the Select Printer: Edit menu.

For more information on WordPerfect forms, refer to *Forms* in *Reference* in the *WordPerfect Reference Manual*.

23 Press **Exit** three times to return to a blank WordPerfect document screen.

Specifying the Location of the .PRS File

If you are setting up printers for yourself or one user only you need to change where WordPerfect looks for your printer resource files. To do this,

1 Press **Setup** (PF1,F7).

2 Select Location of Auxiliary Files (6).

3 Select Printer Files (5).

4 Enter **WPCORP\$PTRPATH**

5 Press **Exit** (F13) to return to the document screen.

You should now be able to print using the definitions you have created. If not, turn to *Troubleshooting* in *Technical Reference* for some suggestions that may help you locate and eliminate the problem.

If your printer has no supplementary font capabilities, (e.g., Digital LN03), printing should now be fully functional. If your printer has supplementary font capabilities (i.e., can use font cartridges or soft fonts), turn to *Cartridges and Soft Fonts*.

Cartridges and Soft Fonts

WordPerfect 5.0 makes it very easy for users to quickly switch between a variety of fonts and font attributes. In the use of fonts, WordPerfect is limited only by the capabilities of your printer(s) and the fonts available for that printer. The example which follows shows how to set up the HP LaserJet Series II printer for accessing both cartridge and soft fonts.

For this example to work, you need to have already followed the instructions in *Selecting and Setting Up Printers*. If you are setting up printers for multiple users, you must be running WordPerfect under the Global Setup Utility.

From the WordPerfect document screen,

- 1** Press **Print** (PF1,F13).
- 2** Choose **Select Printer (S)**.
- 3** Select **Additional Printers (2)**.
- 4** Select **Name Search (N)** and type **hp**.
- 5** Press **Return** to end the search.
- 6** Use **Down Arrow (↓)** to move the cursor to **HP LaserJet Series II**.
- 7** Choose **Select (1)** and press **Return**.

WordPerfect creates the HPLASEII.PRS file and displays the Printer Helps and Hints screen for the HP LaserJet Series II printer.

- 8** Press **Exit (F13)** to return to the **Select Printer: Edit menu**.
- 9** Select **Output Type (2)**.
- 10** Select **System Queue (1)**.
- 11** Select **Queue Name (1)** and enter the name of the queue.
- 12** Select **Form Name (2)** and enter the name of the system form.
- 13** Press **Exit** to return to the **Select Printer: Edit menu**.
- 14** Select **Cartridges and Fonts (5)**.

The **Select Printer: Cartridges and Fonts** menu appears, with the cursor resting on **Cartridge Fonts**.

Cartridge Fonts

If you have font cartridges for your HP LaserJet Series II printer,

- 15** Choose **Select Fonts (1)**.

A list of the font cartridges available for the HP LaserJet Series II printer appears.

- 16** Move the cursor to the first cartridge you want to use and type an asterisk (*) to mark the cartridge.

The Available Quantity indicator at the top right of the screen decreases to 1, indicating you can select another cartridge.

- 17** Move to the next cartridge you want to select and type an asterisk.

- 18** Press **Exit** to return to the Select Printer: Cartridges and Fonts menu.

Now, when the HP LaserJet Series II printer is selected, all fonts on the cartridges you marked will appear whenever you access one of the WordPerfect font menus. If you do not have soft fonts, press Exit four times to return to the document screen. Printing should now be fully functional.

Soft Fonts

If you have soft fonts and have copied them to the directory pointed to by the WPCORP\$DOWNLOAD logical, you can now select fonts that can be downloaded to your printer.

- 1** Press **Down Arrow** to move the cursor to Soft Fonts.

- 2** Choose Select Fonts.

WordPerfect displays a "*Please Wait*" message while it loads the font information for the printer you are setting up. After a few seconds, a list of soft fonts appears. To the right of each font name is the amount of printer memory required for that font. Notice that the Available Quantity indicator is 350K, which means that by default, the HPLaserJet Series II printer can store up to a maximum of 350K of downloadable soft fonts. If your printer has an expanded memory board however, you should be able to download many more fonts.

For information on how to increase the Available Quantity indicator, refer to Cartridges and Fonts in the WordPerfect Reference Manual.

- 3** Move the cursor to the name of the first soft font you want to use.

At the left of each font name is a code (e.g., (AC), (AD), etc.) which indicates the Hewlett-Packard character set for that font. Each font is listed twice, the first being for portrait orientation, the second for landscape orientation.

For more information on the soft fonts available for the HP LaserJet printers, refer to the Hewlett-Packard LaserJet Printer Family font catalog.

- 4** Type an asterisk to mark the font so it will be available when the print job begins.

- 5** Continue to mark the fonts you want to use.

Notice that as each font is marked with an asterisk, the available quantity decreases in proportion to the size of the font file. The size of each font file and the memory available on your printer will be

critical when you are determining how many initialization modules you want to create and how to group your fonts.

Type a plus sign (+) next to those fonts you will use less often. These fonts are downloaded when the job is printed and then unloaded when the job is completed. If you want to mark any fonts in this way, however, you need to leave enough memory for them when marking other fonts with asterisks. If, after marking fonts with asterisks, there is not enough memory remaining for the fonts marked with a plus sign, those fonts will not be able to be downloaded.

When you have finished marking fonts,

6 Press **Exit** to return to the **Select Printer: Cartridges and Fonts** menu.

7 Press **Exit** again to save the font data to the **HPLASEII.PRS** file.

WordPerfect displays the "Updating Font" counter on the status line while the font list in the PRS file is being updated. After a few seconds, the **Select Printer: Edit** menu reappears. The default font is indicated to the right of the **Initial Font** option.

8 Select **Initial Font (6)**.

The **Select Printer: Initial Font** menu appears, and the fonts you have selected are listed, together with the resident fonts for the HP LaserJet II. An asterisk appears next to the default initial font.

9 Move the cursor to the font you want to use as your initial font and choose **Select (1)**.

You can scroll through the list using the **Up/Down Arrow** keys, **Screen Up/Down**, **Page Up/Down**, etc., or you can select **Name Search (N)** and type the first few characters of the font name to move the cursor to the desired file.

When you have selected an initial font, you are returned to the **Select Printer: Edit** menu.

10 Press **Exit** to return to the **Print: Select Printer** menu.

11 Make sure the cursor is on the name of the printer you are defining and choose **Select (1)**.

You are returned to the initial **Print** menu, and HP LaserJet Series II is displayed as the current printer.

Creating an Initialization Module

Now that the soft fonts are marked, you can create the module that will download them to the printer. The first step in creating an initialization module is to select a queue and assign a system form. You can create a system form from **DCL** or from within **WordPerfect**. The only elements of a system form used by **WordPerfect** are the form name, description, and stock qualifier (if one is assigned). **WordPerfect** ignores the form's format settings and uses its own in their place. The

form name and description you enter should help to identify which font characteristics are used in association with that form.

You first need to create the form for the module. To do so, from the Print menu,

1 Select Control Printer (4).

The Print: Control Printer menu appears, and the name of the queue and form currently selected are displayed at the top of the screen.

2 Select System Form (6).

3 Select Create (1).

The System Form: Create/Edit menu appears.

4 Select Name (1) and enter a name for the form.

The name you assign should be one that helps identify the form. No spaces are allowed in the form name.

5 Select Number (2) and enter a unique number for the form.

You can assign any random number (1 through 99999) as long as it is unique to the form you are defining.

You can select Stock (3) to assign your own stock qualifier. Use of a stock qualifier helps you to maximize the number of fonts available on a minimum number of printers. For more information on stock types, see *Stock Qualifier* in *Using Soft Fonts*. If you do not enter a stock type, WordPerfect will assign the stock type the same name as the form.

6 Select Description (4) and enter a description for the initialization module.

The description should include any information that helps describe what the particular initialization module contains (the names of the fonts and their point sizes, etc.) or for what kind of document it should be used.

When you have finished entering a description,

7 Press Exit (F13) twice to save the description and exit the System Form: Create/Edit menu.

The "OK: Normal Successful Completion" message appears, confirming that the form has been created, and you are returned to the Print: Control Printer menu. Although the form has been created, it still needs to be selected.

8 Press Exit to return to the Print menu.

9 Choose Select Printer (S).

10 Select Edit (3).

11 Select Output Type (2).

12 Select System Queue (1).

13 Select Form Name (2) and enter the name of the new form.

The description you entered when creating the form appears in the Description box.

14 Press **Exit** three times to return to the Print menu.

15 Select Initialize Printer (7).

The "Initialize Mode: 1 Compare; 2 Write" prompt appears.

16 Select Write (2) to write the module to a file.

The "OK: Normal Successful Completion" message appears, indicating that the marked fonts were found and that the module has been created. The actual font downloading takes place the first time a print job is sent to the specified queue and form.

For information on how you can take full advantage of your printers' font capabilities, turn to *Using Soft Fonts*.

Using Soft Fonts

If you have laser printers with soft font capabilities, you may want to consider purchasing soft fonts. Soft fonts are available from a variety of vendors in an extensive selection of typefaces, weights, and point sizes.

If you want to use soft fonts with WordPerfect 5.0, you need to create initialization modules that can be downloaded to your printer. By creating multiple initialization modules, you can maximize the number of fonts available on a minimum number of printers and better plan and coordinate the downloading of soft fonts. You can use WordPerfect to create as many initialization modules as you need. Initialization modules can be used only with integrated system queues.

An initialization module is simply a file that specifies the queue, the System form, and which fonts have been marked for downloading. The actual downloading takes place the first time a print job is sent to a queue with a System form that requires soft fonts. Once the fonts have been downloaded, any subsequent print jobs with the same queue/form combination specified will be printed immediately. If the queue/form combination does not match, the original fonts are removed from the printer's memory so a new module can be downloaded.

This assumes that each System form has the same stock qualifier. If you use different stock qualifiers with your System forms, the print job will pend and WordPerfect will display a Form/Stock mismatch message. For more information, see Stock Qualifier below.

Before Creating the Modules

You can set up a variety of initialization modules, depending on how many printers you have, the memory available on your printers, and the number of soft fonts you want to use. The examples below are intended to introduce you to some of the options available to you, and should help you decide which method you may want to use when creating multiple initialization modules.

Before creating the initialization modules, take a few minutes to plan how you want to group the fonts (depending on memory required by each font and the memory limitations of your printers), which printers need to have access to initialization modules, and to decide how you want to manage the downloading of your soft fonts (e.g., according to a predetermined schedule, or simply as the fonts are needed).

Once you have a good idea of how you want to group your fonts, which queue(s) and form(s) need to be specified, and how you plan to manage soft font downloading, you can proceed to create the initialization modules.

The instructions which follow assume you have already followed the steps in *Selecting and Setting Up Printers* and that the necessary printer definitions have been created.

Important: *When you define your printers and mark the fonts to be included in the initialization modules, you need to do so within the Global Setup Utility*

so that the soft fonts can be accessed by users on the system. If you are not familiar with the Global Setup Utility, turn to WordPerfect Global Settings and read the information and examples before continuing.

One Printer Using One Initialization Module

If you have a limited number of downloadable soft fonts, you can create one initialization module that can be used by each printer with soft font capabilities.

To create the initialization module,

1 Start WordPerfect with the /GLOBAL_SETUP qualifier.

2 Press Print (PF1,F13).

Remember that when WordPerfect is running under the Global Setup Utility, you must select an Unlock option from each Lock Options menu to continue to subordinate menus and features.

3 Choose Select Printer (S).

4 Highlight the name of the printer you want to use and Select Edit (3).

5 Select Cartridges and Fonts (5).

6 Move the cursor to Soft Fonts and choose Select Fonts (1).

The Select Printer: Soft Fonts menu appears.

7 Move the cursor to the fonts you want to include in the module and type an asterisk.

When you have finished marking fonts,

8 Press Exit (F13) three times to save the fonts in the current printer's .PRS file and return to the Print: Select Printer menu.

9 Make sure the cursor is on the name of the printer definition you are creating the initialization module for and choose Select (1).

10 Select Initialize Printer (7).

If you select Compare (1), WordPerfect will check to see if there is already an initialization module with the same queueform combination. If none exists, the "ERROR: file not found" message appears, indicating there is no file to compare the new initialization module with. If another initialization module is found to have the same queueform combination, and the fonts are the same in both modules, WordPerfect will display the "OK: normal successful completion" message, indicating that an initialization module has already been created for the fonts you have selected. If the fonts do not match, the "ERROR: Initialization modules different" message appears, indicating that one or more fonts were different than those in the original initialization module.

11 Select Write (2) to create the initialization module file.

The "OK: normal successful completion" message appears, and you are returned to the document screen. The initialization module file has now been created and is stored in the directory pointed to by the WPCORP\$DOWNLOAD logical. When the file was created, WordPerfect assigned it the filename of WPCORP_<QUEUE NAME>_<FORM NAME>.PRINTER_INIT.

If the <QUEUE NAME>_<FORM NAME> portion of the filename exceeds 32 characters, WordPerfect will truncate the extra characters.

One Printer Using Multiple Initialization Modules

If you have a limited number of printers available, yet have more soft fonts than your printer's memory can hold, you can set up several modules, each containing a specific group of fonts. Once the initialization modules have been created, they will be automatically downloaded to the printer as they are needed. Whenever a new module needs to be downloaded, the printer's memory is cleared so it can receive the new fonts.

To avoid unnecessary downloading, you may want to set up a schedule for the use of each initialization module. For example, users could be instructed to use Hold (H) on the Print menu and then specify that the job be released to the queue according to a scheduled time when the form containing the appropriate initialization module is mounted to the queue. Another alternative would be to use the stock qualifier to cause the print job to pend until that form has been mounted. For more information, see Stock Qualifier below.

The process described below assumes you have already set up several queue/form combinations for a single printer and have assigned a different printer name to each definition. For details on this process, see *Selecting and Setting Up Printers*.

To create the first initialization module,

- 1** Start WordPerfect with the /GLOBAL_SETUP qualifier.
- 2** Press Print (PF1,F13).

Remember that when WordPerfect is running under the Global Setup Utility, you must select an Unlock option from each Lock Options menu to continue to subordinate menus and features.

- 3** Choose Select Printer (S).
- 4** Highlight the name of the first printer definition you want to use and Select Edit (3).
- 5** Select Cartridges and Fonts (5).
- 6** Move the cursor to Soft Fonts and choose Select Fonts (1).

The Select Printer: Soft Fonts menu appears.

- 7** Move the cursor to the fonts you want to include in the module and type an asterisk.

When you have finished marking fonts,

- 8** Press **Exit** (F13) three times to save the fonts in the current printer's .PRS file and return to the **Print: Select Printer** menu.
- 9** Make sure the cursor is on the name of the printer definition you are creating the initialization module for and choose **Select** (1).
- 10** Select **Initialize Printer** (7).

For information on the Compare option, see the note under step 10 under One Printer Using One Initialization Module above.

- 11** Select **Write** (2) to create the initialization module file.

The "OK: normal successful completion" message appears, and you are returned to the document screen. The initialization module file has now been created and is stored in the directory pointed to by the WPCORP\$DOWNLOAD logical. When the file was created, WordPerfect assigned it the filename of WPCORP_<QUEUE NAME>_<FORM NAME>.PRINTER_INIT.

To create additional initialization modules,

- 1** Press **Print** and choose **Select Printer**.
- 2** Highlight the name of the next printer definition and choose **Edit**.
- 3** Repeat steps 5-11 above for each additional printer definition.

Once the different initialization modules have been created, when the first user executes a print job with one of the applicable printer definitions selected, the fonts are downloaded to the printer and the fonts in that module are immediately available for each subsequent print job (from any user) using the same queue/form combination. When a print job is executed with a different queue/form combination, the original initialization module is removed from the printer's memory and the new module is downloaded to the printer.

Multiple Printers Using Multiple Initialization Modules

The process for assigning multiple initialization modules to multiple printers is identical to that described under *One Printer Using Multiple Initialization Modules* above, except that you will need to define a logical for the fonts in each initialization module. The information under *Initialization Logicals* below explains the search path used by WordPerfect to locate the fonts when writing the modules, as well as for the actual font downloading.

Stock Qualifier

By changing the stock qualifier, you can *qualify* given print jobs for immediate or delayed printing. WordPerfect will print the job immediately if the stock qualifier matches that currently mounted on the queue. If not, the print job will pend until a form containing the specified stock qualifier has been mounted on the queue.

Initialization Logicals

If the stock qualifier matches, each time a print job is executed, the queue manager checks the queue to see if the System form specified is the same as that currently mounted. If not, the printer's memory is cleared and a new initialization module (if one is defined) is downloaded to the printer. The downloading process can take a significant amount of time (from a few minutes to a half hour or more), depending on how many fonts need to be downloaded. By using a stock qualifier, users can execute print jobs without causing unnecessary downloading.

If you have created multiple initialization modules and want to store the fonts for each module in different directories, you can define any of the following 3 logicals to direct WordPerfect to the locations containing the appropriate font files:

`WPCORP$DOWNLOAD_<QUEUE NAME>_<FORM NAME>`

`WPCORP$DOWNLOAD_<QUEUE NAME>`

`WPCORP$DOWNLOAD_<FORM NAME>`

WordPerfect looks first for the `WPCORP$DOWNLOAD_<QUEUE NAME>_<FORM NAME>` logical.

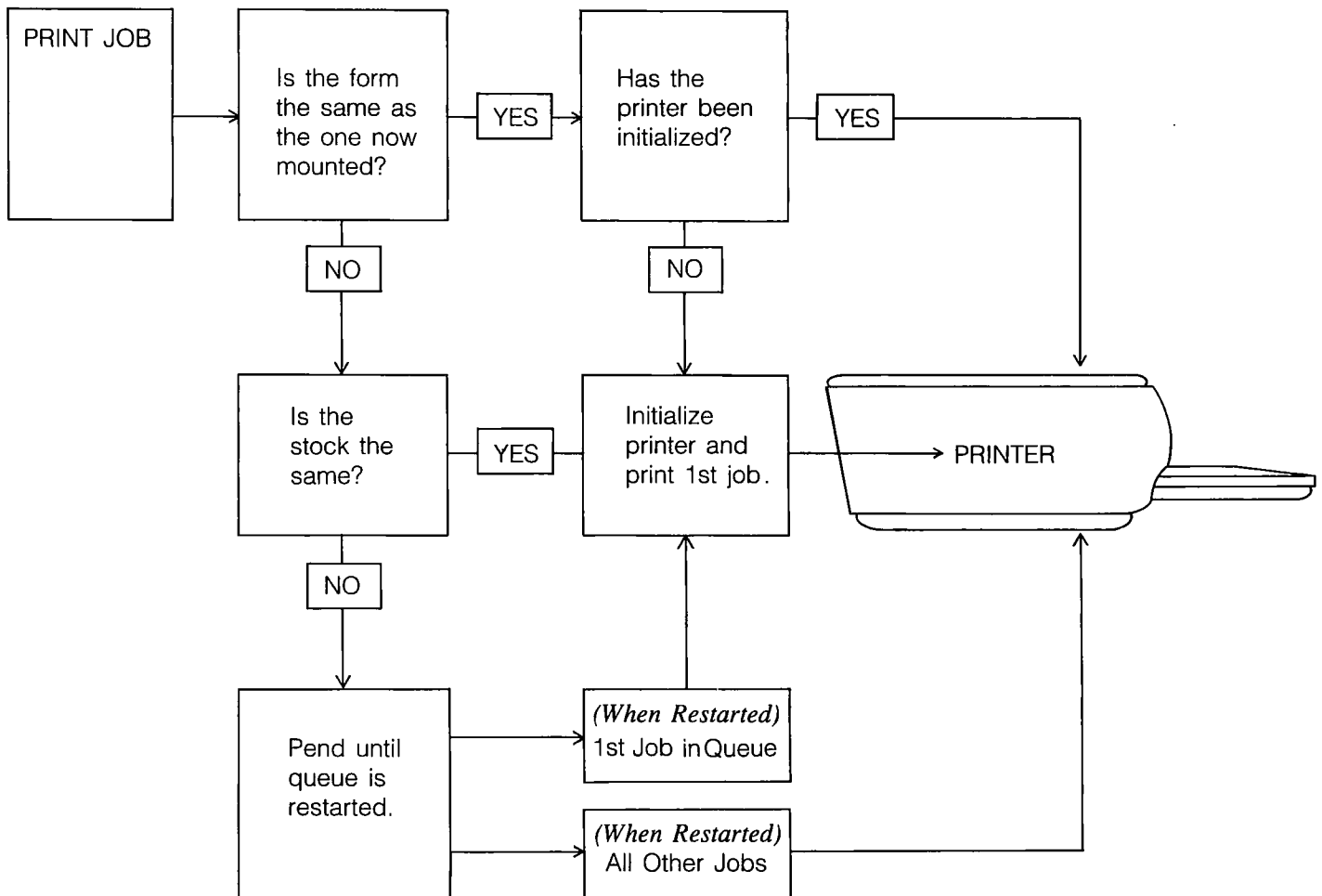
If this logical has been defined, WordPerfect will find the required fonts, create the module, and name the initialization file `WPCORP_<QUEUE NAME>_<FORM NAME>.PRINTER_INIT`. If it is not found, WordPerfect looks for the `WPCORP$DOWNLOAD_<QUEUE NAME>` logical.

If this logical has been defined, WordPerfect will find the required fonts, create the module, and name the initialization file `WPCORP_<QUEUE NAME>_<FORM NAME>.PRINTER_INIT`. If it is not found, WordPerfect looks for the `WPCORP$DOWNLOAD_<FORM NAME>` logical.

If this logical has been defined, WordPerfect will find the required fonts, create the module, and name the initialization file `WPCORP_<QUEUE NAME>_<FORM NAME>.PRINTER_INIT`. If none of these logicals are found, WordPerfect will search in the directory pointed to by the `WPCORP$DOWNLOAD` logical to find the fonts and create the module.

Initialization Modules

The flow chart below illustrates the printer initialization process as described on the previous pages.



Queue Integration/Deintegration

The WordPerfect queue integration relies on the SMBSRVSHR system group logical. WordPerfect works well with most user-defined or third party symbionts. Before performing the WPCORP queue integration, be sure that the Queue Manager has been started on your system.

***Important:** If your system is using VAX/VMS 4.7 or another version of VMS that has version 2.1 of DEC's LATSYM, you MUST use non-integrated or local printing.*

Performing the Integration

To perform the integration,

- 1 Enter `@WPCORP$PTRDIR:WPCORP_PTR_QUEUES.COM` at the DCL prompt.

When you run the integration, the command procedure first looks for the WPCORP\$WPDIR logical. The presence of this logical indicates that another WPCorp product (e.g., WordPerfect 4.2, WordPerfect Office 2.0, or PlanPerfect 3.0) is also on the system. If this logical is found, the integration of WordPerfect 5.0 will be preceded by the reintegration of any other WPCorp products. If the WPCORP\$WPDIR logical is not found, the command procedure will proceed to perform the integration for WordPerfect 5.0.

If you have another WPCorp product on your system in addition to WordPerfect 5.0 and need to repeat the integration at some future date, you should use the WPCORP_PTR_QUEUES.COM procedure unless you want to deintegrate one of the products or limit which products are integrated. When you use this command procedure, all WPCorp products on the system will be integrated.

Deintegration

If at some point you need to deintegrate all WPCorp products including WordPerfect 5.0, you can use the DEINTEGRATE parameter with the WPCORP_PTR_QUEUES.COM procedure.

For example, to deintegrate all WPCorp products, enter `@WPCORP$PTRDIR:WPCORP_PTR_QUEUES.COM DEINTEGRATE` at the DCL prompt.

To deintegrate WordPerfect 4.2 and preserve the WordPerfect 5.0 queue integration,

- 1 Deassign the WPCORP\$WPDIR logical.
- 2 Run the WPCORP\$PTRDIR:WPCORP_PTR_QUEUES command procedure.

Parameters

The following parameters can be used with the WPCORP_PTR_QUEUES command procedure:

- <p1> INTEGRATE or DEINTEGRATE. (Default is INTEGRATE.)
- <p2> Specific processor to be integrated or deintegrated. (No default.)

- <p3> Specifies whether or not important messages or instructions should be output to the screen. (Default is YES.)
- <p4> Turns on VERIFY to output all processing to the screen. (Default is NO.)

WPCorp Products Print Processing

The WPCORP\$DOCUMENT characteristic identifies WordPerfect integrated VMS print queues and documents. It is defined as 127 to avoid conflict with other print characteristics.

The WPCORP_PTR_QUEUES.COM command procedure writes the SYS\$MANAGER:WPCORP_QUEUE_STARTUP.COM command procedure which defines WPCORP\$DOCUMENT and sets WPCORP\$DOCUMENT on all system queues so they can print from within WPCorp products.

WPCorp products can print directly from the DCL prompt to integrated queues when you specify the WPCorp characteristic.

For example, from the DCL prompt,

1 Enter **PRINT/QUEUE=<QUEUE NAME>/FORM=<FORM NAME>/CHAR=127 <NAME OF .PRS FILE> + <FILENAME>**

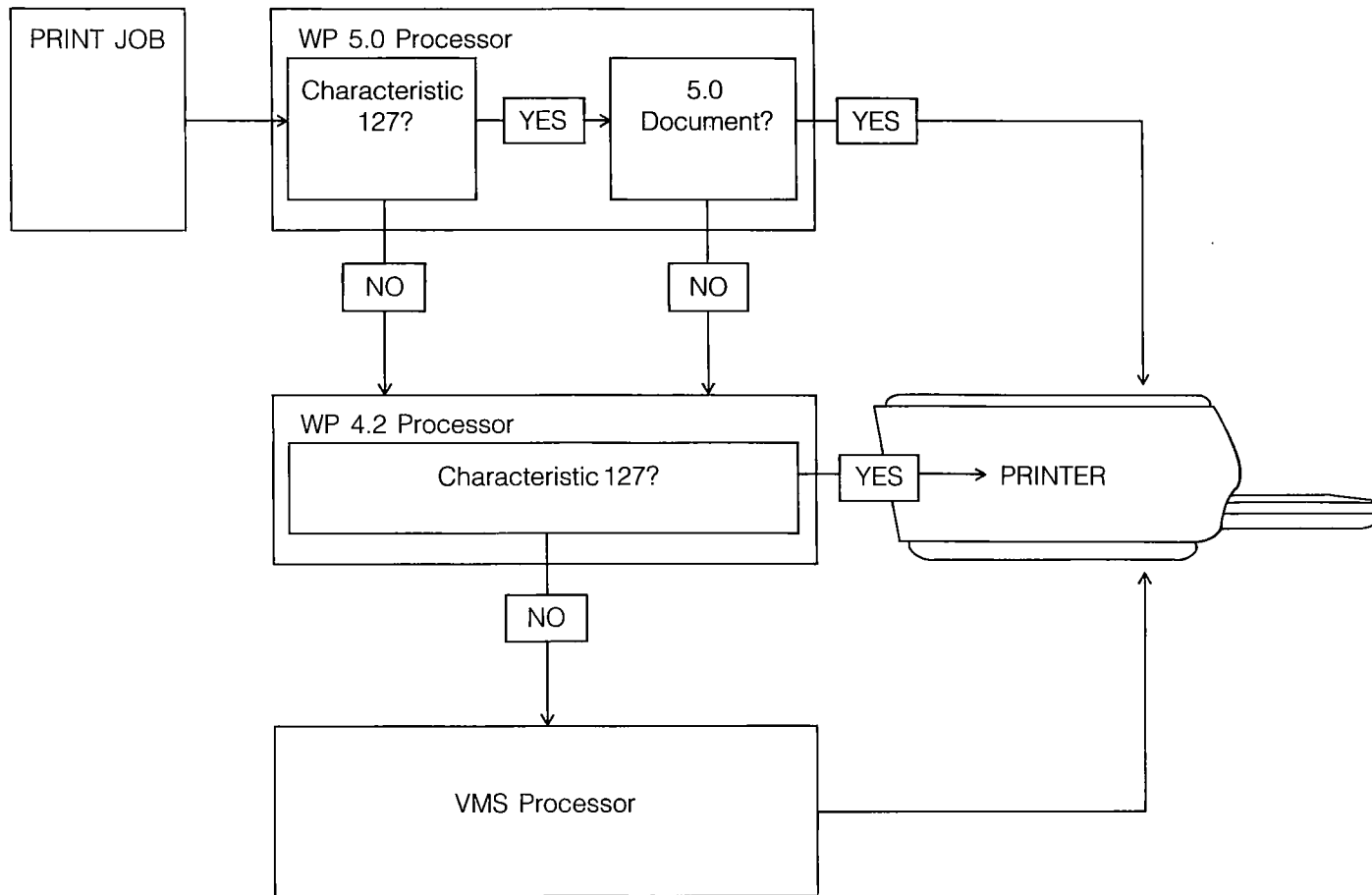
Integrated system queues will still print non-integrated print jobs that could be printed before integration. Integrated queues distinguish between WordPerfect documents and other files by looking for WPCORP\$DOCUMENT on the print job.

If WPCORP\$DOCUMENT is not found, the normal input routines are called from the system run-time library.

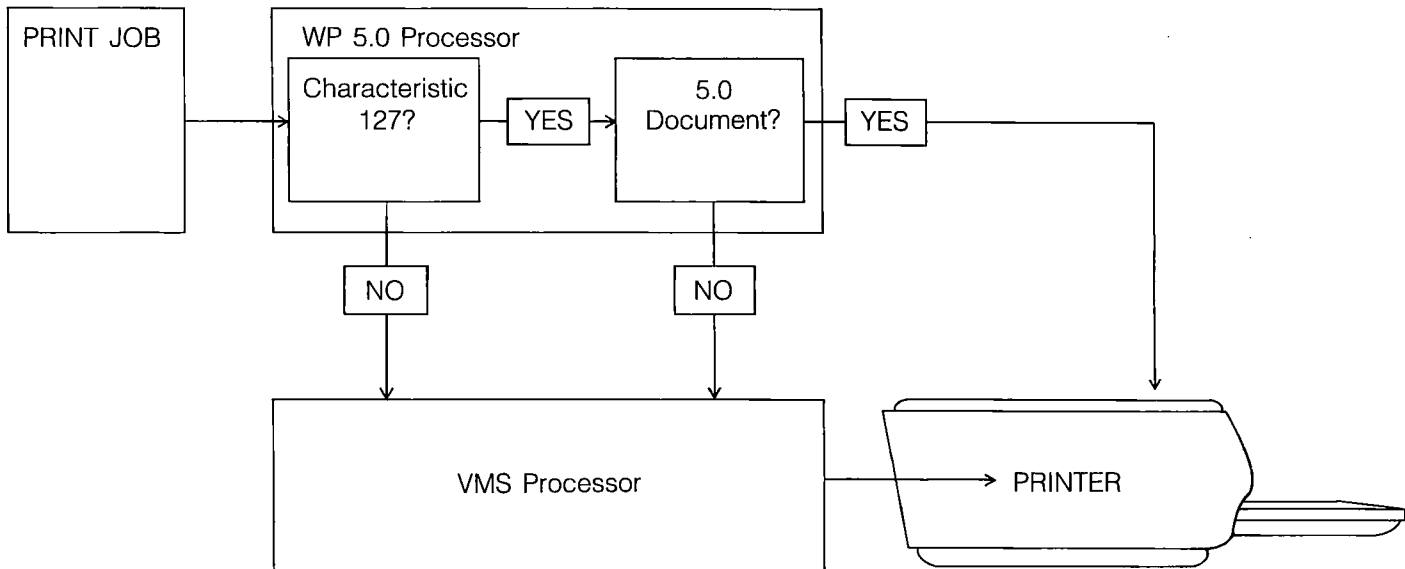
If WPCORP\$DOCUMENT is found, input routines from a WordPerfect run-time library are called. These routines translate the document to the codes required to print it using the .PRS file you selected from within WordPerfect 5.0. Refer to the flow charts on the following pages for an illustration of how the symbiont determines how the document needs to be processed.

The WordPerfect input routines report the number of pages printed to VMS accounting, even if the actual pages are not separated in the output by form feeds required by normal spooler routines.

Print Processing With WP 5.0 and WP 4.2 on System



Print Processing With WP 5.0 Only on System



Printer Output Types

Integrated System Queue

WordPerfect 5.0 allows users to select from several *output types* when printing documents. Printing from within WordPerfect can be done on a *system* or *local* basis. With system printing, all document processing is performed by the system print symbionts and queues. With local printing, document processing is performed by WordPerfect at the user's local process level.

Printing to an integrated VMS queue causes the document to be entered directly into the specified VMS queue that has been integrated to interpret WordPerfect document codes.

A VMS queue name must be specified as the destination queue. The queue may be either a logical, generic, or physical queue. System forms may also be specified.

WordPerfect submits the print image file with /NOFEED. This eliminates printing blank pages, but requires that the terminal port to which the printer is attached be set to PASTHRU for WordPerfect documents to print correctly.

The queue may be started, stopped, paused, restarted, etc., and the entry may be cancelled. The destination queue may be a generic queue pointing to several different types of printers; the document prints correctly on the first available print queue.

The WordPerfect integration does not interfere with the operation of VMS queue printing from non-WP Corp products.

The user may exit WordPerfect as soon as the document is queued for printing. Documents may also be queued for printing from the DCL command line using this print queue configuration.

We suggest that you use this output type in most cases. If you plan to create initialization modules for your soft fonts, you should use integrated printing.

To set up printing for an integrated system queue, from the WordPerfect document screen,

- 1** Press **Print** (PF1,F13).
- 2** Choose **Select Printer (S)**.
- 3** Move the cursor to the name of the printer you want to use and select **Edit (3)**.
- 4** Select **Output Type (2)**.
- 5** Select **System Queue (1)**.

The **Output Type: System Queue** menu appears.

- 6 Press **Exit** (F13) twice if no changes need to be made to the displayed queue or form name.

or

Make any necessary changes to the displayed queue or form name and then press **Exit** twice.

When you select System Queue, the default setting is for it to be an integrated queue. Information on how to select a non-integrated queue is found below.

With the cursor on the name of the desired printer,

- 7 Choose **Select (1)**.

Now, whenever you send a job to this printer, it will print to an integrated system queue.

If your system is using VMS 4.7 or another version of VMS that have version 2.1 of DEC's LATSYM, you must use a non-integrated system queue.

For help on integrating other symbionts with WPCorp print symbionts, contact your authorized VAX reseller or dealer or WPCorp's VAX Technical Support department.

Non-integrated System Queue

Printing to a non-integrated VMS queue causes the user's local process to create a print image file which is then entered into a VMS queue. Since in this case, processing is already performed by WordPerfect, this queue does not have to be integrated with WordPerfect. A VMS queue name must be specified as the destination queue. The queue may be either a logical, generic, or physical queue. System forms may also be specified. The completed file is submitted to the queue and then handled entirely by VMS.

WordPerfect submits the print image file with **/NOFEED**. This eliminates printing blank pages, but requires that the terminal port to which the printer is attached be set to **PASTHRU** for WordPerfect documents to print correctly on some printers.

While printing to a non-integrated VMS print queue prints correctly, printer accounting may or may not be accurately reported since it is not directly performed by WordPerfect.

Some control of the VMS queues is still possible. The print image may only go to generic queues if they point to queue identical printers. Notification is given only if the print image file was successfully placed in the destination queue. The user should not exit WordPerfect until the print image file is placed in the destination queue.

Use this output type when you do not want WordPerfect print spooler integration, or when you are on a clustered system and WordPerfect does not reside on the same node as the print queue.

To set up printing for a non-integrated system queue, from the WordPerfect document screen,

- 1** Press **Print** (PF1,F13).
- 2** Choose **Select Printer** (S).
- 3** Move the cursor to the name of the printer you want to use and select **Edit** (3).
- 4** Select **Output Type** (2).
- 5** Select **System Queue** (1).

The **Output Type: System Queue** menu appears.

- 6** Make any necessary changes to the displayed queue and/or form names.

After you specify a queue and form name, the **Integrated WordPerfect Queue** option appears on the menu. By default, the setting for **Integrated WordPerfect Queue** is **Yes**.

- 7** Select **Integrated WordPerfect Queue** (3).
- 8** Type **n** to change to a non-integrated WordPerfect queue.
- 9** Press **Exit** (F13) twice to return to the **Print: Select Printer** menu.

With the cursor on the name of the printer you want to use,

- 10** Choose **Select** (1).

Now, whenever you send a job to this printer, it will print to a non-integrated system queue.

Pass Through

Pass Through printing enables the user's local process to print to a printer that is attached to the auxiliary port of the user's own terminal. The user must remain in WordPerfect while the document is printed or the print job will be terminated. No VMS accounting is performed, and queue control is not available.

The terminal device type must be set to VT102 or greater to have access to the correct device control sequences from DEC's SMG terminal tables.

Although WordPerfect 5.0 supports Pass Through printing, you may experience problems because the terminal sometimes interferes with the printer codes passed to the printer by WordPerfect. Because WordPerfect has no control over the interference of the terminal, we suggest that if you have trouble, you select the STANDARD.PRS printer definition (from the Print: Select Printer menu) instead of the normal .PRS file for your printer.

To print a document directly to an attached printer,

- 1** Retrieve the document to be printed.
- 2** Press **Print** (PF1,F13).

- 3** Choose Select Printer (S).
- 4** Highlight the name of the attached printer and select Edit (3).
- 5** Select Output Type (2).
- 6** Select Pass Through (2).
- 7** Press **Exit** (F13) to return to the Print: Select Printer menu.
- 8** Choose Select (1).
- 9** Press **Exit** to return to the Print menu.
- 10** Select Full Document (1) or Page (2).

Print to a Device

Printing directly to a device enables a user's local process to send a print job directly to the output device rather than via a VMS print queue. The user must remain inside the WordPerfect document until the print job is complete; otherwise, the print job will be terminated. No VMS accounting is performed.

The destination device to which the print image is sent is specified within WordPerfect. This enables you to use a single printer definition to access multiple output devices simply by changing the device number.

To print directly to a device,

- 1** Start WordPerfect.
- 2** Press **Print** (PF1,F13) to display the Print menu.
- 3** Choose Select Printer (S).
- 4** Move the cursor to the printer you want to use.

***Important:** The steps outlined here assume you have already set up your printers for WordPerfect 5.0. If your printers are not yet set up, turn to Selecting and Setting Up Printers and follow the steps for setting up a printer before continuing.*

- 5** Select Copy (4) to display the "Printer filename:
<FILENAME.PRS>" prompt.

When you copy a .PRS file, WordPerfect automatically modifies the original filename for you. For example, if you are copying the .PRS file for the HP LaserJet Series II printer, the original HPLASEII.PRS filename is modified to HPLASEI0.PRS so it can be used as a resource for the new file.

- 6** Press **Return** to accept HPLASEI0.PRS as the filename for the new .PRS file.
- 7** Press **Exit** (F13) to go to the Select Printer: Edit menu.
- 8** Select Name (1) and enter a name for the Print to Device printer.

The name you enter will be listed in the Print: Select Printer menu when you want to select a Print to Device printer.

9 Select Output Type (2).

10 Select Other (3).

The "Device or Filename:" prompt appears.

11 Enter the device name, followed by a colon (:).

***Important:** The colon must be included to specify that the name you entered is a device rather than a filename. If you do not include a colon, WordPerfect will assume the name is a disk filename. If a terminal server device is used, you need to set up the reverse LAT protocol for the specified device using DEC's LATCP utility.*

12 Press Exit to return to the Print: Select Printer menu.

The cursor should be resting on the name of the Print to Device printer you created.

13 Choose Select (1).

You are returned to the Print menu, and the Print to Device printer is indicated as the current printer.

14 Press Exit to return to the document screen.

Now, when you send a print job, it will print directly to the device you specified.

Print to a Disk File

Printing to a disk file enables the user's local process to create a print image file and save it with a disk filename. The print image file may then be sent directly to a print queue, copied to a device, or typed on a hardcopy console. The correct printer should have been selected so the appropriate printer codes are included in the print image file.

To set up a Print to Disk printer,

1 Start WordPerfect.

2 Press Print (PF1,F13) to display the Print menu.

3 Choose Select Printer (S).

4 Move the cursor to the printer you want to use.

***Important:** The steps outlined here assume you have already set up your printers for WordPerfect 5.0. If your printers are not yet set up, turn to Selecting and Setting Up Printers and follow the steps for setting up a printer before continuing.*

5 Select Copy (4) to display the "Printer filename:
<FILENAME.PRS>" prompt.

When you copy a .PRS file, WordPerfect automatically modifies the original filename for you. For example, if you are copying the PRS file for the HP LaserJet Series II printer, the original HPLASEII.PRS filename is modified to HPLASEIO.PRS so it can be used as a resource for the new file.

- 6** Press **Return** to accept HPLASEIO.PRS as the filename for the new .PRS file.
- 7** Press **Exit** (F13) to go to the Select Printer: Edit menu.
- 8** Select **Name (1)** and enter a name for the Print to Disk printer.
- 9** Press **Exit** three times to return to the document screen.

A .PRS file has now been created and can be used whenever you want to print directly to a disk file. Before printing to a disk, you need to select the Print to Disk printer you have created, and assign a disk filename.

With the document to be printed to disk on your screen,

- 1** Press **Print** (PF1,F13).
- 2** Choose **Select Printer (S)**.
- 3** Place the cursor on the Print to Disk printer you want to use.
- 4** Select **Edit (3)**.
- 5** Select **Output Type (2)**.
- 6** Select **Other (3)**.
- 7** Enter a filename for the file to be printed to disk.
- 8** Press **Exit** to return to the Print: Select Printer menu.

With the cursor on the name of the Print to Disk printer,

- 9** Choose **Select (1)**.

You are returned to the Print menu, and the Print to Disk printer is indicated as the current printer.

- 10** Select **Full Document (1)**.

The file is saved to your current directory as a print image, and can be printed from DCL with all WordPerfect print attributes preserved.

Printer Program

Each time you set up a printer in WordPerfect, a Printer Resource (.PRS) file is created for that printer, using the information contained in the appropriate WPRINT.ALL file. The .PRS file contains the information WordPerfect needs to communicate with that printer, including font and attribute codes, the output type, and sheet feeder definitions. Whenever you edit the settings for a specific printer, the .PRS file is updated to include the changes you made.

The Printer (PTR) program is used to make adjustments to .PRS and .ALL files that cannot be made in WordPerfect. Most systems may never need to use the PTR program. In some situations, however, you may find the program to be very useful. While some tasks that can be performed with the PTR program are very simple, others require a significant amount of technical knowledge. The PTR program is used primarily for creating new printer and sheet feeder definitions or for editing character maps, proportional spacing tables, or typeface definitions.

The PTR program is accompanied by a comprehensive manual entitled *WordPerfect Printer Definition Program, A Technical Reference*. This manual includes an extensive *Reference*, an *Applications* section that provides step-by-step instructions for specific tasks, and an *Appendix* that provides specialized information about the WordPerfect Printer Description Language (WPDL), error messages, and other PTR program features.

The PTR program is currently available only for the IBM PC and compatibles running on MS/DOS. To use the PTR program to modify your printer definitions, you will need to copy the appropriate printer (.PRS and .ALL) files to an MS/DOS-formatted diskette, make the changes to your printer files with the PTR program, and then transfer the modified printer files back to the VAX.

If you would like to order the PTR program and technical reference manual, or if you would like more information, contact your authorized VAX reseller or dealer, or call WPCorp's VAX Technical Support department at (801) 226-4180.

Bitstream Fonts

WordPerfect Corporation, in conjunction with Bitstream, Inc., offers a Fontware Installation Kit for a minimal charge, to purchasers of WordPerfect 5.0. The kit includes three typefaces: Bitstream Charter (medium weight), Dutch (Bitstream's version of the Times Roman typeface), and Swiss (Bitstream's version of the Helvetica typeface). The Swiss and Dutch typefaces each come in 4 weights. The following printers are supported:

AST TurboLaser
Data Products LZR 1230
Destiny Laseract 1
HP LaserJet Plus
HP LaserJet 500 Plus
HP LaserJet Series II
HP LaserJet Series IID
Kyocera F Series
LaserPro Silver Express
Mannesmann-Tally MT910
NEC SilentWriter 860+
Okidata Laserline 6
Olympia LaserStar 6
Panasonic KX-P 4450
Quadram Quadlaser

To make use of the Bitstream fonts, the appropriate WPRINT.ALL file(s) must be copied to an MS/DOS-formatted diskette and then loaded into the hard drive on an IBM AT-compatible personal computer. The Bitstream Fontware Installation Kit must be loaded into the hard drive of the personal computer and executed to build the fonts. Once the fonts have been created, the font files and printer .ALL files can be uploaded to your VAX system. The final step is to update the appropriate .PRS files from within WordPerfect to make the Bitstream fonts available to users. Complete documentation is included when you order the Bitstream Fontware package.

If you would like to order the Bitstream Fontware Installation Kit, or if you would like more information, call your authorized VAX reseller or dealer or WPCorp's VAX Orders department at (800) 248-2680.

Technical Reference

Convert Utilities

WordPerfect 5.0 includes several utilities you can use to convert various types of files to the required formats. Many of your documents will need no editing after conversion. If WordPerfect is unable to convert a code, it inserts a comment into the document at the location of that code to alert you about any changes that need to be made manually.

Document Conversion

Documents created in WordPerfect 4.2 are automatically converted as they are retrieved into WordPerfect 5.0. Some codes are not converted completely however, because some 4.2 features have been replaced by different features in 5.0. For this reason, WordPerfect includes a conversion resource file (STANDARD.CRS) which can help in making these types of conversions. Instructions for converting 4.2 documents are found in the *Appendix* of the *WordPerfect Reference Manual* under *Document Convert Program*. Instructions are also included for using the Document Convert utility to convert files to and from other word processing formats (e.g., DEC DX, IBM DCA, etc.)

Graphics Conversion

WordPerfect includes a utility that can be used to convert files created with various graphics programs to WordPerfect graphics format (WPG) so they can be used with the Graphics feature in WordPerfect 5.0. See *Graphics Convert Program* in the *Appendix* of the *WordPerfect Reference Manual* for detailed instructions.

Macro Conversion

The Macro feature in WordPerfect 5.0 has been completely rewritten to allow use of an extensive programming language that can be used to create anything from simple to sophisticated macros. Consequently, macros created in WordPerfect 4.2 need to be converted before they can be used in version 5.0.

As with document conversion, some features cannot be converted because they have been replaced by different features in 5.0. Whenever WordPerfect encounters a code that cannot be converted, it inserts a comment in the converted macro file to indicate that the code must be converted manually. Using the 5.0 macro editor, you can make any necessary changes to make the macro fully functional in WordPerfect 5.0. Details on how to convert macros are found in the *WordPerfect Reference Manual* under *Macro Convert Program*.

Document Accounting

By starting WordPerfect with the /ACCOUNTING qualifier, you can have WordPerfect keep track of document statistics such as the number of keystrokes, pages printed, and elapsed time during an editing session.

Start Accounting

To activate the Document Accounting feature,

1 Enter **WP50/ACCOUNTING** at the DCL prompt.

A WordPerfect session is started, and WordPerfect is now keeping track of document statistics.

If the work to be done is for a particular client, project, case number, etc., you can add the optional /USER TYPE qualifier (WP50/ACCOUNTING/USER_TYPE=<USER_TYPE>) when activating the Document Accounting feature. This will create an additional field that can be used for extracting and sorting accounting records. See Sort Options below for more information.

The accounting statistics are compiled in memory only, and are saved only when you press Exit (F13) and save the document or answer Yes to the "Save Accounting Information? (Y/N)" prompt. No statistics are recorded when you use Save (F18) or Text In/Out (PF2,F11) to save a document.

If you save the statistics, WordPerfect checks to see if the WPCORP_WP50_ACCOUNTING logical has been defined. If so, the statistics are appended to the file pointed to by this logical. If this logical is not defined, the statistics are appended to the WPCORP\$STATDIR:WPCORP_WP50_ACCOUNTING.FIL file. The file to which compiled accounting statistics are appended is referred to as the *Document Accounting Resource file*.

When using features such as Merge, Spell, or Move, only the keystrokes pressed to execute the features are recorded for the accounting statistics. With macros, however, every keystroke in the macro definition, including text characters, is counted in the accounting statistics.

To facilitate sorting and extracting data, the statistics in the accounting resource file are saved in WordPerfect secondary merge format. Each information field ends with a ^R code, and each document record ends with a ^E code, followed by a hard page break. Comprehensive information on WordPerfect merge files and codes is found in *Merge and Merge Codes* in the *WordPerfect Reference Manual*.

Each record in the resource file contains the following 13 fields, in the following order:

- Filename
- Revision date (when last edited)
- Username

- User type (specified by /USER_TYPE)
- Keystrokes
- Elapsed time
- Elapsed CPU time
- Elapsed time in seconds
- CPU time in seconds
- Number of pages printed
- Beginning document length
- Ending document length
- Revision date, in the following format: YYYYMMDDHHMMSS (i.e., 19900215113022, for 2-FEB-1990 at 11:30:22)

Elapsed time is calculated from the moment Document Accounting is activated, and is restarted each time a document is saved or exited. Beginning and Ending document length figures are in bytes, and indicate the size of a document when first retrieved, and when exited.

Stats Macro

For convenience in extracting and sorting data from the accounting resource file, a special WordPerfect macro (STATS.WPM) is included with your software. This macro enables you to:

- Sort statistics by username, user type, date, or filename.
- Create and edit the format in which statistics are displayed and printed.
- Calculate totals for specific or multiple documents.

To use the Stats macro, you must turn off the Document Accounting feature (if it is still on) by exiting and restarting WordPerfect. If you try to run the Stats macro while Document Accounting is active, an error message will appear and you will be returned to the document screen.

To start the macro,

1 Press **Macro** (PF3,F18).

2 Enter **WPCORP\$STATDIR:STATS**

The Stats macro is started, and after a few seconds the main Document Accounting menu appears.

3 Select **Sort Options** (1).

4 Select a **Sort** option and enter a sort criteria. (See *Sort Options* below.)

You can extract and sort data that matches more than one field by entering a criteria for each field you want to have extracted.

After you have specified the sort criteria,

5 Select **Sort Records** (5).

The records are extracted from the resource file, and then sorted and placed in a temporary WordPerfect file (WPCORP\$SCRATCH:WPCORP_WP50_RES.TEMP_ACTIVE). After a few seconds you are returned to the main Document Accounting menu.

6 Select a Display option (See *Format Options* below).

After a few seconds the compiled statistics appear on the screen in the format you specified, and the Stats macro terminates. The compiled *statistics output file* is a standard WordPerfect file, and can be edited, printed, saved, and/or deleted like any WordPerfect document.

When accessing any of the Document Accounting menus, if you make a mistake and select the wrong option, you can press Cancel (and type y if the "Cancel changes? Y/N" prompt appears) to cancel the selection.

Sort Options

The Sort options described below enable you to specify one or more criteria by which you want WordPerfect to extract and sort records from the resource file.

Username

To extract and sort records created by a specific user, select this option and enter the username. Any user can extract and sort accounting statistics created by any other user.

User Type

If you started the Document Accounting feature with the optional /USER_TYPE=<USER TYPE> qualifier, you can select this option and enter the specified user type. The macro will then extract and sort only the records that include the specified user type.

Date

When you select this option you can enter a date and a logical symbol (=, <>, >, <, >=, or <=) to specify a date or range for the extracted records. For example, to extract and sort only the statistics compiled on or before January 17, 1990, enter **19900117** at the "Enter Date to sort by:" prompt, and <= at the "Enter Logical Symbol:" prompt. The default logical operator is >= (all records *since* the date and time you specify).

Filename

Select this option and enter a filespec (DEVICE:[DIRECTORY]FILENAME) to extract and sort only those records with the filename you enter.

Format Options

Several options are available for defining the format you want to use for the statistics output file. The following default formats are provided for your convenience, and can be edited (by users who have WRITE privileges to the WPCORP\$STATDIR logical area), displayed, or viewed by selecting the corresponding options from the Document Accounting menus.

The Other Format form can be edited by any user, since the file is created and stored in the user's SYS\$LOGIN directory.

Full Format

By default, this format includes the first 12 fields for which accounting statistics are compiled. This format can be edited only by users with WRITE privileges to the WPCORP\$STATDIR logical area.

Brief Format

The default for this format includes only the merge codes to display the filename, username, and revision date. The ^N^P^P codes are also included to cause records to be displayed in consecutive order with no page breaks between each record. This format can be edited only by users with WRITE privileges to the WPCORP\$STATDIR logical area.

Other Format

This is a user-defined format, and can be used to create your own form for displaying the compiled statistics. This format can be edited by any user, since it is created and stored in the user's SYS\$LOGIN directory.

Total Format

This format displays the combined totals for all records that match the sort criteria you specify in the Sort Options menu. The default fields displayed are keystrokes, elapsed time, CPU time, number of pages printed, and beginning and ending document length. This format can be edited only by users with WRITE privileges to the WPCORP\$STATDIR logical area.

Creating and Editing Formats

The options on the Create/Edit Formats menu allow the user to specify how the records should be formatted when the Stats macro generates the statistics output file. Using the available options, the user can create, edit or view the titles and/or forms that will be used for displaying the compiled statistics in Full, Brief, Other, or Totals Format.

Considerations and Limitations

When using the Document Accounting feature, you should be aware of the following considerations and/or limitations:

- If a document is printed from List Files, no statistics are recorded.
- When a block of text is printed, only one page is counted, regardless of the length of the block.
- Statistics are not recorded when endnotes are printed alone.
- Print jobs executed using Print Screen (Ctrl-p) are not included in the accounting statistics.
- The Stats macro will function only in a regular WordPerfect session. If Document Accounting is still active, the user must exit and then restart WordPerfect. Also, the macro will function only if the original (default) WordPerfect keyboard definition is selected. (See *Keyboard Layout* in the *WordPerfect Reference Manual* for information on keyboard definitions.)

- If you have WordPerfect Office and want to activate Document Accounting from the Shell menu, you first need to go to DCL and run the WPCORP\$STATDIR:GET.COM command procedure in order to create the necessary temporary files.
- Since the statistics data is continually being appended to the Accounting Resource file, this file will continually increase in size. We suggest that this file be checked periodically and either deleted or renamed for archiving after billing is completed.

Graphics Screen Types

Users can select a graphics screen type only if their terminals are capable of displaying graphics in various formats.

To select a graphics screen type,

- 1** Press **Setup** (PF1,F7) and select **Display** (2).
- 2** Select **Graphics Screen Type** (5).
- 3** Move the cursor to the screen type you want to use and press **Return**.

or

Choose **Auto-Select** (2) to have WordPerfect determine the appropriate screen type for your terminal.

- 4** Press **Exit** (F13) to return to the document screen.

Screen Types

The following screen types are available:

Auto-Select (Terminal Dependent)

Lets WordPerfect determine the best possible graphics screen type.

Text Mode (Mosaic if Possible)

If the terminal does not have graphics capability, WordPerfect uses text characters to give a visual representation of what is on the screen.

SIXEL (Bitmap)

Uses pixels to create an image on the screen.

ReGIS (Vector)

Uses vector coordinates to create an image on the screen.

XWindows Mode and UIS Mode (Workstations)

Allows you to make full use of the windowing capability of your workstation.

User-defined External Driver

Lets you use a graphics screen type for which you have defined your own driver.

Licensing Procedure

The licensing procedure includes instructions for installing and maintaining WPCorp products for the appropriately licensed VAX/VMS system(s). When installing WordPerfect on your system, you need to enter your company name and authorization code exactly as they appear on the Product Licensing Key you received with your software.

During the installation of WordPerfect 5.0, you are prompted to enter the name and authorization code. This information is case and space-sensitive; it must be entered exactly as shown on the Product Licensing key.

If you make any errors while entering the name and code, the installation may seem to complete successfully but when you attempt to run WordPerfect, an error message will appear briefly on your screen and you will be returned to the DCL prompt.

To correct an error in the license name or authorization code or to update your license authorization code, you must use the WPCorp license command procedure.

License Command Procedure

To run the WPCorp license command procedure,

- 1 Enter `@WPCORP$WP50DIR:WPCORP_LICENSE` at the DCL prompt.

The following prompts appear:

"Name:"
"Authorization code:"

- 2 Enter the correct name and code from the Product Licensing Key.

Be sure to enter the information precisely as indicated on the form. The authorization code must have exactly 32 characters, including symbols, uppercase and lowercase letters, and no additional spaces.

After you enter the name and code, the "Image to license:" prompt appears.

To indicate the image you are licensing,

- 3 Enter `WPCORP_WP50_SHR.EXE`

If `WPCORP_WP50_SHR.EXE` is installed as a known image, it needs to be replaced. To verify whether the known images were installed, at the DCL prompt,

- 1 Enter `INSTALL:=$INSTALL/COMMAND_MODE`
- 2 Enter `INSTALL LIST WPCORP_WP50_SHR`

If the image is present, you can replace it with a new version by entering **INSTALL REPLACE WPCORP_WP50_SHR** at the DCL prompt. This must be done after the WPCorp license command procedure is completed.

If the image is not present, you may need to run the WPCorp startup procedure to install the images, logicals, and queues.

Performance Considerations

CPU and I/O Intensivity

Any time a program actively computes on a time-shared system such as VMS, it is referred to as CPU-intensive. When the program needs to read disk files or use the user's terminal or workstation, it requests I/O operations. Usually it waits for these requested operations to be completed before it performs more computation or requests more I/O operations. While the program waits for these requests to complete, VMS can execute other programs.

If a program spends too much time computing, VMS interrupts it and passes execution on to another program. In this case, program execution becomes slower because the program has to wait for VMS to give other programs a time slice before proceeding with its computations. System monitors show that the program is in COM state. Usually this means that the process is performing an operation requiring prolonged computation (compute-intensive).

A program that takes a whole time slice every time the VMS scheduler offers it impacts the execution of other programs on the system much more than a process which usually decreases its time slice because it is waiting for completion of an I/O request. Whenever a program computes, other programs must wait longer for their next time slice. The greater amount of time a program spends doing computation, or "consuming CPU", the more CPU-intensive it may be said to be.

Generation and completion of I/O requests by the operating system incurs system computation overhead, and ties up the device while the I/O request is processed (this can vary greatly depending upon the I/O device type). The larger the I/O request, the more efficiently the system can transfer data to and from the user and disk, and the longer time the program can spend waiting for the larger request to complete instead of computing and issuing more small requests. The faster I/O requests are generated from a program within a certain time ("I/O consumed"), the more I/O-intensive it may be said to be.

Text Entry

Text entry on terminals that allow WordPerfect to request input one line at a time is designed to consume as little CPU and I/O as possible.

Document settings can affect how efficiently WordPerfect can process text entry. For example, when a proportionally-spaced font is selected, WordPerfect must look up the printer width of each character on the line before it can determine where the line should wrap, and slightly more computation will be required. If WordPerfect has to continually pan the screen back and forth to accommodate text entry (when more than 80 characters fit on a line), more CPU and I/O demand will be generated. The user may be able to avoid this situation by pressing Screen (PF2,F9), selecting Screen Size (3), and then selecting Wide (4) to display text in 132-column mode, or by entering all text before selecting options that affect the efficiency of text entry (e.g., columns, small fonts, etc.).

In Reveal Codes, text entry becomes considerably more I/O and CPU-intensive than normal text entry because two windows must be updated and data must be requested character-by-character instead of line-by-line.

Entry and display of WordPerfect extended attributes or characters which are not part of the native VMS Multinational or ISO character set (especially those which can only be accurately displayed using the downloadable character set on VT200 compatible terminals) are less efficient than the entry and display of native characters and attributes. You can modify and economize their display by selecting alternative characters from the Setup: Attributes menu (PF1,F7,2,2).

Cursor Movement Keys

Keys that move the cursor a short distance in the document, such as the arrow keys, are less CPU and I/O efficient for moving long distances. Pressing Beginning of Document (Home,Home,Home,↑) is much more efficient for getting to the top of document than holding down an arrow key or even pressing Screen Up, but using Screen Up is less intensive than using Up Arrow.

Line Draw (PF2,F9,2)

Pressing the arrow keys to insert line draw characters is CPU-intensive. Line drawing could be done more efficiently (although less handily) by mapping the required line draw characters to keys and entering the characters directly as text. For information on key mapping, see *Keyboard Layout* in the *WordPerfect Reference Manual*.

List Files (F11)

List Files can be CPU and I/O-intensive, depending greatly upon the size of the directory being scanned. The entire directory is scanned and saved in memory and overflow files before the first screen of filenames is displayed. The more the user limits the filenames to be listed, the fewer files need to be scanned, and the faster and more efficient the startup of List Files will be.

VMS requires List Files to open a file in order to find the modification date and size. When the Show Date/Size option (+) is selected, startup of List Files is slower and less efficient because every file must be opened as WordPerfect encounters it while scanning the directory. It is usually more efficient to first display the directory without the date/size information, and then type a plus sign (+) with the cursor on the names of the specific files whose date and size information you want to display. You can also display the date/size information by typing an asterisk next to the names of the files and then typing +.

Save (F18) and Retrieve (PF1,F18)

Save and Retrieve require more CPU and I/O than text entry. Also, the more often timed backups are created, the more system overhead is required.

Search (F8 and PF1,F8), Replace (PF3,F8), and Go To (PF2,Home)

These functions are CPU-intensive when used inside a large document.

Setup (PF1,F7)

When display features such as Automatically Format and Rewrite (1) and Side-by-side Columns Display (8) are activated, CPU and I/O consumption are increased.

Merge/Sort (PF2,F17), Spell (PF2,F7), Macro (PF3,F18)

These and a variety of other features have the potential to be very CPU-intensive, depending upon the amount of data involved and the amount and speed of user interaction.

Graphics Operations

Graphics manipulation and display operations always consume more CPU than normal text entry.

Display of rotated bitmapped graphics is very CPU-intensive, especially on high-resolution displays.

Display and manipulation of vector graphics tends to be more efficient than bitmapped graphics operations.

Graphics Screen Drivers

- **Text Mode**
The Text Mode graphics screen driver is less CPU and I/O-intensive than higher-resolution graphics options.
- **SIXEL (Bitmap)**
Due to its superior flexibility and the fact that it displays graphics more quickly than other non-workstation, high-resolution screen drivers, the SIXEL driver is preferred for true DEC-compatible graphics terminals. You should be aware, however, that CPU consumption by the SIXEL driver is greater than for most other drivers, and it increases with screen resolution. The SIXEL graphics driver also becomes more CPU and I/O-intensive when fill patterns or graphics containing significant detail are displayed.
- **ReGIS (Vector)**
ReGIS graphics mode is I/O-intensive, especially when you are displaying bitmapped graphics or using View Document (PF1,F13,6) in WordPerfect. Currently there are known problems with the ReGIS driver that cause it to be especially inefficient and I/O-intensive on certain clipped polygons and wide lines.

Printing

View Document (PF1,F13,6) is CPU and I/O-intensive, but viewing a page generally uses less CPU and I/O than printing a page, because printing a page generally requires all preceding pages to be scanned by the print formatter.

Printing is CPU and I/O-intensive. Several users entering text simultaneously consumes CPU overhead similar to that required to print one document because printing generates no I/O requests to the user. This is generally compensated for by the fact that users spend more real time editing than actively printing documents. But in environments where the printing of existing documents is more frequent than document editing, or where users print many times during an editing session, you may find that the number of users supportable appears reduced.

Integrated printing is generally more efficient than spooled printing (from a system impact perspective). In addition to providing more efficient printer control and more immediate completion of user print requests, integrated printing allows the System Manager to control the system-wide CPU slice devoted to printing-related WordPerfect processing by controlling the symbiont's priority and the number of printers operated per symbiont (by using the /BASE_PRIORITY qualifier and the WPCORP\$STREAMS logical).

For example, on a queue where base priority is set to 4 and the print symbiont is set to operate 16 queues (streams), you can speed up print processing by increasing the base priority to 5 and decreasing the number of streams per symbiont to 8. While this speeds up printing, it may slow down other user processes. On the other hand, if the speed of print processing is less important, you may want to decrease the base priority to 3 and increase the number of streams per symbiont to 24.

To modify the base priority, from the DCL prompt,

1 Enter **SET QUEUE/BASE_PRIORITY=<NUMBER> <QUEUE NAME>**

The base priority would need to be set individually on each queue.

To set the number of streams per symbiont,

2 Enter **DEFINE/SYSTEM WPCORP\$STREAMS <NUMBER>**

Memory

Memory for a virtual memory system is like gasoline for an engine. If you try to run it on less than you need, it will run much slower and with reduced power. And without proper tuning, things get even worse. Digital Equipment Corporation provides a variety of resources to help you tune your system for a specific workload.

If all WordPerfect image and resource files are installed for shared access on a particular system, memory consumed by WordPerfect users is greatly reduced. However, the remaining memory requirements can vary greatly. The document buffer uses a significant portion of the total non-shared memory, as well as the total open and temporary file requirements of WordPerfect. One user with several active document screens in one WordPerfect session uses more memory and file resources than one user with one active WordPerfect buffer, but less

than one user with several WordPerfect sessions, each with one active document.

Performance-related restrictions can be implemented by using the WordPerfect Global Setup Utility to restrict user access to various WordPerfect features. See *WordPerfect Global Settings in System Setup and Customization* for information on how access to specific features can be locked or restricted.

Speller Management Utility

You can use the Speller Management Utility (SMU) to create or change dictionaries, add or delete words, convert a WordPerfect 4.2 dictionary to 5.0 format, or combine different speller dictionaries. The SMU can also be used to optimize dictionaries after adding or deleting words so that spell-checking will be as fast and efficient as possible.

To access the SMU,

- 1** Enter **WP50/SMU** at the DCL prompt.

The main Speller Management Utility menu appears.

- 2** Select an option from the menu and respond to the prompts.

While in any menu, if you make a mistake and want the SMU to ignore a change you have made, you can press **Cancel (F7)** or select **Cancel** from the displayed menu.

When you have finished,

- 3** Press **Exit (F13)** to exit the SMU and return to DCL.

Options

The main Speller Management Utility menu displays the following options:

Change/Create Dictionary

Select this option when you want to create a new dictionary or when you want to make changes to a dictionary that is different than the one currently selected. When you select this option, you will be prompted to enter the name of the dictionary you want to create or edit. If the filename you enter is for a new dictionary, you will be asked to confirm creation of the filename you entered.

Add Words to Dictionary

By selecting this option, you can add words to the common word list or to the main word list used by the WordPerfect speller. You can also choose to enter new words from the keyboard or you can enter the name of a WordPerfect file that contains the words to be added.

Delete Words from Dictionary

You can select this option when you want to delete words from the common word list or from the main word list used by the WordPerfect speller. You can also choose to enter the words from the keyboard or you can enter the name of a WordPerfect file that contains the words to be deleted.

Optimize Dictionary

After making any significant changes to a dictionary, such as adding or deleting several dozen words or converting or combining dictionaries,

you should *optimize* the dictionary file. By optimizing, the dictionary file is resorted and condensed, and makes the speller operate faster and more efficiently.

Display Common Word List

Whenever you use the Spell feature, WordPerfect searches first in a *common word list*, which contains a list of frequently-used words, and then searches in the *main word list*. This enables the speller to function as quickly and efficiently as possible. Before adding or deleting words, you may want to view the list to confirm whether or not specific words are already contained in the list. When you select this option, the first 48 words in the common word list are displayed in alphabetical order on the screen. By pressing any key, the next 48 words in the list are displayed.

Check Location of a Word

Select this option when you want to find out if a word is contained in the current dictionary, and if so, whether it is in the common or the main word list. After you select this option, the "Word to check:" prompt appears. After you enter the word, the SMU displays "Found in common word list," "Found in main dictionary," or "Not found."

Look Up

This option works exactly like the Look Up feature in the WordPerfect Speller. After you select this option, the "Word pattern:" prompt appears, and you can enter any word pattern you want to search for, using the standard ? and * VMS wildcards. For example, *re?d* matches "read" and "reed" but not "red." *Bl*ot* matches "blot," "Blackfoot," and "bloodshot." *Bl*fo?t* matches "Blackfoot" only. The SMU displays a list of all words that match the pattern you entered.

Phonetic Look Up

This option allows you to search phonetically for a word for which you do not know the correct spelling. When you enter a phonetic spelling for a word, the SMU will search for and display any words in the current dictionary that sound similar to the word you entered.

Convert 4.2 Dictionary to 5.0

If you have added words to the main WordPerfect 4.2 speller dictionary and want to include these words in the 5.0 speller dictionary, you will need to convert the 4.2 dictionary to 5.0 format. When you select this option, you are prompted to enter the filename of the 4.2 dictionary to be converted, followed by the name of the 5.0 dictionary. After entering the two filenames, the SMU begins converting the file, displaying messages on the screen to inform you about the progress of the conversion. When the conversion is completed, you are returned to the main SMU menu. The conversion will take approximately 20 minutes, depending upon the system.

All that is needed to convert a 4.2 supplementary dictionary to 5.0 format is to retrieve it into WordPerfect 5.0 and then save it with a new filename. Then, from the Setup: Location of Auxiliary Files menu, select Supplementary Dictionary (7), and enter the new filename.

Combine Other 5.0 Dictionary

You can select this option if you have created an alternate main 5.0 speller dictionary or have converted a 4.2 dictionary to 5.0 format and want to combine it with the default 5.0 speller dictionary. When you select this option, you will be prompted to enter the name of the dictionary file you want to combine with the current main dictionary. You are then asked if you want to combine the common word lists in both dictionaries. After responding to this prompt, the SMU begins combining the files, and displays messages on the screen to inform you about the progress of the combination process. When the SMU has finished combining the files, you are returned to the main SMU menu.

Startup Options

The following qualifiers can be used to perform the specified functions when starting WordPerfect.

/ACCOUNTING

Activates the Document Accounting feature so that WordPerfect keeps track of statistics such as keystrokes, pages printed, CPU time, etc. For more information, refer to *Document Accounting* in *Technical Reference*.

/BATCH

Can be used to start WordPerfect in batch mode without a command procedure.

/CONVERT=DOCUMENT

Accesses the WordPerfect Document Convert Program for the purpose of converting documents to and from other word processing formats. See *Document Convert Program* in the *WordPerfect Reference Manual* for detailed information.

/CONVERT=GRAPHIC

Accesses the WordPerfect Graphics Convert Program for the purpose of converting graphics files to WordPerfect Graphics (WPG) format. See *Graphics Convert Program* in the *WordPerfect Reference Manual* for detailed information.

/CONVERT=MACRO

Accesses the WordPerfect Macro Convert Program for the purpose of converting WordPerfect 4.2 macros to 5.0 format. See *Macro Convert Program* in the *WordPerfect Reference Manual* for detailed information.

/GLOBAL_SETUP

Starts WordPerfect under the Global Setup utility, which the System Manager can use to restrict or limit access to specific WordPerfect features, as well as define default settings for users. Refer to *WordPerfect Global Settings* in *System Setup and Customization* for detailed information.

/IGNORE

Can be used to cause WordPerfect to ignore both global and local settings and use the WordPerfect default settings. See */GLOBAL_SETUP* above.

/IGNORE=MERGED_SETTINGS

Can be used to cause WordPerfect to ignore the global settings file and use the user's local settings only.

/LANGUAGE=<LANGUAGE>

Can be used to execute WordPerfect in a language other than the default language. If you ordered additional languages, the appropriate language resource files were copied during the installation of WordPerfect 5.0.

/MACRO=<MACRO NAME>

Can be used to automatically execute the named macro when WordPerfect is started.

/READ_ONLY

Starts WordPerfect in READ_ONLY mode. Documents retrieved can be edited but cannot be saved without assigning a new filename.

/SETTING=<LOCAL SETTINGS FILE>

Can be used to cause WordPerfect to access a specific local settings file.

/SMU

Can be used to access the WordPerfect Speller Management Utility to modify the dictionaries used by the WordPerfect Speller. Refer to *Speller Management Utility* in *Technical Reference* for detailed information.

/SYSTEM_SETUP

Can be used to access an alternate system (SYS) file.

Terminal Specifications

WPCorp products rely on a number of terminal settings that can significantly affect screen display. WPCorp products redefine only a few settings, assuming that in most cases, settings are already in an appropriate state. These settings can be divided into the following five categories:

- 1** Settings that affect how WPCorp products handle the terminal.
- 2** Settings that affect the way VMS handles the terminal while a WPCorp product is running.
- 3** Settings that cannot be automatically modified by SET, CLEAR, or SCREEN_SIZE terminal setup logicals. These settings may be changed during execution, but are not automatically restored to their original state following program execution.
- 4** Settings that are automatically set by WPCorp products unless overridden using the CLEAR terminal setup logical.
- 5** Settings that are automatically cleared by WPCorp products unless overridden using the SET terminal setup logical.

The terminal settings that can affect the execution of WPCorp products are described below. The numbers to the right of the name of each terminal setting indicate into which of the above categories the settings fall.

/ADVANCED_VIDEO (1)

Specifies that the terminal has advanced video attributes and is capable of 132 x 24 mode operation. If a terminal width is set to 132 columns and advanced video, the terminal length is set to 24 lines, otherwise the terminal length is set to 14 lines.

/APPLICATION_KEYPAD (1,3)

Sets the keypad to Applications mode so that WordPerfect features on the keypad are available. For user convenience, WPCorp recommends that the keypad be set to Applications mode. While using WordPerfect, the user can toggle between Applications and Numeric modes by pressing PF1 twice. A flashing "N" appears in the bottom right corner of the screen to remind the user when Numeric mode has been enabled. The current state of the keypad remains consistent between programs, even when the user hot-keys from WordPerfect.

/BRDCSTMBX (2,4)

Controls whether broadcast messages are sent to the announcement window. If /BRDCSTMBX is set with /NOBROADCAST clear, broadcast messages will be displayed both at the cursor position on the screen and in the announcement window at the top of the screen.

/NOBROADCAST (2,4)

Controls whether broadcast messages are displayed at the cursor position on the screen. If **/NOBROADCAST** is set with the **/BRDCSTMBX** clear, broadcast messages will be displayed both at the cursor position on the screen and in the announcement window at the top of the screen.

/DEC_CRT (1)

Specifies that the terminal can function with a minimum of DEC VT100 escape sequences (the terminal should also correctly parse unrecognized escape sequences). Without this setting, WPCorp products cannot control the screen.

/DEC_CRT2 (1)

Specifies that the terminal can function with a minimum of DEC VT200 escape sequences (the terminal should also correctly parse unrecognized escape sequences). Without this setting, WPCorp products disable the **/EIGHT_BIT** terminal setting.

/DEC_CRT3 (1)

Specifies that the terminal can function with a minimum of DEC VT300 escape sequences (the terminal should also correctly parse unrecognized escape sequences).

/NOECHO (2,5)

Controls whether VMS echoes the input lines it receives. This must be cleared for efficient line I/O to work properly.

/EDIT_MODE (1)

Specifies whether the terminal is capable of performing defined advanced editing functions such as Insert mode. Also used to enable line I/O for insertion in the middle of a line.

/EIGHT_BIT (1,2)

Indicates whether the terminal can send and receive eight-bit ASCII character codes for compose characters and more efficient escape sequence transmission. Used to decide whether to send the more efficient eight-bit escape sequences and extended characters to the terminal. VMS also strips the high bit of characters when this is not set. Automatically cleared if **DEC_CRT2** is not set. It is inconsistent to run a terminal set to eight-bit mode with this setting clear.

/ESCAPE (2,4)

Controls whether control sequences transmitted from the terminal are received as a single terminator (economizing function key interpretation).

/HOSTSYNC (2)

Controls whether VMS controls the flow of input from the terminal, or whether the input buffer simply overflows. Although it may not matter greatly whether or not this setting is set for certain environments, for others it can be very critical. For example, VT340's connected to the VAX send a large color report which will overflow the buffer if /HOSTSYNC is not enabled.

/INQUIRE (1,2)

Requests a response sequence from DEC-compatible terminals and sets many terminal settings according to the response. WPCorp recommends that terminal characteristics be set using the /INQUIRE qualifier or by manually specifying the applicable settings.

/LINE_EDITING (2,5)

Causes the F6 function key to be interpreted as Ctrl-c. WPCorp products automatically disable this setting. This has no adverse affect because an internal line editor is used.

/NUMERIC_KEYPAD (1,3)

Sets the keypad to Numeric mode to enable the entry of numbers. For user convenience, WPCorp recommends that the keypad be set to Applications mode. While using WordPerfect, the user can toggle between Applications and Numeric modes by pressing PF1 twice. A flashing "N" appears in the bottom right corner of the screen to remind the user that Numeric mode has been enabled. The current state of the keypad remains consistent between programs, even when the user hot-keys from WordPerfect.

/PAGE=nn (1,2)

Specifies the screen length. WPCorp products rely on this value being properly set so that the appropriate amount of data can be displayed on the screen. Where terminals have more rows available, WPCorp products can only drive the longer screen if this value is set correctly. Workstation windows can be set to any size (before program execution starts) and this value reports the true window size to WordPerfect so that the screen can be fully utilized.

/READSYNC (2)

Causes VMS to allow data flow from the terminal only when the program specifically asks for it. Enabling this setting adversely affects interaction.

/REGIS (1) and**/SIXEL_GRAPHICS (1)**

Specifies which graphics protocols the terminal can interpret (used if Auto-Select is chosen from the Setup: Graphics Screen Type menu in WordPerfect. Also frequently used to distinguish between VT220s and VT240s or VT320s and VT330s, since character cell design and size (for downloading soft characters) and other factors vary greatly between graphics and non-graphics terminals.

/SOFT_CHARACTERS (1)

Specifies that the soft character set may be used to display graphics, symbols, extended characters, and character settings not displayable because of the hardware capabilities of the terminal.

/TTSYNC (2)

Specifies whether VMS controls the flow of data from the program to the terminal, halting output before overflowing the terminal's buffers. WPCorp recommends that this setting be enabled.

/TYPE_AHEAD (2)

Specifies whether the terminal may accept input when the program is not specifically waiting for input. Disabling this setting adversely affects interaction.

/WIDTH=nn (1,2)

Specifies screen width. WPCorp products rely on this value being properly set so that the appropriate amount of data can be displayed on the screen. Where terminals have more columns available, WPCorp products can only drive the wider screen if this value is set correctly. Terminals can frequently be set to 132-column mode. Workstation windows can be set to any size (before program execution starts) and this value reports the true window size to WordPerfect so the screen can be fully utilized.

Troubleshooting

The following information may be helpful in identifying some of the causes of problems users may have when initially starting or running WordPerfect 5.0, and suggests some possible solutions.

Running WordPerfect

- If the "ERROR: operation requires software license" message appears when a user attempts to start WordPerfect, repeat the WPCorp licensing procedure. See *Licensing Procedure* in *Technical Reference*.
- If the "ERROR: operation requires SYSLOCK privilege" message appears when a user attempts to start WordPerfect, you need to reinstall the WordPerfect image with SYSLOCK privilege.
- If the "ERROR: unrecognized command verb" message appears after typing WP, WPCORP, or WP50, to start WordPerfect, check to see that the DCL tables have been updated.
- If the "%CLI-W-INVDEF <NAME OF IMAGE>" message appears when attempting to start WordPerfect, followed by the message that shareable images must be installed, you may need to run the WordPerfect 5.0 startup command procedure.
- If you have other WPCorp products, check to be sure that the WPCORP_STARTUP command is the *only* (WPCorp) startup in your system startup command procedure. This command executes the startups and queue integration for all WPCorp products on your system.
- If users are unable to access the Workbook (.WKB) or Graphics (.WPG) files, check to see that the protection for the WPCORP\$WP50DIR directory is set for W:RE.

Printing Problems

If you have trouble printing,

- Be sure the system's Queue Manager was started before the WPCorp queue integration.
- Make sure you have run the WPCorp queue integration procedure. If you ran the WPCORP_STARTUP procedure, your queues should be properly integrated. If you have modified your print queues and need to repeat the WordPerfect integration, turn to *Queue Integration/Deintegration* in *Printer Information*.
- Be sure that PASTHRU is set in the terminal's setup.

- If users get the "ERROR: File not found, *FILENAME.PRS*" message after selecting a printer, it may be because the incorrect location is specified for their printer files. To correct the problem, press Setup (PF1,F7), select Location of Auxiliary Files (6), and make sure that the location specified for Printer Files (5) is WPCORP\$PTRPATH and not WPCORP\$PTRDIR.
- When using Pass Through printing (printing directly from a user's terminal), if you have difficulties, this is usually due to interference from the terminal (over which WordPerfect has no control). If so, we suggest you try the Standard Printer (STANDARD.PRS) definition instead of the actual .PRS file for your printer.

Postscript Printing

If you use a postscript symbiont that uses the /PARAMETER qualifier with the PRINT command, you can define one of the following logicals to allow you to use WordPerfect integrated printing with your postscript printers.

For instance, logicals could equate to DATA_TYPE=POSTSCRIPT, as in the examples below.

```
WPCORP_PTR_<PARAMETER NUMBER>_<QUEUE NAME>_<FORM NAME> DATA_TYPE=POSTSCRIPT
```

```
WPCORP_PTR_<PARAMETER NUMBER>_<QUEUE NAME> DATA_TYPE=POSTSCRIPT
```

```
WPCORP_PTR_<PARAMETER NUMBER>_<FORM NAME> DATA_TYPE=POSTSCRIPT
```

```
WPCORP_PTR_<PARAMETER NUMBER> DATA_TYPE=POSTSCRIPT
```

The logical path priority starts with the most specific and moves to the most general, as indicated in the examples above. <PARAMETER NUMBER> represents any number from 1-8 (i.e., P1, P2, P3, etc.), thus permitting eight different parameters to be used with each logical you define. This means that up to 32 logicals can be defined using the above combinations.

WordPerfect Files

The following files are included in your WordPerfect 5.0 software.

Startup and Queue Integration

ENV000_STARTUP.COM
WPC050_STARTUP.COM
WPCORP_PTR_QUEUES.COM
WPCORP_STARTUP.COM

WPCorp Environment

AAAREADME.TERMINALS
ENV000_IMAGES.DAT
ENV000_LOGICALS.DAT
TRN\$WPCORP_PS.EXE
WPCORP_ENV_<COUNTRY CODE>.SYS
WPCORP_ENV_<LANGUAGE>.LNG
WPCORP_ENV_INIT_SHIFT_FUNCTION_KEYS.TXT
WPCORP_ENV_SHR.EXE
WPCORP_ENV_SHR.LRS
WPCORP_ENV_WP200.CHR
WPCORP_ENV_WP320.CHR
WPCORP_ENV_WP330.CHR
WPCORP_ENV_WPCHR.DRS

WordPerfect 5.0

WPC050_IMAGES.DAT
WPC050_LOGICALS.DAT
WPCORP_LICENSE.COM
WPCORP_PTR_SRV.EXE
WPCORP_WP50_<COUNTRY CODE>.SYS
WPCORP_WP50_<LANGUAGE>.TLB
WPCORP_WP50_<LANGUAGE>.LNG
WPCORP_WP50_SHR.EXE
WPCORP_WP50_US.HYL
WPCORP_WP50_US.HYC
WPCORP_WP50_US.LEX
WPCORP_WP50_US.THS
WPCORP_WPC050.CLD
WPCORP_WPC050.HLP
WPCORP_WPC050_D4.CLD
WPCORP_WPC050_D5.CLD
WPCORP_WPC050_MIX.HLP

Workbook and Sample Documents

ADDRESS.WKB
ALTI.WPM
BRIEF.WKB
CHARACTR.DOC
CHARMAP.TST
CHART.WKB
CLIENTS.WKB
COMPASS.WKB
CUSTOMER.WKB
FUTURE.WKB
GRAPH.WPG

INCOME.WKB
INVOICE.WKB
ITINERY.WKB
KERN.TST
LABELA.WKB
LETTER.STY
LIBRARY.STY
LIST.WKB
MASTER.WKB
MEMO.WKB
MINUTES.WKB
MUSICBOX.WKB
NEWS.STY
NEWSTEXT.WKB
OUTLINE.WKB
PAST.WKB
PENCIL.WPG
PRESENT.WKB
PRINTA.WPM
PRINTB.WPM
PRINTER.TST
README.WPM
RETAIL.WKB
RETAILA.WKB
SHOW.WPM
STORES.WKB
TABLE.WKB
WILL.WPM
WILLPF.WKB
WILLSF.WKB

Sample Keyboard Files

ALTERNATE.VWPK
ENHANCED.VWPK
MACROS.VWPK
WPCORP_WP42_DEFAULT.VWPK

Sample Graphics Files

Postscript-supported

AIRPLANE.WPG
AND.WPG
ANNOUNCE.WPG
APPLAUSE.WPG
ARROW1.WPG
ARROW2.WPG
AWARD.WPG
BADNEWS.WPG
BOOK.WPG
BORDER.WPG
CHECK.WPG
CONFIDEN.WPG
FLAG.WPG
GAVEL.WPG
GOODNEWS.WPG
HOURGLAS.WPG

MAPSYMBL.WPG
NEWSPAPER.WPG
NO1.WPG
PC.WPG
PRESENT.WPG
QUILL.WPG
RPTCARD.WPG
THINKER.WPG
USAMAP.WPG

Not Postscript-supported

ABAN-SU.WPG
ARCHERY.WPG
ARROW-10.WPG
ARROW-21.WPG
BALLOONS.WPG
BORDER-6.WPG
BULB.WPG
CHECKMRK.WPG
CLOCK.WPG
DINOSAUR.WPG
FRAGILE.WPG
GLOBE2-M.WPG
HANDS-2.WPG
HANDS-6.WPG
HAPPY.WPG
HOUSE.WPG
KEY.WPG
MOVIECAM.WPG
NEWS.WPG
NOSIGN.WPG
PC3.WPG
PEN.WPG
PENCIL-1.WPG
PHONE.WPG
RIBBON.WPG
SADFACE.WPG
SALE.WPG
SANTA.WPG
STAR-2.WPG
STATES-M.WPG

Document Accounting

BRIEF.WPM
EDIT.WPM
EDIT_0.WPM
FILE_SORT.WPM
FIRST.MRG
FULL.PF
FULL.WPM
GET.COM
LONG.HEADER
LONG.PF
LONG.WPM

MAIN.MENU
MATH1.MRG
MATH2.MRG
MATH3.MRG
MIN_SEC.MRG
OTHER.WPM
R.WPM
SECOND.MRG
SHORT.HEADER
SHORT.PF
SHORT.WPM
SORT.WPM
SORT1.WPM
STATS.WPM
STATS_.WPM
THIRD.MRG
TOTAL.PF
TOTAL.TEMP
TOTAL.WPM
VIEW.WPM

**WordPerfect Printer
Drivers and
Resource Files**

AAAREADME.PRINTER_LIST
ENHANDLER.PS
README.PS
STANDARD.PRS
WPCORP_PTR_USER_CONTROL.COM
WPRINT<1-25>.ALL

**Utilities and
Convert Programs**

COPYFONT.EXE
STANDARD.CRS
WPCORP_CVT_<COUNTRY CODE>.SYS
WPCORP_CVT_<LANGUAGE>.LNG
WPCORP_CVT_DOC.EXE
WPCORP_CVT_GRAPH.EXE
WPCORP_CVT_MACRO.EXE
WPCORP_WP50_SMU.EXE
WPCORP_WP50_SPW.EXE

WordPerfect Logicals

WordPerfect 5.0

The installation of WordPerfect 5.0 defines the following logicals in Executive mode in the system-wide logical table.

WPCORP\$WP50DIR

= SYS\$COMMON:[WPCORP.WPC050]

The main WordPerfect 5.0 directory containing program and resource files.

WPCORP\$UTLDIR

= SYS\$COMMON:[WPCORP.UTL000]

Location for all file conversion executable files.

WPCORP\$CVTDIR

= SYS\$COMMON:[WPCORP.UTL000]

Used by WordPerfect 5.0 and the Convert program to locate the Utility directory.

WPCORP\$PTRDIR

= SYS\$COMMON:[WPCORP.PTR000]

This directory holds the .ALL files and printer executables.

WPCORP\$DOWNLOAD

= WPCORP\$PTRDIR

Location where printer command files, download files, and soft fonts are stored.

WPCORP_PTR_SRV

= WPCORP\$PTRDIR:WPCORP_PTR_SRV.EXE

If WordPerfect 5.0 is the only WPCorp product on your system, the SMBSRVSHR logical points to this logical, which in turn points to the location containing the WordPerfect printer executable.

If you have other WPCorp products on your system, the SMBSRVSHR logical is defined to point to the WPCORP_TRF_SMB logical, which in turn points to the location containing the appropriate printer executable.

WPCORP\$WP50_MACROS

= SYS\$DISK:[].WPM, SYS\$LOGIN:[].WPM,
WPCORP\$WP50DIR:[].WPM

Logical path to where the macro (.WPM) files are stored.

WPCORP_WP42_DEFAULT

= WPCORP\$WP50DIR:WPCORP_WP42_DEFAULT.VWPK

Points to the default VT100 keyboard file.

WPCORP\$WP50_KEYBOARDS

= SYS\$DISK:[], SYS\$LOGIN, WPCORP\$WP50DIR

Logical path to where the WordPerfect keyboard (.WPK) files are stored.

WordPerfect Environment

WPCORP\$PTRPATH

= SYS\$LOGIN, WPCORP\$PTRDIR

Logical path pointing to the .PRS and .ALL printer files.

WPCORP\$SCRATCH

= SYS\$SCRATCH

The directory where WordPerfect puts all temporary files.

WPCORP_WP50_SHR

= WPCORP\$WP50DIR:WPCORP_WP50_SHR

File containing the WordPerfect 5.0 word processor.

WPCORP_WP50_000

= WPCORP\$WP50DIR:WPCORP_WP50_<COUNTRY CODE>.SYS

The default WordPerfect system file.

WPCORP_WP50_LNG

= WPCORP\$WP50DIR:WPCORP_WP50_<LANGUAGE>.LNG

The default WordPerfect language file.

WPCORP_CVT_000

= WPCORP\$CVTDIR:WPCORP_CVT_<COUNTRY CODE>.SYS

The default Convert program system file.

WPCORP_CVT_LNG

= WPCORP\$CVTDIR:WPCORP_CVT_<LANGUAGE>.LNG

Language-specific resource file for Convert program.

WPCORP_WP50_LOCALSET

= SYS\$LOGIN:WPCORP_LOCALSET

Points to the directory containing users' local settings file.

WPCORP_WP50_GLOBALSET

= WPCORP\$ENVDIR:WPCORP_GLOBALSET

Points to the directory containing system settings file.

WPCORP\$STATDIR

= SYS\$COMMON:[WPCORP.UTL000.STATISTICS]

The directory containing the files and macros used by the Document Accounting feature.

WPCORP\$ENVDIR

= SYS\$COMMON:[WPCORP.ENV000]

The main WPCorp environment directory that contains available program and resource files. If WordPerfect 5.0 is not the only WPCorp product on your system, this logical points to the WPCORP\$WPDIR logical. If WordPerfect 5.0 is the only WPCorp product on your system, this logical points to the WPCORP\$WP50DIR logical.

WPCORP_ENV_SHR

= WPCORP\$ENVDIR:WPCORP_ENV_SHR

Contains the environment files shared by all WPCorp products.

WPCORP_ENV_000

= WPCORP\$ENVDIR:WPCORP_ENV_<COUNTRY CODE>.SYS

The default environment system file.

WPCORP_ENV_LNG

= WPCORP\$ENVDIR:WPCORP_ENV_<LANGUAGE>.LNG

The default environment language file.

WPCORP_ENV_WP200

= WPCORP\$ENVDIR:WPCORP_ENV_WP200.CHR

File containing bitmapped character definitions for VT220 terminals.

WPCORP_ENV_WP320

= WPCORP\$ENVDIR:WPCORP_ENV_WP320.CHR

File containing bitmapped character definitions for VT320 terminals.

WPCORP_ENV_WP330

= WPCORP\$ENVDIR:WPCORP_ENV_WP330.CHR

File containing bitmapped character definitions for VT330 terminals.

WPCORP_ENV_WPCHR

= WPCORP\$ENVDIR:WPCORP_ENV_WPCHR.DRS

File containing vector definitions for the WordPerfect character sets.

WPCorp Command Line Descriptors (CLDs)

You can manually insert the WPCORP verb into your DCL tables. This is necessary only if the command verb was not added during the installation of WordPerfect, or if the system DCL tables have been replaced by a VMS update.

To manually insert the WPCORP verb for the current session only,

- 1 Enter **SET COMMAND**
WPCORP\$WP50DIR:WPCORP_WPC050.CLD

This inserts the WPCORP verb into the user's local command table. Since this affects the current session only, this command should be placed in the user's LOGIN.COM file so it does not have to be re-entered each time the user logs on. Or, it can also be placed in the system DCL tables.

If you also have WordPerfect 4.2 on your system, you can specify whether you want version 4.2 or version 5.0 to be called up by the WPCORP verb. To have version 5.0 as the default, specify WPCORP_WPC050_D5.CLD; to have version 4.2 as the default, specify WPCORP_WPC050_D4.CLD.)

To manually insert the WPCORP verb into the system DCL tables, follow the steps listed below.

From the DCL prompt,

- 1 Enter **INSTALL:==\$INSTALL/COMMAND**

This command assigns a symbol for the Install utility.

- 2 Enter **INSTALL**

This command invokes the Install utility and displays the **INSTALL>** prompt.

From the **INSTALL>** prompt,

- 3 Enter **LIST/FULL SYS\$LIBRARY:DCLTABLES**

This will list the full pathname of the DCL tables currently installed. The full pathname (e.g., DUA1:[SYS0.SYSLIB]DCLTABLES.EXE) must be specified when entering the commands in the instructions below.

- 4 Press **Ctrl-z** to exit the **INSTALL** utility.

- 5 Enter **SET COMMAND**
WPCORP\$WP50DIR:WPCORP_WPC050.CLD/TABLE=<FULL PATHNAME>/OUTPUT=<FULL PATHNAME>

- 6 Enter **INSTALL**

From the INSTALL> prompt,

7 Enter LIST/GLOBAL/SUMMARY

This command checks the number of unused global pages before replacing DCLTABLES. Compare the size of DCLTABLES.EXE with the unused global pages to insure a successful installation of the modified DCL tables.

8 Enter REPLACE/HEAD/OPEN/SHARE <FULL PATHNAME>

This replaces the original DCL tables with DCL tables that have the WPCORP verb inserted.

9 Press Ctrl-z to exit the Install utility.

To remove the WPCORP verb from the system DCL tables,

1 Enter SET COMMAND/DELETE=WPCORP/TABLE=<FULL PATHNAME>/OUTPUT=<FULL PATHNAME>

2 Repeat steps 6 through 8 above.

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WordPerfect Corporation • 1555 N. Technology Way • Orem, Utah 84057 U.S.A.
Telephone: (801) 222-5500 • Telex: 820618 • FAX: (801) 222-5577