WPS–PLUS/VMS Installation

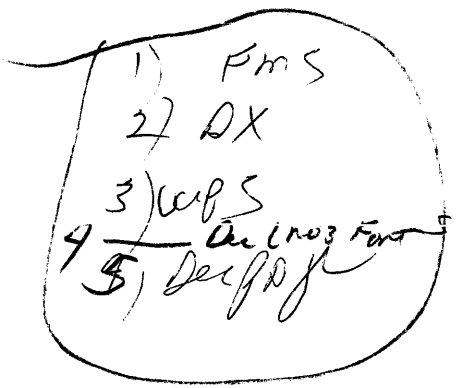
Order Number: AA–BL46E–TE

This manual describes how to install WPS–PLUS/VMS.

Operating Systems: VAX/VMS V4.6, V4.7 or V5.0

Software Version: V3.0

ORDER of INSTALLATION



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Preface

This manual describes how to install and maintain WPS–PLUS/VMS. You should review the entire guide before you start the installation.

Audience

This guide is for VMS system managers or others responsible for installing WPS–PLUS/VMS software.

Prerequisites

To install WPS–PLUS/VMS software, you must have access to a privileged account and be familiar with the VAX/VMS installation procedure (VMSINSTAL). You should also be familiar with VAX/VMS system management.

Associated Documents

For VMS Versions 4.x:

- *Guide to VAX/VMS Software Installation*
- *Guide to Setting up a VMS System*
- *Guide to VAX/VMS System Management and Daily Operations*
- *Guide to VAXclusters*

For VMS Versions 5.x:

- *VMS System Manager's Manual*
- *VMS VAXcluster Manual*
- *VMS Install Utility Manual*
- *VMS Authorize Utility Manual*

For details about how to use WPS–PLUS, refer to the following documents:

- *WPS–PLUS/VMS Getting Started*
- *WPS–PLUS on VMS*
- *WPS–PLUS/VMS Editor Functions*
- *WPS–PLUS/VMS List and Sort Processing*
- *WPS–PLUS/VMS Quick Lookup*
- *WPS–PLUS/VMS Applications for Experienced Users*
- *WPS–PLUS/VMS Glossary*
- *WPS–PLUS/VMS Keyboard Reference Cards*
- *WPS–PLUS/VMS Accessing External Applications*
- *WPS–PLUS/VMS Guide to Modifying Printer Tables*

Conventions

This manual uses the following conventions:

Convention	Meaning
CTRL/x	Means hold down the CTRL key while you press the designated letter key.
DECmate	Means DIGITAL DECmate II or DIGITAL DECMate III.
Enter	Means type your response then press a terminator key such as RETURN.
Dot Matrix Type	Indicates text that appears on your screen.
GOLD/x	Means press the GOLD key, labeled PF1 on some keypads, then a function key.
Red Print	Indicates commands you enter or responses to prompts.
RETURN	Means press the RETURN key.
WPS–PLUS	Means the WPS–PLUS/VMS™ software.

Chapter 1

Preparing to Install WPS–PLUS/VMS Software

For successful installation of WPS–PLUS, it is important that you follow the procedures in all four chapters of this book:

- Chapter 1 discusses the preparations and requirements necessary for installing WPS–PLUS
- Chapter 2 describes the installation procedure
- Chapter 3 contains important post–installation information and procedures
- Chapter 4 describes the post–installation verification procedure

WPS–PLUS installation is not complete until you have completed all the procedures in this manual.

Your bill of materials (BOM) and indented bills report (BIL) specify the number and contents of your media. Be sure to verify the contents of your kit with this information. If your kit is damaged, or if you find that parts of it are missing, contact your DIGITAL representative.

The WPS–PLUS software provides online Release Notes. DIGITAL strongly recommends that you read the Release Notes before you proceed with the installation.

Required Operating System Components

The WPS–PLUS software supports all VMS V5.0 classes.

Prerequisite and Optional Software

This section discusses the software you must have installed on your system before you install WPS–PLUS. The section also includes information about software that you can use with WPS–PLUS.

Required Software

To install the WPS–PLUS software you must have:

- A valid VAX/VMS operation system configuration running VAX/VMS Version 4.6, 4.7 or 5.0, or MicroVMS Version 4.6 or 4.7.
- VAX/VMS FMS Version 2.3 – forms driver kit only. The forms driver kit is included in the complete FMS product kit, but also may be purchased separately. The complete FMS product kit is not required.

NOTE

WPS–PLUS/VMS requires the installation of the FMS forms driver, SYS$SHARE:FDVSHR.EXE, as a known shareable image.

The WPS–PLUS installation procedure checks for prerequisite software. If the required software is not installed on your system, the installation terminates.

Optional Software

The following products can be integrated into WPS–PLUS V3.0:

- DECpage V3.0
- VAX Grammar Checker V1.0

- Optional lexicons

  American Business V2.0
  American Medical V2.0
  British Language V2.0
  German Language V2.0
  French Language V2.0

  NOTE

  WPS–PLUS V3.0 requires that you use Versions 2.0 of the optional lexicons. Earlier versions of the lexicons will not function with WPS–PLUS V3.0.

Each of the optional products has its own installation procedure.

VAXcluster Configurations

You can install WPS–PLUS.VMS V3.0 software on any of three VAXcluster configuration types: Computer Interconnect–only VAXclusters, Local Area VAXclusters, and Mixed–interconnect VAXclusters.

The sections that follow describe the types of cluster and provide installation information specific to each cluster. The sections also define the operating environments. For information about installation procedures for VAXcluster configurations, see the section entitled Installing WPS–PLUS on a VAXcluster Configuration in Chapter 3 of this guide. For more information, see the *VMS VAXcluster Manual* in your VMS documentation.

VAXcluster Configuration Types

You can install WPS–PLUS/VMS V3.0 on the following types of clusters, using the procedure described in Chapter 3:

- Computer Interconnect (CI)–only VAXcluster configuration

  CI–only clusters use the computer interconnect for interprocessor communication, with the Star Coupler as the common connection point for all cluster nodes. Cluster nodes may be any VAX processors specified in the VAXcluster Software Product Description, or they may be Hierarchical Storage Controllers (HSCs).

- Local Area VAXcluster configurations

  Local area clusters consist of a boot server (a VAX or MicroVAX containing all the disks from which WPS–PLUS is run) connected by Ethernet to a number of satellite nodes. A satellite node is usually a MicroVAX. If you are running a version of VMS prior to Version 4.7, none of the nodes on the Local Area VAXcluster system can have a Computer Interconnect–only (CI) port.

  With local area clusters, install WPS–PLUS on the boot server only, using the pre–installation and installation procedures described in Chapters 1 and 2. Do not install WPS–PLUS on the satellite nodes. Satellite nodes, which are used by the individual work groups only, use the boot server to access WPS–PLUS. You must, however, check the VMS system parameters for each node on which you are going to run WPS–PLUS. See the System Parameters section later in this chapter.

- Mixed–interconnect VAXcluster Configurations

  Mixed–interconnect clusters are available for the first time with VMS V5.0. A Mixed–interconnect cluster may include VAX processors, HSCs, and MicroVAX satellite nodes. The procedure for installing WPS–PLUS software on a Mixed–interconnect VAXcluster system is the same as that for installing on a Local Area VAXcluster system.

Installation Procedure Requirements

The following sections discuss various requirements for installing WPS–PLUS software.

Time

The installation should take approximately 2 hours, depending on your type of media and your system configuration.

Privileges

Install WPS–PLUS from the system manager's account, with full privileges.

Note that the VAX/VMS installation procedure (VMSINSTAL) turns off the BYPASS privilege at the start of the installation.

Disk Space

WPS–PLUS installation requires a certain amount of free storage disk space. Once installation is complete, less storage space is required. Table 1–1 summarizes the storage requirements for WPS–PLUS.

Table 1–1: Disk Space Requirements

Kit	Blocks During Installation on System Disk	Blocks After Installation on System Disk
WPS–PLUS Version 3.0	25,000	6,000
Kit	**Blocks During Installation on Target Disk**	**Blocks After Installation on Target Disk**
WPS–PLUS Version 3.0	15,000	15,000

NOTE

If you specify the system disk as the target disk, you need a total of 21,000 blocks on the system disk after the installation. This total is determined by adding together the number of blocks needed on the system disk and the number of blocks needed on the target disk.

To determine the number of free disk blocks on the current system disk, enter the following command at the DCL prompt:

```
$ SHOW DEVICE SYS$SYSDEVICE
```

System Parameters

Table 1–2 lists the minimum required system parameter values for the installation. The table lists only nonstandard parameter settings. SYSGEN default values are adequate for those settings not listed. Depending on the kinds of programs and applications running at your site, you may need higher values for some settings.

NOTE

If your system's current SYSGEN parameters are set at higher values than those listed in Table 1–2, do not reduce those values.

Table 1–2: Minimum Required System Parameter Values

System Parameter	Value
CLISYMTBL[1]	250
GBLPAGES[2]	n + 3500
GBLSECTIONS[2]	n + 35
LOCKIDTBL[3]	340
RESHASHTBL[4]	85
VIRTUALPAGECNT	20000
TTY_BUF	140
TTY_TYPAHDSZ	160
WSMAX	3000

[1]The CLISYMTBL dynamic system parameter must be set to a minimum value of 250 during the installation procedure. If the CLISYMTBL setting is less than 250, you can lower the setting to its original value once the installation is finished.

[2]The n variable refers to the system parameter values that are currently in use. To install WPS–PLUS, you must raise those values by the number indicated. (See Calculating the Values for GBLPAGES and GBLSECTIONS later in this chapter.)

[3]The formula for calculating the LOCKIDTBL parameter is 80 + (40 x maximum number of simultaneous users).

[4]The formula for calculating the RESHASHTBL parameter is 1/4 x the value of LOCKIDTBL.

The following sections of this chapter show you how to:

- Check system parameter values
- Calculate values for the GBLPAGES and GBLSECTIONS system parameters
- Change GBLPAGES, GBLSECTIONS, and other parameter values (with the exception of CLISYMTBL) using the VMS AUTOGEN command procedure
- Set the CLISYMTBL dynamic system parameter using the VMS System Generation Utility (SYSGEN)

Checking System Parameter Values

To check the values of your system parameters, enter the following command at the DCL prompt to invoke the SYSGEN utility:

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN>
```

At the SYSGEN> prompt, enter the SHOW command to display the value of each system parameter. The values displayed should equal or exceed the value of each parameter listed in Table 1–2. For example, the following command displays the value for the WSMAX system parameter:

```
SYSGEN> SHOW WSMAX
```

After you finish checking the parameters with the SHOW command, enter the EXIT command at the SYSGEN> prompt to return to DCL level.

Calculating the Values for GBLPAGES and GBLSECTIONS

To install and run WPS–PLUS, you must set the correct values for the GBLPAGES and GBLSECTIONS system parameters.

The n + 3500 and n + 35 values for GBLPAGES and GBLSECTIONS in Table 1–2 indicate that you must have at least 3500 unused pages and 35 unused sections available on your system for the installation to process successfully.

To calculate how many unused global pages and global sections your system has, complete the following steps:

1. Run the VMS Install Utility (INSTALL) using the following DCL commands:

```
$ INSTALL :== $SYS$SYSTEM:INSTALL/COMMAND_MODE
$ INSTALL LIST/GLOBAL/SUMMARY
```

   If you are installing under VMS V5.x, the first line in this example is not necessary.

   The INSTALL utility displays a summary of global pages and global sections used by your system, as well as the current number of unused global pages. For example:

```
                    Summary of Local Memory Global Sections

248 Global Sections Used,  22580/3420 Global Pages Used/Unused
```

2. Determine if the number of unused pages (3420 in the example) is equal to or greater than the number specified in Table 1–2. If the number of unused pages is less than the number listed in the table, you need to increase the value for GBLPAGES.

   For example, using the figures from the summary shown above, you would need to increase GBLPAGES by 26080. The process used to calculate that value is:

```
      22580  Used Global Pages
    +  3420  Unused Global Pages
    -------
      26000  Current Value of GBLPAGES

And:
      3500   Required GBLPAGES for WPS-PLUS
    - 3420   Unused Global Pages
    ------
        80   Remainder

Then:

     26000   Current Value of GBLPAGES
    -   80   Remainder
    ------
     26080   Increase GBLPAGES by this amount
```

You should run AUTOGEN after changing these and other system parameter values. The section Changing System Parameter Values with AUTOGEN in this chapter describes the procedures for running VMS AUTOGEN and for increasing the values of other system parameters. Refer to the VMS documentation on System Management and Operations for more information.

3. For GBLSECTIONS, first note the amount shown for "Global Sections Used" (248 in the example).
4. Run the SYSGEN utility and use the SHOW command to determine the number of allocated global sections, using the following commands:

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN> SHOW GBLSECTIONS

Parameter Name  Current  Default  Minimum  Maximum Unit Dynamic
--------------  -------  -------  -------  ------- ---- -------
GBLSECTIONS       250      250       20      4095 Sections
```

5. Subtract the amount shown in the summary used in the GBLPAGES section (248) from the current amount allocated (250 in this example). If the difference is less than the number required in Table 1–2, you need to increase the value of the GBLSECTIONS parameter.

   For example, using the figures from the summaries shown above, you would need to increase GBLSECTIONS by 283. The process used to calculate that value is:

```
          250  Current Value of GBLSECTIONS
      -   248  Global Sections Used
      -------
            2  Unused Global Sections

And:
           35  Global Sections Required (from Table 1-2)
      -     2  Unused Global Sections
      -------
           33  Remainder

Then:
          250  Current Value of GBLSECTIONS
      +    33  Remainder
      ------
          283  Increase GBLSECTIONS by this amount
```

You should run AUTOGEN after changing these and other system parameter values. The following section, Changing System Parameter Values with AUTOGEN, describes the procedures for running VMS AUTOGEN and for increasing the values of other system parameters. Refer to the VMS documentation on System Management and Operations for more information.

Changing System Parameter Values with AUTOGEN

Use the AUTOGEN command procedure to change GBLPAGES, GBLSECTIONS and other system parameters.

NOTE

Use the VMS SYSGEN Utility to change CLISYMBTL, as described later in this chapter.

AUTOGEN automatically adjusts values for other system parameters that are associated with the ones you reset manually. When you have made the required changes to the system parameters, AUTOGEN performs an automatic system shutdown, and reboots the system when it has finished. Rebooting your system activates the new parameter values.

NOTE

Before you run AUTOGEN, make sure all users are logged off your system.

To change system parameters with AUTOGEN:

1. Edit the following file:

   ```
   SYS$SYSTEM:MODPARAMS.DAT
   ```

2. Add a line for each setting you want to change. For example, to change the setting for the WSMAX system parameter, add this line to the file:

   ```
   WSMAX = 3000
   ```

   See the instructions for modifying system parameters using AUTOGEN in the VMS documentation on System Management and Operations for more specific information.

3. Run the AUTOGEN procedure by entering the following command at the DCL prompt:

```
$ @SYS$UPDATE:AUTOGEN GETDATA REBOOT
```

AUTOGEN recalculates the system parameters you changed, and automatically adjusts any other system parameters affected by those changes. AUTOGEN automatically reboots your system.

On VMS V5.x systems you may wish to add the [NO]FEEDBACK parameter to the AUTOGEN command line.

For more information about using AUTOGEN, see the VMS documentation on System Management and Operations.

Setting the CLISYMTBL Dynamic System Parameter

Unlike the other system parameters you changed using AUTOGEN, you use the SYSGEN Utility to change CLISYMTBL. CLISYMTBL is a dynamic parameter, and dynamic parameters changed with the SYSGEN utility become active immediately, without rebooting your system.

Since rebooting returns CLISYMTBL and other dynamic system parameter values to their previous settings, and because AUTOGEN reboots your system automatically, it is important to change CLISYMTBL *after* you have run AUTOGEN to change the other system parameters.

If the CLISYMTBL system parameter value for your system is less than 250, change the setting by using the following series of commands:

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN> USE ACTIVE
SYSGEN> SET CLISYMTBL nnn
SYSGEN> WRITE ACTIVE
SYSGEN> EXIT
```

Once the installation is complete, you can use SYSGEN to reset CLISYMTBL to its previous setting, or let it be reset automatically when you reboot your system again. You do not have to maintain the CLISYMTBL setting at 250 or greater to run WPS–PLUS. That value is only necessary for installation.

Process Account Quotas

The account you use to install WPS–PLUS must have sufficient quotas to enable you to perform the installation. Table 1–3 summarizes the process quotas required to perform the installation.

Table 1–3: Process Account Quotas for the Installing Account

Account Quota	Value
ASTLM	80
BIOLM	50
BYTLM	36000
DIOLM	18
ENQLM	200
FILLM	150
PGFLQUO	20000
PRCLM	6
TQELM	50
WSDEF[1]	256
WSEXTENT	2048
WSQUO	512

[1]The values for WSEXT and WSQUO must be equal to or greater than the WSDEF value.

User account quotas are stored in the file SYSUAF.DAT. You use the VMS Authorize Utility to verify and change user account quotas. First set your directory to SYS$SYSTEM and then run AUTHORIZE:

```
$ SET DEFAULT SYS$SYSTEM
$ RUN AUTHORIZE
UAF>
```

At the AUTHORIZE prompt (UAF>), use the SHOW command with an account name to check a particular account. For example:

```
UAF> SHOW SMITH
```

To change a quota, use the MODIFY command at the UAF> prompt. MODIFY has the following format:

```
MODIFY account-name/quota-name=nnnn
```

This example changes the FILLM quota for the SMITH account and then exits from the Authorize Utility:

```
UAF> MODIFY SMITH/FILLM=150
UAF> EXIT
```

After you exit from the utility, the VMS system displays messages indicating whether or not changes were made. Once the changes have been made, you must log out and log in again for the new quotas to take effect.

For more information on modifying account quotas, see the VMS documentation on the AUTHORIZE Utility.

Checking Installed Images

Before you can run VMSINSTAL, you must make sure that the following shareable images are installed on your system:

SYS$SHARE:VAXCRTL.EXE
SYS$SHARE:MTHRTL.EXE
SYS$SHARE:LBRSHR.EXE
SYS$SHARE:FDLSHR.EXE
SYS$SHARE:FDVSHR.EXE
SYS$MESSAGE:FDVMSG.EXE

To see if the above files are installed, use the VAX/VMS Install Utility (INSTALL). (The Install Utility is described in the *VAX/VMS Utilities Reference Volume.*)

```
$ INSTALL :== $SYS$SYSTEM:INSTALL/COMMAND_MODE
$ INSTALL
INSTALL>
```

At the INSTALL prompt (INSTALL>), enter the logical name and the file name for each of the images listed above, using the LIST command. For instance, the following example checks the FDVSHR.EXE image, finds it installed on SYS$DEVICE, then exits from the INSTALL utility.

```
INSTALL> LIST SYS$SHARE:FDVSHR.EXE
SYS$DEVICE:<SYS0.SYSLIB>.EXE

  FDVSHR;3    Open    Hdr  Shar      Lnkbl

INSTALL> EXIT
```

If any image is not installed, VMSINSTAL notifies you that the file entry was not found in the share table. For details on installing image files, see the VMS documentation on Software Installation.

Update Installations

If you are updating from WPS–PLUS V2.1, make sure that all of the WPS–PLUS logicals are defined correctly by invoking the WPLSTART.COM file:

```
$ @SYS$MANAGER:WPLSTART.COM
```

VMSINSTAL Requirements

When you invoke VMSINSTAL, it checks for the following:

- Your default device and directory is set to SYS$UPDATE.
- You are logged in to a privileged account.
- You have adequate quotas for installation.
- DECnet is up and running.
- All users are logged off the system.

If VMSINSTAL detects any problems during the installation, it notifies you of the problem and asks if you want to continue the installation. In some instances, you can enter YES to continue. To stop the installation process and correct the situation, enter NO or press RETURN. Then correct the problem and restart the installation.

Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks if you have backed up your system disk. DIGITAL recommends that you do a system disk backup before installing any software on top of the operating system.

Use the backup procedures that have been established at your site. For details on performing a system disk backup, see the section on the Backup Utility in the VMS documentation set.

Chapter 2

Installing WPS–PLUS

This chapter describes how to install the WPS–PLUS software and contains step–by–step instructions for the procedure. See Appendix A for an example of a sample installation.

After completing the steps in this chapter, be sure to follow the instructions and procedures described in Chapters 3 and 4.

Chapter 3 contains essential post–installation information and procedures. Chapter 4 describes the post–installation verification procedure.

Accessing the Online Release Notes

The WPS–PLUS software provides online Release Notes. DIGITAL strongly recommends you read the Release Notes, which contain important information about changes, restrictions, or limitations to the product.

Specify OPTIONS N when you invoke VMSINSTAL, and the installation procedure will ask you if you want to display or print the Release Notes.

After the software has been installed, the Release Notes are in:

```
SYS$HELP:WPLENGLISH030.RELEASE_NOTES
```

Running the Installation Verification Procedures

There are two WPS–PLUS installation verification procedures (IVPs).

- The first IVP runs as part of VMSINSTAL and verifies the software installation. During the installation, you will be asked if you want to run the VMSINSTAL IVP as part of the installation. If you respond YES, VMSINSTAL runs the IVP.
- The second IVP should be performed independently after the software is installed, and verifies that the software is available on your system. Chapter 4 in this book describes the post–installation IVP.

Aborting the Installation

To abort the installation procedure at any time, press CTRL/Y. When you press CTRL/Y, the installation procedure deletes all files it has created up to that point and exits.

The Installation Procedure

The WPS–PLUS installation procedure consists of a series of questions, prompts, and informational messages.

NOTE

If you are updating WPS–PLUS, make sure no one is using WPS–PLUS before beginning the installation.

Invoking VMSINSTAL

To start the installation, invoke the VMSINSTAL command procedure from a privileged account, such as the SYSTEM account. Next, invoke VMSINSTAL, using the following syntax:

```
@SYS$UPDATE:VMSINSTAL WPLENGLISH030 MFA0: OPTIONS N
```

031

product-name

The installation name for the component. For the English Language Version of WPS–PLUS, use the installation name WPLENGLISH030 as in the example above.

device-name

The name of the device on which you plan to mount the media. For example, MFA0: in the example above is the device name for a tape drive. (It is not necessary to use the console drive for this installation. However, if you do use the console drive, you should replace any media you removed once the installation is completed.)

OPTIONS N

An optional parameter that indicates you want to be prompted to display or print the Release Notes. DIGITAL strongly recommends that you read the Release Notes before proceeding with this installation.

VMSINSTAL has several other options. For information, see the VMS documentation on Software Installation.

The following example displays the command to invoke VMSINSTAL to install WPS–PLUS from tape drive MFA0:, and shows the system response. This example uses the OPTIONS N parameter for printing or displaying Release Notes.

```
$ @SYS$UPDATE:VMSINSTAL WPLENGLISH030 MFA0: OPTIONS N

      VAX/VMS Software Product Installation Procedure

It is 30-SEP-1988 at 12:34
Enter a question mark (?) at any time for help.
```

If you supply neither the product name nor the device name, VMSINSTAL prompts you for this information later in the installation procedure.

VMSINSTAL does not prompt you for any options, so be sure to include OPTIONS N on the VMSINSTAL command line to access the Release Notes during the installation.

Installation Questions

This section discusses the questions that appear during the installation. See Appendix A for a sample installation procedure.

Each question in the installation is marked with an asterisk (*) at the beginning of the line. Some questions show the default response in brackets: for example [YES]. If you want to give the default response, press the RETURN key.

1. DECnet status

   VMSINSTAL notifies you if DECnet is running and displays a list of all active processes. It then asks if you want to continue the installation. You can install WPS–PLUS with DECnet up and running.

   ```
   %VMSINSTAL-W-DECNET, Your DECnet network is up and running.
   *Do you want to continue anyway [NO]? YES
   ```

2. System backup

   VMSINSTAL asks if you are satisfied with your system backup. You should always back up your system disk before performing an installation. If you are satisfied with the backup of your system disk, press RETURN. Otherwise, enter NO to discontinue the installation. After you back up your system disk, you can restart the installation.

   ```
   * Are you satisfied with the backup of your system disk [YES]?
   ```

3. Mounting the media

   You should now mount the first distribution volume on the device you specified when you invoked VMSINSTAL. VMSINSTAL then asks if you are ready to continue the installation.

   If you respond YES to indicate that you are ready, VMSINSTAL displays a message that the media containing WPS–PLUS has been mounted on the specified device and that the installation has begun. For example:

```
Please mount the first volume of the set on MFA0:.

* Are you ready? YES

%MOUNT-I-MOUNTED, WPLENG mounted on _MFA0:

The following products will be processed:

WPLENGLISH V3.0

    Beginning installation of WPLENGLISH V3.0 at 12:35

%VMSINSTAL-I-RESTORE, Restoring product saveset A...
```

To stop the installation at this point, enter NO in response to the question, "Are you ready?" To abort the installation for other reasons, at any time, press CTRL/Y.

4. Release Notes

   If you specified OPTIONS N when you invoked VMSINSTAL, you are now given options for reviewing the Release Notes.

   On a VMS Version 4.6 or 4.7 system you see this message:

```
Release Notes Options:

    1. Display Release Notes
    2. Print Release Notes
    3. Both 1 and 2

* Select option [3]:
```

   Option 3 is the default. To select 3, press RETURN.

   On a VMS Version 5.0 system you see this message:

```
Release Notes Options:

    1. Display Release Notes
    2. Print Release Notes
    3. Both 1 and 2
    4. Copy release notes to SYS$HELP
    5. Do not display, print or copy release notes

* Select option [2]:
```

   Option 2 is the default. To select 2, press RETURN.

5. You are prompted for a print queue:

```
* Queue name [SYS$PRINT]:
```

Press RETURN to print the release notes on SYS$PRINT, or type a different queue name and press RETURN. You receive a message similar to the following:

```
Job WPLENGLISH030 (queue SYS$PRINT, entry 159) started on SYS$PRINT
```

6. Continuing the installation

   The installation procedure now asks if you want to continue the installation. To continue, enter YES. Otherwise, press RETURN. In either case, the Release Notes are copied to a file in the SYS$HELP directory. For example:

```
* Do you want to continue the installation [N]?: YES

%VMSINSTAL-I-RELMOVED, The products Release Notes have been
successfully moved to SYS$HELP.
```

   The Release Notes are located in the following file:.

```
SYS$HELP:WPLENGLISH030.RELEASE_NOTES.
```

NOTE

> The name of the Release Notes file installed by VMSINSTAL consists of the current product name and version number. Do not delete Release Notes for previous versions of WPS–PLUS.

7. Choosing to purge files

   You have the option of purging files from previous versions of WPS–PLUS that are superseded by this installation. Purging is recommended; however, if you need to keep files from the previous versions, enter NO in response to the question.

```
*Do you want to purge files replaced by this installation [YES]?
```

8. Running the IVP

   You have the option to run the VMSINSTAL Installation Verification Procedure (IVP) automatically after installing WPS–PLUS. The IVP verifies that the software is available on your system. DIGITAL recommends that you run the VMSINSTAL IVP.

```
*Do you want to run the IVP after the installation [YES]?
```

VMSINSTAL will now check for prerequisite software.

```
%WPLENGLISH-I-CHKGBL, Checking that required system parameters are
correct
%WPLENGLISH-I-UAFCHK, Checking process quotas (SYSUAF) for the
current process
```

9. Selecting installation type

   After the prerequisite software check is complete, select the number of the installation type you would like to perform.

```
Please select the number of the installation type you would like
to perform.

1)  Full installation on a clean machine
2)  Upgrade of WPS-PLUS/VMS V2.1    to WPS-PLUS/VMS V3.0
3)  Upgrade of WPS-PLUS/VMS V3.0    to WPS-PLUS/VMS V3.0
4)  Upgrade of WPS-PLUS/VMS BEV2.1  to WPS-PLUS/VMS V3.0
5)  Installation of additional language only

*What installation type do you want to perform [1]:
```

10. Library Files

    This step applies only if you chose installation type 1) in Step 9 above: Full installation on a clean machine. If you chose another type of installation, skip this step and proceed to Step 11.

    Provide the name of the disk on which you want to install the WPS–PLUS files in response to the following prompt:

```
*Which disk will hold the WPS-PLUS/VMS library files [SYS$SYSDEVICE:]?
```

    As the installation procedure creates the WPS–PLUS directory and subdirectories, the following messages will display:

```
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSROOT:[SYSTEST.WPLENGLISH].
Creating a WPS-PLUS/VMS directory
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS].
Creating required WPS-PLUS/VMS sub-directories
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.SCP_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.BLP_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.IVP_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.CBI_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.PRINT].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.LIB_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.LIB_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DO_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DO_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DATA_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DATA_ENGLISH].
```

11. Selecting Date and Time

    After you have chosen the date and time format and completed this installation, you cannot change the date and time format unless you re–install the WPS–PLUS software.

    Choose the date and time formats by responding as follows:

```
Please select the number of the date format that you would
like to use.

 1) dd mm yy
 2) mm dd yy
 3) yy mm dd
 4) yyyy mm dd
 5) dd mmm yyyy   (mmm = 3 char month, DEC standard)
 6) yyyy mmm dd

* What date format do you want [5]:

Please select the number of the date separator that you would
like to use.

 1) dash   (-)
 2) slash  (/)
 3) period (.)
 4) comma  (,)
```

```
* What date separator do you want [1]:

Please select the number of the time separator that you would
like to use.

 1) colon  (:)
 2) period (.)
 3) comma  (,)

* What time separator do you want [1]:

You have chosen a date and time format of 19-JUL-1988  18:34:19

* Is this correct [YES]?
```

The steps remaining in the installation procedure do not require answers from you; you should proceed automatically unless there is a problem or error. See Appendix A for a sample of the complete installation procedure.

Completing the Installation Procedure

The following messages indicate that the entire installation procedure is complete:

```
Installation of WPLENGLISH V3.0 completed at 14:49

VMSINSTAL procedure done at 14:50
```

Note that VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you are going to continue using the system manager's account and you want to restore these symbols, you should log out and log in again.

NOTE

WPS–PLUS Installation is NOT complete until you perform the post–installation procedures described in Chapter 3. Your installation may fail unless you follow the post–installation instructions.

Error Recovery

If errors occur during the installation itself or when the IVP is running, VMSINSTAL displays a failure message. For example:

```
%VMSINSTAL-E-INSFAIL, The installation of WPLENGLISH V3.0 has failed.
```

Errors can occur during the installation if:

- The operating system version is incorrect.
- A prerequisite software version is incorrect.
- Quotas necessary for successful installation are insufficient.
- System parameter values for successful installation are insufficient.

For descriptions of the error messages generated by these conditions, see the VMS documentation on system messages, recovery procedures, and VMS software installation.

If you are notified that any of these conditions exist, you must take the action described in the message. (You might need to change a system parameter or increase an authorized quota value.) For information on installation procedure requirements, see Chapter 1.

Chapter 3

After Installing WPS–PLUS

After installing WPS–PLUS, you **MUST** perform the post–installation procedures described in this chapter. The procedures are:

- Edit the system startup file to include the WPS–PLUS startup procedure
- Compile the text library file
- Modify system parameter values for WPS–PLUS performance tuning (optional)
- Create new WPS–PLUS accounts
- Set terminal characteristics for WPS–PLUS
- Set terminal characteristics for DECmates and Rainbows
- Set terminal characteristics for printers
- Add printer table changes from previous versions

This chapter also tells you how to perform the following optional tasks:

- Install WPS–PLUS on a VAXcluster system
- Reboot the system

Editing the System Startup File

You must edit the system startup file to provide for automatic startup of WPS–PLUS when your system is rebooted.

Add the following command line, which starts WPS–PLUS, to the system startup file, SYS$MANAGER:SYSTARTUP.COM.

NOTE

For VMS V5.0, the name of the system startup command file is SYSTARTUP_V5.COM.

Be sure the entire command is on one line in your file. Note that *ddcu:* in this example is the device on which WPS–PLUS was installed.

```
$ @SYS$MANAGER:WPLSTART.COM ddcu:[WPSPLUS.DATA_SHARE]
```

When you add this new command line to your system's SYSTARTUP, be sure to position it *after*:

the command that starts the queues
the command that invokes FMS startup
the command that invokes the network startup command procedure

The following example shows part of a SYSTARTUP file, with the network startup command line followed by the startup command line for WPS–PLUS.

```
$ ...
      .
      .
      .
$ @SYS$MANAGER:STARTNET.COM
      .
      .
      .
$ @SYS$MANAGER:WPLSTART.COM ddcu:[WPSPLUS.DATA_SHARE]
```

Compiling the Text Library File

The text library file (TXL) contains the compiled user interface scripts. After the installation, compile this text library using the following steps:

1. From a privileged system manager's account, run WPSPLUS.
2. At the WPS-PLUS Main menu enter:

```
<DO OA$DO:OACOMTXL
```

   These messages are displayed:

```
Closing TXL ...

Attempting to remove TXL ...

If a global section error message is displayed while
attempting to remove the TXL, it indicates that
you do not have the TXL installed.  If this is the
case, then you can ignore this error message.

Press RETURN to continue
```

3. Press RETURN. Next, these messages are displayed:

```
Compiling TXL ...

TXL> BLP FCDIR
TXL> BLP FCDIRHDR
.
.
.
TXL> DO WPSTSTSPC
TXL> SCRIPT GENERAL_CURDOC_ERROR
TXL> total bytes in elements = 82765
```

   If you do not have DECpage installed on your system, you will see this message displayed before the last line in the above example:

```
No or empty directory "OA$DO_LLV for TXL DO's -- continuing Text
Library compilation.
```

4. Answer Y (Yes) when asked if you want the TXL installed.
5. Exit from WPS-PLUS.
6. Set protection for the file as follows:

```
$ SET PROTECTION=W:RE WPSPLUS$SYSTEM:A1TXL.TXL
```

Compiling the Text Library File on a VAXcluster Configuration

If you are on a VAXcluster system, re-install the .TXL file on every node in the cluster, including the node for which you compiled the TXL:

1. From the system account on each node, run WPS-PLUS.
2. At the WPS-PLUS Main menu, enter:

   ```
   <OA$TXL_REMOVE
   ```

3. Then enter:

   ```
   <OA$TXL_INSTALL
   ```

Modifying System Parameters

After installation of WPS-PLUS, you can help ensure efficient system performance by changing some system parameter values and by modifying PAGEFILE and SWAPFILE settings.

Tuning the WPS-PLUS System

You can improve WPS-PLUS performance by changing the system parameter values listed in Table 3–1. See Changing System Parameter Values with AUTOGEN in Chapter 1 for information on modifying system parameters.

NOTE

If your current system parameters are set at values greater than or equal to the values in Table 3–1, do not change those parameters.

Table 3–1: Tuning System Parameter Values

System Parameter	Value
BALSETCNT	48
FREEGOAL	500
GROWLIM	300
IRPCOUNT	300
IRPCOUNTV	1500
NPAGEDYN	200000
LRPCOUNT	30
MAXPROCESSCNT	50
MPW_HILIMIT	800
MPW_LOLIMIT	200
MPW_THRESH	300
MPW_WAITLIMIT[1]	800
PFRATL	5
SRPCOUNT	2000
SRPCOUNTV	3200
SYSMWCNT	450

[1]Must be equal to or greater than MPR_HILIMIT

Modifying PAGEFILE and SWAPFILE Settings

For maximum efficiency on your system, modify the PAGEFILE and SWAPFILE settings to the values in Table 3–2. Refer to the VMS documentation on System Management and Operations for instructions for resetting these values.

NOTE

If the PAGEFILE and SWAPFILE settings on your system are currently set at values greater than or equal to the values in Table 3–2, do not change those settings.

Table 3–2: PAGEFILE and SWAPFILE Settings

Number of Users	PAGEFILE Setting	SWAPFILE Setting
1–8	15000	20000
8–16	30000	20000
16–24	45000	20000

Installing Accounts for WPS–PLUS Users

If you installed WPS–PLUS for the first time, follow the procedure in the User Accounts for New Installations section, then proceed with all remaining sections in this chapter, including those under the User Accounts for Update Installations section.

If you updated WPS–PLUS, go directly to the User Accounts for Update Installations section.

If users on your system run WPS–PLUS from more than one type of terminal, also see the section Setting Terminal Characteristics for Multiple Terminals later in this chapter.

User Accounts for New Installations

If you are installing WPS–PLUS on your system for the first time, you must create and initialize a WPS–PLUS account for each user, under the user's SYS$LOGIN directory, before you set terminal characteristics. Do the same for the SYSTEM account.

The command procedure WPSPLUS$SYSTEM:WPLNEWUSR.COM creates all required subdirectories and creates or copies all necessary files for each user account you create.

To install new user accounts, type:

```
$ @WPSPLUS$SYSTEM:WPLNEWUSR
```

The command procedure prompts you for the user's main directory, and then creates the WPS–PLUS directory at the next level, other required subdirectories, required default .DAT files, and a user profile.

The following is sample output from running WPLNEWUSR.COM to add user SMITH to device DUA0:

```
$ @WPSPLUS$SYSTEM:WPLNEWUSR

    Users SYS$LOGIN [SYS$COMMON:[SYSMGR]]: DUA0:[SMITH]
    Creating a WPSPLUS directory...
    Creating REQUIRED sub-directories...
    Creating REQUIRED default .DAT files....
    Creating REQUIRED user profile...
    Setup Completed for user: DUA0:[SMITH]
    Do you wish to enter another user (Y/N)? N
```

User Accounts for Update Installations

To install accounts for all WPS–PLUS users, you must:

- Set terminal characteristics
- Check special requirements for using the Technical Character Set
- Check user account privileges
- Check user account quotas

Setting Terminal Characteristics

If every user on your system uses WPS–PLUS, add the following command to your SYS$MANAGER:SYLOGIN.COM file:

```
$ @SYS$MANAGER:WPSPLUS_LOGIN
```

This command sets terminal characteristics for WPS–PLUS.

If some users on your system do not use WPS–PLUS, instruct the WPS–PLUS users to add the above command to their own LOGIN.COM files.

WPSPLUS_LOGIN.COM also sets up supported non–DIGITAL terminals that emulate a VT100 to run WPS–PLUS. Check the *VAX/VMS System Support Addendum* (SSA.26.27.xx) for information about supported non–DIGITAL terminals.

The WPSPLUS_LOGIN.COM procedure loads the WPS–PLUS Technical Character Set for most terminals. However, special hardware and/or additional setup procedures are required for using the Technical Character Set (TCS) in some instances:

- To use the Technical Character Set on a DIGITAL Rainbow or on a DIGITAL Professional, the user must have the optional TCS ROM installed.
- To use the Technical Character Set when running WPS–PLUS on DIGITAL supported Workstations in terminal emulation mode, users must perform additional setup procedures.

For DIGITAL DECmates II and III, DIGITAL Rainbows, DIGITAL Professionals, DIGITAL VAXmates, and IBM PCs, IBM PC/XTs, and IBM Personal Computer ATs running in terminal emulation mode, use the following special procedures:

- DIGITAL DECmate II or DECmate III

  To access the WPS–PLUS TCS with a DECmate II or DECmate III in terminal emulation mode, users must set up the DECmate at the DECmate Systems Options menu with this setting:

```
TM 227
EH Y(es)
```

  DECmate users also must add the following line to their VMS LOGIN.COM files:

```
$ @WPSPLUS$SYSTEM:WPSPLUS_DECMATE.COM
```

NOTE

Users with graphic boards on their DECmates should refer to the DECmate documentation for information on required settings.

- DIGITAL Rainbow

  To access the WPS–PLUS TCS with a Rainbow in terminal emulation mode, users must:

  — Set up the Rainbow as an ANSI terminal

  — Set the Rainbow for 8N (8 bit, no parity)

— Add the following line to their VMS LOGIN.COM file:

```
$ @WPSPLUS$SYSTEM:WPSPLUS_RAINBOW.COM
```

- DIGITAL Professional

  To access the WPS–PLUS TCS with a Professional in terminal emulation mode, users must add the following line to their VMS LOGIN.COM file:

  ```
  $ @WPSPLUS$SYSTEM:WPSPLUS_PRO.COM
  ```

- DIGITAL VAXmate

  To access the WPS–PLUS TCS with a VAXmate in terminal emulation mode, users must add the following line to their VMS LOGIN.COM file:

  ```
  $ @WPSPLUS$SYSTEM:WPSPLUS_VAXMATE.COM
  ```

- IBM PCs, IBM PC/XTs, and IBM Personal Computer ATs

  To access the WPS–PLUS TCS with these systems running in terminal emulation mode, users must add the following line to their VMS LOGIN.COM file:

  ```
  $ @WPSPLUS$SYSTEM:WPSPLUS_IBMPC.COM
  ```

For more information on terminal setups for DIGITAL supported terminals, see the user documentation supplied with those systems.

User Account Privileges

To use WPS–PLUS, each account must have at least the TMPMBX and NETMBX privileges. Use the VMS Authorize Utility to determine whether users have the privileges they require. See the VMS documentation on the Authorize Utility for more information.

You must make sure that the appropriate user accounts have sufficient quotas to be able to use WPS–PLUS. Table 3–3 summarizes the required quotas.

Table 3–3: User Account Quotas for the WPS–PLUS User

Account Quota	Value
ASTLM	80
BIOLM	50
BYTLM	36000
DIOLM	18
ENQLM	200
FILLM	150
PGFLQUO	20000
PRCLM	6
TQELM	50
WSDEF[1]	256
WSEXTENT	2048
WSQUO	512

[1]The values for WSEXT and WSQUO must be equal to or greater than the WSDEF value.

User account quotas are stored in the file SYSUAF.DAT. You use the Authorize Utility to verify and change user account quotas. First, set your directory to SYS$SYSTEM and then run AUTHORIZE:

```
$ SET DEFAULT SYS$SYSTEM
$ RUN AUTHORIZE
UAF>
```

At the AUTHORIZE prompt (UAF>), use the SHOW command with an account name to check a particular account. For example:

```
UAF> SHOW SMITH
```

To change a quota, use the MODIFY command at the UAF> prompt. MODIFY has the following format:

```
MODIFY account-name /quota-name=nnnn
```

This example changes the FILLM quota for the SMITH account and then exits from the utility:

```
UAF> MODIFY SMITH /FILLM=150
UAF> EXIT
```

After you exit from the utility, the VMS system displays messages indicating whether or not changes were made. Once you have finished making the changes, the users for whom you made changes must log out and log in again for the new quotas to take effect.

For more information on modifying account quotas, see the description of the Authorize Utility in the VMS documentation on system management and operations.

Setting Terminal Characteristics for Multiple Terminals

If your system has users who use more than one type of terminal to run WPS–PLUS, you can set terminal characteristics in either of two ways:

- System–wide, using WPSPLUS_LOGIN.COM, as described in the sections Setting Terminal Characteristics and Special Requirements for the Technical Character Set in this chapter
- On an individual basis, using SAMPLE_LOGIN.COM

SAMPLE_LOGIN.COM is a login file for changing terminal settings according to the type of terminal used. It is supplied for users who run WPS–PLUS from more than one type of terminal.

Instruct those users to add the following line to their personal LOGIN.COM files:

```
$ @WPSPLUS$SYSTEM:SAMPLE_LOGIN.COM
```

When users log in to their VMS accounts or to the system, they will be prompted for the terminal type. Users respond with one of the terminal types listed in Table 3–4.

Table 3–4: Terminal Types

For Terminal	Enter Type:
VT100 series	VT100
VT125	VT125
VT200 series	VT200
VT300 series	VT300
DECmate	DECMATE
Rainbow	RAINBOW
Professional	PRO
VAXmate	VAXMATE
IBM PC	IBMPC

Setting Terminal Characteristics for Printers

Execute the following command procedure to set the terminal characters for WPS–PLUS supported printers on your system:

```
$ WPSPLUS$SYSTEM:PRINTER_SETUP.COM
```

PRINTER_SETUP.COM sets the printer queues for all devices on the system. The command procedure accepts the parameters shown in Table 3–5.

Table 3–5: Printer Setup Parameters

Parameter	Example
P1 = Physical connection	TTA0:
P2 = Baud rate of the terminal	4800
P3 = Page size	63
P4 = Type of device	LN03
P5 = Name of queue	SYS$PRINT
P6 = Form name	WPSPLUS
P7 = Additional terminal characteristics	optional
P8 = Additional queue characteristics	optional

To run the procedure, type:

```
$ @WPSPLUS$SYSTEM:PRINTER_SETUP.COM P1 P2 P3 P4 P5 P6 P7 P8
```

You will be prompted for each parameter. Enter them in the format shown in the Example column in Table 3–5. It is not necessary to use quotes around the entries.

The following example procedure shows how to set up your system to use an LQP02 printer. Repeat this procedure for each supported printer on your system:

1. Edit SYS$MANAGER:SYSTARTUP.COM.
2. Add the following line to SYSTARTUP.COM:

   ```
   $ @WPSPLUS$SYSTEM:PRINTER_SETUP.COM TTC3:9600 LQP02 SYS$PRINT WPSPLUS""
   ```

   Be sure to add the line *after* the line $@SYS$MANAGER:WPLSTART.COM and after SYS$PRINT has been defined and started in SYSTARTUP.COM.

   NOTE

   For VMS V5.0, the name of the system startup command file is SYSTARTUP_V5.COM.

   In this example, TTC3: is the terminal line number for this printer on this system. Be sure to use the correct terminal line number for each printer. If you have more than one of the same type of printer, each must have a different terminal line number.

In this example, SYS$PRINT is the queue name for this printer. If you have more than one of the same type of printer, each must have a different queue name.

In this example, no entries were made for parameters P7 and P8, which are optional.

PRINTER_SETUP.COM sets default values for the terminal and the queue as well as for the device. The default values are:

- Terminal:

  /NOBROADCAST
  /NOECHO
  /HARDCOPY
  /NOTAB
  /FORM
  /NOWRAP
  /HOSTSYNC
  /LOWER
  /PERM
  /WIDTH=255

- Queue:

  /NOSEPARATE
  /PROT=(W:RE)
  /START

Adding Printer Table Changes

The WPS–PLUS software installs printer tables for each DIGITAL–supported printer in the following directory. *ddcu:* is the device on which you installed WPS–PLUS.

```
ddcu:[WPSPLUS.PRINT]
```

After installation, you may notice multiple versions of each printer table in that directory. For example:

```
Directory DDCU:[WPSPLUS.PRINT]

LA100.PRA;1
LA100.PRA;2
LA100.PRC;1
LA100.PRC;2
LA210.PRA;1
LA210.PRA;2
LA210.PRC;1
LA210.PRC;2
```

NOTE

If you have made changes or additions to printer tables, do not purge the [WPSPLUS.PRINT] directory without first re-running those changes through the Print Table Utility.

If you made no changes to the printer tables in previous versions of WPS-PLUS, you can purge this directory.

If you did make changes to printer tables for DIGITAL-supported printers in previous versions of WPS-PLUS, you should run the Printer Table Utility and add these changes to the new printer tables supplied with this installation of WPS-PLUS.

If you have created printer tables for non-DIGITAL-supported printers, you should run the Printer Table Utility and add these changes.

When you add the changes, be sure to use the F (File changes) option to save the changes. For more information about using the Print Table Utility, see the *WPS-PLUS/VMS Guide to Modifying Printer Tables*.

Installing WPS-PLUS on a VAXcluster Configuration

You can install WPS-PLUS on three cluster configuration types:

- Computer Interconnect-only VAXcluster
- Local Area VAXcluster
- Mixed-interconnect VAXcluster

See the VAXcluster Configurations section in Chapter 1 for definitions of the cluster types and information specific to installing WPS-PLUS on each type.

There must be a single WPS–PLUS directory structure for all nodes in the VAXcluster system. You install WPS–PLUS on one node only in the cluster. You must, however, run the WPS–PLUS startup command procedure (SYS$MANAGER:WPLSTART.COM) on all nodes in the cluster on which you want to run WPS–PLUS.

Follow this procedure to install WPS–PLUS on a VAXcluster system:

1. Set the SYSGEN parameters to the required values on each node in the cluster on which you are going to run WPS–PLUS. See the System Parameters section in Chapter 1 for instructions.
2. Install the DCLTABLES, which include the new WPS–PLUS DCL command:

```
$ MCR INSTALL
INSTALL> SYS$LIBRARY:DCLTABLES/REPLACE
INSTALL> EXIT
```

3. Add this line to SYS$MANAGER:SYSTARTUP.COM:

```
$ @PRINTER_SETUP.COM
```

NOTE

For VMS V5.0, the name of the system startup command file is SYSTARTUP_V5.COM.

4. To create the following additional WPS–PLUS print formatter queues, you can use the template provided in:

```
WPSPLUS$SYSTEM:WPL$FORMATTER_START.COM:
```

Use the template to:

- Create execution queues on specific nodes of the cluster.
- Create and start a cluster–wide generic queue from which jobs are moved to active execution queues.
- Start execution queues on specific nodes of the cluster.

The template creates execution queues on nodes called NODE1, NODE2, and NODE3 and a cluster–wide generic queue with the queues on NODE1, NODE2 and NODE3 as the target queues.

The template then starts the execution queues on nodes NODE1 and NODE2, and the cluster–wide generic queue. The execution queue on NODE3 is not started, but having been created, it is available to be started if the NODE1 or NODE2 execution queues are not available.

You can modify the template by adding your own node names in place of NODE1, NODE2 and NODE3 to the existing command lines, and by removing the EXIT line located before the template.

NOTE

If your system currently has queues WPL$FORMATTER and WPL$FORMATTER_NODEn, you must stop those queues, delete them, and restart them. You can run WPLSTART.COM to restart those queues.

5. Run the following startup command procedure on each node in the cluster from which you want to run WPS–PLUS. In this command, *ddcu:* is the device on which you installed WPS–PLUS.

```
$ @SYS$MANAGER:WPLSTART.COM ddcu:[WPSPLUS.DATA_SHARE]
```

Rebooting the System (Optional)

You can reboot your system after you have installed WPS–PLUS, edited the system startup, and reset the system parameters (if necessary). A system reboot:

- Verifies that WPS–PLUS is ready for use
- Ensures that the edits to the system startup command file are correct
- Establishes new parameter settings

Chapter 4

Installation Verification Procedure

The WPS–PLUS Post–installation Verification Procedure (Post–IVP) checks that WPS–PLUS was installed successfully.

The WPS–PLUS Post–IVP:

- Creates a temporary WPS–PLUS user account [username.WPLIVP]
- Creates and edits WPS–PLUS documents
- Creates a WPS–PLUS document with a footnote
- Creates a WPS–PLUS document using the Two–Dimensional Editor
- Creates a User–defined Process document
- Copies a WPS–PLUS document to a VMS file and a VMS file to a WPS–PLUS document
- Tests paragraph numbering
- Tests the List Processing options
- Tests the File Cabinet options
- Deletes files created during installation

The Post–IVP must be run from the system manager's account, and you must use a WPS–PLUS supported terminal.

NOTE

You must have completed all of the post–installation procedures in Chapter 3 before running the Post–IVP.

To run the Post–IVP, complete the following procedure:

To invoke the WPS–PLUS Post–IVP, run WPLIVP.COM as shown:

```
$ @SYS$SYSROOT:[SYSTEST.WPLENGLISH]WPLIVP
```

It takes about fifteen minutes for the Post–IVP to complete.

After you invoke the Post–IVP, you receive the following messages telling you what the Post–IVP is doing:

```
%DCL-I-SUPERSEDE, previous value of OAUSER has been superseded
Executing the NEW USER command file...
Users SYS$LOGIN [SYS$SYSROOT:[SYSMGR]]:
```

After the last message, you must press RETURN to continue. The following messages are displayed:

```
Creating a WPS-PLUS directory...
Creating REQUIRED sub-directories...
Creating REQUIRED default .DAT files...
Creating REQUIRED user profile...
Setup completed for user: SYS$SYSROOT:[SYSMGR]
```

Respond to the following question:

```
Did the NEW USER section run properly (Y/N)?
```

Answer Y (Yes) to this question if all the messages appeared and no error messages occurred. Otherwise, answer N (No); this ends the Post–IVP.

WPS–PLUS/VMS menu screens display as the Post–IVP verifies the WPS–PLUS installation.

The system displays the following messages when the Post–IVP has completed successfully:

```
WPS-PLUS/VMS V3.0 IVP Completed Successfully!!!

%DCL-I-SUPERSEDE, previous value of OAUSER has been superseded
```

If the Post–IVP is unsuccessful, these messages display:

```
WPS-PLUS/VMS V3.0 IVP Encountered Error - check WPS-PLUS/VMS
Installation Guide

%DCL-I-SUPERSEDE, previous value of OAUSER has been superseded
```

Error Messages

The Post–IVP can fail both before it invokes WPS–PLUS and while it is running WPS–PLUS. The following section and Appendix C show some of the Post–IVP error messages that may occur, the problems they indicate, and their solutions.

Error message: File IVPRESET.COM not found

Problem During the installation of WPS–PLUS, the installation procedure creates the file WPLSTART.COM and copies it to your SYS$MANAGER directory. This file must be invoked to assign the logicals and install the WPS–PLUS Spell Check images before the Post–IVP is run.

If WPLSTART.COM is not run first, the Post–IVP will exit with the error:

```
Error opening OA$IVP:[SYSMGR]IVPRESET.COM; as input
Error in device name or inappropriate device type
```

Solution You should run your WPLSTART.COM file from a privileged account, following the instructions in Chapter 3 in this book. Then run the Post–IVP again.

Appendix A
Sample Installation

This appendix contains a sample installation of WPS–PLUS. This sample was run on a system with no previous version of WPS–PLUS installed.

The sample installation assumes that DECnet has been shut down, that no users are logged on to your system, and that OPTIONS N is specified to print the Release Notes.

```
$ @SYS$UPDATE:VMSINSTAL WPLENGLISH030 MFA0: OPTIONS N
VAX/VMS Software Product Installation Procedure V5.0
It is 19-JUL-1988 at 17:41.
Enter a question mark (?) at any time for help.
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
* Do you want to continue anyway [NO]? YES
* Are you satisfied with the backup of your system disk [YES]?

Please mount the first volume of the set on  MFA0:.
* Are you ready? yes
%MOUNT-I-MOUNTED, WPLENG mounted on _MFA0:
The following products will be processed:
  WPLENGLISH V3.0
 Beginning installation of WPLENGLISH V3.0 at 17:51

%VMSINSTAL-I-RESTORE, Restoring product saveset A ...

    Release Notes Options:

 1.  Display release notes
 2.  Print release notes
 3.  Both 1 and 2
 4.  Copy release notes to SYS$HELP
 5.  Do not display, print or copy release notes
```

```
* Select option [2]:
* Queue name [SYS$PRINT]:
Job WPLENGLISH030 (queue SYS$PRINT, entry 159) started on SYS$PRINT
* Do you want to continue the installation? YES
%VMSINSTAL-I-RELMOVED, The product's release notes have been
successfully moved to SYS$HELP.
* Do you want to purge files replaced by this installation [YES]?
%WPLENGLISH-I-CHKGBL, Checking that required system parameters are correc
%WPLENGLISH-I-UAFCHK, Checking process quotas (SYSUAF) for the current
process.


 Please select the number of the installation type you would like
 to perform.

   1) Full installation on a clean machine
   2) Upgrade of WPS-PLUS/VMS V2.1   to WPS-PLUS/VMS V3.0
   3) Upgrade of WPS-PLUS/VMS V3.0   to WPS-PLUS/VMS V3.0
   4) Upgrade of WPS-PLUS/VMS BEV2.1 to WPS-PLUS/VMS V3.0
   5) Installation of additional language only

* What installation type do you want to perform [1]:
* Which disk will hold the WPS-PLUS/VMS library files [SYS$SYSDEVICE:]:
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSROOT:[SYSTEST.WPLENGLISH].
Creating a WPS-PLUS/VMS directory
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS].
Creating required WPS-PLUS/VMS sub-directories
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.SCP_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.BLP_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.IVP_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.CBI_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.PRINT].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.LIB_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.LIB_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DO_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DO_ENGLISH].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DATA_SHARE].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$SYSDEVICE:[WPSPLUS.DATA_ENGLISH].

Please select the number of the date format that you would like to use.
```

```
 1) dd mm yy
 2) mm dd yy
 3) yy mm dd
 4) yyyy mm dd
 5) dd mmm yyyy  (mmm = 3 char month, DEC standard)
 6) yyyy mmm dd

* What date format do you want [5]:

Please select the number of the date separator that you would like to use.

 1) dash   (-)
 2) slash  (/)
 3) period (.)
 4) comma  (,)

* What date separator do you want [1]:

Please select the number of the time separator that you would like to use.

 1) colon  (:)
 2) period (.)
 3) comma  (,)

* What date separator do you want [1]:

You have chosen a date and time format of 19-JUL-1988  18:34:19

* Is this correct [YES]?

   All questions regarding the installation have now been asked.

   The installation will now continue.

%VMSINSTAL-I-RESTORE, Restoring product saveset B ...
%VMSINSTAL-I-RESTORE, Restoring product saveset C ...
%WPLENGLISH-I-WPLINK, Starting link of the Message File image.
%WPLENGLISH-I-WPLINK, Starting link of the WPS-PLUS/VMS image.
%WPLENGLISH-I-WPLINK, Starting link of the Print and Formatter images.

%WPLENGLISH-I-WPLINKED, Finished linking the images.
%VMSINSTAL-I-RESTORE, Restoring product saveset D ...
%VMSINSTAL-I-RESTORE, Restoring product saveset E ...

%WPLENGLISH-I-WPLINK, Starting link of lexicon images.

%OA-I-LASTLINE, Running WPS-PLUS to create data files.
%OA-I-LASTLINE, Ignore any NO SUCH GLOBAL SECTION messages that may appear
%SYSTEM-E-NOSUCHSEC, no such (global) section
%SYSTEM-E-NOSUCHSEC, no such (global) section
%SYSTEM-E-NOSUCHSEC, no such (global) section
 SYSTEM finished using WPS-PLUS at 09-SEP-1988 19:03

During the installation, a file called WPLSTART.COM has been
added to SYS$MANAGER.

The site dependent start-up file, SYS$MANAGER:SYSTARTUP.COM
(for VMS V4.x) and SYS$MANAGER:SYSTARTUP_V5.COM (for VMS V5.x),
should have the following line added:

$ @SYS$MANAGER:WPLSTART.COM DEV$:[WPSPLUS.DATE_SHARE]
```

```
where: DEV$ is the device you installed WPS-PLUS on.

It must be invoked before users can successfully invoke WPS-PLUS/VMS.

Preparing for transfer of WPS-PLUS/VMS - Boilerplate Files
Preparing for transfer of WPS-PLUS/VMS - Data Files
Preparing for transfer of WPS-PLUS/VMS - Do Script Files
Preparing for transfer of WPS-PLUS/VMS - IVP Files
Preparing for transfer of WPS-PLUS/VMS - Library Files

%VMSINSTAL-I-RESTORE, Restoring product saveset F ...
%VMSINSTAL-I-RESTORE, Restoring product saveset G ...

Preparing for transfer of WPS-PLUS/VMS - CBI Files
Preparing for transfer of WPS-PLUS/VMS - Print Files

 Spelling System (c) 1983 Houghton Mifflin.  All rights reserved.
 Based on "The American Heritage Dictionary."

 Houghton Mifflin Usage Alert (c) 1984 Houghton Mifflin.
 All rights reserved.

 Roget's II Electronic Thesaurus (c) 1984 Houghton Mifflin.
 All rights reserved.  Based on "Roget's II:  The New Thesaurus."

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target
directories...
 Installation of WPLENGLISH V3.0 completed at 19:31

 VMSINSTAL procedure done at 19:32
```

Appendix B

Files and Logical Names Installed on Your System

The following files are transferred to your system when you are installing WPS–PLUS. The files are organized by directory with DDCU: as a generic disk name.

Files for English Language Version

```
Directory DDCU:[WPSPLUS.BLP_ENGLISH]

FCDIR.BLP                       File Cab. Dir. Boilerplate
FCDIRHDR.BLP                    File Cab. Dir. Header Boilerplate
FOLPRINT.BLP                    List Folders Print Boilerplate
FOLPRINTXP.BLP                  List Folders Mult. Print Boilerplate
FORMAT.BLP                      Format Boilerplate
LIST_STATUS.BLP                 Read Status Line Boilerplate

Total of 6 files.
```

```
Directory DDCU:[WPSPLUS.CBI_ENGLISH]

CBIEDTMSG.SCP                    Computer-Based Instruction Scripts
CBIFCEMP.SCP
CBIFCEXI.SCP
CBIFCINT.SCP
CBIFCRFC.SCP
CBIFCRFD.SCP
CBIFCUII.SCP
CBIFCXFD.SCP
CBILPDOC1.TXT
CBILPDOC2.TXT
CBILPDOC3.TXT
CBILPFOR.SCP
CBILPLIS.SCP
CBILPRUN.SCP
CBILPRUNEXI.SCP
CBIPCPMOV.SCP
CBIPCPREP.SCP
CBIPCRARR.SCP
CBIPCREAT.SCP
CBIPDEFRU.SCP
CBIPDELET.SCP
CBIPDLKEY.SCP
CBIPDLLNG.SCP
CBIPDLRUB.SCP
CBIPEDIT.SCP
CBIPEXEDHI.SCP
CBIPEXEDLE.SCP
CBIPEXEDPA.SCP
CBIPEXEDRU.SCP
CBIPEXEDSE.SCP
CBIPEXFRM.SCP
CBIPEXIND.SCP
CBIPFIRST.SCP
CBIPHIEXI.SCP
CBIPHIINT.SCP
CBIPHIREM.SCP
CBIPINTOVR.SCP
CBIPLED.SCP
CBIPLGALE.SCP
CBIPLGEXI.SCP
CBIPLGINT.SCP
CBIPLGSPL.SCP
CBIPLGSTX.SCP
CBIPLGTHE.SCP
CBIPLIST.SCP
CBIPMSEL.SCP
CBIPPAGIN.SCP
CBIPPRIN.SCP
CBIPRLDIS.SCP
CBIPRLSAV.SCP
CBIPSEARC.SCP
CBIPSELEC.SCP
CBIPSELRE.SCP
```

```
CBIPTCEXI.SCP
CBIPTDCRE.SCP
CBIPTDDEL.SCP
CBIPTDENT.SCP
CBIPTDEX1.SCP
CBIPTDEX2.SCP
CBIPTDINT.SCP
CBIPTDMCP.SCP
CBIPTDMOV.SCP
CBIPTDPEN.SCP
CBIPWET.SCP
CBIQSAMP.TXT
CBITCS.SCP
CBIUDPADI.SCP
CBIUDPCRE.SCP
CBIUDPEXDEL.SCP
CBIUDPEXI.SCP
CBIUDPINT.SCP
CBIUDPSRL.SCP
CBIUDPUSE.SCP
CBIWGSEXI.SCP
CBIWGSFIF.DAT
CBIWGSFIF.SCP
CBIWGSGHE.SCP
CBIWGSINM.SCP
CBIWGSINT.SCP
CBIWGSOVR.SCP
CBIWGSUME.SCP
CBIWPCRE.SCP
CBIWPLWRCRE.SCP
CBIWPLWRDEL.SCP
CBIWPLWREDI.SCP
CBIWPLWREXI.SCP
CBIWPLWRRTF.SCP

Total of 87 files.

Directory DDCU:[WPSPLUS.DATA_ENGLISH]

PRINTERS.DAT                    List Of Valid Printers
WPSFNATT.DAT                    List Of Valid Footnote Attributes
WPSFNPOS.DAT                    List Of Valid Footnote Positions
WPSFNSEPS.DAT                   List Of Valid Footnote Separators

Total of 4 files.
```

```
Directory DDCU:[WPSPLUS.DATA_SHARE]

DECSPELL.DAT                        List Of Valid Spell Langs.& Dialects
FORMAT.DAT                          Formatting Data File
LANGUAGES.DAT                       List Of Valid Spell Languages
OA$DAF_E.DAT                        File Cab. List For Users
PENDING.DAT                         File Cab. Maintenance File
SYSTEM.PST                          System Permanent Symbol Table
WPLCONFIG.DAT                       System WPS-PLUS Config. Data File

Total of 7 files.


Directory DDCU:[WPSPLUS.DO_SHARE]

APNDELETE.SCP                       Paragraph Numbering Delete
COPYDOC.SCP                         Copy WPS-PLUS Docs to ALL-IN-1 Account
DATE_FORMAT.SCP                     Populates File Of Valid Date Formats
DOCCREATE.SCP                       Document Create
DOCSELECT.SCP                       Document Select
DXRD.SCP                            Receive From DECmate
DXRV.SCP                            Receive From VMS
DXRX.SCP                            Receive From DX Index
DXSD.SCP                            Send To DECmate
DXSV.SCP                            Send To VMS
DXSX.SCP                            Send To DX Index
DXXM.SCP                            Go To DECdx Menu
FCDELFDR.SCP                        File Cab. Delete Folder
FCDIR.SCP                           File Cab. Dir.
FCEW.SCP                            File Cab. Empty Wastebasket
FILECAB_REORG.SCP                   File Cab. Reorganization
FOLCOUNT.SCP                        List Folders Count
FOLDER.SCP                          Prompt User For New Folders
FOLPRINT.SCP                        List Folders Print
FOLPRINTXP.SCP                      List Folders Multiple Print
GENERAL_CURDOC_ERROR.SCP            Index General Error Handler
GRAMCHECK.SCP                       Grammar Checker
LNGSPLCONVERT.SCP                   Spell Initialization
LNGSPLCRE.SCP                       Create New Dictionary
LNGSPLDEL.SCP                       Delete Dictionary
LNGSPLDOW.SCP                       Arrow Functions On Dict. Selection Form
LNGSPLFMT.SCP                       Format Dictionary
LNGSPLINI.SCP                       Initializing Script
LNGSPLIST.SCP                       Select Dictionary
LNGSPLMNU.SCP                       Display Current Dictionary
LNGSPLSC2.SCP                       Run Spell Check
LNGSPLSCAN.SCP                      Check Open Dictionary Entries
LNGSPLSEL.SCP                       Selection Dictionary
LNGSPL_CHANGE_CURRENT_DIC.SCP       Restore Current Dict. After Change Maste
LNGSPL_CHECK_PERS_OPEN.SCP          Change Personal Dict. After Change Maste
LNGSPL_CLOSE_DICT.SCP               Close Dictionary
LNGSPL_CMD_RECOG.SCP                Display Valid Master Dictionaries
LNGSPL_FREE_SLOT.SCP                Check For Less Than 10 Open Dictionaries
LNGSPL_OPEN_CHECK.SCP               Check For Open Dictionaries
LNGSPL_OPEN_DICT.SCP                Open Dictionary
LNGSPL_OPEN_GLOBAL_DIC_CHECK.SCP Can't Open Global Dictionary
```

```
LNGSPL_PERS_DIC_CHECK.SCP       Can't Open Personal Dictionary
LNGSPL_POST_LISTOPEN.SCP        Post-processing After List Open Dicts.
LNGSPL_PRE_LISTOPEN.SCP         Pre-processing Before List Open Dicts.
LNGSPL_WPL_SEARCH.SCP           Can't Open Dictionary That's Open
METER.SCP                       Metering Script
NEXTLIST.SCP                    Selects Next Entry In Selection List
OACOMTXL.SCP                    Compile TXL File
PARANUM.SCP                     Paragraph Numbering
WPAPNUM.SCP                     Paragraph Numbering
WPAPNUM_POST.SCP                Post Processing After Para. Numbering
WPAPNUM_PRE.SCP                 Pre-processing Before Para. Numbering
WPCOPY.SCP                      Copy To New File Cab.
WPDELETE.SCP                    Deletes D Document
WPDOUDP.SCP                     Calls A UDP Document
WPDUMPUDP.SCP                   Clear UDP Script Mechanism
WPEDADDMEN.SCP                  Editor Attributes Control Script
WPEDIT.SCP                      Editor Control Script
WPFOLDER.SCP                    Performs Folder Lookup
WPLIST.SCP                      List Output To Your Screen
WPMDMP.SCP                      Multi-Print/Delete
WPNEXTL.SCP                     Find Next Document In List
WPNEXTNUM.SCP                   Find Next Document With Same Number
WPPAFOLDER.SCP                  Allow Folder Names Used As Parameters
WPPBGFORMAT.SCP                 Print Background Format
WPPFILE.SCP                     Print To File
WPPOUTDOC.SCP                   Print To Document
WPPPORT.SCP                     Print To Port
WPPRINT.SCP                     Printer Control
WPPRTEXIT.SCP                   Print Exit Handler
WPPSYSTEM.SCP                   Print To Generic Queues
WPPTERMIN.SCP                   Print To Terminal
WPPTYPEIT.SCP                   Print To Type
WPSDECGET.SCP                   Gold GET Document From DECmate
WPSDECWRT.SCP                   Gold WRITE Document From DECmate
WPSLPS.SCP                      Performs List And Sort Functions
WPSTSTSPC.SCP                   Performs List Test Spec. Document

Total of 78 files.

Directory DDCU:[WPSPLUS.IVP_ENGLISH]

IVP.DOC                         Sample Document
IVPRESET.COM                    Resets Directory
WPLIVP.LOG                      Sample Output
WPLIVP.SCP                      IVP Script
WPLIVPUSR.COM                   Creates IVP Account

Total of 5 files.
```

```
Directory DDCU:[WPSPLUS.LIB_ENGLISH]

CBIWGS_PREPOP.SCP               Prepop Script For CBI Data File
CHARACTER.WPL                   WPS-PLUS Character Set
LIBEE.WPL                       Equation Examples
LIBKLT.WPL                      Keyboard Layout For The LK201
LIBNTC.WPL                      Name Of Technical Characters
LIBRARY.UDP                     Combined Lib.Files For File Cab. File
LIBSTL.WPL                      Summary Of Technical Library
LIBTCL.WPL                      Technical Character Library
MEMRES.FLB                      Memory Resident Form Library
MEMRES.FLC                      Compiled Memory Resident Form Library
OACBIFORMS.FLB                  CBI Form Library
OAFORM.FLB                      Form Library
OAFORM.FLC                      Compiled Form Library
OAHELP.HLB                      Main Help Library
PECOHELP.PLB                    TDE Help Library
PRINTER_SETUP.COM               Set Terminal Char. For All Printers
PTUFORMS.MSG                    Print Utility Message File
RELNOTES.SCP                    Release Notes Script File
RENDITION.WPL                   Print Rendition Sample
SAMPLE_LOGIN.COM                Sample Login File
SETOA.COM                       Switch Primary/Secondary System
TDELIB.WPL                      Sample TDE File
WPDDXSEND.COM                   Interfaces To Run DECdx
WPDECDX.COM                     Interfaces To Run DECdx
WPL$FORMATTER_START.COM         Start Backgrnd Print Formatter Queues
WPLNEWUSR.COM                   Create New User Account
WPSMAIL.COM                     VMS MAIL Interface
WPSPLUS_DECMATE.COM             DECMATE Login File
WPSPLUS_IBMPC.COM               IBMPC Login File
WPSPLUS_PRO.COM                 PRO Login File
WPSPLUS_RAINBOW.COM             Rainbow Login File
WPSPLUS_VAXMATE.COM             Vaxmate Login File
WPSSYS.MSG                      System Message File
WPUDPSUP.COM                    UDP Processing
XAL_DOC.TXT                     Example External Applic. Document

Total of 35 files.

Directory DDCU:[WPSPLUS.LIB_SHARE]

CNVPRTUIC.COM                   UIC Check For File Cab. Reorganization
DOCDB.FDL                       File Definition Lang.,User's File Cab.
FF.LIS                          Form Feed For Printing
KOTERMTAB.COM                   Define Logicals For Terminal Tables
LOADTCS.TXT                     Load Technical Character Set Test File
OAINI.COM                       Initialization Procedure
PDAF.FDL                        File Cab. Maintenance
TRACESET.SCP                    Trace Mode
WPL$MAIN.EXE                    WPS-PLUS Executable Image
WPSDEF.WPL                      User's Profile
WPSPELL.CLD                     SPELL Command Language Definition
WPSPLUS.CLD                     WPS-PLUS Command Language Definition

Total of 12 files.
```

```
Directory DDCU:[WPSPLUS.PRINT]

LA100.PRA                       Print Utility
LA100.PRC                       Print Utility
LA210.PRA                       Print Utility
LA210.PRC                       Print Utility
LA50.PRA                        Print Utility
LA50.PRC                        Print Utility
LA75.PRA                        Print Utility
LA75.PRC                        Print Utility
LJ250.PRA                       Print Utility
LJ250.PRC                       Print Utility
LN01.PRA                        Print Utility
LN01.PRC                        Print Utility
LN03.PRA                        Print Utility
LN03.PRC                        Print Utility
LP11.PRA                        Print Utility
LP11.PRC                        Print Utility
LQP02.PRA                       Print Utility
LQP02.PRC                       Print Utility
LQP03.PRA                       Print Utility
LQP03.PRC                       Print Utility
LQP45.PRA                       Print Utility
LQP45.PRC                       Print Utility
PTU.EXE                         Print Utility
QUME.PRA                        Print Utility
QUME.PRC                        Print Utility
VT100.PRA                       Print Utility
VT100.PRC                       Print Utility
VT200.PRA                       Print Utility
VT200.PRC                       Print Utility
VT300.PRA                       Print Utility
VT300.PRC                       Print Utility

Total of 61 files.

Directory DDCU:[WPSPLUS.SCP_ENGLISH]

GENERAL_CURDOC_ERROR.SCP        General Index Error

Total of 1 file.

Directory  SYS$SYSROOT:[SYSEXE]

WPL$FORMATTER.EXE               WPS-PLUS Print Symbiont
LNGSPLFOR.EXE                   Spell Format Dictionary

Total of 2 files.
```

```
Directory  SYS$SYSROOT:[SYSLIB]

WPL$LLVENGLISH.EXE              WPS-PLUS Message File
LNGOSENVR.EXE                   Spell Image
LNGSPLCOM.EXE                   Spell Image
LNGSPLAET.LGS                   Thesaurus
LNGSPLAET.LGM                   Thesaurus
LNGSPLAEU.LGS                   Usage Alert
LNGSPLAEU.LGM                   Usage Alert
LNGSPLSHR.EXE                   Spell Image
LNGSPLENG.EXE                   English Lexicon
LNGSPLAE2.LGS                   English Dictionary

Total of 10 files.


Directory SYS$SYSROOT:[SYSMGR]

WPLSTART.COM                    WPS-PLUS Startup File

Total of 1 file.


Directory SYS$SYSROOT:[SYSHLP]

WPLENGLISH030.RELEASE_NOTES     Release Notes

Total of 1 file.


Directory SYS$SYSROOT:[SYSTEST.WPLENGLISH]

WPLIVP.COM                      Post-Installation Verification Proc.
WPSINS_IVP.COM                  VMSINSTAL IVP

Total of 2 files.
```

Files for Languages Other Than English

The following files are transferred to your directory when you install a non–English language version of WPS–PLUS.

```
BRITISH: LNGSPLBE2.LGS Instead of LNGSPLAE2.LGS   British Dictionary

FRENCH:  LNGSPLFRD.LGS Instead of LNGSPLAE2.LGS   French Dictionary
         LNGSPLFRD.LGM                            French Dictionary
         LNGSPLFRE.EXE Instead of LNGSPLENG.EXE   French Lexicon
         WPL$LLVFRENCH.EXE
                   Instead of WPL$LLVENGLISH.EXE French Message File
         WPL$FRENCH.RELEASE_NOTES                 French Release Notes
```

```
GERMAN:  LNGSPLGRD.LGS Instead of LNGSPLAE2.LGS   German Dictionary
         LNGSPLGRD.LGM                            German Dictionary
         LNGSPLGER.EXE Instead of LNGSPLENG.EXE   German Lexicon
         WPL$LLVGERMAN.EXE
                  Instead of WPL$LLENGLISH.EXE    German Message File
          WPL$GERMAN.RELEASE_NOTES                German Release Notes
```

Depending upon which language version is available on your system, you can have:

```
WPL$LLV_LANGUAGE_.EXE
WPL$_LANGUAGE_.RELEASE_NOTES
```

where *LANGUAGE* is the language version.

Logical Names and Logical Name Tables

The following logical names and logical name tables are entered into the system logical name tables when WPS–PLUS is installed. These names are stored in the startup file, WPLSTART.COM. They are automatically entered into the system logical name table whenever the system is rebooted.

```
WPSPLUS$SYSTEM
WPL$IMAGE
KOA$HEAP_SIZE
DX$PRINT

WPL$_LANGUAGE_TABLE
WPL$SHARE_TABLE
```

LANGUAGE is the language version.

Appendix C
Error Messages

This appendix lists WPS–PLUS system error messages.

NOTE

When you get an error while installing WPS–PLUS, check the UAF parameters first. Many installation errors occur because these parameters are not set high enough. See Table 1–2 for the required settings.

Error Message: %SYSTEM–F–NOPRIV, no privilege for attempted operation

Problem The A1TXL.TXL does not have the correct protection setting.

Solution Set protection for that file to W:RE, as follows:

```
$ Set protection=(W:RE) WPSPLUS$SYSTEM:A1TXL.TXL
```

Error Message: Error opening SCRIPT file "METER"

Problem Error occurs when the WPSPLUS$SYSTEM:A1TXL.TXL file doesn't exist.

Solution Recompile the A1TXL.TXL file as described in Chapter 3, After Installing WPS–PLUS, in this book.

Error Message:

```
%DCL-W-ACTIMAGE, error activating image WPL$IMAGE
-CLI-E-IMGNAME, image file ('file spec)
-RMS-F-DEV, error in device name or inappropriate device type
for operation
```

Problem This error occurs if the area in which WPS–PLUS was installed has been moved, or if the device on which it is installed has changed.

Solution Check the WPLCONFIG form to make sure all entries are correct, using the following procedure:

1. At the WPS–PLUS Word and Document Processing menu, enter:

   ```
   WPLCONFIG
   ```

2. Press RETURN.
3. On the WPS–PLUS System Configuration Information form, press FIND (or GOLD L) at the Language field.

   WPS–PLUS lists all records that must be checked.
4. For each record on the list:
   a. Select the record.
   b. Use I (Inquire) to verify the device and directory.
   c. Use C (Change) to make corrections, changing each record within this form to conform to the correct device and directory specification.

Error Message: %OA–E–NOREENTER

Several problems can cause this error message:

- Problem If WPSPLUS$SYSTEM:WPLNEWUSR was not set up for the account, or if data files (DAF.DAT, DOCDC.DAT) or the profile file (WPSDEF.WPL) are missing, the following error message occurs:

  ```
  %OA-E-NOREENTER, You are already using WPS-PLUS, you cannot
  restart it
  ```

  Solution Create a WPS–PLUS File Cabinet, by invoking:

  ```
  $ @WPSPLUS$SYSTEM:WPLNEWUSR
  ```

- Problem If any user–writeable files are protected, the following message occurs:

```
%OA-E-NOREENTER, You are already using WPS-PLUS, you cannot
restart it
```

  Solution Check protections. All files within your [user.WPSPLUS] directory must have protection set at least to (OWNER:RWE).

- Problem If SYS$MANAGER:WPSPLUS_LOGIN.COM has not been invoked, the logical OAUSER is not defined, producing the following error message:

```
%OA-E-NOREENTER, You are already using WPS-PLUS, you cannot
restart it
```

  Solution See Installing Accounts for WPS–PLUS Users in Chapter 3 in this book for instructions on adding this command to your SYS$MANAGER:SYLOGIN.COM file, or to each user's LOGIN.COM file.

- Problem If another process is already running WPS–PLUS from the same account and using the same File Cabinet, the following error message occurs:

```
%OA-E-NOREENTER, You are already using WPS-PLUS, you cannot restart it
```

  Solution Log out of WPS–PLUS from your original process.

Error Message: Obsolete version of OAFORM.FLB

Problem If your OAFORM.FLB and OAFORM.FLC do not match, you receive the following error message:

```
Obsolete version of ddcu:[WPSPLUS.LIB]OAFORM.FLG; - Continuing
```

Solution Re–compile your WPSPLUS$SYSTEM:OAFORM.FLB to create WPSPLUS$SYSTEM:OAFORM.FLC, using the following procedure:

1. From the WPS–PLUS Word and Document Processing Menu, enter the following commands:

```
<OA$FBT_REMOVE_LIBRARY OA$LIB:OAFORM
<OA$FBT_WRITE_LIBRARY OA$LIB:OAFORM
<OA$FBT_INSTALL_LIBRARY OA$LIB:OAFORM
```

NOTE You must have PRMGBL and SYSGBL privileges to install OAFORM.

2. Exit from WPS–PLUS.

Error Message: Error opening profile document

Problem The profile document for WPS–PLUS is called WPSDEF.WPL and resides in each user's WPS–PLUS directory. If this file is missing, you receive the following error:

```
Error opening WPSDEF.WPL
Press any key to continue
```

Solution Copy a new WPSDEF.WPL from the WPSPLUS$SYSTEM directory to the user's WPS–PLUS [*username*.WPSPLUS] directory.

Error Message: SEND_JBC operation error.

Problem The WPL$FORMATTER QUEUE does not exist, or the SYSTEM QUEUE MANAGER is not running.

Solution Reinvoke SYS$MANAGER:WPLSTART.COM to recreate the WPS–PLUS print queues.

Error Message: LNGSPL_NOT_INITIALIZED

Problem When using the Spell Checker, if the chosen Language Lexicon is not installed, you will see the following message:

```
Error occurred during operation  :LNGSPL_NOT_INITIALIZED
Press any key to continue
```

Solution Install the lexicon image using the following commands:

```
$INSTALL :== $SYS$SYSTEM:INSTALL/COMMAND_MODE
$INSTALL
INSTALL>SYS$SHARE:LNGSPLXXX.EXE/OPEN/HEAD/SHARE
```

where *LNGSPLXXX* is one of the following:

LNGSPLGER.EXE Optional German lexicon
LGNSPLFRE.EXE Optional French lexicon
LNGSPLENG.EXE Optional English lexicon

Error Message: Reference to the proper DAF.DAT file could not be established.

Problem You have deleted or refiled your current dictionary from a menu other than the Dictionary Maintenance menu.

Solution Select a dictionary by using the SEL option on the Dictionary Maintenance menu.

Appendix D
Diagnostic Tools

Use these WPS–PLUS tools for diagnosing problems:

- Gold (and Gold)

  Turns verify mode on (left parenthesis) and off (right parenthesis). Verify mode displays DCL subcommands.

- CTRL N

  Displays the named data for the form you are using.

- CTRL V

  Displays all fields of the form you are using.

- Trace utility

  Sets or clears trace–mode flags that govern the areas/extent of tracing and the destination(s) of trace output. To use the Trace utility:

  1. Press GOLD 7
  2. Respond to the prompt by entering:

     ```
     Enter command: OA$TRA_SET [OFF,][A1LOG,] flag [,...]
     ```

     OFF is optional; A1LOG means that it includes A1 logging output (interleaved) in trace–log (only valid if LOG is also on); flag can be any one of those trace–mode flags listed in Table D–1.

Table D–1: Trace–mode Flags

Flag	Description
FORM	trace form–processing (OAFORM): opening, closing, etc.
FIELD	trace–field processing (OAFLD)
FLOW	trace form–library operations (OAFLO)
HELP	trace help (OAHELP)
PUT[1]	trace filed–put (OAFMS, OAFLD)
ALL	trace all of the above (OFF, ALL also permitted)
STUMP	dump form stack
TERM	output trace to terminal
LOG[2]	output trace to logging device/file (preset to TRUE)

[1]PUT is fairly low level: you do not normally need detail.

[2]LOG is preset enabled. You must turn it off if you do not want logging to a file. The trace–log file is A1TRACE.LOG. Each time you set LOG to on, a new A1TRACE.LOG is created.

The following is an example trace utility command line:

```
Enter command: OA$TRA_SET OFF,A1LOG,LOG,FORM,FIELD,FLOW,HELP
```

You can also output a trace line from the keyboard (A1 command input) with the command:

```
Enter command: OA$TRA_OUT [text]
```

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~~Lup S~~

< ~~OA$FLO~~_OPEN ^

~~OA$LIB_Show:OA~~

_OA$FLO_OPEN ^ OA$LIB_Show:OAForm

< OA$FBT_WRITE_LIBRARY ^ OA$LIB_Show:OAForm
FC

~~OA~~ UPSPLUS$SYSTEM

OAForm.FLC

(1) Oir/Pret

W:RE

< OA$FBT_INSTALL_LIBRARY ^ OA$LIB_Show:OA

OA$FLO_FLB

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