Please Read This First

PDL/81 Installation on DEC Alpha APX Computers Under Open VMS

This brief document takes the place of the machine-specific chapter of the *Installation and Tailoring Guide* (Tab 5 of the PDL/81 Documentation Binder). Other parts of that guide, particularly Chapter 6 on device tailoring and Chapter 7 on style tailoring should be read.

Installation on Open VMS Systems

This document describes the preferred method for installing PDL/81 on a DEC Alpha AXP computer under the Open VMS operating system. This method uses the VMSINSTAL procedure. If this method fails, or if you do not want to use VMSINSTAL, an alternate method is described in *Appendix B* of the *Installation and Tailoring Guide*.

Hardware and Software Prerequisites

This version of PDL/81 will run on Version 1.5 or later of Open VMS. It will probably also run on earlier versions.

The installation requires at least 3,000 blocks of disk. There are no other hardware requirements that are unique to PDL/81.

NOTE: This installation method must be run from a privileged account -- typically SYSTEM. It will modify the system files

SYS\$LIBRARY:DCLTABLES.EXE SYS\$HELP:HELPLIB.HLB

and will create the files and directories

SYS\$SYSTEM:PD8_V20.EXE
SYS\$SYSROOT:[SYSLIB.PD8_V20_LIB]
SYS\$SYSROOT:[SYSTEST.PD8_V20_SAMPLES]

If you do not want to do this, do not install by this method. The method described in *Appendix B* of the *Installation and Tailoring Guide* provides for a non-privileged, but less convenient, installation.

Performing the Installation

This section discusses the steps required in using VMSINSTAL to install PDL/81. A transcript of an actual installation session is used to illustrate the steps. In the transcript, *italics* are used to show material entered by the user. The symbol $\langle CR \rangle$ stands for the carriage return key.

Preparation

Before you begin the installation you should be sure that your system is adequately backed up in case any severe problems occur. Since the installation will modify the DCL tables, the current set should be saved by a command such as

\$ copy sys\$library:dcltables.exe sys\$library:dcltables_old

Getting Started

After logging in as SYSTEM, the default device and directory should be set to SYS\$UPDATE. Then, VMSINSTAL should be invoked, giving it the product name to be installed and the device on which the distribution tape is to be mounted. The product name for this release of PDL/81 is PD8020. Instead of giving the name, you may just give an asterisk. After starting up, VMSINSTAL will ask you if you are satisfied with the state of your system backup. If you are not, reply *no* and the process will be terminated. If you reply *yes*, processing will continue. Note that the output you see in this document is only representative. The actual output you see during installation may differ, particularly in areas of version numbers, dates, and device names.

```
$ set def sys$update
$ @vmsinstal * msa0
VAX/VMS Software Product Installation Procedure V5.0-2
It is 11-FEB-1994 at 11:31.
Enter a question mark (?) at any time for help.
* Are you satisfied with the backup of your system disk [YES]?<CR>
```

Mounting the Distribution Tape

You will next be asked to mount the tape. Do so, and then enter y.

```
Please mount the first volume of the set on MSA0:.
* Are you ready? y<CR>
%MOUNT-I-MOUNTED, PDL81 mounted on _MSA0:
The following products will be processed:
PD8 V2.0
Beginning installation of PD8 V2.0 at 11:32
```

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

Display of Notices

Several notices will now be displayed. On completion, you will be asked if you wish to continue. If you are satisfied with the restrictions presented in the notices, enter y (or just hit return). If not, enter n and processing will be terminated.

***** Begin Installation of PDL/81 V2.0.908 *****

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* Do you wish to continue [YES]? <CR>

Naming the PDL/81 Command

The normal name of the command used to run PDL/81 is **PDL81**. If, for some reason, you need another name, you can provide it now. We suggest, however, that you just enter return when asked.

By default, PDL/81 will be installed with "PDL81" as the DCL verb used to invoke the processor. You may, however, specify a different verb. Remember that all verbs in your DCL tables must be unique in the first four characters!

* Verb to use for PDL/81 processor [PDL81]: <CR>

* You chose PDL81 as the verb. Is that ok [YES]? <CR>

Acknowledging Required Changes

You will now be reminded that after installation is complete you must read and modify certain files in the library. These files all contain information that should be changed to reflect the requirements of your company.

WARNING: AFTER INSTALLATION IS COMPLETE, YOU *MUST* READ AND MODIFY THE CONTENTS OF THE FOLLOWING FILES IN SYS\$SYSROOT:[SYSLIB.PD8_V20_LIB]:

CLPHN.LIB CPYRT.LIB RSTRCT.LIB UID.LIB UTTL.LIB

SEE THE CHAPTER ON VMS INSTALLATION IN THE "PDL/81 INSTALLATION AND TAILORING GUIDE".

* Do you wish to continue [YES]? <CR>

Selecting Installation Verification

You will now be asked if you wish to run the installation verification procedure when installation is finished. You should probably elect to do so. This kit has an installation verification procedure (IVP). After installation, it will be left in

```
SYS$SYSROOT:[SYSTEST.PD8_V20_SAMPLES]PD8_IVP.COM
```

You may invoke this at any time to verify the installation.

* Do you want to run the IVP after the installation [YES]? < CR>

Purging of Files

During installation, any replaced files will normally be purged. You are now given a chance to keep them.

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

Remainder of the Installation

At this point all questions have been asked and installation will proceed automatically.

```
This ends the conversational part of the PDL/81 installation. The
remainder of the installation process should not require attention.
Linking PDL/81 with the shared RTL ...
Establishing DCL entry and help file ...
Establishing PDL/81 executable image ...
Creating PDL/81 style library ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSLIB.PD8_V20_LIB].
Creating PDL/81 samples ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSTEST.PD8_V20_SAMPLES].
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target
directories...
```

Installation Verification

If you asked that the installation verification procedure be run, you should see

Start Installation Verification Procedure for PDL/81 This procedure will run the installed PDL/81 on the file sys\$common:[systest.pdl81]design3.pdl and will place the output in design3.lis in that directory. The output should look like that in design3.lis-delivered. Executing: PDL81/DEVICE=PR10N DESIGN3 PDL/81 V2.0(vb).908 (5332-PD8) [style: DESIGN] [device: PR10N] [pass 1] 1 [source: VMI\$ROOT:[SYSTEST.PD8 V20 SAMPLES]DESIGN3.PDL;1] 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 [pass 2] 1 .1 [source: VMI\$ROOT:[SYSTEST.PD8_V20_SAMPLES]DESIGN3.PDL;1] 2 3 .1 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 [trees] 21 .1 [dindex]

```
22 .1 .2 .3 .4
[sindex]
23 .1 .2 .3
[rindex]
24 .1
[cic]
25 .1 .2
[stats]
26
Verification Procedure executed successfully.
Installation of PD8 V2.0 completed at 11:53
VMSINSTAL procedure done at 11:55
```

Post-Installation Tailoring

At this point, a few modifications should be made to files in the

```
SYS$SYSROOT:[SYSLIB.PD8_V20_LIB]
```

directory. Most of these changes are optional. However, the ones relating to notices should be read and modified.

Defining the Notices

A number of files contain text which must be modified before PDL/81 is used for actual production work:

CLPHN.LIB	definitions to handle the fourth argument of the <i>.Reverse</i> command of the <i>manual</i> style.
CPYRT.LIB	definitions to produce a copyright notice for the manual style.
RSTRCT.LIB	definition of the Restricted Rights Notice for the manual style.
UID.LIB	definition of the identification string for the design and ada styles.
UTTL.LIB	definition of the name and address block for the <i>design</i> and <i>ada</i> styles.

NOTE: These files are provided as examples only Several of them contain text which may have legal implications. No legal advice is intended by their inclusion. It is strongly suggested that competent legal advice be obtained before adopting your own contents for such files.

Defining the Default Style

As distributed, PDL/81 will process with the *design* style unless the /STYLE qualifier is used. This default can be changed by modifying the file named DEFAULT. It's distributed contents will be something like:

#{lib;DESIGN}

For example, if you wish to have the manual style as your default, change the definition line to

#{lib;MANUAL}

Defining the Default Output Device

As distributed, PDL/81 will process with the pr10 output device definition unless the /DEVICE qualifier is used. This default can be changed by modifying the file named DEFAULT.D. It's distributed contents will be something like:

#{lib;PR10.D}

For example, if you wish to have the hp12 output device as your default, change the definition line to

#{lib;HP12.D}

Style and Device Tailoring

The distributed style and device files will usually produce the desired results. However, as you gain experience with PDL/81 you may want to tailor style and device definitions to meet specific device and site requirements. Style tailoring is discussed in *Chapter 7* and device tailoring is discussed in *Chapter 6* of the *Installation and Tailoring Guide*.

NOTE: Some VMS printer devices may not support underscoring as defined in the distributed device definitions. See *Section 6.2* of the *Installation and Tailoring Guide* for a discussion. Also, because some devices will not properly support form feeds or horizontal tabs, you may have to modify the settings of the *.noff* or *.notab* parameters as discussed in *Section 6.1* of the *Installation and Tailoring Guide*.

Changing the Standard Page Depth

All distributed device files define a page depth of 66 lines. This may be changed for a particular device by changing the definition of the *pdepth* number register in the device definition file for that device. For example, the page depth supported by the PR10 device may be changed to 60 lines per inch by changing the definition line in the PR10.D file from

#{nr;pdepth;66}

to

#{nr;pdepth;60}

The PDL/81 Sample Directory

The directory

SYS\$SYSROOT:[SYSTEST.PD8_V20_SAMPLES]

contains a number of PDL/81 design source files that may be useful in understanding how to use the PDL/81 processor. This directory also contains the Installation Validation Procedure (PD8_IVP.COM) and a copy of the Command Language Definition file (PD8.CLD).

Removing PDL/81

To remove the PDL/81 processor from your system, delete the following files and directories:

```
SYS$SYSROOT:[SYSEXE]PD8_V20
SYS$SYSROOT:[SYSLIB.PD8_V20_LIB]*.*
SYS$SYSROOT:[SYSLIB.PD8_V20_LIB]
SYS$SYSROOT:[SYSTEST.PD8_V20_SAMPLES]*.*
SYS$SYSROOT:[SYSTEST.PD8_V20_SAMPLES]
```

This will delete all of PDL/81 except for the command definition in the system DCL tables. You may leave the command definition installed, if you wish, since attempting to use it will only result in an error message.

However, if you wish to remove that last vestige of PDL/81, you may do so by using the /DELETE qualifier of the Command Definition Utility (SET COMMAND). Do not do this unless you know what you are doing! If you damage the system DCL tables you may find it difficult to recover them.