2

Installing VPA

This chapter describes the requirements and procedures for installing VPA.

Read this entire chapter before beginning the installation.

2.1 Software Kit Media

The software kit for the VPA software contains *one* of the following:

- A magnetic tape labeled ''VPA V2.1 BIN 16MT9''
- A TK50 labeled ''VPA V2.1 BIN TK50''
- Four RX33 diskettes labeled ''VPA V2.1 BIN RX33''

2.2 Required Software

To install VPA Version 2.1, you must be running VMS Version 5.3 or 5.4.

In addition to the VMS Required Saveset, the following VMS Tailoring Classes are required:

- Programming Support
- System Programming Support
- Utilities

2.3 Installation Requirements

Before installing the VPA software, you need certain resources. The software requirements are:

- A registered and loaded Product Authorization Key (PAK). To verify that your PAK is registered and loaded, refer to the *VMS License Management Utility Manual*.
- Access to either of the following accounts:
  - The SYSTEM account
  - An account with the SETPRV privilege
  - An account with the DETACH, CMKRNL, WORLD, GRPNAM, ALTPRI, SYSLCK, EXQUOTA, SYSNAM, and PSWAPM privileges

  To verify that you have appropriate privileges, issue the SHOW PROCESS/PRIVILEGE command at the DCL prompt and check that you have the privileges listed above.
- A minimum of 14307 blocks of free disk space on the system device during the installation of VPA, and 7197 blocks of disk space after installation, if you choose not to install any of the optional VPA data definition files for the 10 supported languages. If you choose to install all of the optional VPA data definition files for the 10 supported languages, then you need a minimum of 14307 blocks of free disk space on the system device during the installation of VPA, and 8133 blocks of disk space after installation, for normal operation. This disk space does not include the disk space required for collecting performance data.

  To check the available disk space on the system device, issue the SHOW DEVICE command and examine the ''Free Blocks'' for the system device.

  You must provide sufficient disk space for the VPA database directory files. The amount of disk space needed for the database files depends on:
  - The collection schedule
  - The number of concurrent processes running
  - The frequency of image activations
  - The number of configured disk devices
  - The archiving scheme selected

For daily data, allocate 6000 blocks per day for each node, until you determine your exact requirements. Allocate at least 4,000 blocks per day if you are using a VAX-11/780, and at least 10,000 if using a VAX 8800 system. Hot file data, for which collection is controlled by a user settable threshold, also significantly affects the size of the data file.

If you choose to archive performance data, you will need to allocate additional space.

- A process slot for the data collection process.
- 600 + number of disks or tapes * MAXPROCESSCNT + 40000 bytes of available nonpaged dynamic memory for the installation, including the Installation Verification Procedure (IVP).

  The amount of available nonpaged pool can be determined by issuing the SHOW MEMORY command at the DCL prompt, then examining the value of ''Nonpaged Dynamic Memory Largest.'' If this value is less 200 * MAXPROCESSCNT + 24000, then compare the value of ''Nonpaged Dynamic Memory Total'' in the SHOW MEMORY output to the value of the SYSGEN parameter NPAGEVIR. To display the current value of NPAGEVIR, enter the following commands:

```
$  RUN SYS$SYSTEM:SYSGEN
SYSGEN>  USE CURRENT
SYSGEN>  SHOW NPAGEVIR
```

  If the difference between NPAGEVIR and ''Nonpaged Dynamic Memory Total'' is less than 200 * MAXPROCESSCNT + 24000, then increase the SYSGEN parameters NPAGEDYN and NPAGEVIR by the value of 200 * MAXPROCESSCNT + 24000. To change the SYSGEN parameters, enter new parameter values in SYS$SYSTEM:MODPARAMS.DAT and invoke AUTOGEN. Refer to the *VMS System Generation Utility Manual (SYSGEN)* for information about modifying SYSGEN parameters.

- During VPA installation, VMSINSTAL creates a new copy of the DCL command tables that includes the ADVISE command. In order for VMSINSTAL to complete this process successfully, your system must have available enough unused global sections and global pages.

  To determine the number of global pages and global sections that the DCL tables at your site require, enter the following commands:

```
$  INSTALL
INSTALL
LIST SYS$LIBRARY:DCLTABLES.EXE/GLOBAL
```

The output generated is similar to the following:

```
DCLTABLES;219    Open Hdr Shar      Lnkbl

       System Global Sections

DCLTABLES_001  (06000000)         PRM SYS      Pagcnt/Refcnt=484/21296
```

In this example, the DCL command table uses one global section, as indicated by the single entry ''DCLTABLES_001.'' It also uses 484 global pages, indicated by the ''Pagcnt.'' Therefore, to replace your DCL command table to include the VPA ADVISE command, this system needs a minimum of one unused global section and 484 unused global pages.

To calculate the number of unused global sections, enter the following:

```
INSTALL>  LIST/GLOBAL/SUMMARY
          Summary of Local Memory Global Sections
299 Global Sections Used, 32316/12684 Global Pages Used/Unused
```

As this example illustrates, there are 299 used global sections and 12684 unused global pages. Since this system requires 484 global pages to replace its DCL command table, and there are 12684 available, the GBLPAGES parameter does not need to be increased.

To check the current value of GBLSECTIONS, enter the following sequence of commands:

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

These commands produce output similar to the following:

```
Parameter Name      Current   Default   Minimum   Maximum Unit  Dynamic
--------------      -------   -------   -------   ------- ----  -------
GBLSECTIONS             500       128        20      4095 Sections
```

To make the calculation for this system, subtract the number of used GBLSECTIONS from the number of current GBLSECTIONS, such as:

```
500 - 299 = 201 unused sections.
```

Since this system required only one global section to replace its DCL command table and there are 201 unused global sections, the value of the SYSGEN parameter GBLSECTIONS would not need to be altered.

If you need to change the number of global pages or global sections, invoke AUTOGEN after entering the new parameter values in SYS$SYSTEM:MODPARAMS.DAT.

It takes between 15 and 30 minutes to install VPA depending on your system configuration.

2.4 User Requirements

You must have the following minimum requirements in effect to run VPA:

- Privileges to start, stop, and alter the data collection process:

  DETACH
  CMKRNL
  WORLD
  GRPNAM
  ALTPRI
  SYSLCK
  EXQUOTA
  PSWAPM

- Write access to the following files:

  VPA$DATABASE:VPA$SCHEDULE.DAT
  VPA$DATABASE:VPA$PARAMS.DAT

2.5 Installation Procedure

To install the VPA software, you must invoke the VMSINSTAL command procedure. Refer to the *VMS System Manager's Manual* for more information.

During VPA's installation, your system's DCLTABLES will automatically be updated to include VPA commands. Update your system tables accordingly if your system's usage of DCLTABLES differs from the standard usage.

Step 1: Log in Under the System Account

If you're installing VPA for the first time, go to step 2. Otherwise, stop the existing data collectors on all VAXcluster nodes by entering the following command on each node:

```
$ ADVISE/COLLECT/STOP
```

After you log in to the system manager's account to install the VPA software, continue with step 2.

Step 2: Invoke VMSINSTAL

Enter the following command line to invoke VMSINSTAL:

```
$  @SYS$UPDATE:VMSINSTAL VPA device-name
```

When you give this command to invoke VMSINSTAL, you provide the following:

- The name of the product you are installing (VPA).
- The name of a device (device-name) on which the installation medium is to be mounted. The device name should have the form *ddcn*, in which *dd* represents the device code, *c* represents the controller number, and *n* represents the unit number.

When you invoke VMSINSTAL, it checks to see:

- If you are logged in to the system manager's account. (It is recommended that you install layered software from the system manager's account.)
- If you have adequate quotas for installing layered products.

VMSINSTAL checks to see if either of the following conditions exist:

- Whether DECnet is up and running
- Whether any users are logged onto the system

If VMSINSTAL detects either of these conditions, it asks you whether you want to continue:

```
* Do you want to continue anyway [NO]?
```

If you do not want to continue the installation process, press Return. Otherwise, enter **YES** to continue.

VMSINSTAL also asks you if you are satisfied with the system disk backup. (You should always be sure you have a current system disk backup before you perform an installation of any type.)

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

If you are satisfied with your system backup, press Return. Otherwise, type **NO**, back up your system disk and restart the installation.

Step 3: Mount the Software Media

If you did not specify the device name in the command line, VMSINSTAL now prompts you to mount the software media:

```
Please mount the first volume of the set on <device-name>

* Are you ready?
```

When you have mounted the software media, enter **YES** and press Return. VMSINSTAL displays the following message:

```
%MOUNT-I-MOUNTED, VPA mounted on <device-name>


The following products will be processed:
  VPA V2.1
       Beginning installation of VPA V2.1 at <time-of-day>
%VMSINSTAL-I-RESTORE, Restoring product saveset A...
%VMSINSTAL-I-RELMOVED, The products release notes have been
       successfully moved to SYS$HELP.
* Do you want to purge files replaced by this installation [YES]?
```

Press Return to purge the files.

Step 4: Respond to the IVP Prompt

VPA displays the following message about the IVP:

```
     This kit contains an Installation Verification Procedure
     (IVP) to verify the correct installation of the VAX Performance
     Advisor. It can be run prior to the conclusion of this procedure
     by answering "Yes" to the IVP prompt or invoked after installation
     as follows:

     @SYS$TEST:VPA$IVP.COM

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

Press Return to run the IVP.

Step 5: Respond to the Licensing Prompt

VMSINSTAL now asks you if this product has an authorization key registered and loaded.

```
Does this product have an authorization key registered and loaded?
```

Type **YES** and press Return if your authorization key is registered and loaded. If the license has not been registered and loaded, type **NO**. The license must be registered and loaded before VPA can be installed.

Step 6: Enter the Device and Directory Name for the VPA Database

VMSINSTAL now asks you to enter the name of the device and directory to which the data collection process will write the VPA database files :

```
* What device will be used for the VPA database files [SYS$COMMON:[VPA]]:
```

If you want to use the default of SYS$COMMON:[VPA], press Return. Otherwise, enter a device name and an optional directory name, then press Return. VMSINSTAL displays a message similar to the following:

```
You have selected SYS$COMMON:[VPA] to be used for the VPA database files.
* Is this correct [YES]?
```

If the message displays the correct device and directory name, press Return. Otherwise, type **NO**, then enter the correct device and directory name. VMSINSTAL then displays the following:

```
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$COMMON:[VPA].
```

Step 7: Retain the VPA Schedule File

If you have previously installed VPA, VMSINSTAL displays the following:

```
In the current VPA database, there exists
the scheduling file VPA$DATABASE:VPA$SCHEDULE.DAT;1

* Do you want to retain the existing VPA schedule file [YES]?
```

If you have modified the default schedule file and want to retain the changes, press Return. Otherwise, enter **NO**

Step 8: Retaining the VPA Parameters File

If you have previously installed VPA, VMSINSTAL displays the following:

```
In the current VPA database, there exists
the parameter file VPA$DATABASE:VPA$PARAMS.DAT;1

* Do you want to retain the existing VPA parameters file [YES]?
```

If you have modified the default parameters file and want to retain the changes, press Return. Otherwise, enter **NO**.

Step 9: Selecting the VPA Definition Files

VMSINSTAL now asks you if you want VPA definition files required for data extraction.

```
* Do you want VPA definition files required for data extraction [NO]? yes
```

If you type **YES** and press Return, VMSINSTAL displays the following:

```
    VPA definition files are supported for the following languages:
        ADA,BASIC,BLISS,C,FORTRAN,LISP,MACRO,PASCAL,PLI

    VPA definition files for the following languages existed from
    a previous installation:

        ADA,BASIC,BLISS,C,FORTRAN,LISP,MACRO,PASCAL,PLI

* Do you want the definition files for all of these languages [NO]? no

* Do you want the definition file for BASIC [NO]?

* Do you want the definition file for BLISS [NO]? y

* Do you want the definition file for C [NO]?

* Do you want the definition file for FORTRAN [NO]?

* Do you want the definition file for LISP [NO]?

* Do you want the definition file for MACRO [NO]? y

* Do you want the definition file for PASCAL [NO]?

* Do you want the definition file for PLI [NO]?
```

After you have completed step 9, VMSINSTAL displays the following information:

```
No more input is required to complete this installation. From
this point it will proceed automatically.

Upon completion of the installation, please be sure to add
"@SYS$STARTUP:VPA$STARTUP" and "@SYS$MANAGER:VPA$SHUTDWN" to
the system startup and shutdown files SYS$MANAGER:SYSTARTUP_V5.COM
and SYS$MANAGER:SYSHUTDWN.COM as described in Chapter 2
of the VPA User's Guide.
```

At this time, VMSINSTAL restores the save set from the software media, moves the files to their target directories, and starts the data collection process. VMSINSTAL displays the following messages during these procedures:

```
%VMSINSTAL-I-RESTORE, Restoring product saveset B...
%VPA-I-BUILDING,  Linking VPA Message File...
%VPA-I-BUILDING,  Linking VPA Data Collector...
%VPA-I-BUILDING,  Linking VPA Advisor...
%VPA-I-BUILDING,  Linking VPA Graph...
%VPA-I-BUILDING,  Linking VPA Rule Compiler...
%VPA-I-BUILDING,  Linking VPA VPA Modeling...
%VPA-I-BUILDING,  Linking VPA Graphical Model Editor...
%VPA-I-BUILDING,  Linking VPA Params Editor...
%VPA-I-BUILDING,  Linking VPA Callable Interface...
%VMSINSTAL-I-SYSDISK, This product creates system disk directory
                      [SYSHLP.EXAMPLES.VPA].

    If you intend to execute this layered product on other nodes in your
    VAXcluster, and you have the appropriate software license, you must
    prepare the system-specific roots on the other nodes by issuing the
    following command on each node (using a suitably privileged account):

 $ CREATE /DIRECTORY SYS$SPECIFIC:[SYSHLP.EXAMPLES.VPA]

 The VPA data collection process is starting

 %VMSINSTAL-I-MOVEFILES, Files will now be moved to their target
 directories...
```

Verification Procedure (IVP) will execute if you answered **YES** to the IVP prompt earlier in the installation procedure. When VMSINSTAL executes this procedure, it displays the following:

```
Beginning the VPA V2.1 Installation Verification Procedure.

SCHEDULE  FILE

 _________________________   ________   _____________________________________
|                         | | Node   | |
| Collection  Parameters  | | Names  | | Weekly schedule for ALL nodes
|-------------------------| |--------| |-------------------------------
| Beginning 27-APR-1990   | | SUPPLY | | Sunday     0-24
| Ending     1-JAN-2010   | | DEMAND | | Monday     0-24
| Hot files  0.33         | |        | | Tuesday    0-24
| Delete after     3 days | |        | | Wednesday  15-17
| Working set   1000      | |        | | Thursday   10-24
| Min. Free Space  2500   | |        | | Friday     0-24
| Extended IO meas: On    | |        | | Saturday   0-24
                          | |        | |
                          | |        | |
                          | |        | |
                          | |        | |

NODE and VPA STATUS
-------------------------------------------------------------------
|  Node Name       |  Node Status  |  VPA Data Collector Status  |
-------------------------------------------------------------------
   SUPPLY          |  Up           |  Recording Data
   DEMAND          |  Up           |  Stopped
```

When the IVP completes, VMSINSTAL displays the following messages:

```
The installation verification program for VPA V2.1 has completed successfully

      Installation of VPA V2.1 completed at <time-of-day>

      VMSINSTAL procedure done at <time-of-day>
```

You can execute the IVP at any time by issuing the following command:

```
$  @SYS$TEST:VPA$IVP.COM
```

Step 10: Modify the System Start-Up Command Procedure

To invoke the VPA data collector at system boot time, edit your SYS$MANAGER:SYSTARTUP_V5.COM file and insert the following command:

```
$ @SYS$STARTUP:VPA$STARTUP.COM
```

The VPA$STARTUP.COM file contains commands to define the VPA system logical names and to start the data collector.

Note *If you want all VPA users to obtain VPA reports without receiving messages about insufficient privileges or file protection violations, edit the file VPA$STARTUP.COM to change the protection codes on database files to world READ (W:R). The protection of files created by the VPA data collector is determined by the default protection of the process that creates the detached image (which is normally the process running the SYS$MANAGER:SYSTARTUP_V5.COM procedure).*

Modify the SYS$STARTUP:VPA$STARTUP.COM procedure to change the default protection for the process. You must also change it back to the desired protection after the VPA data collector has been started.

The modified VPA$STARTUP.COM file could be similar to the following:

```
$ DEFINE/SYSTEM/EXEC VPA$DATABASE DISK:[VPA.DATABASE]
$ OLD_DEFAULT=F$ENVIRONMENT("PROTECTION")
$ SET PROTECTION=(S:RWED,O:RWED,G:RWED,W:RE) /DEFAULT
$ ADVISE/COLLECT/START
$ !Now change default back
$ SET PROTECTION = ('OLD_DEFAULT) /DEFAULT
```

Step 11: Modify the System Shutdown Command Procedure

To stop the data collector at system shutdown, insert the following command in the SYS$MANAGER:SYSHUTDWN.COM file:

```
$  @SYS$MANAGER:VPA$SHUTDWN.COM
```

The VPA$SHUTDWN.COM file contains the command that stops the data collector.

Note *If you have a standalone system, you have completed the installation of the VPA software. Make sure that all of the required files listed in Table 2–1 are in the correct directories.*

Proceed to step 12 if you have installed VPA on a VAXcluster System that has one system disk.

Proceed to step 13 if you have a VAXcluster System with multiple system disks or a Local Area VAXcluster System with multiple boot members.

Step 12: Start VPA on the Other Nodes in the VAXcluster System

After you have installed VPA on a VAXcluster System that has one system disk, follow these steps to start the VPA data collector on each of the other nodes in the cluster:

1. Load the VPA license with the following command:

   ```
   $  LICENSE LOAD VPA
   ```

2. Install the new DCL command table on other nodes in the cluster by entering the following commands on each of the other nodes. Follow the procedure in Section 2.3 to assure that sufficient global pages and sections exist.

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

CAUTION *If your system or cluster configuration deviates from standard usage of DCLTABLES, modify the above commands to suit your particular needs.*

3. To access the new ADVISE command, log out and log in again.

4. Start the data collector by running the command procedure SYS$STARTUP:VPA$STARTUP.COM from a privileged account.

Note *If any nodes were shut down that share a common system disk with a node in which the VPA installation is complete, simply boot the systems and go to step 13, Part 3.*

Step 13: Install VPA on Clusters with Multiple System Disks or on Local Area VAXcluster Systems with Multiple Boot Members

When you use multiple system disks or boot members in a cluster, you must change the installation procedures. The following procedure assumes you are using a single directory for the VPA database and that the VPA database will be accessible from every node in the VAXcluster System.

1. Run VMSINSTAL once for each system disk or boot member. If multiple nodes share a system disk, run VMSINSTAL on only one of the nodes sharing that system disk.
2. When VMSINSTAL prompts for the data directory, be sure to specify the same directory each time.
3. You can start the data collector on the other cluster nodes on which VMSINSTAL was not run by logging into each of those nodes, updating the DCL tables, and invoking SYS$STARTUP:VPA$STARTUP.COM as described in step 10.

Step 14: If you use any VPA V2.0 compiled rules files (.KB), recompile the rules with VPA V2.1.

2.6 VPA File Names and Directory Areas

This section identifies all the files that comprise the VPA product. VPA files, with the exception of the release notes file, start with the prefix VPA$. The glossary contains a list of the possible file types. Below to the right of the file name is the directory area in which the file resides. Some of the directory areas are logical names. See Appendix F for their descriptions.

Table 2–1 The VPA Files

File Name	Directory Area
VPA021.RELEASE_NOTES	*SYS$HELP*
This text file contains the release notes for VPA Version 2.1.	

(continued on next page)

Table 2–1 (Cont.) The VPA Files

File Name	Directory Area
VPA$ADVISOR.EXE	*SYS$SYSTEM*
This is the report generator and analysis image file for VPA.	
VPA$ARCHIVE.COM	*VPA$EXAMPLES*
This command procedure may be used to archive daily data to the history files on a daily basis. The template for this command procedure is created during VPA installation.	
VPA$BLDKB.EXE	*SYS$SYSTEM*
This is the image file which compiles the auxiliary Knowledge Base.	
VPA$DAILY.COM	*VPA$EXAMPLE*
This is a sample command procedure that you may use to generate daily VPA reports. The template for this command procedure is created during VPA installation.	
VPA$DC_V5.EXE	*SYS$SYSTEM*
This is the VPA data collection image file. It writes the two minute interval record to the daily data file.	
VPA$DC.LOG	*VPA$DATABASE*
This text file contains error messages for errors that occur during the data collection process.	
VPA$DCOMM.EXE	*SYS$SYSTEM*
This is an image file used to update the VPA schedule file and communicate with the VPA data collector.	
VPA$DECW_HELP.HLB	*SYS$HELP*
This is the help file for the DECwindows Interface.	
VPA$DEINSTAL.COM	*SYS$UPDATE*
This command procedure removes VPA from the system.	
VPA$EDIT.EXE	*SYS$SYSTEM*
This image file is used to edit the VPA parameters file.	
VPA$EDITHELP.HLB	*SYS$HELP*
This is the help file for the VPA Parameter Edit Utility.	
VPA$GETDATA.COM	*VPA$EXAMPLES*
This command procedure creates an executable image from VPA$GETDATA.MAR and its library file.	

(continued on next page)

Table 2–1 (Cont.) The VPA Files

File Name	Directory Area
VPA$GETDATA.MAR This text file is a sample MACRO application that uses the Callable Interface for Data Extraction (CIFDE).	*VPA$EXAMPLES*
VPA$GRAPH.EXE This is an image file for graphing VPA data.	*SYS$SYSTEM*
VPA$HOLIDAYS.TXT This text file contains holiday dates. For each date found in this file the archival process will use the holiday schedule in place of the normal schedule.	*VPA$DATABASE*
VPA$IVP.COM This command file contains the Installation Verification Procedure. It may be run at product installation time to verify a successful installation.	*SYS$TEST*
VPA$KB.VPR This is an example of the rules source file for the VPA factory knowledge base. It may be used to provide examples for writing rules.	*VPA$EXAMPLES*

VPA$LIB.*
These files contain various data structure definitions for selected languages that may be used with the VPA Callable Interface for Data Extraction. These files are created at installation time and may include:
`VPA$LIB.ADA ADA`
`VPA$LIB.BAS Basic`
`VPA$LIB.R32 Bliss`
`VPA$LIB.H C`
`VPA$LIB.FOR Fortran`
`VPA$LIB.LSP Lisp`
`VPA$LIB.MAR Macro`
`VPA$LIB.BAS Pascal`
`VPA$LIB.PLI PL/I`
	SYS$LIBRARY

VPA$MAIN.UID This file contains most of the DECwindows widget definitions used by VPA.	*DECW$SYSTEM_DEFAULTS*

(continued on next page)

Table 2–1 (Cont.) The VPA Files

File Name	Directory Area
VPA$MESSAGE.EXE	*SYS$MESSAGE*
This is an image file which provides the VPA messages.	
VPA$MSG.TXT	*SYS$SYSTEM*
This file contains the conclusions and message templates that are required by VPA.	
VPA$nodename_dd-mmm-yyyy_dd-mmm-yyyy.name	*VPA$DATABASE*
This file contains the archived daily data. The actual file name depends on the history descriptor parameters and *name* is the history file descriptor name.	
VPA$nodename_dd-mmm-yyyy_dd-mmm-yyyy.name_JOU	*VPA$DATABASE*
This history journal file contains information to aid the recovery of a corrupted history file. The actual file name depends on the history descriptor parameters and *name* is the history file descriptor name.	
VPA$nodename_yyyymmmdd.CPD	*VPA$DATABASE*
The daily data file is written by the data collector. It contains the two minute interval data records. The file name associates the file with a specific node and time period.	
VPA$PARAMS.DAT	*VPA$DATABASE*
The parameter file is a repository for VPA parameters. The main parameters include: workload definitions workload family definitions history file descriptors for archiving a switch to signal the use of user auxiliary rules version limit indicator for parameter and history file generations	
VPA$READ.EXE	*SYS$LIBRARY*
This image file is used to execute the VPA Callable Interface procedures.	
VPA$SCHEDULE.DAT	*VPA$DATABASE*
The data collection schedule file designates when the data collector will collect data. It is created and modified with the ADVISE/COLLECT command.	
VPA$SHUTDWN.COM	*SYS$MANAGER*

(continued on next page)

Table 2–1 (Cont.) The VPA Files

File Name	Directory Area
This command procedure performs an orderly shutdown of the data collector. It should be called from the site-specific shutdown command procedure.	
VPA$STARTUP.COM	*SYS$STARTUP*
This command procedure defines the VPA system logical names and starts the data collector. The site-specific system startup procedure should be modified to execute VPA$STARTUP.COM. It is created during VPA installation.	
VPA$VME.EXE	*SYS$SYSTEM*
This is the image file for VPA modeling.	
VPA$VME_edit.EXE	*SYS$SYSTEM*
This is the image which enables full screen editing and solving of VPA models.	

2.7 Sample Installation Log

This section contains a sample log of an initial VPA installation with Option N, which allows you to access online release notes.

```
$ @sys$update:vmsinstal vpa

 VAX/VMS Software Product Installation Procedure V5.3


It is 21-MAY-1990 at 16:34.

Enter a question mark (?) at any time for help.
* Are you satisfied with the backup of your system disk [YES]?

The following products will be processed:
  VPA V2.1

 Beginning installation of VPA V2.1 at 16:34

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%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]?

     This kit contains an Installation Verification Procedure (IVP)
     to verify the correct installation of the VAX Performance Advisor.
     It can be run prior to the conclusion of this procedure by answering
     "YES" to the IVP prompt or invoked after the installation as follows:

     @SYS$TEST:VPA$IVP.COM

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

```
        Product:      VPA
        Producer:     DEC
        Version:      2.1
        Release Date: 01-JUL-1990

* Does this product have an authorization key registered and loaded? y
    VPA$DATABASE is already defined system-wide as
      DISK$SYSMGR:[VPA]

* Should this be used for the VPA database files [YES]?
    In the current VPA database directory, there exists
    the scheduling file disk$SYSMGR:[VPA]VPA$SCHEDULE.DAT;3

* Do you want to retain the existing VPA scheduling file [YES]?
    In the current VPA database directory, there exists
    the parameter file disk$SYSMGR:[VPA]VPA$PARAMS.DAT;41

* Do you want to retain the existing VPA parameters file [YES]?
    VPA definition files for the following languages currently
    exist in SYS$LIBRARY:

        FORTRAN

    VPA language definition files allow the use of Callable
    VPA routines for program extraction of VPA daily data.

    You may choose from 9 language definition files which
    range in size from about 100 to 200 blocks, for a
    total of 1085 blocks.


* Do you want VPA definition files required for data extraction [NO]?

    No more input is required to complete this installation.  From
    this point it will proceed automatically.

    Upon completion of the installation, please be sure to add
    "@SYS$STARTUP:VPA$STARTUP" and "@SYS$MANAGER:VPA$SHUTDWN" to
    the system startup and shutdown files SYS$MANAGER:SYSTARTUP_V5.COM
    and SYS$MANAGER:SYSHUTDWN.COM as described in Chapter 2 of the VPA
    User's Guide.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VPA-I-BUILDING, Linking VPA Message File...
%VPA-I-BUILDING, Linking VPA Data Collector...
%VPA-I-BUILDING, Linking VPA Advisor...
%VPA-I-BUILDING, Linking VPA Graph...
%VPA-I-BUILDING, Linking VPA Rule Compiler...
%VPA-I-BUILDING, Linking VPA Modelling...
%VPA-I-BUILDING, Linking VPA Graphical Model Editor...
%VPA-I-BUILDING, Linking VPA Params Editor...
%VPA-I-BUILDING, Linking VPA Callable Interface...

 The VPA data collection process is starting

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

  Beginning the VPA V2.1 Installation Verification Procedure.
```

```
SCHEDULE  FILE
 ____________________________   _________   ___________________________________
|                            | | Node    | |
| Collection  Parameters     | | Names   | | Weekly schedule for ALL nodes
|----------------------------|-|---------|-|-------------------------------
| Beginning 21-MAY-1990      | | VAX01   | | Sunday     0-24
| Ending     1-JAN-2010      | | VAX02   | | Monday     0-24
| Hot files  0.33            | | VAX03   | | Tuesday    0-24
| Delete after 99998 days    | |         | | Wednesday  0-24
| Working set   2048         | |         | | Thursday   0-24
| Min. Free Space    10      | |         | | Friday     0-24
| Extended IO meas: On       | |         | | Saturday   0-24
NODE and VPA STATUS
------------------------------------------------------------
| Node Names       | Node Status | VPA Data Collector Status|
------------------------------------------------------------
  VAX01            | Up          | Recording Data
  VAX02            | Up          | Recording Data
  VAX03            | Up          | Recording Data

  The Installation Verification Procedure for VPA V2.1 has completed
  successfully.

 Installation of VPA V2.1 completed at 16:40

 VMSINSTAL procedure done at 16:40
 $
```