VAX Performance and Coverage Analyzer Installation Guide

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This document contains instructions for installing VAX PCA on the VMS operating system. It also explains how to read the online release notes before or after installing the product. This document applies to VAX PCA Version 3.0.

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Preface

This document describes how to install the VAX Performance and Coverage Analyzer (PCA) on the VMS operating system. It is intended for system managers. This document applies to VAX PCA Version 3.0 and all maintenance updates in that version. A major version number is represented by the digits to the left of the decimal point, and the maintenance update version number is indicated by the digits to the right of the decimal point.

Keep this document with your distribution kit. You will need it to install maintenance updates or to reinstall VAX PCA for any other reason.

At the back of this document are two Reader's Comments forms. If you have any comments about this document, fill out one form and mail it; your comments will be considered for the next revision of the installation guide.

For more information about installing VAX PCA on VMS systems, see your processor-specific installation/operations guide.

The installation procedure is described step-by-step and is, for the most part, self-explanatory. The system prompts you to answer questions and to change volumes, and waits for you to tell it to continue.

Defaults appear in brackets ([ ]) throughout the installation procedure. Text you type is indicated in red.

Preparing to Install VAX PCA

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

Distribution media must be mounted in numerical order. The installation procedure prompts you to mount the volumes. For more information on how to mount distribution media, see your processor-specific installation /operations guide, which also details several options to the installation procedure.

Required Operating System Components

The VMS operating system comes with a variety of support options, or classes. Classes include such features as networking and RMS journaling. For a complete list of the required classes, see the Software Support Addendum (SSA), which comes with the Software Product Description (SPD).

Prerequisite Software

VAX PCA Version 3.0 requires VMS Version 5.3 or higher. If you are using the PCA DECwindows interface, VMS DECwindows Version 2.0 is also required.

The VMS DECwindows Compute Server component must be installed before the VAX Performance and Coverage Analyzer is installed. The DECwindows compute server consists of the RTL images: DECW$DWTLIBSHR.EXE, DECW$XLIBSHR.EXE, and DECW$TRANSPORT_COMMON.EXE.

Optional Software

The following optional software can be used with VAX PCA Version 3.0:

- VAX Ada Version 1.5 and 2.0
- VAX BASIC Version 3.2 and Version 3.3
- VAX BLISS-32 Implementation Language Version 4.5
- VAX C Version 2.4 through Version 3.0

- VAX COBOL Version 4.2
- VAX DIBOL Version 4.0
- VAX FORTRAN Version 5.4 and 5.5
- VAX FORTRAN HPO Version 1.0
- VAX PASCAL Version 3.9 and 4.0
- VAX PL/I Version 3.2
- VAX RPG II Version 2.1
- VAX SCAN Version 1.1
- VAX DEC/Test Manager Version 3.2
- VAX Language-Sensitive Editor Version 3.0 and 3.1
- VAX Source Code Analyzer Version 2.0 and 2.1

All features of PCA are available to each of these languages. The VAX DEC/Test Manager, the VAX Language-Sensitive Editor, and the VAX Source Code Analyzer can be used in conjunction with VAX PCA.

Accessing the Online Release Notes

VAX PCA provides online release notes. The prompt to display or print the release notes during the installation appears in step 5 of the installation procedure when you invoke VMSINSTAL with the OPTIONS N parameter.

To obtain the release notes after the installation, type or print the file SYS$HELP:PCA030.RELEASE_NOTES. Online help also directs you to the the release notes file. After the installation, type the following command:

```
$ HELP PCA RELEASE_NOTES RETURN
```

Installation Procedure Requirements

The installation takes approximately 5 to 25 minutes, depending on the type of media and your system configuration. Before installing VAX PCA, you must have the following privileges and resources:

- SETPRV privileges, or CMKRNL, WORLD, and SYSPRV privileges
- A minimum of 11000 blocks of free disk space during installation; 5500 blocks are used after installation; 6500 blocks are used after installation with the demo package

- A minimum of 40 free global pages plus the size (in number of disk blocks) of the file SYS$LIBRARY:DCLTABLES.EXE at installation; for most efficient operation, you will need a total of 40 free global pages plus the size of SYS$LIBRARY:DCLTABLES.EXE after installation
- A minimum of 4 free global sections at installation

NOTE

You must ensure that your system has the necessary global page and global section SYSGEN quotas for the installation. Failure to do so could cause the DCL tables to be corrupted in some situations.

To determine the number of available global pages on your system, invoke the VMS Install Utility by typing the following commands:

```
$  INSTALL  RETURN
```

Then type the following command:

```
INSTALL>  LIST/GLOBAL/SUMMARY  RETURN
        Summary of Local Memory Global Sections
100 Global Sections Used,  300/400 Global Pages Used/Unused
INSTALL>  EXIT  RETURN
```

When you issue these commands, the system displays a summary of the number of global sections used, the number of global pages used, and the number of global pages unused. To exit from the VMS Install Utility, type the EXIT command.

VAX PCA requires approximately 40 global pages. If there are fewer than 40 pages available, you can delete an existing known image with the VMS Install Utility, or you can increase the GBLPAGES system parameter with the VMS System Generation Utility (SYSGEN) by editing the file SYS$SYSTEM:MODPARAMS.DAT and then invoking the AUTOGEN command procedure, SYS$UPDATE:AUTOGEN.COM. For more information on the AUTOGEN command procedure, see your processor-specific installation /operations guide.

You can determine the number of available global sections by invoking SYSGEN as follows:

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

The last number displayed is the maximum number of global sections. Compare this number to the number of global sections in use displayed by the VMS Install Utility. VAX PCA requires 4 global sections. Therefore, if the number of global sections used plus 2 exceeds the maximum number of global sections, you must increase the number of available global sections before you can install VAX PCA. To increase the number, you must increase the GBLSECTIONS system parameter with SYSGEN by editing the file SYS$SYSTEM:MODPARAMS.DAT and then invoking the SYS$UPDATE:AUTOGEN.COM procedure. For more information on the AUTOGEN.COM procedure, see your processor-specific installation /operations guide.

If the number of global sections used plus 2 is less than the maximum number of global sections, you can exit from SYSGEN and continue.

User Account Quotas and Privileges

To use VAX PCA, it is recommended that each account have TMPMBX and NETMBX privileges and the following requirements:

- AST limit (ASTLM) 30 (minimum)
- Buffered I/O byte count quota (BYTLM) 4096 (minimum)
- Open file limit (FILLM) 20 (minimum)

Use the VMS Authorize Utility (AUTHORIZE) to compare the current values of these quotas with the requirements for VAX PCA. For example, the account used in the following example is the SYSTEM account:

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

To change the values of these quotas, use the VMS Authorize Utility's MODIFY command. For more information, see the *VMS Authorize Utility Manual*.

VMS License Management Facility

The VMS License Management Facility (LMF) is available with Version 5.0 of the VMS operating system. To install VAX PCA on a VMS V5.3 system, you must register your VAX PCA software license.

The license registration information you need is contained in the Product Authorization Key (PAK) that is shipped with VAX PCA. The PAK is a paper certificate that contains information about the license you have to run a particular piece of software.

During the installation, you are asked if you have registered the VAX PCA license and loaded the appropriate authorization key. You must register and load your license for VAX PCA *before* you start the installation in order to run the Installation Verification Procedure (IVP) and use the software.

To register a license under VMS Version 5.3, first log in to the system manager's account, SYSTEM. You then have a choice of two ways to perform the registration:

- Invoke the SYS$UPDATE:VMSLICENSE.COM procedure. When it prompts you for information, respond with data from your Product Authorization Key (PAK).
- Issue the LICENSE REGISTER DCL command with the appropriate qualifiers that correspond to information on the PAK.

For complete information on using LMF, see the *VMS License Management Utility Manual* in the VMS documentation set. Register the information contained in the Product Authorization Key (PAK) that is shipped with VAX PCA by using either the VMS License command procedure (VMSLICENSE) or the LICENSE REGISTER and LICENSE LOAD commands.

Using VMSINSTAL

After you log in to a privileged account to install VAX PCA, invoke VMSINSTAL, the command procedure that installs this product. An example of this procedure is shown in steps 1 and 2 of the Installing VAX PCA section.

The VMSINSTAL command procedure has the following syntax:

```
$ @SYS$UPDATE:VMSINSTAL PCA030 ddcu: [OPTIONS N]
```

ddcu:
Represents a device name where the distribution volumes will be mounted for the VAX PCA installation media, where *dd* is the device code, *c* is the controller code, and *u* is the unit number. It is not necessary to use the console drive to install VAX PCA. If you do use the console drive, you should replace any media you removed from the drive. CSA1: is the device name used in examples in this document.

OPTIONS N

Is an optional parameter you should provide if you want to be prompted to display or print the release notes. If you do not include the OPTIONS N parameter, VMSINSTAL does not prompt you to display or print the release notes. VMSINSTAL permits the use of several other options. For more information on the other options, see your processor-specific installation /operations guide.

If you do not supply the first two parameters, VMSINSTAL prompts you for the product and device names. If you wish to be prompted for the product and device names and to display or print the release notes, type the following:

```
$ @SYS$UPDATE:VMSINSTAL RETURN
```

When you invoke VMSINSTAL, it checks the following:

- Whether you logged in to a privileged account. Digital recommends that you install software from the system manager's account with your default device and directory set to SYS$UPDATE.
- Whether you have adequate quotas for installation. VMSINSTAL checks for the following quota values:
  - ASTLM = 24
  - BIOLM = 18
  - BYTLM = 18000
  - DIOLM = 18
  - ENQLM = 30
  - FILLM = 20

  VMSINSTAL then checks whether the following conditions exist. If so, discontinue the conditions before resuming the installation procedure.
  - Whether DECnet is up and running
  - Whether any users are logged in to the system

  If VMSINSTAL detects either of these conditions, you will be asked whether you want to continue the installation. If you want to continue, type YES. If you want to stop the installation, press RETURN.

Installing VAX PCA

This section contains excerpts from the installation procedure and explains each step. Defaults appear in brackets throughout the installation procedure.

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 then returns you to DCL level. If you want to retry the installation procedure after pressing CTRL/Y, you must proceed from step 2.

Step 1: Log in to a privileged account and set your default device and directory to SYS$UPDATE.

```
RETURN
Username:  SYSTEM   RETURN
Password:           RETURN
$  SET DEFAULT SYS$UPDATE  RETURN
```

Step 2: Invoke VMSINSTAL.

```
$  @VMSINSTAL PCA030 CSA1: OPTIONS N  RETURN

      VAX/VMS Software Product Installation Procedure V5.3


It is dd-mmm-yyyy at hh:mm.
Enter a question mark (?) at any time for help.

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

If you are satisfied with the backup of your system disk, press RETURN. Otherwise, type NO and press RETURN to discontinue the installation.

Step 3: Insert the first installation kit volume.

```
Please mount the first volume of the set on CSA1:.
* Are you ready?  YES  RETURN
The following products will be processed:

  VAX PCA V3.0


    Beginning installation of VAX PCA V3.0 at 12:30

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

To indicate that you want to continue the installation, mount volume 1, type YES, and press RETURN.

Step 4: Insert the subsequent installation kit volumes.

```
%BACKUP-I-READYREAD, mount volume 2 on _CSA1: for reading

Enter "YES" when ready:  YES  RETURN
```

VMSINSTAL prompts you to insert the next volume and waits for you to type YES after inserting it. If you type NO, VMSINSTAL displays the prompt again. This prompt is displayed only if your installation kit contains more than one volume.

Step 5: Select a release notes option.

This step applies only if you specified OPTIONS N in step 2.

```
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 [3]:  RETURN
```

If you select option 1, VMSINSTAL displays the release notes on line immediately. You can terminate the display at any time by pressing CTRL/C.

If you select option 2, VMSINSTAL prompts you for a queue name. Either type a queue name or press RETURN to send the file to the default output print device.

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

If you select option 3, VMSINSTAL displays the release notes on line immediately. You can terminate the display at any time by pressing CTRL/C. VMSINSTAL then prompts you for a queue name. Either type a queue name or press RETURN to send the file to the default output print device. The VAX PCA release notes are then copied to SYS$HELP:PCA030.RELEASE_NOTES.

If you select option 4, VMSINSTAL copies the release notes to SYS$HELP immediately.

If you selected release note option 5 which specified that the release notes be copied to SYS$HELP, you will not be able to access the release notes without installing the product kit again.

NOTE

This version of the release notes file installed by VMSINSTAL is labeled with the current product name and version number. Take care not to delete release notes for previous versions of VAX PCA.

Next, VMSINSTAL displays the following prompt:

```
* Do you want to continue the installation [N]?:  Y RETURN
%VMSINSTAL-I-RELMOVED, The product release notes have been
      successfully moved to SYS$HELP.
```

If you want to continue the installation, type YES and press RETURN. If you type NO or press RETURN, VMSINSTAL discontinues the installation. In either case, VMSINSTAL moves the release notes to SYS$HELP.

Step 6: Respond to License Registration Queries.

VAX PCA supports the VMS License Management Facility (LMF). The installation procedure displays license information about your product and then asks if you have registered and loaded your authorization key for VAX PCA. The following is an example of such information:

```
Product:       PCA
Producer:      DEC
Version:       3.0
Release Date:  10-AUG-1990

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

You must have a PCA license installed and loaded on the system. If you do not have a license installed, answer NO. The installation of PCA will continue but the Installation Verification Procedure (IVP) will not be executed. The IVP will be placed on the system. It is recommended that you execute the IVP upon completion of installation once you have registered and loaded the PCA license. See step 10 on how to execute the IVP.

Step 7: Select installation options.

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

The Installation Verification Procedure (IVP) runs tests to check whether the installation procedure was successful. Press RETURN to run the IVP after the installation. If you do not want to run the IVP, type NO in response to the prompt.

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

The directories SYS$EXAMPLES, SYS$HELP, SYS$LIBRARY, SYS$MANAGER, and SYS$SYSTEM may contain previous versions of VAX PCA files. These files are replaced during the installation with new files, but the old files are not automatically purged. Purging is recommended. In response to the purging prompt, press RETURN to purge the files or type NO to keep them.

Step 8: Install the PCA demo package.

```
* Do you want to install the PCA demo package [YES]?  Y RETURN
%VMS-I-SYSDIR, This product creates system directory
      [SYSHLP.EXAMPLES.PCA]
```

VMSINSTAL asks you if you want to install the optional PCA demo package. If you type YES (the default), then the SYS$COMMON:[SYSHLP.EXAMPLES.PCA] directory is created, and all the demo files are copied into it. The system logical name PCA$EXAMPLES, pointing to this directory, is also defined. After the installation, you will be able to run the demos with @PCA$EXAMPLES:PCA_DEMO.

Step 9: Read informational messages.

The VAX PCA installation procedure produces a number of informational messages that report on the progress of the installation.

The success of the installation is indicated by the following message:

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

If the installation procedure is successful, the new or modified files are moved to their target directories.

The SYS$HELP:HELPLIB.HLB and SYS$LIBRARY:DCLTABLES.EXE files are updated to include the new versions of the VAX PCA HELP text and the PCA command line definition.

This installation will add the following files:

- SYS$SYSTEM:PCA$ANALYZER.EXE
- SYS$LIBRARY:PCA$COLLECTOR.EXE
- SYS$LIBRARY:PCA$OBJ.OBJ
- SYS$HELP:PCA030.RELEASE_NOTES
- SYS$HELP:PCA$HELP.HLB
- DECW$SYSTEM_DEFAULTS:PCAC$UID.UID
- DECW$SYSTEM_DEFAULTS:PCAA$UID.UID

- SYS$HELP:PCA$DWHELP.HLB
- SYS$MESSAGE:PCA$MSG.MSG
- SYS$STARTUP:PCA$STARTUP.COM
- SYS$COMMON:[SYSTEST]PCA.DIR
- VUE$LIBRARY:*.COM (PCA VUE Files)
- SYS$COMMON:[SYSTEST.PCA]*.*
- SYS$TEST:PCA$IVP.COM

The VAX PCA Version 3.0 installation optionally adds or replaces the SYS$COMMON:[SYSHLP.EXAMPLES.PCA] directory and its contents.

If you typed YES in response to the prompt that requests a file purge at step 7, previous versions of the VAX PCA files are now purged.

Step 10: Observe the Installation Verification Procedure.

If you chose to run the IVP in step 7, VMSINSTAL now calls the IVP to verify that VAX PCA was successfully installed.

If VAX PCA has been successfully installed, the IVP displays the following:

```
Running the IVP...

The IVP ran successfully for VAX PCA Version V3.0
```

If you answered NO to the LMF question in step 6, you can run the IVP after installation, and after loading and registering the PCA license.

To execute the IVP command procedure, enter the following command:

```
$  @SYS$TEST:PCA$IVP RETURN
```

Step 11: End the installation procedure.

```
   Installation of VAX PCA V3.0 completed at hh:mm

   VMSINSTAL procedure done at hh:mm

$  LOGOUT  RETURN
SYSTEM     logged out at dd-mmm-yyyy hh:mm:ss.ss
```

When the product installation procedure is complete, you can choose to install more products or to log out (as shown here.) If you removed any media from the console drive before beginning the installation, you should replace it now.

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.

Installing VAX PCA on a VAXcluster

If you want to run VAX PCA on multiple nodes of a VAXcluster, first check to see that you have the appropriate software license. Then, follow these steps after installing VAX PCA:

1. Issue the LICENSE LOAD command to activate the license on each node in the VAXcluster on which VAX PCA is to be executed as described in the *VMS License Management Utility Manual*.
2. Execute PCA$STARTUP.COM on each node of the cluster that has a software license.
3. To use the product on other nodes in the VAXcluster, you must replace the version of the DCL tables that is installed on the other VAXcluster nodes. To do this, perform the following steps:
   a. Log in to a node on the cluster.
   b. Run INSTALL and enter the following command at the INSTALL> prompt:

      ```
      INSTALL>  REPLACE SYS$LIBRARY:DCLTABLES.EXE  RETURN
      ```

   c. Repeat steps a and b for each node of the cluster.

After the Installation

VAX PCA is now installed and can be invoked by all users with the PCA command.

The installation procedure modifies the DCL command table so that the PCA command is recognized and processed. However, the previous command table is still in effect for those users who are currently logged in. All logged-in users who want to use the PCA command must log out of the system and log in again.

To reinstall VAX PCA at system boot time, modify the system-specific startup procedure. Include the following line in the SYS$STARTUP:SYSTARTUP_V5.COM file:

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

The PCA$STARTUP.COM file contains commands to install PCA$COLLECTOR.EXE. The VAX PCA installation procedure puts the PCA$STARTUP.COM file in the SYS$STARTUP directory.

Running the Installation Verification Procedure Separately

The Installation Verification Procedure (IVP) is usually run at installation. If you want to run the IVP separately to ensure the integrity of installed files if system problems occur, execute the following command procedure:

```
$   @SYS$TEST:PCA$IVP RETURN
```

If the IVP fails for any reason, the following messages are displayed:

```
The VAX PCA V3.0 Installation Verification Procedure failed.

%VMSINSTAL-E-IVPFAIL, The IVP for VAX PCA V3.0 has failed.
```

Error Conditions

If the installation procedure fails for any reason, a message like the one following is displayed:

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

An error during the installation can occur if one or more of the following conditions exist:

- Operating system version is incorrect.
- Prerequisite software version is incorrect.
- Quotas necessary for successful installation are insufficient (see the Installation Procedure Requirements section).
- Process quotas required by VMSINSTAL are incorrect (see the Using VMSINSTAL section).
- The VMS HELP library is currently in use.
- The product license was registered incorrectly or not registered.

For descriptions of the error messages generated by these conditions, see the *VMS System Messages and Recovery Procedures Reference Volume*, your processor-specific installation/operations guide, or the *VMS License Management Utility Manual*.

If you are notified that any of these conditions exist, you should take the appropriate action as described in the message. You may need to change a system parameter or increase an authorized quota value.

If the installation fails, you must restart the installation procedure from step 2. If the installation fails due to an IVP failure, contact a Digital field service representative.

Maintenance Updates

Digital may periodically issue maintenance updates of VAX PCA. Each update consists of an installation kit. You should install this kit as described in this document or in any documentation that may accompany the maintenance update.

Each time a maintenance update is released, the version number changes. For example, if the current version is 1.0, the version number of the first maintenance update will be 1.1. In addition, each maintenance update includes new release notes. The release notes describe the changes that have been made to VAX PCA since the previous release.

The update release notes are provided on line. You should read the release notes when you first install VAX PCA; they are also accessible at any time after the product is installed. For information on reading the release notes at the time that you install VAX PCA, follow the installation procedure through step 5. To locate the release notes after VAX PCA is installed, display or print the file SYS$HELP:PCA030.RELEASE_NOTES, or type the following command :

```
$ HELP PCA RELEASE_NOTES RETURN
```

Improving Product Performance

The PCA Collector uses memory resources to gather the specified data. To minimize the effect of this memory usage on the behavior of the program, especially paging behavior, you can add 600 pages to the process working set. This is approximately the number of pages the Collector uses while gathering data. Further, you can also increase the virtual page count by 1800 pages.

Determining and Reporting Problems

If an error occurs while you are using VAX PCA and you believe that the error is caused by a problem with VAX PCA, take one of the following actions:

- If you purchased VAX PCA within the past 90 days and you think the problem is caused by a software error, you can submit a Software Performance Report (SPR).
- If you have a Basic or DECsupport Software Agreement, you should call your Customer Support Center. With these services, you receive telephone support that provides high-level advisory and remedial assistance. For more information, contact your local Digital representative.
- If you have a Self-Maintenance Software Agreement, you can submit a Software Performance Report (SPR).

If you find an error in the VAX PCA documentation, you should fill out and submit a Reader's Comments form from the back of the document in which the error was found. Include the section and page number where the error was found.

Sample Installation

This section contains three sample installations of VAX PCA: the first sample is an installation with PCA's authorization key registered and loaded and running the IVP; the second sample is an installation with PCA's authorization key registered and loaded and without running the IVP; the third sample is an installation without PCA's authorization key registered and loaded.

Note that these are only samples. Sometimes the installation procedure is modified in maintenance updates of this product. Because this installation guide is not usually revised for maintenance updates, be sure to read the *Read Before Installing or Using VAX PCA* letter before you install this product. This letter notes any significant changes in the installation that vary from this sample.

Sample 1 for Installation with PCA Authorization Key and the IVP

```
$   @SYS$UPDATE:VMSINSTAL PCA030 PCA$KIT

      VAX/VMS Software Product Installation Procedure V5.3

 VAX/VMS Software Product Installation Procedure V5.3

It is 15-MAR-1990 at 13:48.

Enter a question mark (?) at any time for help.
%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
 DECW$WM_1
* Do you want to continue anyway [NO]? y
* Are you satisfied with the backup of your system disk [YES]?
```

```
The following products will be processed:

  PCA V3.0

 Beginning installation of PCA V3.0 at 13:49

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%VMSINSTAL-I-RELMOVED , The product's release notes have been successfully
          moved to SYS$HELP.

    *** PCA V3.0 installation procedure. ***

        Product:      PCA
        Producer:     DEC
        Version:      3.0
        Release Date: 10-AUG-1990


* Does this product have an authorization key registered and loaded? Yes
* Do you want to run the IVP after the installation [YES]?
* Do you want to purge files replaced by this installation [YES]?
* Do you want to install the PCA demo package [YES]:

    You have answered all the questions required for this installation.
    The installation will now continue for about 5 to 25 minutes without
    further intervention, depending on your system's configuration, the
    installation media, and the options you have selected.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
             VMI$ROOT:[SYSTEST.PCA].
%VMSINSTAL-I-RESTORE, Restoring product save set D ...
%VMSINSTAL-I-SYSDIR, This product creates system directory
        [SYSHLP.EXAMPLES.PCA].

    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.PCA]

The name of the PCA startup command file is: PCA$STARTUP.COM in the
SYS$STARTUP directory area.

In order to start up PCA when your system boots, you should add the
following line to your system startup procedure:

 $ @SYS$STARTUP:PCA$STARTUP.COM

The release notes are available online by typing HELP PCA RELEASE_NOTES.

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

    Starting the IVP procedure for VAX PCA Version V3.0


    The IVP procedure is complete for VAX PCA Version V3.0

      The IVP ran successfully for VAX PCA Version V3.0

 Installation of PCA V3.0 completed at 14:08

 VMSINSTAL procedure done at 14:09
```

Sample 2 for Installation with PCA Authorization Key without the IVP

```
$   @SYS$UPDATE:VMSINSTAL PCA030 PCA$KIT

      VAX/VMS Software Product Installation Procedure V5.3

 VAX/VMS Software Product Installation Procedure V5.3

It is 15-MAR-1990 at 14:09.

Enter a question mark (?) at any time for help.

%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
 DECW$WM_1
* Do you want to continue anyway [NO]? y
* Are you satisfied with the backup of your system disk [YES]?

The following products will be processed:

  PCA V3.0

 Beginning installation of PCA V3.0 at 14:09

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%VMSINSTAL-I-RELMOVED , The product's release notes have been successfully
         moved to SYS$HELP.

    *** PCA V3.0 installation procedure. ***


        Product:      PCA
        Producer:     DEC
        Version:      3.0
        Release Date: 10-AUG-1990

* Does this product have an authorization key registered and loaded? Yes
* Do you want to run the IVP after the installation [YES]? No
* Do you want to purge files replaced by this installation [YES]?
* Do you want to install the PCA demo package [YES]:

    You have answered all the questions required for this installation.
    The installation will now continue for about 5 to 25 minutes without
    further intervention, depending on your system's configuration, the
    installation media, and the options you have selected.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
             VMI$ROOT:[SYSTEST.PCA].
%VMSINSTAL-I-RESTORE, Restoring product save set D ...
%VMSINSTAL-I-SYSDIR, This product creates system directory
             [SYSHLP.EXAMPLES.PCA].

    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.PCA]

The name of the PCA startup command file is: PCA$STARTUP.COM in the
SYS$STARTUP directory area.
```

```
In order to start up PCA when your system boots, you should add the
following line to your system startup procedure:

 $ @SYS$STARTUP:PCA$STARTUP.COM

The release notes are available online by typing HELP PCA RELEASE_NOTES.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
 Installation of PCA V3.0 completed at 14:32

 VMSINSTAL procedure done at 14:32
```

Sample 3 for Installation without PCA Authorization Key

```
$   @SYS$UPDATE:VMSINSTAL PCA030 PCA$KIT

      VAX/VMS Software Product Installation Procedure V5.3

It is 15-MAR-1990 at 14:45.

Enter a question mark (?) at any time for help.

%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
 DECW$WM_1
* Do you want to continue anyway [NO]? y
* Are you satisfied with the backup of your system disk [YES]? y

The following products will be processed:

  PCA V3.0

 Beginning installation of PCA V3.0 at 14:46

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%VMSINSTAL-I-RELMOVED , The product's release notes have been successfully
          moved to SYS$HELP.

    *** PCA V3.0 installation procedure. ***

        Product:      PCA
        Producer:     DEC
        Version:      3.0
        Release Date: 10-AUG-1990

* Does this product have an authorization key registered and loaded? No

%PCA-W-PCA$NOIVP, PCA's IVP will not be run, because license not registered.

%PCA-I-PCA$IVP, It is recommended that the IVP be run after the license has
              been registered.

%PCA-I-PCA$IVP,               Installation continuing

* Do you want to purge files replaced by this installation [YES]?
* Do you want to install the PCA demo package [YES]:

    You have answered all the questions required for this installation.
    The installation will now continue for about 5 to 25 minutes without
    further intervention, depending on your system's configuration, the
    installation media, and the options you have selected.
```

```
%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
          VMI$ROOT:[SYSTEST.PCA].

The name of the PCA IVP Procedure is: PCA$IVP.COM in the
SYS$TEST directory area.

In order to execute the IVP enter the command:

                  @SYS$TEST:PCA$IVP.COM

%VMSINSTAL-I-RESTORE, Restoring product save set D ...
%VMSINSTAL-I-SYSDIR, This product creates system directory
                [SYSHLP.EXAMPLES.PCA].

    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.PCA]

The name of the PCA startup command file is: PCA$STARTUP.COM in the
SYS$STARTUP directory area.

In order to start up PCA when your system boots, you should add the
following line to your system startup procedure:

 $ @SYS$STARTUP:PCA$STARTUP.COM

The release notes are available online by typing HELP PCA RELEASE_NOTES.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
 Installation of PCA V3.0 completed at 15:08

 VMSINSTAL procedure done at 15:08
```