VMS Software

VSI Performance Management for OpenVMS Installation Guide

Operating System and Version: VSI OpenVMS x86-64 Version 9.2-3 or later

Software Version: VSI Performance Management V3.1-1 for OpenVMS

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VSI Performance Management for OpenVMS Installation Guide

Legal Notice

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Preface

VSI Performance Management for OpenVMS is a layered product designed to reduce the time and effort required to manage and monitor system performance and to plan for future resource requirements. VSI Performance Management for OpenVMS includes the following components:

- Performance Manager
- Performance Agent
- Accounting Chargeback (available only on Alpha)

1. About VSI

VMS Software, Inc. (VSI) is an independent software company licensed by Hewlett Packard Enterprise to develop and support the OpenVMS operating system.

2. Intended Audience

This guide is for system managers who are installing VSI Performance Management for OpenVMS and for system administrators who are looking for an overview of this product. It contains information about the installation and use of the product. This document should be read in its entirety before beginning the installation.

3. Related Documentation

For VSI Performance Management V3.1-1, only the release notes and installation guide are available.

4. VSI Encourages Your Comments

You may send comments or suggestions regarding this manual or any VSI document by sending electronic mail to the following Internet address: <docinfo@vmssoftware.com>. Users who have VSI OpenVMS support contracts through VSI can contact <support@vmssoftware.com> for help with this product.

5. OpenVMS Documentation

The full VSI OpenVMS documentation set can be found on the VMS Software Documentation webpage at https://docs.vmssoftware.com.

Chapter 1. Installing Performance Agent

This chapter describes how to install the Performance Agent on a system running the OpenVMS operating system.

1.1. Prepare for the Installation

The Performance Agent gathers, manages, classifies, and archives system data for standalone and cluster systems. Cluster systems refer to OpenVMS cluster systems (that might include Integrity Servers and Alpha systems).

Note

If you are upgrading an existing installation, you might need to reboot the system after you install the agent.

1.1.1. Hardware and Software Requirements

Before installing the Performance Agent, your OpenVMS server should meet the following minimum requirements:

- VSI OpenVMS x86-64 V9.2-3
- VSI TCP/IP Services for OpenVMS x86-64 Version V6.0
- If you intend to use the DECwindows interface, you must install VSI DECWindows Motif for x86-64 V1.8-2 or later. This is included in the VSI OpenVMS V9.2-3 distribution.
- If you intend to use the remote functions to access other Performance Management Managers running on standalone nodes or different VMS Clusters, you must install DECnet Phase IV V9.2-3 or DECnet Plus V9.2-G or later.

1.1.2. Required Order for Installing Software

The Performance Agent is a pre-requisite for Performance Manager. If you are installing both products, you must install the Agent first, and the Manager second.

1.1.3. Installation Procedure Requirements

This section describes the requirements for installing the Performance Agent (privileges, system parameters, and disk space).

For standard procedures for checking and setting various parameters, see *Appendix A, "Standard System Maintenance Procedures"*.

Privileges

To install the software, you need access to one of the following accounts:

- The SYSTEM account
- An account with the SETPRV privilege
- An account with these privileges:
  - CMKRNL
  - SYSPRV
  - WORLD
  - IMPERSONATE
  - GRPNAM
  - ALTPRI
  - WORLD
  - SYSLCK
  - SYSNAM
  - PSWAPM

To verify that you have these privileges, enter the **SHOW PROCESS/PRIVILEGE** command at the DCL prompt.

You also need a process slot for the data collection process and write access to these files:

- PSDC$DATABASE:PSDC$SCHEDULE.DAT
- PSDC$DATABASE:PSDC$PARAMS.DAT

Note

The installation procedure turns off BYPASS privilege at the start of the installation.

Privileges required for product use are defined in *Section 1.3.5, "Privileges and Quotas Required After Installation"*.

Process Account Quotas

If you choose to install Performance Trend, you must satisfy the following process account quotas:

- ASTLM = 100
- FILLM = 100
- ENQLM = 100
- TQELM = 100
- DIOLM = 100

- BYTLM = 65534
- JTQUOTA = 4096
- PRCLM = 10
- PGFLQUO = 250000
- WSDEFAULT = 4096
- WSQUO = 16384
- WSEXTENT = 32768

System Parameters

The minimum system parameter values required for the installation are listed below. Depending on the kinds of programs and applications running at your site, you might need higher values for some settings.

- System Parameter: WSMAX
- Minimum Value: 16384

Disk Space

The Performance Agent software requires approximately 250,000 blocks during installation. These block sizes refer to the space required on the system disk sizes and assume that both the product software zip file package and its contents also reside on the system disk. The sizes are approximate; actual sizes may vary depending on your system environment, configuration, and software options. To check for available disk space on your system disk, enter the command:

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

To check for available disk space on your system disk, enter the following command:

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

System Disk Backup

At the beginning of the installation, the installation process asks if you have backed up your system disk. We recommend that you back up the system disk before installing any software. Use the backup procedures that are established at your site.

1.2. Installing Performance Agent

1.2.1. Stop the Installation

You can manually stop the installation at any time for any reason. If you stop the installation, all Performance Agent files that had been installed to that point are removed. If you want to restart the installation after stopping, you must repeat the entire installation procedure.

To stop the installation, press **Ctrl+Y**.

1.2.2. How You Install Performance Agent

The installation consists of a number of steps designed to check your system, install Performance Agent, and then initialize Performance Agent. You must complete the following tasks in the following order:

1. **Decompress the Zip File**

   Extract the installation kit from the installation package zip file. You must have OpenVMS UNZIP utility present on the system and you must have the UNZIP foreign command defined. Once these two requirements are met, enter the command:

   ```
   $ UNZIP X86VMS-PERFMGMT-V0301
   ```

   Make note of the directory path where the installation kit was extracted to; you will need it for the next step.

2. **Check Your System Backup**

   You should always back up your system disk before installing any new software. If you need to restore your former system settings, you want the most current information saved. To ensure you have a good backup, the installation asks if you are satisfied with your backup. Select one of the following responses:

   YES

   If you are satisfied with the backup of your system disk, press **Return** to accept the default YES.

   NO

   Type **NO** and press **Return** to stop the installation. Back up your system disk and then restart the installation.

3. **Run the Installation Procedure**

   ```
   @SYS$UPDATE:VMSINSTAL VPA031 <DIRECTORY-PATH-FOR-THE-INSTALLATION-KIT>
   ```

4. **Check for a Product Authorization Key**

   The installation procedure prompts for the presence of a valid Product Authorization Key (PAK). Select one of the following responses:

   YES

   The installation verifies if a PAK has been registered and loaded. If a PAK is found the installation will continue. If a PAK is not found, the installation proceeds, and the Installation Verification Procedure is skipped.

   NO

   The installation continues; however, the Installation Verification procedure will not be run.

5. **Start Performance Agent After the Installation (optional)**

   During the installation process you can choose to start or not start Performance Agent after the installation completes.

Note

If you choose not to start Performance Agent after installing it but you run the Installation Verification Procedure (IVP), the IVP starts Performance Agent before it can run.

If this is the first time you are installing Performance Agent on your system, you are asked if you want the software to start right after the installation.

Select one of the following responses:

YES

Performance Agent is started after the installation.

NO

Performance Agent is not started after the installation.

If a reboot is required, you will see the following message:

```
The installation has detected that Performance Agent is installed, and has been
started since the last time the system was booted.

To avoid compatibility issues, you must reboot the system prior to starting
Performance Agent.

The installation will continue, however Performance Agent will not start until a
reboot has been performed.

The installation will not start Performance Agent. The installation will not
perform the Installation Verification Procedure.

For the steps you need to perform after the system is rebooted, refer to the
post-installation tasks in the Installation Guide chapter on Installing the
Performance Agent.
```

6. **Run the Installation Verification Procedure (optional)**

After the installation, the Installation Verification Procedure (IVP) checks to ensure that the installation was successful. It starts the application and performs function tests. When the installation dialog asks you if you want to run the IVP, VSI recommends that you select YES. Select one of the following responses:

YES

The IVP runs after the installation completes.

NO

The IVP does not run after the installation completes.

Note

If you choose not to run the IVP during the installation, you can run it at any time after the installation completes by entering the following command:

```
$ @SYS$TEST:PERF$AGENT$IVP.COM
```

7. **Purge Previous Version Files**

   You can purge files from previous versions of the product that are superseded by this installation. We recommend that you purge your old files; however, if you need to keep files from a previous version you can choose to not purge your files. The installation asks if you want to purge files replaced by this installation. Select one of the following responses:

   YES

   The files related to earlier versions of the product are purged after the installation completes.

   NO

   The files related to earlier versions of the product are left on the system after the installation completes.

8. **Install the DECwindows/MOTIF components (Optional)**

   The installation asks if you want to install the DECwindows/MOTIF components.

   The following files are required to support the Motif interface:

   SYS$LIBRARY:DECW$DWTLIBSHR.EXE
   SYS$LIBRARY:DECW$DXMLIBSHR.EXE
   SYS$LIBRARY:DECW$XMLIBSHR.EXE
   SYS$LIBRARY:DECW$XLIBSHR.EXE
   SYS$LIBRARY:DECW$XTSHR.EXE

   Select one of the following responses:

   YES

   These files are installed on your system.

   NO

   Motif components are not installed.

9. **Stop Performance Agent**

   If the installation detects that Performance Agent is running, it prompts you to terminate the process before continuing with the installation.

   YES

   Stops Performance Agent and then continues.

   NO

   Stops the installation.

10. **Choose the Performance Agent Database Device**

    The installation procedure asks you to enter the name of the device and directory to which the data collection process writes the database files.

    - If you have a previous definition for PSDC$DATABASE, you are asked if you want to preserve the old definition.

    - If you do not have an existing definition for PSDC$DATABASE, you will be prompted to use the default location, which is SYS$COMMON:[DECPS-DATABASE], press **Return** to accept the default response.

      To install in an alternate location, enter a device name and an optional directory, then press **Return**. The installation procedure will then display a message similar to the following example:

      ```
      You have selected SYS$COMMON:[DECPS-DATABASE] to be used for
      the 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. The installation procedure will then display the following messsage:

      ```
      %VMSINSTAL-I-SYSDIR, This product creates system disk directory
      SYS$COMMON: [DECPS-DATABASE].'
      %PSDC-I-CREATEDIR, Created directory SYS$COMMON:[DECPS-DATABASE]
      ```

11. **Retain the old Performance Agent database directory (optional)**

    If you have a Performance Agent database on your system from a previous installation, the installation procedure asks you if you want to retain the old database directory definition.

    YES

    To continue using the existing database directory definition.

    NO

    To specify a new database directory definition.

12. **Retain the old schedule file (optional)**

    If you have previously installed the Performance Agent, the installation procedure displays a message asking if you want to retain the current scheduling file.

    YES

    If you modified the default schedule file and want to retain the changes.

    NO

    Deletes the existing file and replaces it with a default file.

Note

If a reboot is required, this question is not asked. The existing schedule file is retained so that the Performance Agent can be started after reboot with no additional steps. To make changes to the schedule file refer to the *Performance Agent Administrator Guide*.

13. **Retain the old parameters file (optional)**

    If you have previously installed the Performance Agent, the installation procedure displays a message asking if you want to retain the existing parameters.

    YES

    If you modified the default parameters file and want to retain the changes.

    NO

    Deletes the existing file and replaces it with a default file.

Note

If a reboot is required, this question is not be asked. The existing parameters file is be retained so that the Performance Agent may be started after reboot with no additional steps. To make changes to the parameters file refer to the *Performance Agent Administrator Guide*.

1.2.3. Uninstall Performance Agent

You can use the de-installation script to uninstall Performance Agent. The script is named PERF$AGENT$DEINSTALL.COM.

1.3. Complete the Performance Agent Installation

The following post-installation steps are necessary to enable your system to run the Performance Agent software.

1. Use the **ADVISE COLLECT** command to invoke Performance Agent for all users.

   The installation procedure modifies the DCL command table so that the **ADVISE COLLECT** command is recognized and processed. However, the previous command table is still in effect for those users who are currently logged in.

2. All logged-in users who want to use the **ADVISE COLLECT** command must log out and log in again or use the following DCL command:

   ```
   $ SET COMMAND /TABLES=SYS$LIBRARY:DCLTABLES
   ```

The following are items to consider after Performance Agent is installed:

- Configure the Automatic Startup Procedure

- Edit the system startup file
- Edit the system shutdown file
- Verify required disk space
- Verify required non-paged pool allocations
- Verify required privileges and quotas
- Run the Installation Verification Procedure (IVP)

1.3.1. Edit the System Startup File

The Performance Agent kit contains a startup procedure that defines pointers to system directories. You need to add the following command line to the system startup file:

```
$ @SYS$STARTUP:PERF$AGENT$STARTUP
```

The PERF$AGENT$STARTUP.COM file contains commands to define the system logical names as well as start the Performance Agent.

1.3.1.1. Configure the Automatic Startup Procedure

Run SYS$STARTUP:PERF$AGENT$STARTUP.COM as early as possible in the procedure. VSI recommends that you place this command in your startup file after commands that install any secondary paging or swapping files and before commands starting DECnet or any queues.

To allow all Performance Agent users to obtain reports, edit the file PERF$AGENT$STARTUP.COM to change the protection codes on database files to world READ (W:R). The protection of files the Performance Agent creates is determined by the default protection of the process that creates the detached image (which is normally the process running the SYSTARTUP_VMS.COM procedure).

Modify the SYS$STARTUP:PERF$AGENT$STARTUP.COM procedure to change the default protection for the process. You must also change it back to the desired protection after the Performance Agent is started.

The modified PERF$AGENT$STARTUP.COM file could be similar to the following code:

```
$ DEFINE/SYSTEM/EXEC PSDC$DATABASE DISK:[PSDC.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
```

1.3.2. Edit the System Shutdown File

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

```
$ @SYS$STARTUP:PERF$AGENT$SHUTDOWN.COM
```

The SYS$STARTUP:PERF$AGENT$SHUTDOWN.COM file contains the command that stops the Performance Agent.

1.3.3. Disk Space Required after Installation

After installation, you need approximately 110,000 blocks of disk space on the system disk to run the Performance Agent.

You must also provide sufficient disk space for the database directory files, the location of which you specify during the installation. The amount of disk space needed for the database files depends on the following conditions:

- Collection schedule
- Number of concurrent processes running
- Frequency of image activations
- Number of configured disk devices
- Level of Hot File statistics being collected
- Archiving scheme selected

For daily data, allocate 15,000 blocks per day for each node, until you determine your exact requirements.

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

1.3.4. Non-Paged Pool Allocations Required After Installation

The Performance Agent process uses the system resource non-paged pool. The number of non-paged pool allocations and their sizes depends on the workload that the system supports and the I/O activity.

The Performance Agent allocates non-paged pool resources in the following amounts:

Bytes	**Allocations**
38400	1
Multiply MAXPROCESSCNT by 480	1
392	As needed on CPD process image queue overflow[1]
Multiply MAXPROCESSCNT by 4	1 per active disk
Multiply maximum configured disks by 184	1
7680	As needed on VMS I/O event buffer overflow[b]

[1]note 1
[b]note 2

Notes

- Process image queue overruns increase as the system image activation rate increases.
- I/O buffer overruns may occur in heavily I/O-intensive environments. The logical PSDC$IO_PACKET_MAX controls the frequency of overruns and specifies the maximum number of non-paged pool allocations due to overruns, respectively.

Many processes compete for available non-paged pool. The requirements need to be considered when determining the most appropriate size of non-paged pool for a specific system.

Non-paged pool is a system resource controlled by the two SYSGEN parameters, NPAGEDYN, and NPAGEVIR. For more information about modifying SYSGEN parameters, refer to the VSI OpenVMS documentation on system generation.

1.3.5. Privileges and Quotas Required After Installation

Some Performance Agent commands and utilities require privileges to perform correctly. The following table gives the command or utility and the privileges each requires:

Command/Utility	**Privileges**
ADVISE COLLECT DISPLAY FILES	CMKRNL, SYSPRV
ADVISE COLLECT MODIFY	SYSLCK You can modify the schedule file without privileges, but part of the command also shows the status, which requires SYSLCK. You must also have access to the schedule file.
ADVISE COLLECT REPORT	SYSPRV
ADVISE COLLECT REPORT DISK_SPACE	SYSPRV
ADVISE COLLECT SHOW	SYSLCK You can display the schedule file without privileges, but the status indicates that you have no privileges because SYSLCK is needed to show status.
ADVISE COLLECT START	CMKRNL, GRPNAM, IMPERSONATE, PSWAPM, ALTPRI, WORLD, EXQUOTA, SYSPRV, SYSLCK
ADVISE COLLECT STOP	CMKRNL, GRPNAM, IMPERSONATE, PSWAPM, ALTPRI, WORLD, EXQUOTA, SYSPRV, SYSLCK
ADVISE COLLECT SYSTEM_PC	CMKRNL, ALTPRI, PSWAPM, WORLD

The quotas required for the Performance Agent after installation are:

- Working set quota (WSQUO) default = 4,096
- Working set extent (WSEXTEN) default = 16,384
- Timer Queue Limit (TQELM) default = 50

1.3.6. Run the IVP

The IVP verifies that the component was installed correctly. If you did not choose to auto-run the IVP during the installation procedure, you can manually run it with the following command:

```
$ @SYS$TEST:PERF$AGENT$IVP
```

You can run the IVP at any time if you want to verify that the Performance Agent software is properly installed.

1.4. Created and Modified Files

The following table lists all files that are created or modified during the installation of the Performance Agent, and the directories where they reside.

File Name	Directory Area	Description
DCLTABLES.EXE	SYS$LIBRARY	This is the system command tables image.
DECPS.TLB	SYS$UPDATE	This is a library of DCL and Help files shared by the components.
DECPS$RESOURCES.DAT	SYS$COMMON: [SYSHLP.EXAMPLES.PSDC]	This text file contains sample Motif interface resource settings.
DECPS-DATABASE.DIR	SYS$SYSDEVICE:[VMS $COMMON]	This directory contains the parameters, schedule, and CPD data files.
HELPLIB.HLB	SYS$HELP	This is the system HELP library file.
PSDC$ARCHIVE.COM	PSDC$EXAMPLES	This command procedure can be used to archive daily data to the history files on a daily basis. The template for this command procedure is created during the Performance Agent installation.
PSDC $COLLECT_SYSTEMPC.EXE	SYS$SYSTEM	This is the image that collects system Program Counter samples.
PSDC$DCOMM.EXE	SYS$SYSTEM	This image file starts the Performance Agent and updates the schedule file.
PSDC$DC_V5.EXE	SYS$SYSTEM	This file is the Performance Agent image for Data Collector.
PSDC$DSKANL.EXE	SYS$SYSTEM	This image file is the Disk Analysis Utility.
PSDC$EDIT.EXE	SYS$SYSTEM	This image file is the Parameter Editor Utility for Performance Agent.
PSDC$EDITHELP.HLB	SYS$HELP	This is the help file for the Parameter Editor Utility.
PSDC$FILES.EXE	SYS$SYSTEM	This image file is the File Activity Display.
PSDC$FILES.HLB	SYS$HELP	This file provides the Help system File Activity Display image

File Name	Directory Area	Description
PSDC$FUNCTIONS.EXE	VMS$COMMON:[SYSEXE]	This image file does archiving, reporting, and dump report functions.
PSDC$HOLIDAYS.TXT	SYS$COMMON: [SYSHELP.EXAMPLES.PSDC]	This text file contains holiday dates. For each date found in this file, the archival process uses the holiday schedule in place of the normal schedule.
PERF$AGENT$IVP.COM	SYS$TEST	This command file contains the Installation Verification Procedure. It can be run at product installation time to verify a successful installation.
PSDC$MESSAGE.EXE	SYS$MESSAGE	This image file provides the Performance Agent messages.
PSDC$MOTIF.EXE	SYS$SYSTEM	This file executes the DECwindows Motif interface.
PSDC$MOTIF.UID	DECW$SYSTEM_DEFAULTS	This file contains the Motif widget definitions used by the Performance Agent DECwindows interface.
PSDC$MSG.TXT	SYS$SYSTEM	This file contains the message templates that are required for reporting.
PSDC$nodename_dd-mmm-yyyy_dd- mmm-yyyy.name	Directory path of the CPD collection definition as specified in the schedule file, PSDC $SCHEDULE.DAT.	This is created by the Performance Agent; this file contains the archived daily data. The file name is defined by the history descriptor parameters; *name* is the history file descriptor name.
PSDC$nodename_dd-mmm-yyyy_dd- mmm-yyyy.name_JOU	Directory path of the CPD collection definition as specified in the schedule file, PSDC $SCHEDULE.DAT.	This is created by the Performance Agent; this history journal file contains information to aid the recovery of a corrupted history file. The file name is defined by the history descriptor parameters; *name* is the history file descriptor name.
PSDC $nodename_yyyymmmdd.CPD	Directory path of the CPD collection definition as specified in the schedule file, PSDC $SCHEDULE.DAT.	The daily data file is written by the Performance Agent. It contains the 2- minute interval data records. The file name associates the file with a specific node and time.

File Name	Directory Area	Description
PSDC$PARAMS.DAT	PSDC$DATABASE	The parameters file is a repository for Performance Agent 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 parameters and history file generations
PSDC $REPORT_SYSTEMPC.EXE	SYS$SYSTEM	This is the image file for Program Counter sampling and reporting.
PSDC$RT_V5.EXE	SYS$SYSTEM	This is the Real-Time Performance Agent image file.
PSDC$SCHEDULE.DAT	PSDC$DATABASE	The data collection schedule file contains the CPD and alternate collection definitions, which designate when the Performance Agent collects data. It is created and modified with the ADVISE COLLECT command.
PSDC$SERVER.COM	SYS$SYSTEM	This command procedure is invoked by DECnet Services to start a Real-Time Performance Agent.
PERF$AGENT $SHUTDOWN.COM	SYS$STARTUP	This command procedure performs an orderly shutdown of the Performance Agent. It should be called from the site-specific shutdown command procedure.
PERF$AGENT$STARTUP.COM	SYS$STARTUP	This command procedure defines the Performance Agent system logical names and starts the Performance Agent. It is created during Performance Agent installation.
PSDC$WINDOW.EXE	SYS$SYSTEM	This file is a dispatch image for the DECwindows interface.

File Name	Directory Area	Description
PSDC.DIR	SYS$EXAMPLES	A data collector directory.
UPM$README_yymmdd-Vvvv.TXT	SYS$HELP	This text file contains the readme notes for VSI Performance Management.
PSDCTIMER.COM	SYS$STARTUP	This file loads the PSDCTIMER image.
PSDCTIMER.EXE	SYS$LOADABLE_IMAGES	The SWA0: device driver file (the Timer Driver).

1.5. Shut Down Performance Agent

Before performing an orderly system shutdown, execute the following command file to stop the Performance Agent process:

```
$ @SYS$STARTUP:PERF$AGENT$SHUTDOWN
```

1.6. Sample Performance Agent Installation Log

This section contains a sample installation for the Performance Agent on an Integrity Server, as shown in the following example:

```
$ @SYS$UPDATE:VMSINSTAL VPA031 SYS$MANAGER:


 OpenVMS  Software Product Installation Procedure V9.2-3


It is 6-JUN-2025 at 23:43.

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

%VMSINSTAL-W-ACTIVE, The following processes are still active:
       TCPIP$FTP_1
       TCPIP$NTP_1
       SSHD22_BG86
* Do you want to continue anyway [NO]? YES
* Are you satisfied with the backup of your system disk [YES]?


The following products will be processed:

  VPA V3.1


 Beginning installation of VPA V3.1 at 23:43

    ******************************************************************
%VMSINSTAL-I-VALSIGN, Performing product kit validation of signed kits ...
Success
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPA031.A_VNC succeeded

Success
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPA031.B_VNC succeeded

Success
```

```
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPA031.F_VNC succeeded

Success
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPA031.Y_VNC succeeded

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

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        Product:      VMS-PERFMGMT
        Producer:     VSI
        Version:
        Release Date:


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


* Do you want to run the IVP after the installation (Product Startup Required)
[YES]?


  The product will be started and the IVP will run automatically at the end of this
 install.

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



   The DECwindows/MOTIF components of this software are optional_[0m

* Do you want to install the DECwindows/MOTIF components [YES]?

   The TCP/IP stack TCP/IP Services is up and running...


* What device will be used for the database files
 [SYS$COMMON:[DECPS-DATABASE]]:

    You have selected SYS$COMMON:[DECPS-DATABASE] to be used
    for the database files.

* Is this correct [YES]?

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

   All questions regarding this installation have been asked.
   The installation will run for approximately 2 to 5 minutes

%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-RESTORE, Restoring product save set F ...

   Providing Startup, Shutdown, Installation Verification
   and Deinstallation procedures ...


------------------------------------------------------------------------
   Product Management Command Files
------------------------------------------------------------------------
   Startup:     @SYS$STARTUP:PERF$AGENT$STARTUP.COM
   Shutdown:    @SYS$STARTUP:PERF$AGENT$SHUTDOWN.COM
```

```
   IVP:         @SYS$TEST:PERF$AGENT$IVP.COM
   Deinstall:   @SYS$UPDATE:PERF$AGENT$DEINSTALL.COM
------------------------------------------------------------------------------

   Note:  A call to the product startup procedure or common
          startup procedure should be inserted manually in
          SYS$STARTUP:SYSTARTUP_VMS.COM in order to start
          the product automatically at system boot time.
          Similarly, a call to the product or common
          shutdown procedure should be inserted in the system
          shutdown procedure, SYS$MANAGER:SYSHUTDWN.COM


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

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  Beginning the VSI Performance Management Agent
  Installation Verification Procedure.

  Executing the Agent startup command procedure...  (Starting Agent).


%PSDC-I-SWA0EXISTS, Device SWA0 already exists.
  Not attempting reload of the PSDCTIMER device driver.

%DCL-I-SUPERSEDE, previous value of PSDC$SWTIMER has been superseded
%DCL-I-SUPERSEDE, previous value of SPM$SWTIMER has been superseded

%PSDC-I-STILLRUNNING, Agent was already running
  Performing Data Collection Inquiry:


                      Performance Schedule File
================================================================================
Collection Name //   Attributes    //  Weekly Schedule
================================================================================
CPD                                  | Monday    0-24
           Delete After      7 Days  | Tuesday   0-24
           HotFile Que.     0.33     | Wednesday 0-24
           Interval/sec   120.0      | Thursday  0-24
           Start Date     6-JUN-2025 | Friday    0-24
           End Date       1-JAN-2999 | Saturday  0-24
           Classes: All              | Sunday    0-24
           Def Path: PSDC$DATABASE:
           Def Minimum Free Space: 2500
           Def Working Set Size:   2048
--------------------------------------------------------------------------------
-Node---DC Status-------DskFreeSpace--WSquota---Path----------------------
--------------------------------------------------------------------------------
  X86PD1  Running             2500       2048     PSDC$DATABASE:



 Performance Agent version V3.1-1301 built 5-JUN-2025

  Testing System PC Sample collection...

%PSDC-I-EXECONFIG, retrieving VMS EXECUTIVE configuration at 23:45:12.92
%PSDC-I-COLLECTSTART, starting PC collections at 23:45:13.17
  Testing System PC Sample report writer...



  The Installation Verification Procedure for the Performance
```

```
 Management Agent has completed successfully.

Installation of VPA V3.1 completed at 23:46

   Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY

   Creating installation data file: VMI$ROOT:[SYSUPD]VPA031.VMI_DATA

VMSINSTAL procedure done at 23:46
```

Chapter 2. Install the Performance Manager

This chapter describes how to install VSI Performance Management for OpenVMS Performance Manager (Performance Manager) on an Integrity or Alpha system running the OpenVMS operating system.

Keep this guide with your distribution kit. You will need it to install maintenance updates or to reinstall Performance Manager for any other reason.

2.1. Prepare for the Installation

If you upgraded the Performance Agent and the upgrade installation indicated that a reboot is required, you must reboot the system before installing Performance Manager.

2.1.1. Hardware and Software Requirements

Before installing Performance Manager, your OpenVMS server should meet the following minimum requirements:

- VSI OpenVMS x86-64 V9.2-3
- VSI TCP/IP Services for OpenVMS x86-64 Version V6.0
- If you intend to use the DECwindows interface, you must install VSI DECWindows Motif for x86-64 V1.8-2 or later. This is included in the VSI OpenVMS V9.2-3 distribution.
- If you intend to use the remote functions to access other Performance Management Managers running on standalone nodes or different VMS Clusters, you must install DECnet Phase IV V9.2-3 or DECnet Plus V9.2-G.

2.1.2. Required Order for Installing Software

The Performance Agent is a prerequisite for the Performance Manager. If you are installing more than one of the following products, install them in the following order:

1. Performance Agent
2. Performance Manager

If you proceed with the Performance Manager installation on a system where Performance Agent is not yet installed, the installation halts and you receive a message that the Performance Agent is not installed. If this occurs, install Performance Agent and then attempt again to install Performance Manager.

2.1.3. Installation Procedure Requirements

This section describes the requirements for installing Performance (privileges, system parameters, and disk space).

Standard procedures for checking and setting various parameters are described in Standard System Maintenance Procedures later in this chapter.

Privileges

To install the software, you need access to one of the following accounts:

- The SYSTEM account
- An account with the SETPRV privilege
- An account with the CMKRNL, SYSPRV, and WORLD privileges

To verify that you have these privileges, enter the **SHOW PROCESS/PRIVILEGE** command at the DCL prompt.

Note

The installation procedure turns off BYPASS privilege at the start of the installation.

Privileges required for product use are defined in *Section 2.3.3, "Privileges and Process Account Quotas after Installation"*.

System Parameters

The minimum required system parameter values for the installation are listed below. Depending on the kinds of programs and applications running at your site, you might need higher values for some settings. See the *Performance Manager Administrator Guide* for page requirements for reporting and graphing.

- System Parameter: WSMAX
- Minimum Value: 2048

Disk Space

The Performance Manager software requires approximately 250,000 blocks during installation.

These block sizes refer to the space required on the system disk and assume that both the product software zip file package and its contents also reside on the system disk.

To check for available disk space on your system disk, enter the command:

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

System Disk Backup

At the beginning of the installation, the installation process asks if you have backed up your system disk. We recommend that you back up the system disk before installing any software. Use the backup procedures that are established at your site.

2.2. Install Performance Manager

If you encounter any errors or failures during installation, see the section *Section 2.7, "Recover from Errors"*.

2.2.1. Stop the Installation

You can manually stop the installation at any time for any reason. If you stop the installation, all Performance Manager files that had been installed to that point are removed. If you want to restart the installation after stopping, you must repeat the entire installation procedure.

To stop the installation, press **Ctrl+Y**.

2.2.2. How You Install Performance Manager

The installation consists of a number of steps designed to check your system, install Performance Manager, and then initialize Performance Manager. You must complete the following tasks in the following order:[1]

1. **Decompress the Zip File**

   Extract the installation kit from the installation package zip file. If you have already extracted the kit from the zip file prior to the installation of the agent you do not need to repeat this step. You must have OpenVMS UNZIP utility present on the system and you must have the UNZIP foreign command defined. Once these two requirements are met, enter the command:

   ```
   $ UNZIP X86VMS-PERFMGMT-V0301
   ```

   Make note of the directory path where the installation kit was extracted to; you will need it for the next step.

2. **Run the Installation Procedure**

   ```
   @sys$update:vmsinstal VPM031 <directory-path-for-the-installation-kit>
   ```

3. **Check Your System Backup**

   You should always back up your system disk before installing any new software. If you need to restore your former system settings, you want the most current information saved. To ensure you have a good backup, the installation asks if you are satisfied with your backup. Select one of the following responses:

   YES

   If you are satisfied with the backup of your system disk, press **Return** to accept the default YES.

   NO

   Type **NO** and press Return to stop the installation. Back up your system disk, and then restart the installation.

4. **Check for a Product Authorization Key**

   The installation procedure prompts for the presence of a valid Product Authorization Key (PAK). Select one of the following responses:

   YES

   The installation verifies if a PAK has been registered and loaded. If a PAK is found the installation will continue. If a PAK is not found, the installation proceeds, and the Installation Verification Procedure is skipped.

   NO

   The installation continues; however, the Installation Verification procedure will not be run.

[1] For a sample installation, see the *Section 2.9, "Sample Performance Manager Installation Log"*.

5. **Start Performance Manager After Installation**

   During the installation process you can choose to start or not start Performance Agent after the installation completes.

   ## Note

   If you choose not to start Performance Agent after installing it but you run the Installation Verification Procedure (IVP), the IVP starts Performance Agent before it can run.

   If this is the first time you are installing Performance Manager on your system, you are asked if you want the software to start right after the installation.

   Select one of the following responses:

   YES

   Performance Manager is started after the installation.

   NO

   Performance Manager is not started after the installation.

6. **Run the Installation Verification Procedure (optional)**

   After the installation, the Installation Verification Procedure (IVP) checks to ensure that the installation was successful. It starts the application and performs function tests. We recommend that you run the IVP, so the installation gives you the opportunity by asking if you want to run it after completing the installation. Select one of the following responses:

   YES

   The IVP runs after the installation completes.

   NO

   The IVP does not run after the installation completes.

   ## Note

   If you choose not to run the IVP during the installation, you can run it at any time after the installation completes by entering the following command:

   ```
   $ @SYS$TEST:PERF$MANAGER$IVP.COM
   ```

   ---

7. **Purge Previous Version Files**

   You can purge files from previous versions of the product that are superseded by this installation. We recommend that you purge your old files; however, if you need to keep files from a previous version you can choose to not purge your files. The installation asks if you want to purge files replaced by this installation. Select one of the following responses:

YES

The files related to earlier versions of the product are purged after the installation completes.

NO

The files related to earlier versions of the product are left on the system after the installation completes.

8. **Install the DECwindows/MOTIF components (Optional)**

The installation asks if you want to install the DECwindows/MOTIF components.

The following files are required to support the Motif interface:

SYS$LIBRARY:DECW$DWTLIBSHR.EXE
SYS$LIBRARY:DECW$DXMLIBSHR.EXE
SYS$LIBRARY:DECW$XMLIBSHR.EXE
SYS$LIBRARY:DECW$XLIBSHR.EXE
SYS$LIBRARY:DECW$XTSHR.EXE

Select one of the following responses:

YES

These files are installed on your system.

NO

Motif components are not installed.

9. **Select the Performance Manager Definition Files**

The installation procedure now asks you if you want the Performance Manager definition files required for data extraction. These are library source files that are used if you write your own applications to read data. See the *VSI Performance Management for OpenVMS API Guide* for more information on Performance Manager APIs.

```
Language definition files allow the use of the Performance Manager's APIs
for program extraction of PSPA daily data.

You may choose from 7 language definition files which range in size from about
100 to 300 blocks, for a total of 1455 blocks.
* Do you want to select any PSPA definition files [NO]?YES
```

If you type **YES** and press **Return**, the installation procedure displays the following information:

```
PSPA definition files are supported for the following languages:
ADA,BASIC,BLISS,C,FORTRAN,MACRO,PASCAL
* Do you want the definition files for all of these languages [NO]?
* Do you want the definition file for ADA [NO]?
* Do you want the definition file for BASIC [NO]?
* Do you want the definition file for BLISS [NO]? YES
* Do you want the definition file for C [NO]? YES
* Do you want the definition file for FORTRAN [NO]?
* Do you want the definition file for MACRO [NO]? YES
* Do you want the definition file for PASCAL [NO]? YES
```

2.3. Complete the Performance Manager Installation

Some post-installation requirements are necessary to enable your system to run the Performance Manager software. After Performance Manager is installed, it can be invoked by all users with the **ADVISE PERFORMANCE** command.

The installation procedure modifies the DCL command table so that the **ADVISE PERFORMANCE** 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 **ADVISE PERFORMANCE** command must log out and log in again, or use the following DCL command:

```
$ SET COMMAND /TABLES=SYS$LIBRARY:DCLTABLES
```

The following are items to consider after Performance Manager is installed:

- Configure the Automatic Startup Procedure
- Configure the Motif Resource File
- Check the privileges and quotas
- Run the IVP

2.3.1. Configure the Automatic Startup Procedure

Performance Manager software contains a startup procedure that defines pointers to example directories. The startup procedure is named PERF$MANAGER$STARTUP.COM and is placed in the SYS$STARTUP directory. Edit the SYSTARTUP_VMS.COM file to run SYS$STARTUP:PERF$MANAGER$STARTUP.COM to define Performance Manager logical names.

For more revisions that you might want to make to your startup file, see the *Performance Manager Administrator Guide*.

2.3.2. Configure the Motif Resource File

If the necessary library files to support the DECwindows Motif interface are found during installation, the image is placed in SYS$SYSTEM.

Start the image by entering the following command:

```
$ ADVISE/INTERFACE=MOTIF
```

This command determines if the necessary fonts are available on your system. The names of any fonts that are missing are displayed in a message box. Record these names for modifying the Performance resource file, PSPA$EXAMPLES:DECPS$RESOURCES.DAT.

Copy the resource file from the examples area and edit the file as necessary. Replace the fonts listed as missing with fonts that are available in your environment and place the edited file in the directory DECW$USER_DEFAULTS. If you have already performed this process for a Performance Agent installation, you do not need to repeat this.

See the section Performance Manager Resource File for Motif for a complete discussion of the contents of the resource file.

2.3.3. Privileges and Process Account Quotas after Installation

When using Performance Manager to generate reports or graphs, the process needs sufficient privileges to read the daily or history data files and the schedule and parameters files. The working set and pagefile requirements vary depending on the quantity of performance data being loaded. A good minimum starting point is a WSEXTENT quota of 20,000 and a PGFLQUOTA of 60,000.

To run the Performance Manager Real-time interfaces, the process must have privileges to access the files as described above plus have the SYSLCK privilege. When using network mode, the remote system must allow access to the Real-time Performance Agent through a network object or a proxy account. For a complete description, see the *Performance Manager Administrator Guide*.

2.3.4. Run the IVP

The IVP verifies that the component was installed correctly. If you did not choose to auto-run the IVP during the installation procedure, you can manually run it with the following command:

```
$ @SYS$TEST:PERF$MANAGER$IVP
```

You can run the IVP at any time if you want to verify that the Performance Agent software is properly installed.

2.4. Disk Space Required after Installation

A minimum of 46,000 blocks free disk space is required to run the Performance Manager.

2.5. Created and Modified Files

The following table lists all files that are created or modified during the installation of Performance, and the directories where they reside.

File Name	Directory Area	Description
DECPS.TLB:	SYS$UPDATE	This is a library of DCL and Help files shared by the VSI components.
DECPS$RESOURCES.DAT:	PSPA$EXAMPLES	This text file contains sample Motif interface resource settings. See Using the Performance Manager Resource File for Motif, later in this chapter.
PSPA$ADVISOR.EXE:	SYS$SYSTEM	This is the report generator and analysis image file for Performance Manager.
PSPA$BLDKB.EXE:	SYS$SYSTEM	This image file compiles the auxiliary knowledge base.
PSPA$COMMAND.HLB:	SYS$HELP	This file provides the help system for the command mode interface.
PSPA$DAILY.COM:	PSPA$EXAMPLES	This file is a sample command procedure that you can use to generate daily Performance Manager reports.
PSPA$GETDATA.C:	PSPA$EXAMPLES	This file is a sample CIFDE program written in VAX C.

File Name	Directory Area	Description
PSPA$GETDATA.COM:	PSPA$EXAMPLES	This command procedure creates an executable image from PSPA $GETDATA.MAR and its library file.
PSPA$GETDATA.MAR:	PSPA$EXAMPLES	This text file is a sample OPENVMS MACRO application that uses the API.
PSPA$GETDATA.PAS:	PSPA$EXAMPLES	This text file is a sample VSI Pascal application that uses the API.
PSPA$GRAPH.EXE:	SYS$SYSTEM	This image file is for graphing and command mode.
PERF$MANAGER $IVP.COM:	SYS$TEST	This command file contains the Installation Verification Procedure. It can be run at product installation time to verify a successful installation.
PSPA$LIB.*:	SYS$LIBRARY	These files contain data structure definitions for selected languages that may be used with the Performance Manager API. These files are created at installation time and may include: ● PSPA$LIB.ADA for Ada ● PSPA$LIB.BAS for VSI BASIC ● PSPA$LIB.R32 for BLISS-32 ● PSPA$LIB.H for VSI C ● PSPA$LIB.FOR for FORTRAN ● PSPA$LIB.MAR for OPENVMS MACRO ● PSPA$LIB.PAS for Pascal
PSPA$MESSAGE.EXE:	SYS$MESSAGE	This image file provides the Performance messages.
PSPA$MOTIF.EXE:	SYS$SYSTEM	This image file executes the DECwindows Motif interface.
PSPA$MOTIF.UID:	DECW $SYSTEM_DEFAULTS	This file contains most of the DECwindows Motif widget definitions used by Performance Manager.
PSPA$MOTIF_RT.UID:	DECW $SYSTEM_DEFAULTS	This is the widget library for the DECwindows Motif Real-time interface.
PSPA$MSG.TXT:	SYS$SYSTEM	This file contains the conclusions and message templates that are required by Performance Manager.
PSPA$PROFILE.VUE$DAT:	VUE$LIBRARY	This Motif resource file provides FileView with menu definitions for

File Name	Directory Area	Description
		PSPA and PSPA_RT application start up entries.
PSPA $VUE_STARTUP.COM:	VUE$LIBRARY	This file contains the command procedures that start PSPA when invoked through FileView.
PSPA $VUE_STARTUP_RT.COM:	VUE$LIBRARY	This file contains the command procedures that start PSPA Real-time when invoked through FileView.
PSPA$READ.EXE	SYS$LIBRARY	This image contains the Performance CIFDE procedures
PSPA $RT_CHARCELL.EXE:	SYS$SYSTEM	This image contains the character cell Real-time display.
PSPA $RT_DEFAULTS.DAT:	DECW $SYSTEM_DEFAULTS	This file provides the Motif Real-time Display Utility with the default panel definitions.
PSPA $RT_DEFAULTS.DAT_100:	DECW $SYSTEM_DEFAULTS	This file provides the Motif Real-time Display Utility with the default panel definitions. If using 100 dpi, copy this file to the PSPA$RT_DEFAULTS.DAT file.
PSPA $RT_DEFAULTS.DAT_75:	DECW $SYSTEM_DEFAULTS	This file provides the Motif Real-time Display Utility with the default panel definitions for 75 dpi display.
PSPA$RT_MOTIF.EXE:	SYS$SYSTEM	This image file is the DECwindows Motif Real-time display.
PERF$MANAGER $DEINSTALL.COM:	SYS$UPDATE	This command procedure removes Performance Manager from the system.
PERF$MANAGER $STARTUP.COM:	SYS$STARTUP	This command procedure defines the Performance Manager system logical names. It is created during installation.
PSPA$KB.KB	PSDC$DATABASE	This file is the factory rules database.

2.6. Performance Manager Resource File for Motif

This section describes user-definable characteristics for the Performance Manager DECwindows Motif interface.

The resources used by the application are those generally available in an OpenVMS Motif workstation environment. In other smaller environments, these resources may not be available. Therefore, the resource file provides a mechanism for altering the resources used to those the user can access. In the example directory, PSPA$EXAMPLES, a sample resource file lists the modifiable characteristics. Copy this file to your DECW$USER_DEFAULTS directory and modify any defaults that need to be altered.

2.6.1. Set the Graph Window Characteristics

This section lists the characteristics of the graph window.

- Fonts for Graphs:
  - decps.graph.pieFont:

    Adobe-Helvetica-MEDIUM-R-NORMAL--*-100-*-*-P-*-ISO8859-1
  - decps.graph.legendFont:

    Adobe-Helvetica-MEDIUM-R-NORMAL--*-140-*-*-P-*-ISO8859-1
  - decps.graph.titleFont:

    Adobe-Helvetica-BOLD-R-NORMAL--*-180-*-*-P-*-ISO8859-1
- Dimensions of Graph Windows:
  - decps.graph.width: 600
  - decps.graph.height: 517
  - decps.graph.100dpi_width: 700
  - decps.graph.100dpi_height: 661
- Managing Graph Expose Eventsdecps.graph.backingstore: TRUE

  The graphing routines create a pixmap using the client memory. If the server attempts to create a second copy through the backingstore mechanism, this can create an unnecessary memory drain on the server. This mechanism can create too large a demand in some server environments. To enable you to disable this function, we have provided a resource whose value can be set to FALSE and reduce the demands of Performance Manager on the server.

  If your system has sufficient resources to support the backingstore mechanism, for performance reasons, it is best to leave the resource value set to TRUE.
- Background and Foreground:
  - decps.graph.color1: Black
  - decps.graph.color2: White
- Color Graphs:
  - decps.graph.color3: Blue
  - decps.graph.color4: Orange
  - decps.graph.color5: LimeGreen
  - decps.graph.color6: Orchid
  - decps.graph.color7: DarkTurquoise
  - decps.graph.color8: Thistle
- Graph Subtitle Color:
  - decps.graph.color9: Brown

2.6.2. Set the General DECwindows Fonts

The following fonts are used throughout the DECwindows interface:

Data Selection Dialog Box Fonts

Used in the select data dialog box for the node buttons:

- decps.select_data.node_button_font:

  -Adobe-Courier-Bold-R-Normal--14-140-*-*-M-90-ISO8859-1

Report Fonts

Used in the reports that require 80 columns and 132 columns respectively:

- decps.reports.80_column_font:

  -DEC-Terminal-Medium-R-Normal--14-140-*-*-C-80-ISO8859-1

- decps.reports.132_column_font:

  -DEC-Terminal-Medium-R-Narrow--14-140-*-*-C-60-ISO8859-1

Data Collector Fonts

Used in the main status window in the data collector status section:

- decps.main_window.dc_status_font:

  -DEC-Terminal-Bold-R-Normal--14-140-*-*-C-80-ISO8859-1

Workload Definition Fonts

Used in the workload definition box:

- decps.workload_dfn_wdw.wld_dfn_font:

  -Adobe-Helvetica-Bold-R-Normal--18-180-*-*-P-99-ISO8859-1

2.7. Recover from Errors

This section provides information to help you deal with failures or errors that might occur during Performance Manager installation or use of the application.

2.7.1. Failures During Product Installation

If the installation procedure detects any problems during the installation, it notifies you 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.

If errors occur during the installation itself or when the Installation Verification Procedure (IVP) is running, the installation procedure displays failure messages.

Errors can occur during the installation if any of the following conditions exist:

- 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.
- The OpenVMS help library is currently in use.

For descriptions of the error messages generated by these conditions, see VSI OpenVMS documentation on system messages, recovery procedures, and OpenVMS software installation. If you are notified that any of these conditions exist, you should take the appropriate action as described in the message.

For information on installation requirements, see the section *Section 2.1, "Prepare for the Installation"*.

2.8. Uninstall Performance Manager

Uninstallation scripts enable you to remove Performance Agent from your system. The script PERF$MANAGER$DEINSTALL.COM uninstalls Performance Manager:

Note

A component is not removed if the Registry includes multiple dependencies for it. Specifically, the Performance Manager must be uninstalled before the Performance Agent can be uninstalled.

2.9. Sample Performance Manager Installation Log

This section contains a sample installation for Performance Manager:

```
@SYS$UPDATE:VMSINSTAL VPM031 SYS$MANAGER:

 OpenVMS  Software Product Installation Procedure V9.2-3

It is 9-JUN-2025 at 23:30.

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

%VMSINSTAL-W-ACTIVE, The following processes are still active:
       TCPIP$FTP_1
       TCPIP$NTP_1
       SSHD22_BG86
* Do you want to continue anyway [NO]? YES
* Are you satisfied with the backup of your system disk [YES]?

The following products will be processed:

  VPM V3.1

 Beginning installation of VPM V3.1 at 23:30

    ******************************************************************
%VMSINSTAL-I-VALSIGN, Performing product kit validation of signed kits ...
Success
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPM031.A_VNC succeeded

Success
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPM031.B_VNC succeeded

Success
```

```
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPM031.F_VNC succeeded

Success
%VMSINSTAL-I-VALPASSED, validation of SYS$SYSROOT:[SYSMGR]VPM031.Y_VNC succeeded

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

  Copyright (c) 2025 VMS Software, Inc.. All rights reserved.

        Product:      VMS-PERFMGMT
        Producer:     VSI
        Version:
        Release Date:

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

* Do you want to run the IVP after the installation (Product Startup Required)
[YES]?

 The product will be started and the IVP will run automatically at the end of this
 install

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

   The DECwindows/MOTIF components of this software are optional

* Do you want to install the DECwindows/MOTIF components [YES]?

   The TCP/IP stack TCP/IP Services is up and running...

    Language definition files allow the use of the Performance
    Manager's API routines to extract daily data.

    You may choose from 7 language definition files which
    range in size from about 100 to 300 blocks, for a
    total of 1455 blocks.

* Do you want to select any PSPA definition files [NO]? YES

    PSPA definition files are supported for the following languages:
        ADA,BASIC,BLISS,C,FORTRAN,MACRO,PASCAL

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

   All questions regarding this installation have been asked.
   The installation will run for approximately 2 to 5 minutes

%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-RESTORE, Restoring product save set F ...

   Providing files...

   Providing Startup, Shutdown, Installation Verification
   and Deinstallation procedures ...

------------------------------------------------------------------------------
   Product Management Command Files
------------------------------------------------------------------------------
   Startup:    $ @SYS$STARTUP:PERF$MANAGER$STARTUP.COM
   Shutdown:   $ @SYS$STARTUP:PERF$MANAGER$SHUTDOWN.COM
   IVP:        $ @SYS$TEST:PERF$MANAGER$IVP.COM
   Deinstall:  $ @SYS$UPDATE:PERF$MANAGER$DEINSTALL.COM
------------------------------------------------------------------------------

   Note:  A call to the product startup procedure or common
```

```
          startup procedure should be inserted manually in
          SYS$STARTUP:SYSTARTUP_VMS.COM in order to start
          the product automatically at system boot time.
          Similarly, a call to the product or common
          shutdown procedure should be inserted in the system
          shutdown procedure, SYS$MANAGER:SYSHUTDWN.COM

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

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  Beginning the VSI Performance Management Manager
  Installation Verification Procedure.

    Checking system files...
    Testing sample program in PSPA$EXAMPLES...

 Performance Manager version V3.1-2506 built 9-JUN-2025

  The Installation Verification Procedure for VSI Performance Management
  Manager has completed successfully.

 Installation of VPM V3.1 completed at 23:30

    Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY

    Creating installation data file: VMI$ROOT:[SYSUPD]VPM031.VMI_DATA

 VMSINSTAL procedure done at 23:31
```

Appendix A. Standard System Maintenance Procedures

A.1. Check and Set Process Account Quotas

User account quotas are stored in the file SYSUAF.DAT. Use the OpenVMS Authorize Utility (AUTHORIZE) to verify and change user account quotas. Follow these steps:

1. Set your directory to SYS$SYSTEM, and then run AUTHORIZE, as shown in the following example:

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

2. At the UAF> prompt, enter the **SHOW** command with an account name. For example:

   ```
   UAF> SHOW SMITH
   ```

3. To change a quota, enter the **MODIFY** command.

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

   ```
   UAF> MODIFY SMITH /FILLM=50
   UAF> EXIT
   ```

After you exit from the utility, the system displays messages indicating whether or not changes were made. After 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 description of the Authorize Utility in VSI OpenVMS documentation.

A.2. Check System Parameter Values

To check the values of your system parameters, follow these steps:

1. Enter the following command at the DCL prompt to invoke the System Generation Utility (SYSGEN):

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

2. At the SYSGEN> prompt, enter the **SHOW** command to display the value of a system parameter.

   The following example displays the value for the WSMAX system parameter:

   ```
   SYSGEN> SHOW WSMAX
   ```

   Enter the **EXIT** command at the SYSGEN> prompt to return to DCL level.

A.2.1. Calculate the Values for Global Pages or Pagelets and Global Sections

During the installation, the installation procedure creates a new copy of the DCL command tables that includes the **ADVISE** command. For the installation procedure to complete this process successfully, your system must have available enough unused global sections and global pages or pagelets.

Note

If you do not ensure that your system has the necessary global pages or pagelets and global section SYSGEN parameters for the installation, the DCL tables can be unavailable until rebooted.

- 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 1 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 **ADVISE** command, this system needs a minimum of 1 unused global section and 484 unused global pages.

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

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

  In this example, there are 299 used global sections and 12684 unused global pages. Because this system requires 484 global pages to replace its DCL command table and 12684 are 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. For example:

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

Because 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, pagelets, or sections, invoke AUTOGEN after entering the new parameter values in SYS$SYSTEM:MODPARAMS.DAT.

A.2.2. Change System Parameter Values with AUTOGEN

Use the AUTOGEN command procedure to change system parameters. AUTOGEN automatically adjusts values for parameters that are associated with the values you reset manually. Follow these steps:

1. Edit the following file:

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

2. Change a parameter value listed in this file, delete the current value associated with that parameter and enter the new value.

3. To add a new parameter, add a line to the file that includes both the name of the parameter and its value. For example:

   ```
   WSMAX = 8096
   ```

4. To modify incremental parameters such as free global pages or pagelets and global sections, use ADD_*parameter*. The following example increases the global page setting by 2000:

   ```
   ADD_GBLPAGES = 2000
   ```

   Note

   When you set the page file quota, do not use a value that exceeds the amount of page file space available on the system.

   ---

5. After you make all your changes, exit from the editor and execute the AUTOGEN procedure to recalculate your system parameters.

   The following command recalculates your system parameters and reboots the system:

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

When you specify REBOOT, AUTOGEN performs an automatic system shutdown, and then reboots the system. Any users logged on to the system are immediately disconnected during the shutdown. The automatic reboot puts the new parameter values into effect.

The AUTOGEN utility automatically adjusts some of the SYSGEN parameters based on the consumption of resources since the last reboot. If you do not want to take advantage of this automatic adjustment, include the NOFEEDBACK qualifier on the AUTOGEN command line.

For more information about using AUTOGEN, refer to *OpenVMS System Management Utilities Reference* manual.

A.3. Set Dynamic Parameter Values

Use the System Generation Utility (SYSGEN) to set dynamic parameter values. Dynamic parameters changed with the SYSGEN WRITE ACTIVE command become active immediately without any need to reboot your system.

Rebooting returns the dynamic parameter values to their previous settings.

After you change the dynamic parameter values, complete the installation before rebooting the system. After you finish with the installation, you can reset the dynamic parameters to their previous values or let them be reset automatically when you next reboot your system.

If the dynamic parameter values on your system are less than the values listed in Installation Procedure Requirements, use the following series of commands to change the values. This example changes the CLISYMTBL value to 250:

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN> USE ACTIVE
SYSGEN> SET CLISYMTBL 250
SYSGEN> WRITE ACTIVE
SYSGEN> EXIT
```