

CA Performance Management for OpenVMS

Installation Guide

r3.1



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Chapter 1: Introduction

CA 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. CA Performance Management for OpenVMS includes the following components:

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

This section contains the following topics:

[Who Should Read This Guide](#) (see page 9)

[Related Documentation](#) (see page 9)

[Kit Names](#) (see page 10)

[Installation Disks](#) (see page 10)

Who Should Read This Guide

This guide is for system managers who are installing CA Performance Management for OpenVMS and for system administrators who are looking for an overview of these products. It contains information about the installation and use of the product. This document should be read in its entirety before beginning the installation. It is intended to be used in conjunction with the *Readme* file (CAPM\$README.txt) and the *Release Summary* (CAPMforOpenVMS_RS_ENU.pdf).

Related Documentation

A complete set of CA Performance Management for OpenVMS for OpenVMS documentation is available in Adobe's Portable Document Format (PDF) and Hypertext markup language (HTML) on the DVD-ROM.

Kit Names

The kit names incorporate the product name, service pack level, kit date, and version.

The kit name has following format:

UPMxxx-UNI-0000-YYMMDD-V031

UPMxxx-UNI

Represents the product name.

0000

Represents the service pack level.

YYMMDD

Represents the year, month, and date.

V031 or Vnnn

Represents the version number.

Product	Kit Name
CA Performance Management for OpenVMS Performance Manager	UPMMGR-UNI-0000- <i>yymmdd</i> -V031
CA Performance Management for OpenVMS Performance Agent	UPMAGT-UNI-0000- <i>yymmdd</i> -V031
CA Performance Management for OpenVMS Accounting Chargeback	UPMAC-UNI-0000-YYMMDD-V031

Installation Disks

Depending on the version of CA Performance Management for OpenVMS you install, CA might provide the product on a DVD-ROM or a CD-ROM disk. Throughout this guide we refer to the DVD-ROM as the media device; however, the term is interchangeable with CD-ROM.

Chapter 2: Install the Performance Agent

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

Keep this guide with your distribution kit. You need it to install maintenance updates or to reinstall Performance Agent.

This section contains the following topics:

[Prepare for the Installation](#) (see page 11)

[Install Performance Agent](#) (see page 15)

[Complete the Performance Agent Installation](#) (see page 28)

[Created and Modified Files](#) (see page 33)

[Shut Down Performance Agent](#) (see page 37)

[Sample Performance Agent Installation Log](#) (see page 38)

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 HP 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

Included with the Performance Agent software are the *Readme* and *Release Summary* documents. CA recommends that you read the *Readme* and the *Release Summary* before you install the software. Print these documents from the DVD-ROM before the installation.

See also

[Upgrade Considerations](#) (see page 15)

Hardware and Software Requirements

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

Alpha

- HP OpenVMS Alpha 7.3-2, V8.2 or V8.3
- At least 386,000 blocks of free disk space

Integrity

- HP OpenVMS V8.2-1 or V8.3
- At least 775,000 blocks of free disk space

The following items list the OpenVMS versions and the corresponding TCP/IP stack versions:

- HP TCP/IP Services for OpenVMS Industry Standard 64 V5.5 and V5.6
- HP TCP/IP Services for OpenVMS Alpha V5.4, V5.5 and V5.6
- Process Software TCPware 5.7-2
- Process Software MultiNet V5.1 and V5.2

Required Order for Installing Software

The Performance Agent is a pre-requisite for Performance Manager. If you are installing both products, you must install them in the following order:

1. Performance Agent
2. Performance Manager

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 the appendix [Standard System Maintenance Procedures](#) (see page 91).

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

Privileges required for product use are defined in Privileges and Quotas Required after Installation later in this chapter.

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 following bullets list the minimum required system parameter values for the installation. 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 485,000 blocks during installation on Alpha and 775,000 blocks during installation on I64. This disk space does not include the disk space required for collecting performance data.

These block sizes refer to the space required on the system disk and the disk you choose for the temporary installation files (default SYS\$COMMON:[CA\$SETUP]). 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 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.

Install Performance Agent

Included with the Performance Agent software are the Readme and Release Summary documents. CA recommends that you read the *Readme* and the *Release Summary* before you install the software. Print these documents from the DVD-ROM before the installation.

The installation always copies the readme file to SYS\$HELP by default.

For a sample installation, see the [Sample Performance Agent Installation Log](#) (see page 38).

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.

Upgrade Considerations

When performing an upgrade of Performance Agent on Alpha systems, you might need to be reboot the system before starting Performance Agent. You must reboot the system if any Performance Agent version is detected and if Performance Agent was started since the last reboot.

The installation detects the conditions that require a reboot. If it informs you a reboot is required, it skips the questions about product startup and IVP, since Performance Agent cannot be started before a reboot.

On Integrity systems, a reboot is not required but is strongly recommended in order to take advantage of the latest fixes and enhancements.

For steps to perform after the system is rebooted, refer to the section [Complete the Performance Agent Installation](#) (see page 28).

Additionally, on upgrade, the installation procedure shuts down Performance Agent. It shuts down CA NSM Integration and CAM, in order to provide IPv6 support. It deinstalls the previous version of CAM, if detected.

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. Mount the distribution media (DVD or CD)
2. Run the Installation Procedure
3. Specify a temporary directory to unzip the savesets
4. Check your system backup
5. View and accept the License Agreement
6. Start Performance Agent after the installation
7. Run the Installation Verification Procedure
8. Purge previous version files
9. Install the DECwindows/MOTIF components (optional)
10. Specify whether or not to stop the agent
11. Choose the Performance Agent Database Device
12. Retain the old Performance Agent database (optional)
13. Retain the old schedule file (optional)
14. Retain the old parameters file (optional)
15. Specify the directory for CA NSM Integration
16. Specify the UIC of the CAUNIVMS account
17. Activate the CA NSM Integration Components (optional)
18. Specify your approval to stop CUBEMAN
19. Specify your approval to stop CAM
20. Specify your approval to remove CAM
21. Specify whether to create a new cube options file (optional)
22. Specify whether to create a new cube management data file (optional)
23. Choose the products for automatic startup
24. Specify the CA NSM Manager System

Step 1. Mount the Distribution Media

The CA Performance Management for OpenVMS DVD-ROM can be mounted on OpenVMS or on Windows. For OpenVMS, insert the DVD into the drive and type the following command:

```
$ mount/over=id device
```

device

This is the name of the DVD reader device.

For example, if the DVD-ROM reader is DQA0, the command would be:

```
$ mount/over=id dqa0:
```

Step 2. Run the Installation Procedure

Using the SYSTEM account, run the installation procedure on the OpenVMS system by typing the following command:

For Alpha:

```
$ run device:[000000]setup_alpha.exe
```

For Integrity:

```
$ run device:[000000]setup_ia64.exe
```

This command launches an installation menu where you can install the components.

Step 3. Specify a Temporary Directory to Unzip the Savesets

The installation procedure allows you to choose the temporary directory used for the savesets and installation files. Choose a device and directory with at least 386,000 free blocks. The following example shows how to select a device and directory:

* Enter the device and directory to unzip the save-sets, 386000 blocks of temp space needed [sys\$common:[CA\$SETUP]]:

Note: 386,000 free blocks are the minimum for Alpha; the minimum free blocks for Integrity are 775,000.

Step 4. 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.

Step 5. View and Accept the License Agreement

You must accept the terms of the license agreement before the installation process begins.

To view and accept the license agreement

1. Type V to view the license agreement.

Note: The license agreement is several pages long.

2. Select one of the following responses to accept or reject the terms and conditions of the agreement:

YES

The installation continues.

NO

The installation stops.

Step 6. 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, see [Upgrade Considerations](#) (see page 15), this question is not asked. Instead, you 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.

Step 7. 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$TEST:UPM$AGENT$IVP.COM
```

If a reboot is required, this question is not asked. For more information see [Step 6](#) (see page 18).

Step 8. 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.

Step 9: 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.

Step 10: 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.

Step 11: 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.

To choose the device

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

Note: If a previous definition exists, skip this and go to the next step.

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

2. If you want to use the default of SYS\$COMMON:[DECPS-DATABASE], press Return.

OR

Enter a device name and an optional directory then press Return.

The installation procedure displays 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]?

3. If the message displays the correct device and directory name, press Return.

OR

Type NO, then enter the correct device and directory name. the installation procedure then displays the following message:

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

```
%PSDC-I-CREATEDIR, Created directory SYS$COMMON:[DECPS-DATABASE]
```

Step 12: 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.

Step 13: 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:

SYS\$COMMON:[DECPS-DATABASE]PSDC\$SCHEDULE.DAT

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*.

Step 14: 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*.

Step 15: Specify the directory for CA NSM Integration

If you are installing on a cluster that has mixed versions or uses different IP stacks in the cluster, you *must* install on SYS\$SPECIFIC. Otherwise, you can use the default of SYS\$COMMON.

Specify the directory as in the following example:

```
* Enter the full pathname for the CA Common Services root directory
[SYS$COMMON:[UNIVMS]]:
Selected pathname: SYS$COMMON:[UNIVMS]
* Is that correct [Y]?
```

YES

If the message displays the correct device and directory name.

NO

If the message does not display the correct device and directory name, enter NO and then enter the correct device and directory name.

The installation procedure then displays the following information:

```
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS$COMMON:[UNIVMS]
%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY$BIN.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY$TMP.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY$DATA.
%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY$LOGS.
COMMON install complete
```

Step 16: Specify the UIC of the CAUNIVMS account

The installation checks for the presence of an OpenVMS account CAUNIVMS. This account is needed to support the remote commands from the CA management station.

If the account does not exist, it prompts you for the UIC information to create the account. You need to have a unique UIC value.

Step 17: Activate the CA NSM Integration Components (optional)

The installation asks if you want to activate the CA Common Services Integration Components

YES

The installation activates the CA NSM Integration components and then continues.

NO

The installation continues without activating the CA NSM Integration components.

Step 18: Stop Performance Trend Cube Daemon

The installation checks if the Performance Trend Cube daemon (CUBEMAN) is current running on the system. If it is running, it needs to be shut down before the installation can continue. The installation asks if you are able to shut down CUBEMAN at this time.

YES

Shuts down CUBEMAN on the system and then continues.

NO

Stops the installation.

Step 19: Stop CAM and CAFT

The installation checks if CAM is current running on the system. If it is running, it needs to be shutdown before the installation can continue. The installation asks if you are able to shut down CAM at this time.

Note: This question is not be asked if you answered YES to the step [Stop Performance Trend Cube Daemon](#) (see page 24).

YES

Shuts down CAFT and CAM on the system and then continues.

NO

Stops the installation.

Step 20: Remove CAM

The installation checks for certain prior releases of CAM installed on the system. If a certain prior release is installed, it must be removed in order for the current release to be installed. The installation asks if you are able to remove the prior release of CAM from the system.

YES

Uninstalls CAM and CAFT from the system and then continues

NO

Stops the installation

Step 21: Create a new cube options file (optional)

The installation checks for the presence of the cube options file on the system. If a file is detected, the installation asks if you would like to create a new one. The cube options file may contain added data for this release. A cube options template file is created, CAPOLY\$CUBE_OPTIONS.TEMPLATE, which includes any new data. Refer to the README for further details.

YES

Supersedes the existing file with the new cube options file from the kit.

NO

Does not supersede the cube options file.

Step 22: Create a new cube management data file (optional)

When the installation detects an existing copy of the cube management data file, you are prompted whether or not you would like to create a new one.

YES

Supersedes the existing cube management data file.

NO

Does not supersede the cube management data file.

Step 23: Select Products for Automatic Startup

The installation displays the Product Startup Selection menu listing all the products that you can choose to start automatically after installation and asks if you are satisfied with the displayed choices, as shown in the following example:

```

CA Unicenter NSM for OpenVMS - product startup selection
-----
1. CA Job Management ..... NO
2. CA Job Management Agent ..... NO
3. Unicenter Universal Job Management Agent ..... NO
4. CA Unicenter NSM Jobflow Support..... NO
5. CA Job Management NSM/CCS Integration ..... NO
6. Unicenter Console Management ..... NO
7. CA System Watchdog ..... NO
8. CA System Watchdog NSM/CCS Integration ..... NO
9. CA Performance Management Agent ..... YES
10. CA Unicenter NSM Performance Trend Cube ..... YES
11. CA Common Services OpenVMS Gateway .....YES

```

Are you satisfied with the product selection Y/[N] ? y

If you responded Yes to the question about activating CA Common Services, then the value for item 11 (CA Common Services OpenVMS Gateway) is also set to Yes.

If No, the value is set to No.

To activate CA Unicenter NSM Integration at a later date

1. Run `@sys$manager:capoly$set_startup_params`. Make sure that the following values are set.
 - The product that you are installing is set to YES.
 - CA Common Services OpenVMS Gateway is set to Yes.
 - The name of the CA NSM Manager system is identified.
2. Run `@sys$startup:capoly$startup`
3. Run the CA NSM Integration IVP by executing `@sys$test:TNG$LINKS$IVP`

In a clustered environment, you may not have licenses for all components on all nodes. This menu enables you to select components separately for each node. You can also customize the startup list by using the following command procedure while logged on to each node:

```
@sys$manager:CAPOLY$SET_STARTUP_PARAMS.COM
```

Step 24: Specify the CA Unicenter NSM Manager System

The installation prompts you to specify the node name, which is usually the same as the node name you already specified, or IP address of the system where CA Unicenter NSM Manager is running, as shown in the following message.

To complete integration with a CA Unicenter NSM Management Station, its IP address or node name is required.

The CA Unicenter NSM Manager has been identified as:

```
"vmstest0"
```

```
* Node Name or IP Address [vmstest0]?
```

If, at a later time, you want to change the system name, you can do so by using the following command procedure:

```
@sys$manager:CAPOLY$SET_STARTUP_PARAMS.COM
```

Uninstall Performance Agent

You can use the de-installation scripts to uninstall Performance Agent. There are three scripts included. One script removes both the base Performance Agent product and the CA Unicenter NSM Systems Performance Option integration components. The second script removes only the CA Unicenter NSM Systems Performance Option integration components. The third script removes the CA Unicenter NSM integration common components.

The command files to execute the scripts are located in the SYS\$UPDATE directory.

The following scripts uninstall Performance Agent:

- Main uninstall script: UPM\$AGENT\$DEINSTALL.COM
- Performance Links only uninstall script: DATACOLLECTLNK\$DEINSTALL.COM
- Common Links uninstall script: COMLNK\$DEINSTALL.COM

Note: A component is not removed if the Registry includes multiple dependencies for it. Specifically, the Performance Agent cannot be uninstalled until Performance Manager is uninstalled.

Complete the Performance Agent Installation

Some post-installation requirements are necessary to enable your system to run the Performance Agent software.

To complete the installation

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)

Edit the System Startup File

Depending on what you installed on your system, you need to complete one of the following actions:

- If you activated the CA Common Services Integration, you need to add the following statement to your system startup file:

```
@SYS$STARTUP:CAPOLY$STARTUP
```

CAPOLY\$STARTUP checks for the presence of each component, and starts those items that are installed.

- If you did not activate the CA Common Services Integration software, 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$STARTUP:UPM$AGENT$STARTUP
```

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

Configure the Automatic Startup Procedure

Run SYS\$STARTUP:UPM\$AGENT\$STARTUP.COM as early as possible in the procedure. CA 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 UPM\$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:UPM\$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 UPM\$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
```

Edit the System Shutdown File

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

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

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

If you are using CA Common Services Integration software as well, add the following code:

```
@SYS$STARTUP:CAPOLY$SHUTDOWN
```

to your system shutdown file. CAPOLY\$SHUTDOWN checks for the presence of each component, and if installed, shuts it down.

Disk Space Required after Installation

After installation, you need approximately 140,000 blocks of disk space to run Performance Agent.

You must provide sufficient disk space for the database directory files. 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.

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

Bytes	Allocations
392	As needed on CPD process image queue overflow (note 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 (note 2)

Note 1: Process image queue overruns increase as the system image activation rate increases.

Note 2: 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 HP OpenVMS documentation on system generation.

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

Command/Utility	Privileges
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

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$TEST:UPM$AGENT$IVP
```

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

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
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.	

File Name	Directory Area
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	
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.	
UPM\$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.	

File Name	Directory Area
<p>PSDC\$MOTIF.UID</p> <p>This file contains the Motif widget definitions used by the Performance Agent DECwindows interface.</p>	DECW\$SYSTEM_DEFAULTS
<p>PSDC\$MESSG.TXT</p> <p>This file contains the message templates that are required for reporting.</p>	SYS\$SYSTEM
<p>PSDC\$nodename_dd-mmm-yyyy_dd-mmm-yyyy.name</p> <p>This is created by the Performance Agent; this file contains the archived daily data. The file name is defined by the history descriptor parameters; <i>name</i> is the history file descriptor name.</p>	<p>Directory path of the CPD collection definition as specified in the schedule file, PSDC\$SCHEDULE.DAT.</p>
<p>PSDC\$nodename_dd-mmm-yyyy_dd-mmm-yyyy.name_JOU</p> <p>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; <i>name</i> is the history file descriptor name.</p>	<p>Directory path of the CPD collection definition as specified in the schedule file, PSDC\$SCHEDULE.DAT.</p>
<p>PSDC\$nodename_yyyymmdd.CPD</p> <p>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.</p>	<p>Directory path of the CPD collection definition as specified in the schedule file, PSDC\$SCHEDULE.DAT.</p>

File Name	Directory Area
PSDC\$PARAMS.DAT	PSDC\$DATABASE
<p>The parameters file is a repository for Performance Agent parameters. The main parameters include:</p> <ul style="list-style-type: none"> ■ 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
<p>This is the image file for Program Counter sampling and reporting.</p>	
PSDC\$RT_V5.EXE	SYS\$SYSTEM
<p>This is the Real-Time Performance Agent image file.</p>	
PSDC\$SCHEDULE.DAT	PSDC\$DATABASE
<p>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.</p>	
PSDC\$SERVER.COM	SYS\$SYSTEM
<p>This command procedure is invoked by DECnet Services to start a Real-Time Performance Agent.</p>	
UPM\$AGENT\$SHUTDOWN.COM	SYS\$STARTUP
<p>This command procedure performs an orderly shutdown of the Performance Agent. It should be called from the site-specific shutdown command procedure.</p>	

File Name	Directory Area
UPM\$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.	
PSDC.DIR	SYS\$EXAMPLES
A data collector directory.	
UPM\$README_ymmdd-Vvvv.TXT	SYS\$HELP
This text file contains the readme notes for CA 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).	

Shut Down Performance Agent

If you are shutting down your system, you should shut down the Performance Agent process. Depending on if you activated the CA Common Services Integration software or not, use one of the following procedures:

- If you activated the Integration software, add the following statement to your system shutdown file:

```
@SYS$STARTUP:CAPOLY$SHUTDOWN
```

CAPOLY\$SHUTDOWN checks for each installed component and shuts them down.

- If you did not activate the CA Common Services Integration software, before performing an orderly system shutdown, execute the following command file to stop the Performance Agent process:

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

Sample Performance Agent Installation Log

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

```
$ run $1$DQA0:[000000]SETUP_ALPHA.EXEUnZipSFX 5.20 of 30 April 1996, by Info-ZIP
(Zip-Bugs@wkuvx1.wku.edu).  inflating: ca$setup.com
  inflating: installhelp.hlp
  inflating: product.key
  inflating: upm$readme.txt
  inflating: unzip_alpha.exe
  inflating: unzip_ia64.exe
Setup location: $1$DQA0:[000000]
```

CA Performance Management for OpenVMS

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```
-----
          PRODUCT

1      Performance Agent Install
2      Performance Manager Install
3      Accounting Chargeback Install

I      Unicenter Integration Help
P      Product Readme
H      Install Help
E      Exit
```

```
      Please Enter the Number of the Product you wish to
      install >>>> 1%DCL-S-SPAWNED, process SYSTEM_40232 spawned
%DCL-S-ATTACHED, terminal now attached to process SYSTEM_40232
UnZipSFX 5.20 of 30 April 1996, by Info-ZIP (Zip-Bugs@wkuvx1.wku.edu).
inflating: ca$setup.com
  inflating: ca$setup.ini
  inflating: unzip_alpha.exe
  inflating: unzip_ia64.exe
Platform type : ALPHA
OS version   : V7.3
Setup location: $1$DQA0:[000000.ENU.OPENVMS.PERFAGENT]
Product Kit:
$1$DQA0:[000000.ENU.OPENVMS.PERFAGENT]UPMAGT_UNI_0000_yymmdd_V031.ZIP;1
```

* Enter the device and directory to unzip the save-sets, 110000 blocks of temp space needed [sys\$common:[CA\$SETUP]]:
UNZIP location: \$1\$DQA0:[000000.ENU.OPENVMS.PERFAGENT]UNZIP_ALPHA.EXE;1
Unzipping installation media ... Please be patient ...

OpenVMS AXP Software Product Installation Procedure V7.3-2

It is 29-NOV-2007 at 15:04.

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

%VMSINSTAL-W-ACTIVE, The following processes are still active:

TCPIP\$PORTM_1
TCPIP\$FTP_1
TCPIP\$SNMP_1
TCPIP\$HR_MIB
TCPIP\$OS_MIBS

* 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:

UPMAGT_INO_0000_yymmdd_V V3.1

Beginning installation of IPMAGT_UNI_0000_yymmdd_V V3.1 at 15:05

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

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* DO YOU ACCEPT THE TERMS AND CONDITIONS OF THIS AGREEMENT AS SET FORTH IN THE LICENSE AGREEMENT (YES (Y) / NO (N) / VIEW (V)) [N]: y
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[CAI\$REGISTRY].

* Do you want this software to start right after the installation [YES]?

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

* 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]?

** NOTE **

If you are installing on a cluster that has mixed versions, mixed architectures, or uses different IP stacks in the cluster, you MUST install on SYS\$SPECIFIC. Otherwise, you may use the default of SYS\$COMMON.

* Enter the full pathname for the Unicenter Common Services root directory [SYS\$COMMON:[UNIVMS]]:

Selected pathname: SYS\$COMMON:[UNIVMS]

* Is that correct [Y]?

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

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$BIN.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$TMP.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$DATA.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$LOGS.

COMMON install complete

%VMSINSTAL-I-RESTORE, Restoring product save set R ...

The installation will now check the for the presence of an OpenVMS account CAUNIVMS. This account is needed to support the remote commands from the Unicenter management station.

The installation did not find the CAUNIVMS account. It will prompt you for the UIC information to create the account. You will need to have a unique UIC value.

* Enter a new UIC (include brackets) [[713,63]]:

%VMSINSTAL-I-ACCOUNT, This installation creates an ACCOUNT named CAUNIVMS.

%UAF-I-ADDMSG, user record successfully added

%UAF-I-RDBADDMSGU, identifier CAUNIVMS value [000713,000063] added to rights database

%UAF-I-RDBADDMSGU, identifier NSM value [000713,177777] added to rights database

* Do you want to activate the CA Common Services Integration Components [YES]? NO

To activate links at a later time, execute the following command procedure:

@SYS\$MANAGER:CAPOLY\$SET_STARTUP_PARAMS

%VMSINSTAL-I-RESTORE, Restoring product save set X ...

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 Z ...

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

%VMSINSTAL-I-RESTORE, Restoring product save set D ...

%VMSINSTAL-I-SYSDIR, This product creates system directory
[SYSHLP.EXAMPLES.PSDC].

Providing product readme ...

UPM\$README_yymmdd-V031.TXT

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

Installing links...

%VMSINSTAL-I-RESTORE, Restoring product save set T ...

To have CA Common Services started when rebooting, add
"@SYS\$STARTUP:CAPOLY\$STARTUP" to the system startup file,
either SYS\$MANAGER:SYSTARTUP_V5.COM for VMS V5 or
SYSTARTUP_VMS.COM for OpenVMS V6 and OpenVMS V7, and add
"@SYS\$STARTUP:CAPOLY\$SHUTDOWN" to the system shutdown file,
SYS\$MANAGER:SYSHUTDOWN.COM.

Checking for required TCP/IP files. Depending on what TCP/IP
product you are running, you may see error messages stating
that a file cannot be found. You may safely ignore these
messages unless you do not have any of the supported TCP/IP
stacks running on this machine. In that case, the installation
will abort.

Required TCP/IP file test completed.

Installing CA Message Service (CAM)

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.AXPNO.D.CAM].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.AXPNO.D.CAM.LOGS].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.AXPNO.D.CAM.QLOCAL].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.AXPNO.D.CAM.QREMOTE].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.AXPNO.D.CAM.FTLOGS].

%UPMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY\$TNGD...

```
%UPMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY$TRAP...
%UPMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY$CASEND...
%UPMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY$FORCEX...
```

You may run the CA Common Services integration Installation Verification Procedure at any time by typing the command:

```
$ @SYS$TEST:TNG$LINKS$IVP.COM
```

```
%UPMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY$CUBEMAN...
```

Product Management Command Files

```
Startup:    $ @SYS$STARTUP:UPM$AGENT$STARTUP.COM
Shutdown:   $ @SYS$STARTUP:UPM$AGENT$SHUTDOWN.COM
IVP         $ @SYS$TEST:UPM$AGENT$IVP.COM
Deinstall:  $ @SYS$UPDATE:UPM$AGENT$DEINSTALL.COM
```

Common Component Command Files

```
Startup:           $ @SYS$STARTUP:CAPOLY$STARTUP
Shutdown:          $ @SYS$STARTUP:CAPOLY$SHUTDOWN
Reconfig Common Startup: $ @SYS$MANAGER:CAPOLY$SET_STARTUP_PARAMS
List Installed Products: $ @SYS$STARTUP:CAREGISTRY$LISTPRODUCTS [FULL]
```

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 _[l]mor _[m]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 CA 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 29-NOV-2007 | 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-----
-----
I64VM5 Stopped 2500 2048 PSDC$DATABASE:
USEN84 Running 2500 2048 PSDC$DATABASE:
AXPNOD Running 2500 2048 PSDC$DATABASE:
```

Performance Agent version V3.1-0805 built 26-NOV-2007

Testing System PC Sample collection...

%PSDC-I-EXECCONFIG, retrieving VMS EXECUTIVE configuration at 15:10:40.46
 %PSDC-I-COLLECTSTART, starting PC collections at 15:10:46.06
 Testing System PC Sample report writer...

The Installation Verification Procedure for
 the Performance Agent has completed successfully.

Installation of UPMAGT_UNI_0000_yymmdd_V V3.1 completed at 15:11

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

Creating installation data file:
 VMI\$ROOT:[SYSUPD]UPMAGT_UNI_0000_yymmdd_V031.VMI_DATA

VMSINSTAL procedure done at 15:12

%DELETE-I-FILDEL, SYS\$COMMON:[000000]CA\$SETUP.DIR;1 deleted (4 blocks)
 %DELETE-I-FILDEL, SYS\$SYSROOT: [SYSMGR]CA\$SETUP.INI;1 deleted (100 blocks)
 %DELETE-I-FILDEL, SYS\$SYSROOT: [SYSMGR]CA\$SETUP.COM;1 deleted (100 blocks)

%DCL-S-RETURNED, control returned to process SYSTEM_5351

CA Performance Management for OpenVMS

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PRODUCT

- 1 Performance Agent Install
- 2 Performance Manager Install
- 3 Accounting Chargeback Install

I Unicenter Integration Help

P Product Readme

H Install Help

E Exit

Please Enter the Number of the Product you wish to
install >>>>

\$

Chapter 3: Install the Performance Manager

This chapter describes how to install CA 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.

This section contains the following topics:

[Prepare for the Installation](#) (see page 45)

[Install Performance Manager](#) (see page 48)

[Complete the Performance Manager Installation](#) (see page 55)

[Disk Space Required after Installation](#) (see page 57)

[Created and Modified Files](#) (see page 58)

[Performance Manager Resource File for Motif](#) (see page 61)

[Recover from Errors](#) (see page 63)

[Uninstall Performance Manager](#) (see page 64)

[Sample Performance Manager Installation Log](#) (see page 65)

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.

Included with the Performance Manager software are the *Readme* and *Release Summary* documents. CA recommends that you read the *Readme* and the *Release Summary* before you install the software. Print these documents from the DVD-ROM before the installation.

Hardware and Software Requirements

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

Alpha

- HP OpenVMS Alpha V8.2 or V8.3
- At least 250,000 blocks of free disk space during the installation, and 50,000 after
- HP Motif V1.5 or later for OpenVMS Server

Integrity

- HP OpenVMS V8.2-1 or V8.3
- At least 335,000 blocks of free disk space during the installation, and 85,000 after
- HP Motif V1.5 or later for OpenVMS Server

The following items list the OpenVMS versions and the corresponding TCP/IP stack versions:

- HP TCP/IP Services for OpenVMS Industry Standard 64 V5.5 and V5.6
- HP TCP/IP Services for OpenVMS Alpha V5.4, V5.5 and V5.6
- Process Software TCPware 5.7-2
- Process Software MultiNet V5.1 and V5.2

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.

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 the *After Installation* section of this chapter.

System Parameters

The following table lists the minimum required system parameter values for the installation. 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 on Alpha and 335,000 blocks during installation on Integrity.

These block sizes refer to the space required 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
```

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.

Install Performance Manager

Included with the Performance Manager software are the *Readme* and *Release Summary* documents. CA recommends that you read the *Readme* and the *Release Summary* before you install the software. Print these documents from the DVD-ROM before the installation.

If you encounter any errors or failures during installation, see the section [Recover from Errors](#) (see page 63).

Prior Versions of CA Performance Management for OpenVMS

Before installing components of CA Performance Management for OpenVMS, you should stop any prior version running on your system. After starting the installation, if there are active processes, the installation procedure displays them and asks if you would like to continue. Answering YES lets you continue the installation procedure, while NO stops the installation.

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. Mount the distribution media
2. Run the Installation Procedure
3. Specify a temporary directory to unzip the savesets
4. Check your system backup
5. View and accept the License Agreement
6. Start Performance Manager after the installation
7. Run the Installation Verification Procedure
8. Purge previous version files
9. Install the DECwindows/MOTIF components (optional)
10. Select the Performance Manager definition files
11. Activate the CA Integration Components (optional)
12. Choose the products for automatic startup (step 17)
13. Specify the CA NSM Manager System

For a sample installation, see the [Sample Performance Manager Installation Log](#) (see page 65) later in this chapter.

Step 1. Mount the Distribution Media

The CA Performance Management for OpenVMS DVD-ROM can be mounted on OpenVMS or on Windows. For OpenVMS, insert the DVD into the drive and type the following command:

```
$ mount/over=id device
```

device

This is the name of the DVD reader device.

For example, if the DVD-ROM reader is DQA0, the command would be:

```
$ mount/over=id dqa0:
```

Step 2. Run the Installation Procedure

Using the SYSTEM account, run the installation procedure on the OpenVMS system by typing the following command:

For Alpha:

```
$ run device:[000000]setup_alpha.exe
```

For Integrity:

```
$ run device:[000000]setup_ia64.exe
```

This command launches an installation menu where you can install the components.

Step 3: Specify a Temporary Directory to Unzip the Savesets

The installation procedure allows you to choose the temporary directory used for the savesets and installation files. Choose a device and directory with at least 285,000 free blocks. The following example shows how to select a device and directory:

```
* Enter the device and directory to unzip the save-sets, 285000 blocks of temp
space needed [sys$common:[CA$SETUP]]:
```

Note: 285,000 free blocks are the minimum for Alpha; the minimum free blocks for Integrity are 335,000.

Step 4. 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.

Step 5. View and Accept the License Agreement

You must accept the terms of the license agreement before the installation process begins.

To view and accept the license agreement

1. Type V to view the license agreement.

Note: The license agreement is several pages long.

2. Select one of the following responses to accept or reject the terms and conditions of the agreement:

YES

The installation continues.

NO

The installation stops.

Step 6: 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.

Step 7. 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$TEST:UPM$CHRGBACK$IVP>CPM
```

Step 8. 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.

Step 9: 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.

Step 10: 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 *CA Performance Management for OpenVMS SDK 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

Step 11: Activate the CA NSM Integration Components (optional)

The installation asks if you want to activate the CA Common Services Integration Components

YES

The installation activates the CA NSM Integration components and then continues.

NO

The installation continues without activating the CA NSM Integration components.

Step 12: Choose the products for automatic startup

The installation displays the Product Startup Selection menu listing all the products that you can choose to start automatically after installation and asks if you are satisfied with the displayed choices, as shown in the following example:

```
CA Unicenter NSM for OpenVMS - product startup selection
-----
1. CA Job Management ..... NO
2. CA Job Management Agent ..... NO
3. Unicenter Universal Job Management Agent ..... NO
4. CA Unicenter NSM Jobflow Support..... NO
5. CA Job Management NSM/CCS Integration ..... NO
6. Unicenter Console Management ..... NO
7. CA System Watchdog ..... NO
8. CA System Watchdog NSM/CCS Integration ..... NO
9. CA Performance Management Agent ..... YES
10. CA Unicenter NSM Performance Trend Cube ..... YES
11. CA Common Services OpenVMS Gateway .....YES
```

Are you satisfied with the product selection Y/[N] ? y

If you responded Yes to the question about activating CA Common Services, then the value for item 11 (CA Common Services OpenVMS Gateway) is also set to Yes.

If No, the value is set to No.

To activate CA Unicenter NSM Integration at a later date

1. Run `@sys$manager:capoly$set_startup_params`. Make sure that the following values are set.
 - The product that you are installing is set to YES.
 - CA Common Services OpenVMS Gateway is set to Yes.
 - The name of the CA NSM Manager system is identified.
2. Run `@sys$startup:capoly$startup`
3. Run the CA NSM Integration IVP by executing `@sys$test:TNG$LINKS$IVP`

In a clustered environment, you may not have licenses for all components on all nodes. This menu enables you to select components separately for each node. You can also customize the startup list by using the following command procedure while logged on to each node:

```
@sys$manager:CAPOLY$SET_STARTUP_PARAMS.COM
```

Step 13: Specify the CA Unicenter NSM Manager System

The installation prompts you to specify the node name, which is usually the same as the node name you already specified, or IP address of the system where CA Unicenter NSM Manager is running, as shown in the following message.

To complete integration with a CA Unicenter NSM Management Station, its IP address or node name is required.

The CA Unicenter NSM Manager has been identified as:

```
"vmstest0"
```

```
* Node Name or IP Address [vmstest0]?
```

If, at a later time, you want to change the system name, you can do so by using the following command procedure:

```
@sys$manager:CAPOLY$SET_STARTUP_PARAMS.COM
```

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

Configure the Automatic Startup Procedure

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

If you are using the CA Common Services Integration software as well, add the following item to your system startup file:

```
@SYS$STARTUP:CAPOLY$STARTUP
```

CAPOLY\$STARTUP checks for the presence of each component, and, if installed, will start it.

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](#) (see page 61) for a complete discussion of the contents of the resource file.

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*.

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$TEST:UPM$MANAGER$IVP
```

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

Disk Space Required after Installation

A minimum of 50,000 blocks free disk space on Alpha or 85,000 blocks free disk space on Integrity is required to run Performance Manager.

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

File Name	Directory Area
PSPA\$GETDATA.MAR: This text file is a sample OPENVMS MACRO application that uses the SDK.	PSPA\$EXAMPLES
PSPA\$GETDATA.PAS: This text file is a sample HP Pascal application that uses the SDK.	PSPA\$EXAMPLES
PSPA\$GRAPH.EXE: This image file is for graphing and command mode.	SYS\$SYSTEM
UPM\$MANAGER\$IVP.COM: This command file contains the Installation Verification Procedure. It can be run at product installation time to verify a successful installation.	SYS\$TEST
PSPA\$LIB.*: These files contain data structure definitions for selected languages that may be used with the Performance Manager SDK. These files are created at installation time and may include: <ul style="list-style-type: none"> ■ PSPA\$LIB.ADA for Ada ■ PSPA\$LIB.BAS for HP BASIC ■ PSPA\$LIB.R32 for BLISS-32 ■ PSPA\$LIB.H for HP C ■ PSPA\$LIB.FOR for FORTRAN ■ PSPA\$LIB.MAR for OPENVMS MACRO ■ PSPA\$LIB.PAS for Pascal 	SYS\$LIBRARY
PSPA\$MESSAGE.EXE: This image file provides the Performance messages.	SYS\$MESSAGE
PSPA\$MOTIF.EXE: This image file executes the DECwindows Motif interface.	SYS\$SYSTEM

File Name	Directory Area
PSPA\$MOTIF.UID: This file contains most of the DECwindows Motif widget definitions used by Performance Manager.	DECW\$SYSTEM_DEFAULTS
PSPA\$MOTIF_RT.UID: This is the widget library for the DECwindows Motif Real-time interface.	DECW\$SYSTEM_DEFAULTS
PSPA\$MESSG.TXT: This file contains the conclusions and message templates that are required by Performance Manager.	SYS\$SYSTEM
PSPA\$PROFILE.VUE\$DAT: This Motif resource file provides FileView with menu definitions for PSPA and PSPA_RT application start up entries.	VUE\$LIBRARY
PSPA\$VUE_STARTUP.COM: This file contains the command procedures that start PSPA when invoked through FileView.	VUE\$LIBRARY
PSPA\$VUE_STARTUP_RT.COM: This file contains the command procedures that start PSPA Real-time when invoked through FileView.	VUE\$LIBRARY
PSPA\$READ.EXE This image contains the Performance CIFDE procedures	SYS\$LIBRARY
PSPA\$RT_CHARCELL.EXE: This image contains the character cell Real-time display.	SYS\$SYSTEM
PSPA\$RT_DEFAULTS.DAT: This file provides the Motif Real-time Display Utility with the default panel definitions.	DECW\$SYSTEM_DEFAULTS

File Name	Directory Area
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.	
UPM\$MANAGER\$DEINSTALL.COM:	SYS\$UPDATE
This command procedure removes Performance Manager from the system.	
UPM\$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.	

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.

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 Events
decps.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

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

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.

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. If the installation fails, you see the following message:

```
%VMSINSTAL-E-INSFAIL, The installation of UPMGR-UNI-0000-yymmdd-V3.1 has failed.
```

If the IVP fails, you see these messages:

```
The UPMGR-UNI-0000-yymmdd-V03.1 Installation Verification Procedure failed.  
%VMSINSTAL-E-IVPFAIL, The IVP for UPMGR-UNI-0000-yymmdd-V03.1 has failed.
```

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 HP's 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 [Prepare for the Installation](#) (see page 45).

Uninstall Performance Manager

Uninstallation scripts enable you to remove Performance Agent from your system. The following script uninstalls Performance Manager:

- Main De-Install Script: UPM\$MANAGER\$DEINSTALL.COM

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.

Sample Performance Manager Installation Log

This section contains a sample installation for Performance Manager:

```
$ run $1$DQA0:[000000]setup_alpha.exeUnZipSFX 5.20 of 30 April 1996, by Info-ZIP
(Zip-Bugs@wkuvx1.wku.edu).  inflating: ca$setup.com
  inflating: installhelp.hlp
  inflating: product.key
  inflating: upm$readme.txt
  inflating: unzip_alpha.exe
  inflating: unzip_ia64.exe
Setup location: $1$DQA0:[000000]
```

CA Performance Management for OpenVMS

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```
-----
          PRODUCT

1      Performance Agent Install
2      Performance Manager Install
3      Accounting Chargeback Install

I      Unicenter Integration Help
P      Product Readme
H      Install Help
E      Exit
```

```
      Please Enter the Number of the Product you wish to
      install >>>> 2%DCL-S-SPAWNED, process SYSTEM_29175 spawned
%DCL-S-ATTACHED, terminal now attached to process SYSTEM_29175
```

```
UnZipSFX 5.20 of 30 April 1996, by Info-ZIP (Zip-Bugs@wkuvx1.wku.edu).
inflating: ca$setup.com
  inflating: ca$setup.ini
  inflating: unzip_alpha.exe
  inflating: unzip_ia64.exe
Platform type : ALPHA
OS version   : V7.3
Setup location: $1$DQA0:[ENU.OPENVMS.PERFMANAGER]
```

Product Kit :
\$1\$DQA0:[ENU.OPENVMS.PERFMANAGER]UPMMGR_UNI_0000_yymmdd_V031.ZIP;1
* Enter the device and directory to unzip the save-sets, 110000 blocks of temp
space needed [sys\$common:[CA\$SETUP]]: UNZIP location:
\$1\$DQA0:[ENU.OPENVMS.PERFMANAGER]UNZIP_ALPHA.EXE;1
Unzipping installation media ... Please be patient ...

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It is 30-NOV-2007 at 10:46.

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

%VMSINSTAL-W-ACTIVE, The following processes are still active:

TCPIP\$PORTM_1
TCPIP\$FTP_1
TCPIP\$SNMP_1
TCPIP\$HR_MIB
TCPIP\$OS_MIBS

* 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:

UPMMGR_UNI_0000_yymmdd_V V3.1

Beginning installation of UPMMGR_UNI_0000_yymmdd_V V3.1 at 10:46

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

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

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* DO YOU ACCEPT THE TERMS AND CONDITIONS OF THIS AGREEMENT AS SET FORTH IN THE
LICENSE AGREEMENT (YES (Y) / NO (N) / VIEW (V)) [N]: y

* Do you want this software to start right after the installation [YES]? * Do you
want to run the IVP after the installation [YES]? * 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]? Y

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]?

Y%UPMMGR_UNI_0000_yymmdd_V-I-EXISTS, Directory VMI\$SPECIFIC:[UNIVMS.BIN] already exists.

Unicenter for OpenVMS - product startup selection

```

-----
 1  Unicenter Job Management ..... NO
 2  Unicenter Job Management Agent ..... NO
 3  Unicenter Universal Job Management Agent ..... NO
 4  Unicenter NSM Workload Management Jobflow Support . NO
 5  Unicenter Job Management NSM/UCS Integration ..... NO
 6  Unicenter Console Management ..... NO
 7  Unicenter System Watchdog ..... NO
 8  Unicenter System Watchdog NSM/UCS Integration ..... NO
 9  Unicenter Performance Management Agent ..... YES
10  Unicenter NSM Performance Trend Cube ..... NO
11  Unicenter Common Services OpenVMS Gateway ..... NO

```

* Are you satisfied with the product selection Y/[N] ? y

All questions regarding this installation have been asked. [m

The installation will run for approximately 2 to 5 minutes

%VMSINSTAL-I-RESTORE, Restoring product save set Z ...

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

%VMSINSTAL-I-RESTORE, Restoring product save set D ...

Providing files...

%VMSINSTAL-I-SYSDIR, This product creates system directory
[SYSHLP.EXAMPLES.PSPA].

Providing product readme ...

UPM\$README_yymmdd-V031.TXT

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

Product Management Command Files

```

Startup:    $ @SYS$STARTUP:UPM$MANAGER$STARTUP.COM
Shutdown:  $ @SYS$STARTUP:UPM$MANAGER$SHUTDOWN.COM
IVP:       $ @SYS$TEST:UPM$MANAGER$IVP.COM
Deinstall: $ @SYS$UPDATE:UPM$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 _[l]mor _[m]common shutdown procedure should be inserted in the system shutdown procedure, SYS\$MANAGER:SYSHUTDOWN.COM

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

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Beginning the CA Performance Management Manager Installation Verification Procedure.

Checking system files...
Testing sample program in PSPA\$EXAMPLES...
Performance Manager version V3.1-0805 built 30-NOV-2007

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

Installation of UPMGR_UNI_0000_yymmdd_V V3.1 completed at 10:50

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

Creating installation data file:
VMI\$ROOT:[SYSUPD]UPMGR_UNI_0000_yymmdd_V031.VMI_DATA

VMSINSTAL procedure done at 10:51

%DELETE-I-FILDEL, SYS\$COMMON:[000000]CA\$SETUP.DIR;1 deleted (4 blocks)
%DELETE-I-FILDEL, SYS\$SYSROOT:[SYSMGR]CA\$SETUP.INI;1 deleted (100 blocks)
%DELETE-I-FILDEL, SYS\$SYSROOT:[SYSMGR]CA\$SETUP.COM;1 deleted (100 blocks)
%DCL-S-RETURNED, control returned to process SYSTEM_43062

CA Performance Management for OpenVMS

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PRODUCT

- 1 Performance Agent Install
- 2 Performance Manager Install
- 3 Accounting Chargeback Install

I Unicenter Integration Help
P Product Readme
H Install Help
E Exit

Please Enter the Number of the Product you wish to
install >>>> \$

Chapter 4: Install Accounting Chargeback

This section describes how to install Accounting Chargeback on Alpha servers running the OpenVMS operating system.

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

This section contains the following topics:

[Introduction](#) (see page 71)

[Prepare for the Installation](#) (see page 72)

[Install Accounting Chargeback](#) (see page 74)

[Complete the Accounting Chargeback Installation](#) (see page 80)

[Created and Modified Files](#) (see page 81)

[Uninstall Accounting Chargeback](#) (see page 83)

[Sample Accounting Chargeback Installation Log](#) (see page 84)

Introduction

The Accounting Chargeback software uses OpenVMS accounting data to produce system use reports. These reports show monetary amounts charged for various types of system resources based on unit prices provided by the user. Use the Accounting Chargeback report as an itemized bill or as a general resource use report.

With the Accounting Chargeback software, you can:

- Produce a single report from multiple accounting files created by the OpenVMS Accounting Utility on a single node or a cluster system
- Charge different prices for resources in different accounting files
- Charge different prices for printed pages according to printer queue names and accounting files
- Charge different prices for disk use according to volume names and the disk use information provided by the OpenVMS Analyze/Disk_Structure Utility
- Generate reports on the basis of single jobs, job types, UICs, users accounts, and grand totals

Prepare for the Installation

Included with the Accounting Chargeback software are the Readme and Release Summary documents. CA recommends that you read the *Readme* and the *Release Summary* before you install the software. Print these documents from the DVD-ROM before the installation.

Required Operating System Components and Software

Before installing Accounting Chargeback, your OpenVMS server should meet the following minimum requirements:

Class	Purpose
Motif	To provide the DECwindows interface
OpenVMS Accounting	To provide accounting data

For example, the following table shows how to check for required software on OpenVMS Alpha Version 7.3-2 and above.

Class	Enter this command:
Motif	DIR SYS\$LIBRARY:DECW\$XLIBSHR.EXE

Cluster Considerations

Remove any Accounting Chargeback executable image files from node-specific root directories of cluster systems.

For systems running an earlier version of Accounting Chargeback, the system manager might have placed executable files into the root directories of individual nodes. This is sometimes done during software modification or patching operations or for other reasons. Unless deleted, these files interfere with the installation because the installation places executable files in the common root directory, SYS\$COMMON.

Accounting Chargeback executable files are named using the following format:

- PSAC\$file_name.EXE

For each node in the cluster system remove these files:

- SYS\$SPECIFIC:[SYSEXE]
- SYS\$SPECIFIC:[SYSMSG]
- SYS\$SPECIFIC:[SYS\$LDR]
- SYS\$SPECIFIC:[SYSLIB]

Installation Procedure Requirements

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

Standard procedures for checking and setting various parameters are described in 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

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

Note that VMSINSTAL turns off BYPASS privilege at the start of the installation.

System Parameters

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

System Parameter	Minimum Value
VIRTUALPAGECNT	25K
WSMAX	2048

Disk Space

The Accounting Chargeback software requires approximately 85,000 blocks during installation.

These block sizes refer to the space required 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
```

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.

Install Accounting Chargeback

For a sample installation, see the [Sample Accounting Chargeback Installation Log](#) (see page 84).

Upgrade Considerations

Before installing Accounting Chargeback on your system, you should stop any previous version running on that system. After starting the installation, if there are active processes, the installation procedure displays them and asks if you would like to continue. Answering YES lets you continue the installation procedure, while NO stops the installation.

How You Install Accounting Chargeback

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

1. Mount the distribution media (DVD)
2. Run the Installation Procedure
3. Specify a temporary directory to unzip the savesets
4. Check your system backup

5. View and accept the license agreement
6. Start Accounting Chargeback after installation
7. Run the installation verification procedure (IVP)
8. Purge previous version files
9. Install the DECwindows/MOTIF components
10. Activate the CA Integration Components
11. Choose products for automatic startup after installation
12. Specify the CA NSM Manager System

Step 1. Mount the Distribution Media

The CA Performance Management for OpenVMS DVD-ROM can be mounted on OpenVMS or on Windows. For OpenVMS, insert the DVD into the drive and type the following command:

```
$ mount/over=id device
```

device

This is the name of the DVD reader device.

For example, if the DVD-ROM reader is DQA0, the command would be:

```
$ mount/over=id dqa0:
```

Step 2. Run the Installation Procedure

Using the SYSTEM account, run the installation procedure on the OpenVMS system by typing the following command:

For Alpha:

```
$ run device:[000000]setup_alpha.exe
```

This command launches an installation menu where you can install the components.

Note: Chargeback does not run on Integrity.

Step 3: Specify a Temporary Directory to Unzip the Savesets

The installation procedure allows you to choose the temporary directory used for the savesets and installation files. Choose a device and directory with at least 135,000 free blocks. The following example shows how to select a device and directory:

* Enter the device and directory to unzip the save-sets, 135000 blocks of temp space needed [sys\$common:[CA\$SETUP]]:

Step 4. 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.

Step 5. View and Accept the License Agreement

You must accept the terms of the license agreement before the installation process begins.

To view and accept the license agreement

1. Type V to view the license agreement.

Note: The license agreement is several pages long.

2. Select one of the following responses to accept or reject the terms and conditions of the agreement:

YES

The installation continues.

NO

The installation stops.

Step 6: Start Accounting Chargeback after installation

During the installation process you can choose to start or not start Accounting Chargeback after the installation completes.

If this is the first time you are installing Accounting Chargeback on your system, you are asked if you want the software to start right after the installation. Select one of the following responses:

YES

Accounting Chargeback is started after the installation.

NO

Accounting Chargeback is not started after the installation.

Step 7. 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$TEST:UPM$CHRGBACK$IVP>CPM
```

Step 8. 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.

Step 9: 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.

Step 10: Activate the CA NSM Integration Components

The installation asks if you want to activate the CA Common Services Integration Components

YES

The installation activates the CA NSM Integration components and then continues.

NO

The installation continues without activating the CA NSM Integration components.

Step 11: Choose Products for Automatic Startup

The installation displays the Product Startup Selection menu (shown below) listing all the products that you can choose to start automatically after installation and asks if you are satisfied with the displayed choices.

CA Unicenter NSM for OpenVMS - product startup selection

```

-----
1      CA Job Management ..... NO
2.     CA Job Management Agent ..... NO
3.     Unicenter Universal Job Management Agent ..... NO
4.     CA Unicenter NSM Jobflow Support..... NO
5.     CA Job Management NSM/CCS Integration ..... NO
6.     Unicenter Console Management ..... NO
7.     CA System Watchdog ..... NO
8.     CA System Watchdog NSM/CCS Integration ..... NO
9.     CA Performance Management Agent ..... YES
10.    CA Unicenter NSM Performance Trend Cube ..... YES
11.    CA Common Services OpenVMS Gateway .....YES

```

Are you satisfied with the product selection Y/[N] ? y

The installation automatically sets the value for the product that you are installing to Yes. If you responded Yes to the question about activating CA Common Services, then the value for item 11 (CA Common Services OpenVMS Gateway) is also set to Yes.

In a clustered environment, you may not have licenses for all components on all nodes. This menu enables you to select components separately for each node. You can also customize the startup list by using the following command procedure while logged on to each node:

```
@sys$manager:CAPOLY$SET_STARTUP_PARAMS.COM
```

Step 12: Specify the CA NSM Manager System

The installation prompts you to specify the node name, which is usually the same as the node name you already specified, or IP address of the system where CA Unicenter NSM Manager is running, as shown in the following message.

To complete integration with a CA Unicenter NSM Management Station, its IP address or node name is required.

The CA Unicenter NSM Manager has been identified as:

```
"vmstest0"
```

```
* Node Name or IP Address [vmstest0]?
```

If, at a later time, you want to change the system name, you can do so by using the following command procedure:

```
@sys$manager:CAPOLY$SET_STARTUP_PARAMS.COM
```

Disk Space and Privileges Required after Installation

Accounting Chargeback requires about 10,000 blocks of permanent disk space on an Alpha system.

You need the SYSPRV privilege after installation.

Complete the Accounting Chargeback Installation

A few post-installation requirements are necessary to enable your system to run the Accounting Chargeback software. After the Accounting Chargeback is installed, it can be invoked by all users with the ADVISE CHARGE_BACK command.

The installation procedure modifies the DCL command table so that the ADVISE CHARGE_BACK 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 CHARGE_BACK 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 Accounting Chargeback is installed:

- Configure the Automatic Startup Procedure
- Run the IVP

Configure the Automatic Startup Procedure

The Accounting Chargeback kit contains the following startup procedure that allows your system to invoke the Accounting Chargeback software automatically when the system is booted:

```
UPM$CHRGBACK$STARTUP.COM
```


This file is placed in the SYS\$STARTUP directory. To cause the Accounting Chargeback software to be invoked at every system startup, edit the SYSTARTUP_VMS.COM file to run the following:

```
@SYS$STARTUP:UPM$CHRGBACK$STARTUP.COM
```

As early as possible in the procedure, we recommend that you place this command in your SYSTARTUP_VMS.COM file after commands that install any secondary paging or swapping files and before commands starting DECnet or any queues.

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$TEST:UPM$CHRGBACK$IVP
```

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

Created and Modified Files

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

File Name	Directory Area
UPM\$README_yymmdd-Vvvv.TXT	SYS\$HELP
PSAC\$DCL.HLP	SYS\$HELP
This file contains the DCL help and is added to SYS\$HELP:HELPLIB.HLB.	
PSAC\$DECW_HELP.HLB	SYS\$HELP
This is the help file for the DECwindows interface.	
PSAC.DIR	SYS\$HELP.EXAMPLES
This directory contains the file PSAC\$DISK_USAGE.COM.	

File Name	Directory Area
PSAC\$DISK_USAGE.COM	SYS\$HELP.EXAMPLES.PSAC
This file contains the command procedure to create a disk usage file for a list of specified devices.	
UPM\$CHRGBACK\$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.	
PSAC\$MAIN.EXE	SYS\$COMMON:[SYSEXEXE]
This file is the PSAC image.	
PSAC\$MAIN.UID	DECW\$SYSTEM_DEFAULTS
This is the user interface description file for the DECwindows interface.	
PSAC\$MESSAGE.EXE	SYS\$MESSAGE
This image file adds the PSAC messages to the system messages.	
UPM\$CHRGBACK\$STARTUP.COM	SYS\$STARTUP
This command procedure defines the system logical names for the Accounting Chargeback software. It is created during installation.	
UPM\$CHRGBACK\$DEINSTALL.COM	SYS\$UPDATE
This command procedure removes the Accounting Chargeback component of the CA Performance Management product (PSAC) from the system.	
COMLNK\$DEINSTALL.COM	SYS\$UPDATE
Procedure to deinstall the links common components of the Scheduler Server, Console, Watchdog and Performance products.	

Uninstall Accounting Chargeback

Uninstallation scripts enable you to easily remove Accounting Chargeback. There are two scripts included for each product. One script removes both the base product and the CA Unicenter NSM OpenVMS Integration components associated with it; the other script removes only the CA Unicenter NSM OpenVMS Integration components. The command files to execute the scripts are located in the SYS\$UPDATE directory.

The following scripts de-install Accounting Chargeback:

- Main De-Install Script: UPM\$CHRGBACK\$DEINSTALL.COM
- Links Only De-Install Script: COMLNK\$DEINSTALL.COM

Note: A component is not removed if the Registry includes multiple dependencies for it.

Sample Accounting Chargeback Installation Log

This section contains a sample installation for the Accounting Chargeback on an Alpha system.

```
$ run $1$DQA0:[000000]setup_alpha.exe
UnZipSFX 5.20 of 30 April 1996, by Info-ZIP (Zip-Bugs@wkuvx1.wku.edu).
inflating: ca$setup.com
  inflating: installhelp.hlp
  inflating: product.key
  inflating: upm$readme.txt
  inflating: unzip_alpha.exe
  inflating: unzip_ia64.exe
Setup location: $1$DQA0:[000000]
```

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```
-----
          PRODUCT

1      Performance Agent Install
2      Performance Manager Install
3      Accounting Chargeback Install

I      Unicenter Integration Help
P      Product Readme
H      Install Help
E      Exit
```

Please Enter the Number of the Product you wish to
install >>>> 3

```
%DCL-S-SPAWNED, process SYSTEM_40232 spawned
%DCL-S-ATTACHED, terminal now attached to process SYSTEM_40232
UnZipSFX 5.20 of 30 April 1996, by Info-ZIP (Zip-Bugs@wkuvx1.wku.edu).
  inflating: ca$setup.com
  inflating: ca$setup.ini
  inflating: unzip_alpha.exe
  inflating: unzip_ia64.exe
Platform type : ALPHA
OS version   : V7.3
Setup location: $1$DQA0:[ENU.OPENVMS.CHARGEBACK]
Product Kit  : $1$DQA0:[ENU.OPENVMS.CHARGEBACK]UPMAC_UNI_0000_yymmdd_V031.ZIP;1
* Enter the device and directory to unzip the save-sets, 135000 blocks of temp
space needed [sys$common:[CA$SETUP]]:
UNZIP location: $1$DQA0:[ENU.OPENVMS.CHARGEBACK]UNZIP_ALPHA.EXE;1
Unzipping installation media ... Please be patient ...
```

OpenVMS AXP Software Product Installation Procedure V7.3-2

It is 30-NOV-2007 at 09:28.

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

%VMSINSTAL-W-ACTIVE, The following processes are still active:

TCPIP\$PORTM_1

TCPIP\$FTP_1

TCPIP\$SNMP_1

TCPIP\$HR_MIB

TCPIP\$OS_MIBS

* 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:

UPMAC_UNI_0000_yymmdd_V V3.1

Beginning installation of UPMAC_UNI_0000_yymmdd_V V3.1 at 09:28

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

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

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* DO YOU ACCEPT THE TERMS AND CONDITIONS OF THIS AGREEMENT AS SET FORTH IN THE LICENSE AGREEMENT (YES (Y) / NO (N) / VIEW (V)) [N]: y

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[CAI\$REGISTRY].

* Do you want this software to start right after the installation [YES]?

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

* 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...

**** NOTE ****

If you are installing on a cluster that has mixed versions, mixed architectures, or uses different IP stacks in the cluster, you MUST install on SYS\$SPECIFIC. Otherwise, you may use the default of SYS\$COMMON.

* Enter the full pathname for the Unicenter Common Services root directory
[SYS\$COMMON:[UNIVMS]]:

Selected pathname: SYS\$COMMON:[UNIVMS]

* Is that correct [Y]?

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

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$BIN.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$TMP.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$DATA.

%VMSINSTAL-I-SYSDIR, This product creates system disk directory CAPOLY\$LOGS.

COMMON install complete

%VMSINSTAL-I-RESTORE, Restoring product save set R ...

The installation will now check the for the presence of an
OpenVMS account CAUNIVMS. This account is needed to support
the remote commands from the Unicenter management station.

The installation did not find the CAUNIVMS account.

It will prompt you for the UIC information to create the account.

You will need to have a unique UIC value.

* Enter a new UIC (include brackets) [[713,63]]:

%VMSINSTAL-I-ACCOUNT, This installation creates an ACCOUNT named CAUNIVMS.

%UAF-I-ADDMSG, user record successfully added

%UAF-I-RDBADDMSGU, identifier CAUNIVMS value [000713,000063] added to rights
database

%UAF-I-RDBADDMSGU, identifier NSM value [000713,177777] added to rights database

* Do you want to activate the CA Common Services Integration Components [YES]? NO

To activate links at a later time, execute the following command
procedure:

```
@SYS$MANAGER:CAPOLY$SET_STARTUP_PARAMS
```

%VMSINSTAL-I-RESTORE, Restoring product save set X ...

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 Z ...

%VMSINSTAL-I-RESTORE, Restoring product save set C ...

%VMSINSTAL-I-SYSDIR, This product creates system directory
[SYSHLP.EXAMPLES.PSAC].

If you intend to execute this layered product on other nodes in your
cluster, 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.PSAC]
```

```
Providing product readme ...
```

```
UPM$README_yymmdd-V031.TXT
```

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

```
Installing links...
```

%VMSINSTAL-I-RESTORE, Restoring product save set T ...

To have CA Common Services started when rebooting, add
"@SYS\$STARTUP:CAPOLY\$STARTUP" to the system startup file,
either SYS\$MANAGER:SYSTARTUP_V5.COM for VMS V5 or
SYSTARTUP_VMS.COM for OpenVMS V6 and OpenVMS V7, and add
"@SYS\$STARTUP:CAPOLY\$SHUTDOWN" to the system shutdown file,
SYS\$MANAGER:SYSHUTDWN.COM.

Checking for required TCP/IP files. Depending on what TCP/IP
product you are running, you may see error messages stating
that a file cannot be found. You may safely ignore these
messages unless you do not have any of the supported TCP/IP
stacks running on this machine. In that case, the installation
will abort.

Required TCP/IP file test completed.

Installing CA Message Service (CAM)

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.ALPHA2.CAM].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.ALPHA2.CAM.LOGS].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.ALPHA2.CAM.QLOCAL].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.ALPHA2.CAM.QREMOTE].

%VMSINSTAL-I-SYSDIR, This product creates system disk directory
SYS\$COMMON:[UNIVMS.LOGS.ALPHA2.CAM.FTLOGS].

%UPMAC_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY\$TNGD...

%UPMAC_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY\$TRAP...

%UPMAC_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY\$CASEND...

%UPMAC_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLY\$FORCEX...

You may run the CA Common Services integration Installation
Verification Procedure at any time by typing the command:

\$ @SYS\$TEST:TNG\$LINKS\$IVP.COM

Product Management Command Files

Startup: \$ @SYS\$STARTUP:UPM\$CHRGBACK\$STARTUP.COM
Shutdown: \$ @SYS\$STARTUP:UPM\$CHRGBACK\$SHUTDOWN.COM
IVP: \$ @SYS\$TEST:UPM\$CHRGBACK\$IVP.COM
Deinstall: \$ @SYS\$UPDATE:UPM\$CHRGBACK\$DEINSTALL.COM

Common Component Command Files

Startup: \$ @SYS\$STARTUP:CAPOLY\$STARTUP
Shutdown: \$ @SYS\$STARTUP:CAPOLY\$SHUTDOWN
Reconfig Common Startup: \$ @SYS\$MANAGER:CAPOLY\$SET_STARTUP_PARAMS
List Installed Products: \$ @SYS\$STARTUP:CAREGISTRY\$LISTPRODUCTS [FULL]

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] mcommon
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 Accounting Chargeback
Installation Verification Procedure.

Checking system files...

Unicenter Accounting Chargeback version V3.1-0805 built 30-NOV-2007

The Installation Verification Procedure for Accounting Chargeback
Version has completed successfully.

Installation of UPMAC_UNI_0000_yymmdd_V V3.1 completed at 09:32

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

Creating installation data file:
VMI\$ROOT:[SYSUPD]UPMAC_UNI_0000_yymmdd_V031.VMI_DATA

VMSINSTAL procedure done at 09:32

%DELETE-I-FILDEL, SYS\$COMMON:[000000]CA\$SETUP.DIR;1 deleted (4 blocks)
%DELETE-I-FILDEL, SYS\$SYSROOT:[SYSMGR]CA\$SETUP.INI;1 deleted (100 blocks)
%DELETE-I-FILDEL, SYS\$SYSROOT:[SYSMGR]CA\$SETUP.COM;1 deleted (100 blocks)
%DCL-S-RETURNED, control returned to process SYSTEM_5351

CA Performance Management for OpenVMS

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PRODUCT

- 1 Performance Agent Install
- 2 Performance Manager Install
- 3 Accounting Chargeback Install

- I Unicenter Integration Help
- P Product Readme
- H Install Help
- E Exit

Please Enter the Number of the Product you wish to
install >>>>

Appendix A: Standard System Maintenance Procedures

This section contains the following topics:

[Check and Set Process Account Quotas](#) (see page 91)

[Check System Parameter Values](#) (see page 92)

[Set Dynamic Parameter Values](#) (see page 95)

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.

To check and set process account quotas

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 HP's OpenVMS documentation.

Check System Parameter Values

To check the values of your system parameters

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.

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.

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.

To change system parameters with AUTOGEN

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 HP's *OpenVMS System Management Utilities Reference* manual.

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
```


Appendix B: Third-Party Software Agreement

Portions of this product include software developed by third-party software providers. This appendix provides information regarding this third-party software.

This section contains the following topics:

[Info-ZIP Acknowledgement](#) (see page 97)

[Tomcat](#) (see page 99)

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