Unicenter® Job Management for OpenVMS I64

Installation Guide

r3

Computer Associates®
First Edition
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Chapter 1: Preparing to Install

Unicenter Job Management

This guide describes how to install Unicenter Job Management for OpenVMS I64 on HP Integrity Servers. Unicenter Job Management lets you automate and manage repetitious computer processing jobs, such as fiscal reporting procedures, system maintenance tasks, and user applications.

Unicenter Job Management includes two components—the manager and the agent. Throughout this guide, we use these component names in our discussions.

Preparing to Install Unicenter Job Management

Before installing, do the following:

- **Check for the latest install information**

  Unicenter Job Management installation information released after the publication of this guide is provided in the Unicenter Job Management for OpenVMS I64 r3 readme file. Be sure to review this file for important updates before beginning the installation.

Hardware and Software Requirements

Before installing Unicenter Job Management on OpenVMS, your OpenVMS machine should meet the following minimum requirements:

- Manager: At least 160,000 blocks of free disk space
- Agent: At least 55,000 blocks of free disk space
- HP OpenVMS I64 8.2
- HP Motif V1.5 or later for OpenVMS Server
- Minimally supported TCP/IP Stacks:
  - HP TCP/IP Services: HP OpenVMS 8.2: TCP/IP V5.5

Wide Area Network Support

To support a wide area network (WAN), you need a TCP/IP Stack for OpenVMS as described in the “Hardware and Software Requirements” section above. The following sections describe installation procedures for TCP/IP services.
Default Unicenter Job Management Manager Node Must Have a Supported TCP/IP Stack

If you are installing remote Agent software, TCP/IP must be installed and running on the manager’s default node before you start up the manager. Otherwise, remote operations will not work since the default node handles all remote node operations.

To check which node is the default node, execute this command on a node that is a member of the OpenVMS Cluster:

```
$ SCHEDULE SHOW STATUS
```

The default node name will be indicated by "<-- DEFAULT" in the output. To force the default manager node to a particular node, execute the command:

```
$ SCHEDULE SET DEFAULT node_name
```

where `node_name` is the new default node.

TCP/IP Services Installation and Configuration

The manager uses hp TCP/IP Services for OpenVMS, or Process Software TCPware for communication between the manager and the remote agents.

Configuration Items Required Regardless of IP Stack Installed

In addition, perform the following procedures to ensure proper communication between the manager and the remote agent:

- When specifying a job on a remote node, use the syntax user@node (rather than node::user).
- Make sure TCP/IP is running on Unicenter Job Management Manager node. Use the command SCHED SHOW STATUS to see which node is the default.
- Make sure SCHED$LISTENER is running on the default manager node.
- Make sure you can ping each node from the other, in both directions.
- If the manager is running in a cluster, make sure all nodes in the cluster have proxy access to the account on the remote Agent. In cases where Unicenter Job Management Manager failover occurs, another manager node in the cluster may take over submission of jobs to the remote agent. Defining the proxies ensures that the other manager nodes will be able to run jobs on the remote agent.

You must define those proxies in AUTHORIZE (not TCP/IP). To add proxies for manager nodes, use the following command on the remote agent node:

```
$RUN AUTHORIZE
UAF>ADD/PROXY servernode::serveruser /DEFAULT
```
Enabling Wide Area Network Support

To enable WAN support, you should perform these three procedures:

- Create a network object
- Add an account for the network object
- Add a proxy for each cluster account or local account that will be using the manager

The Unicenter Job Management Manager startup procedure creates the network object for you. For the manager to function correctly with WAN support, both the network object and the corresponding account must be added, as described below. If they are not, the environment is at risk and may not function correctly.

**Note:** DECnet is required to enable communication between manager and agent pairs, for proxy authentication only.

The passwords for the SCHED_DECNET object and the SCHED$DECNET USER account must match to properly facilitate the communication between manager instances across the WAN. To properly synchronize the passwords between the object and the account, run these commands:

```bash
$ MCR NCP
NCP> define object SCHED_DECNET password yourpassword
NCP> set object SCHED_DECNET password yourpassword
NCP> exit

$ RUN AUTHORIZE
$ SET DEF SYS$SYSTEM
UAF> MOD SCHED$DECNET/password=yourpassword
UAF> exit
```

To add the account for the network object, first determine a UIC that is in the same group as the default DECnet account, or is in a group by itself. Then, run AUTHORIZE as follows:

```bash
$ RUN AUTHORIZE
UAF> ADD SCHED$DECNET/FLAGS=DISUSER/UIC=uic-spec
UAF> EXIT
```

Add a proxy for each account that will be using the manager:

```bash
$ RUN AUTHORIZE
UAF> ADD/PROXY local_node::local_user local_user/DEFAULT
UAF> EXIT
```

Note that on cluster member nodes, this proxy needs to be added for each cluster account only, not for each cluster node account. This is needed to allow DECnet to operate in cases such as use of the following command:

```bash
$ SCHEDULE MODIFY remote-node::job1/sync=(local-node::job2)
```
Refer to the *Unicenter Job Management for OpenVMS I64 r3 Administrator Guide* for standard proxy needs and setup. Those specified here are in addition to those specified in the Administrator Guide. Both sets of instructions must be followed. Also, for information on how to set up proxies to allow job synchronization on remote nodes, see "Setting Up a Proxy in AUTHORIZE Database" in Chapter 3 of this guide.

### Changing the Network Infrastructure

This product may be sensitive to changes in the network infrastructure. For example, when reinstalling or upgrading network software (TCP/IP), shut down the manager first.
Installing the Manager in an OpenVMS Cluster

Computer Associates supports Unicenter Job Management Manager in a homogeneous OpenVMS cluster or a mixed cluster. A mixed OpenVMS cluster is one that has mixed architecture, mixed versions, or both. A mixed-architecture cluster has both Integrity and Alpha systems. A mixed version cluster has different nodes at different operating system versions. A cluster may also be mixed with both Alpha and Integrity nodes that are each running different versions of OpenVMS. For the manager to function correctly, each machine must have its own license. Nodes with the same architecture or the same system version should share executables. All other files must be shared on a cluster common disk.

**Note:** You cannot place Unicenter Job Management for OpenVMS files on a DFS mounted disk because the DFS lacks write-sharing capabilities.

You can accomplish this set up as follows:

1. Select a common directory on a disk that:
   - Is served cluster-wide
   - Has at least 5,000 free blocks

   It is preferable to use a cluster member fault-tolerant disk—that is, a disk hosted on a multi-path storage controller and physically connected to more than one cluster member.

   When the installation procedure prompts for a pathname to the cluster common files area, provide the pathname to the selected storage area. For example, if the logical name of the designated shared disk is SHARED$DISK, the proposed pathname could be SHARED$DISK:[NSCHED].

   **Note:** The default answer to the prompt for the common disk, SYS$COMMON:[NSCHED], is only valid on homogeneous clusters and on standalone nodes. Only these clusters may have a system disk that is shared among all nodes. In a mixed-architecture cluster, a minimum of two system disks are required, one for Integrity and one for Alpha. Do not choose the default answer to the prompt on these clusters.

   The directory will be created by the installation procedure, if it does not yet exist. You do not need to create it manually prior to installation.

2. Select a platform-specific directory that:
   - Is common to all nodes with the same architecture (Integrity, Alpha) and system version
   - Has at least 70,000 free blocks

   When the installation procedure prompts for a pathname to the node-specific files area, specify the selected directory. As long as there is sufficient space available on the device SYS$COMMON, selecting the default answer to the prompt, SYS$COMMON:[NSCHED] is a safe choice.
In a completely homogeneous cluster where all machines are of the same architecture and all machines are running an identical version of OpenVMS and patches, the node-specific area may be shared in order to save space. If the nodes share a system disk, this sharing of space happens automatically. In heterogeneous clusters, nodes of different types do not necessarily share system disks, and SYS$COMMON points to different locations. This device is safe to select. If you relocate files, you must select distinct directories for each node type.

**Tip:** The installation procedure stops running processes it encounters. When installing on a cluster, you save time if you do not automatically start the software after installation on each node. After you finish installing on the last node, run startup and IVP for each node.

3. **Install on all cluster members.**

Repeat the installation on each of the cluster nodes where the manager will be needed. Provide a directory name for the system specific directory according to step 2. The default value for the system specific directory works in all types of clusters.

**Note:** Installing the manager on one node in a cluster does not allow you to run the manager on other nodes by simply running the startup procedure. You must run the kit installation procedure on every member, even in a homogeneous cluster environment.

4. **Start the manager on all cluster members on which it was installed.** By default, the load-balancing mechanism will be engaged in a cluster environment. Verify the result of the load balancing startup by using one of the following commands:

   $ SCHEDULE SHOW STATUS

   or

   $ SCHEDULE SHOW LOAD_BALANCE

**Note:** Basic load balancing may not provide desired results in a mixed-architecture cluster. We recommend observing the results on a few batches of jobs, then either using specific node restrictions for some or all jobs, or designing load-balance groups that restrain the execution of given jobs to selected cluster member subsets.

**WARNING!** Be careful when making assumptions about which node is the default node, or which architecture the default node uses. Because batch queues may not be distributed across architectures or nodes, care should also be taken when using batch mode jobs.
Installing on a Standalone System

You can install the manager on a standalone node. The installation procedure prompts you for two separate directories. This prompt is intended for OpenVMS cluster installations; however, for a standalone node, you also select the default answer to both prompts. We recommend that you use the default answers to place the files on device SYS$COMMON. This location lets you easily transition this node into a cluster in the future. You can accomplish this setup as follows:

1. Select a common directory on a disk that has at least 5,000 free blocks
   The default answer to the prompt for the common disk, SYS$COMMON:[NSCHED], is valid on standalone nodes.
   If the directory does not exist, the installation procedure creates it. You do not need to create it prior to installation.

2. Select a node-specific directory that has at least 70,000 free blocks
   When the installation procedure prompts you for a pathname to the node-specific files area, specify the selected directory. If there is sufficient space available on the device SYS$COMMON, selecting the default answer to the prompt, SYS$COMMON:[NSCHED] is a safe choice.

Note: You cannot place Unicenter Job Management for OpenVMS files on a DFS mounted disk because the DFS lacks write-sharing capabilities.

Considerations for Systems Running DECnet

Before installing or starting the manager on systems running DECnet, grant the NET$MANAGE IDENTIFIER to the user account. To grant the NET$MANAGE IDENTIFIER, run AUTHORIZE as follows:

```bash
$ RUN AUTHORIZE
UAF> GRANT /IDENTIFIER NET$MANAGE user_account
```

For example, if the manager is being installed or started by user SMITH, type:

```bash
$ RUN AUTHORIZE
UAF> GRANT /IDENTIFIER NET$MANAGE SMITH
```

Installation Procedure Requirements

The following sections list Unicenter Job Management Manager installation procedure requirements.

Installation Time

The installation should take from 10 to 20 minutes, depending on the type of media you use and your system configuration.
Privileges

To install the manager, you must be logged in to an account that has either the SETPRV privilege or at least the following default privileges:

- CMKRNL
- WORLD
- SYSPRV
- SYSNAM
- CMEXEC
- SYSLCK
- DETACH
- TMPMBX
- NETMBX

Note: The installation procedure turns off the BYPASS privilege when the installation starts.

Disk Space

Installing the manager requires at least 160,000 blocks of free storage disk space. After the manager is installed, about 75,000 blocks are used. For more information, see the "Installing in an OpenVMS Cluster" section in this guide.

To determine the number of free disk blocks on the current system disk, enter the following command at the DCL prompt:

$ SHOW DEVICE SYS$SYSDEVICE

Process Account Quotas

The account you use to install the manager must have sufficient quotas to enable you to perform the installation. The installation procedure requires that the installation account have the following quotas:

- ASTLM = 24
- BIOLM = 18
- BYTL = 32 768
- DIOLM = 18
- ENQLM = 30
- FILLM = 20
Note: These quotas are installation quotas only. Refer to Chapter 3 in this guide for recommended run-time account quotas.

User account quotas are stored in the file SYSUAF.DAT. Use the OpenVMS Authorize Utility to verify and change user account quotas. The following procedure shows how to do this:

1. Set your directory to SYS$SYSTEM:
   
   $ SET DEFAULT SYS$SYSTEM

2. Run the Authorize utility:
   
   $ RUN AUTHORIZE
   UAF>

3. At the Authorize utility prompt UAF>, use the SHOW command with an account name to check a particular account. For example:
   
   UAF> SHOW SMITH

4. To change a quota, use the MODIFY command at the UAF> prompt. MODIFY has the following format:
   
   UAF> MODIFY account-name/quota-name=(nnnn)

5. The following example changes the FILLM quota for the SMITH account:
   
   UAF> MODIFY SMITH/FILLM=50

6. Finally, exit from the Authorize utility:
   
   UAF> EXIT

After you exit from the utility, the OpenVMS operating system displays messages indicating whether changes were made. After changes are made, you must log out and log in again for the new quotas to take effect.

See the description of AUTHORIZE in the OpenVMS documentation for more information on modifying account quotas.

VMSINSTAL Requirements

The Job Management installation procedure uses VMSINSTAL to complete the installation. When invoked, VMSINSTAL checks whether:

- You are logged into a privileged account
- You have adequate quotas for installation
- Any users are logged into the system

If it detects any problems during the installation, the installation procedure notifies you of the problem 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 problem, type NO or press Enter. After the problem is corrected, restart the installation.
Chapter 2: Installing Unicenter Job Management Manager

This section provides step-by-step instructions for installing Unicenter Job Management Manager (the manager).

Running the Installation

A successful installation requires you to be logged into the SYSTEM account for security access to the Unicenter Job Management Manager configuration database.

This section describes the following topics:

- Installing Unicenter Job Management Manager
- Running the Installation Verification Procedure (IVP)
- Error recovery

Installing Unicenter Job Management Manager

Before installing the manager on your system, you should stop any previous version currently running on that system. If there are active processes, the installation procedure displays them and prints the following message:

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

Then you will be asked the following question:

* Do you want to continue anyway [NO]?

A NO answer halts the installation procedure and exits. A YES answer allows you to continue the installation procedure.
To install the Unicenter Job Management Manager software, use the following procedure (to view a sample installation, see “Examples of New Installations” in Chapter 6 of this guide).

**Note:** Default answers to the installation questions below are provided in brackets. For example, "[YES]" indicates the default answer is YES. You can accept the default by pressing Enter. For answers other than the default, type your answer and press Enter.

1. **Mount the CD.**
   - The Unicenter Job Management for OpenVMS CD can be mounted on OpenVMS or on Windows. For OpenVMS, insert the CD in the CD reader and type the command:
   ```
   $ mount/over=id device
   ```
   where `device` is the name of the CD reader device. For example, if the CD reader is DQA0, the command would be:
   ```
   $ mount/over=id dqa0
   ```

2. **Run the installation procedure.**
   - Log into the system account on the OpenVMS system. Type:
   ```
   $ run device:[000000]setup_ia64.exe
   ```
   This command launches an installation menu where you can install the manager.

3. **Specify a temporary directory to unzip the save-sets**
   - 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 160,000 free blocks.
   ```
   * Enter the device and directory to unzip the save-sets, 160000 blocks of temp space needed [sys$common:[CA$SETUP]]:
   ```

4. **Check your system backup.**
   - Always back up your system disk before performing an installation. The installation procedure asks if you are satisfied with your system backup:
   ```
   * Are you satisfied with the backup of your system disk [YES]?
   ```
   If you are satisfied with the backup of your system disk, press Enter. Otherwise, enter NO to stop the installation. After you back up your system disk, you can restart the installation.
5. **Accept License Agreement.**

Before continuing the installation, you must accept the License Agreement. To review the agreement, type V or VIEW. To accept the agreement, type YES. If you type NO or press Enter without typing your response, the installation will terminate.

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

6. **Choose whether to start the product after installation.**

If you have no previously installed version of the manager on your system, the installation procedure asks the following question:

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

Press Enter to start the product immediately after installation is complete.

If you have a previously installed version of the product, the installation procedure asks the following question:

* Do you want to stop/restart this software during this installation [YES]?

If you enter NO and you also answer NO to the IVP question that follows, the product will not be started after installation.

7. **Choose whether to run the Installation Verification Procedure (IVP).**

The installation procedure asks if you want to run the IVP:

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

The IVP checks to ensure that the installation is successful—we recommend running the IVP, unless you are installing in a cluster. See Chapter 1 for information on starting and running IVP in a cluster. To run the IVP, press Enter. If choose not to run it, enter NO.

If you choose not to run the IVP during the installation, you can run it after the installation, by typing:

$ @SYS$TEST:UJM$MANAGER$IVP.COM

The IVP creates a job, runs the job through the manager, reports whether the job succeeded, and then deletes the job.

8. **Purge files.**

You have the option to purge files from previous versions of the product that are superseded by this installation. Purging is recommended; however, if you need to keep files from a previous version, enter NO in response to this question:

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

If you press Enter, the files related to the earlier version of the product will be purged after the installation.
9. **Choose whether to activate the CA Common Services Integration components.**

The installation asks:

* Do you want to activate the CA Common Services Integration Components [YES]?

If yes, the installation sets the value to YES for item 11 (CA Common Services OpenVMS Gateway) on the Product Startup Selection menu. If No, the value is set to NO.

If you want to activate CCS Integration at a later date, do the following:

a. 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 Unicenter Manager system is identified.

b. Run @sys$startup:capoly$shutdown

c. Run @sys$startup:capoly$startup

d. Run the OpenVMS/Windows Integration IVP by executing @sys$test:TNG$LINKS$IVP

10. **Account quotas, product startup and IVP**

The installation checks the account quotas required for the product startup. If at least one quota is below the required value, the installation lists current quotas and asks if you want to continue. If you choose to continue anyway, the product will NOT start after the installation and IVP will NOT run.

11. **Choose whether to install the DECwindows interface (optional).**

If you have Motif installed, the installation asks if you want to install Unicenter Job Management Manager DECwindows interface.

* Do you want the DECwindows interface [YES]?

The DECwindows interface provides a graphical, user-friendly interface to the manager. To run the DECwindows interface, you must have a workstation or an X-based display station. The DECwindows interface requires approximately 8000 blocks of disk space.

12. **Choose support for remote command execution.**

The manager can be installed with support for executing jobs on a remote OpenVMS node. If you want to use the manager to control jobs on one or more of these remote nodes, answer YES to this question. This feature of the manager requires that a supported TCP/IP stack be installed on your system. If it is, the installation asks the following question:

* Do you want support for remote Agent command execution [YES]?
If you answer YES to this question, and a supported TCP/IP stack is not installed on ALL the nodes of your cluster, be sure that the Unicenter Job Management Manager default node is one on which the supported TCP/IP stack is running. If this is not the case, remote operations will not work since the default node handles all remote node operations.

To check which node is the default node, type the command:

$ SCHEDULER SHOW STATUS

The default node name will be indicated by "<-- DEFAULT" in the output. To force the default Manager node to a particular node, type the command:

$ SCHEDULER SET DEFAULT node_name

where node_name is the new default node.

13. Choose a product common directory location.

Unicenter Job Management Manager common files are installed to two directories on a cluster common disk: NSCHED$COM and NSCHED$DATA. The installation procedure asks for the device where the product common directory will be located. The default device is SYS$COMMON.

Note: Directories [DATA] and [COM] will be created under the path you specify. Any existing data and common files will be moved to these directories. Logical names NSCHED$DATA and NSCHED$COM will be associated accordingly.

However, if you are installing the manager in a mixed architecture OpenVMS cluster, specify a disk that is shared among all nodes in the cluster (for more details, see “Installing on an OpenVMS Cluster” in this guide).

* Enter the full pathname for Unicenter Job Management – (cluster) common files[SYS$COMMON:[NSCHED]]:
  Selected pathname: SYS$COMMON:[NSCHED]
  * Is that correct [Y]?

Note: On a standalone system, the prompt still refers to a cluster common directory. You may choose to install the common and specific files to the same directory. However, we recommend choosing a directory that is part of SYS$COMMON, which makes it easier to add this system to a cluster in the future.

14. Choose a node-specific directory location.

The manager’s system specific files are installed to NSCHED$EXE on a system specific disk. The installation procedure asks for the device where the node-specific directory will be located. The default answer is SYS$COMMON. The directory must not be in use by a manager instance on another node of the cluster. In most cases, this is a good choice (for more details, see “Installing on an OpenVMS Cluster” in this guide).
* Enter the full pathname for Unicenter Job Management - node specific files [SYS$COMMON:[NSCHED]].
  Selected pathname: SYS$COMMON:[NSCHED]
* Is that correct [Y]?

Note: Directory [EXE] will be created under the path you specify. Any existing executable files from a previous installation will be moved to this [EXE] directory. Logical name NSCHED$EXE will be associated with this directory.

15. **Choose a directory location for CA Common Services Integration files**

* Enter the full pathname for Unicenter Job Management – node specific files [SYS$COMMON:[NSCHED]].
  Selected pathname: SYS$COMMON:[NSCHED]
* Is that correct [Y]?

16. **Choose products for automatic startup after installation.**

If you choose to activate CCS Integration, 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.

```
1   Unicenter Job Management ..........................   YES
2   Unicenter Job Management Agent ....................   NO
3   Unicenter Universal Job Management Agent ..........   NO
4   Unicenter NSM Job Management Jobflow Support ......   YES
5   Unicenter Job Management NSM/CCS Integration ......   YES
6   Unicenter Console Management ......................   NO
7   Unicenter System Watchdog Manager .................   NO
8   Unicenter System Watchdog NSM/CCS Integration .....   NO
9   Unicenter Performance Management Agent ............   NO
10  Unicenter NSM Performance Trend Cube ..............   NO
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 Unicenter components, 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 onto each node:

```
@sys$manager:CAPOLYSSET_STARTUP_PARAMS.COM
```

17. **Specify the Unicenter Manager system.**

The installation prompts you to specify the node name or IP address of the system where Unicenter Manager is running.

To complete integration with a Unicenter Manager, the IP address or node name is required.

* Node Name or IP Address [nodename]
where *nodename* is the IP address or the node name of the system where Unicenter Manager is running.

If you are reinstalling, you will see the informational message "Directory already exists" when you restore product save set R. You can ignore this message:

%VMSINSTAL-I-RESTORE. Restoring product save set R ...
%UJMMGR-UNI-0000-yymmdd-V-I-EXISTS. Directory VMI$SPECIFIC:[UNIVMS.BIN] already exists.

18. **Specify the CAUNIVMS Account.**

If you choose to activate CA Common Services Integration components, the installation checks for the CAUNIVMS account. If this is a new installation, you will be asked to specify a unique UIC for the new account:

* Enter a new UIC (include brackets) [[713.63]]:

If you install the manager over a previous installation, this message appears:

%VMSINSTAL-I-ACCOUNT. This installation updates an ACCOUNT named CAUNIVMS.

The installation has detected the account CAUNIVMS. The installation will skip account creation. If this account is used by something different than Unicenter TNG, please modify the account name and re-install the VMS LINKS code.

19. **Upgrading the database.**

If the installation is an upgrade from a previous version of the product, the existing job database VSS.DAT must be upgraded to support the new features in V3.0/r3. Be sure you have the proper VSS.DAT file in the NSCHED$ directory before the installation, and check that the logical name NSCHED$ is defined.

The installation will search for the existing database in the NSCHED$ and NSCHED$DATA paths and determine whether or not the file should be upgraded and/or moved to another directory.

If the installation cannot find the VSS.DAT file, it will prompt you to create a new one during product startup. You can define the NSCHED$ logical name or copy the desired file to the NSCHED$ directory at that time and retry the search.

If the installation finds multiple VSS.DAT files in different directories, it will let you choose which one should be used.

If the installation finds the VSS.DAT file and determines that it should be moved to NSCHED$DATA, it will ask for your confirmation.

**Note:** When performing multiple installations in a cluster, the database will be upgraded and moved only once, by the first installation.

**Note:** The VSS.DAT file might grow in size as a result of access optimization performed during the upgrade.
Warning: After the database upgrade you must not copy another VSS.DAT file from a previous version to the NSCHED$DATA directory. Trying to use UJM Manager 3.0/r3 with an older VSS.DAT will result in the product failing to work properly.

20. Backup of existing files.

If the installation is not a first time install on the node, it will determine whether or not it should backup the existing files.

The installation might create two savesets: NSCHED$:OLD_UJM_DATABASE.BCK containing the files NSCHED$:*.*.DAT;*, and NSCHED$:OLD_UJM_EXECUTABLES.BCK containing the files NSCHED$:*.*.EXE;*,*.OLB;*,*.UID;*,*.COM;*,*.HLB;*,*.CLD;*. The installation will also delete all files from their original location.

Error Recovery

If errors occur during the installation, the procedure displays failure messages. If the installation fails, the following message is generated:

%VMSINSTAL-E-INSFAIL. The installation of UJMMGR-UNI-0000-yyymmdd-V V3.0 has failed.

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

- Incorrect operating system version
- Incorrect version of some prerequisite software
- The account used for the installation does not have the required quotas for a successful installation
- System parameter values are insufficient for a successful installation
- OpenVMS help library is currently in use
- Insufficient disk space

For descriptions of the error messages that these conditions generate, see the OpenVMS documentation on system messages, recovery procedures, and OpenVMS software installation. If you are notified that any of these conditions exist, take the appropriate action as described in the message. You may need to change a system parameter or increase an authorized quota value.

For information on installation requirements, see “Preparing to Install Unicenter Job Management Manager” in Chapter 1 of this guide.
Chapter 3: After Installing Unicenter Job Management Manager

After you install Unicenter Job Management Manager (the manager) on OpenVMS, perform the following procedures:

- Start the manager on the nodes on which you installed it (if they are not started as part of the installation procedure).
- Edit your system startup and shutdown files.
- Reboot your system to verify your edits (optional).
- Ensure that your system account has the required minimum quotas.
- Ensure that the accounts managing the manager have the required privileges.
- Customize your manager installation by modifying the logical name definitions in SYS$STARTUP:UJM$MANAGER$STARTUP.COM.
- Enter proxies for each user account.

Starting Unicenter Job Management Manager

If you chose the option to start or restart the manager, the installation procedure has already started the manager.

If you did not, you can use one of the following methods to start or restart the manager after the installation procedure is complete:

- Enter the following command to run the command procedure SYS$STARTUP:UJM$MANAGER$STARTUP.COM from the SYSTEM account:
  `$ @SYS$STARTUP:UJM$MANAGER$STARTUP.COM`

- If you are not currently logged into the SYSTEM account, enter this command:
  `$ SUBMIT/USER=SYSTEM SYS$STARTUP:UJM$MANAGER$STARTUP.COM`
If you are activating the Integration software, enter the following command to start up from the SYSTEM account:

$ @SYS$STARTUP:CAPOLY$STARTUP.COM

Editing the System Startup and Shutdown Files

You must edit your operating system startup and shutdown files, as described below.

System startup command file

Edit your system startup command file to cause an automatic startup of the manager when your system is rebooted.

Add the following command line to the system startup file, SYS$MANAGER:SYSTARTUP_VMS.COM:

$ @SYS$STARTUP:UJM$MANAGER$STARTUP.COM

If you are activating the Integration software as well, you only need to add the following to your system startup file:

@SYS$STARTUP:CAPOLY$STARTUP

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

Place this new command line after the line that invokes the network startup command procedure. For example:

$ @SYS$MANAGER:STARTNET.COM
.
.
.

$ @SYS$STARTUP:UJM$MANAGER$STARTUP.COM

You may want to edit UJM$MANAGER$STARTUP.COM to change default values for Max_jobs or to enable load balancing. Users who are currently logged on must log off and then back on again to gain access to the Unicenter Job Management Manager DCL command interface.

In addition, if you have a supported TCP/IP stack installed and you asked for remote Agent command execution support during the installation, you must place the Unicenter Job Management Manager startup command after the line that invokes the TCP/IP Startup command procedure. For example, when using TCP/IP:

$ @SYS$STARTUP:TCPIP$STARTUP.COM
.
.

$ @SYS$STARTUP:UJM$MANAGER$STARTUP.COM
Edit your system shutdown file so that the manager will shut down properly when your system performs an orderly shutdown.

Add the following command line to the system shutdown file, SYS$MANAGER:SYSHUTDOWN.COM:
$ @SYS$STARTUP:UJMSMANAGER$SHUTDOWN.COM

If you are activating the Integration software as well, you only need to add the following to your system shutdown file:
@SYS$STARTUP:CAPOLYSHUTDOWN

CAPOLYSHUTDOWN checks for the presence of each component and, if installed, shuts it down.

**Rebooting the System**

You can reboot your system after you have installed the manager and edited your system startup command file. A system reboot verifies that the manager is ready for use and ensures that the edits to the system startup command file are correct.

Rebooting the system is an optional step and not required for using the manager.
Starting Unicenter Job Management Manager on an OpenVMS Cluster

If you have installed the manager on an OpenVMS Cluster, you must start the manager on all the nodes that will run Unicenter Job Management Manager jobs.

You can start the manager on a node in three ways:

- **Automatically**
  Edit the node’s startup command file to start the manager automatically. For instructions, see the “Editing the System Startup Command File” section in this guide.

- **Interactively**
  Log into the account from which the manager will run (normally the SYSTEM account), and enter the following command:
  
  $ @SYS$STARTUP:UJM$MANAGER$STARTUP.COM
  
  or
  
  $ @SYS$STARTUP:CAPOLY$STARTUP.COM

- **From batch**
  Enter the following command:
  
  $ SUBMIT/USER=SYSTEM SYS$STARTUP:UJM$MANAGER$STARTUP.COM

On nodes that will not run jobs, you can install just the DCL interface. To install the interface on a node without starting the manager, enter the following commands. You can enter the commands interactively or place them in the system startup file:

$ @SYS$STARTUP:UJM$MANAGER$STARTUP.COM LOGICAL_NAMES
$ DEFINE/SYSTEM/EXEC NSCHED$ NSCHED$DATA,NSCHED$COM,NSCHED$EXE
$ @NSCHED$:INSTALL_INTERFACE.COM
Shutting Down Unicenter Job Management Manager

If you chose the option to shut down the manager, the installation procedure has already shut down the manager.

If you did not, you can use one of the following methods to shut down the manager after the installation procedure is complete:

- Enter the following command to run the command procedure SYS$SHUTDOWN:UJM$MANAGER$SHUTDOWN.COM from the SYSTEM account:
  $ @SYS$STARTUP:UJM$MANAGER$SHUTDOWN.COM

- If you are not currently logged into the SYSTEM account, enter this command:
  $ SUBMIT/USER=SYSTEM SYS$SHUTDOWN:UJM$MANAGER$SHUTDOWN.COM

- If you are activating the Integration software, enter the following command to shut down from the SYSTEM account:
  $ @SYS$STARTUP:CAPOLY$SHUTDOWN.COM

Checking SYSGEN Parameters and System Account Minimum Quotas

The following SYSGEN parameters and system quotas are checked during the installation and are highly suggested for a system in a production-clustered environment. Warning messages are generated during installation if these parameters and quotas are lower than recommended, but you have the responsibility of setting these yourself prior to the startup of the manager product.

These settings will ensure maximum effectiveness of the manager. You should ensure that SYSGEN parameters meet or exceed the following minimum values:

- CHANNELCNT=256
- PQL_DASTLM=200
- PQL_MASTLM=200
- PQL_DENQLM=300
- PQL_MENQLM=300
- RESHASHTBL=8192
- LOCKIDTBL=45 000
- LOCKIDTBL_MAX=65 535
However, your own configuration may differ and may not require settings as high as these recommended parameters. In particular, RESHASHTBL requirements may vary broadly for a given configuration. If lower settings are used, they should be monitored closely.

In addition, the account from which the manager runs (normally SYSTEM) should be able to execute a detached process with the following minimum quotas (note that higher values may be needed for other applications):

- ASTLM=200
- FILLM=100
- ENQLM=300
- TQELM=200
- DIOLM=200
- BIOLM=10 000
- PGFLQUO=10 000
- BYTLM=32 768
- PRCLM=10

**Note:** The SYSGEN parameter values and system quotas listed in this section are the recommended values for a clustered environment. The optimum values for your particular system may vary from the recommended values, particularly if the system on which you have installed the manager is not part of a cluster.
Checking the Minimum Privileges for Unicenter Job Management Manager

If you do not choose to start the manager under the SYSTEM account, the manager must start under an account that has the following privileges enabled by default:

- SYSPRV
- SYSLCK
- SYSNAM
- CMKRNL
- CMEXEC
- WORLD
- DETACH

To use the manager, individual accounts must have at least the TMPMBX and NETMBX privileges. The startup procedure will fail to execute for an account without sufficient privileges. Use the OpenVMS Authorize Utility to determine whether users have the privileges that they require.
Customizing Your System

The SYS$STARTUP:UJM$MANAGER$STARTUP.COM file contains several logical name definitions that you can modify to customize your particular system. Change the values of the logicals as needed, and delete the comments on the appropriate command lines. For a list of these logicals, see the “Unicenter Job Management Manager Logical Names” section in Chapter 7 of this guide.

NSCHED process priority has a default value of 6 in this version; Unicenter Job Management Manager jobs run at a default priority of 4.

The following privileges are required to start the manager (that is, to run the UJM$MANAGER$STARTUP.COM file):

- Default privileges: SYSPRV + DETACH
- Authorize privileges: SETPRV, or ALTPRI + CMEXEC + CMKRNL + DETACH + SYSLCK+ SYSNAM + SYSPRV

**Note:** The file NSCHED$:nodename.LOG is always created by NSCHED.EXE (that is, the manager).

The startup procedure command file contains the command:

```
PURGE NSCHED*:*.LOG/KEEP=2
```

**Note 1:** Customization of the UJM$MANAGER$STARTUP procedure affects how the manager runs and what it does. Before attempting any customization of the Unicenter Job Management Manager startup procedure, read the sections referencing the system logicals in the Unicenter Job Management for OpenVMS I64 r3 Administrator Guide and the “Unicenter Job Management Manager Logical Names” section in Chapter 7 of this guide.

**Note 2:** The Unicenter Job Management Manager UJM$MANAGER$STARTUP.COM procedure allows users outside the SYSTEM account to start the manager. If this is an undesirable feature for your installation, insert the following line in your SCHEDULER$STARTUP_SPECIFIC.COM procedure:

```
$ UIC == "[1,4]"
```

This will ensure that the manager always runs under the SYSTEM account.
The SYS$STARTUP:UJM$MANAGER$SHUTDOWN.COM procedure allows the passing of a parameter that conditionalizes the type of shutdown invoked at shutdown time. The parameter values accepted are:

- **FAST**
  This P1 parameter shuts down the system without checking for any currently running Unicenter Job Management Manager jobs. Any jobs currently running are stopped and requeued.

- **NOWAIT**
  This P1 parameter checks for any currently running Unicenter Job Management Manager jobs. If any jobs are found, you are notified and given the option of reviewing a list of currently running jobs and terminating the shutdown, if desired. If you do not respond within 30 seconds, the shutdown procedure continues, and any jobs currently running are stopped and requeued. This is the SYS$STARTUP:UJM$MANAGER$SHUTDOWN.COM default setting.

- **WAIT**
  This P1 parameter checks for any currently running Unicenter Job Management Manager jobs. If any jobs are found, you are notified and given the option of reviewing a listing of currently running jobs and terminating the shutdown, if desired. The shutdown will not continue until a response is given.

### Entering a Proxy for Each User Account

To enable WAN support via DECnet, you need to perform these three procedures:

- Create a network object
- Add an account for the network object
- Add a proxy for each cluster account or local account that will be using the manager

For the manager to function correctly with WAN support, both the network object and the corresponding account must be added, as described below. If they are not, the environment is at risk and may not function correctly.
The passwords for the SCHED_DECNET object and the SCHED$DECNET UAF account need to match in order to properly facilitate the communication between manager instances across the WAN. The commands to do this are as follows:

$ MCR NCP
NCP> define object SCHED_DECNET password yourpassword
NCP> set object SCHED_DECNET password yourpassword
NCP> exit

$ SET DEF SYSSYSTEM
$ RUN AUTHORIZE
UAF> MOD SCHED$DECNET/password=yourpassword
UAF> exit

These commands will properly synchronize the passwords between the object and the account.

To create the network object, enter these commands:

$ MCR NCP
NCP> SHOW EXEC CHAR
NCP> SET EXEC INCOMING TIMER 120
NCP> SET EXEC OUTGOING TIMER 120
NCP> SHOW KNOWN OBJECT
NCP> DEFINE OBJECT SCHED_DECNET NUMBER 0 -_
NCP> FILE SYS$COMMON:[SYSEXE]SCHED_DECNET.COM -_
NCP> USER SCHED$DECNET -_
NCP> ALIAS INCOMING ENABLED -_
NCP> ALIAS OUTGOING ENABLED -_
NCP> SET OBJECT SCHED_DECNET NUMBER 0 -_
NCP> FILE SYS$COMMON:[SYSEXE]SCHED_DECNET.COM -_
NCP> USER SCHED$DECNET -_
NCP> ALIAS INCOMING ENABLED -_
NCP> ALIAS OUTGOING ENABLED -_
NCP> SET NODE local-node ACCESS BOTH
NCP> EXIT

To add the account for the network object, first determine a UIC that is in the same group as the default DECnet account, or is in a group by itself. Then, run AUTHORIZE as follows:

$ RUN AUTHORIZE
UAF> ADD SCHED$DECNET/FLAGS=DISUSER/UIC=uic-spec
UAF> EXIT

Enter these commands to add a proxy for each account that will be using the manager:

$ RUN AUTHORIZE
UAF> ADD/PROXY local_node::local_user local_user/DEFAULT
UAF> EXIT

**Note:** On cluster member nodes, this proxy needs to be added for each cluster account only, and not for each cluster node account. This configuration allows DECnet to operate in cases such as use of the following command:

$ SCHEDULE MODIFY remote-node::job1/SYNC=(local-node::job2)
Refer to the *Unicenter Job Management for OpenVMS I64 r3 Administrator Guide* for standard proxy needs and setup. Those specified here are in addition to those specified in the Administrator Guide. Both sets of instructions must be followed.

**Setting Up a Proxy in AUTHORIZExE database**

For job synchronization on remote nodes, an additional proxy must exist in the AUTHORIZExE database of the dependent job’s node to allow that job to receive job completion synchronization messages from its predecessor jobs. You need to set up only one proxy for each node that must receive job completion messages. If the proxies are not set up, jobs with the status DEP WAIT will never run.

The proxy must define the predecessor job’s node and the account on that node under which the manager was started (usually the SYSTEM account). The proxy must be set up to access the dependent job’s node through the account on that node under which the manager was started (also usually the SYSTEM account).

To add the proxy, run AUTHORIZExE as follows:

```
$ RUN AUTHORIZE
UAF> ADD/PROXY predecessor_job_node::pred_node_startup_account -
UAF> dependent_job_node_startup_account/DEFAULT
```

For example, if the manager was started under the SYSTEM account on both nodes, type:

```
$ RUN AUTHORIZE
UAF> ADD/PROXY predecessor_job_node::SYSTEM SYSTEM/DEFAULT
```

If the manager was started under the XYZ account on the predecessor job node, type:

```
$ RUN AUTHORIZE
UAF> ADD/PROXY predecessor_job_node::XYZ SYSTEM/DEFAULT
```

If the manager was started under the account XYZ on the predecessor job node and also started under the account SMITH on the dependent job node, type:

```
$ RUN AUTHORIZE
UAF> ADD/PROXY predecessor_job_node::XYZ SMITH/DEFAULT
```
Chapter 4: Reinstalling Unicenter Job Management Manager

This chapter considers reinstallation requirements and processes.

Reinstall After Operating System Upgrade

The Unicenter Job Management Manager must be reinstalled after OpenVMS upgrade. For example if you installed the manager on OpenVMS 7.2 and then upgraded to OpenVMS 7.3, you must reinstall the manager. The reason is that the manager installation links executables with current system libraries and those executables might not work properly after OpenVMS upgrade.

Reinstalling in a Cluster

When reinstalling in a cluster, you may perform just one installation for all the nodes with the same architecture and OpenVMS version. Those nodes must share node-specific directory NSCHED$EXE so the reinstalled executables will be, in effect, on all nodes. Choose any node among those nodes to run the installation on. Be sure to specify the same node-specific directory as the existing one. If however you decide to specify another node-specific directory, you must edit SYS$STARTUP:UJM$MANAGER$STARTUP.COM on ALL nodes that share this directory and alter the definition of the NSCHED$EXE logical name.
Chapter 5: Installing Unicenter Job Management Agent

This section contains instructions for installing Unicenter Job Management Agent (the agent) on nodes running the OpenVMS operating system.

Before Installing Any Agent Component

Before installing the agent, perform the following procedures:

- **Back up your system disk**
  
  We recommend that you back up your system disk before installing any software. For information about backing up your system disk, see the documentation for the operating system involved.

- **Verify your hardware and software requirements**
  
  Your OpenVMS HP Integrity Server should satisfy the general requirements outlined in the “Hardware and Software Requirements” section in Chapter 1 of this guide.

- **Check your system account quotas**
  
  The account from which the agent runs should be able to execute a detached process with the following minimum quotas:

  - ASTLM=200
  - FILLM=100
  - ENQLM=300
  - TQELM=200
  - DIOLM=200
  - BIOLM=100
  - PGFLQUO=10 000
  - PRCLM=10

  **Note:** These are minimum quotas only and intended for systems with Unicenter Job Management Agent-only installations. Higher values may be needed for other applications.
Installing the Unicenter Job Management Agent

The installation procedure provides instructions to install the agent on an OpenVMS node that is accessible by an OpenVMS computer where Unicenter Job Management Manager (the manager) is installed, or will be installed. Installation time for the agent is 5 to 10 minutes.

- **Distribution media:** This product is available on CD-ROM.
- **User requirement:** The installation procedure requires that the user be familiar with system level OpenVMS commands and procedures.
- **Default Unicenter Job Management Manager node and Unicenter Job Management Agent node must have TCP/IP installed:** The node on which you are installing the agent must have TCP/IP installed. In addition, TCP/IP must be running on default Unicenter Job Management Manager node.

Installation Procedure

Before installing the agent on your system, stop any previous version that you have running on that system. If there are active processes, the installation procedure displays them and prints the following message:

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

Then you will be asked the following question:

* Do you want to continue anyway [NO]?

A NO answer halts the installation procedure and exits. A YES answer lets you continue the installation procedure.

To install the agent, use the following procedure (to view a sample installation, see “Examples of New Installations” in Chapter 6 of this guide).

**Note:** Default answers to the installation questions below are provided in brackets. For example, “[YES]” indicates the default answer is YES. You can accept the default by pressing Enter. For answers other than the default, type your answer and press Enter.

1. **Mount the CD.**

   The Unicenter Job Management for OpenVMS CD can be mounted on OpenVMS or on Windows. For OpenVMS, insert the CD in the CD reader and type the command:

   `$ mount/over=\id device`

   where `device` is the name of the CD reader device. For example, if the CD reader is DQA0, the command would be:

   `$ mount/over=\id dqa0`
2. **Run the installation procedure.**

Log into the system account on the OpenVMS system. Type:

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

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

3. **Check your system backup.**

Always back up your system disk before performing an installation. The installation procedure asks if you are satisfied with your system backup:

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

If you are satisfied with the backup of your system disk, press Enter. Otherwise, enter NO to stop the installation. After you back up your system disk, you can restart the installation.

4. **Accept License Agreement.**

Before continuing the installation, you must accept the License Agreement. To review the agreement, type V or VIEW. To accept the agreement, type YES. If you type NO or press Enter without typing your response, the installation will terminate.

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

5. **Choose whether to start the product after installation.**

If you have no previously installed version of the agent on your system, the installation procedure asks the following question:

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

Press Enter to start the product immediately after installation is complete.

If you have a previously installed version of the product, the installation procedure asks the following question:

* Do you want to stop/restart this software during this installation [YES]?

If you enter NO, the product will not be started after installation.

6. **Choose whether to run the Installation Verification Procedure (IVP).**

The installation procedure asks if you want to run the IVP:

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

The IVP checks to ensure that the installation is successful—we recommend running the IVP. To run the IVP, press Enter. If choose not to run it, enter NO.

If you choose not to run the IVP during the installation, you can run it after the installation, by typing:

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

The IVP sends a test message to the agent and reports the results.
7. **Purge files.**

You have the option to purge files from previous versions of the product that are superseded by this installation. Purging is recommended; however, if you need to keep files from a previous version, enter NO in response to this question:

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

If you press Enter, the files related to the earlier version of the product will be purged after the installation.

8. **Choose whether to activate the CA Common Services Integration components.**

The installation asks:

* Do you want to activate the CA Common Services Integration Components? [YES]?

If yes, the installation sets the value to YES for item 11 (CA Common Services OpenVMS Gateway) on the Product Startup Selection menu. If No, the value is set to NO.

If you want to activate CCS Integration at a later date, do the following:

a. 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 Unicenter Manager system is identified.

b. Run `@sys$manager:capoly$set_startup_params`

c. Run `@sys$manager:capoly$set_startup_params`

d. Run the OpenVMS/Windows Integration IVP by executing `@sys$manager:capoly$set_startup_params`

9. **Choose products for automatic startup after installation.**

If you choose to activate CCS integration, 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.
Unicenter for OpenVMS - product startup selection

-------------------------------------------------
1  Unicenter Job Management ..........................  NO
2  Unicenter Job Management Agent ....................  YES
3  Unicenter Universal Job Management Agent .........  NO
4  Unicenter NSM Job Management Jobflow Support .....  NO
5  Unicenter Job Management NSM/CCS Integration ......  NO
6  Unicenter Console Management ......................  NO
7  Unicenter System Watchdog Manager .................  NO
8  Unicenter System Watchdog NSM/CCS Integration .....  NO
9  Unicenter Performance Management Agent ............  NO
10 Unicenter NSM Performance Trend Cube ..............  NO
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 Unicenter components, 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 onto each node:

@sys$manager:CAPOLY$SET_STARTUP_PARAMS.COM

10. Specify the Unicenter Manager system.

   The installation prompts you to specify the node name or IP address of the system where Unicenter Manager is running.

   To complete integration with a Unicenter Manager, the IP address or node name is required.

   * Node Name or IP Address [nodename]

   where nodename is the IP address or the node name of the system where Unicenter Manager is running.

11. Specify the CAUNIVMS Account.

   If you choose to activate CA Common Services Integration components, the installation checks for the CAUNIVMS account. If this is a new installation, you will be asked to specify a unique UIC for the new account:

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

   If you install the agent over a previous installation, this message appears:

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

   The installation has detected the account CAUNIVMS. The installation will skip account creation. If this account is used by something different than Unicenter TNG, please modify the account name and re-install the VMS LINKS code.
Chapter 6: After Installing the Unicenter Job Management Agent

After installing Unicenter Job Management Agent (the agent), you can perform the following tasks:

- Start the agent
- Shut down the agent
- Edit startup command files
- Edit shutdown command files

Each of these tasks is described in detail in the following sections.

Starting Unicenter Job Management Agent

To start the agent, use one of these two methods:

- If you are logged into the SYSTEM account, enter the following to run the command procedure SYS$STARTUP:UNIJM$AGENT$STARTUP.COM:
  
  $ @SYS$STARTUP:UNIJM$AGENT$STARTUP.COM

- If you are not currently logged into the SYSTEM account, you can start the agent by entering:
  
  $ SUBMIT/USER=SYSTEM SYS$STARTUP:UNIJM$AGENT$STARTUP.COM

- If you are activating the Integration software, enter the following command to start up from the SYSTEM account:
  
  $ @SYS$STARTUP:CAPOLYS$STARTUP.COM
Shutting Down Unicenter Job Management Agent

To shut down the agent, use one of these methods:

- If you are logged into the SYSTEM account, enter the following to run the command procedure SYS$STARTUP:UNIJM$AGENT$SHUTDOWN.COM:
  $ @SYS$STARTUP:UNIJM$AGENT$SHUTDOWN.COM

- If you are not currently logged into the SYSTEM account, you can stop the agent by entering:
  $ SUBMIT/USER=SYSTEM SYS$STARTUP:UNIJM$AGENT$SHUTDOWN.COM

- If you are activating the Integration software, enter the following command to shut down from the SYSTEM account:
  $ @SYS$SHUTDOWN:CAPOLY$SHUTDOWN.COM

Editing the System Startup Command File

You can edit your system startup command file so that the agent is automatically started when your system is rebooted. To do this, add the following command line to the system startup file, SYS$MANAGER:SYSTARTUP_VMS.COM:

$ @SYS$STARTUP:UNIJM$AGENT$STARTUP.COM

Place this new command line after the line that invokes the network startup command procedure. For example:

$ @SYS$MANAGER:STARTNET.COM

$ @SYS$STARTUP:UNIJM$AGENT$STARTUP.COM

In addition, place the Unicenter Job Management Agent startup command after the line that invokes the TCP/IP services startup command procedure. For example:

$ @SYS$STARTUP:UCX$STARTUP.COM

$ @SYS$STARTUP:UNIJM$AGENT$STARTUP.COM

If you activated CA Common Services for OpenVMS, you do not need to run the commands above. Instead, just run @SYS$STARTUP:CAPOLY$STARTUP.
You can edit your system shutdown file so that the agent shuts down properly when your system performs an orderly shutdown. To do this, add the following command line to the system shutdown file, SYS$MANAGER:SYSHUTDWN.COM:

$ @SYS$STARTUP:UNIJMSAGENT$SHUTDOWN.COM

If you activated CA Common Services for OpenVMS, just run @SYS$STARTUP:CAPOLY$SHUTDOWN.

To start only the agent, run @SYS$STARTUP:CAPOLY$SET_STARTUP_PARAMS.COM.
Chapter 7: Examples of New Installations

This chapter provides sample installations for the two components of Unicenter Job Management for OpenVMS — the manager and the agent.

Unicenter Job Management Manager OpenVMS I64 Installation

The following example shows the log file from a sample installation of the manager.

$ run dqa0:[000000]setup_ia64.exe
UnZipSFX 5.20 of 30 April 1996, by Info-ZIP (Zip-Bugs@wkuvx1.wku.edu).
  inflating: ca$setup.com
  inflating: installhelp.hlp
  inflating: product.key
  inflating: ujm$readme.txt

Setup location: DQA0:[000000]

Unicenter Job Management for OpenVMS

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--------------------------------------------------------------
PRODUCT
1    Job Management Manager Install
2    Job Management Agent 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_23 spawned
%DCL-S-ATTACHED, terminal now attached to process SYSTEM_23
UnZipSFX 5.20 of 30 April 1996, by Info-ZIP (Zip-Bugs@wkuvx1.wku.edu).
  inflating: ca$setup.com
  inflating: ca$setup.ini

Platform type  : IA64
OS version     : V8.2
Setup location: DQA0:[000000]
Product Kit    : DQA0:[000000]UJMMGR_UNI_0000_yymmdd_V030.ZIP;1
  * Enter the device and directory to unzip the save-sets. 110000 blocks of
temp space needed [sys$common:[CASSETUP]]:
UNZIP location: DKA0:[KITS.UJM.ENU.OPENVMS.JOBMANAGER]UNZIP_IA64.EXE;1
Unzipping installation media ... Please be patient ...
OpenVMS Software Product Installation Procedure V8.2

It is 25-APR-2005 at 16:50.

Enter a question mark (?) at any time for help.
%VMSINSTALL-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:
UJMMGR_UNI_0000_yymmdd_V V3.0

Beginning installation of UJMMGR_UNI_0000_yymmdd_V V3.0 at 16:52

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

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5. Payment of the fees specified on the Order Form or as agreed between Licensee and an authorized reseller of CA, shall entitle Licensee to use the Product for the term specified on the Order Form (the "Term"), which use may include the right to receive maintenance services therefor for the period set forth on the Order Form. After the Term, continued usage and/or maintenance of the Product as provided herein shall be subject to the payment by Licensee of the fees described on the Order Form. Notwithstanding the foregoing, if the Product was licensed under this Agreement without an Order Form, Licensee shall be entitled to use the Product for an indefinite period, but the license does not include the right to receive maintenance services. Notwithstanding the foregoing, with respect to any Product that relies on continuous content updates, such as signature files and security updates, Licensee shall be entitled to such content updates for a period of one (1) year from the effective date of the license.

6. If maintenance is provided by CA, it shall be renewed annually (except as otherwise provided in the Order Form) and Licensee agrees to pay the annual renewal maintenance fee, unless either party gives the other at least 20 days written notice of non-renewal. All fees are net of applicable taxes. Licensee agrees to pay any tariffs, duties or taxes imposed or levied by any government or governmental agency including, without limitation, federal, state and local, sales, use, value added and personal property taxes, (other than franchise and income taxes for which CA is responsible) upon a presentation of invoices by CA. Any claimed exemption from such tariffs, duties or taxes must be supported by proper documentary evidence delivered to CA. Any invoice which is unpaid by Licensee when due shall be subject to an interest charge equal to the lower of 1.5% per month or the highest applicable legal rate.

7. Licensee may use the Product as provided herein solely to process its own data and the data of its majority-owned subsidiaries and use is restricted to the location, computer equipment, and Authorized Use Limitation specified on the Order Form or CD sleeve, as applicable. If Licensee desires to use the Product beyond such restrictions, it shall notify CA, and Licensee will be invoiced for and shall pay the applicable fees for such expanded use.

8. The Product, including any source or object code that may be provided to Licensee hereunder, as well as documentation, appearance, structure and organization, is the proprietary property of CA and/or its licensors. If any, and may be protected by copyright, patent, trademark, trade secret and/or other laws. Title to the Product, or any copy, modification, translation, partial copy, compilation, derivative work or merged portion of any applicable SDK, shall at all times remain with CA and/or its licensors. Usage rights respecting the Product may not be exchanged for any other CA product. The Product is licensed as a single product. Its component parts may not be separated for use. Licensee and its employees will keep the Product and the terms of this license strictly confidential. Licensee may not (i) disclose, de-compile, disassemble nor otherwise reverse engineer the Product except to the extent the foregoing restriction is expressly prohibited under applicable law; (ii) create any derivative works based on the Product; (iii) use the Product to provide facilities management or in connection with a service bureau or like activity whereby Licensee, without purchasing a license from CA for such purpose, operates or uses the Product for the benefit of a third party who has not purchased a copy of the Product; or (iv) permit the use of the Product by any third party without the prior written consent of CA. Licensee shall not release the results of any
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9. CA warrants that it can enter into this Agreement and that it will indemnify, hold Licensee harmless, and defend or, at its option, settle any claim that CA is not so authorized or that Licensee’s use of the Product as authorized hereby infringes any patent, copyright or other intellectual property right of any third party. CA also warrants that the Product will operate in accordance with its published specifications, provided that CA's only responsibility will be to use reasonable efforts, consistent with industry standards, to cure any defect. The foregoing warranty respecting the operation of the Product will be in effect only during any period for which Licensee shall have paid the applicable license fee and annual maintenance fee, or, with respect to Products licensed without an Order Form, during a period of ninety (90) days from Licensee's acquisition of license for the Product. If, within a reasonable time after receiving Licensee's written notice of breach of either of the above warranties, CA is unable to cause the Product to operate (a) without infringing a third party's intellectual property rights, or (b) in accordance with CA's written specifications, then either party may terminate this Agreement on written notice to the other party and CA or the authorized reseller will refund the relevant license fees paid for such non-compliant Product only when Licensee returns the Product to CA or its authorized reseller from whom it obtained the Product, with the purchase receipt within the warranty period noted above.

10. EXCEPT AS SET FORTH ABOVE, TO THE FULL EXTENT PERMITTED BY APPLICABLE LAW: (A) NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE BY CA; AND (B) IN NO EVENT
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OF THE ABOVE WARRANTIES OR MAKE ANY ADDITIONAL WARRANTIES ON BEHALF
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REQUIREMENTS OR THAT USE OF THE PRODUCT WILL BE UNINTERRUPTED OR
ERROR FREE.

11. Licensee may assign this Agreement only if Licensee complies with
CA's then prevailing policies respecting assignment of licenses,
which includes a requirement that the scope of use of the Product not
be expanded beyond the business of Licensee and the business of
Licensee's majority-owned subsidiaries. CA may assign this Agreement
to any third party that succeeds to CA's interests in the Product
and assumes the obligations of CA hereunder; and CA may assign its
right to payment hereunder or grant a security interest in this
Agreement or such payment right to any third party.

12. If Licensee breaches any term of this Agreement or if Licensee
becomes insolvent or if bankruptcy or receivership proceedings are
initiated by or against Licensee, CA shall have the right to withhold
its own performance hereunder and/or to terminate this Agreement
immediately and, in addition to all other rights of CA, all amounts
due or to become due hereunder will immediately be due and payable to
CA.

13. If Licensee fails to pay the applicable maintenance fee, then
Licensee may reinstate maintenance thereafter by paying to CA a fee
equal to 150% of CA's then prevailing maintenance fee for each year
for which the maintenance fee has not been paid.

14. If a court holds that any provision of this Agreement to be illegal,
invalid or unenforceable, the remaining provisions shall remain in
full force and effect. No waiver of any breach of this Agreement
shall be a waiver of any other breach, and no waiver shall be
effective unless made in writing and signed by an authorized
representative of the waiving party. Any questions concerning this
Agreement should be referred to Computer Associates International,
Inc., One Computer Associates Plaza, Islandia, NY 11749, Attention:
Worldwide Law Department.

15. In the event Licensee acquires a license for the Product outside of
the United States, the following Sections will apply to the use of
the Product:

Notwithstanding the terms of the last sentence of Section 8, the
laws of the country in which Licensee acquires a license for the
Product shall govern this Agreement, except as otherwise provided
below.

In Albania, Armenia, Belarus, Bosnia/Herzegovina, Bulgaria, Croatia,
Georgia, Hungary, Kazakhstan, Kirghizia, Former Yugoslav Republic of
Macedonia (FYROM), Moldova, Romania, Russia, Slovak Republic,
Slovenia, Ukraine and Federal Republic of Yugoslavia, the laws of
Austria govern this Agreement.

Argentina
The CA subsidiary that is the licensor is Computer Associates de
Argentina S.A.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of Argentina. Any dispute hereunder shall be determined by the Tribunales de la Cuidad de Buenos Aires.

The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement should be referred to Computer Associates de Argentina S.A. Avenida Alicia Moreau de Justo, 400, 2 piso, 1107, Buenos Aires - At.: Finance Department.

Australia
The CA subsidiary that is the licensor is Computer Associates Pty. Ltd.
The following is added to each of the end of Sections 2, 3 and 10: Although CA specifies that there are no warranties, Licensee may have certain rights under the Trade Practices Act 1974 and other state and territory legislation which may not be excluded but may be limited. To the full extent permitted by law CA excludes all terms not expressly set out in the express terms of this Agreement, and limits any terms imposed by the Trade Practices Act 1974 and other state and territory legislation to the full extent permitted by the applicable legislation.
The last sentence of Section 8 is deleted and replaced with: The laws of the State or Territory in which the transaction is performed govern this Agreement.
The following is added to Section 10:
Where CA is in breach of a condition or warranty implied by the Trade Practices Act 1974 or other state and territory legislation, CA's liability is limited. In the case of goods, to the repair or replacement of the goods, or payment for the repair or replacement of the goods, and in the case of services, the supplying of the services again or payment for the re-supply of the services, as CA may elect. Where that condition or warranty relates to a right to sell, quiet possession or clear title, in respect of goods or if the goods supplied by CA are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this Section apply.

Austria
The last sentence of Section 8 is deleted and replaced with: The laws of Austria govern this Agreement. The following is added to Section 8: In addition, CA is entitled to bring action against Licensee in a court located in Licensee's place of incorporation, establishment or permanent residence.
The following is added to Section 10:
Any liability for the slight negligence of CA is excluded.
The following is added to the Agreement:
In the event the Licensee qualifies as a consumer according to Austrian Consumer Protection Act ("Konsumentenschutzgesetz" - "KSchG") Sections 2, 3, 9 and 10 of this Agreement are not applicable to the extent they reduce CA's liability and the consumer's warranty.

Belgium
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The last sentence of Section 8 is deleted and replaced with: The courts of CA's registered office shall have exclusive jurisdiction regarding any dispute that may arise between the parties dealing with the formation, execution, interpretation, or termination of this Agreement, including but not limited to measures of conservation, emergency proceedings, warranty proceedings, petition
or in case of more than one defendant.

The last sentence of Section 14 are deleted and replaced with:
The last sentence of Section 14 are deleted and replaced with:
Any question concerning this Agreement should be referred to Computer
Associates S.A./N.V., Da Vincialaan 11, Box F2, Building Figueras,
B-1935 Zaventem, Attention: Worldwide Law Department.

Brazil
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de Programas de Computador Ltda.
The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance
with the laws of Brazil. Any dispute hereunder shall be determined by
a court of the São Paulo City Hall.
The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement shall be referred to
Computer Associates Programas de Programas de Computador Ltda.,
Avenida das Nações Unidas, 12901 - 6 andar - Torre Norte - São
Paulo - SP, 04578-000, At.: Worldwide Law Department.

Canada
The CA subsidiary that is the licensor is Computer Associates Canada
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The last sentence of Section 8 is deleted and replaced with:
The laws in the Province of Ontario shall govern this Agreement.

Chile
The CA subsidiary that is the licensor is Computer Associates de
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The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance
with the laws of Chile. Any dispute hereunder shall be determined by
the Tribunales Ordinarios de la Cuidad de Santiago.
The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement shall be referred to
Computer Associates de Chile S.A., Avenida Providencia 1768, piso 15 -
Edificio Palladio, oficina 1501 - 6640709 Providencia - Santiago -
At.: Finance Department.

China
The CA subsidiary that is the licensor is Computer Associates (China)
Co., Ltd.
The second sentence of Section 6 is deleted and replaced with:
All fees are inclusive of VAT.
The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance
with the laws of the People’s Republic of China, without regard to
its choice of law provisions. Any dispute hereunder shall be
determined by a competent court located in Beijing.

Columbia
The CA subsidiary that is the licensor is Computer Associates de
Colombia S.A.
The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance
with the laws of Colombia. Any dispute hereunder shall be determined by
the Tribunales Ordinarios de la Cuidad de Bogotá.
The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement should be referred to Computer Associates de Colombia S.A. Avenida 82, numero 12-18, Oficina 305 - Santa Fé de Bogotá, D.C., Colombia - At.: Finance Department.

Czech Republic
The first sentence of Section 1 is deleted and replaced with:
CA grants the Licensee a non-exclusive license to use the Product, for use by a single user, or the quantity designated as the authorized use limitation ("Authorized Use Limitation") on any Order Form (defined below) referencing the terms of this Agreement or CD sleeve included within the Product box.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of the Czech Republic, without regard to its choice of law provisions. Any dispute hereunder shall be determined by a court of competent jurisdiction within the Czech Republic.

Section 10 is deleted and replaced with:
Except as set forth above, to the full extent permitted by applicable law, no other warranties, whether express or implied, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose, are made by CA.

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The third paragraph of the Preamble is deleted and replaced with:
BY INSTALLING, COPYING OR USING THE PRODUCT OR BY ANSWERING "YES" TO THE QUESTION BELOW, YOU ARE (I) REPRESENTING THAT YOU ARE NOT A MINOR AND HAVE FULL LEGAL CAPACITY AND HAVE THE AUTHORITY TO BIND YOURSELF AND YOUR EMPLOYER, AS APPLICABLE, TO THE TERMS OF THIS AGREEMENT; AND (II) CONSENTING ON BEHALF OF YOURSELF AND/OR AS AN AUTHORIZED REPRESENTATIVE.

The following is added to the last paragraph of the Preamble:
In the event that you answer "No" to the question below the installation shall cease. You should delete all copies of the Product from your computer systems and return, by registered first class post, the Product, complete with box and any documentation, to CA or the authorized reseller from whom you purchased the Product with your proof of purchase within thirty (30) days of the date of purchase. You will promptly be issued a full refund of any license fees paid for the Product and, if applicable, maintenance fees paid. If requested at the time of return and provided that receipts of costs incurred are provided, CA or the authorized reseller shall also refund to you any postage costs you incurred in returning the Product.

The second to last sentence of Section 2 is deleted and replaced with:
BETA PRODUCTS ARE PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES, CONDITIONS OR REPRESENTATIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS AGREEMENT.

The last sentence of Section 3 is deleted and replaced with:
LICENSEE'S USE OF THE PRODUCT DURING THE TRIAL PERIOD IS ON AN "AS IS" BASIS WITHOUT ANY WARRANTY, AND CA DISCLAIMS ALL WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED.
ELSEWHERE IN THIS AGREEMENT.

The seventh sentence of Section 8 is deleted and replaced with:
Licensee may not (i) disclose, de-compile, disassemble nor otherwise reverse engineer the Product save to the extent expressly permitted by law; (ii) create any derivative works based on the Product; (iii) use the Product in connection with a service bureau or like activity whereby Licensee, without purchasing a license from CA for such purpose, operates or uses the Product for the benefit of a third party who has not purchased a copy of the Product; or (iv) permit the use of the Product by any third party without the prior written consent of CA, save for contract staff of the Licensee who are acting on the Licensee's business, not engaged in facilities management and who the Licensee agrees as a condition of this Agreement to ensure such contract staff shall comply with all the terms of this Agreement, including without limitation, confidentiality provisions.

Section 10. (A) is deleted and replaced with:
NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE BY CA; AND

The following is added at the end of Section 10:
The foregoing exclusions and limitations upon liability shall not apply to any liability for damages arising from (a) tangible property damage to the extent that such is due to the negligence of an employee or authorized agent of CA, in which event CA's maximum liability shall be limited to $1,000,000 for each event or series of events, or (b) death or personal injury caused by the negligence of an employee or authorized agent of CA.

France
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The last sentence of Section 8 is deleted and replaced with:
The Commercial Court of Paris shall have exclusive jurisdiction regarding any dispute that may arise between the parties dealing with the formation, execution, interpretation, or termination of this Agreement, including but not limited to measures of conservation, emergency proceedings, warranty proceedings, petition or in case of more than one defendant.

The last sentence of Section 14 is deleted and replaced with:
Any question concerning this Agreement should be referred to Computer Associates S.A., Immeuble Ex-Libris, 25, Quai du Président Paul Doumer, 92408 Courbevoie Cedex, Attention: Worldwide Law Department.

Germany
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Section 6 of the Agreement is deleted.

The twelfth sentence of Section 8 is deleted. The sixteenth sentence of Section 8 is deleted and replaced with:
Licensee shall comply with all relevant import and export regulations, including those adopted by the Office of Export Administration of the US Department of Commerce, any competent EU government and German export regulations. Licensee understands and acknowledges that US, EU and German restrictions vary regularly and, depending on Product. Licensee must refer to then current US, EU or German regulations.

The following is added to Section 9:
CA shall not be liable for any infringement based upon use of other
than an unaltered release of the Product unless altered with CA's prior written consent.

Section 10 is deleted and replaced with:
In case of (i) willful misconduct, no limitation of liability applies; (ii) personal injury or damage to property, CA's liability to Licensee is limited to the maximum amount that CA will recover under its insurance policies; (iii) gross negligence that results in other damage than personal injury or damage to property, CA’s liability to Licensee shall be limited to an amount equal to the license fee for the Product; (iv) negligence that results in damages other than personal injury or damage to property, CA’s liability to Licensee shall be limited to an amount equal to fifty percent (50%) of the license fee for the Product. Notwithstanding the foregoing, the aggregated liability according to (iii) and (iv) above shall never exceed an amount equal to the purchase price of the Product.

Except in case of willful misconduct or gross negligence, neither party shall be liable to the other for indirect, incidental, special or consequential damage, including but not limited to harm to services supplied by Licensee, or loss of business, loss of profit, or loss of data, arising out of or in connection with the implementation or the use of the Product. No actions, regardless of form, arising out of this Agreement may be brought by either party more than three (3) years after the cause of action has arisen, or, in the cause of non-payment, more than three (3) years from the date of the relevant invoice. Neither party shall be liable for delay in performing or failure to perform any of its obligations under this Agreement if the delay or failure results from events or circumstances outside its reasonable control. Such delay or failure shall not constitute a breach of this Agreement and time for performance shall be extended by time equivalent to the length of the delay caused by force majeure.

Greece
The CA subsidiary that is the licensor is COMPUTER ASSOCIATES HELAS LTD.

The last sentence of Section 8 is deleted and replaced with:
Any dispute hereunder shall finally be determined by Athens Courts.

Hong Kong
The CA subsidiary that is the licensor is Computer Associates International Ltd.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of Hong Kong. The courts of Hong Kong will have sole and exclusive jurisdiction with respect to any disputes arising out of this Agreement.

The following is added at the end of Section 10:
THE AFOREMENTIONED LIABILITY LIMITATION AND THE AFOREMENTIONED MAXIMUM LIABILITY AMOUNT WILL NOT AFFECT OR PREJUDICE THE STATUTORY RIGHTS OF THE LICENSEE UNDER THE SALE OF GOODS ORDINANCE, THE SUPPLY OF SERVICES (IMPLIED TERMS) ORDINANCE OR THE CONTROL OF EXEMPTION SECTIONS ORDINANCE, NOR WILL THEY LIMIT OR EXCLUDE ANY LIABILITY FOR DEATH OR PERSONAL INJURY SOLELY CAUSED BY CA'S NEGLIGENCE.

India
The CA subsidiary that is the licensor is C.A. Computer Associates India Pvt. Ltd.

The last sentence of Section 8 is deleted and replaced with:
This Agreement and the terms hereof shall be governed and construed in accordance with the laws of India and the courts of Mumbai shall have sole and exclusive jurisdiction with respect to any disputes
arising out of this Agreement.

Indonesia
The last sentence of Section 8 is deleted and replaced with:
This Agreement and the terms hereof shall be governed and construed in accordance with the laws of Indonesia. The courts of Indonesia, located in Jakarta, will have the sole and exclusive jurisdiction with respect to any disputes arising out of this Agreement.

Section 9 is amended by adding the following:
Licensee represents that Licensee (i) has full corporate power and authority; and (ii) is legally capable to execute, deliver and perform this Agreement. CA and Licensee agree to waive any provisions, procedures and operation of any applicable law to the extent that a court order is required for termination of this Agreement.

Israel
The CA subsidiary that is the licensor is CA COMPUTER ASSOCIATES ISRAEL LTD.

The last sentence of Section 8 is deleted and replaced with:
Any dispute hereunder shall finally be determined by Tel Aviv Courts.

Italy
The CA subsidiary that is the licensor is COMPUTER ASSOCIATES S.p.A.

According to article 1341 and 1342 of the Italian Civil Code, the Licensee expressly accepts the terms and conditions included in Sections 6 (specifically the interest rate set forth in the last sentence), 8 and 9.

The last sentence of Section 8 is deleted and replaced with:
Any dispute hereunder shall finally be determined by Milan Courts.

Japan
The CA subsidiary that is the licensor is Computer Associates Japan, Ltd.

The third sentence of Section 6 is deleted and replaced with:
Licensee agrees to pay any tariffs, duties or taxes imposed or levied by any government or governmental agency other than the taxes for which CA is responsible upon a presentation of invoices by CA.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of the country of Japan, without regard to its choice of law provisions. Any dispute hereunder shall finally be determined by Tokyo District Court located in Tokyo Japan.

The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement should be referred to Computer Associates Japan, Ltd., 2-1-1, Nishishinjyuku, Shinjyuku-ku, Tokyo, 163-0439, Japan, Attention: Worldwide Law Department.

Korea
The CA subsidiary that is the licensor is Computer Associates Korea Limited.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of Republic of Korea, without regard to its choice of law provisions.

The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement should be referred to
Computer Associates Korea Limited, City Air Tower (18th Fl.), 159-9, Samsung-Dong, Kangnam-Ku, Seoul 135-973 Korea, Attention: Worldwide Law Department.

Malaysia
The CA subsidiary that is the licensor is Computer Associates (M) Sdn. Bhd.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of Malaysia. The courts of Malaysia will have sole and exclusive jurisdiction with respect to any disputes arising out of this Agreement.

The following is added to Section 10:
Although CA specifies that there are no other warranties, Licensee may have certain rights under the Consumer Protection Act 1999 and the warranties are only limited to the extent permitted by the applicable legislation.

Mexico
The CA subsidiary that is the licensor is Computer Associates de México S.A. de C.V.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of México. Any dispute hereunder shall be determined by the Tribunales de la Ciudad de México.

The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement should be referred to Computer Associates de México S.A. de C.V. Avenida Jaime Balmes, 8 - Piso 4 - Oficina 403 - Col. Los Morales - Polanco , 11510 - Mexico - DF - At.: Finance Department.

Netherlands
The CA subsidiary that is the licensor is Computer Associates B.V.

The third paragraph of the Preamble is deleted and replaced with:
BY INSTALLING, COPYING OR USING THE PRODUCT OR BY ANSWERING “YES” TO THE QUESTION BELOW, YOU ARE (I) REPRESENTING THAT YOU ARE NOT A MINOR AND HAVE FULL LEGAL CAPACITY AND HAVE THE AUTHORITY TO BIND YOURSELF AND YOUR EMPLOYER, AS APPLICABLE, TO THE TERMS OF THIS AGREEMENT; AND (II) CONSENTING ON BEHALF OF YOURSELF AND/OR AS AN AUTHORIZED REPRESENTATIVE.

The following is added to the last paragraph of the Preamble:
In the event that you answer "No" to the question below the installation shall cease. You should delete all copies of the Product from your computer systems and return, by registered first class post, the Product, complete with box and any documentation, to CA or the authorized reseller from whom you purchased the Product with your proof of purchase within thirty (30) days of the date of purchase. You will promptly be issued a full refund of any license fees paid for the Product and, if applicable, maintenance fees paid. If requested at the time of return and provided that receipts of costs incurred are provided, CA or the authorized reseller shall also refund to you any postage costs you incurred in returning the Product.

The second to last sentence of Section 2 is deleted and replaced with:
BETA PRODUCTS ARE PROVIDED ON AN "AS IS" BASIS. WITHOUT WARRANTIES OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES, CONDITIONS OR REPRESENTATIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR
PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS AGREEMENT.

The last sentence of Section 3 is deleted and replaced with:
LICENSEE'S USE OF THE PRODUCT DURING THE TRIAL PERIOD IS ON AN "AS IS" BASIS WITHOUT ANY WARRANTY, AND CA DISCLAIMS ALL WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS AGREEMENT.

The seventh sentence of Section 8 is deleted and replaced with:
Licensee may not (i) disclose, de-compile, disassemble nor otherwise reverse engineer the Product save to the extent expressly permitted by law; (ii) create any derivative works based on the Product; (iii) use the Product in connection with a service bureau or like activity whereby Licensee, without purchasing a license for such purpose from CA, operates or uses the Product for the benefit of a third party who has not purchased a copy of the Product; or (iv) permit the use of the Product by any third party without the prior written consent of CA, save for contract staff of the Licensee who are acting on the Licensee's business, not engaged in facilities management and who the Licensee agrees as a condition of this Agreement to ensure that such contract staff shall comply with all the terms of this Agreement, including without limitation, confidentiality provisions.

Section 10.(A) is deleted and replaced with:
NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE BY CA.

The following is added at the end of Section 10:
The foregoing exclusions and limitations upon liability shall not apply to any liability for damages arising from (a) tangible property damage to the extent that such is due to the negligence of an employee or authorized agent of CA, in which event CA's maximum liability shall be limited to $1,000,000 for each event or series of events, or (b) death or personal injury caused by the negligence of an employee or authorized agent of CA, or (c) willful misconduct or gross negligence of CA.

New Zealand
The CA subsidiary that is the licensor is Computer Associates (N.Z.) Ltd.

Notwithstanding the final sentence of Section 6, the applicable interest charge on invoices unpaid by Licensee is 1.5% per month.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of New Zealand. The courts of New Zealand will have sole and exclusive jurisdiction with respect to any disputes arising out of this Agreement.

The following is added to Section 10:
Although CA specifies that there are no warranties, Licensee may have certain rights under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods or services which CA supplies, if Licensee acquires the goods and services for the purposes of a business as defined in that Act. Where the Product is not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.
The following is added to Section 12:
CA's rights under this Section shall also apply if any resolution is passed or proceedings are commenced for the liquidation or winding up of Licensee.

Norway
The CA subsidiary that is the licensor is Computer Associates Norway AS.

The third paragraph of the Preamble is deleted and replaced with:
BY INSTALLING, COPYING OR USING THE PRODUCT OR BY ANSWERING "YES" TO THE QUESTION BELOW, YOU ARE (I) REPRESENTING THAT YOU ARE NOT A MINOR AND HAVE FULL LEGAL CAPACITY AND HAVE THE AUTHORITY TO BIND YOURSELF AND YOUR EMPLOYER, AS APPLICABLE, TO THE TERMS OF THIS AGREEMENT; AND (II) CONSENTING ON BEHALF OF YOURSELF AND/OR AS AN AUTHORIZED REPRESENTATIVE.

The following is added to the last paragraph of the Preamble:
In the event that you answer "No" to the question below the installation shall cease. You should delete all copies of the Product from your computer systems and return, by registered first class post, the Product, complete with box and any documentation, to CA or the authorized reseller from whom you purchased the Product with your proof of purchase within thirty (30) days of the date of purchase. You will promptly be issued a full refund of any license fees paid for the Product and, if applicable, maintenance fees paid. If requested at the time of return and provided that receipts of costs incurred are provided, CA or the authorized reseller shall also refund to you any postage costs you incurred in returning the Product.

The second to last sentence of Section 2 is deleted and replaced with:
BETA PRODUCTS ARE PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES, CONDITIONS OR REPRESENTATIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS AGREEMENT.

The last sentence of Section 3 is deleted and replaced with:
LICENSEE'S USE OF THE PRODUCT DURING THE TRIAL PERIOD IS ON AN "AS IS" BASIS WITHOUT ANY WARRANTY, AND CA DISCLAIMS ALL WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS AGREEMENT.

The seventh sentence of Section 8 is deleted and replaced with:
Licensee may not (i) disclose, de-compile, disassemble nor otherwise reverse engineer the Product save to the extent expressly permitted by law; (ii) create any derivative works based on the Product; (iii) use the Product in connection with a service bureau or like activity whereby Licensee, without purchasing a license from CA for such purpose, operates or uses the Product for the benefit of a third party who has not purchased a copy of the Product; or (iv) permit the use of the Product by any third party without the prior written consent of CA, save for contract staff of the Licensee who are acting on the Licensee's business, not engaged in facilities management and who the Licensee agrees as a condition of this Agreement to ensure that such contract staff shall comply with all the terms of this Agreement, including without limitation, confidentiality provisions.

Section 10.(A) is deleted and replaced with:
NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE.
BY CA.

The following is added at the end of Section 10:
The foregoing exclusions and limitations upon liability shall not apply to any liability for damages arising from (a) tangible property damage to the extent that such is due to the negligence of an employee or authorized agent of CA, in which event CA’s maximum liability shall be limited to $1,000,000 for each event or series of events, or (b) death or personal injury caused by the negligence of an employee or authorized agent of CA, or (c) willful misconduct or gross negligence of CA.

Peru
The CA subsidiary that is the licensor is Computer Associates de Peru S.A.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of Peru. Any dispute hereunder shall be determined by the Tribunales Ordinarios de La Cuidad de Lima.

The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement should be referred to Computer Associates de Peru S.A, Avenida Paseo de La Republica, 3211, Piso 11, San Isidro, Lima 27, Peru - At.: Finance Department.

Philippines
The CA subsidiary that is the licensor is Philippine Computer Associates International Inc.

The first seven sentences of Section 8 are deleted and replaced with:
Title to the Product and all modifications thereto shall remain with CA. The Product is a trade secret and the proprietary property of CA or its licensors. Usage rights respecting the Product may not be exchanged for any other CA product. Licensee and its employees will keep the Product and the terms of this Agreement strictly confidential. To the maximum extent permitted by applicable law, Licensee will not disclose, de-compile, disassemble nor otherwise reverse engineer the Product.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of the Philippines. The courts of Makati City will have sole and exclusive jurisdiction with respect to any disputes arising out of this Agreement.

Section 12 is deleted and replaced with:
If Licensee breaches any term of this Agreement or if Licensee becomes insolvent or if bankruptcy or receivership proceedings are initiated by or against Licensee, CA shall have the right to withhold its own performance hereunder and/or to terminate this Agreement immediately upon notice and, in addition to all other rights of CA, all amounts due or to become due hereunder will immediately be due and payable to CA.

Poland
If payments are to be made in PLN, the last sentence of Section 6 is replaced as follows:
Any invoice which is unpaid by Licensee when due shall be subject to an interest charge equal to the lower of 1.5% per month or the statutory delay interest rate then applicable in Poland.

The last sentence of Section 8 is deleted and replaced with:
The laws of Poland govern this Agreement.

Section 12 is deleted and replaced with:
If Licensee breaches any term of this Agreement or if Licensee becomes insolvent or if bankruptcy or receivership proceedings are initiated by or against Licensee, CA shall have the right to withhold its own performance hereunder and/or, to the extent permitted by the applicable law, to terminate this Agreement immediately and, in addition to all other rights of CA, all amounts due or to become due hereunder will immediately be due and payable to CA.

Portugal
The last sentence of Section 8 is deleted and replaced with:
Any dispute hereunder shall finally be determined by Lisbon Courts.

Singapore
The CA subsidiary that is the licensor is Computer Associates Pte. Ltd.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of Singapore. The courts of Singapore will have sole and exclusive jurisdiction with respect to any disputes arising out of this Agreement.

The following is added to the end of Section 9:
To the full extent permitted by applicable law, CA disclaims all implied conditions or warranties of satisfactory quality or fitness for purpose.

The following is added at the end of Section 10:
The limitation of liability set forth in this Section above will not apply to any breach of CA's obligations implied by Section 12 of the Sales of Goods Act (Cap 393). In addition, if you are a consumer, the limitation of liability will not apply to any breach of CA's obligations implied by Sections 13, 14 or 15 of the Sale of Goods Act (Cap 393).

Sweden
The CA subsidiary that is the licensor is Computer Associates Sweden AB.

The third paragraph of the Preamble is deleted and replaced with:
BY INSTALLING, COPYING OR USING THE PRODUCT OR BY ANSWERING "YES" TO THE QUESTION BELOW, YOU ARE (I) REPRESENTING THAT YOU ARE NOT A MINOR AND HAVE FULL LEGAL CAPACITY AND HAVE THE AUTHORITY TO BIND YOURSELF AND YOUR EMPLOYER, AS APPLICABLE, TO THE TERMS OF THIS AGREEMENT; AND (II) CONSENTING ON BEHALF OF YOURSELF AND/OR AS AN AUTHORIZED REPRESENTATIVE.

The following is added to the last paragraph of the Preamble:
In the event that you answer "No" to the question below the installation shall cease. You should delete all copies of the Product from your computer systems and return, by registered first class post, the Product, complete with box and any documentation, to CA or the authorized reseller from whom you purchased the Product with your proof of purchase within thirty (30) days of the date of purchase. You will promptly be issued a full refund of any license fees paid for the Product and, if applicable, maintenance fees paid. If requested at the time of return and provided that receipts of costs incurred are provided, CA or the authorized reseller shall also refund to you any postage costs you incurred in returning the Product.

The second to last sentence of Section 2 is deleted and replaced with:
BETA PRODUCTS ARE PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES, CONDITIONS OR
The last sentence of Section 3 is deleted and replaced with:
LICENSEE’S USE OF THE PRODUCT DURING THE TRIAL PERIOD IS ON AN “AS IS” BASIS WITHOUT ANY WARRANTY, AND CA DISCLAIMS ALL WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS AGREEMENT.

The seventh sentence of Section 8 is deleted and replaced with:
Licensee may not (i) disclose, de-compile, disassemble nor otherwise reverse engineer the Product save to the extent expressly permitted by law; (ii) create any derivative works based on the Product; (iii) use the Product in connection with a service bureau or like activity whereby Licensee, without purchasing a license from CA for that purpose, operates or uses the Product for the benefit of a third party who has not purchased a copy of the Product; or (iv) permit the use of the Product by any third party without the prior written consent of CA, save for contract staff of the Licensee who are acting on the Licensee’s business, not engaged in facilities management and who the Licensee agrees as condition of this Agreement to ensure that such staff shall comply with all the terms of this Agreement, including without limitation, confidentiality provisions.

Section 10.(A) is deleted and replaced with:
NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE BY CA.

The foregoing is added at the end of Section 10:
The following exclusions and limitations upon liability shall not apply to any liability for damages arising from (a) tangible property damage to the extent that such is due to the negligence of an employee or authorized agent of CA, in which event CA's maximum liability shall be limited to $1,000,000 for each event or series of events, or (b) death or personal injury caused by the negligence of an employee or authorized agent of CA, or (c) willful misconduct or gross negligence of CA.

Switzerland
The following is added at the end of Section 1:
THE PLACE OF PERFORMANCE OF ANY DUTIES OF CA UNDER THIS AGREEMENT IS ISLANDIA, NEW YORK.

The last sentence of Section 8 is deleted and replaced with:
ANY DISPUTE HEREUNDER SHALL BE DETERMINED BY A COURT OF COMPETENT JURISDICTION WITHIN THE STATE OF NEW YORK, U.S.A.

Taiwan
The CA subsidiary that is the licensor is Computer Associates Taiwan Ltd.

The second sentence of Section 6 is deleted and replaced with:
All fees are inclusive of VAT.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of the Republic of China, without regard to its choice of law provisions. Any dispute hereunder shall be determined by Taipei District Court.

Thailand
The CA subsidiary that is the licensor is Computer Associates Pte. Ltd.

The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance with the laws of Thailand. The courts of Thailand will have sole and exclusive jurisdiction with respect to any disputes arising out of this Agreement.

Turkey
The following is added at the end of Section 8:
Licensee undertakes to keep all information of trade secret nature strictly private and confidential, and to use all necessary measures and its best efforts in order to assure and maintain the confidentiality thereof and to prevent and protect it, or any part thereof, from disclosure to any third person. Furthermore, Licensee hereby expressly undertakes: (i) not to use a CA trade secret directly or indirectly in any respect or for whatever reason on its own behalf or on behalf of any third party or allow it to be used for any other purpose except as expressly permitted by CA; or (ii) not to disclose, de-compile, disassemble nor otherwise reverse engineer the Product and to avoid such a disclosure in whatever form, and (iii) not to copy or permit the others to copy without CA’s prior written consent.

Licensee acknowledges that in the event of a breach of any one of the obligations imposed upon it under this Section, CA might suffer significant damage, notwithstanding the return of all copies of the Product, arising out of the fact that it has breached the aforesaid obligations. Consequently, Licensee undertakes to indemnify CA in full against any such damage.

Licensee acknowledges that CA has the right to prevent any threat to confidentiality or restrain ongoing infringement or breach of confidentiality by Licensee through legal proceedings and in case an order is obtained against Licensee for breach, Licensee shall reimburse CA’s juridical costs and expenses including the attorney fees.

The following is added at the end of Section 9:
In the event that CA is rendered unable, wholly or in part, to perform or implement any of its warranties herein set forth, by force majeure which includes governmental controls or orders of the government of Turkey, acts of God, wars, commotion or riot, epidemics, strikes, lockouts and any other events or forces beyond its reasonable control, it shall be relieved from such warranties and shall not be held liable for the non-fulfillment and/or suspended implementation thereof, as long as and to the extent that the effect of such events or forces remains unabated.

The following is added at the end of the second sentence of Section 10:
EXCEPT THAT MAY ARISE FROM CA’S WILFUL FAULT OR NEGLIGENCE.

United Kingdom
The CA subsidiary that is the licensor is Computer Associates Plc.

The third paragraph of the Preamble is deleted and replaced with:
BY INSTALLING, COPYING OR USING THE PRODUCT OR BY ANSWERING "YES" TO THE BUTTON BELOW, YOU ARE (I) REPRESENTING THAT YOU ARE NOT A MINOR AND HAVE FULL LEGAL CAPACITY AND HAVE THE AUTHORITY TO BIND YOURSELF AND YOUR EMPLOYER, AS APPLICABLE, TO THE TERMS OF THIS AGREEMENT; AND (II) CONSENTING ON BEHALF OF YOURSELF AND/OR AS AN AUTHORIZED REPRESENTATIVE.

The following is added to the last paragraph of the Preamble:
In the event that you answer "No" to the question below the installation shall cease. You should delete all copies of the
Product from your computer systems and return, by registered first
class post, the Product, complete with box and any documentation, to
CA or the authorized reseller from whom you purchased the Product with
your proof of purchase within thirty (30) days of the date of
purchase. You will promptly be issued a full refund of any license
fees paid for the Product and, if applicable, maintenance fees paid.
If requested at the time of return and provided that receipts of costs
incurred are provided, CA or the authorized reseller shall also refund
to you any postage costs you incurred in returning the Product.

The second to last sentence of Section 2 is deleted and replaced with:
BETA PRODUCTS ARE PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR
REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING,
WITHOUT LIMITATION, ANY WARRANTIES, CONDITIONS OR REPRESENTATIONS OF
MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR
PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS
AGREEMENT.

The last sentence of Section 3 is deleted and replaced with:
LICENSEE'S USE OF THE PRODUCT DURING THE TRIAL PERIOD IS ON AN "AS
IS" BASIS WITHOUT ANY WARRANTY, AND CA DISCLAIMS ALL WARRANTIES
INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS
OF MERCHANTABILITY OR SATISFACTORY QUALITY AND FITNESS FOR A
PARTICULAR PURPOSE, AS WELL AS ANY EXPRESS WARRANTIES PROVIDED ELSEWHERE IN THIS
AGREEMENT.

The seventh sentence of Section 8 is deleted and replaced with:
Licensee may not (i) disclose, de-compile, disassemble nor otherwise
reverse engineer the Product save to the extent expressly permitted
by law; (ii) create any derivative works based on the Product; (iii)
use the Product in connection with a service bureau or like activity
whereby Licensee, without purchasing a license from CA for that
purpose, operates or uses the Product for the benefit of a third
party who has not purchased a copy of the Product; or (iv) permit
the use of the Product by any third party without the prior written
consent of CA, save for contract staff of the Licensee who are acting
on the Licensee's business, not engaged in facilities management and
who the Licensee agrees as a condition of this Agreement to ensure
that such contract staff shall comply with all the terms of this
Agreement, including without limitation, confidentiality provisions.

The last sentence of Section 8 is deleted and replaced with:
All disputes relating to this Agreement will be governed by the laws
of England and Wales and will be submitted to the exclusive
jurisdiction of the English courts.

Section 10.(A) is deleted and replaced with:
NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT
LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY,
SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE
BY CA.

The following is added at the end of Section 10:
The foregoing exclusions and limitations upon liability shall not
apply to any liability for damages arising from (a) tangible
property damage to the extent that such is due to the negligence of
an employee or authorized agent of CA, in which event CA's maximum
liability shall be limited to $1,000,000 for each event or series of
events, or (b) death or personal injury caused by the negligence of
an employee or authorized agent of CA, or (c) willful misconduct or
gross negligence of CA.

Venezuela
The CA subsidiary that is the licensor is Computer Associates de
Venezuela, CA.
The last sentence of Section 8 is deleted and replaced with:
This Agreement shall be governed by and interpreted in accordance
with the laws of Venezuela. Any dispute hereunder shall be determined
by the Tribunales Ordinarios de la Cuidad de Caracas.

The last sentence of Section 14 is deleted and replaced with:
Any questions concerning this Agreement should be referred to
Computer Associates de Venezuela, CA, Avenida Principal de La
Castellana - Centro Letonia, Torre ING Bank, Piso 10, Oficina 105 -
1060 - Caracas - Venezuela - At.: Finance Department.

16. If the Product contains third party software, and the licensor
requires the incorporation of specific license terms and conditions
for such software into this Agreement, those specific terms and
conditions, which are hereby incorporated by this reference, are
located below this Agreement.

LICENSEE ACKNOWLEDGES THAT THIS LICENSE HAS BEEN READ AND UNDERSTOOD AND
BY ANSWERING "YES" TO THE QUESTION BELOW, LICENSEE ACCEPTS ITS TERMS AND
CONDITIONS. LICENSEE ALSO AGREES THAT THIS LICENSE (INCLUDING ANY ORDER
FORM REFERENCING THIS AGREEMENT AND ANY TERMS RELATING TO THIRD PARTY
SOFTWARE WHICH ARE SET FORTH BELOW THIS AGREEMENT) CONSTITUTES THE
COMPLETE AGREEMENT BETWEEN THE PARTIES REGARDING THIS SUBJECT MATTER AND
THAT IT SUPERSEDES ANY INFORMATION LICENSEE HAS RECEIVED RELATING TO THE
SUBJECT MATTER OF THIS AGREEMENT, EXCEPT THAT THIS AGREEMENT (EXCLUDING
THE THIRD PARTY TERMS BELOW) WILL BE SUPERSEDED BY ANY WRITTEN AGREEMENT.
EXECUTED BY BOTH LICENSEE AND CA, GRANTING LICENSEE A LICENSE TO USE THE
PRODUCT. THIS AGREEMENT MAY ONLY BE AMENDED BY A WRITTEN AGREEMENT
SIGNED BY AUTHORIZED REPRESENTATIVES OF BOTH PARTIES.

ANSWER "V" TO VIEW THIS LICENSE AGREEMENT.

ANSWER "YES" TO ACCEPT THE TERMS AND CONDITIONS OF THIS AGREEMENT
AS SET FORTH ABOVE AND PROCEED WITH THE INSTALLATION PROCESS.

ANSWER "NO" TO HALT THE INSTALLATION PROCESS.

* 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]?
* Do you want to activate the CA Common Services Integration Components [YES]?

The DECwindows/MOTIF components of this software are optional

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

This product needs a TCP/IP network stack installed and
started on this node. You can use TCPWARE, MULTINET, UCX
or Compaq TCP/IP Services.

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

Support for remote agent command execution is an available option.

* Do you want support for remote Agent command execution [YES]?

The installation procedure will prompt you for pathnames to two distinct
areas: cluster-common files area and node-specific files area.
When prompted, enter the full pathname of selected root directories, including device names.

- **Cluster Common files area**
  Contains data files and scripts which are shared by all cluster nodes. It must be on a cluster-common non-DFS device. Default value SYS$COMMON:[NSCHED] is intended for homogeneous clusters and stand-alone nodes. It will NOT work for clusters that have different system disks for different nodes. Directories [DATA] and [COM] will be created under the path you specify. Logical names NSCHED$DATA and NSCHED$COM will be associated accordingly.

- **Machine architecture specific files area**
  Contains executables and other files which are specific to the hardware architecture and/or OpenVMS version of the node. A single set of executables can be shared for nodes with the same architecture and OpenVMS version, to save disk space. For other cases be sure to specify a directory that is specific to the local node. The default value SYS$COMMON:[NSCHED] is a valid choice for stand-alone nodes and clustered nodes with a shared system disk. Directory [EXE] will be created under the path you specify. Logical name NSCHED$EXE will be associated with this directory.

- **Disk space required**
  Initial cluster-common NSCHED$ area requires a total of 5,000 blocks of disk space. Node architecture specific area requires about 25,000 blocks. If this installation is an upgrade from a previous version, additional disk space (equal to the current total size of NSCHED$ directory) will be required to backup your current files. If you do not have sufficient space, abort the installation by pressing CTRL-Y at this time.

* Enter the full pathname for Unicenter Job Management - (cluster) common files [SYS$COMMON:[NSCHED]]:

  Selected pathname: SYS$COMMON:[NSCHED]

* Is that correct [Y]?

* Enter the full pathname for Unicenter Job Management - node specific files [SYS$COMMON:[NSCHED]]:

  Selected pathname: SYS$COMMON:[NSCHED]

* Is that correct [Y]?

** 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

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

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

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

* Node Name or IP Address ? W2KMGR
%UJMMGR_UNI_0000_050408_V-I-TRAPDST, The Unicenter Management station is set to “W2KMGR”
%UJMMGR_UNI_0000_050408_V-I-CREPRM, Created the file SYS$MANAGER:CAPOLY$SYSTARTUP.COM
%UJMMGR_UNI_0000_050408_V-I-SETPRM, You can modify the selection later, using:
SYS$MANAGER:CAPOLY$SET_STARTUP_PARAMS.COM

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-SYSDIR, This product creates system directory [CA_LIC].

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

Linking Unicenter Unicenter Job Management Manager Images...
Linking NSCHED.EXE ...
Linking SCHED DECNET...
Linking INTERFACE...
Linking RETRY....
Linking MANAGER...
Linking SHELL_INTERFACE...
Linking SUMMARIZE_LOG...
Linking DOD COMMAND...
Linking DB UTILITY....
Linking VSS_REPORTS...
Linking SCHED$LISTENER...
Linking SCHED$GET_BEST_NODE...
Linking MOTIF....
Linking Config Utility...
Linking CPU Utility...
Linking Convert Utility...

Providing files...
  Providing DCL interface, utilities, and HELP...
  Providing Wide Area Network capabilities...
  Providing Remote Executor capabilities for Agent...
  Providing DECEwindows Interface...
  Providing Callable Application Programming Interface (API)...

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

Installing links...

%VMSINSTAL-I-RESTORE. Restoring product save set U ...

The installation will now check 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-ADDMG, user record successfully added
%UAF-I-RDBADDMGU, identifier CAUNIVMS value [000713,000063] added to rights
database
%UAF-I-RDBADDMGU, identifier TNG value [000713,177777] added to rights
database

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.

%UJMMGR_UNI_0000_058408_V-I-BUILDING, Linking CAPOLY$TNGD...
%UJMMGR_UNI_0000_058408_V-I-BUILDING, Linking CAPOLY$STRAP...
%UJMMGR_UNI_0000_058408_V-I-BUILDING, Linking CAPOLY$CASEND...
%UJMMGR_UNI_0000_058408_V-I-BUILDING, Linking CAPOLY$FORCEX...

You may run the CCS integration Installation Verification
Procedure at any time by typing the command:

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

%UJMMGR_UNI_0000_058408_V-I-BUILDING, Linking CAPOLY$SCEVENT...
%UJMMGR_UNI_0000_058408_V-I-BUILDING, Linking CAPOLY$SCHECH...

--------------------------------------------------------------------------
Product Management Command Files
--------------------------------------------------------------------------
Startup: $ @SYS$STARTUP:UJM$MANAGER$STARTUP.COM
Shutdown: $ @SYS$STARTUP:UJM$MANAGER$SHUTDOWN.COM
IVP: $ @SYS$TEST:UJM$MANAGER$IVP.COM
Deinstall: $ @SYS$UPDATE:UJM$MANAGER$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$STARTUP:SYSTARTUP_VMS.COM in order to start the product automatically at system boot time. Similarly, a call to the product or common shutdown procedure should be inserted in the system shutdown procedure, SYS$MANAGER:SYSHUTDWN.COM

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...%UJMMGR_UNI_0000_yymmdd_V-W-UPGDB, Could not find the existing job database.

Job database VSS.DAT could not be found in the following paths:
1. NSCHED$ logical name
2. NSCHED$DATA logical name "NSCHED$DATA" = "SYS$COMMON:[NSCHED.DATA]" (LNMSYSTEM_TABLE)

Unicenter Job Management Manager will create new VSS.DAT file during startup. If there is an existing job database (VSS.DAT) file to be used, please correctly define the NSCHED$ logical name or copy the desired file to the NSCHED$ directory, then answer "NO" to the following question to retry the search:

* Do you want to create a new job database file (VSS.DAT) [YES]? y

DECwindows interface installation has completed successfully.

The DECwindows interface may be accessed by type the command:

$ schedule/interface=decwindows

You may want to edit the startup file UJM$MANAGER$STARTUP.COM to change the default value for Max_jobs, or to enable load balancing... Users who are currently logged on must log off and then back on again to gain access to the Unicenter Job Management command line interface.

IMPORTANT

For each Unicenter Job Management user on this node set up a proxy to self. using AUTHORIZE as follows:

$ RUN AUTHORIZE
UAF> ADD/PROXY <local-node>::<local-user> <local-user>/DEFAULT

An additional proxy is needed to support job execution synchronization. This proxy must exist in AUTHORIZE on the DEPENDENT JOB NODE. If both Unicenter Job Management Managers are started under the SYSTEM account.
then add:

```
UAF> add/proxy <predecessor-job-node>::SYSTEM SYSTEM/DEFAULT
```

Finally, add the account for the network object: first determine an UIC which is either in the same group as the default DECNET account, or in a group by itself. Then, run AUTHORIZE as follows:

```
UAF> ADD SCHED_DECNET/FLAGS=DISUSER/UIC=<uic-spec>
UAF> EXIT
```

Please refer to the Unicenter Job Management Installation Guide for more details.

%RUN-S-PROC_ID, identification of created process is 00000506
%RUN-S-PROC_ID, identification of created process is 00000507

OpenVMS TNG Gateway Daemon Shutdown Complete

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

The Unicenter Management station is set to "W2KMGR"

Note: You may change the list of products to be started on this node, using:

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

prior to launch this startup procedure...

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

The Unicenter Management station is set to "W2KMGR"

Starting OpenVMS TNG Gateway Daemon...

%RUN-S-PROC_ID, identification of created process is 0000050A
Job Management Manager already running...
Starting Job Management Jobflow Daemon...

%RUN-S-PROC_ID, identification of created process is 0000050B
Starting CAPOLY$SCHEVENT...
%RUN-S-PROC_ID, identification of created process is 0000050D

Beginning the Unicenter Job Management Manager Installation Verification Procedure.
Job Management job #1 (Name: IVP_JOB) Started on node I64BOX
Job Management Job #1 (Name: IVP_JOB) Completed on node I64BOX
%NSCHED-I-RQSTSUCCESS, Job 1 - Created
%NSCHED-I-FLAGSET, Job IVP_JOB - DELETE Requested

Unicenter Job Management Manager has been successfully installed.

Starting TNG$LINKS$IVP

Sending IVP Request to node: W2KMGR
wait 5 seconds
Checking node: W2KMGR

................. Responded OK

Unicenter Links IVP succeeded!

Installation of UJMMGR_UNI_0000_yymmdd_V V3.0 completed at 17:10

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

Creating installation data file:
VMI$ROOT:[SYSUPD]UJMMGR_UNI_0000_yymmdd_V030.VMI_DATA

VMSINSTAL procedure done at 17:11

%DELETE-I-FILDEL, SYS$COMMON:[000000]CA$SETUP.DIR;1 deleted (8 blocks)
%DELETE-I-FILDEL, SYS$SYSROOT:[SYSMGR]CA$SETUP.INI;1 deleted (104 blocks)
%DELETE-I-FILDEL, SYS$SYSROOT:[SYSMGR]CA$SETUP.COM;1 deleted (104 blocks)
%DCL-S-RETURNED, control returned to process SYSTEM_163

Unicenter Job Management for OpenVMS

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------------------------------------
PRODUCT
1      Job Management Manager Install
2      Job Management Agent Install
I      Unicenter Integration Help
P      Product Readme
H      Install Help
E      Exit

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

%DELETE-I-FILDEL, SYS$SYSROOT:[SYSMGR]CA$SETUP.COM;1 deleted (104 blocks)
$
Unicenter Job Management Agent OpenVMS I64 Installation

The following example shows the log file from a sample installation of the agent.

$ run DQA0:[000000]SETUP_IA64.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: ujmreadme.txt

Setup location: DQA0:[000000]

Unicenter Job Management for OpenVMS

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------------------------------------

PRODUCT

1   Job Management Manager Install
2   Job Management Agent 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

%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:

UJMAGT_UNI_0000_yymmdd_V V3.0

Beginning installation of UJMAGT_UNI_0000_yymmdd_V V3.0 at 14:46

%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

%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]?
* Do you want to activate the CA Common Services Integration Components [YES]?

This product needs a TCP/IP network stack installed and started on this node. You can use TCPWARE, MULTINET, UCX or Compaq TCP/IP Services.

The TCP/IP stack TCPIP 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 CAPOLY$BIN.
%VMSINSTAL-I-SYSDIR. This product creates system disk directory CAPOLY$TMP.
%VMSINSTAL-I-SYSDIR. This product creates system disk directory CAPOLY$DATA.
COMMON Install complete
%VMSINSTAL-I-RESTORE. Restoring product save set R ...
%UJMAGT_UNI_0000_yymmdd_V-I-EXISTS. Directory VM$SPECIFIC:[UNIVMS.BIN] already exists.

Unicenter for OpenVMS - product startup selection
----------------------------------------------
1 Unicenter Job Management ...................... NO
2 Unicenter Job Management Agent ................. YES
3 Unicenter Universal Job Management Agent ...... NO
4 Unicenter NSM Workload Management Jobflow Support NO
5 Unicenter Job Management NSM/UCS Integration NO
To change a selection, enter the corresponding index number, 
or RETURN to accept the list. >

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

* Node Name or IP Address ? W2KMGR
%UJMAGT_UNI_0000_yymmdd_V-I-TRAPDST, The Unicenter Management station is set to 
 "W2KMGR"
%UJMAGT_UNI_0000_yymmdd_V-I-CREPRM, Created the file 
SYS$MANAGER:CAPOLY$SYSTARTUP.COM
%UJMAGT_UNI_0000_yymmdd_V-I-SETPRM, You can modify the selection later, using:
SYS$MANAGER:CAPOLY$SET_STARTUP_PARAMS.COM

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-SYSDIR, This product creates system directory [CA_LIC].

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

Linking Agent...
Linking NSCED$AGENT.EXE ...

Linking NSCED$AGENT_IVP.EXE ...
Linking NSCED$AGENT_SHUTDOWN.EXE ...

Providing files...
Providing NSCED$AGENT.EXE ...
Providing NSCED$AGENT_SHUTDOWN.EXE ...
Providing NSCED$AGENT_IVP.EXE ...
Providing NSCED$AGENT_DO_COMMAND.COM ...
Providing NSCED$AGENT_RUN.COM ...

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

Installing links...

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

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-ADDMGS, user record successfully added
%UAF-I-RDBADDMGU, identifier CAUNIVMS value [000713.000063] added to rights 
database
%UAF-I-RDBADDMGU, identifier TNG value [000713.17777] added to rights database

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

%UJMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLYS$TNGD...
%UJMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLYS$TRAP...
%UJMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLYS$CASEND...
%UJMAGT_UNI_0000_yymmdd_V-I-BUILDING, Linking CAPOLYS$FORCEX...

You may run the CCS integration Installation Verification Procedure at any time by typing the command:

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

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

Common Component Command Files
------------------------------------------
Startup: $ @SYS$STARTUP:CAPOLYS$STARTUP
Shutdown: $ @SYS$STARTUP:CAPOLYS$SHUTDOWN
Reconfig Common Startup: $ @SYS$MANAGER:CAPOLYS$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$STARTUP:SY$STARTUP.VMS.COM in order to start the product automatically at system boot time. Similarly, a call to the product or common shutdown procedure should be inserted in the system shutdown procedure, SY$MANAGER:SY$SHUTDOWN.COM

%VMSINSTALL-I-MOVEFILES, Files will now be moved to their target directories...
%DCL-I-TABSUPER, previous table LN$SCHED_AGENT_TABLE has been superseded
%RUN-S-PROC_ID, identification of created process is 0000052C
OpenVMS TNG Gateway Daemon Shutdown Complete

Unicenter for OpenVMS - product startup selection
-------------------------------------------------
1 Unicenter Job Management ....................... NO
2 Unicenter Job Management Agent ............... YES
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 Manager ................. NO
8 Unicenter System Watchdog NSM/UCS Integration ...... NO
9 Unicenter Performance Management Agent .............. NO
10 Unicenter NSM Performance Trend Cube ............... NO
11 Unicenter Common Services OpenVMS Gateway ........ YES

The Unicenter Management station is set to "W2KMGR"

Note: You may change the list of products to be started on this node, using: @SYS$MANAGER:CAPOLY$SET_STARTUP_PARAMS.COM prior to launch this startup procedure...

Unicenter for OpenVMS - product startup selection
---------------------------------------------
1 Unicenter Job Management ....................... NO
2 Unicenter Job Management Agent ................... YES
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 Manager ................. NO
8 Unicenter System Watchdog NSM/UCS Integration ...... NO
9 Unicenter Performance Management Agent .............. NO
10 Unicenter NSM Performance Trend Cube ............... NO
11 Unicenter Common Services OpenVMS Gateway ........ YES

The Unicenter Management station is set to "W2KMGR"

Starting OpenVMS TNG Gateway Daemon...
%RUN-S-PROC_ID, identification of created process is 00000052D
Job Management Agent already running...

Beginning the Job Management Agent IVP

Unicenter Job Management Agent. 0 jobs running. 64 jobs max

The Job Management Agent IVP procedure has completed successfully.

Starting TNG$LINKS$IVP

Sending IVP Request to node: W2KMGR

................. Responded OK

Unicenter Links IVP succeeded!

Installation of UJMAGT_UNI_0000_yymmdd_V V3.0 completed at 14:50

Adding history entry in VMS$ROOT:[SYS$SUPD]VMSINSTAL.HISTORY

Creating installation data file: VMS$ROOT:[SYS$SUPD]UJMAGT_UNI_0000_yymmdd_V030.VMI_DATA

VMSINSTAL procedure done at 14:50

%DELETE-I-FILDEL, SYS$COMMON:[000008]CASSETUP.DIR;1 deleted (8 blocks)
%DELETE-I-FILDEL, SYS$SYS$ROOT:[SYS$MG]CASSETUP.INI;1 deleted (104 blocks)
%DELETE-I-FILDEL, SYS$SYS$ROOT:[SYS$MG]CASSETUP.COM;1 deleted (104 blocks)
%DCL-S-RETURNED, control returned to process SYSTEM_49
Unicenter Job Management for OpenVMS
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------------------------------------
PRODUCT
1      Job Management Manager Install
2      Job Management Agent Install
I      Unicenter Integration Help
P      Product Readme
H      Install Help
E      Exit

Please Enter the Number of the Product you wish to install >>> e
%DELETE-I-FILDEL. SYS$SYSROOT:[SYSMGR]CA$SETUP.COM;1 deleted (104 blocks)
$
Chapter 8: Unicenter Job Management Manager Logical and Kit Names

The following tables list the logical names and kit names used in Unicenter Job Management Manager (the manager).

**Unicenter Job Management Manager Logical Names**

The following table describes Unicenter Job Management Manager logical names. These names appear in the file SYS$STARTUP:UJM$MANAGER$STARTUP.COM, mostly in lines that are commented. To override a particular manager default, uncomment the appropriate line and edit it if necessary.

<table>
<thead>
<tr>
<th>Logical Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NODE_TO_USE</td>
<td>Defined by users if they selected custom load balancing. It is a local logical, so often it will not have wide impact.</td>
</tr>
<tr>
<td>NSCHED$</td>
<td>Default set up at installation, based on response from user questions. Points to the directories that contain all of the manager’s files.</td>
</tr>
<tr>
<td>NSCHED$BS_MAX_WAIT</td>
<td>The maximum seconds to wait &quot;Batch start.&quot; <strong>Default:</strong> 1800</td>
</tr>
<tr>
<td>NSCHED$BS_RETRIES</td>
<td>The number of retries to send &quot;Batch start.&quot; <strong>Default:</strong> 2</td>
</tr>
<tr>
<td>NSCHED$CHECK_RATIO</td>
<td>The ratio between timer events and check procedure. <strong>Default:</strong> 100</td>
</tr>
<tr>
<td>NSCHED$CLEAR_RESTART_PARAM</td>
<td>A job can have a restart parameter set while it is running, so if it fails during execution, the restart parameter can be passed back when it restarts. If this is defined as TRUE, this behavior is maintained. If defined as FALSE, the restart parameter will not be cleared when the job completes. <strong>Default:</strong> TRUE</td>
</tr>
<tr>
<td>NSCHED$COM</td>
<td>Default set up at installation, based on response from user questions. Points to the directory that contains the manager’s script files.</td>
</tr>
<tr>
<td>Logical Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>NSCHED$CUSTOM_LOAD_BALANCE</td>
<td>If defined to point to a command procedure to execute, the current (default) load balancing will be overridden. The command file will be executed at the time of considering a load balance. The manager expects that command procedure to have defined a logical called NODE_TO_USE as the nodename to use. <strong>Default: UNDEFINED</strong></td>
</tr>
<tr>
<td>NSCHED$DATA</td>
<td>Default set up at installation, based on response from user questions. Points to the directory that contains the manager's database and log files.</td>
</tr>
<tr>
<td>NSCHED$DEBUG</td>
<td>Sets debug either on or off. <strong>Default: OFF</strong></td>
</tr>
<tr>
<td>NSCHED$DEFAULT_JOB_MAX</td>
<td>Defines the maximum number of jobs allowed to run at one time. <strong>Default: 6</strong></td>
</tr>
<tr>
<td>NSCHED$DEFAULT_JOB_PRI</td>
<td>Sets the priority level at which jobs will run. <strong>Default: Level 4</strong></td>
</tr>
<tr>
<td>NSCHED$DEFAULT_LOG</td>
<td>Defines the logging events that will be captured. <strong>Default: JOB_EVENT and ABNORMAL_EVENT</strong></td>
</tr>
<tr>
<td>NSCHED$DEFAULT_SD_ACTION</td>
<td>Defines the system default Special Day Action, which can be SKIP or HOLD. <strong>Default: SKIP</strong></td>
</tr>
<tr>
<td>NSCHED$EXE</td>
<td>Default set up at installation, based on response from user questions. Points to the directory that contains the manager’s executable files.</td>
</tr>
<tr>
<td>NSCHED$LBAL$CPU_WEIGHT</td>
<td>Weighs the CPU rating by multiplying the CPU rating by the translation of this logical. A valid range is from 0.0 to 1.0. <strong>Default: 0.5</strong></td>
</tr>
<tr>
<td>NSCHED$LBAL$INTERVAL</td>
<td>Determines the number of seconds between data collection. <strong>Default: 30.0 seconds</strong></td>
</tr>
<tr>
<td>NSCHED$LBAL$MEMORY_WEIGHT</td>
<td>Weighs the memory rating by multiplying the memory rating by the translation of this logical. A valid range is from 0.0 to 1.0. <strong>Default: 0.5</strong></td>
</tr>
<tr>
<td>NSCHED$LBAL$WAIT_AVAIL_NODE</td>
<td>When set to TRUE, directs the manager to place a job into Job Slot Wait for one of the nodes in the load balance group if no node is available in the job's load balance group when the job is scheduled to run. If this logical is not defined, or is set to FALSE, a job that is not able to load balance as directed runs on the default node. <strong>Default: FALSE</strong></td>
</tr>
<tr>
<td>NSCHED$LOAD_BALANCE</td>
<td>Turns load balancing on or off. <strong>Default: ON</strong></td>
</tr>
<tr>
<td>NSCHED$LOGFILE</td>
<td>Names the manager's log file. <strong>Default: NSCHED$::VERMONT_CREAMERY.LOG</strong></td>
</tr>
<tr>
<td>Logical Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>NSCHED$MAILBOX</td>
<td>System logical that points to the manager’s message mailbox.</td>
</tr>
<tr>
<td></td>
<td><strong>WARNING!</strong> Users should not touch this in any way.</td>
</tr>
<tr>
<td>NSCHED$MESSAGE_RATIO</td>
<td>The ratio between mailbox messages and timer_event.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> 5</td>
</tr>
<tr>
<td>NSCHED$node_SCHED_PORT</td>
<td>The variable node is the OpenVMS node name defined by SYS$NODE in DECnet.</td>
</tr>
<tr>
<td></td>
<td>If you cannot use the default UDP port 5482 on this system, define this</td>
</tr>
<tr>
<td></td>
<td>logical to override the default.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> 5482</td>
</tr>
<tr>
<td>NSCHED$NODEPS</td>
<td>Suppresses the display of job dependencies.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> TRUE</td>
</tr>
<tr>
<td>NSCHED$remnode_EXEC_PORT</td>
<td>The variable remnode is the name of the target remote node. The node name</td>
</tr>
<tr>
<td></td>
<td>can be, at most, 13 characters. Use this logical in the case of a remote</td>
</tr>
<tr>
<td></td>
<td>node that must use a UDP port number other than the default (5481). It</td>
</tr>
<tr>
<td></td>
<td>may require defining an alias for a remote node so that its length is</td>
</tr>
<tr>
<td></td>
<td>fewer than 14 characters. The variable remnode will be the same as the</td>
</tr>
<tr>
<td></td>
<td>node specified in the job’s REMOTE_NODE characteristic.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> 5481</td>
</tr>
<tr>
<td>NSCHED$REMOTE_SUPPORT_ENABLED</td>
<td>The default is defined during the installation when the installer</td>
</tr>
<tr>
<td></td>
<td>responds to questions. If TRUE, remote support will be available.</td>
</tr>
<tr>
<td>NSCHED$SILENT</td>
<td>Suppresses the connecting messages to remote nodes.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> TRUE</td>
</tr>
<tr>
<td>NSCHED$TERM_MAILBOX</td>
<td>System logical that points to the manager’s termination message mailbox.</td>
</tr>
<tr>
<td></td>
<td><strong>WARNING!</strong> Users should not touch this in any way.</td>
</tr>
<tr>
<td>NSCHED$TERMINATION_RATIO</td>
<td>The ratio between termination messages and mailboxes messages.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> 5</td>
</tr>
<tr>
<td>NSCHED$UID</td>
<td>Defines the location of the X-window interface User Interface Definition</td>
</tr>
<tr>
<td></td>
<td>(UID) file. Defined in INSTALL_INTERFACE.COM.</td>
</tr>
<tr>
<td>SCHED$BATCH_KEEP_LOG</td>
<td>Controls deletion of log files from batch mode jobs. If defined as FALSE,</td>
</tr>
<tr>
<td></td>
<td>log files from batch mode jobs will be automatically deleted.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> TRUE</td>
</tr>
<tr>
<td>SCHED$BATCH_NAME_PREFIX</td>
<td>Specifies the job name prefix of batch mode jobs.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> SCHEDULER</td>
</tr>
</tbody>
</table>
### Logical Name Description

<table>
<thead>
<tr>
<th>Logical Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHED$BATCH_PRINT_LOG</td>
<td>Controls printing of log files from batch mode jobs. If defined as TRUE, log files from batch mode jobs will be automatically printed. <strong>Default:</strong> FALSE</td>
</tr>
<tr>
<td>SCHEDULER$NODE</td>
<td>This logical is used instead of SYS$NODE which is defined only if DECnet is ‘ON.’ This allows the manager to work without DECnet.</td>
</tr>
<tr>
<td>UJM$COMMON</td>
<td>Default set up at installation, based on response from user questions. Points to the head of the tree that contains all Unicenter Job Management cluster common files.</td>
</tr>
<tr>
<td>UJM$SPECIFIC</td>
<td>Default set up at installation, based on response from user questions. Points to the head of the tree that contains all Unicenter Job Management node-specific files.</td>
</tr>
</tbody>
</table>
Unicenter Job Management Manager Installation Kit Files

The following tables list the installation kit files for the Unicenter Job Management Manager software. These kit files include five categories:

- The Unicenter Job Management Manager core files
- Startup and miscellaneous control files
- Unicenter Job Management Agent (the agent) files
- DCL interface files
- Motif interface files

All files reside in the NSCHED$ directory, unless the table indicates otherwise.

Unicenter Job Management Manager Core Files

The following table describes Unicenter Job Management Manager core files.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU_UTILITY.EXE</td>
<td>Shows the CPU rating of the local node, if available.</td>
</tr>
<tr>
<td>DB_UTILITY.EXE</td>
<td>Database compression utility.</td>
</tr>
<tr>
<td>NSCHED.EXE</td>
<td>Unicenter Job Management Manager program image.</td>
</tr>
<tr>
<td>RETRY.EXE</td>
<td>A program image that retries the manager’s remote operations.</td>
</tr>
<tr>
<td>SCHED$LISTENER.EXE</td>
<td>Detached process listening for termination messages from remote Agents.</td>
</tr>
</tbody>
</table>
| SCHEDULER$DOO_COMMAND.EXE   | Run by jobs that are created by the manager. Protection must be set to W:RE.
| SCHEDULER$SHELL.COM         | A command shell used to execute jobs.                                      |
| SCHEDULER$SUMMARIZE_LOG.EXE | Used to generate a log file summary.                                      |
| VSS.DAT                     | The job database.                                                          |
| VSS_REPORTS.EXE             | A log file reader/reporter utility.                                        |
### Startup and Miscellaneous Control Files

The following table describes the manager’s startup and miscellaneous control files.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPENDENCY.DAT</td>
<td>File for dependencies, created or updated by the manager when you create a dependency.</td>
</tr>
<tr>
<td>INSTALL_DO.COM</td>
<td>Installs the job command Agent SCHEDULER$DOO_COMMAND.EXE.</td>
</tr>
<tr>
<td>INSTALL_INTERFACE.COM</td>
<td>Installs all Unicenter Job Management Manager user interfaces.</td>
</tr>
<tr>
<td>LBAL_ROUND_ROBIN.COM</td>
<td>Alternative load-balancing procedure that performs round-robin load balancing.</td>
</tr>
<tr>
<td>LOAD_BALANCE.COM</td>
<td>Load-balancing command procedure. Performs dynamic load balancing within an OpenVMS Cluster. You can customize this command procedure to meet specific user requirements.</td>
</tr>
<tr>
<td>SCHED$GET_BEST_NODE.EXE</td>
<td>Load balancing file.</td>
</tr>
<tr>
<td>SCHED$LISTENER.COM</td>
<td>Runs the manager’s Remote Agent Listener.</td>
</tr>
<tr>
<td>SCHED$SD_CLASSES.DAT</td>
<td>File for Special Day Class definitions, created or updated by the manager when you create a Special Day Class.</td>
</tr>
<tr>
<td>SCHED$SD_RESTRICTIONS.DAT</td>
<td>File for Special Day Restrictions, created to record the Day Class definitions (that is, user-defined calendars associated with jobs that run only on specified dates).</td>
</tr>
<tr>
<td>SCHED_DECNET.EXE</td>
<td>Detached process listening for communication requests from remote OpenVMS machine running the manager.</td>
</tr>
<tr>
<td>SCHED_RUN.COM</td>
<td>Runs the manager’s program image.</td>
</tr>
<tr>
<td>SYS$SYSTEM:SCHED_DECNET.COM</td>
<td>Runs the manager’s remote network object.</td>
</tr>
</tbody>
</table>
### File Description

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMP_PARMS.DAT</td>
<td>File that contains parameter override values, created when a RUN or SET command is executed with parameter override values.</td>
</tr>
<tr>
<td>UJM$MANAGER$IVP.COM</td>
<td>The manager’s installation verification procedure. Resides in the SYS$TEST directory.</td>
</tr>
<tr>
<td>UJM$MANAGER$SHUTDOWN.COM</td>
<td>The Unicenter Job Management Manager shutdown procedure that the SYS$MANAGER:SYSSHUTDOWN.COM procedure should call.</td>
</tr>
<tr>
<td>UJM$MANAGER$STARTUP.COM</td>
<td>Installs the manager’s images and starts them running. Resides in the SYS$STARTUP directory.</td>
</tr>
</tbody>
</table>

### Unicenter Job Management Agent Files

The following table describes Unicenter Job Management Agent files.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCHED$AGENT.EXE</td>
<td>SYS$SYSTEM Agent image.</td>
</tr>
<tr>
<td>NSCHED$AGENT_DO_COMMAND.COM</td>
<td>Same as DO_COMMAND for server.</td>
</tr>
<tr>
<td>NSCHED$AGENT_RUN.COM</td>
<td>Same as SCHED_DECNET.COM but for the agent.</td>
</tr>
<tr>
<td>UNIJM$AGENT$IVP.COM</td>
<td>SYS$TEST IVP for the agent.</td>
</tr>
<tr>
<td>UNIJM$AGENT$SHUTDOWN.COM</td>
<td>SYS$STARTUP shutdown for the agent.</td>
</tr>
<tr>
<td>UNIJM$AGENT$STARTUP.COM</td>
<td>SYS$STARTUP startup file for the agent.</td>
</tr>
</tbody>
</table>
DCL Interface Files

The following table describes the manager’s DCL files.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHEDULER$CONFIG.EXE</td>
<td>The DCL interface program image for Load Balance Group database subsystem</td>
</tr>
<tr>
<td>SCHEDULER$INTERFACE.EXE</td>
<td>The DCL interface program image for general command users.</td>
</tr>
<tr>
<td>SCHEDULER$MANAGER.EXE</td>
<td>The DCL interface program image for privileged command users.</td>
</tr>
<tr>
<td>SCHEDULER$SHELL_INTERFACE.EXE</td>
<td>The DCL interface shell for the Unicenter Job Management Manager subsystem.</td>
</tr>
<tr>
<td>SCHEDULER.CLD</td>
<td>The manager’s command language definitions file for the DCL interface.</td>
</tr>
<tr>
<td>SCHEDULER.HLB</td>
<td>The manager’s help file.</td>
</tr>
</tbody>
</table>

Motif Interface Files

The following table describes Unicenter Job Management Manager Motif Interface files.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHED_RTL.EXE</td>
<td>Vested image runtime library for Motif interface on OpenVMS Alpha only.</td>
</tr>
<tr>
<td>SCHEDULER$MOTIF.DAT</td>
<td>Same as the file SCHEDULER$MOTIF_COLOR.DAT, this file is moved to the directory DECW$SYSTEM_DEFAULTS.</td>
</tr>
<tr>
<td>SCHEDULER$MOTIF.EXE</td>
<td>The Motif interface image for the manager.</td>
</tr>
<tr>
<td>SCHEDULER$MOTIF.UID</td>
<td>The user interface database for the Motif interface.</td>
</tr>
<tr>
<td>SCHEDULER$MOTIF_BW.DAT</td>
<td>Motif resource file used by the manager for single-plane displays; copy to DECW$USER_DEFAULTS:SCHEDULER$MOTIF.DAT.</td>
</tr>
</tbody>
</table>
Uninstall scripts enable you to easily remove Unicenter Job Management for OpenVMS components. Two scripts are included for each component. One script removes both the base product and the CA Common Services Integration components associated with it. The other script removes only the CA Common Services Integration components. The command files to execute the scripts are located in the SYS$UPDATE directory.

Uninstall Scripts

The following table lists the uninstall scripts.

<table>
<thead>
<tr>
<th>Product</th>
<th>Main Uninstall Script</th>
<th>Links Only Uninstall Script</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unicenter Job Management</td>
<td>UNIJM$AGENT$DEINSTALL.COM</td>
<td></td>
</tr>
<tr>
<td>Agent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unicenter Job Management</td>
<td>UJM$MANAGER$DEINSTALL.COM</td>
<td>SCHMGRLNK$DEINSTALL.COM</td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

This appendix provides answers to frequently asked questions about Unicenter Job Management Manager (the manager) installation.

FAQs

If I install a new version of Unicenter Job Management Manager, what happens to the old version that was running?

The old version of the manager is superseded by the new version. During the installation, you may choose to stop the old manager and restart the new manager. From the DCL prompt, you may stop the manager by entering the following command:

SCHEDULE> STOP

The old job database is preserved across manager versions. To start the manager, run the startup procedure in the file SYS$STARTUP:UJM$MANAGER$STARTUP.COM.

After installing the manager, how do I define the command SCHEDULE?

When you install the manager on a node, only that node has the updated DCL table. The tables on the other nodes are updated when those nodes are rebooted.

You can also update the DCL tables by entering the following command from an account that has the CMKRNL privilege:

$ INSTALL REPLACE SYSLIBRARY:DCLTABLES.EXE

You can use SYSMAN to perform this task automatically on every node on your OpenVMS Cluster. If any users are currently logged in, they must log out and log in again for the new DCL tables to take effect for them.
When I install a new version of the manager, do I have to reenter all the jobs that are in the current database?

You should be able to use your current database. In the installation procedure, just specify the manager to be installed in the same area as before—usually SYS$COMMON:[NSCHED].

Will the manager operate in a heterogeneous cluster?

Yes. To run the manager in any cluster, follow the installation instructions to assign files to cluster common devices and to platform specific devices.
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