Digital Cartridge Server Component for OpenVMS

Installation Guide

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This guide describes how to install the Digital Cartridge Server Component (DCSC) for OpenVMS. It describes the required hardware and software, installation procedure, what to do after installation, and how to run the Installation Verification Procedure.

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Preface

The Digital Cartridge Server Component (DCSC) for OpenVMS™ software provides VAX™ and Alpha AXP™ computer users with access to tape cartridges within automated tape libraries. Access is provided by the DCSC server software which, in turn, accesses a central library server that controls all of the resources within the configuration.

This guide describes how to install the DCSC software on a computer running OpenVMS operating software, Version 5.5-2 or higher. It describes the required hardware and software, installation procedure, what to do after installation, and how to run the Installation Verification Procedure (IVP).

Audience

This guide is for anyone who needs to install the DCSC software on an OpenVMS operating system. You must have SYSTEM PRIVILEGES (SETPRV) to install the software. In addition, you must be familiar with the OpenVMS Installation Procedure (VMSINSTAL) and know how to set the parameters and process quotas for your system.

Document Structure

This guide is structured as follows:

- Chapter 1, Preparing to Install the Digital Cartridge Server Component, describes requirements for installing the DCSC software, VMScluster™ considerations, and software and hardware prerequisites.
- Chapter 2, Installing the Digital Cartridge Server Component, explains how to install the DCSC. It also describes each installation procedure question.
- Chapter 3, After Installing the Digital Cartridge Server Component, describes the various tasks that you need to perform after installing the DCSC.
- Chapter 4, Installation Verification Procedure, explains how to run the IVP.
- Appendix A, Sample Installation, contains a sample installation of DCSC. This sample was run on a system that had no previous version of DCSC installed.
- Appendix B, Files and Logical Names Installed on Your System, provides a list of the logical names that are entered into the system logical name tables.

Related Documentation

The following guides, including this guide, comprise the DCSC documentation set:

- *Digital Cartridge Server Component for OpenVMS System Manager's Guide* — This guide describes how to manage a system after the DCSC is installed. It describes its environment, how to use the Configuration File Editor, and includes tips for troubleshooting and handling errors.
- *Digital Cartridge Server Component for OpenVMS Programmer's Reference Guide* — This guide provides a reference for programmers who need to use the DCSC Run-Time Library routines to create applications. It also provides an overview of the routines and C examples.
- *Digital Cartridge Server Component for OpenVMS User's Reference Guide* — This guide summarizes the main functions of the DCSC, highlighting the functions performed by the computer operator, such as mounting and dismounting tapes. In addition, it provides a command description section.

The following guides provide information on the ACS library and the DEC TCP/IP Services for OpenVMS (also known as UCX) software:

- *TC44-AA/BA STI to ACS library Interconnect Hardware Installation Guide*
- *KCM44 Tape Controller User Guide*
- *DEC TCP/IP Services for OpenVMS System Manager's Guide*

For more information on using LMF, see the *OpenVMS License Management Utility Manual*.

Conventions

Convention	Meaning
Enter	The word *enter* means to type information at the keyboard, and then press the Return key.
Return key	The Return key is not shown in formats and examples. Assume that you must press Return after typing a command or other input to the system unless instructed otherwise.
Ctrl/*x*	This key sequence is sometimes in an instruction. It means to press the *x* key while holding down the Ctrl key. For example, Ctrl/Y means press the Ctrl key and the letter Y key simultaneously.
`$ SHOW TIME` `28-OCT-93 11:55:22`	Command examples are in monospaced type, and show all user-entered commands in bold letters. Displays or output lines of prompting characters that the system prints are shown in regular type.
RUN AUTHORIZE	Uppercase words in examples represent commands. Enter all uppercase words exactly as they are displayed in this guide.
filename	Lowercase words in examples tell you to supply an input value, not to enter the literal word.

1

Preparing to Install the Digital Cartridge Server Component

This chapter discusses the preparations and requirements necessary for installing the Digital Cartridge Server Component (DCSC) for OpenVMS.

Your bill of materials (BOM) and Indented Bills Report (BIL) specify the number and contents of your media. Be sure to verify the contents of your kit with this information. If your kit is damaged or if you find that parts of it are missing, contact your Digital representative.

DCSC provides online release notes. Digital strongly recommends that you read the release notes before proceeding with the installation. For information on reviewing the release notes, see the description of the OPTIONS N parameter in Section 2.1.

1.1 Prerequisite Hardware

Table 1–1 describes the hardware items needed to install the DCSC software.

Table 1–1 Hardware Requirements for Installing DCSC

Item	Purpose
TC44-AA or TC44-BA	Provides the data conversion between the Digital Standard Tape Interconnect (STI) and the Federal Information Processing Standard (FIPS) interface through an HSC40 or HSC70 to the ACS library.
KCM44	Provides the data conversion between the Digital XMI backplane and the Federal Information Processing Standard (FIPS) interface.
STI Cables	Connects the TC44 to the HSC. The STI cable part numbers are BC26V-*xx* (*xx* = length in feet).
FIPS60 Cables	Connects the TC44 to the ACS library hardware.

See the *TC44-AA/BA STI to ACS library Interconnect Hardware Installation Guide* or *KCM44 Tape Controller User Guide* for details on the hardware configuration requirements before you install the DCSC software.

1.2 Prerequisite and Optional Software

Table 1–2 describes the software that must be installed on your system before you install DCSC. The table also includes information about optional software that you can use with DCSC. The Software Product Description (SPD) contains a complete list of the prerequisite and optional software and the required version numbers.

Table 1–2 Prerequisite and Optional Software

Prerequisite Products	Purpose
DEC TCP/IP Services for OpenVMS (UCX) Version 3.1	Communication between DCSC and ACS library software

Optional Products	Purpose
VAX C Version 3.0	VAX Application development
DEC C Version 1.3	VAX and Alpha AXP Application development
Storage Library System (SLS) V2.3	Automated data backup and restore

1.3 License Registration

Before you install and run DCSC, you must register the DCSC license through the OpenVMS License Management Facility (LMF) in accordance with the license agreement signed by your site. The license registration information is contained in the Product Authorization Key (PAK). The PAK is a certificate that has information about the license to run the software. It is shipped with DCSC or to a location based on your license order.

If you are installing DCSC as an update on a node or VMScluster already licensed for this software, you have already completed the PAK registration requirements.

You must register and load your license, and configure and start up the DCSC *before* you run the IVP and use the software.

To register a license under OpenVMS, first log in to the system manager's account, SYSTEM. Then choose one of the following options for registering a license:

- Invoke the SYS$UPDATE:VMSLICENSE.COM procedure. When it prompts you for information, respond with data from your License PAK.
- Enter the LICENSE REGISTER command with the appropriate qualifiers that correspond to License PAK information at the DCL ($) prompt.

If you plan to install DCSC on more than one node in a VMScluster, you will need to register the DCSC license on the other nodes after you complete this installation. See Section 3.4 for additional VMScluster postinstallation procedures.

1.4 DEC TCP/IP Services for OpenVMS Requirements

After installing the DEC TCP/IP Services for OpenVMS (UCX) software, you must increase the number of device sockets. To do this, add the following line to the command procedure SYS$MANAGER:UCX$INET_SET_INTERFACES.COM:

```
$ UCX SET COMMUNICATION/DEVICE_SOCKETS=300
```

Add the command line on each node of the cluster that is running the DEC TCP/IP Services for OpenVMS software. This command line must be added immediately after the other $ UCX SET commands in the command procedure.

1.5 Installation Procedure Requirements

Depending on your type of media and system configuration, the installation procedure takes approximately 5 to 20 minutes, using VMSINSTAL. This includes running the IVP and editing the DCSC system startup and configuration files.

The installation procedure checks the following:

- Whether you are running the required version of the OpenVMS operating system
- Whether you are running the required version of the DEC TCP/IP Services for OpenVMS software
- Whether you have installed the license for DCSC
- Whether you have enough disk space to install DCSC
- Whether you have the minimum required system parameter values

The following sections discuss the various requirements for installing the DCSC.

1.5.1 Privileges and Disk Space

To install DCSC, you must be logged in to an account that has SETPRV, or at least CMKRNL, WORLD, or SYSPRV privilege. Digital recommends that you use the system manager's account (SYSTEM) to install DCSC.

Note

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

On a OpenVMS System, the DCSC requirements for free disk storage space are different during installation and after installation. You must have at least 8000 free blocks before you start the installation. After installation, DCSC permanently uses 7500 blocks. These figures are the minimum space requirements. Extra disk space is needed for the log files that are generated during the DCSC server operation if logging is enabled.

The DCSC requirements for free disk storage space on an Alpha AXP system are different during installation and after installation. You must have at least 20,000 free blocks before you start the installation. After installation, DCSC permanently uses 17,000 blocks. These figures are the minimum space requirements. Extra disk space is needed for the log files that are generated during the DCSC server operation if logging is enabled.

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

```
$ SHOW DEVICE device-name:
```

The following describes the *device-name* parameter:

device-name
The name of the device on which you plan to install the software. For example, SYS$SYSDEVICE: is the device name for the system disk. Be sure to check the free space of the disk on which the software will be installed.

1.5.2 System Parameters

When installing DCSC on a OpenVMS System, certain system parameter values are recommended. The minimum required values are listed in Table 1–3.

Table 1–3 Minimum Required System Parameter Values (VAX OpenVMS)

System Parameter	Minimum Required Value
GBLPAGES	n + 4300
GBLPAGFIL	n + 4300
GBLSECTIONS	n + 2

For a successful installation of DCSC, the value for the GBLPAGES parameter must be 4300 or greater. Add 4300 to the current value for this parameter to get the new system value with which to update SYSGEN.

In addition, the value for the GBLSECTIONS parameter must be 2 or greater. Add 2 to the current value for this parameter to get the new system value with which to update SYSGEN.

When installing DCSC on an Alpha AXP System, certain system parameter values are recommended. The minimum required values are listed in Table 1–4.

Table 1–4 Minimum Required System Parameter Values (Alpha AXP OpenVMS)

System Parameter	Minimum Required Value
GBLPAGES	n + 5000
GBLPAGFIL	n + 313
GBLSECTIONS	n + 3

For a successful installation of DCSC on an Alpha AXP system, the value for the GBLPAGES parameter is defined in pagelets which are 512 bytes. Add 5000 to the current value for this parameter to get the new system value with which to update SYSGEN.

For Alpha AXP hardware, GBLPAGFIL, in pages, is machine dependent. Pages vary in size from 8KB to 64KB. For the current Alpha AXP, the page size is 8KB.

In addition, the value for the GBLSECTIONS parameter must be 3 or greater. Add 3 to the current value for this parameter to get the new system value with which to update SYSGEN.

1.5.2.1 Checking System Parameter Values

To check the values of your system parameters, invoke SYSGEN by entering the following command at the DCL prompt:

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

At the SYSGEN> prompt, enter the SHOW command to display the current value of a system parameter. For example:

```
SYSGEN> SHOW GBLPAGES
```

After you check the parameters with the SHOW command, exit SYSGEN and return to the DCL level by entering the EXIT command at the SYSGEN> prompt:

```
SYSGEN> EXIT
$
```

If you need to increase the parameters, use the AUTOGEN command procedure, as described in the following section.

1.5.2.2 Changing System Parameter Values with AUTOGEN

Use AUTOGEN to change the system parameters. AUTOGEN automatically adjusts values for parameters that are associated with the values you manually reset.

To change system parameters with AUTOGEN, edit the following file:

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

To modify any of the parameter values in the file, delete the current value associated with that parameter and enter the new value.

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

```
GBLPAGFIL = 10240     !Minimum global pages needed
```

To modify incremental parameters such as GBLPAGES and GBLSECTIONS, use the MIN_ prefix.

The following example limits the global page setting to 12740, which is the 10240 minimum value required by the system (shown in the previous example) plus the 4300 required by DCSC on the VAX.

```
MIN_GBLPAGES = 12740    !Minimum global pages needed including 4300
!                       !required by DCSC on the VAX
```

Note

Do not use a value that exceeds the amount of page file space available on the system when setting the page file quota.

After you make all the changes, exit from the editor and execute the AUTOGEN procedure to recalculate the system parameters. To do this, enter the following command at the DCL prompt:

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

When you specify the REBOOT parameter, AUTOGEN performs an automatic system shutdown and then reboots the system. When the system is rebooted, the new parameter values take effect.

Note

If any users are logged in to the system, they are immediately disconnected during the shutdown.

If the SAVE option was chosen at system shutdown time, AUTOGEN automatically adjusts the SYSGEN parameters based on the consumption of resources since the last reboot. If you do not want to take advantage of this

automatic adjustment, include the NOFEEDBACK qualifier on the AUTOGEN command line, as follows:

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

For more information about using AUTOGEN, see the OpenVMS System Management Subkit.

1.5.3 Installation Account Quotas

When you invoke VMSINSTAL, it checks the following:

- Whether you have set your default device and directory to SYS$UPDATE
- Whether you are logged in to a privileged account
- Whether you have adequate quotas for installation
- Whether any users are logged in to the system

VMSINSTAL has the following minimum requirements for the installation account quotas:

ASTLM = 24
BIOLM = 18
BYTLM = 32768
DIOLM = 18
ENQLM = 30
FILLM = 20

If VMSINSTAL detects any problems during the installation, it notifies you and asks if you want to continue the installation.

To continue, enter YES. To stop the installation process and correct the situation, enter NO or press the Return key. Then, correct the problem and restart the installation.

1.5.4 Modifying Account Quotas

User account quotas are stored in the SYSUAF.DAT file. If you need to verify and change user account quotas, use the OpenVMS Authorize Utility (AUTHORIZE). To do this, log in to a privileged account, set your directory to SYS$SYSTEM, and run AUTHORIZE, as shown in the following example:

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

At the UAF> prompt, enter the SHOW command with the account name to check its quota. For example, to check the SYSTEM account quotas, enter the following command:

```
UAF> SHOW SYSTEM
```

To change a quota, enter the MODIFY command.

The following example changes the FILLM quota for the SYSTEM account using the MODIFY command, and then exits from the utility:

```
UAF> MODIFY SYSTEM/FILLM=20
UAF> EXIT
```

After you exit from the OpenVMS Authorize Utility, the system displays messages indicating whether changes were made. Once the changes have been made, you must log out and log in again before the new quotas take effect.

For more information on modifying account quotas, see the description of the OpenVMS Authorize Utility in the OpenVMS System Management Subkit.

1.5.5 Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks if you have backed up your system disk. Digital recommends that you back up a system disk before installing any software product.

Use the backup procedures that are established at your site. For details on performing a system disk back up, see the section on the BACKUP Utility in the OpenVMS System Management Subkit.

2

Installing the Digital Cartridge Server Component

This chapter describes how to install the Digital Cartridge Server Component (DCSC) for OpenVMS. It also contains a step-by-step description of the installation procedure using VMSINSTAL and error and recovery information.

2.1 The Installation Procedure

The installation procedure consists of a series of questions and informational messages. See Appendix A for a sample installation.

To abort the installation procedure at any time, press Ctrl/Y. When you press Ctrl/Y, the installation procedure deletes all the files it has created up to that point and exits. You can then restart the installation.

1. **Invoke the VMSINSTAL command procedure.**

   VMSINSTAL is located in the SYS$UPDATE directory. To start the installation, invoke VMSINSTAL from a privileged account, such as the SYSTEM account, as follows:

   ```
   $ @SYS$UPDATE:VMSINSTAL saveset-name device-name OPTIONS N
   ```

   The following list defines the VMSINSTAL parameters:

   saveset-name
   The installation name for the component. The following is an example of the installation name for DCSC:

   ```
   DCSC030
   ```

   device-name
   The name of the device on which you plan to mount the media. For example, MTA0: is the device name for a tape drive. It is not necessary to use the console drive for this installation. However, if you do use the console drive, you should replace any media you removed once the installation is complete.

   OPTIONS N
   An optional parameter that indicates you want to see the question on release notes. If you do not include the OPTIONS N parameter, VMSINSTAL does not ask you to choose an option for reviewing the release notes. Digital recommends that you read the release notes before proceeding with the installation, in case they contain additional information about the installation.

Note

If you are restarting the installation and have already reviewed the release notes, you do not need to specify OPTIONS N.

There are several other options you can select when you invoke VMSINSTAL. They are as follows:

- A — Auto-answer Option

  Initially creates a file that contains your answers to VMSINSTAL questions and prompts. You can then use the option and the answer file to save time during a reinstallation (typically after upgrading your system).

- G — Get Saveset Option

  Lets you temporarily store product save sets on a magnetic tape or in a disk directory.

- L — File Log Option

  Logs all activity on the terminal during installation.

- R — Alternate Root Option

  Lets you install the product to a system root other than that of the running system.

See the OpenVMS documentation on software installation in the OpenVMS System Management Subkit for detailed information on these options.

If you specify more than one option, separate the option letters with commas. For example:

```
$ @SYS$UPDATE:VMSINSTAL saveset-name device-name OPTIONS N,A
```

The following example invokes VMSINSTAL to install DCSC from tape drive MTA0: and uses the OPTIONS N release notes parameter.

```
$ @SYS$UPDATE:VMSINSTAL DCSC030 MTA0: OPTIONS N
```

The system displays the following response:

```
        OpenVMS AXP Software Product Installation Procedure V6.1

It is 7-FEB-1995 at 11:12.

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

If you do not supply either the product name or the device name when you invoke VMSINSTAL, it asks you for this information later in the installation procedure.

2. **Confirm system backup.**

   VMSINSTAL asks if you are satisfied with your system BACKUP.

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

   You should always back up your system disk before performing an installation. If you are satisfied with the BACKUP of your system disk, press Return. Otherwise, enter NO to stop the installation. After you back up your system disk, you can restart the installation.

3. **Mount the media.**

Mount the first distribution volume on the device you specified when you invoked VMSINSTAL. The device name automatically appears in the system message. For example,

```
Please mount the first volume of the set on MTA0:.
```

VMSINSTAL then asks you if you are ready to continue with the installation.

```
* Are you ready? YES
```

- Enter YES if you are ready to continue.

  VMSINSTAL displays a message that the media containing the DCSC has been mounted on the specified device and that the installation has begun.

  ```
  %MOUNT-I-MOUNTED, DCSC MOUNTED ON _$$MTA0:  (NODE1)
  The following products will be processed:
    DCSC 3.0

      Beginning installation of DCSC V3.0 at 11:15

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

- Enter NO at the `Are you ready?` question if you entered the wrong device name when you invoked VMSINSTAL and need to restart the installation.

  To abort the installation for other reasons, press Ctrl/Y.

4. **Mount additional media volumes.**

   If your installation kit contains more than one volume, VMSINSTAL asks you to mount the additional volumes and to indicate when you are ready for the installation to proceed.

   ```
   %BACKUP-I-READYREAD, mount volume 2 on _MTA0: for reading

   Enter "YES" when ready:
   ```

5. **Select a release notes option.**

   If you specified the OPTIONS N parameter when you invoked VMSINSTAL, you are now asked to choose one of four options for reviewing the release notes, as follows:

   ```
   Release notes included with this kit are always copied to SYS$HELP.

   Additional Release Notes Options:

          1.  Display release notes
          2.  Print release notes
          3.  Both 1 and 2
          4.  None of the above

   * Select option [2]:
   ```

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

   If you select option 2, VMSINSTAL asks you for the name of the print queue that you want to use:

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

   Press Return to send the file to the default output print device, or enter another queue name.

   If you select option 3, VMSINSTAL immediately displays the release notes on the console terminal, and then asks you for the name of the print queue.

If you have already reviewed the release notes and are restarting the installation, select option 4.

Note

A hardcopy version of the release notes is included with the DCSC documentation set.

Next, VMSINSTAL displays the following question:

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

To continue the installation, enter YES. Otherwise, press Return. In either case, the release notes are copied to the following file in SYS$HELP:

```
SYS$HELP:DCSC030.RELEASE_NOTES
```

After the installation, you can enter the following command to review the release notes:

```
$ TYPE SYS$HELP:DCSC030.RELEASE_NOTES
```

Note

The name of the release notes file installed by VMSINSTAL consists of the current product name and version number. Do not delete the release notes for the previous versions of DCSC.

6. **Insure that DCSC is not running on your system.**

   If DCSC is already installed on your system, you should be sure to shut it down prior to starting the installation.

```
******************************************************************************
            Digital Cartridge Server Component for VMS, V3.0

                        Installation Procedure

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******************************************************************************


    ******************************************************

        Before running this installation procedure, it is
        advisable to shut down DCSC. Issue a Show System
        command and verify that DCSC$SUPERVISOR is not active.

        DCSC FILES MAY BECOME CORRUPTED IF DCSC IS RUNNING
        AND YOU CONTINUE THE INSTALLATION PROCEDURE.

     ******************************************************
```

```
* Do you want to continue [YES]?
```

7. **Verify existence of prerequisite software.**

   The installation procedure displays a list of the required software and then asks if you want to continue.

```
      ******************************************************

          Before you install the DCSC software, verify that the
          following software is installed.

             OpenVMS Version 1.5 or later
             UCX Version 3.1 or later
                  (UCX is only required on the MASTER node)

       ******************************************************

* Do you want to continue [YES]?
```

   The installation procedure checks to make sure that the prerequisite software is installed. If it is not, the installation will fail. If you do not have the prerequisite software installed on your system, you must answer NO to this question. Stop the installation now, install the prerequisite software, then restart the DCSC installation.

8. **Respond to license registration queries.**

   The installation procedure displays license information about your product, then asks if you have registered and loaded your PAK, as follows:

```
      Product:      CARTRIDGE-SERVER-V
      Producer:     DEC
      Version:      3.0
      Release Date: 26-AUG-1991

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

   If you have not registered and loaded your PAK, you must answer NO to this question; otherwise, the installation procedure will fail. Stop the installation now, register and load your PAK, then restart the installation.

9. **Purge files.**

   You have the option of purging files from previous versions of the DCSC that are superseded by this installation.

```
    During this installation, new files will be provided to replace existing
    versions.  You may purge these older versions to save disk space, or keep
    them if you feel they may be of use.  Purging is recommended.
* Do you want to purge files replaced by this installation [YES]?
```

   Purging the files is recommended; however, if you need to keep the previous versions, enter NO in response to this question.

10. **Choose the Installation Verification Procedure (IVP) option.**

    The installation procedure now asks if you want to run the IVP option after you install DCSC:

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

    It is recommended that you run the IVP after DCSC is installed to verify that the installation was successful. Press Return to accept the default (YES) in response to this question.

11. **Specify the directory structure to contain all of the files.**

    The installation procedure now asks for the directory specification where the files can be placed:

```
* Enter the device and directory where [DCSC$SERVER] should
  be created [SYS$SYSDEVICE:[VMS$COMMON:]]:

* Enter the device and directory where [DCSC$SERVER] should
  be created [SYS$SYSDEVICE:[VMS$COMMON]]:
```

    The default area is on your system disk. If you want to place your DCSC files elsewhere, enter a valid device and directory specification, and the directory [DCSC$SERVER] will be placed in that location.

    If this is a reinstallation and DCSC$DIR is already defined, the installation procedure will verify the directory structure and ask if you want to change the location.

12. **Choose to convert data files.**

    If this is an upgrade from the previous version of DCSC, the installation procedure has the ability to convert the data files to be compatible with the new version. If for some reason you would like to delay this conversion, you may enter NO in response to this question.

    Running the conversion utility is only necessary if you are upgrading from version 1.1. If you are currently running either version 2.0 or 2.0A, your files are already in an appropriate format for version 3.0.

```
******************************************************

 You should run the conversion utility in order to
 convert Version 1.1 files to Version 2.0 format.
 FAILURE TO DO SO MAY CAUSE FILE INCOMPATIBILITIES.

******************************************************


* Do you want to run the conversion [YES]?
```

13. **Read informational messages.**

    Now the installation procedure displays several informational messages on the status of the installation. There are no further questions. If the installation procedure has been successful up to this point, VMSINSTAL moves the new or modified files to their target directories, updates help files, updates the DCL tables, if necessary, and purges previous file versions, if specified.

    Note

    If you are installing DCSC on a device other than the system device, the system directory informational messages (-I-SYSDIR) are not displayed.

    The following messages are displayed:

```
     ******************************************************

       All questions regarding the installation have now
       been asked.  The installation of DCSC V3.0
       will take approximately 10 minutes.

      ******************************************************

%DCSC-I-INSBEG, Beginning installation....
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%CREATE-I-EXISTS, $1$DUA14:[000000] already exists
%CREATE-I-EXISTS, $1$DUA14:[000000.DCSC$SERVER] already exists
%DCSC-I-INSCONT, Continuing installation....
%DCSC-I-FILEPROT, Setting protection on product files....
%DCSC-I-INSDCL, Installing DCL command....
%DCSC-I-INSHELP, Installing DCL help....

      ******************************************************

         A list of DCSC V3.0 files installed
         on your OpenVMS system can be found in
         DCSC$DIR:[DCSC$SERVER]DCSC$FILE_LIST.TXT.

      ******************************************************

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

14. **Execute DCSC$STARTUP command procedure.**

    The installation procedure now executes the DCSC$STARTUP.COM procedure using the SETUP parameter. This parameter ensures that the STARTUP procedure defines only the system logical names that are used by DCSC. These logicals must be defined for the IVP to complete successfully.

```
(LNM$SYSTEM_TABLE)

  "DCSC$ACSLIB_DEFAULT" = "1"
  "DCSC$BACKUP_ENABLE" = "FALSE"
  "DCSC$CAP_ACS_DEFAULT" = "0"
  "DCSC$CAP_CAP_DEFAULT" = "0"
  "DCSC$CAP_LSM_DEFAULT" = "0"
  "DCSC$CONFIG_FILE" = "DCSC$FILES:DCSC$CONFIG.DAT"
  "DCSC$DIR" = "$1$DUA14:[000000.]"
  "DCSC$DISMOUNT_ENABLE" = "FALSE"
  "DCSC$ENABLE_CHANNEL_LOG" = "TRUE"
  "DCSC$ENABLE_ORH_LOG" = "TRUE"
  "DCSC$ERROR_LOG" = "DCSC$LOGS:DCSC$ERROR.LOG"
  "DCSC$EXAMPLES" = "DCSC$DIR:[DCSC$SERVER.EXAMPLES]"
  "DCSC$EXE" = "DCSC$DIR:[DCSC$SERVER.IMAGES]"
  "DCSC$FILES" = "DCSC$DIR:[DCSC$SERVER.FILES]"
  "DCSC$LIBRARY" = "DCSC$DIR:[DCSC$SERVER.LIBRARY]"
  "DCSC$LOGS" = "DCSC$DIR:[DCSC$SERVER.LOGS]"
  "DCSC$MSG_SHARE" = "DCSC$EXE:DCSC$MSG_SHARE.EXE"
  "DCSC$ORH_IGNORE_BAD_MSG" = "FALSE"
  "DCSC$PRINT_FILE" = "DCSC$FILES:DCSC$CONFIG.LIS"
  "DCSC$RESPONSE" = "DCSC$DIR:[DCSC$SERVER.RESP_FILES]"
  "DCSC$RTL_SHARE" = "DCSC$EXE:DCSC$RTL_SHARE.EXE"
  "DCSC$SPVSR_LOG" = "DCSC$LOGS:DCSC$SPVSR.LOG"
  "DCSC$TRACE_LOG" = "DCSC$LOGS:DCSC$TRACE.LOG"

%DCSC-I-LOGICALS, Logical names have been established
```

15. **Run IVP, if the IVP option was chosen.**

    If you answered Yes to the question, `Do you want to run the IVP after the installation?` the IVP automatically runs. If you answered NO, this step is skipped. See Chapter 4 for a sample of the output generated by the IVP.

16. **End the installation procedure.**

    The following messages indicate that the entire installation procedure is complete:

```
    Installation of DCSC 3.0 completed at 11:16
    Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY
    Creating installation data file: VMI$ROOT:[SYSUPD]DCSC030.VMI_DATA

Enter the products to be processed from the next distribution volume set.
* Products:
VMSINSTAL procedure done at 11:17
```

    You can now log out of the privileged account, as follows:

```
$ LOGOUT
SYSTEM     logged out at  29-OCT-1993 13:15:15.15
```

    VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you are going to continue using the system manager's account and you want to restore these symbols, log out and log in again.

2.2 Error Recovery

The next two sections contain information on the conditions that can cause the DCSC installation to fail and the error messages that are generated.

2.2.1 Installation Failure

If the installation fails, VMSINSTAL displays the following message:

```
%VMSINSTAL-E-INSFAIL, The installation of DCSC 3.0 has failed.
```

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

- The operating system version is incorrect.
- A prerequisite software version is incorrect.
- Quotas necessary for successful installation are insufficient.
- Disk space necessary for successful installation is insufficient.
- System parameter values for successful installation are insufficient.
- The OpenVMS help library is currently in use.
- The product license has not been registered and loaded.

For descriptions of the error messages generated by these conditions, 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. For information on installation requirements, see Chapter 1.

2.2.2 Nonfatal Errors

During the selection of the device and directory for the DCSC files, several checks are performed to ensure that the DEVICE:[DIRECTORY] you are specifying is valid, nonrooted, and on a disk. If not, one of the following error messages is generated:

- The logical name DCSC$ROOT is already defined to be DEVICE:[DIRECTORY] but this does not refer to a valid [DCSC$DIR] directory tree.
- DEVICE:[DIRECTORY] is an invalid device.
- The device DEVICE:[DIRECTORY] is not a disk.
- Rooted directories are not valid as an installation location.
- Bad syntax in directory name specification.
- Detected the string DCSC$DIR in your directory response. Nesting [DCSC$DIR] trees is not permitted.
- DEVICE:[DIRECTORY] is an invalid directory specification. Directory not found.

If you receive any of these messages, you will be asked to reenter the location and continue.

3

After Installing the Digital Cartridge Server Component

This chapter describes the following tasks that are performed after installing the Digital Cartridge Server Component (DCSC) for OpenVMS:

- Editing the system startup and shutdown files
- Editing the DCSC configuration file
- Starting up the system
- Making the DCSC available on a VMScluster system
- Setting user account privileges and quotas
- Reporting problems

3.1 Editing the System Files

You must edit the system startup and shutdown files to provide automatic startup and shutdown of DCSC when your system is rebooted. To do this, perform these steps:

1. Add the following command line, which starts DCSC, to the system startup file, SYS$STARTUP:SYSTARTUP_V5.COM, or for VAX/VMX V6.1 systems SYS$STARTUP:SYSTARTUP_VMS.COM.

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

2. Add the following command line to the system shutdown file, SYS$STARTUP:SYSHUTDWN.COM:

   ```
   $ @SYS$MANAGER:DCSC$SHUTDOWN.COM
   ```

3.2 Editing the DCSC Configuration File

Before you can run DCSC, you must set certain parameters. These parameters are kept in a configuration file that must be edited before you start up the software. The DCSC software includes a menu-driven system called the Configuration File Editor. This editor lets you configure your system and create the configuration file used by the software at startup.

Before you can invoke the Configuration File Editor, several DCSC logical names must be defined. To define these logicals, run the DCSC$STARTUP command procedure from the SYSTEM account. The STARTUP command procedure is located in the SYS$STARTUP directory. Include the SETUP parameter, as follows:

```
$ @SYS$STARTUP:DCSC$STARTUP SETUP
```

Note

You must enter the SETUP parameter to ensure that only the logical definitions portion of the DCSC$STARTUP command procedure, and not the full startup command procedure, is executed.

After running the STARTUP command procedure, you can invoke the Configuration File Editor. See the *Digital Cartridge Server Component for OpenVMS System Manager's Guide* for information on how to use the Configuration File Editor.

3.3 Starting Up the System

After you edit the configuration file with the required information about your particular configuration, run the DCSC$STARTUP.COM procedure. Include the COLD parameter to fully start up the software, allocate all the resources identified in the configuration file to the DCSC server, and prepare it to accept user requests.

Note

The COLD startup parameter should only be used for the initial startup after installation. DO NOT use the COLD start after an UPGRADE from an earlier version of DCSC.

To start up the DCSC for the first time, enter the following command:

```
$ @SYS$STARTUP:DCSC$STARTUP COLD
```

Use the COLD parameter for only the initial start up of the system. For subsequent startups or after upgrading the existing DCSC software, use the WARM parameter.

3.4 VMScluster Postinstallation Procedures

To run the DCSC software on the other member nodes in the VMScluster, you must complete the following tasks:

1. Load the DCSC PAK on the other VMScluster nodes.
2. Replace the old DCLTABLES.EXE image with the updated DCLTABLES.EXE using the Install Utility on the other VMScluster nodes.
3. Start up the DCSC software on the other VMScluster nodes.

Note

DCSC must be configured to allow each node access. See the *Digital Cartridge Server Component for OpenVMS System Manager's Guide* for more information.)

3.4.1 Loading the DCSC License on the Other VMScluster Nodes

To load the DCSC license on other VMScluster nodes, first log in to the SYSTEM account. Then choose one of the following for loading a license:

- Invoke the System Management Utility (SYSMAN), and use the DO command to execute the LICENSE LOAD command on the other VMScluster nodes, as follows:

```
$ RUN SYS$SYSTEM:SYSMAN
SYSMAN> SET ENVIRONMENT/CLUSTER
SYSMAN> DO LICENSE LOAD CARTRIDGE-SERVER-V
SYSMAN> EXIT
$ LOGOUT
```

  You only issue the DO LICENSE LOAD command once; it will execute on all the VMScluster nodes.

- Log in to the SYSTEM account on each VMScluster node. Issue the LICENSE LOAD command from the DCL prompt on each node, as follows:

```
$ LICENSE LOAD CARTRIDGE-SERVER-V
$ LOGOUT
```

3.4.2 Replacing the DCLTABLES.EXE on the Other VMScluster Nodes

To replace the DCLTABLES.EXE image installed in memory on the other VMScluster nodes, first log in to the SYSTEM account. Then choose one of the following for replacing the image:

- Invoke the SYSMAN Utility, and use the DO command to execute the INSTALL REPLACE command on the other VMScluster nodes, as follows:

```
$ RUN SYS$SYSTEM:SYSMAN
SYSMAN> SET ENVIRONMENT/CLUSTER
SYSMAN> DO INSTALL REPLACE SYS$SHARE:DCLTABLES.EXE/OPEN/HEAD/SHARE
SYSMAN> EXIT
$ LOGOUT
```

  You only issue the DO INSTALL REPLACE command once; it will execute on all the VMScluster nodes.

- Log in to the SYSTEM account on each VMScluster node. Issue the INSTALL REPLACE command from the DCL prompt on each node, as follows:

```
$ INSTALL REPLACE SYS$SHARE:DCLTABLES.EXE/OPEN/HEAD/SHARE
$ LOGOUT
```

3.4.3 Starting Up the DCSC Software on Other VMScluster Nodes

To start up the DCSC software on the other nodes of a VMScluster, first log in to the SYSTEM account. Then choose one of the following methods for starting up the software:

- Invoke the SYSMAN Utility and use the DO command to execute the SYS$STARTUP:DCSC$STARTUP command file on all nodes of the VMScluster, as follows:

```
$ RUN SYS$SYSTEM:SYSMAN
SYSMAN> SET ENVIRONMENT/CLUSTER
SYSMAN> DO @SYS$STARTUP:DCSC$STARTUP
SYSMAN> EXIT
$ LOGOUT
```

  You only issue the DO @SYS$STARTUP:DCSC$STARTUP command once; it will execute on all the VMScluster nodes.

- Log in to the SYSTEM account on each VMScluster node. Enter the @SYS$STARTUP:DCSC$STARTUP command from the DCL prompt on each node, as follows:

```
$ @SYS$STARTUP:DCSC$STARTUP
$ LOGOUT
```

  The default parameter is WARM for both startup methods. See the *Digital Cartridge Server Component for OpenVMS System Manager's Guide* for more information on starting up the system.

3.5 User Account Requirements

To work with DCSC, each user account on your system must have certain privileges and quotas. The next two sections describe these requirements.

3.5.1 Privileges

The minimum privileges a user account must have to use DCSC are TMPMBX and NETMBX privileges. Use the VMS Authorize Utility (AUTHORIZE) to determine whether users have these privileges.

3.5.2 Quotas

Each user account must have sufficient quotas to use DCSC. Table 3–1 summarizes these required user account quotas.

Table 3–1 User Account Quotas for Using DCSC

Account Quota	Value
WSDEF	1024[1]
WSQUOTA	2048

[1]DCSC does not have specific required values for WSEXT and WSQUO; however, they must be equal to or greater than the WSDEF value.

See Section 1.5.4 for a description of how to modify account quotas.

3.6 File Protections

Due to the nature of the DCSC software and in particular, the CARTRIDGE SAVE function, the file DCSC$FILES:DCSC$SAVESET.DAT will have W:REWD priviledges. This protection may be changed if the site is not going to use the CARTRIDGE SAVE feature or if the users of the CARTRIDGE SAVE command are given alternate means of access to this file.

3.7 Determining and Reporting Problems

If you encounter a problem while using DCSC, report it to Digital Equipment Corporation. Depending on the nature of the problem and the type of support you have, take one of the following actions:

- Call Digital if your software contract or warranty agreement entitles you to telephone support.
- Submit a Software Performance Report (SPR).

- Fill out and submit a Reader's Comments form if the problem has to do with the DCSC documentation. There are Reader's Comments forms at the back of each hardcopy guide. Use the form from the guide in which you found the error. Include the section and page number.

Review the Software Product Description (SPD) and Warranty Addendum for an explanation of the warranty. If you encounter a problem during the warranty period, report the problem as previously indicated, or follow alternate instructions provided by Digital for reporting SPD nonconformance problems.

4
Installation Verification Procedure

The Installation Verification Procedure (IVP) is usually run at the end of the installation procedure to verify that the software is correctly installed. The IVP can also be run standalone, for example, after a system failure to make sure users can access the software.

Before you run the IVP, make sure you have completed the following tasks:

- Registered and loaded the CARTRIDGE-SERVER-V PAK.

  If you are installing DCSC on a VMScluster, you must load the license on each of the other VMScluster member nodes. See Section 3.4 for more information on loading the license on the other VMScluster nodes.

- Started up the DCSC software using the DCSC$STARTUP.COM procedure in SYS$STARTUP.

  The DCSC system logical names are defined by using the SETUP parameter, which is passed to the startup procedure, or by doing a complete startup using the WARM or COLD parameters. If specific DCSC logicals are not defined, the IVP will fail.

To run the IVP standalone, execute the following command:

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

The following is a sample of the output generated by the IVP:

```
$ @SYS$TEST:DCSC$IVP
        ********************************************************
        *                                                      *
        *    Beginning Digital Cartridge Server Component V3.0 *
        *       Installation Verification Procedure (IVP)      *
        *                                                      *
        *   Copyright Digital Equipment Corporation 1991,1993. *
        *     All rights reserved.                             *
        *                                                      *
        *   Restricted Rights: Use, duplication, or disclosure *
        *     by the U.S. Government is subject to restrictions *
        *     as set forth in subparagraph (c) (1) (ii) of     *
        *     DFARS 252.227-7013, or in FAR 52.227-19, or in   *
        *     FAR 52.227-14 Alt.III, as applicable.            *
        *                                                      *
        *   This software is proprietary to and embodies the   *
        *     confidential technology of Digital Equipment     *
        *     Corporation.  Possession, use or copying of this *
        *     software and media is authorizied only pursuant  *
        *     to a valid written license from Digital or an    *
        *     authorized sublicensor.                          *
        *                                                      *
        ********************************************************

        Installation verification begun at  7-FEB-1995 11:16:28.81

        Initializing the IVP...
```

Installation Verification Procedure

```
        Testing for correct version of VMS...
                ...VMS version OK.

        Testing for required license...
                ...product license OK.

        Testing for prerequisite software...
                ...prerequisite software found.

        Testing for DCSC directories in DCSC$DIR...
                ...DCSC directories found.

        Testing for system-wide logical names...
                ...logical names defined.

        Testing for DCSC V3.0 files...
                ...DCSC files found.

        Testing for correct version of DCSC...
                ...DCSC version OK.

        * * *  All tests have completed successfully. * * *
        Installation verification finished at  7-FEB-1995 11:16:31.31

*******************************************************************************
                  Successful Installation Verification of
                  Digital Cartridge Server Component V3.0
*******************************************************************************
```

A

Sample Installation

This appendix contains a sample installation of DCSC. This sample was run on an Alpha AXP™ system that had no previous version of DCSC installed.

```
$ @SYS$UPDATE:VMSINSTAL

        OpenVMS AXP Software Product Installation Procedure V6.1

It is 7-FEB-1995 at 11:12.

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

%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
        OLIVER
        MYERS

* Do you want to continue anyway [NO]? YES
* Are you satisfied with the backup of your system disk [YES]?
* Where will the distribution volumes be mounted: USER1:[MYERS]

Enter the products to be processed from the first distribution volume set.

* Products: DCSC030
* Enter installation options you wish to use (none):
The following products will be processed:

  DCSC V3.0

        Beginning installation of DCSC 3.0 at 11:12


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

   ******************************************************************************
               Digital Cartridge Server Component for VMS, V3.0

                            Installation Procedure

   Copyright Digital Equipment Corporation 1991,1993.  All rights reserved.
   Restricted Rights: Use, duplication, or disclosure by the U.S. Government
   is subject to restrictions  as set forth in subparagraph (c) (1) (ii) of
   DFARS 252.227-7013, or in FAR 52.227-19, or in FAR 52.227-14 Alt.III, as
   applicable.

   This software is proprietary to and embodies the confidential technology
   of Digital Equipment Corporation.  Possession, use or copying of this
   software and media is authorizied only pursuant to a valid written
   license from Digital or an authorized sublicensor.
   ******************************************************************************


       ********************************************************

           Before running this installation procedure, it is
           advisable to shut down DCSC. Issue a Show System
           command and verify that DCSC$SUPERVISOR is not active.
```

Sample Installation

```
            DCSC FILES MAY BECOME CORRUPTED IF DCSC IS RUNNING
            AND YOU CONTINUE THE INSTALLATION PROCEDURE.

          ******************************************************

* Do you want to continue [YES]?

         ******************************************************

            Before you install the DCSC software, verify that the
            following software is installed.

               OpenVMS Version 1.5 or later
               UCX Version 3.1 or later
                    (UCX is only required on the MASTER node)

          ******************************************************

* Do you want to continue [YES]?

          Product:      CARTRIDGE-SERVER-V
          Producer:     DEC
          Version:      3.0
          Release Date: 26-AUG-1991

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

     During this installation, new files will be provided to replace existing
     versions.  You may purge these older versions to save disk space, or keep
     them if you feel they may be of use.  Purging is recommended.
* Do you want to purge files replaced by this installation [YES]?

    Most products provide an Installation Verification Procedure (IVP)
     which verifies the completeness and accuracy of the installation.
     You may wish to run the IVP immediately after installation.
* Do you want to run the IVP after the installation [YES]?

* Enter the device and directory where [DCSC$SERVER] should
  be created [SYS$SYSDEVICE:[VMS$COMMON]]: $1$DUA14:[000000]

      ******************************************************

        All questions regarding the installation have now
        been asked.  The installation of DCSC V3.0
        will take approximately 10 minutes.

       ******************************************************

%DCSC-I-INSBEG, Beginning installation....
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%CREATE-I-EXISTS, $1$DUA14:[000000] already exists
%DCSC-I-INSCONT, Continuing installation....
%DCSC-I-FILEPROT, Setting protection on product files....
%DCSC-I-INSDCL, Installing DCL command....
%DCSC-I-INSHELP, Installing DCL help....

       ******************************************************

          A list of DCSC V3.0 files installed
          on your OpenVMS system can be found in
          DCSC$DIR:[DCSC$SERVER]DCSC$FILE_LIST.TXT.

       ******************************************************

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

         ******************************************************
         *                                                    *
         *   Digital Cartridge Server Component for VMS, V2.1 *
         *  Copyright 1991, 1993, Digital Equipment Corporation *
         *                                                    *
         ******************************************************
```

```
(LNM$SYSTEM_TABLE)

  "DCSC$ACSLIB_DEFAULT" = "1"
  "DCSC$BACKUP_ENABLE" = "FALSE"
  "DCSC$CAP_ACS_DEFAULT" = "0"
  "DCSC$CAP_CAP_DEFAULT" = "0"
  "DCSC$CAP_LSM_DEFAULT" = "0"
  "DCSC$CONFIG_FILE" = "DCSC$FILES:DCSC$CONFIG.DAT"
  "DCSC$DIR" = "$1$DUA14:[000000.]"
  "DCSC$DISMOUNT_ENABLE" = "FALSE"
  "DCSC$ENABLE_CHANNEL_LOG" = "TRUE"
  "DCSC$ENABLE_ORH_LOG" = "TRUE"
  "DCSC$ERROR_LOG" = "DCSC$LOGS:DCSC$ERROR.LOG"
  "DCSC$EXAMPLES" = "DCSC$DIR:[DCSC$SERVER.EXAMPLES]"
  "DCSC$EXE" = "DCSC$DIR:[DCSC$SERVER.IMAGES]"
  "DCSC$FILES" = "DCSC$DIR:[DCSC$SERVER.FILES]"
  "DCSC$LIBRARY" = "DCSC$DIR:[DCSC$SERVER.LIBRARY]"
  "DCSC$LOGS" = "DCSC$DIR:[DCSC$SERVER.LOGS]"
  "DCSC$MSG_SHARE" = "DCSC$EXE:DCSC$MSG_SHARE.EXE"
  "DCSC$ORH_IGNORE_BAD_MSG" = "FALSE"
  "DCSC$PRINT_FILE" = "DCSC$FILES:DCSC$CONFIG.LIS"
  "DCSC$RESPONSE" = "DCSC$DIR:[DCSC$SERVER.RESP_FILES]"
  "DCSC$RTL_SHARE" = "DCSC$EXE:DCSC$RTL_SHARE.EXE"
  "DCSC$SPVSR_LOG" = "DCSC$LOGS:DCSC$SPVSR.LOG"
  "DCSC$TRACE_LOG" = "DCSC$LOGS:DCSC$TRACE.LOG"

%DCSC-I-LOGICALS, Logical names have been established

        ************************************************************
        *                                                          *
        *    Beginning Digital Cartridge Server Component V3.0     *
        *       Installation Verification Procedure (IVP)          *
        *                                                          *
        *   Copyright Digital Equipment Corporation 1991,1993.     *
        *     All rights reserved.                                 *
        *                                                          *
        *   Restricted Rights: Use, duplication, or disclosure     *
        *     by the U.S. Government is subject to restrictions    *
        *     as set forth in subparagraph (c) (1) (ii) of         *
        *     DFARS 252.227-7013, or in FAR 52.227-19, or in       *
        *     FAR 52.227-14 Alt.III, as applicable.                *
        *                                                          *
        *   This software is proprietary to and embodies the       *
        *     confidential technology of Digital Equipment         *
        *     Corporation.  Possession, use or copying of this     *
        *     software and media is authorizied only pursuant      *
        *     to a valid written license from Digital or an        *
        *     authorized sublicensor.                              *
        *                                                          *
        ************************************************************

        Installation verification begun at  7-FEB-1995 11:16:28.81

        Initializing the IVP...

        Testing for correct version of VMS...

                ...VMS version OK.

        Testing for required license...

                ...product license OK.

        Testing for prerequisite software...

                ...prerequisite software found.
```

Sample Installation

```
        Testing for DCSC directories in DCSC$DIR...
                ...DCSC directories found.

        Testing for system-wide logical names...
                ...logical names defined.

        Testing for DCSC V3.0 files...
                ...DCSC files found.

        Testing for correct version of DCSC...
                ...DCSC version OK.

        * * *  All tests have completed successfully. * * *
        Installation verification finished at  7-FEB-1995 11:16:31.31

*******************************************************************************
                   Successful Installation Verification of
                   Digital Cartridge Server Component V3.0
*******************************************************************************
        Installation of DCSC 3.0 completed at 11:16
    Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY
    Creating installation data file: VMI$ROOT:[SYSUPD]DCSC030.VMI_DATA
Enter the products to be processed from the next distribution volume set.
* Products:
VMSINSTAL procedure done at 11:17
```

B

Files and Logical Names Installed on Your System

The DCSC installation procedure installs a number of files on your system and defines several logical names. A complete list of these files is located in the directory DCSC$DIR:[DCSC$SERVER] in the file DCSC$FILE_LIST.TXT.

The following logical names are entered into the system logical name table when DCSC is installed. These names are stored in the startup file, SYS$STARTUP:DCSC$STARTUP.COM. They are automatically entered into the system logical name table whenever the system reboots or whenever the software is invoked.

If you need to customize any of the logicals, you should create the file SYS$STARTUP:DCSC$LOCAL_STARTUP.COM. This command procedure will be executed prior to starting DCSC. Logical definitions in this file take precedence over the defaults.

- DCSC$ACSLIB_DEFAULT
- DCSC$BACKUP_ENABLE
- DCSC$CAP_ACS_DEFAULT
- DCSC$CAP_CAP_DEFAULT
- DCSC$CAP_LSM_DEFAULT
- DCSC$CONFIG_FILE
- DCSC$DIR
- DCSC$DISMOUNT_ENABLE
- DCSC$ENABLE_CHANNEL_LOG
- DCSC$ENABLE_ORH_LOG
- DCSC$ERROR_LOG
- DCSC$EXAMPLES
- DCSC$EXE
- DCSC$FILES
- DCSC$LIBRARY
- DCSC$LOGS
- DCSC$MSG_SHARE
- DCSC$ORH_IGNORE_BAD_MSG
- DCSC$PRINT_FILE

Files and Logical Names Installed on Your System

- DCSC$RESPONSE
- DCSC$RTL_SHARE
- DCSC$SPVSR_LOG
- DCSC$TRACE_LOG