Compaq TP Desktop Connector for ACMS

Installation Guide

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This document provides information about installing the *Compaq TP Desktop Connector* software on desktop systems, and about installing the *Compaq* TP Desktop Connector Gateway for ACMS software on systems running the *Compaq OpenVMS* operating system and *Compaq ACMS* software. It also describes activities associated with these installations, such as the verification procedure.

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Preface

This guide presents information about installing the *Compaq TP Desktop Connector* software on desktop platforms, and the TP Desktop Connector Gateway for ACMS software on *OpenVMS* platforms.

Intended Audience

This document is intended for:

- Programmers developing client applications with *TP Desktop Connector* software.
- System managers responsible for *Compaq ACMS* transaction processing installations.

To perform the installation and deinstallation procedures described in this guide, you must have administrator (for Windows NT platforms), SYSTEM (for *OpenVMS* platforms), or superuser (for *Tru64 UNIX* platforms) privileges, and you should be familiar with your operating system's installation procedure.

Related Software

Compaq TP Desktop Connector is part of a transaction processing software suite that also contains the following product variants:

- *Compaq TP Desktop Connector for ACMSxp*
- *Compaq TP Desktop Connector for Portable TP*
- *Compaq TP Web Connector*
- *Compaq Portable TP for Windows NT*
- *Compaq Application Optimizer for Windows NT*

Complete information about the relationships of other software products with *TP Desktop Connector* software is available in the Software Product Description (SPD). The SPD also identifies which versions of your operating system are compatible with *TP Desktop Connector* software.

A copy of the SPD is included in your product kit and on the *Compaq* Web site at `www.compaq.com` by searching for *TP Desktop Connector* in Software Product Descriptions. Refer to ***Compaq TP Desktop Connector for ACMS*** *Release Notes* for the actual URL.

Related Documents

Installation instructions for the *ACMSxp* and *Portable TP* versions of *TP Desktop Connector* software appear in the following manuals, respectively:

- ***Compaq TP Desktop Connector for ACMSxp*** *Installation Guide*
- ***Compaq TP Desktop Connector for Portable TP*** *Installation Guide*

The following manuals contain information about building client applications with *TP Desktop Connector* products:

- ***Compaq TP Desktop Connector*** *Getting Started*
- ***Compaq TP Web Connector*** *Getting Started*
- ***Compaq Portable TP for Windows NT*** *Getting Started*
- ***Compaq Application Optimizer for Windows NT*** *Getting Started*

The following documents contain information on the *TP Desktop Connector* Client Services Interface:

- ***Compaq TP Desktop Connector for ACMS*** *Client Application Programming Guide*
- ***Compaq TP Desktop Connector for ACMS*** *Client Services Reference Manual*
- ***Compaq TP Desktop Connector for ACMS*** *Gateway Management Guide*
- ***Compaq TP Desktop Connector for ACMS*** *4D Externals User's Guide*—online only

  (Look in the `acmsdi-examples` folder of your Macintosh after installation.)

Other manuals contain information about installing and managing your *ACMS* system and TP Desktop Connector Gateway for ACMS software:

- ***Compaq ACMS for OpenVMS*** *Installation*

  Describes the installation of *ACMS* software on *OpenVMS* systems.
- ***Compaq ACMS for OpenVMS*** *Managing Applications*

Explains how to start and stop the *ACMS* system, monitor system performance, and perform some tuning operations. It also tells how to install applications and how to authorize users, devices, and applications.

This guide does not provide details about the *OpenVMS* installation procedure. For that information, refer to the *Installation and Operations* for the particular device that you use. That manual describes the following procedures:

- Handling and mounting the distribution media
- Readying the current system and target system devices

For information on recommended system management and operations policies and procedures, refer to your site management guide and the volumes in the *OpenVMS* documentation set that pertain to system management and operations.

Finally, the ***Compaq TP Desktop Connector*** *Release Notes* contain information about new features and current restrictions for *TP Desktop Connector* software. In your Web browser, open the `dskcon_release_notes.htm` file on the TPware Product Suite CD. On the *OpenVMS* Software Products Library CD, the *Release Notes* are contained in the installation procedures. Compaq recommends that you read the *Release Notes* before you install the software.

Structure

This manual is divided into three parts, according to how you received the *TP Desktop Connector* software. If you have the *OpenVMS* Software Products Library CD, you should start with Part I. If you have the TPware Product Suite CD, you should start with Part II. If you have the TP Desktop Connector Gateway for ACMS CD, start with Part III.

The document has the following components.

Component	Description
Part I	**Using the Software Products Library CD**
Chapter 1	Explains how to prepare your *OpenVMS* system for installing *TP Desktop Connector* software from the Software Products Library CD.
Chapter 2	Explains how to install *TP Desktop Connector* and gateway software from the Software Products Library CD.

Component	Description
Part I	**Using the Software Products Library CD**
Chapter 3	Describes tasks that might be needed on your *OpenVMS* system after installing *TP Desktop Connector* software from the Software Products Library CD. It also provides references to information on post-installation tasks for *TP Desktop Connector* client software on other platforms.
Part II	**Using the TPware Product Suite CD**
Chapter 4	Explains how to prepare your system for installing *TP Desktop Connector* software from the TPware Product Suite CD.
Chapter 5	Describes how to install the *TP Desktop Connector* software on a 32-bit Microsoft operating system: • Windows NT running on either an Intel or a *Compaq Alpha* processor • Windows 95 or 98 on an Intel processor
Chapter 6	Describes how to install the *TP Desktop Connector* Client Services Interface software and sample client applications on the following non–Windows 32-bit desktop platforms: Microsoft DOS Microsoft Windows 3.11 *Compaq OpenVMS* *Tru64 UNIX*
Chapter 7	Describes how to install the *TP Desktop Connector* Client Services Interface software and sample client applications on Apple Macintosh systems.

Component	Description
Part III	**Using the Gateway CD**
Chapter 8	Explains how to prepare your *OpenVMS* system for installing TP Desktop Connector gateway for ACMS software.
Chapter 9	Describes how to install the TP Desktop Connector gateway for ACMS software and sample server-side applications and run the Installation Verification Procedure (IVP). It also tells you how to recover from system and installation failures.
Chapter 10	Describes postinstallation procedures that prepare the *OpenVMS* system for running gateway software.
Chapter 11	Describes how to run the installation verification procedure (IVP) separately from the installation procedure.
Part IV	**Appendixes**
Appendix A	Lists the files that are installed on your system for the various sample programs.
Appendix B	Contains helpful hints about errors that might occur when you run one of the sample applications.

The information in the Appendixes applies no matter which CD you installed.

Conventions

The following icons appear in the margin to distinguish information that is specific to either *OpenVMS VAX* or *OpenVMS Alpha*:

The *Alpha* icon denotes the beginning of information specific to *OpenVMS Alpha* systems.

The *VAX* icon denotes the beginning of information specific to *OpenVMS VAX* systems.

♦

The diamond symbol denotes the end of a section of *OpenVMS* operating system information specific to either the *Alpha* or *VAX* platform.

Additional typographic conventions used in this document are listed below:

Convention	Description
TP Desktop Connector	Represents the *Compaq TP Desktop Connector* product software.
Gateway	Represents the *Compaq* TP Desktop Connector Gateway for ACMS software.
UPPERCASE	In text, the names of *OpenVMS* directories, commands, logicals, and so on, are set in all capital letters.
FTP	Represents the file transfer program of your choice, not necessarily File Transfer Protocol. You can substitute any method that works on your installation and target platforms.
italics	In text, italics indicate emphasis, a product name, or the title of a book.
`courier`	This font indicates a command, programming language, or an object on your screen.
`user input`	In examples, letters that you actually type are highlighted in boldface type.
`node`	In syntax format and examples, italic type indicates variables, parameters, or arguments. You need to substitute the appropriate value.
`E:\`	In examples, the CD-ROM device is assumed to be drive E:. Substitute the correct letter for your system, if needed.
`C:\TPware_Products\`	This is the default destination for the TPware Product Suite installation program. All the examples in this book use the default. If you choose a different folder during the installation, substitute that drive and folder name.
. . .	In examples, a vertical ellipsis indicates that information not directly related to the example has been omitted.

Part I

Using the Software Products Library CD

Part I describes how to install *Compaq TP Desktop Connector* and *Compaq* TP Desktop Connector Gateway for ACMS software from the *OpenVMS* Software Products Library compact disk, also known as the consolidated distribution (CONDIST) CD.

For installations using the TPware Product Suite CD, see Part II. For installations using the TP Desktop Connector Gateway for ACMS CD, see Part III.

1

Before Installing *TP Desktop Connector* from the Software Products Library CD

This chapter discusses the preparations and requirements necessary for installing *Compaq TP Desktop Connector* and *Compaq* TP Desktop Connector Gateway for ACMS software on an *OpenVMS* system from the Software Products Library CD. This chapter also provides a general overview of the installation process.

If you have the TPware Product Suite or TP Desktop Connector Gateway for ACMS CD, see Part II or III, respectively.

TP Desktop Connector software includes online *Release Notes* and gives you the option of printing or displaying them during the installation procedure. Compaq strongly recommends that you read the *Release Notes* before proceeding with the installation, in case they contain important information regarding the installation procedure.

1.1 Overview of the Software Products Library Installation

The *TP Desktop Connector* software is delivered in two distinct product savesets, one for the gateway software that run on the *OpenVMS* platform and one for desktop clients:

- The gateway saveset (ACMSDIA031.*)

  Delivers the software required on an *OpenVMS* system to enable access to *Compaq ACMS* from the desktop systems. Also includes server-side sample applications.

  You install the gateway software with a regular VMSINSTAL command.

- The client saveset (TPWA031.A)

  Delivers the software required for application development in a multiplatform, networked, desktop systems environment. Also includes sample client applications.

You install the client software by starting with a VMSINSTAL command on an *OpenVMS* system. The next steps depend on your target desktop platform.

The clients are provided as self-extracting archive files that expand upon execution. In general, the procedure for installing the client software and accompanying sample client application files consists of the following steps:

1. Transfer a client archive file to your target desktop platform, using a file transfer program such as FTP.
2. Expand the archive file by executing it.
3. If your target desktop is a Win32 system, run the resulting `setup.exe` file as explained in Section 5.1.

   If your target desktop is non–Win32:

   a. Set up your system for the *TP Desktop Connector* environment.

   b. Set up your network transport.

   These steps are explained in Section 5.2.

   If your target desktop is an Apple Macintosh, see Chapter 7
4. Run the sample application to verify that the installation functions properly.

The following sections discuss the preparations and requirements necessary before installing the *TP Desktop Connector* software.

1.2 Software and Hardware Prerequisites

The *Compaq TP Desktop Connector* Software Product Description (SPD), included in the product kit, contains complete information on software products, networks, and systems required for installing and using *TP Desktop Connector* client and gateway software.

In addition, installing *TP Desktop Connector* software requires a certain amount of free storage space. Table 1–1 summarizes the storage requirements for *TP Desktop Connector* during and after installation.

Table 1–1 *TP Desktop Connector* Disk Space Requirements

	Blocks During Installation	Blocks After Installation
TP Desktop Connector Gateway for ACMS software	23 304	6 500
OpenVMS client files	34 383	3 300

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
```

In the output column under the heading `Free Blocks` is the number of 512-byte blocks available on the device.

1.3 Installation Procedure Requirements

Both the gateway and client installations from the Software Products Library CD use the VMSINSTAL command (see Section 2.1 and Chapter 8 for gateway and server-side instructions). Section 2.2 describes the client installation process.

2

Installing *TP Desktop Connector* from the Software Products Library CD

This chapter explains how to install *Compaq TP Desktop Connector* and *Compaq* TP Desktop Connector gateway for ACMS from the *OpenVMS* Software Products Library CD. Table 2–1 shows the contents of the *TP Desktop Connector* directory on the library CD.

Table 2–1 *TP Desktop Connector* Files on the Software Products Library CD

Name	Description
ACMSDIA031.*	TP Desktop Connector Gateway for ACMS savesets
DSKCON_IG_ACMS.PS DSKCON_IG_ACMS.TXT	This book, formatted for PostScript or plain text
DSKCON_ACMS_RBI	Read Before Installing letter
DSKCON_ACMS_RELEASE_NOTES.PS DSKCON_ACMS_RELEASE_NOTES.TXT	New features and product restrictions
DSKCON_ACMS_SPD	Software Product Description document
TPWA031.*	*TP Desktop Connector* client savesets

2.1 Installing the TP Desktop Connector Gateway for ACMS Software

Installing the gateway kit from the Software Products Library CD is the same as from the TP Desktop Connector Gateway for ACMS CD, except for the location of the product saveset. Refer to the Software Products Library Master Index for the directory name on the library CD. Instructions for VMSINSTAL are in Chapter 9.

2.2 Installing the Client Kit

To install the client kit on the *OpenVMS* system, while logged in under the SYSTEM account at the DCL prompt, type a command in the following format:

```
$ @SYS$UPDATE:VMSINSTAL TPWA031 device-name:[directory-name]
```

The value of *device-name:* is the specification of the drive on which the CD-ROM is mounted and *directory-name* is the location of the product saveset on the library CD (refer to the Software Products Library Master Index for the directory name). Example 2–1 shows the output from a sample installation.

Example 2–1 Sample Client Installation

```
        OpenVMS VAX Software Product Installation Procedure V6.2

It is 8-DEC-1998 at 11:31.

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:
        NOTES$0145_11*
        DECW$TE_0C4F
        KNEELAND
        FAL_14260004
        DECW$TE_0688
        _FTA57:
        _FTA58:
        ACMS01EXC001000
        ACMS01EXC004000
        ACMS004SP001000
        ACMS01EXC00A000
        ACMS00ASP001000
        ACMS00ASP002001
* 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:

  TPW V3.1


        Beginning installation of TPWA V3.1 at 11:31

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

Installation of TP Desktop Connector for ACMS V3.1 client software started.
```

(continued on next page)

Example 2–1 (Cont.) Sample Client Installation

```
******************************************************************************
*                       Copyright (C) 1990, 1999 by                          *
*               COMPAQ Computer Corporation, Houston, Texas                  *
*          ALL RIGHTS RESERVED.  UNPUBLISHED RIGHTS RESERVED UNDER THE       *
*                COPYRIGHT LAWS OF THE UNITED STATES.                        *
******************************************************************************

%VMSINSTAL-I-SYSDIR, This product creates system disk directory  SYS$COMMON:[ACMSDI.V
MS_CLIENTS].
%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory  SYS$COMMON:[ACMSDI.N
ONVMS_CLIENTS].
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%VMSINSTAL-I-SYSDIR, This product creates system disk directory  SYS$COMMON:[SYSHLP.E
XAMPLES.ACMSDI.AVERTZ.MOTIF].
%VMSINSTAL-I-RESTORE, Restoring product save set D ...
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

Installation of TP Desktop Connector for ACMS V3.1 client software has ended.

        Installation of TPWA V3.1 completed at 11:33

        VMSINSTAL procedure done at 11:33
```

See Chapter 3 to continue with postinstallation tasks.

3

After Installing from the Software Products Library CD

This chapter describes the procedures, on both the *OpenVMS* system where the gateway kit was installed and on your target desktop system, that are required for server-side and client-side applications to run and communicate.

3.1 After Installing the Gateway Kit

Post-installation tasks for TP Desktop Connector Gateway for ACMS software are the same whether you install from the Software Products Library CD or the TPware Product Suite CD (see Chapter 10).

For *TP Desktop Connector* on the Software Products Library, the server-side sample application is part of the client kit, not the gateway kit. The client services files for *OpenVMS* are laid down when you use VMSINSTAL on the TPWA031 savesets. See Section 3.3 for information on the server-side Avertz sample application.

3.2 After Installing *TP Desktop Connector* Client Kit

After installing the client kit from the Software Products Library CD, all the files needed for *OpenVMS* client and sample applications are in place. If you are developing an *OpenVMS* client application, you should edit a startup file as shown in Section 3.2.1. If you are developing a client application for a different desktop platform, you should follow Sections 3.2.1 and 3.2.2.

3.2.1 Editing Startup Files

If TP Desktop Connector Gateway for ACMS is already installed on the same system, edit the gateway startup file, SYS$STARTUP:ACMSDI$STARTUP.COM. Remove the comment character (!) from the following logical name definitions for the client directories:

```
$! The next three logical name definitions pertain to TP Desktop Connector
$! client libraries and Motif samples and should be defined only after installing
$! clients on the same system where the Gateway is installed.
$!
$! define/system acmsdi$vms sys$common:[acmsdi.vms_clients]
$! define/system acmsdi$nonvms_clients sys$common:[acmsdi.nonvms_clients]
$! define/system acmsdi$examples_avertz_motif -
$!               sys$common:[syshlp.examples.acmsdi.avertz.motif]
```

If the gateway is on a different system, add the following logical name definitions to your system startup file:

```
$ define/system acmsdi$vms sys$common:[acmsdi.vms_clients]
$ define/system acmsdi$nonvms_clients sys$common:[acmsdi.nonvms_clients]
$ define/system acmsdi$examples_avertz_motif -
               sys$common:[syshlp.examples.acmsdi.avertz.motif]
```

3.2.2 After Installing Non–VMS Clients

In addition to *OpenVMS* client libraries, the client installation loads the self-extracting archive files on your *OpenVMS* system (see Table 3–1). (The logical name ACMSDI$NONVMS_CLIENTS is defined in Section 3.2.1.)

Table 3–1 Contents of ACMSDI$NONVMS_CLIENTS

ALPHA32.EXE	Runtime and development kit for the entire TPware product suite on *Compaq Alpha* platforms running Microsoft Windows NT
DUNIX.EXE	*TP Desktop Connector* client services[1] and samples for *Tru64 UNIX* systems
INTEL16.EXE	*TP Desktop Connector* client services[1] and samples for 16-bit Microsoft operating systems (DOS, Windows 3.11, or Windows 95) on Intel platforms
INTEL32.EXE	Runtime and development kit for the entire TPware product suite on Intel platforms running 32-bit Microsoft operating systems (Windows NT or Windows 95)
ACMS_DESKTOP.INSTALLER	*TP Desktop Connector* client services[1] and samples for Apple Macintosh systems

[1]Formerly known as the *ACMS* Desktop ‘‘portable API’’ services.

After installing the *TP Desktop Connector* client kit on an *OpenVMS* system, transfer the appropriate archive file to your desktop system and execute it (see Sections 3.2.2.1 through 3.2.2.3). After you expand the appropriate archive, the resulting files can then be used.

3.2.2.1 Transfering Client Files to a 32-bit Microsoft System

To place the client files on a 32-bit system on an Intel platform, transfer the appropriate archive file from the ACMSDI$NONVMS_CLIENTS directory on the *OpenVMS* system. For example:

1. Use a network file transfer utility such as FTP to copy from the *OpenVMS* system the INTEL32.EXE file (see Table 3–1). For example:

   a. On the client system, create a subdirectory to store the software:

   ```
   > mkdir c:\tpwa031
   ```

   b. Change directory to the newly created subdirectory:

   ```
   > cd c:\tpwa031
   ```

   c. Connect to the *OpenVMS* system that contains the archive file:

   ```
   > ftp nodename
      .
      .
      .
   login to host
      .
      .
      .
   FTP>
   ```

   The value of *nodename* is the name of the *OpenVMS* system on which the archive is installed. At the FTP prompts, supply the *OpenVMS* user name and password. If you successfully log on to the *OpenVMS* system, type commands at the FTP prompt to copy the archive file from the *OpenVMS* directory to the client system and close the FTP utility. For example:

   ```
   FTP> binary
   FTP> cd ACMSDI$NONVMS_CLIENTS:
   FTP> get intel32.exe
   FTP> quit
   ```

2. On the client system, expand the archive file and delete it to recover disk space. For example:

   ```
   > intel32
   > del intel32.exe
   ```

See Section 5.2 for information on setting up an environment for 32-bit Microsoft systems.

3.2.2.2 Transfering Client Files to a 16-bit Microsoft System

To place the client files on a 16-bit system on an Intel platform, transfer the appropriate archive file from the ACMSDI$NONVMS_CLIENTS directory on the *OpenVMS* system and expand it. For example:

1. Use a network file transfer utility such as FTP to copy from the *OpenVMS* system the INTEL16.EXE file (see Table 3–1). For example:

   a. On the client system, create a subdirectory to store the software:

      ```
      > mkdir c:\tpwa031
      ```

   b. Change directory to the newly created subdirectory:

      ```
      > cd c:\tpwa031
      ```

   c. Connect to the *OpenVMS* system that contains the archive file:

      ```
      > ftp nodename
         .
         .
         .
      login to host
         .
         .
         .
      FTP>
      ```

      The value of *nodename* is the name of the *OpenVMS* system on which the archive is installed. At the FTP prompts, supply the *OpenVMS* user name and password. If you successfully log on to the *OpenVMS* system, type commands at the FTP prompt to copy the archive file from the *OpenVMS* directory to the client system and close the FTP utility. For example:

      ```
      FTP> binary
      FTP> cd ACMSDI$NONVMS_CLIENTS:
      FTP> get intel16.exe
      FTP> quit
      ```

2. On the client system, expand the archive file and delete it to recover disk space. For example:

   ```
   > intel16
   > del intel16.exe
   ```

For client services installation and setup, see Section 6.2.

3.2.2.3 Transfering Client Files to a *Tru64 UNIX* System

To place the client files on a *Tru64 UNIX* system, transfer the appropriate archive file from the ACMSDI$NONVMS_CLIENTS directory on the *OpenVMS* system. For example:

1. Use a network file transfer utility such as FTP to copy from the *OpenVMS* system the `dunix.exe` file (see Table 3–1). For example:

   a. On the client system, create a directory under your home directory:

   ```
   > mkdir tpwa031dir
   ```

   b. Change to the new directory.

   ```
   > cd tpwa031dir
   ```

   c. Connect to the *OpenVMS* system that contains the archive file.

   ```
   > ftp nodename
      .
      .
      .
   login to host
      .
      .
      .
   ftp>
   ```

   The value of *nodename* is the name of the *OpenVMS* system on which the archive is installed. At the FTP prompts, supply the *OpenVMS* user name and password. If you successfully log on, type commands at the FTP prompt to copy the archive file and close the FTP utility. For example:

   ```
   ftp> binary
   ftp> cd sys$common:[acmsdi.nonvms_clients]
   ftp> get dunix.exe
   ftp> quit
   ```

2. On the client system, expand the archive file and delete it to recover disk space. For example:

   ```
   > chmod 755 dunix.exe
   > ./dunix.exe
   > rm dunix.exe
   ```

The archive expands into two `tar` files (see Section 6.4).

3.2.3 Installing the Client Services Interface on *OpenVMS* Systems

The client services library is preconfigured for DECnet network access. To build applications that use NetWare or TCP/IP as a transport, you must reconfigure the library before creating executable programs.

The following steps are necessary to set up the client services library for NetWare or TCP/IP access:

1. Copy the library and related files to your home directory with the following command:

   ```
   $ copy/log ACMSDI$VMS:*.* []
   ```

2. Remove the DECnet object from the library with the following command:

   ```
   $ library/delete = net_decnet acmsdi$client_objlib.olb
   ```

3. For NetWare, insert the NetWare transport access module into the library with the following command:

   ```
   $ library/insert acmsdi$client_objlib.olb net_netware.obj
   ```

   For TCP/IP, insert the TCP/IP transport access module into the library with the following command:

   ```
   $ library/insert acmsdi$client_objlib.olb net_tcpip.obj
   ```

After these steps, you are ready to build *TP Desktop Connector* applications that use NetWare or TCP/IP as a transport. Table A–1 shows the files that are added to your desktop system during the installation of the *TP Desktop Connector* client services for *OpenVMS*.

3.2.4 Verifying the Motif Client Sample on *OpenVMS*

Copy, compile, link, and run the source code for the sample client program to verify your capability to build applications.

To build the sample application, follow these steps:

1. Copy the client sample files to your home directory using the following command:

   ```
   $  copy/log ACMSDI$EXAMPLES_AVERTZ_MOTIF:*.* []
   ```

   Table A–2 lists the files that are added to your desktop system.

2. If you have MMS, use the MMS makefile provided to build the m_avertz sample application. In the sample directory, run MMS using the following command:

   ```
   $ MMS/DESC=M_AVERTZ
   ```

If you download *TP Desktop Connector* libraries to a different location, edit the makefile to indicate the new location of the libraries.

Alpha

Note

On *OpenVMS Alpha* systems, the makefile expects the logical ACMSDI$VMS_ALPHA to point to the directory that contains the *TP Desktop Connector* client library. In addition, on *OpenVMS Alpha* systems, the first time that the makefile tries to create the DECwindows library, the makefile fails. When this happens, rerun MMS to continue the build.♦

If you do not have MMS, use the makefile as a guide to build the application yourself.

3. Run the application by entering the following command:

```
> run m_avertz/nodebug
```

The m_avertz application displays the menu bar of the AVERTZ Car Reservation System. If you want the sample desktop client program to communicate with the *ACMS* application, follow the procedures in Section 6.3.3 to set up the sample application on the *ACMS* system. After you set up the *ACMS* system, use the Session menu to sign in to the *ACMS* system. After you sign in, you can use the Rental menu to run the reserve task of the AVERTZ application.

The installation procedure is now complete and verified.

3.3 Setting Up the Avertz *ACMS* Sample Application on an *OpenVMS* System

The command procedure VR_DA_RUNTIME_SETUP.COM sets up the sample application. You need SYSPRV privilege to run the procedure. Refer to the file ACMSDI$VR_APPLICATION_INFO.TXT in the ACMSDI$EXAMPLES_AVERTZ directory for more information on setting up the sample.

To prepare the AVERTZ sample application on the *Compaq OpenVMS* system, do the following:

1. Run the command procedure to set up the application:

```
$ @ACMSDI$EXAMPLES_AVERTZ:VR_DA_RUNTIME_SETUP
    .
    .
    .
$
```

2. Start the *ACMS* system (if necessary) and the application:

```
$ ACMS/START SYSTEM
$ ACMS/START APPLICATION VR_DA_APPL
```

3. Perform other management tasks related to your system, for example, authorizing user accounts. Refer to the management information in ***Compaq TP Desktop Connector for ACMS*** *Client Application Programming Guide*.

The following sections provide additional information about using the Avertz sample application on the *ACMS OpenVMS* system.

3.3.1 Using the Avertz *ACMS* Sample with Rdb Version 6.0 with Multiversion

When you execute the VR_DA_RUNTIME_SETUP.COM file to set up the sample application, this command file invokes two option files, VR_READ_SERVER.OPT and VR_UPDATE_SERVER.OPT, which refer to the SYS$LIBRARY:SQL$USER library. On a system with Rdb Version 6.0 with multiversion installed, the SYS$LIBRARY:SQL$USER file is not available. Instead, the version number is appended to the file name, for instance, SYS$LIBRARY:SQL$USER60.

To work around this naming mismatch problem, you can define the logical name SQL$USER to reference the appropriate library file. For example:

```
$ DEFINE SQL$USER SYS$LIBRARY:SQL$USER60
```

Modify the linker options files:

ACMSDI$EXAMPLES_AVERTZ:VR_READ_SERVER.OPT
ACMSDI$EXAMPLES_AVERTZ:VR_UPDATE_SERVER.OPT

Replace the line

```
SYS$LIBRARY:SQL$USERnn.OLB/LIBRARY
```

with the following:

```
SYS$USER/LIBRARY
```

3.3.2 Building the Avertz *ACMS* Sample with DECforms V1.4

The VR_FORM.IFDL file of the Avertz *ACMS* sample application cannot be compiled under DECforms Version 1.4. This is because the DECforms Version 1.4 IFDL parser no longer recognizes the colon symbol (:), which the VR_ FORM.IFDL file uses.

To get around this problem, put double quotation marks around the text containing the ‘‘:’’ symbol in the VR_FORM.IFDL file.

For example, change the following:

```
Copy
     AVERTZ_CDD_FIELD:CUSTOMER_ID from Dictionary
End Copy
```

To look like:

```
Copy
     "AVERTZ_CDD_FIELD:CUSTOMER_ID" from Dictionary
End Copy
```

3.3.3 User Name Quotas for the Avertz *ACMS* Sample

The VR_DA_RUNTIME_SETUP.COM command file assigns quotas for the AVERTZ_EXC, AVERTZ_UPD, and AVERTZ_READ user names that are adequate for running the VR_DA_APPL sample application. If your system already has these user names defined, the quotas for these user names might be inadequate for VR_DA_APPL. If you are using the AVERTZ sample application, delete the AVERTZ_EXC, AVERTZ_UPD, and AVERTZ_READ user names before running VR_DA_RUNTIME_SETUP.COM to ensure that you get appropriate quotas for these user names.

To ensure the success of the operations in the VR_DA_RUNTIME_SETUP.COM command procedure, run it from the system account.

3.3.4 Access Control List for the Avertz *ACMS* Sample

The VR_DA_RUNTIME_SETUP.COM procedure adds the AVERTZ application name VR_DA_APPL to the *ACMS* database. The command line to do so includes the ACL qualifier and assigns the ID as /ID=SYSTEM. This might fail on your system.

To ensure that the VR_DA_RUNTIME_SETUP.COM procedure works, change the ID=SYSTEM to ID=[UIC], where UIC is that of the account SYSTEM; for example, ID=[1,4].

3.3.5 Rebuilding the Avertz *ACMS* Sample

Executables are provided for the sample. You do not need to rebuild the sample to run it. However, a DEC/MMS description file is provided for rebuilding the sample to incorporate any changes you make to the sample.

To modify and rebuild the sample, follow these steps:

1. Copy the sample sources to another directory.
2. Use the command procedure VR_DA_BLD_MMS.COM to rebuild the sample under a different ADB name in that directory:
   a. Create the CDD directories for the AVERTZ components.
   b. Define logical names.

      If you are using a directory other than ACMSDI$EXAMPLES_AVERTZ for rebuilding the sample, edit the logical name definitions in the VR_DA_BLD_LOGICALS.COM command procedure to point to your file and CDD directories. Make these edits before running the BLD portion of the VR_DA_BLD_MMS.COM command procedure.

   c. Perform other setup and build activities.
3. Run the command procedure VR_DA_BLD_MMS.COM without parameters:

   ```
   $ @ACMSDI$EXAMPLES:VR_DA_BLD_MMS
   ```

   All the setup and build activities are performed.

To perform a specific activity, specify one of the parameters in Table 6–3.

Table 3–2 VR_DA_BLD_MMS.COM Parameters

Keyword	Activity
BLD	Run MMS to build VR_DA_APPL
CDD	Set up the CDD dictionary and directories for VR_DA_APPL
DB	Create the VEHICLE_RENTALS database

Part II

Using the TPware Product Suite CD

Part II describes *Compaq TP Desktop Connector* software installation from the TPware Product Suite CD on a Windows 32-bit system.

This part covers the client-side software and samples, but not the server-side software and samples. See Part III for the server-side instructions.

If you install the software from the Software Products Library CD, see Part I.

4

Before Installing *TP Desktop Connector* Software

This chapter describes the preparations and requirements necessary for installing *Compaq TP Desktop Connector* software and also contains information on removing *TP Desktop Connector* software from Win32 platforms. 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 incomplete, contact your Compaq representative.

4.1 Installation Overview

The TPware Product Suite CD contains all the software required for development or deployment of *TP Desktop Connector* client applications, *except* for the gateway needed to connect to an *ACMS* system. The gateway software is distributed separately. Table 4–1 lists the contents of the TPware Product Suite CD.

As shown in Table 4–1, all *TP Desktop Connector* files are provided on the TPware Product Suite CD. This compact disk is in ISO9660 standard format and contains executable programs that install the appropriate files. You must have a Windows NT or Windows 95/98 system with a CD drive on which to run the installation procedures that are described in Chapter 5.

TP Desktop Connector supports the following platforms in addition to 32-bit Microsoft operating systems (Windows NT and Windows 95/98):

- 16-bit Microsoft operating systems running on Intel platforms
- *Compaq OpenVMS* running on *VAX* or *Alpha* systems
- *Tru64 UNIX* systems
- Macintosh systems

If you are developing *TP Desktop Connector* client applications for any of the above non–Win32 systems, you must install the client services files yourself. Refer to Chapters 6 and 7.

Table 4–1 Contents of the TPware Product Suite CD

Name	Contents
\alpha32	Runtime and development kit for the entire TPware product suite on *Compaq Alpha* platforms running Microsoft Windows NT
\dunix	*TP Desktop Connector* client services[1] and samples for *Tru64 UNIX* systems
\install_guides	Installation guides for all of the TPware products, formatted for Web browsing
\intel16	*TP Desktop Connector* client services[1] and samples for 16-bit Microsoft operating systems (DOS, Windows 3.11, or Windows 95) on Intel platforms
\intel32	Runtime and development kit for the entire TPware product suite on Intel platforms running 32-bit Microsoft operating systems (Windows NT or Windows 95/98)
\mac	*TP Desktop Connector* client services[1] and samples for Apple Macintosh systems
\vmsalpha	*TP Desktop Connector* client services[1] and samples for *OpenVMS Alpha* systems
\vmsvax	*TP Desktop Connector* client services[1] and samples for *OpenVMS VAX* systems
dskcon_release_notes.htm	Information on new features and known restrictions for all three *TP Desktop Connector* kits
optimizer_release_notes.htm	Information on new features and known restrictions for *Application Optimizer for Windows NT*
portable_tp_release_notes.htm	Information on new features and known restrictions for *Portable TP for Windows NT*
webcon_release_notes.htm	Information on new features and known restrictions for *TP Web Connector*

[1]Formerly known as the *ACMS* Desktop ''portable API'' services.

4.2 Preparing to Install *TP Desktop Connector* Software

Ensure that your system meets the software requirements. Minimum software requirements needed to install the *TP Desktop Connector* software and build client applications that run with *ACMS* systems are shown in the Software Product Description (SPD), a copy of which is included in the product kit.

4.2.1 Product Licenses

To install *TP Desktop Connector* products, you must have a Product License Key. This is a paper certificate that contains information about the license you have to run a particular piece of software. You are asked to enter the license key during the installation procedure.

4.2.2 Disk Space

Installing *TP Desktop Connector* software requires a certain amount of free storage space, which depends on the platform you use. Table 4–2 shows the storage requirements for *TP Desktop Connector* software.

Table 4–2 *TP Desktop Connector* Disk Space Requirements

	Intel	*Alpha*
Kilobytes (KB)	6 063	6 517

Note

These are the minimum disk space requirements. These estimates, though conservative, are not always an accurate indicator of the disk space used on a particular machine. System disk configuration, including the size of the disk sector and the number of sectors per cluster, cannot be determined by the installation program. Therefore, some systems require more space.

See Table 6–2 for the disk space required for *TP Desktop Connector* client services software on non–Win32 systems.

4.3 Removing the Installed Software

You might decide to remove the installed TPware software to upgrade to a new TPware software version, or for other reasons. Note that when you remove the software, you lose the settings defined in the TPware Management Utility. Before removing the software, refer to the *Release Notes* for instructions on saving your management settings.

You can remove the installed *TP Desktop Connector* software from your system using either the shortcut provided in the TPware products program group, or the system Add/Remove Programs utility.

Note

The uninstall procedure removes all currently installed TPware products.

- To remove the software using the shortcut provided in the TPware program group:
  1. Click the `Start` button.
  2. Choose the `Programs` menu.
  3. Choose the `TPware Products` program group.

     If you chose a different program group while installing *TP Desktop Connector*, that group name is displayed on the `Programs` menu in place of `TPware Products`.
  4. Choose the `Uninstall TPware` item.
- To remove the software using the system Add/Remove Programs utility:
  1. Double click the `Add/Remove Programs` icon in the `Control Panel` window.
  2. Choose the *Compaq* TPware item.
  3. Click the `Add/Remove...` button.

5

Installing *TP Desktop Connector* Software on Win32 Systems

This chapter describes the procedures for installing or reinstalling the *Compaq TP Desktop Connector* software from the TPware Product Suite CD on Microsoft Windows NT running on an Intel or a *Compaq Alpha* system, or Windows 95/98 on an Intel system. This chapter also contains information on postinstallation tasks on Windows NT or Windows 95/98 systems.

For information on installing *TP Desktop Connector* software on non–Win32 platforms, see Chapters 6 and 7.

For information on installing TP Desktop Connector Gateway for ACMS software, see Part III of this guide (Chapters 8 through 11).

5.1 *TP Desktop Connector* Software Installation Procedure

To install *TP Desktop Connector* software, run one of the `setup` programs provided on the TPware Product Suite CD. Double-click one of the following:

```
E:\alpha32\setup.exe
E:\intel32\setup.exe
```

Replace `E:` with the correct drive letter for your system.

The `setup` program displays a splash screen and a progress indicator while it initializes its wizard. When `setup` starts, you see a series of dialog boxes. The following table lists the operations associated with the command buttons in the dialog boxes.

To do this...	Click this button:
Complete the choices in a dialog box and continue	`Next`
Return to a previous dialog box	`Back`
Exit without completing the installation	`Cancel`

Follow the instructions in the dialog boxes to select installation of *TP Desktop Connector*.

The `setup` utility checks whether there is sufficient disk storage, copies the appropriate files, and performs registry operations.

If `setup` finds that a requisite software product is not installed or that the minimum version of a requisite product is not on the system, it displays a `Warning` box showing the product name and version. The installation might continue after the warning or it might fail, depending on the prerequisite. If the installation continues, you must install the prerequisite software before you can actually use *TP Desktop Connector* software.

5.2 After Installing *TP Desktop Connector* Software

This section describes some procedures you might want to perform after you copy files from the *OpenVMS* system (see Section 3.2.2.1) or after the `setup` program finishes (see Section 5.1).

5.2.1 Setting Up the TPware Environment

Before developing TPware client applications, you must set up the environment variables that TPware software requires. To do this, run the command file installed by the `setup` program:

```
C:\TPware\stdl\bin\stdl_set_version.bat
```

Note

All examples show the default location. If you chose a different destination while running `setup`, substitute your own drive and folder for `C:\TPware`.

5.2.2 Accessing the *ACMS* System

For access to a *Compaq ACMS* transaction processing system, the TP Desktop Connector Gateway for ACMS must be installed on the *OpenVMS* system. The gateway software is distributed on a separate CD; instructions for installing it are contained in Part III of this guide.

5.2.3 Defining the Network Transport for the Client Services Interface

TP Desktop Connector software supports both DECnet and TCP/IP network transports for Windows NT or Windows 95/98 clients. The product files include two versions of the client application's dynamic link library (DLL); one for DECnet and one for TCP/IP. These files are installed, by default, in:

```
C:\TPware\stdl_rt\bin\acmsdiDN.dll
C:\TPware\stdl_rt\bin\acmsdiWS.dll
```

To set up the *TP Desktop Connector* software for your network transport, copy the appropriate DLL from the installation folder to your working directory, and rename it `acmsdi.dll`. The `acmsdiDN.dll` provides DECnet support and works with PATHWORKS 32. The `acmsdiWS.dll` provides TCP/IP support and also works with PATHWORKS 32.

5.2.4 Verifying the *TP Desktop Connector* Installation

To verify that your *TP Desktop Connector* software is installed correctly, you can run one of the sample applications provided.

If you are developing an application that uses the Adapter Interface (refer to ***Compaq TP Desktop Connector*** *Getting Started*), both the sample applications and the instructions for running them are online. To read the instructions, choose the `ACMS Samples` item from the `TP Desktop Connector for ACMS` menu in the `TPware Products` program group.

For a *TP Desktop Connector* application that uses the Client Services Interface, * you must have platform-specific *TP Desktop Connector* client software on your development system. All the client services files are on the TPware Product Suite CD. If you are developing a *TP Desktop Connector* client application that uses the Client Services Interface, in a non–Win32 operating system, you must transfer the *TP Desktop Connector* client services files to your desktop development system yourself. How to do this varies according to platform:

- For 16-bit Microsoft systems, *Compaq OpenVMS*, and *Tru64 UNIX* systems, see Chapter 6.
- For Apple Macintosh systems, see Chapter 7.

* Formerly known as the *ACMS* Desktop ''portable API'', and as opposed to the new TPware automation interface.

If you are developing a *TP Desktop Connector* client application that uses the Client Services Interface on a Win32 system, the client services files are installed on your desktop by the `setup` program with the rest of the development tools. The instructions for setting up the client services and running the sample programs are in Sections 5.2.5 and 5.2.6. You do not need to read Chapters 6 and 7.

5.2.5 Running the Win32 Sample Client Applications

TP Desktop Connector client services include two sample applications for Win32 clients:

- For Windows 95, in PowerBuilder, a simplified version of the original AVERTZ for Windows described in the *ACMS* manuals. This sample illustrates the execution of an *ACMS* task with no exchange I/O.

  Table A–3 describes the contents of the PowerBuilder sample folder `TPware\STDL\Samples\acmsdi\PB`.

  For directions on running the PowerBuilder sample, read the three `.doc` files in the sample folder.

- For Windows 95/98 or Windows NT, the same Visual Basic AVERTZ sample that was provided for *ACMS* Desktop V2.0; it is a blocking, no exchange I/O client.

  Table A–4 describes the contents of the Visual Basic sample folder `TPware\STDL\Samples\acmsdi\VB`.

The following files provide memory copy procedures and can be used to help with interfacing Visual Basic Win32 programs with the *TP Desktop Connector* client services:

```
C:\TPware\STDL\lib\divb.lib
C:\TPware\STDL_RT\bin\divb.dll
C:\TPware\STDL_RT\bin\msvcrt40.dll
```

To verify the success of your *TP Desktop Connector* client services installation, you can run the Visual Basic sample application. Follow these steps:

1. Start up the Visual Basic development environment in Windows 95.
2. Open the VBAVERTZ project.

3. Verify that all the required files were loaded (see the VBAVERTZ project window):

   ```
   vbavertz.bas
   mainmenu.frm
   reserve.frm
   signin.frm
   ```

   Double click each item in the project window to verify that it loads properly.

4. Run the interpreted version of VBAVERTZ (choose the `Start` command from the `Run` menu).

5.2.6 Code Conversion Libraries for Kanji

TP Desktop Connector client services (on Windows 95 systems only) provides code conversion libraries for Kanji users, which convert Shift JIS code to DEC Kanji code and DEC Kanji code to Shift JIS code. You can link these libraries with your client application, if it requires Kanji code conversion.

The following files are installed for Kanji applications:

```
C:\TPware\stdl\lib\jcnvwin.lib
C:\TPware\stdl\include\jcnvwin.h
C:\TPware\help\jcnvwin_guide.ps
C:\TPware\help\jcnvwin_guide.txt
```

For usage information, refer to either the PostScript or the text version of the Japanese conversion guide.

6

Installing the *TP Desktop Connector* Client Services on Non–Win32 Systems

The *TP Desktop Connector* client services software was previously released as the *ACMS* Desktop ''portable API'' services. It allows client applications running on a variety of desktop platforms to call *ACMS* tasks. For the current *TP Desktop Connector* release, the client services software is distributed on the TPware Product Suite CD in folders (directories) according to the desktop platform. This chapter is also organized by platform:

For this platform	See . . .
16-bit[1] Microsoft operating systems, that is, DOS or Windows 3.11 (also known as Windows for Workgroups (WfW))	Section 6.2
Compaq OpenVMS systems	Section 6.3
Tru64 UNIX systems	Section 6.4

[1]For Win32 Microsoft operating systems, see Section 5.2

Section 6.1 presents a general overview of the installation process and its prerequisites.

For information on *TP Desktop Connector* client services for Apple Macintosh systems, see Chapter 7.

For information on how to design and develop client applications using the *TP Desktop Connector* client services software, refer to the following *ACMS* books:

- ***Compaq TP Desktop Connector for ACMS*** *Client Application Programming Guide*
- ***Compaq TP Desktop Connector for ACMS*** *Client Services Reference Manual*

6.1 Overview of the Client Services Installation

The TPware Product Suite CD is in ISO 9660 standard format. The instructions in this chapter assume that you can mount this CD directly on your desktop system. If you can not, you will have to use `ftp` or some other network file transport to get the files from a Windows 95 or Windows NT system that has the TPware CD mounted.

The client services are provided as self-extracting archive files that expand upon execution. In general, the procedure for installing the client services and accompanying sample client application files consists of the following steps:

1. Transfer a client services archive to your desktop platform
2. Execute it
3. Set up your system for the TPware environment
4. Set up the client services for your network transport
5. Transfer and execute a sample client archive
6. Run the sample to verify that the installation functions properly.

The following sections discuss the preparations and requirements necessary before installing the *TP Desktop Connector* client services and sample files.

6.1.1 Software Prerequisites

The *TP Desktop Connector* SPD contains information on software prerequisites for installing *TP Desktop Connector*. Table 6–1 lists the products required to use the various client services sample applications.

Table 6–1 Client Services Sample Applications Software Requirements

Platform	Products Required
DOS	Microsoft COBOL Version 5.0 or higher Microsoft Visual C++ Version 1.52 or higher
Windows 3.11 SDK	Microsoft Windows Version 3.11 or higher Microsoft Visual C++ Version 1.52 or higher
Visual Basic	Microsoft Windows Version 3.11 or higher Microsoft Visual Basic Version 4.0
Motif on *OpenVMS*	VAX C for *OpenVMS* Version 3.0 or higher DECwindows Motif for *OpenVMS Alpha* Version 1.0

(continued on next page)

Table 6–1 (Cont.) Client Services Sample Applications Software Requirements

Platform	Products Required
Motif on *Tru64 UNIX*	DEC C, DECwindows Developers Kit on *Tru64 UNIX* for OSF/Motif Version 1.1

6.1.2 Disk Space

Table 6–2 lists the disk space required for each of the desktop systems.

Table 6–2 *TP Desktop Connector* Client Services Disk Space Requirements on Non–Win32 Systems

***OpenVMS VAX* Client**	**Number of Blocks**
Client services library and network software	322
Common headers	31
Motif sample files	305

***OpenVMS Alpha* Client**	**Number of Blocks**
Client services library and network software	709
Common headers	31
Motif sample files	489

DOS and Windows 3.11 Client	**Number of Bytes**
Client services libraries and network software	2 187 264
Common files	70 222
Kanji conversion libraries	182 748
COBOL sample files	421 888
Windows sample files	437 248

Macintosh Client	**Number of Blocks**
Client services library, network software, and sample files	2 538
Common headers	31

(continued on next page)

Table 6–2 (Cont.) *TP Desktop Connector* Client Services Disk Space Requirements on Non–Win32 Systems

Tru64 UNIX Client	Number of Bytes
Client services library and TCP/IP module	261 748
Motif sample files	291 826
Common headers	30 206

6.1.3 Resources

Before you start the installation procedure, obtain the following:

- DECnet node name (host name on TCP/IP) for the *OpenVMS* system on which the TP Desktop Connector Gateway for ACMS is installed
- Valid account (user name and password) on the *OpenVMS* system on which the TP Desktop Connector Gateway for ACMS is installed
- Directory of the network file transfer software in your directory search path or on your CD-ROM
- Directory in which the TPware files reside on an *OpenVMS* system, or your CD-ROM device (usually `E:\`)
- Directory in which to install the client services software
- Sufficient disk space, as shown in Table 6–2
- Host name for TCP/IP

6.2 Installing the Client Services for 16-Bit Microsoft Systems

TP Desktop Connector provides one self-extracting archive named `i16clint.exe` that contains all the client services files for both DOS and Windows 3.11 clients. The files contained within the archive include the static-link (LIB) and the dynamic-linked (DLL) libraries. Also included are individual object files and DLLs for the supported transports.

If you install the software from the TPware Product Suite CD (see Section 5.1), transfer the archive file from the Windows NT system to your desktop system. For example:

1. On the client system, create a subdirectory to store the software:

```
C:\> mkdir ACMSDI
```

2. Change directory to the newly created subdirectory:

   ```
   C:\> cd ACMSDI
   ```

3. Copy the archive file to the newly created subdirectory.

   ```
   C:\ACMSDI> copy E:\intel16\i16clint.exe
   ```

If you install the software from the Software Products Library CD (see Section 3.2.2.2), change directory to the location containing the client files.

To install the client services software, execute the archive file and delete it to recover disk space. For example:

```
> i16clint
> del i16clint.exe
```

The archive expands, and the resulting files can then be used.

If this is to be your working directory, you need to set the environment variables that define the paths for the libraries, include files, and executables. Add commands to your `autoexec.bat` file. For example:

```
set LIB=%LIB%;ACMSDI
set INCLUDE=%INCLUDE%;ACMSDI
set PATH=%PATH%;ACMSDI
```

6.2.1 Setting Up the Client Services for DOS

The DOS client services use the static-link library `ACMSDIL.LIB`, which supports DECnet by default. Additional network transport object files are provided for the large-memory model, whose names reflects the transport they support.

Memory Model	DECnet	TCP/IP	Netware
Large	`netdecl.obj`	`nettcpl.obj`	`netwarel.obj`

If you are not using DECnet, remove the DECnet module and insert the module that corresponds to the transport you are using. For example, to set up up the large model for TCP/IP:

```
LIB ACMSDIL.LIB -NETDECL;
LIB ACMSDIL.LIB +NETTCPL;
```

6.2.2 Installing the Sample Client Application for DOS

The client services sample for DOS is written in Microsoft COBOL and is in a self-extracting archive file named `i16cobol.exe`. If you install the software from the TPware Product Suite CD (see Section 5.1), transfer the archive file from the Windows NT system to your desktop system. For example:

```
C:\ACMSDI\> mkdir cobol
C:\ACMSDI\> cd cobol
C:\ACMSDI\COBOL> copy e:\intel16\Samples\i16cobol.exe
```

If you install the software from the Software Products Library CD (see Section 3.2.2.2), change directory to the location containing the client files.

To install the client services sample for DOS, execute the archive file and delete it to recover disk space. For example:

```
C:\ACMSDI\COBOL> i16cobol.exe
C:\ACMSDI\COBOL> del i16cobol.exe
```

Table A–5 shows the resulting files.

The sample executable was built using the DECnet libraries. If you are not running DECnet, you need to relink the sample before you can run it.

6.2.3 Verifying the Client Services Installation for DOS

Compile, link, and run the source code for the sample client program to verify your capability to build applications. You need the following products on your desktop system to build the sample application:

- Compiler (preferably Microsoft C) that can access objects compiled by Microsoft Visual C++ Version 1.5 or higher
- C runtime library that is compatible with Microsoft Visual C++ Version 1.5
- COBOL compiler compatible with Microsoft COBOL software (required only to build the sample application)

The client services samples include two batch files to build the COBOL client program. You can modify these files according to your own software development environment. After you modify the files, run them. For example:

```
C:\ACMSDI\COBOL> bld-pps
    .
    .
    .
C:\ACMSDI\COBOL> bld-cli
    .
    .
    .
```

To run the sample client program, enter the following command:

```
C:\ACMSDI\COBOL> client
```

The client program displays the main menu of the AVERTZ Vehicle Rental System application.

To connect the sample program to the AVERTZ sample application, follow the procedures in Section 6.3.3 to set up the sample application on the *ACMS* system. You can sign in to the *ACMS* system and use the reserve task of the application.

The DOS installation procedure is now complete and verified.

6.2.4 Setting Up the Client Services for Windows 3.11

You would normally use a DLL when building applications under Windows. However, you can use the static-link libraries provided with *TP Desktop Connector* if you prefer, when the transport is DECnet.

The client services sample for Windows 3.11 expects to find a DLL called `acmsdi.dll` To set up the client services for your network transport, copy one of the files below to your working directory and rename it `acmsdi.dll`.

DECnet	TCP/IP	Netware
`acmsdiDN.dll`	`acmsdiWS.dll`	`acmsdiNW.dll`

For example, to use TCP/IP with the Winsock interface:

```
C:\ACMSDI> mkdir sdk311
C:\ACMSDI> copy acmsdiWS.dll sdk311\acmsdi.dll
```

There is an executable file, `diTskLnk.exe`, that supports multiple executables sharing a submitter session under Windows Version 3.1 using TCP/IP. Refer to ***Compaq TP Desktop Connector for ACMS*** *Gateway Management Guide* for information on this executable file.

6.2.5 Code Conversion Libraries for Kanji

TP Desktop Connector provides code conversion libraries for Kanji users, which convert Shift JIS code to DEC Kanji code and DEC Kanji code to Shift JIS code. You can link these libraries with your client application, if it requires Kanji code conversion.

These libraries are located in the following archive file:

```
E:\intel16\win16\jcnvwin.exe
```

For usage information, refer to JCNVWIN_GUIDE.PS or JCNVWIN_GUIDE.TXT, which are installed when you expand the archive.

6.2.6 Installing the Sample Application for Windows 3.11

The client services sample for Windows 3.11 is written in C and is provided in the following self-extracting archive files.

i16sdklb.exe	Contains both the sample sources and the make file for using the DECnet medium model static-link library.
i16sdkdl.exe	Contains just the alternate files needed to rebuild the sample client against DLLs. The resulting executable file can work with any of the supported transports.

If you install the software from the TPware Product Suite CD (see Section 5.1), transfer the archive file i16sdklb.exe from the Windows NT system to your desktop system. For example:

```
C:\ACMSDI> cd sdk311
C:\ACMSDI\SDK311> copy e:\intel16\Samples\i16sdklb.exe
```

If you install the software from the Software Products Library CD (see Section 3.2.2.2), change directory to the location containing the client files.

To install the software, execute the archive file and delete it to recover disk space. For example:

```
C:\ACMSDI\SDK311> i16sdklb.exe
C:\ACMSDI\SDK311> del i16sdklb.exe
```

If you want the DLL version, first get the sources as above, then get the other archive i16sdkdl.exe, and run it. This overrides the static-link makefiles. For example:

```
C:\ACMSDI\SDK311> copy e:\intel16\Samples\i16sdkdl.exe
C:\ACMSDI\SDK311> i16sdkdl.exe
C:\ACMSDI\SDK311> del i16sdkdl.exe
```

Table A–6 shows the resulting files.

6.2.7 Verifying the Client Services Installation on Windows 3.11

Compile, link, and run the source code for the sample client program to verify your capability to build applications. You need the following products on your desktop system to build the C language sample application:

- Compiler (preferably Microsoft C) that can access objects compiled by Microsoft Visual C++ Version 1.52 or higher
- C runtime library that is compatible with Microsoft Visual C++ Version 1.52

- Microsoft Windows for Workgroups Version 3.11.
- If building against static link libraries, you need the PATHWORKS Version 5.1 Software Developer's Kit.

To verify the installation of the *TP Desktop Connector* client services for Windows 3.11, follow these steps:

1. Using the AVERTZ makefile, build the sample application by running `nmake` in the directory that contains the sample files.

   ```
   C:\ACMSDI\SDK311> nmake -f avertz
   ```

2. Run Windows by entering the following command:

   ```
   C:\ACMSDI\SDK311> win
   ```

3. Run the AVERTZ program by one of the following methods:
   - Use the Run command:
     a. In the Program Manager `File` menu, select the `Run` command.
     b. In the dialog box that appears, type the location:

        \ACMSDI\SDK311\avertz
   - Add the AVERTZ program icon to the screen and double click on it:
     a. In the Program Manager `File` menu, select the `New` command.

        This creates a group window to contain the icon.
     b. In the dialog box, select the new program group and click the `OK` button.
     c. At the description prompt, type a name for the group window. For example:

        ACMS Desktop Samples
     d. Give a file name for the group window. For example:

        C:\ACMSDI\SDK311\sample

        After you enter the name, a window appears having the group window name.
     e. Click on the new group window to select it.
     f. In the Program Manager's `File` menu, select the `New` command to add the AVERTZ icon to the group window.
     g. In the dialog box, select new `Program Item`.

h. In the description prompt, type the icon caption. For example:

   AVERTZ

i. After the command-line prompt, type the location of the AVERTZ executable file. For example:

   C:\ACMSDI\SDK311

j. In the dialog box, click the OK button.

   The AVERTZ icon appears in the group window.

k. Double click the AVERTZ icon to run the sample client program.

The AVERTZ program displays the menu bar of the AVERTZ Vehicle Rental System application.

If you want the sample desktop client program to communicate with the *ACMS* application, follow the procedures in Section 6.3.3 to set up the sample application on the *ACMS* system. After you set up the *ACMS* system, use the Session menu to sign in to the *ACMS* system. After you sign in, you can use the Rental menu to run the reserve task of the AVERTZ application.

The Windows 3.11 installation procedure is now complete and verified.

6.2.8 Installing the PowerBuilder Sample Application

There is a PowerBuilder Version 5.0 sample application provided as a self-extracting archive file named i16pbkit.exe. This sample is a simplified version of the original Avertz for Windows; it illustrates the execution of an *ACMS* task with no exchange I/O.

The archive provides a PowerBuilder library, pbaverz.pbl, that contains the PowerBuilder objects for the Avertz client application, and a dynamic-link library, pbpointr.dll that is required for memory management when building PowerBuilder applications that use TP Desktop Connector gateway for ACMS services.

If you install the software from the TPware Product Suite CD (see Section 5.1), transfer the archive file from the Windows NT system to your desktop system. For example:

```
C:\ACMSDI> mkdir pbsmp
C:\ACMSDI> cd pbsmp
C:\ACMSDI\PBSMP> copy e:\intel16\i16pbkit.exe
```

If you install the software from the Software Products Library CD (see Section 3.2.2.2), change directory to the location containing the client files.

To install the software, execute the archive file and delete it to recover disk space. For example:

```
C:\ACMSDI\PBSMP> i16pbkit.exe
C:\ACMSDI\PBSMP> del i16pbkit.exe
```

Table A–7 lists the files that are added to your system. For instructions on using the PowerBuilder sample, read the three `.doc` files shown in Table A–7.

6.2.9 Installing the Visual Basic Sample Applications

There are two Visual Basic sample applications provided in the form of self-extracting archive files. The file `\intel16\Samples\i16vbavz.exe` contains the files for the same sample that was provided for *ACMS* Desktop V2.0; it is a blocking, no exchange I/O client.

The file `i16vbfnb.exe` (in the same folder) contains the files of a tutorial sample showing how to program to the new TP Desktop Connector gateway for ACMS forced non-blocking interface. This interface allows languages like Visual Basic to issue non-blocking calls to TP Desktop Connector gateway for ACMS and provides support for programming *ACMS* exchange I/O interface calls.

If you install the software from the TPware Product Suite CD (see Section 5.1), transfer the archive file from the Windows NT system to your desktop system. For example:

```
C:\ACMSDI> mkdir vbavertz
C:\ACMSDI> cd vbavertz
C:\ACMSDI\VBAVERTZ> copy e:\Samples\i16vbavz.exe
```

If you install the software from the Software Products Library CD (see Section 3.2.2.2), change directory to the location containing the client files.

To install the sample software, execute the archive file and delete it to recover disk space. For example:

```
C:\ACMSDI\VBAVERTZ> i16vbavz.exe
C:\ACMSDI\VBAVERTZ> del i16vbavz.exe
```

Table A–8 lists the files added to your system from the Avertz archive; Table A–9 lists the files from the Forced Nonblocking tutorial.

6.2.9.1 Verifying the Visual Basic Avertz Sample Installation

To verify the success of the Visual Basic sample installation, bring up the Visual Basic development environment under Microsoft Windows:

1. Open the VBAVERTZ.MAK project using the `Open` command in the `File` menu.
2. Verify that all the required files were loaded. (See the VBAVERTZ.MAK project window):

   ```
   VBAVERTZ.BAS
   MAINMENU.FRM
   RESERVE.FRM
   SIGNIN.FRM
   ```

   Double click on each entry in the project window to verify that it loads properly.
3. Run the interpreted version of VBAVERTZ, by selecting the `Start` command in the `Run` menu.

6.2.9.2 Verifying the Forced Nonblocking Tutorial

To verify the successful installation of the Forced Nonblocking tutorial (from file `i16vbfnb.exe`), bring up the Visual Basic development environment in Microsoft Windows:

1. Open the FNBSAMPL.MAK project using the `Open` command in the `File` menu.
2. Add files ACMSDI.BAS and FORMS.BAS to the FNBSAMPL project by selecting `Add File` from the `File` menu.

   Note

   ACMSDI.BAS and FORMS.BAS were installed on your system as described in Section 6.2.
3. Add file CONSTANT.TXT from the `C:\VB` directory.
4. Verify that all of the required files were loaded. (See the FMBSAMPL.MAK project window):

   ```
   FORM1.FRM
   FRMLOGIN.FRM
   FRMRECVC.FRM
   ACMSDI.BAS
   CONSTANT.TXT
   ```

```
FORMS.BAS
MTEXT.BAS
NONBLK.BAS
```

Double click each entry in the project window to verify that it loads properly.

5. Run the interpreted version of FNBSAMPL by selecting the `Start` command from the `Run` menu.

6.3 Installing the Client Services for *OpenVMS*

The client services files for *OpenVMS* are provided as a compressed saveset that you can copy from the TPware CD mounted on your desktop platform. After copying the client services software, you decompress the file and restore the saveset.

Follow these instructions to install the client services for *OpenVMS*:

1. Create the client services directory on the desktop system.

   Note that this directory must be created from a user account, not from the system account.

   ```
   $ create/dir [.acmsdi]
   ```

2. Copy the file to the newly created directory.

   VAX

   For *OpenVMS VAX* systems:

   ```
   $ set def [.acmsdi]
   $ copy cd:[vmsvax]vms_client.exe []
   $ run vms_client.exe
      .
      .
      .
   Return accept the default output filename
      .
      .
      .
   $ backup vms_client.sav/save *.*/log  ♦
   ```

Alpha

For *OpenVMS Alpha* systems:

```
$ set def [.acmsdi]
$ copy cd:[vmsalpha]vms_client.exe []
$ run vms_client.exe
    .
    .
    .
Return accept the default output filename
    .
    .
    .
$ backup vms_client.sav/save *.*/log  ♦
```

3. The *TP Desktop Connector* library is preconfigured for DECnet network access. To build applications that use NetWare or TCP/IP as a transport, you must reconfigure the library before creating executable programs.

   The following steps are necessary to set up the *TP Desktop Connector* library for NetWare or TCP/IP access:

   a. Remove the DECnet object from the library with the following command:

      ```
      $ library/delete = net_decnet acmsdi$client_objlib.olb
      ```

   b. For NetWare, insert the NetWare transport access module into the library with the following command:

      ```
      $ library/insert acmsdi$client_objlib.olb net_netware.obj
      ```

      For TCP/IP, insert the TCP/IP transport access module into the library with the following command:

      ```
      $ library/insert acmsdi$client_objlib.olb net_tcpip.obj
      ```

After these steps, you are ready to build *TP Desktop Connector* applications that use NetWare or TCP/IP as a transport. Table A–1 shows the files that are added to your desktop system during the installation of the *TP Desktop Connector* client services for *OpenVMS*.

6.3.1 Installing the Motif Sample Client for *OpenVMS*

To install the Motif sample files on the *OpenVMS* desktop system, perform the following steps:

1. Create a directory on the desktop system to contain the sample files and move to that directory:

   ```
   $ create/dir [.motif_avertz]
   $ set def [.motif_avertz]
   ```

2. Copy the Motif sample file.

VAX

For *OpenVMS VAX* systems:

```
$ copy cd:[vmsvax.samples]vms_avertz.exe [] ♦
```

Alpha

For *OpenVMS Alpha* systems:

```
$ copy cd:[vmsalpha.samples]vms_avertz.exe [] ♦
```

3. Decompress the executable and restore the saveset:

```
$ run vms_avertz.exe
    .
    .
    .
Return accept the default output filename
    .
    .
    .
$ backup/restore vms_avertz.sav/save *.*/log
```

4. Copy the Motif resource file to your home directory:

```
$ copy m_avertz.dat  sys$login:m_avertz.dat
```

Table A–2 lists the files that are added to your desktop system.

6.3.2 Verifying the Motif Sample Installation on *OpenVMS*

Compile, link, and run the source code for the sample client program to verify your capability to build applications.

To build the sample application, follow these steps:

1. If you have MMS, use the MMS makefile provided to build the m_avertz sample application. In the sample directory, run MMS using the following command:

   ```
   $ MMS
   ```

   If you download *TP Desktop Connector* libraries to a different location, edit the makefile to indicate the new location of the libraries.

Alpha

Note

On *OpenVMS Alpha* systems, the makefile expects the logical ACMSDI$VMS_ALPHA to point to the directory that contains the *TP Desktop Connector* client library. In addition, on *OpenVMS Alpha* systems, the first time that the makefile tries to create the DECwindows library, the makefile fails. When this happens, rerun MMS to continue the build.♦

If you do not have MMS, use the makefile as a guide to build the application yourself.

2. Run the application by entering the following command:

```
> run m_avertz/nodebug
```

The m_avertz application displays the menu bar of the AVERTZ Car Reservation System. If you want the sample desktop client program to communicate with the *ACMS* application, follow the procedures in Section 6.3.3 to set up the sample application on the *ACMS* system. After you set up the *ACMS* system, use the Session menu to sign in to the *ACMS* system. After you sign in, you can use the Rental menu to run the reserve task of the AVERTZ application.

The installation procedure is now complete and verified.

6.3.3 Setting Up the Avertz *ACMS* Sample Application on an *OpenVMS* System

The command procedure VR_DA_RUNTIME_SETUP.COM sets up the sample application. You need SYSPRV privilege to run the procedure. See the file ACMSDI$VR_APPLICATION_INFO.TXT in the ACMSDI$EXAMPLES_ AVERTZ directory for more information on setting up the sample.

To prepare the AVERTZ sample application on a *Compaq OpenVMS* system, do the following:

1. Run the command procedure to set up the application:

```
$ @ACMSDI$EXAMPLES_AVERTZ:VR_DA_RUNTIME_SETUP
    .
    .
    .
$
```

2. Start the *ACMS* system (if necessary) and the application:

```
$ ACMS/START SYSTEM
$ ACMS/START APPLICATION VR_DA_APPL
```

3. Perform other management tasks related to your system, for example, authorizing user accounts. Refer to the management information in ***Compaq TP Desktop Connector for ACMS*** *Client Application Programming Guide*.

The following sections provide additional information about using the Avertz sample application on the *ACMS OpenVMS* system.

6.3.3.1 Using the Avertz *ACMS* Sample with Rdb Version 6.0 with Multi-Version

When you execute the VR_DA_RUNTIME_SETUP.COM file to set up the sample application, this command file invokes two option files, VR_READ_SERVER.OPT and VR_UPDATE_SERVER.OPT, which reference the SYS$LIBRARY:SQL$USER library. On a system with Rdb Version 6.0 with multi-version installed, the SYS$LIBRARY:SQL$USER file is not available. Instead, the version number is appended to the file name, for instance, SYS$LIBRARY:SQL$USER60.

To work around this naming mismatch problem, you can define the logical name SQL$USER to reference the appropriate library file. For example:

```
$ DEFINE SQL$USER SYS$LIBRARY:SQL$USER60
```

Modify the linker options files:

ACMSDI$EXAMPLES_AVERTZ:VR_READ_SERVER.OPT
ACMSDI$EXAMPLES_AVERTZ:VR_UPDATE_SERVER.OPT

Replace the line

```
SYS$LIBRARY:SQL$USERnn.OLB/LIBRARY
```

with the following:

```
SYS$USER/LIBRARY
```

6.3.3.2 Building the Avertz *ACMS* Sample with DECforms V1.4

The VR_FORM.IFDL file of the Avertz *ACMS* sample application can not be compiled under DECforms Version 1.4. This is because the DECforms Version 1.4 IFDL parser no longer recognizes the colon symbol (:), which the VR_FORM.IFDL file uses.

To get around this problem, put double quotation marks around the text containing the ":" symbol in the VR_FORM.IFDL file.

For example, change the following:

```
Copy
     AVERTZ_CDD_FIELD:CUSTOMER_ID from Dictionary
End Copy
```

To look like:

```
Copy
     "AVERTZ_CDD_FIELD:CUSTOMER_ID" from Dictionary
End Copy
```

6.3.3.3 User Name Quotas for the Avertz *ACMS* Sample

The VR_DA_RUNTIME_SETUP.COM command file assigns quotas for the AVERTZ_EXC, AVERTZ_UPD, and AVERTZ_READ user names that are adequate for running the VR_DA_APPL sample application. If your system already has these user names defined, the quotas for these user names might be inadequate for VR_DA_APPL. If you are using the AVERTZ sample application, delete AVERTZ_EXC, AVERTZ_UPD, and AVERTZ_READ user names before running VR_DA_RUNTIME_SETUP.COM to ensure that you get appropriate quotas for these user names.

To ensure the success of the operations in the VR_DA_RUNTIME_SETUP.COM command procedure, run it from the system account.

6.3.3.4 Access Control List for the Avertz *ACMS* Sample

The VR_DA_RUNTIME_SETUP.COM procedure adds the AVERTZ application name VR_DA_APPL to the *ACMS* database. The command line to do so includes the ACL qualifier and assigns the ID as /ID=SYSTEM. This might fail on your system.

To ensure that the VR_DA_RUNTIME_SETUP.COM procedure works, change the ID=SYSTEM to ID=[UIC], where UIC is that of the account SYSTEM; for example, ID=[1,4].

6.3.3.5 Rebuilding the Avertz *ACMS* Sample

Executables are provided for the sample. You do not need to rebuild the sample to run it. However, a DEC/MMS description file is provided for rebuilding the sample to incorporate any changes you make to the sample.

To modify and rebuild the sample, follow these steps:

1. Copy the sample sources to another directory.
2. Use the command procedure VR_DA_BLD_MMS.COM to rebuild the sample under a different ADB name in that directory:
   a. Create the CDD directories for the AVERTZ components.

b. Define logical names.

   If you are using a directory other than ACMSDI$EXAMPLES_AVERTZ for rebuilding the sample, edit the logical name definitions in the VR_DA_BLD_LOGICALS.COM command procedure to point to your file and CDD directories. Make these edits before running the BLD portion of the VR_DA_BLD_MMS.COM command procedure.

c. Perform other setup and build activities.

3. Run the command procedure VR_DA_BLD_MMS.COM without parameters:

   ```
   $ @ACMSDI$EXAMPLES:VR_DA_BLD_MMS
   ```

   All the setup and build activities are performed.

To perform a specific activity, specify one of the parameters in Table 6–3.

Table 6–3 VR_DA_BLD_MMS.COM Parameters

Keyword	Activity
BLD	Run MMS to build VR_DA_APPL
CDD	Set up the CDD dictionary and directories for VR_DA_APPL
DB	Create the VEHICLE_RENTALS database

6.4 Installing the *Tru64 UNIX* Client Software

The *TP Desktop Connector* client services and sample application files are distributed on the Software Products Library CD and on the TPware Product Suite CD. If you are installing the software from the TPware Product Suite CD (see Section 6.1), you have archive (`tar(1)`) files that you install on a *Tru64 UNIX* desktop system. Perform the following steps.

1. Create the client services directory on the desktop system, and change to that directory. For example:

   ```
   > mkdir acmsdi
   > cd acmsdi
   ```

2. Copy the archive file from the TPware CD to the client services directory. For example:

   ```
   > cp e:/dunix/du_client.tar .
   ```

If you install the client files from the Software Products Library CD (see Section 3.2.2.3), change directory to the location of the `tar` files that you placed on the *Tru64 UNIX* system.

The du_client.tar archive file contains the client files. Perform the following steps.

1. Extract the files from the archive. For example:

```
acmsdi> tar xvf du_client.tar
   .
   .
   .
```

   The list of files printed because of the v flag should match the list of files in Table A–10.

2. If you want to use the DECnet transport, change the client library. For example:

```
> su
# ar d libacmsdi.a net_tcpip.o
# ar r libacmsdi.a net_decnet.o
# ar t libacmsdi.a
   .
   .
   .
# ar qs libacmsdi.a
```

   Also edit the Makefile to add -ldnet to the link library list.

3. You can copy the client services library to /usr/lib/libacmsdi.a, so that you can refer to it in your link command as '-lacmsdi'. You need superuser privileges to copy into the /usr/lib directory.

   Copy the *TP Desktop Connector* client library to the system directory:

```
# cp libacmsdi.a /usr/lib/libacmsdi.a
   .
   .
   .
```

   You can leave the *TP Desktop Connector* library in the client services directory. If you do, use the full path to the library in your link command, instead of using the '-lacmsdi' option.

4. Update the copied library file:

```
# ar qs /usr/lib/libacmsdi.a
```

5. Exit superuser mode:

```
# Ctrl/D
>
```

See Section 6.4.1 for instructions on installing sample files.

6.4.1 Installing the Motif Sample Client on *Tru64 UNIX* Platforms

To install the Motif sample files on the *Tru64 UNIX* system, perform the following steps:

1. Create a directory on the desktop to contain the sample files and move to that directory:

   ```
   > mkdir avertz
   > cd avertz
   ```

2. Copy the sample archive from the TPware products CD:

   ```
   > cp e:\dunix\du_avertz.tar .
   ```

3. Extract the sample files:

   ```
   > tar xvf du_avertz.tar
      .
      .
      .
   ```

   The list of files printed should match the list in Table A–11.

The sample makefile and executables for Motif on *Tru64 UNIX* use TCP/IP as the default transport. If you have changed the client services library to use DECnet, you must relink the sample application before you run it.

6.4.2 Verifying the Motif Sample Installation on *Tru64 UNIX* Platforms

Compile, link, and run the source code for the sample client program to verify your capability to build applications. To build the sample application, follow these steps:

1. Use the makefile provided to build the m_avertz sample application. In the sample directory, run make:

   ```
   > make
   ```

2. Run the application by entering the following command:

   ```
   > m_avertz
   ```

The m_avertz application displays the menu bar of the AVERTZ Car Reservation System. If you want the sample desktop client program to communicate with the *ACMS* application, follow the procedures in Section 6.3.3 to set up the sample application on the *ACMS* system. After you set up the *ACMS* system, use the Session menu to sign in to the *ACMS* system. After you sign in, you can use the Rental menu to run the reserve task of the AVERTZ application.

The installation procedure is now complete and verified.

7

Installing the *TP Desktop Connector* Client Services for Macintosh Systems

This chapter describes the installation of the *TP Desktop Connector* client services and samples for Apple Macintosh clients.

After you install the TP Desktop Connector gateway for ACMS software on the *Compaq OpenVMS* system, you can install the *TP Desktop Connector* client services software on individual desktop systems.

7.1 Macintosh Installation Options

You can choose any of several installation options depending on the type of services you want to install on the target Macintosh:

- **Run-Time Services option**

  Permits the execution of *TP Desktop Connector* client applications, but does not include files that are helpful for developing new applications. You can install Run-Time Services with or without the Calypso Tool, which provides support for dialin applications to the host *ACMS* Desktop server. Choose this option (with or without Calypso) if you do not intend to develop new *TP Desktop Connector* applications on the target Macintosh.

- **System Services option**

  Includes the Run-Time Services plus a set of files that aids in the development of new *TP Desktop Connector* client applications on the target Macintosh. This option does not include the various examples that illustrate the use of the *TP Desktop Connector* client services. Choose the System Services option if you do not require the assistance of the examples, and want to conserve the disk space that the examples occupy.

- **Examples option**

  Includes the following:

  — Sample applications written in 4th Dimension, HyperCard, and C.

  — Two sets of 4th Dimension Externals that invoke the *TP Desktop Connector* client services, one of which includes C source code to illustrate how to write your own 4th Dimension Externals.

  — A set of HyperCard XFCNs that invoke the *TP Desktop Connector* client services, including C source code.

  — A set of utility files containing C source code for date and data conversion functions and programs useful in managing your development platform.

  You can install the Examples option separately, after installing the Run-Time Services.

7.2 Preparing to Install the Macintosh Software

This section describes the preparations and requirements for installing the *TP Desktop Connector* client services software for Macintosh systems.

7.2.1 Prerequisite Software for Macintosh Systems

Before you install the software, do the following:

1. Install TP Desktop Connector gateway for ACMS software on the *OpenVMS* system running *ACMS* software.
2. If you choose to use a VAXshare volume as the source from which to copy the client software to your Macintosh, identify a disk device on which to build a VAXshare volume.

   If you choose not to use a VAXshare volume as the source from which to copy the client software:

   a. Install a file transfer tool such as XMODEM or a DECnet file server on your host *OpenVMS* system.

   b. Install a corresponding file transfer tool such as MacTerminal or NetCopy on the Macintosh.

3. Install the appropriate Communications Tools on your Macintosh for the transports you plan to use:

   — AppleTalk-DECnet Tool

     To use the AppleTalk-DECnet Gateway

   — DECnet Tool

     To manage your Macintosh as a DECnet node

   — MacTCP

     To use a TCP/IP communications transport

   — AppleTalk ADSP Tool

     To manage your host *OpenVMS* node as a socket in an AppleTalk Internet

   — A tool that implements serial communications protocols, such as the Serial Tool or the Apple Modem Tool.

     To use serial communications

4. If you plan to manage your *OpenVMS* node as a socket in an AppleTalk Internet, install the PATHWORKS AppleTalk for *OpenVMS* Transport on your *OpenVMS* system.

5. Log in to the *OpenVMS* system using an account with sufficient privileges. Using the SYSTEM account is recommended.

7.2.2 Disk Space

The required disk space on your Macintosh depends on the installation option you choose, as listed in Table 7–1.

Table 7–1 Macintosh Disk Space Requirements

Option	Disk Space
Run-Time Services	138K bytes
Run-Time Services and Calypso	263K bytes
System Services	183K bytes
System Services and Calypso	308K bytes
Examples	2612K bytes
System Services, Calypso, and Examples	2920K bytes

7.3 Installing the Macintosh Software

This section describes how to install the *TP Desktop Connector* client services software for Macintosh on a Macintosh system.

7.3.1 Copying the *TP Desktop Connector* Installer to the Macintosh

All the files that comprise the *TP Desktop Connector* Macintosh client software are compacted into a single installation file, `ACMSDI_DESKTOP.INSTALLER`. The installation procedure consists of the following steps:

1. Copy or FTP `ACMSDI_DESKTOP.INSTALLER` to the target Macintosh.
2. Double click the installer file.
3. Follow the instructions that are displayed.

The files on the TPware Product Suite and Software Products Library CDs are in MacBinary format. Many file transfer facilities such as NetCopy and MacTerminal automatically convert files from MacBinary to standard Macintosh format as part of the copy operation. If your file transfer utility does not automatically do so, use a tool such as MacBinary Converter (`mBin`) to convert the `ACMSDI_DESKTOP.INSTALLER` to standard Macintosh format after you copy it.

After you have successfully copied the `ACMSDI_DESKTOP.INSTALLER` file to your Macintosh, proceed to Section 7.3.2.

7.3.2 Running the *TP Desktop Connector* Macintosh Installer

The `ACMSDI_DESKTOP.INSTALLER` file is a self-extracting file containing all the *TP Desktop Connector* Macintosh client services files in compressed form. During installation, files are automatically moved to the appropriate folders. The installation process provides instructions with each step:

1. Begin the installation process by double clicking on the `ACMSDI_DESKTOP.INSTALLER` file.
2. A window appears that identifies the product as *TP Desktop Connector* Version 2.3. Click on the `Continue` button.
3. A second window appears containing a copyright notice. Read the copyright notice. Buttons are available to save or print the notice. You can cancel the installation at this point by clicking the `Cancel` button, in which case nothing is installed. Click the `Continue` button if you want to proceed with the installation.

4. The next window provides some information about the installer. It tells you where the files to be installed will be placed and tells how much disk space is required for the (standard) full installation. The Calypso Tool mentioned is the software that enables serial (dialin) communication between *TP Desktop Connector* client applications and the host *ACMS* Desktop server.

   You have three buttons to choose from at this point:

   a. `Custom` button:

      Allows you to proceed to another window where you can choose which parts of the software you want to install.

   b. `Quit` button:

      Allows you to cancel the installation at this point; nothing is installed.

   c. `Install` button:

      Causes a full installation to occur; everything is installed.

   If you want a standard, full installation, click the `Install` button now, and skip to step 6. If you want to examine additional options, click the `Custom` button and proceed to step 5.

5. If you choose a custom installation, a window appears with six installation options. Text appears to describe each option and how much disk storage it requires. Section 7.1 presents a more complete description of the installation options.

   — `System Services, Calypso, and Examples:` This option installs everything. It is identical to the standard installation presented on the previous window.

   — `System Services:` This option installs everything except the examples and Calypso software.

   — `System Services and Calypso:` This option installs everything except the examples.

   — `Examples:` This option installs the examples only. Use it as a follow-up installation to a system services or run-time services option with or without Calypso.

   — `Run-Time Services:` This option installs only the basic software needed for run-time support. The development aids, the Examples and the Calypso software are not installed.

   — `Run-Time Services and Calypso:` This option installs the basic software needed for run-time support and the Calypso software. The development aids and examples are not installed.

You again have three buttons from which to choose:

a. `Standard` button:

   Allows you to return to the standard installation window.

b. `Quit` button:

   Allows you to cancel the installation at this point; nothing is installed.

c. `Install` button:

   Cause an installation to occur. Before clicking on this button, select one of the installation options by clicking on it to highlight it.

6. Clicking on the `Install` button from either the standard or custom installation window causes a window to appear from which you can select the location to place the folder "*TP Desktop Connector* folder (2.3)". All files except the DDEV and Calypso Tool are installed in this folder. Clicking the `Cancel` button cancels the installation, in which case nothing is installed. Clicking the `Save` button causes the installation to occur, as indicated by a progress window.
7. If the installation is successful, a dialog box appears indicating success. From this window, you can quit or continue with additional installations.

Part III

Using the Gateway CD

Part III describes *Compaq* TP Desktop Connector Gateway for ACMS software installation from the TP Desktop Connector Gateway for ACMS CD on an *OpenVMS* system.

This part covers the server-side software and samples, but not the client-side software and samples. For installations using the Software Products Library CD, see Part I. For installations using the TPware Product Suite CD, see Part II.

8

Preparing to Install TP Desktop Connector Gateway for ACMS Software

This chapter discusses the preparations and requirements necessary for installing *Compaq* TP Desktop Connector gateway for ACMS software. 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 incomplete, contact your Compaq representative.

The gateway software includes online *Release Notes* and gives you the option of printing or displaying them during the installation procedure. Compaq strongly recommends that you read the *Release Notes* before proceeding with the installation, in case they contain important information regarding the installation procedure.

8.1 Required Operating System Components

To install gateway software, you must have one of the following operating systems installed:

VAX *OpenVMS VAX* operating system

- Version 5.5-2
- Version 6.2
- Version 7.1
- Version 7.2 ♦

Alpha *OpenVMS Alpha* operating system

- Version 6.2
- Version 7.1
- Version 7.2 ♦

8.2 Prerequisite Software

The Software Product Description (SPD), a copy of which is included in the product kit, contains a list of the prerequisite software, and a complete list of the products that are compatible with this version of gateway software.

8.3 Installation Procedure Requirements

The installation procedure, VMSINSTAL, checks for various conditions on your system. If VMSINSTAL detects any problems during the installation, it notifies you of the problem and asks whether you want to continue the installation. In some instances, you can answer YES to continue. To stop the installation process and correct the situation, answer NO or press Return.

You can avoid having to stop and restart VMSINSTAL by following the directions in this section before you run VMSINSTAL. The time required for installing gateway software is approximately five minutes.

8.3.1 Disk Space

Installing gateway software requires a certain amount of free storage space during the installation. Table 8–1 summarizes the storage requirements for gateway software during and after installation.

Table 8–1 Disk Space Requirements

	Blocks During Installation	Blocks After Installation
Gateway	23 304	6 500

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
```

In the output column under the heading `Free Blocks` is the number of 512-byte blocks available on the device.

8.3.2 Privileges and Authorization

To install gateway software, you must be logged in to an account with the following privileges:

NETMBX
SETPRV
TMPMBX

The SYSTEM account has all the privileges you require for the installation.

VMSINSTAL turns off the BYPASS privilege at the start of the installation and sets whatever privileges it needs during the installation.

At the end of the installation procedure, if the gateway system components were installed, the gateway process on *OpenVMS* is started using the same user name that you use to install the product. Compaq recommends that you run the gateway under the user name SYSTEM or another user name with a [1,4] UIC.

For the gateway process to be properly started, the user name under which the installation is done must be an authorized *ACMS* agent. Use the ACMSUDU Utility to authorize the user name. For example:

```
$ SET DEFAULT SYS$SYSTEM
$ RUN ACMSUDU
UDU> ADD SYSTEM/AGENT
UDU>
```

If the user name is not authorized as a *ACMS* agent, the IVP can fail and *TP Desktop Connector* client programs cannot sign in to the *ACMS* system. To allow client programs to successfully sign in to the *ACMS* system, stop the gateway, and restart it under a user name that is an authorized *ACMS* agent.

8.3.3 *OpenVMS* License Management Facility

The gateway supports the *OpenVMS* License Management Facility (LMF). To install gateway software on an *OpenVMS* system, you must register your software license.

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

Register your gateway license before you perform the installation. During the installation, you are asked whether you have registered the gateway license and loaded the appropriate authorization key. You cannot run either the gateway software or its IVP unless your license is loaded. After you perform the license registration and load an authorization key, you can run the IVP and use the gateway software.

To register a license, first log in to the system manager account, SYSTEM. You then have a choice of two ways to register:

- Run the SYS$UPDATE:VMSLICENSE.COM procedure. When it prompts you for information, respond with data from your PAK.

- Issue the LICENSE REGISTER command with the appropriate qualifiers that correspond to information on the PAK.

For complete information on using LMF, see *VMS License Management Utility Manual*.

8.3.4 System Disk Backup

At the beginning of the installation, VMSINSTAL asks whether your system disk is backed up. Compaq recommends that you always do a system disk backup before installing new software on the operating system.

Use the backup procedures that are established at your site to do this backup. For details on performing a system disk backup, see the section on the Backup Utility in the *OpenVMS* documentation set.

8.3.5 Stopping the *ACMS* System and Gateway

If you have TPware components already installed and running, shut them down. While logged in to the system under an account having the appropriate privileges as described in Section 8.3.2, execute the following commands.

1. Stop the TP Web Connector Gateway for ACMS process. For example:

```
$ @SYS$STARTUP:ACMSDI$SHUTDOWN
$
```

2. If you have *ACMS* software already installed and running, shut it down. Execute the following commands.

   a. Stop the *ACMS* system. For example:

```
$  ACMS/STOP SYSTEM
   .
   .
   .
$
```

   b. Stop the *ACMS* controller. For example:

```
$  @SYS$STARTUP:ACMSTOP
   .
   .
   .
$
```

8.3.6 Locating the Saveset Directory

If you have not already inserted the compact disk (CD) media in the CD drive, do so now.

To obtain the directory location of the saveset for the gateway software on the CD-ROM, refer to the ***OpenVMS*** *Layered Products Compact Disc User's Guide*, or, before starting the installation, complete these steps:

1. To determine whether the CD-ROM drive is already mounted (MOUNT command), enter a command in the following format:

   SHOW DEVICE *device-name*

2. If the device is not mounted, enter a command in the following format:

   MOUNT/OVERRIDE=ID *device-name*

   For example:

   ```
   $ MOUNT/OVERRIDE=ID DKA200:
   ```

3. Locate the distribution files. The *directory-name* depends on the *OpenVMS* platform, as follows:

OpenVMS **Platform**	**Directory Name**
Alpha	VMSALPHA
VAX	VMSVAX

4. To obtain the saveset name, use a DIRECTORY command in the following format and specify the saveset name from the previous command.

   DIRECTORY *device-name*:ACMSDIA031

9

Installing TP Desktop Connector Gateway for ACMS Software

This chapter describes how to install *Compaq* TP Desktop Connector gateway for ACMS software. Section 9.1 provides helpful information about installing the gateway software. Section 9.2 contains a step-by-step description of the installation procedure.

9.1 General Installation Information

This section includes the following information.

- Accessing *Release Notes* (see Section 9.1.1)
- Determining the files and logical names added to your system (see Section 9.1.2)
- Running the Installation Verification Procedure (IVP) (see Section 9.1.3)
- Aborting the installation (see Section 9.1.4)

9.1.1 Accessing the Online *Release Notes*

The gateway software provides online *Release Notes*. To activate the prompt about displaying or printing the *Release Notes*, invoke VMSINSTAL with the OPTIONS N parameter.

After the gateway software has been installed, the *Release Notes* are located in a directory with public access.

9.1.2 Files and Logical Names Installed on Your System

The following files contain a list of the files added to your system by the gateway installation:

```
SYS$COMMON:[SYSTEST.ACMSDI]ACMSDI$FIRST_FILES.DAT
SYS$COMMON:[SYSTEST.ACMSDI]ACMSDI$SAMPLE_ADD_FILES.DAT
SYS$COMMON:[SYSTEST.ACMSDI]ACMSDI$SAMPLE_AVERTZ_FILES.DAT
SYS$COMMON:[SYSTEST.ACMSDI]ACMSDI$SAMPLE_COMMON_FILES.DAT
SYS$COMMON:[SYSTEST.ACMSDI]ACMSDI$SAMPLE_EMPLOYEE_FILES.DAT
SYS$COMMON:[SYSTEST.ACMSDI]ACMSDI$SAMPLE_MACINTOSH_FILES.DAT
SYS$COMMON:[SYSTEST.ACMSDI]ACMSDI$SYSTEM_FILES.DAT
```

You can display or print these files after you install the gateway software.

After the installation, if the gateway is started (by ACMSDI$STARTUP.COM), the following logical names are added to your system:

```
ACMSDI$EXAMPLES
ACMSDI$EXAMPLES_ACMS
ACMSDI$EXAMPLES_ADD
ACMSDI$EXAMPLES_AVERTZ
ACMSDI$EXAMPLES_EMPLOYEE
ACMSDI_AVERTZ_DEFAULT
AVERTZ_TDB
```

These logical names are entered into the system logical name table. The names are used in various gateway startup files. Thus, they are automatically entered into the system logical name table whenever the gateway startup command file is executed.

9.1.3 Installation Verification Procedure

The Installation Verification Procedure (IVP) for gateway software verifies the installation. During the installation, you are asked whether you want to run the IVP as part of the installation. If you answer YES, VMSINSTAL runs the IVP. It is recommended that you run the IVP to be sure that the software is installed correctly.

After you install the gateway software, you can run the IVP independently to verify that the software is available on your system. You might also want to run the IVP after a system failure to be sure that users can access gateway software. See Chapter 11 for information about running the IVP separately from the installation procedure.

9.1.4 Aborting the Installation

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

9.2 Installation Procedure

Perform the steps in the following sections to install the gateway software.

9.2.1 Invoking VMSINSTAL

Perform the following steps to start the installation process.

1. Log to a privileged account (see Section 8.3.2 for details) and set the default to the desired directory. For example:

```
$ SET DEFAULT SYS$UPDATE
$
```

   SYS$UPDATE is used in this example.

2. Use the following syntax to invoke VMSINSTAL:

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

   The parameter *saveset-name* represents the installation name for the component. For the gateway software, use the following installation name:

   ```
   ACMSDIA
   ```

   If you do not supply the saveset name, VMSINSTAL prompts you for it later in the installation procedure.

   The parameter *device-name* represents the location of the saveset files (see Section 8.3.6). If you do not supply `device-name`, VMSINSTAL prompts you for this information later in the installation procedure.

   OPTIONS N is an optional parameter indicating that you want to be prompted to display or print the *Release Notes*. If you do not include the OPTIONS N parameter, VMSINSTAL does not prompt you to display or print the *Release Notes*.

   VMSINSTAL supports several other options. For information, refer to the *OpenVMS* documentation on software installation.

3. Execute the installation procedure. For example:

```
$ @SYS$UPDATE:VMSINSTAL ACMSDIA DKA200[KIT]: OPTIONS N
```

   This command begins installing the ACMSDIA saveset found in the directory KIT on the CD device named DKA200.

VMSINSTAL asks several installation questions as described in Section 9.2.2.

9.2.2 Installation Questions

This section discusses the questions that appear during the installation. Each question in the installation is marked with an asterisk (*) at the beginning of the line. Some questions show the default response in brackets, for example, [YES]. To give the default response, press Return .

1. Confirming active processes

   VMSINSTAL displays a list of all active processes. It then asks whether you want to continue the installation. Install the gateway software on a standalone system or cluster with DECnet shut down to minimize possible installation problems.

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
   .
   .
   .
* Do you want to continue anyway [NO]?  YES
```

2. Confirm system backup

   VMSINSTAL asks whether you are satisfied with your system backup. Always back up your system disk before performing an installation. If you are satisfied with the backup of your system disk, press Return . Answer NO to discontinue the installation. After you back up your system disk, restart the installation.

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

3. Mounting the media

   VMSINSTAL now displays the CD device name and asks whether you are ready to continue with the installation.

   Answer YES to indicate that the CD is mounted. VMSINSTAL displays a message that the media containing gateway software is mounted on the specified device and that the installation is beginning. For example:

```
Please mount the first volume of the set on DKA200:.
* Are you ready? YES
%MOUNT-I-MOUNTED, ACMSDI mounted on DKA200:

The following products will be processed:

  ACMSDIA V3.1

        Beginning installation of ACMSDIA V3.1 at 13:14

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

If you enter the wrong device name when you invoke VMSINSTAL and need to restart the installation, answer NO in response to the `Are you ready?` question. See Section 8.3.6 for instructions on mounting the CD.

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

4. *Release Notes*

   If you specified OPTIONS N when you invoked VMSINSTAL, you see several options for reviewing the *Release Notes*. The following options are displayed:

```
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]: 1
```

   - Option 1

     If you select option 1, VMSINSTAL displays the *Release Notes* immediately on the console terminal. You can terminate the display at any time by pressing Ctrl/C. Because the *Release Notes* are several pages long, it is recommended that you choose option 2 to print the *Release Notes* rather than reviewing them on line.

   - Option 2

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

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

     Enter the name of an ANSI print queue on your system, or press Return to send the file to the default queue shown within the square brackets.

   - Option 3

     If you select option 3, VMSINSTAL displays the *Release Notes* and prompts for a queue name for the printed version.

   - Option 4

     If you select option 4, VMSINSTAL continues the installation.

5. Continuing the installation

   The installation procedure asks whether you want to continue the installation. To continue, answer YES. Otherwise, press Return. In either case, the *Release Notes* are copied to a file in the SYS$HELP directory. For example:

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

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```

   The name of the *Release Notes* file installed by VMSINSTAL consists of the current product name and version number. If you plan to compare previous versions of gateway software, do not delete the *Release Notes* for previous versions of the gateway.

6. Choosing to purge files

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

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

7. Choosing to run the IVP

   If you are installing the gateway system components, the installation procedure asks whether you want to run the IVP. The IVP checks that the software is installed correctly. It is recommended that you run the IVP.

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

   Press Return to run the IVP after installing gateway software. Answer NO to omit the IVP. Run the IVP independently after the installation to check the consistency of the gateway software. See Chapter 11 for information about how to run the gateway IVP independently of the installation procedure.

8. Installing Macintosh sample code

   You have the option of installing the gateway samples for the Macintosh platform.

```
* Do you want to install the Macintosh sample [YES]? NO
```

   Press Return to load the server-side Macintosh sample application code in the [.MACINTOSH] subdirectory of the ACMSDI$EXAMPLES directory. Answer NO to omit the Macintosh sample code. Note that only the Macintosh samples are optional; the Add, Avertz, and Employee server-side sample files are installed automatically.

9. Confirming license registration

   VMSINSTAL asks whether you have a PAK installed. You can install gateway software prior to registration; however, the software is unusable until you register the license.

```
 Looking up the Product Authorization Information.


       Product:       TP-DESKTOP-ACMS
       Producer:      DEC
       Version:       3.1
       Release Date:  18-AUG-1999

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

   If you answer NO, the installation completes but the IVP is not run. If you answer YES and the license is not registered, the IVP fails.

9.2.3 Informational Messages

At this point, the installation procedure displays a number of informational messages that report on the progress of the installation and advise about different uses of the product. There are no further questions.

```
%ACMSDI-I-PROCEED, There are no further questions and all checks have been completed.
-ACMSDI-I-PROCEED, It will take approximately 15 minutes to complete the
installation.
%VMSINSTAL-I-ACCOUNT, This installation updates an identifier named ACMSDI$CLIENT.
%UAF-I-RDBMDFYMSG, identifier ACMSDI$CLIENT modified
   .
   .
   .
```

Read the instructions, because they might apply to your installation.

If the installation procedure has been successful up to this point, VMSINSTAL moves the new or modified files to their target directories and updates help files. If you asked for files to be purged, that work is done. The following message is displayed:

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

If you are installing gateway software on a system disk that has limited free space, VMSINSTAL might not be operating in safety mode. In this case, VMSINSTAL processes all files immediately and does not display the `%VMSINSTAL-I-MOVEFILES...` message.

If the disk has quotas enabled, a message is displayed. The account must have sufficient disk quotas to install. Refer to Table 8–1.

9.2.4 Running the Installation Verification Procedure

If you chose to run the IVP, VMSINSTAL runs it next. When the IVP runs successfully, you see the following messages displayed:

```
%RUN-S-PROC_ID, identification of created process is 210031D5
Starting Server ACMSDI$SERVER
The TP Desktop Connector V3.1 Gateway for ACMS IVP completed successfully
             Installation of ACMSDIA V3.1 completed at 13:32
   .
   .
   .
The TP Desktop Connector V3.1 Gateway for ACMS IVP completed successfully
```

9.2.5 Completing the Installation Procedure

The following messages indicate that the installation procedure is complete:

```
  Installation of ACMSDIA V3.1 completed at 13:32

  VMSINSTAL procedure done at 13:33
$
```

You can now log out of the privileged account:

```
$ LOGOUT
SYSTEM     logged out at 04-JAN-1999 13:34:12.28
```

VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, to continue using the system account and restore these symbols, log out and log in again. Proceed to Chapter 10 to follow postinstallation procedures.

9.3 Recovering from System and Installation Failures

An unsuccessful installation can result from a system failure (see Section 9.3.1) or errors encountered during the installation procedure (see Section 9.3.2).

9.3.1 System Failures

If you experience a system failure, such as a power loss during installation, VMSINSTAL attempts to continue the installation when you reboot the system. Depending on the point in the installation at which the system fails, one of three conditions exists:

- The system disk did not undergo any changes before the system failure. VMSINSTAL instructs you to restart the installation.

- The system disk used by the installation was corrupted. VMSINSTAL instructs you to restore the system disk from the backup copy and restart the installation.
- VMSINSTAL continues the installation and can tell you to manually purge replaced files, even if you request that they be purged automatically. You can purge files, but remember that purging deletes all but the latest version of all files on your system disk. If you have multiple versions of system files to save, you can delete just the gateway files you want to remove from system directories.

  To purge files, perform the following steps:

  1. Reboot the system.
  2. Log in to the SYSTEM account.
  3. Purge all system files using the following command:

```
$ PURGE/LOG SYS$SYSROOT:[*...]*.*
    .
    .
    .
```

  After you perform this task, the installation is complete.

After you see the message that indicates the beginning of the IVP, the installation of the component software is complete. If the system fails subsequently, VMSINSTAL displays the following message when you reboot.

```
%VMSINSTAL-I-RECOVER, TP Desktop Gateway for ACMS was being installed when the system crashed.
The installation completed satisfactorily.
```

This message indicates that VMSINSTAL finished successfully, not that the installation of the gateway was successful.

VMSINSTAL does not automatically restart the IVP. Run the IVP independently by following the steps described in Chapter 11.

9.3.2 Installation Failures

If the installation of the gateway software or a *TP Desktop Connector* sample application fails for some reason other than a system failure, the installation procedure displays a message describing the cause of the failure. To continue with the installation, correct the condition causing the error and restart the installation procedure from the beginning.

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

- The operating system version is incorrect.

- A prerequisite software version is incorrect.
- Quotas necessary for successful installation are insufficient.
- System parameter values for successful installation are insufficient.
- The *OpenVMS* help library is currently in use.

For descriptions of the error messages generated by these conditions, see the *OpenVMS* documentation on system messages, recovery procedures, and *OpenVMS* software installations. If you are notified that any of these conditions exist, take the appropriate action as described in the message. (You might need to change a system parameter or increase a quota value.) For information on installation requirements, see Chapter 8.

If the installation of the component software completes satisfactorily, but a test fails during the IVP, the IVP displays a message describing the failure and suggests a course of action.

In most cases, the suggested course of action is to reinstall the gateway software. If the IVP fails after you reinstall the gateway software, contact your Compaq software specialist.

9.3.3 IVP Error Recovery

As the IVP executes, it checks the success of each test and operation it performs. If any test or operation fails, the IVP displays a message describing the failure and suggests a course of action.

Follow the suggested course of action and then restart the IVP as described in Chapter 11. If you reinstall gateway software, the IVP runs automatically if you answer YES to the IVP question. If you still cannot successfully run the IVP, contact your Compaq software specialist.

10

After Installing TP Desktop Connector Gateway for ACMS Software

After installing gateway software from the Gateway CD, perform the following tasks:

- Edit *OpenVMS* system startup and shutdown files (see Section 10.1).
- Perform any cluster operations (see Section 10.2).
- Match client and server versions (see Section 10.3).
- Read the management chapters in the appropriate document:
  - ***Compaq TP Desktop Connector for ACMS*** *Client Application Programming Guide*
  - ***Compaq TP Desktop Connector*** *Getting Started*

See Chapter 11 for information about how to run the Installation Verification Procedure (IVP) after the software has been installed.

10.1 Editing the *OpenVMS* System Files

You must edit the *OpenVMS* system startup and shutdown files to provide for automatic startup and shutdown of TP Desktop software when your system is rebooted. (This step is usually not necessary for system upgrades.)

10.1.1 Editing the System Startup File

The following files are located in the SYS$STARTUP directory.

```
ACMSDI$SHUTDOWN.COM
ACMSDI$STARTUP.COM
```

Add to the *OpenVMS* system startup file the command line that starts TP Desktop. If you separate the startup procedures into modules, be sure that you add the lines to the correct file.

Position the TP Desktop startup command line *after* the line that invokes the *ACMS* startup command procedure. For example:

```
$ @SYS$STARTUP:ACMSTART.COM
    .
    .
    .
$ @SYS$STARTUP:ACMSDI$STARTUP.COM
```

Note

Start *ACMS* software before you start TP Desktop software.

Starting TP Desktop software automatically enables the use of the DECnet communication transport. To use NetWare or TCP/IP protocols as well, or instead of DECnet, list the transports you want to use in a parameter file. Specify the parameter file as a qualifier on the TP Desktop startup command line.

The parameter file is a simple ASCII text file that lists customer overrides to TP Desktop run-time quotas and defaults. These overrides can include the specification of the communication libraries that have been installed on the *OpenVMS* system. For example, to enable TP Desktop to use all transports, create the following file in the SYS$MANAGER directory:

```
ACMS_DESKTOP_SERVER.DAT
```

Include in the file the following line:

```
transport=(tcpip,netware,decnet,appletalk)
```

Modify the startup command line to specify the parameter file. For example:

```
$ @SYS$STARTUP:ACMSDI$STARTUP.COM SYS$MANAGER:ACMS_DESKTOP_SERVER.DAT
```

To perform this same function in batch from DCL-level, issue a SUBMIT command. For example:

```
$ SUBMIT/USER=SYSTEM/NOLOG SYS$STARTUP:ACMSDI$STARTUP-
_$ /PARAMETER=(SYS$MANAGER:ACMS_DESKTOP_SERVER.DAT)
```

This command starts a batch job that runs the startup command procedure using the input file specified in the parameter qualifier. When the batch job completes, the TP Desktop software is started.

10.1.2 Editing the System Shutdown File

Find the following line, which stops the *ACMS* system, in the *OpenVMS* system shutdown file:

```
$ @ACMSTOP.COM
```

At some point before this line, add the following command line:

```
$ @SYS$STARTUP:ACMSDI$SHUTDOWN.COM
```

The command procedure cancels all active tasks and shuts down the TP Desktop process. This ensures that the TP Desktop system processes are run down properly. The command procedure also deinstalls TP Desktop images (using the Install Utility of *OpenVMS*) and deassigns the logical names.

10.2 Performing Cluster Procedures

Because TP Desktop software treats a VAXcluster or VMScluster system as if it were a local area network (LAN), you must prepare system-specific roots on each node of the cluster. For example:

```
$ CREATE/DIRECTORY SYS$SPECIFIC:[ACMSDI]/OWNER_UIC=SYSTEM-
_$  /PROTECTION=(S:RWE,O:RWE,G:RE,W:RE)
$ CREATE/DIRECTORY SYS$SPECIFIC:[SYSTEST.ACMSDI]/OWNER_UIC=SYSTEM-
_$  /PROTECTION=(S:RWE,O:RWE,G:RE,W:RE)
$ CREATE/DIRECTORY SYS$SPECIFIC:[SYSHLP.EXAMPLES.ACMSDI]/OWNER_UIC=SYSTEM-
_$  /PROTECTION=(S:RWE,O:RWE,G:RE,W:RE)
$
```

Executed on each node in the cluster, these commands create directory roots for the TP Desktop software. See Section 9.1.2 for the locations of files describing the directories added to your system.

10.3 Matching Client and Server Versions

If you are upgrading from *ACMS* Desktop Version 2.*n* to TP Desktop Version 3.*m*, you can use your existing client programs with the new server. But, if you build a new client program under TP Desktop Version 3.*m*, you cannot use this new program with the old *ACMS* Desktop Version 2.*n* server.

When the *ACMS* communication protocols do not match those of the desktop client, the gateway rejects the attempted connection. The gateway writes a message to the software event log (SWL).

The error code returned on the client side depends on the nature of the mismatch. The following error codes can indicate a mismatched condition:

```
ACMSDI_SRVDEAD      -3020
ACMSDI_INVPROTOCOL  -3025
```

11

Running the TP Desktop Connector Gateway for ACMS IVP

This chapter describes how to run the gateway installation verification procedure (IVP) separately from the installation procedure. The IVP can be run as a part of the normal installation when you answer YES to the IVP question. If the IVP fails for any reason, correct the error and rerun the IVP. See Chapter 9 for information on providing the IVP with information required for the installation procedure. Run separately from the installation procedure, the IVP can check the integrity of installed files on the system.

11.1 IVP Operations

The IVP checks that:

1. The installation procedure successfully completed installing TP Desktop software.
2. The installed software can be used to set up and run TP Desktop software.
3. All the necessary files are on the system.

The IVP does not check that the applications run correctly.

11.2 Running the IVP Independently

This section describes the requirements and steps to run the IVP.

11.2.1 IVP Requirements

If disk quotas are enabled, the IVP cannot run. The procedure checks to see whether disk quotas are enabled just after checking the process quotas. If disk quotas are enabled, the procedure provides an informational message to that effect and terminates.

11.2.2 IVP Steps

To run the IVP independently of the installation procedure, follow these steps:

1. Log in to the SYSTEM account:

   ```
   Username: SYSTEM
   Password:
   ```

2. Set your default to the test directory:

   ```
   $ SET DEFAULT SYS$TEST
   $
   ```

3. Run the IVP using the following file specification:

   ```
   ACMSDI$IVP.COM
   ```

   You can run the IVP only on your current booted system. You cannot run the IVP over a networked connection.

To start the IVP, enter the following command:

```
$ @ACMSDI$IVP
The TP Desktop Connector V3.1 Gateway for ACMS IVP completed successfully
   .
   .
   .
The TP Desktop Connector V3.1 Gateway for ACMS IVP completed successfully
```

The IVP takes no more than 30 seconds to run, depending on the current system load.

11.2.3 IVP Error Recovery

As the IVP executes, it checks the success of each test and operation it performs. If any test or operation fails, the IVP does the following:

1. Stops processing.
2. Displays a message describing the failure.
3. Suggests a course of action to eliminate the cause of the failure.

Follow the suggested course of action and then restart the IVP.

Part IV
Appendixes

Part IV provides reference material related to software installation on a system.

Appendix A lists the files that are installed on your system for the various sample programs.

Appendix B contains helpful hints about errors that might occur when you run one of the sample applications.

A
Files Installed

The following tables list the files that are installed on your systems for the various sample applications.

Table A–1 Files Installed for *TP Desktop Connector* Client Services for *OpenVMS* Systems

Files	Description
ACMSDI.H	Include file for the *TP Desktop Connector* client services declarations
ACMSDI$CLIENT_ OBJLIB.OLB	Library for the *TP Desktop Connector* client services
FORMS.H	Include file for DECforms
NET_APPLETALK.OBJ	AppleTalk object file (for *OpenVMS VAX* systems only)
NET_DECNET.OBJ	DECnet object file
NET_NETWARE.OBJ	NetWare object file[1]
NET_TCPIP.OBJ	TCP/IP object file
PPSTUBS.C	Presentation procedure and action routine stubs
TDMS.H	Include file for TDMS

[1]For testing purposes only, not officially supported.

Table A–2 Files Installed for the Motif Sample for *OpenVMS* Systems

Name	Description
Makefile	Makefile for building the sample
acmsdi.h	Include file for the *TP Desktop Connector* client services

(continued on next page)

Table A–2 (Cont.) Files Installed for the Motif Sample for *OpenVMS* Systems

Name	Description
forms.h	Sample include file with DECforms status values
help.txt	Overview of the AVERTZ user interface
sys$login:m_avertz.dat	Motif sample resource file
m_avertz.c	Entry point for the sample; manages the main window of the sample
m_avertz.h	AVERTZ header file; defines global names
m_avertz.opt	Linker-purge options file for building the sample
m_avertz.uid	Runtime representation of the sample's UIL definition
m_avertz.uil	User interface template; defines the layout of the main window and the session dialog box
m_avertzpp.c	Reserve task presentation procedures; stubs for the checkin and the checkout tasks' presentation procedures
m_avertzpp.h	Header file for m_avertzpp.c
m_disable.c	Presentation procedure stub
m_enable.c	Presentation procedure stub
m_icons.uil	User interface template; defines the various session icons
m_list_pkg.c	Provides linked list feature
m_list_pkg.h	Header file for list_pkg.c
m_message.c	Performs message box handling in the sample
m_message.h	Header file for m_message.c
m_read_write.c	Presentation procedure stub
m_receive.c	Presentation procedure stub
m_request.c	Presentation procedure stub
m_resvform.c	Management and convenience routines for handling the reservation form
m_resvform.h	Header file for m_resvform.c
m_resvform.uil	User interface template; defines the layout of the reservation form
m_send.c	Presentation procedure to dispatch to specific routines in m_avertzpp.c

(continued on next page)

Table A–2 (Cont.) Files Installed for the Motif Sample for *OpenVMS* Systems

Name	Description
m_session.c	Manages multiple sessions; switches context for using TP Desktop Connector gateway for ACMS routines and updates the user interface
m_session.h	Header file for m_session.c
m_sitelist.c	Creates (using m_sites.dat) and manages the list box of AVERTZ sites
m_sitelist.h	Header file for m_sitelist.c
m_sites.dat	Contains data about AVERTZ sites; read in at run time
m_transceive.c	Presentation procedure that dispatches to specific routines in avertzpp
m_version.c	Version-checking action routine stub
m_wkspaces.c	Support routines for AVERTZ workspace structures
m_wkspaces.h	Defines the AVERTZ workspace structures
tdms.h	Sample include file with TDMS status values

Table A–3 Files Installed for the PowerBuilder Win32 Sample

Name	Description
`pbreadme.doc`	Contents of the folder in text format
`pbavertz.pbl`	PowerBuilder library containing PowerBuilder objects for the blocking sample that does not support exchange I/O
`pbavertz.exe`	Executable form of the PBAVERTZ sample
`pbavertz.doc`	Declarations and scripts used by PBAVERTZ in text format
`pbpointr.dll`	Dynamic link library required for memory management with PowerBuilder applications that use TP Desktop Connector gateway for ACMS services.
`pbpointr.h`	Interface definition file for `pbpointr.dll`
`acmsdipb.doc`	Microsoft Word document that explains how to use the `pbpointr.dll` services.
`cars.ico`	Icon used by PBAVERTZ

(continued on next page)

Table A–3 (Cont.) Files Installed for the PowerBuilder Win32 Sample

Name	Description
fnbsampl.pbl	A PowerBuilder library containing a sample application that executes an *ACMS* task with exchange I/O using the forced nonblocking extension to the *TP Desktop Connector* client services.
fnbsampl.exe	Executable form of the forced nonblocking sample
fnbsampl.doc	Microsoft Word document that describes forced nonblocking

Table A–4 Files Installed for the Visual Basic Win32 Sample

Name	Description
mainmenu.frm	GUI objects and code for the main window of Visual Basic AVERTZ
reserve.frm	GUI objects and code for the car rental reservations screen of Visual Basic AVERTZ
signin.frm	GUI objects and code for the session-login screen of Visual Basic AVERTZ
readme.1st	Contents of the folder in text format
readme.txt	Text document that explains how to use the helper DLL, divb.dll
vbavertz.bas	Global source code for Visual Basic AVERTZ
vbavertz.exe	Executable version of Visual Basic AVERTZ
vbavertz.mak	Project makefile for Visual Basic AVERTZ

Table A–5 Files Installed for the DOS Sample

Name	Description
ACMSDI.H	Include file for *ACMS* desktop interface programs
BLD-CLI.BAT	Batch file to compile and link the sample client program
BLD-PPS.BAT	Batch file to compile and link presentation procedures used by the sample client program
CHK-DATE.CBL	COBOL program to validate dates
CLASSES.CBL	Sample workspace

(continued on next page)

Table A–5 (Cont.) Files Installed for the DOS Sample

Name	Description
CLIENT.C	Sample client C main program
CLIENT.EXE	Sample client program
CONTROL.CBL	Sample workspace
CUSTOMER.CBL	Sample workspace
CUSTSHDW.CBL	Sample workspace
CU_TRANS.CBL	Sample workspace
DISABLE.C	Sample presentation procedure
ENABLE.C	Sample presentation procedure
FORMS.H	Sample include file with DECforms status values
GETSITE.CBL	Sample presentation procedure
LOGIN.CBL	Sample client initialization procedure
LOGOFF.CBL	Sample client termination procedure
MENU.CBL	Sample client menu procedure
RECV.C	Sample presentation procedure
REQUEST.C	Sample presentation procedure
RESERVTN.CBL	Sample workspace
SELCUST.CBL	Sample presentation procedure
SELSITE.CBL	Sample presentation procedure
SEND.C	Sample presentation procedure
SENDCTRL.CBL	Sample workspace
SHWCUST.CBL	Sample presentation procedure
SHWRESV.CBL	Sample presentation procedure
SITES.CBL	Sample workspace
SI_TRANS.CBL	Sample workspace
TDMS.H	Sample include file with TDMS status values
TRANS.C	Sample presentation procedure
TRANS.CBL	Sample workspace
TRANSHDW.CBL	Sample workspace
VERSION.C	Sample version-checking procedure

Table A–6 Files Installed for the Windows 3.11 Sample

Name	Description
ACMSDI.H	Include file for the *ACMS* desktop interface
AVERTZ	Makefile for building the sample
AVERTZ.C	Entry point for the sample; manages the main window
AVERTZ.DEF	Defines entry points and stack size for Microsoft Windows
AVERTZ.EXE	Microsoft Windows sample executable file
AVERTZ.H	AVERTZ header file; defines globals
AVERTZ.RC	User interface template; defines the main window, menus, and reservation form layout
AVERTZMM.C	Handles memory management for AVERTZ structures
AVERTZMM.H	Header file for AVERTZMM.C
AVERTZPP.C	Reserve task presentation procedures; stubs for checkin and checkout tasks and presentation procedures
AVERTZPP.H	Header file for AVERTZPP.C
DISABLEW.C	Presentation procedure stub
DRIVING.ICO	Icon for (an unselected) session that is currently processing a task
ENABLEW.C	Presentation procedure to define the session ID
FORMS.H	Sample include file with DECforms status values
HELP.TXT	Overview of the AVERTZ user interface
LIST_PKG.C	Provides linked list feature; preallocates memory using arrays to reduce fragmentation of the local heap
LIST_PKG.H	Header file for LIST_PKG.C
RECVW.C	Presentation procedure stub
REDCAR.ICO	Icon for (an unselected) session that is *not* currently processing a task
REQUESTW.C	Presentation procedure stub
RESVFORM.C	Management and convenience routines for handling the reservation form
RESVFORM.H	Header file for RESVFORM.C
SDRIVING.ICO	Icon for a selected session that is currently processing a task

(continued on next page)

Table A–6 (Cont.) Files Installed for the Windows 3.11 Sample

Name	Description
SENDW.C	Presentation procedure to dispatch to specific routines in AVERTZPP.C
SESSION.C	Manages multiple sessions; switches context for using TP Desktop Connector gateway for ACMS routines and updates the user interface
SESSION.H	Header file for to obtain the files for building against the static link libraries SESSION.C
SITELIST.C	Creates (using SITES.DAT) and manages list box of AVERTZ sites
SITELIST.H	Header file for SITELIST.C
SITES.DAT	Contains data about AVERTZ sites; read in at run time
SREDCAR.ICO	Icon for a selected session that is *not* currently processing a task
TDMS.H	Sample include file with TDMS status values
TRANSW.C	Presentation procedure that dispatches to specific routines in AVERTZPP.C
VERSIONW.C	Version-checking procedure stub
WKSPACES.C	String conversion support for AVERTZ workspace structures
WKSPACES.H	Defines the AVERTZ workspace structures

Table A–7 Files Installed for the 16-Bit PowerBuilder Sample

Name	Description
ACMSDIPB.DOC	Document discussing TP Desktop Connector gateway for ACMS support for PowerBuilder
PBAVERTZ.PBL	PowerBuilder library containing the blocking sample which does not support exchange I/O
PBAVERTZ.EXE	Executable form of the PBAVERTZ sample
PBAVERTZ.DOC	Declarations and scripts used by PBAVERTZ in text format
CARS.ICO	Icon used by PBAVERTZ
PBPOINTR.DLL	Dynamic link library containing the required memory management program

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Table A–7 (Cont.) Files Installed for the 16-Bit PowerBuilder Sample

Name	Description
PBPOINTR.H	Interface definition file for PBPOINTR.DLL

Table A–8 Files Installed for the Visual Basic Avertz Sample

Name	Description
ACMSDI.BAS	Include file of the ACMSDI declaration for Visual Basic applications
HELP.TXT	Online help file for the Visual Basic sample
MAINMENU.FRM	GUI objects and code for main window of Visual Basic AVERTZ
RESERVE.FRM	GUI objects and code for reservation form of Visual Basic AVERTZ
SIGNIN.FRM	GUI objects and code for session-login screen of Visual Basic AVERTZ
VBAVERTZ.BAS	Global module file for Visual Basic AVERTZ
VBAVERTZ.EXE	Visual Basic sample executable file
VBAVERTZ.MAK	Visual Basic makefile for AVERTZ sample

Table A–9 Files Installed for the Forced NonBlocking Tutorial

Name	Description
ACMSDI.BAS	ACMSDI declarations for Visual Basic applications
FORM1.FRM	GUI objects and code for the Forced Nonblocking Tutorial main window
FORMS.BAS	DECforms message code definitions for Visual Basic
FNBSAMPL.MAK	Visual Basic make file for the Forced Nonblocking Tutorial
FRMLOGIN.FRM	GUI objects and code for the Forced Nonblocking Tutorial session login window
FRMRECVC.FRM	GUI objects and code for the Forced Nonblocking Tutorial receive control text window
MTEXT.BAS	Declarations and code to initialize ACMSDI message text for Visual Basic applications
NONBLK.BAS	Global declarations for the Visual Basic Forced Nonblocking Tutorial

Table A–10 Files Installed for the Client Services for *Tru64 UNIX* Systems

Name	Description
acmsdi.h	Include file for the *TP Desktop Connector* client services
forms.h	Include file for DECforms
libacmsdi.a	Library for *TP Desktop Connector* client services
net_tcpip.o	TCP/IP file for *TP Desktop Connector* client services
net_decnet.o	DECnet file for *TP Desktop Connector* client services
ppstubs.c	Presentation procedure and action routine stubs
tdms.h	Include file for TDMS

Table A–11 Files Installed for the Motif Sample for *Tru64 UNIX* Systems

Name	Description
makefile	Makefile for building the sample
acmsdi.h	Include file for the *TP Desktop Connector* client services
forms.h	Sample include file with DECforms status values
help.txt	Overview of AVERTZ user interface
load_motif.sh	Command shell to download the Motif sample from the *OpenVMS* system
m_avertz	Motif sample executable file
m_avertz.c	Entry point for the sample; manages the main window of the sample
m_avertz.dat	Font definitions for the sample screens
m_avertz.h	AVERTZ header file; defines globals
m_avertz.uid	Runtime representation of the sample UIL definition
m_avertz.uil	User interface template; defines the layout of the main window and the session dialog box
m_avertzpp.c	Reserve task presentation procedures; stubs for the checkin and the checkout tasks' presentation procedures
m_avertzpp.h	Header file for m_avertzpp.c
m_disable.c	Presentation procedure stub
m_enable.c	Presentation procedure stub

(continued on next page)

Table A–11 (Cont.) Files Installed for the Motif Sample for *Tru64 UNIX* Systems

Name	Description
m_icons.uil	User interface template; defines the various session icons
m_list_pkg.c	Provides linked list feature
m_list_pkg.h	Header file for list_pkg.c
m_message.c	Performs message box handling in the sample
m_message.h	Header file for m_message.c
m_read_write.c	Presentation procedure stub
m_receive.c	Presentation procedure stub
m_request.c	Presentation procedure stub
m_resvform.c	Management and convenience routines for handling the reservation form
m_resvform.h	Header file for m_resvform.c
m_resvform.uil	User interface template; defines the layout of the reservation form
m_send.c	Presentation procedure to dispatch to specific routines in m_avertzpp
m_session.c	Manages multiple sessions; switches context for using TP Desktop Connector gateway for ACMS routines and updates the user interface
m_session.h	Header file for m_session.c
m_sitelist.c	Creates (using m_sites.dat) and manages the list box of AVERTZ sites
m_sitelist.h	Header file for m_sitelist.c
m_sites.dat	Contains data about AVERTZ sites; read in at run time
m_transceive.c	Presentation procedure that dispatches to specific routines in m_avertzpp.c
m_version.c	Version-checking action routine stub
m_wkspaces.c	Support routines for AVERTZ workspace structures
m_wkspaces.h	Defines the AVERTZ workspace structures
tdms.h	Sample include file with TDMS status values

B

Common Configuration Errors

The following sections discuss some of the errors that can occur while running the *TP Desktop Connector* client services sample applications.

B.1 Errors Related to the Desktop System

Errors can arise when any of the following conditions exits:

- The *TP Desktop Connector* client program node does not have the network software functioning correctly.
- The *TP Desktop Connector* client program node does not have the network in the directory search path.
- The *TP Desktop Connector* client program node has insufficient disk space.

B.1.1 Errors on DOS or Windows 3.11 Desktops

Problems might be caused by a faulty startup or configuration file. Example B–1 shows a sample `startup.bat` file.

Example B–1 Sample startup.bat File

```
path=c:\;c:\PWV51;c:\dos;c:\MSVC\bin;c:\windows;c:\windev;c:\acmsdi mouse set
lib=c:\MSVC\lib;c:\windev\lib;c:\acmsdi;c:\decnet\src set
include=c:\MSVC\include;c:\windev\include;o:\acmsdi;c:\decnet\src set
helpfiles=c:\MSVC\help\*.hlp set init=c:\MSVC\init
```

Example B–2 shows a sample `config.sys` file.

Example B–2 Sample config.sys File

```
files= 30
buffers=10
device=C:\himem.sys
shell=\command.com /P /e:1024
device=C:\WINDOWS\smartdrv.sys 2048 1024
lastdrive=z
```

Use the samples as guidelines to finding and fixing the problem.

B.1.2 Errors on *OpenVMS* Desktops

If errors occur in running the Motif Avertz program, verify the following:

- The m_avertz.uid file is in the directory from which you run the m_avertz application.
- The m_avertz.dat file (your resources file) is located in your home directory.

If you encounter font-support problems running the program, you can modify the fonts used by editing the m_avertz resources file (m_avertz.dat in the user's home directory).

B.1.3 Errors on *Tru64 UNIX* Desktops

If errors occur in running the Motif Avertz program, verify the following:

- The m_avertz.uid file is in the directory from which you run the m_avertz application.
- The m_avertz file (your resources file) is located in your home directory.

If you are installing this application once for use by many users, make sure that the users copy m_avertz to their home directories.

If you encounter font-support problems running the program, modify the fonts used by editing the m_avertz resources file (m_avertz in the user's home directory).

B.2 Errors Related to the *ACMS* System

If you have used the client services sample to communicate with the *ACMS* system, errors will occur if any of the following conditions exists:

- The TP Desktop Connector gateway for ACMS system directory ACMSDI$EXAMPLES, ACMSDI$EXAMPLES_AVERTZ, or ACMSDI$EXAMPLES_ADD is protected against read access.
- The TP Desktop Connector gateway for ACMS system does not have the sample files installed.
- The TP Desktop Connector gateway for ACMS system does not have the network software functioning correctly.
- The TP Desktop Connector gateway for ACMS system is unavailable.
- The TP Desktop Connector gateway for ACMS system name is invalid.
- The TP Desktop Connector gateway for ACMS system is not running the *ACMS* software.
- The TP Desktop Connector gateway for ACMS system has not invoked ACMSDI$STARTUP.COM and ACMS/START SYSTEM.
- The TP Desktop Connector gateway for ACMS software is not installed or is improperly installed.
- The TP Desktop Connector gateway for ACMS system IVP failed.

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