Getting Started with DCS 10

For Administrators

DynaComm Connectivity Series™ Getting Started with DCS 10 for Administrators

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Chapter 1
Introduction

Thank you for choosing the DynaComm Connectivity Series 10—the most powerful terminal emulation product available for Windows. FutureSoft maintains an excellent source of easily accessible information on the World Wide Web. Find answers to your questions, check out new product information, view demonstrations of FutureSoft products, and more at http://www.futuresoft.com

If you are new to the DynaComm family, review the Getting Started with DCS 10 manual which is designed to:

- Introduce you to the features and capabilities of the DynaComm Connectivity Series.

- Guide you through installation of a single-user copy of the software.

- Demonstrate how to use the basic functions.

If you are upgrading from a previous version of DynaComm, review this manual which is designed to:

- Present an overview of the DCS 10 product and all Client Options for a review of the scope of the DCS 10 product.

- Provide a list of installation planning considerations to help you determine your site requirements.

- Detailed information of all available install methods with DCS 10 to help you select the best method for your requirements.

DCS 10 Features

Standard features in DCS 10 include:

- Full suite of standard emulations

  Base product emulations include:

    ADDS VP/60
    AT&T 605/705
    ANSI-BBS (with SCO ANSI extensions)
    Digital VT Series (52/100/102/220/320/420)
    TeleVideo 925/950
    Wyse 50/60

  Additional add-on emulations:

    AT&T 4425   TN3270   TN5250
    HP 700/94   Tandem 6530

- A range of standard connectivity options

  Base product connectors include:

    Direct Serial
    Meridian LAT32
    Modem (TAPI)
    Telnet (TCP/IP and IPX/SPX)
    SSH 1
    SSH2

  Additional connectors:

    Microsoft SNA Server (with TN3270 Client Option)

    Transport Layer Security (TLS) (with TN3270 Client Option

- Full suite of standard file transfer protocols

  Base product file transfer protocols include:

    Kermit   FTP
    XYModem   ZModem

  Additional file transfer protocols:

    IND$FILE (with TN3270 Client Option)
    IXF (with Tandem 6530 Client Option)

- Drag-and-drop file handling

  Load a session, memo, or script by dragging corresponding icon into the DCS application window.

- Euro symbol support

  Input or display the euro character representing European Union common currency.

- Menu Editor

  Use the menu editor to customize application-level menus to send a string, launch an application or script.

- OLE-compliant text editor

  An OLE-compliant text editor is included in the base product. Embed documents from other applications into a memo document.

- Powerful event-driven scripting language

  An integrated, full-featured script language with over 350 commands and functions that include conditional execution, subroutine execution, event handling, and the creation of custom menus and dialog boxes.

- Toolbar editor

  Customize application toolbar to create custom toolbar buttons to send a string, launch an application or script, or perform a menu command.

- Y2K Compliant

  DCS 10 contains no date calculation functions. The only use of dates is through scripting functions that make a call to the Windows operating system and use the date provided by this system. Windows dates are based on a four-character year and, therefore, are not affected by the change of the century.

• WinHLLAPI and EHLLAPI support

DCS 10 includes both 32-bit EHLLAPI and 32-bit
WinHLLAPI dynamic link libraries to support
Microsoft® Windows® applications requiring HLLAPI
interfaces. Custom applications can call these libraries
directly to interact with TN3270 and TN5250 ses-
sions.

Client Option Packages

To expand the functionality of DCS 10 to meet specific
enterprise requirements, client option packages for specific
host environments are available. These emulation products
are installed during installation of the base product. The
licenses are activated from the DynaComm Connectivity
Series 10 program group. Purchasing an individual emulator
allows for supporting a unique computing environment and
eliminates the expense of unnecessary emulations.

Each Client Option presents the same graphical interface
as the base product to provide for a consistent computing
environment. It also supports multiple emulation sessions
from within a single instance of the application just as the
base product allows.

AT&T 4425 Client Option

▼ Supported Emulations

• AT&T 4425

• Equivalent 6539 functionality

▼ Network Connectivity

The AT&T 4425 Client Option supports the follow-
ing connectors included in the base product:

• Direct Serial

• Modem (TAPI)

• Telnet (TCP/IP and IPX/SPX)

▼ File Transfer Protocols

The AT&T 4425 Client Option supports the fol-
lowing file transfer protocols included in the base
product:

• FTP

• Kermit

• XModem

• YModem

• ZModem

HP 700/94 Client Option

- ▼ Supported Emulations
    - • HP 700/92
    - • HP 700/94
- ▼ Product Highlights
    - • Hotspot support
    - • Support for downloadable characters and soft fonts
    - • On-screen function keys
- ▼ Network Connectivity

  The HP 700/94 Client Option supports the following connectors included in the base product:
    - • Direct Serial
    - • Modem (TAPI)
    - • Telnet (TCP/IP and IPX/SPX)
- ▼ File Transfer Protocols

  The HP 700/94 Client Option supports the following file transfer protocols included in the base product:
    - • FTP
    - • Kermit
    - • XModem
    - • YModem
    - • ZModem

Tandem 6530 Client Option

- ▼ Supported Emulation
    - • Tandem 6530
- ▼ Product Highlights
    - • EM3270 support
    - • Block mode type ahead
    - • Hotspot support
- ▼ Network Connectivity

  The Tandem 6530 Client Option supports the following connectors included in the base product:
    - • Direct Serial
    - • Modem (TAPI)
    - • Telnet (TCP/IP and IPX/SPX)
- ▼ File Transfer Protocols

  The Tandem 6530 Client Option supports the following file transfer protocols included in the base product:
    - • IXF

TN3270 Client Option

6   Supported Emulations

   •   3278 Models 2 – 5

   •   3279 Models 2 – 5 (with and without extended attributes)

   •   3287 Telnet printing support

   •   TN3270E with print

6   Product Highlights

   •   EHLLAPI
       (32 bit dynamic link libraries to support Microsoft)

   •   WinHLLAPI
       (Windows applications requiring HLLAPI interfaces)

   •   Hotspot support

   •   LU1/LU3 print

6   Network Connectivity

   The TN3270 Client Option supports the following connectors:

   •   Microsoft SNA Server with print support

   •   Telnet

   •   Transport Layer Security (TLS)

6   File Transfer Protocols

   The TN3270 Client Option supports the following file transfer protocol:

   •   IND$FILE (supports TSO, CICS and CMS)

TN5250 Client Option

6   Supported Emulations

   •   5250 Models 2 – 5

   •   3812 Telnet printing

   •   TN5250E with print

6   Product Highlights

   •   EHLLAPI
       (32 bit dynamic link libraries to support Microsoft)

   •   WinHLLAPI
       (Windows applications requiring HLLAPI interfaces)

   •   Hotspot support

▼   Network Connectivity

   The TN5250 Client Option supports the following connectors:

   •   Telnet

▼   File Transfer Protocols

   The TN5250 Client Option supports the following file transfer protocols:

   •   FTP

New In DCS 10

▼ Transport Layer Security (TLS) connectivity support for TNS3270 Client Option

TLS option is now available on the Session sub-tab in the Session Properties dialog. Corresonding strings/ keywords are provided in the EMULCONFIG and CONNCONFIG scripting commands.

▼ Documentation Library Update

The DCS 10 documentation library consists of:

• Getting Started with DCS 10 for Users (ebook)

Designed for the end user; includes features overview, installation and configuration procedures and a tutorial covering the major DCS 10 functions.

• Getting Started with DCS 10 for Administrators (ebook)

Designed for the System Administrator; focuses on the use of Web Install and DynaComm Multiuser Administrator functions.

• Script Language Reference* (ebook)

Technical information for all commands and functions used in the DCS Scripting Language.

• Release Notes* (readme.doc)

Includes last minute information not included in the documentation as well as important items of particular significance.

• DCS 10 Online Reference* (Help system)

Technical information for DCS 10 features and functions and all Client Options.

• FSFTP Online Reference* (Help system)

Technical information for FutureSoft's 32-bit File Transfer Protocol application.

• HLLAPI Auto-Launch Configuration Online Reference* (Help system)

Technical information for using HLLAPI calls with third-party applications.

• Visual Basic Client Online Reference* (Help system)

Technical information for Visual Basic Interface functions.

• DCS 10 Administrator Online Reference* (Help system)

Technical information for installation and maintenance of DCS 10; includes DynaComm Multi-user Administrator information.

• Script Language Online Reference* (Help system)

Technical information for all commands and functions used in the DCS Scripting Language.

* These items are provided on the installation CD-ROM in the /documentation folder. The most current electronic documentation for DCS 10 can be downloaded from http://www.futuresoft.com/.

Upgrading to DCS 10

All DCS 7.1.0.4 (and earlier) installations must be removed before installing DCS 10. Do not install DCS 10 over an older installation of the DynaComm Connectivity Series.

Product Support

Registered users of DCS may call FutureSoft Technical Support for assistance. Standard telephone support is available weekdays, 8 a.m. to 5 p.m., Central Standard Time (CST).

Before contacting Technical Support, gather details about your question which should include all hardware and software configurations, the DynaComm version number (found through the About DynaComm option in the Help menu), any other software loaded (including TSRs) when you experienced the problem, and the exact sequence of steps that preceded the problem.

Phone Number:	800.261.6357
Fax Number:	281.496.1090
E-mail:	support@futuresoft.com

Visit the FutureSoft web site for more information at:

http://www.futuresoft.com/

Chapter 2
Planning Your Installation

Planning Considerations

DCS 10 is a flexible product that offers a range of options for customizing application functions and appearance. Before installing, develop a plan that is well designed through careful consideration of various installation parameters. The more planning you undertake, the easier the installation process.

To effectively design your installation, consider the following:

- How much control over the functionality of DCS 10 should the end user be given?

- Which components and sub-components of DCS 10 are required?

- How will the DCS 10 application be distributed to the end user?

- Will users be involved in the distribution process?

- Which (if any) customized user files need to be distributed to the users?

- How will customized user files and updates be distributed to the end user?

- Can users be grouped to reduce the number of possible configurations and thus reduce support responsibilities?

- Is a specific time line required for the completion of all installs?

- What connectivity upgrades or modifications are needed to support each installation?

- What security issues must be considered for each site?

- Do any client machines currently have DCS 7.0 that will be upgraded?

User control

▼ Full user control

Full control allows the functionality of menus, toolbars, keyboard, display, and character translation to be changed at the user's discretion. Information about each Host system to be accessed is provided to the user. This includes:

- IP address or domain name for Telnet connections.

- Phone number, communication port number, baud rate, parity, and number of stop bits for Modem connections.

- Emulation type to use for the Host system and the emulation configuration parameters.

This scenario implies a multitude of configurations that may require extensive hand-holding from the technical support staff. Each user would need some level of training to understand the requirements for configuration as well as help with troubleshooting session or map files that do not function correctly.

- Limited user control

If the user is to have *limited control*, the administrator supplies all connection files (sessions), keyboard setups, scripts, etc. that users access but do not change. One set of updates or changes is created and distributed to all the users. This scenario implies a limited number of configurations that would result in fewer support requests. Troubleshooting would be decreased due to the smaller number of configuration possibilities.

User Groups

Analyzing user requirements and determining the homogenous groups allows for set up of a limited number of installation configurations. This in turn reduces requests for technical support.

Distribution

Another area of consideration is the method to use for product distribution.

Using the standard installation method from CD-ROM requires an individual to install the software on each client system as well as to keep track of all machines that have the installed product. Loss of or damage to the CD-ROM may occur as well as loss of control of registered copies.

Placing the installation media on a shared network drive reduces support personnel responsibilities and limits access to only those who should have access. Installs or upgrades can be conducted in a controlled manner whereby one group of client installs are performed, tested and modified before the next group receives the software. This can alert the system administrator to problem situations before propagating the same problem(s) to all clients.

Tailoring the installation can also include "who" installs the software. Automating the install process as much as possible allows users to perform client installs. This helps to distribute the workload of initial installs and upgrades and reduces requests of the technical support staff.

DCS 10 Standard Install

DCS 10 standard install allows for installation of DCS 10 from either a CD-ROM or from a shared network location using standard Windows commands. The installation can be customized with the use of a batch file to copy custom configured session, map and script files.

▼ Installation software can be placed on a secure, shared network location for access by multiple users.

Before You Begin

This section details activities to complete before, during and after installation. Read through all information in this section and complete the following activities.

▼ Check system requirements

The minimum requirements for operating DCS 10 on a personal computer are:

- Software
  Windows XP
  Windows Server 2003
  Windows Vista
  Windows Server 2008
  Windows 7

- Hardware

  Pentium IV processor

  50MB hard drive space (complete installation)

  CD-ROM drive

  At least one of the following:

    For direct connections, one free serial port
    For phone line connections, a modem
    For network connectivity, a network interface card

▼ Remove previous versions of DCS

To upgrade from version 7.0 (or earlier) of DCS, remove any prior version before installing DCS 10. If you are not sure which version of DCS is installed, select About DynaComm from the Help menu to display product version information.

Files created after DCS 7.0 is installed, such as session files and scripts, are not removed during the uninstall process. These files can be stored elsewhere during the installation procedure.

▼ Backup the installation media

You are licensed to create up to three backup copies of DCS 10 installation media. Create at least one backup copy and use it for installation.

▼ Locate the product serial number

After installation, activate DCS with the serial number(s) received from FutureSoft.

▼ Close applications

Before starting the installation program, quit any running applications to ensure a good installation process.

Installation Modifications

During installation Windows Registry changes are made as well as the file and folder structure where DCS 10 is placed.

Registry Modifications

DCS 10 modifies the Windows Registry as noted below.

▼ Program group and path used by DCS 10

[HKEY_CURRENT_USER\Software\FutureSoft\DCS10]

[HKEY_USERS\Default\Software\FutureSoft\DCS10]

Settings stored here include:

– Telnet host name and port settings
– Print setup options
– Recent file list settings
– User information
– Toolbar settings
– Menu settings
– Keyboard mapper settings

▼ Version for DCS 10 and Client Options

[HKEY_LOCAL_MACHINE\SOFTWARE\FutureSoft\DCS10]

▼ Shell association

[HKEY_CLASSES_ROOT]

Session (.ses), script (.dcp and .dct) and memo (.dcm) document types are established in the Windows Registry with these keys to create a shell association with DCS10.EXE.

▼ Uninstall string

[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\DCS10DeinstKey]

This entry stores the pointer to the DCS 10 Uninstall string.

Folders

When DCS 10 is installed, several folders are created to hold files used by the program. Figure 2.1 lists all folders created in a DCS 10 installation with a description of the files sotred in each. Note that VBClient has several subfolders.

The default location for install folders is:

c:\Program Files\FutureSoft\DCS10

conn	connector (*.flx) files
display	display (*.flx) files
documentation	Administrator, User, and Script guides (*.pdf)
dnload	downloaded files (default target folder)
emul	emulation (*.flx) files
fonts	font files used by DCS
ft	file transfer (*.flx) files
maps	attribute (*.acm) and keyboard (*.kbd) files
memos	memo (*.dcm) files (default target folder)
scripts	script (*.dcp & *.dct) files (default target folder)
session	session (*.ses) files (default target folder)
trace	trace (*.trc) files (default target folder)
upload	files to upload (default target folder)
vbclient	Visual Basic Interface files (default target folder)
samples	
asp	sample Active Server Page (*.asp) files
vb	sample Visual Basic (*.vbp, *.vbw & *.frm) files

Figure 2.1
DynaComm Connectivity Series 10 folders and files.

A second set of folders are created in a separate location to hold custom files:

```
☐ 📁 Documents and Settings
    ☐ 📁 username
        ☐ 📁 DCS10
```
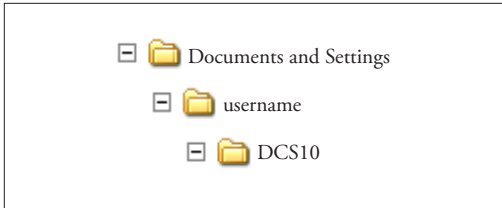
All folders, except VBClient, can be moved and redirected through the File Locations tab of the Options dialog. However, we recommend that "default" folders remain in their original install location to ensure function integrity.

Figure 2.2
File Locations tab of Options dialog.

Files and File Types

When DCS 10 is installed, eight (8) file types are placed in the install folders. Each file type has a specific function within DCS 10.

▼ Document files are opened and edited in DCS 10. These files can be associated with an icon placed on the desktop. Double-clicking on the file name or the associated icon starts DCS 10 and opens the file.
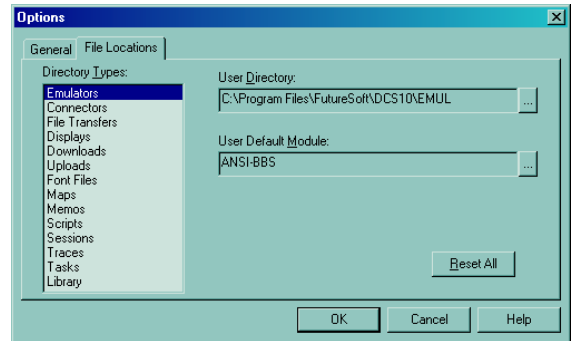
FutureSoft File Type	File Extension
Memo document	*.dcm
Script document	*.dcp
Session document	*.ses

▼ Program support files have extensions of .acm, .kbm and .trc. These files are loaded by DCS 10 when a session file is opened. These files are not opened directly in DCS 10 or in any other application.

FutureSoft File Type	File Extension
Attribute Map file	*.acm
Keyboard Map file	*.kbm
Trace Facility file	*.trc

▼ When a script document (.dcp) is compiled, a compiled script file (.dct) is created. These files are run or executed inside DCS 10 and can be associated with an icon. Double-clicking the file name or associated icon starts DCS 10 and runs the script.

FutureSoft File Type	File Extension
Script file (compiled script)	*.dct

▼ Session properties for emulations, connectors and file transfer protocols are stored in application files with an extension of .flx. These files are used by DCS 10 and are are not opened directly.

FutureSoft File Type	File Extension
Emulation object file	*.flx
Connector object file	*.flx
File Transfer object file	*.flx

Chapter 3
Setup Program

Working with the Setup Program

The Setup Program guides you through the installation of DCS 10. Setup uses two basic functions: Starting and Exiting.

Before starting the Setup Program, be sure that you have reviewed the material in Chapter 2 Planning Your Installation. That chapter provides background information for the responses required for the Setup Program.

Working with the Setup Program includes:

Step 1: Start the Setup program.

More than one method can be used to start the Setup Program.

Step 2: Respond to Setup screens to install appropriate components.

The Setup Program presents a series of screens that require a response for each. Details for each screen are provided in the following chapters.

Starting Setup

The Setup Program is started through the:

▼ FutureSoft Connectivity Products menu

▼ Windows Run dialog

▼ Add/Remove Programs selection on the Control Panel

CD Autorun

If CD Autorun is enabled on the install system, the DCS Selection screen appears when you insert the installation CD-ROM in the appropriate drive.

In addition to installing the software, the DCS Selection

Figure 3.1
CD Autorun dialog.

screen offers choices for viewing documentation or browsing the CD-ROM.

If CD Autorun is disabled, the Setup program can be started from either the Windows Run dialog or the Control Panel Add/Remove Programs selection.

Windows Run dialog.

▼ To start the Setup Program from the Windows Run dialog:

1   Place the installation CD-ROM in the appropriate drive.

2   On the Windows taskbar, click Start and then select Run.

3   In the Run dialog, enter the CD-ROM drive name followed with "setup.exe".

4   Click OK.

    The InstallShield Wizard dialog appears to indicate the status of the installation program load.

Control Panel

The Setup Program can also be started from the Add/Remove Programs selection in the Control Panel window.

▼ To start the Setup Program from the Windows Control Panel:

1   On the Windows taskbar, click Start.

2   Highlight Settings and select Control Panel.

3   Double-click Add/Remove Programs.

4   In the Add/Remove Programs Properties dialog, click Install.

5   Place the installation CD-ROM in the appropriate drive.

6   In the Run Installation Program dialog, click Next.

When Setup initialization is complete the Welcome screen appears. Setup is ready to begin installation of DCS 10.

Exiting Setup

During the installation process, if you click Cancel on any screen, the Exit Setup dialog appears.

▼ To respond to this screen, click either:

• Yes to stop the installation and exit the Setup Program.

• No to return to the previous screen and continue with Setup.

Chapter 4
Standard Install

Standard Installation Overview

The Standard Install procedure is executed from a:

- ▼ CD-ROM, or
- ▼ Shared network location.

Two setup types for Standard Install are available:

- ▼ Typical

    Used to install base product with:

    Emulators:

ADDS VP/60	Digital VT Series
ANSI-BBS	TeleVideo 925/950
AT&T 605/705	Wyse 50/60

    Connectors:

Direct Serial	Telnet
Meridian LAT 32	Trace Play
Modem	

    File Transfer Protocols:

FTP	XYModem
Kermit	ZModem

    Any or all Client Options can be installed along with the base product.

Session Properties Control

Session properties usage is unlimited. The user is able to modify all application and session properties. This includes the ability to configure all emulation, connector and file transfer parameters as well as modify menus and toolbars to customize the application and/or sessions.

Access Control

Installation of DCS 10 can only be multi-user – any user that can log on to the client system is able to use DCS 10.

Program Group Naming

The program group name can be changed to either:

- ▼ An existing folder
- ▼ A new folder

The install file location can also be changed to any location.

Standard Install Procedure

After completing pre-installation activities, follow the steps below to set up an individual copy of DCS 10. These steps use the standard install method for installing from a CD-ROM.

Some steps may ask to enter information or to make a choice. Read the descriptions carefully before completing the step. Most steps do allow you to return to the previous screen to make changes, if necessary. However, copying of DCS 10 files begins when you click Next on the Select Usage screen. To make corrections at this point, you will need to remove DCS 10 and reinstall.

Step 1: Start the Setup Program

Start the installation program using one of the techniques discussed in Chapter 2 Setup Program.

Step 2: Respond to Setup dialogs

Setup Dialog 1: Welcome

The Welcome message indicates that the Setup program is now ready to begin installation of DCS 10 and reminds you to quit any running applications. It also includes the copyright warning.

To respond to this dialog

▼ Choose one of the following:

- Next to continue with the installation.

- Cancel to exit Setup.

Setup Dialog 2: License Agreement

Installation and use of DCS 10 is governed by the terms of the online license agreement. Make sure you read and agree to the terms of the agreement before installing DCS 10.

If you have any questions about the terms of the online license agreement, please contact your FutureSoft account manager or send e-mail to info@futuresoft.com.

To respond to this dialog

1   Choose to accept/not accept the license agreement terms.

2   Choose one of the following:

- Back to return to the Welcome dialog.

- Next to continue with the installation.

- Cancel to exit Setup.

Setup Dialog 3: Confirm Installation

The confirm installation identifies you to DCS 10. You must complete both entries to continue the installation.

To respond to this dialog

1   Choose one of the following:

- Back to return to the Software License Agreement dialog.

- Next to continue with the installation, or

- Cancel to exit Setup.

Setup Dialog 4: Select Installation Folder

The default location is recomended.

To respond to this dialog

1   Choose one of the following:

- Back to return to the previous dialog.

- Next to continue with the installation.

- Cancel to exit Setup.

Setup Dialog 5: Installing

The product is installing.

Setup Dialog 6: Installation Complete

The Completed dialog is the last dialog displayed in the installation of DCS 10.

To respond to this dialog

▼ Click close to complete the installation.

Installation of DCS 10 is complete.

Licensing DCS 10

To activate your DCS10 license(s) use the activation utility from the DynaComm Connectivity Series 10 program group

To apply a valid serial number

1   On the Windows taskbar, click Start and highlight Programs.

2   Highlight DynaComm Connectivity Series 10 and click Product Activation.

    Fill in the registration information.

3   Enter the serial number in the provided box and click "Online Activation".

    Fill in the registration information

4   In the User Information group, do the following:

    a   In User name, enter a complete user name.

    b   In Organization, enter a complete organization or group name.

5   Click OK.

    A confirmation dialog appears.

Optionally, the activation utility can be run from a command line or in a batch file. The command takes the form of:

SNActivation /A #########################

where "#" represents the base product or Client Option serial number.

Note: A new Serial Number must be activated interactively once, before the command line option will work.

Installation Troubleshooting

If you encounter an error while installing DCS 10, one of the following common installation problems may have occurred:

▼ General file transfer error

    The Setup program was unable to copy the files to your destination directory. Make sure you have permission to write to or modify the specified destination directory.

▼ Installation has detected a previous version of the DynaComm Connectivity Series

    DCS 10 cannot be installed over a previous version of DCS. You must remove the previous version first, then install DCS 10.

▼ Error reading disk drive

    • Make sure the CD drive is in proper working order. Try reading another CD in the same drive.

    • Make sure you have inserted the installation CD correctly in the disk drive – the label should be face up.

    • If the drive is functioning and the media is properly inserted, the disk may be defective. If you are installing from a backup copy, install from the original media instead. If you are installing from the original media, please contact your FutureSoft Account Manager for a replacement.