



DRTape Solution

Reference Guide

Second Edition (April 2001)
Part Number 225231-002
Compaq Computer Corporation



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Contents

About This Guide

Text Conventions	v
Symbols in Text	vi
Symbols on Equipment	vi
Rack Stability	vii
Getting Help	vii
Compaq Technical Support	vii
Compaq Website	viii
Compaq Authorized Reseller	viii

Compaq DRTape Solution

Introduction	1
System Requirements	2
Using the Disaster Recovery Solution	3
Creating a Disaster Recovery Tape	3
Restoring a System Using a Tape Drive	3
Restoring a System Using an Autoloader	4

Index

About This Guide

This guide is designed to be used as step-by-step instructions for installation and as a reference for operation, troubleshooting, and future upgrades.

Text Conventions

This document uses the following conventions to distinguish elements of text:

Keys	Keys appear in boldface. A plus sign (+) between two keys indicates that they should be pressed simultaneously.
USER INPUT	User input appears in a different typeface and in uppercase.
<i>FILENAMES</i>	File names appear in uppercase italics.
Menu Options, Command Names, Dialog Box Names	These elements appear in initial capital letters.
COMMANDS, DIRECTORY NAMES, and DRIVE NAMES	These elements appear in uppercase.
Type	When you are instructed to <i>type</i> information, type the information without pressing the Enter key.
Enter	When you are instructed to <i>enter</i> information, type the information and then press the Enter key.

Symbols in Text

These symbols may be found in the text of this guide. They have the following meanings.



WARNING: Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or loss of life.



CAUTION: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

IMPORTANT: Text set off in this manner presents clarifying information or specific instructions.

NOTE: Text set off in this manner presents commentary, sidelights, or interesting points of information.

Symbols on Equipment

These icons may be located on equipment in areas where hazardous conditions may exist.



Any surface or area of the equipment marked with these symbols indicates the presence of electrical shock hazards. Enclosed area contains no operator serviceable parts.

WARNING: To reduce the risk of injury from electrical shock hazards, do not open this enclosure.



Any RJ-45 receptacle marked with these symbols indicates a Network Interface Connection.

WARNING: To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.



Any surface or area of the equipment marked with these symbols indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists.

WARNING: To reduce the risk of injury from a hot component, allow the surface to cool before touching.



Power Supplies or Systems marked with these symbols indicate the equipment is supplied by multiple sources of power.

WARNING: To reduce the risk of injury from electrical shock, remove all power cords to completely disconnect power from the system.

Rack Stability



WARNING: To reduce the risk of personal injury or damage to the equipment, be sure that:

- The leveling jacks are extended to the floor.
 - The full weight of the rack rests on the leveling jacks.
 - The stabilizing feet are attached to the rack if it is a single rack installations.
 - The racks are coupled together in multiple rack installations.
 - A rack may become unstable if more than one component is extended for any reason. Extend only one component at a time.
-

Getting Help

If you have a problem and have exhausted the information in this guide, you can get further information and other help in the following locations.

Compaq Technical Support

In North America, call the Compaq Technical Phone Support Center at 1-800-OK-COMPAQ. This service is available 24 hours a day, 7 days a week. For continuous quality improvement, calls may be recorded or monitored.

Outside North America, call the nearest Compaq Technical Support Phone Center. Telephone numbers for worldwide Technical Support Centers are listed on the Compaq website. Access the Compaq website:

www.compaq.com

Be sure to have the following information available before you call Compaq:

- Technical support registration number (if applicable)
- Product serial number
- Product model name and number
- Applicable error messages
- Add-on boards or hardware
- Third-party hardware or software
- Operating system type and revision level

Compaq Website

The Compaq website has information on this product as well as the latest drivers and Flash ROM images. Access the Compaq website:

www.compaq.com

Compaq Authorized Reseller

For the name of your nearest Compaq Authorized Reseller:

- In the United States, call 1-800-345-1518.
- In Canada, call 1-800-263-5868.
- Elsewhere, see the Compaq website for locations and telephone numbers.

Compaq DRTape Solution

Introduction

Your new tape drive supports Disaster Recovery provided by various Compaq-approved tape backup software vendors. A disaster can occur at any time. When it hits, the server may crash, fail to restart, or recover with functionality problems. If you don't have a Disaster Recovery strategy in place, all of the data can be lost. Even if you perform a full backup, the restore process takes precious time to get the server running again.

The Compaq DRTape Solution simplifies the Disaster Recovery process. If a full backup with DRTape has been completed before a failure occurs, a system can be up and running in a short amount of time. The Compaq DRTape Solution provides the following benefits:

- Reduces the number of steps that need to be performed during a disaster recovery process.
- Reduces the time needed for the backup and restore windows.
- Simplifies the disaster recovery process by reducing the number of items (diskettes, CDs, and tapes) to a single tape. This also helps to ensure a successful recovery by eliminating problems associated with damaged or unavailable media.

The DRTape Solution includes the following features:

- Compaq-specific firmware that allows the tape device to emulate a bootable SCSI CD-ROM in a disaster recovery mode.
- Vendor-specific software that creates disaster recovery media that will load a minimal operating system to allow the user to restore the failed system.

IMPORTANT: Refer to the user documentation that shipped with the vendor-specific software for more information on how to use the software.

- Completely self-contained design that does not require CDs to restore the system during the disaster recovery process.

System Requirements

Note that there are specific operating system, drive firmware, controller BIOS and system drivers that are required for the Compaq DRTape Solution. A supported server and operating system compatibility matrix is available on the Compaq website at:

www.compaq.com/products/storageworks/tape-and-optical-storage/disasterrecovery.html

NOTE: A “DR Ready” sticker on your tape drive indicates that you have the proper firmware. If you do not have the minimum version or later version, you can download a *SoftPaq*™ of the most recent firmware version from the supported drive website.



CAUTION: If you are using a Compaq 66-MHz/64-bit Wide Ultra3 SCSI controller, you must reload this driver after the operating system has been loaded onto the system using the Compaq SmartStart and Support Software CD.

Perform the following steps to reload the driver:

1. Insert the SmartStart or Server Support Setup Utility CD into the CD-ROM drive.
 2. Select “Install Compaq Server Support.”
 3. Use your down arrow key to select “Compaq 66-MHz/64-bit Wide Ultra3 SCSI driver (ADPU160M.SYS).” Then click Install.
-

Using the Disaster Recovery Solution

This section describes how to use the Compaq DRTape Solution to create and restore a system. First, a disaster recovery tape must be created and stored for future use. After a disaster has happened, the disaster recovery tape is retrieved to restore and configure a system with a tape drive or an autoloader.

Creating a Disaster Recovery Tape

The Compaq DRTape Solution consists of a tape that contains a backup of your operating system, application software, and data.

Perform the following steps to create a Disaster Recovery tape backup using a Compaq tape drive or autoloader and supported software:

1. Install the DRTape enabled software.

NOTE: Refer to the vendor-specific documentation to install the software.

2. The tape drive or autoloader will be identified as a bootable tape device and the user will be prompted to create a bootable image that will be copied onto the media.
3. Complete the backup process. Write-protect the tape after the backup process completes, and store the tape for future use.

Restoring a System Using a Tape Drive

To restore a system using the backup DRTape:

1. Insert the SmartStart CD into the CD-ROM drive. Allow it to run until you are prompted to insert the operating system CD.
2. Remove the SmartStart CD.
3. Retrieve the most recent DRTape.
4. Make sure that the DRTape is write-protected and load the DRTape in the tape drive.
5. When all three LED indicator lights on the front of the tape drive are blinking, power on the computer or the tape drive within 15 seconds. This will place the tape drive into disaster recovery mode.

6. Your system is now in disaster recovery mode. When the system restarts, the tape drive is identified as a bootable device. After the operating system loads, the vendor-specific software screen displays giving information on how to proceed. Refer to the vendor-specific software documentation to complete the restore process.

After the vendor-specific software restores the system, the system is now ready for normal operation.

Restoring a System Using an Autoloader

To restore a system using the backup DRTape:

1. Insert the SmartStart CD into the CD-ROM drive. Allow it to run until you are prompted to insert the operating system CD.
2. Remove the SmartStart CD.
3. Retrieve the most recent DRTape.
4. Make sure that the DRTape is write-protected and load the DRTape into the autoloader.
5. Enter LCD Menu Mode by pressing the Select button for approximately five seconds.
6. Select DR Mode by moving the cursor with the select button and pressing the Enter button. Move the cursor to ON and press the Enter button.
7. At this point the autoloader LCD will display Power Cycle To Enter DR Mode, power cycle the autoloader.
8. The device will emulate a CD-ROM at power up. The 4th line of the LCD (usually reserved for Cleaning Request) will flash "DR Mode" once DR mode is recognized.
9. Your system is now in disaster recovery mode. When the system restarts, the autoloader is identified as a bootable device. After the operating system loads, the vendor-specific software screen displays giving information on how to proceed. Refer to the vendor-specific software documentation to complete the restore process.

After the vendor-specific software restores the system, the system is now ready for normal operation.

Index

A

ADPU160M.SYS 2
Autoloader
 restoring a system 4

B

benefits
 disaster recovery 1

C

Compaq 66-MHz/64-bit
 Wide Ultra3 SCSI driver
 reloading 2
Compaq authorized reseller viii
Compaq website viii
compatibility matrix
 URL 2
 website 2
creating a DRTape 3

D

description
 disaster recovery 1

disaster recovery
 benefits 1
 creating a DRTape 3
 description 1
 firmware 3
 restoring a system 3, 4
 restoring with an autoloader 4
 standards 2
DR *See* disaster recovery
drivers
 66-MHz/64-bit Wide
 Ultra3 SCSI 2

F

firmware
 disaster recovery 3

G

getting help vii

H

help
 additional sources vii
 Compaq website viii

technical support
 telephone numbers vii

I

icons
 symbols on equipment vi

R

restoring a system
 using the DRTape 3, 4
RJ-45 receptacle vi

S

standards
 disaster recovery 2
symbols in text vi
symbols on equipment vi

T

technical support vii
telephone numbers viii
text conventions v

V

vendor software 2

W

warnings
 electrical shock vii
 rack stability vii
website
 compatibility matrix 2
www.compaq.com viii