



## **Important Cluster Backup Installation Instructions**

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Compaq Computer Corporation

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# 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:

<b>Keys</b>	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 <b>without</b> pressing the <b>Enter</b> key.
Enter	When you are instructed to <i>enter</i> information, type the information and then press the <b>Enter</b> 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.

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

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

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

## Symbols on Equipment

The following symbols may be placed on equipment to indicate the presence of potentially hazardous conditions:



This symbol in conjunction with any of the following symbols indicates the presence of a potential hazard. The potential for injury exists if warnings are not observed. Consult your documentation for specific details.

---



This symbol indicates the presence of hazardous energy circuits or electric shock hazards. Refer all servicing to qualified personnel.

**WARNING:** To reduce the risk of injury from electric shock hazards, do not open this enclosure. Refer all maintenance, upgrades, and servicing to qualified personnel.

---



This symbol indicates the presence of electric shock hazards. The area contains no user or field serviceable parts. Do not open for any reason.

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

---



This symbol on an RJ-45 receptacle indicates a Network Interface Connection.

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

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This symbol 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.

---



These symbols on power supplies or systems indicate the equipment is supplied by multiple sources of power.

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

---



This symbol indicates that the component exceeds the recommended weight for one individual to handle safely.

Weight in kg **WARNING:** To reduce the risk of personal injury or damage to the  
Weight in lb equipment, observe local occupational health and safety requirements and  
guidelines for manual material handling.

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## Important Safety Information

Before installing this product, read the *Important Safety Information* document provided.

## Rack Stability

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**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 installation.
  - The racks are coupled together in multiple rack installations.
  - Only one component is extended at a time. A rack may become unstable if more than one component is extended for any reason.
- 

## 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 by logging on to the Internet at

<http://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. You can access the Compaq website by logging on to the Internet at

<http://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.



# Overview

## Installation Steps

Your Compaq cluster backup solution can be configured with either a Compaq TL891 MiniLibrary, or a Compaq StorageWorks SSL2020 MiniLibrary. See the appropriate section in this guide for your MiniLibrary installation.

Refer to the documentation included with each component to complete the following installation steps:

1. Cluster server hardware setup and installation
2. Adapter card hardware installation

**IMPORTANT:** This step only applicable for TL891 MiniLibrary installations.

3. Cluster software/MiniLibrary installation

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**IMPORTANT:** Be sure to use the Compaq Important Cluster Backup Installation Instructions FIRST.

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4. Backup software installation

# Compaq TL891 MiniLibrary Installation

## New Installation using the TL891 MiniLibrary

Before connecting the TL891 MiniLibrary to the servers, check the revision number on the black and white barcode label on the rear of the unit. If the revision is a B04, you must first follow the procedures in “Changing the TL891 MiniLibrary SCSI ID Setting.” If the revision is not a B04, use the procedures that follow:

1. Install a Compaq Dual Channel Wide-Ultra SCSI-3 Controller into an available slot on each server node.
2. Attach the cables as to the MiniLibrary as shown in Figure 1.

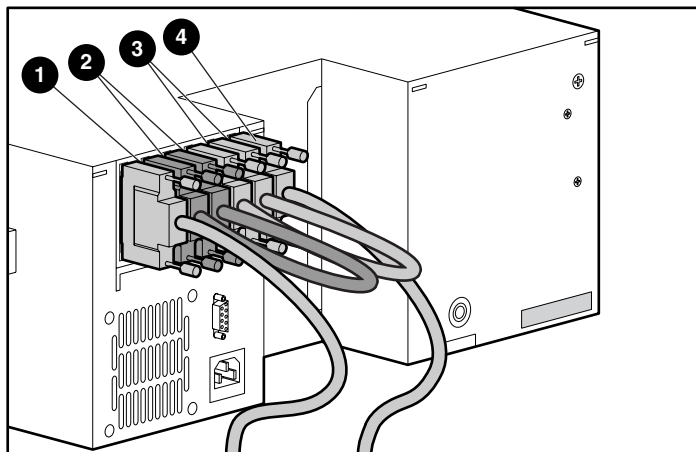


Figure 1. Attaching cables to the MiniLibrary

- |                        |                        |
|------------------------|------------------------|
| ❶ SCSI interface cable | ❸ SCSI jumper          |
| ❷ SCSI jumper          | ❹ SCSI interface cable |

3. Attach the cables to each server node as shown in Figure 2.

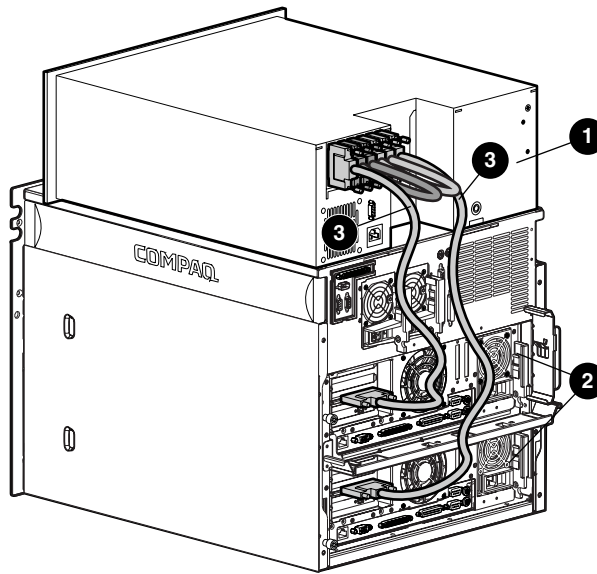


Figure 2. Attaching cables to the servers

- ❶ TL891 MiniLibrary
- ❷ Servers
- ❸ SCSI cables

4. Insert the Compaq SmartStart CD (4.8 or greater) into the CD-ROM drive.
5. Follow the Compaq ProLiant CL1850 or CL380 Installation Guide. During System Configuration (“Configuring the System”, “Configuring Server Node 1”), ensure that the adapter card in each server node connected to the TL891 has a different SCSI ID number than the other. Ensure that these SCSI IDs do not conflict with the TL891 SCSI ID setting. By default the IDs should be 0, 4, and 5 respectively.

---

**IMPORTANT:** Make a note of the SCSI ID setting. When server node 2 is configured, it cannot have the same ID as server node 1. For example, if server node 1 is set for SCSI ID 6, then server node 2 must be set to ID 7.

---

- a. Select Hardware Configuration, then press **Enter**.
- b. Select Review or Modify Hardware Settings.
- c. Select View or Edit Details.

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- d. Arrow down to the Compaq Dual Channel Wide-Ultra SCSI-3 Controller.
  - e. Highlight the SCSI ID option, then press **Enter**.
  - f. Select the desired SCSI ID setting, then press **Enter**.
6. During the Windows NT Disk Administrator or Windows 2000 Disk Management portion of the installation, be sure that each server node volume is allocated as the C:\ drive.
  7. Repeat steps 3 through 6 for server node 2, using the section “Configuring Server Node 2” in your ProLiant user’s guide.



**CAUTION:** If a server failure occurs during backup operations, do not disconnect the failed server until the backup is complete.

---

## Installing the TL891 MiniLibrary into an Existing Cluster

Before connecting the TL891 MiniLibrary to the servers, check the revision number on the black and white barcode label on the rear of the unit. If the revision is a B04, you must first follow the procedures in “Changing the TL891 MiniLibrary SCSI ID Setting.” If the revision is not a B04, use the procedures that follow:

1. Install a Compaq Dual Channel Wide-Ultra SCSI-3 Controller into an available slot on each server node.
2. Attach the cables as show in Figure 1 and Figure 2.
3. Power on server node 1. During bootup place the SmartStart CD (version 4.8 or greater) into the CD-ROM drive.
4. Select “Upgrade System Partition” and follow the onscreen instructions. When prompted, be sure to select “Select All Options.”
5. After the system reboots, select “Update System Configuration.”
6. Ensure that the adapter card in each server node connected to the TL891 has a different SCSI ID number than the other. Ensure that these SCSI IDs do not conflict with the TL891 SCSI ID setting. By default the IDs should be 0, 4, and 5 respectively.

---

**IMPORTANT:** Make a note of the SCSI ID setting. When server node 2 is configured, it cannot have the same ID as server node 1. For example, if server node 1 is set for SCSI ID 6, then server node 2 must be set to ID 7.

---

- a. Select Hardware Configuration, then press **Enter**.
  - b. Select Review or Modify Hardware Settings.
  - c. Select View or Edit Details.
  - d. Arrow down to the Compaq Dual Channel Wide-Ultra SCSI-3 Controller.
  - e. Highlight the SCSI ID option, then press **Enter**.
  - f. Select the desired SCSI ID setting, then press **Enter**.
7. Using Windows Disk Administrator or Windows 2000 Disk Management, be sure that each server node volume is allocated as the C:\ drive.
  8. Repeat steps 3 through 7, powering on server node 2.



**CAUTION:** If a server failure occurs during backup operations, do not disconnect the failed server until the backup is complete.

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## Changing the TL891 MiniLibrary SCSI ID Setting

These steps are only required if the revision on the black and white bar code label on the rear of your unit show that it is B04.

1. Turn on the library and wait until the Power-On Self Test completes and the default screen appears on the display of the control panel. The display may vary depending on the number of drives in the library. The Ready LED indicator will be lit green and the library status window will display the following:

DLT0: No Tape

DLT1: No Tape

Loader Idle

2. At the Default Screen, press the Enter button. The Main Menu appears and displays the following:

Load/Unload

Show Status Menu

Maintenance Menu

Configure Menu

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3. Press the down arrow button. Select the Configure Menu, then press Enter. The Configure Submenu appears as follows:

Set Data Format  
Set SCSI  
Set Library Mode  
Set Element Base

4. Press the down arrow button to select Set SCSI, then press the Enter button. The SCSI Submenu appears as follows:

Library Parity:  
\*Enabled  
Library Bus ID:  
\*0

5. Press the down arrow button to select Library Bus ID and press Enter. Press the up arrow button until a "1" appears below the Library Bus ID. Press Enter to accept the SCSI ID of 1 as shown below:

Library Bus ID:  
\*1

6. Press the Escape key to activate the new SCSI ID setting.  
Note: For about 15 seconds, the front panel will display SCSI Param. Update.
7. At the end of the update, the front panel will return to the Configure Menu.

# Compaq StorageWorks SSL2020 MiniLibrary Installation

## New Installation using the SSL2020 MiniLibrary

To connect the SSL2020 MiniLibrary to a cluster configuration:

1. Attach the cables to the existing Compaq 64-bit Dual Channel Wide-Ultra2 SCSI controllers. (See Figure 2 for an example.)

**NOTE:** Your actual configuration may appear slightly different than shown in Figure 2.

---

**IMPORTANT:** Some controller boards may have a “Do not use” sticker on one of the connectors. Please disregard.

---

2. Insert the Compaq SmartStart CD (4.8 or greater) into the CD-ROM drive.
  3. Follow the Compaq ProLiant CL1850 or CL380 Installation Guide. During System Configuration (“Configuring the System”, “Configuring Server Node 1”), ensure that the adapter card in each server node connected to the SSL2020 has a different SCSI ID number than the other. Ensure that these SCSI IDs do not conflict with the SSL2020 SCSI ID setting. By default the IDs should be 0, 4, and 5 respectively.
- 

**IMPORTANT:** Make a note of the SCSI ID setting. When server node 2 is configured, it cannot have the same ID as server node 1. For example, if server node 1 is set for SCSI ID 6, then server node 2 must be set to ID 7.

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- a. Select Hardware Configuration, then press **Enter**.
- b. Select Review or Modify Hardware Settings.

- c. Select View or Edit Details.
  - d. Arrow down to the Compaq 64-bit Dual Channel Wide-Ultra2 SCSI Controller.
  - e. Highlight the SCSI ID option, then press **Enter**.
  - f. Select the desired SCSI ID setting, then press **Enter**.
4. During the Windows NT Disk Administrator or Windows 2000 disk management portion of the installation, be sure that each server node volume is allocated as the C:\ drive.
  5. Repeat steps 2 through 4, referring to the section, "Configuring Server Node 2."



**CAUTION:** If a server failure occurs during backup operations, do not disconnect the failed server until the backup is complete.

---

## Installing the SSL2020 MiniLibrary into an Existing Cluster

1. To connect the SSL2020 MiniLibrary to a cluster configuration:
2. Attach the cables as show in the examples in Figure 1 and Figure 2.

**NOTE:** Your actual configuration may appear slightly different than shown.

3. Power on server node 1. During bootup place the SmartStart CD (version 4.8 or greater) into the CD-ROM drive.
4. Select "Upgrade System Partition" and follow the onscreen instructions. When prompted, be sure to select "Select All Options."
5. Select "Upgrade System Partition" and follow the onscreen instructions. When prompted, be sure to select "Select All Options."
6. After the system reboots, select "Update System Configuration."
7. Be sure that the adapter card in each server node connected to the SSL2020 has a different SCSI ID number than the other. Ensure that these SCSI IDs do not conflict with the TL891 SCSI ID setting. By default the IDs should be 0, 4, and 5 respectively.

---

**IMPORTANT:** Make a note of the SCSI ID setting. When server node 2 is configured, it cannot have the same ID as server node 1. For example, if server node 1 is set for SCSI ID 6, then server node 2 must be set to ID 7.

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- a. Select Hardware Configuration, then press **Enter**.
  - b. Select Review or Modify Hardware Settings.
  - c. Select View or Edit Details.
  - d. Arrow down to the Compaq 64-bit Dual Channel Wide-Ultra2 SCSI Controller.
  - e. Highlight the SCSI ID option, then press **Enter**.
  - f. Select the desired SCSI ID setting, then press **Enter**.
8. During the Windows NT Disk Administrator or Windows 2000 disk management section, be sure that each server node volume is allocated as the C:\ drive.
9. Repeat steps 2 through 5, powering on server node 2.



**CAUTION:** If a server failure occurs during backup operations, do not disconnect the failed server until the backup is complete.

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