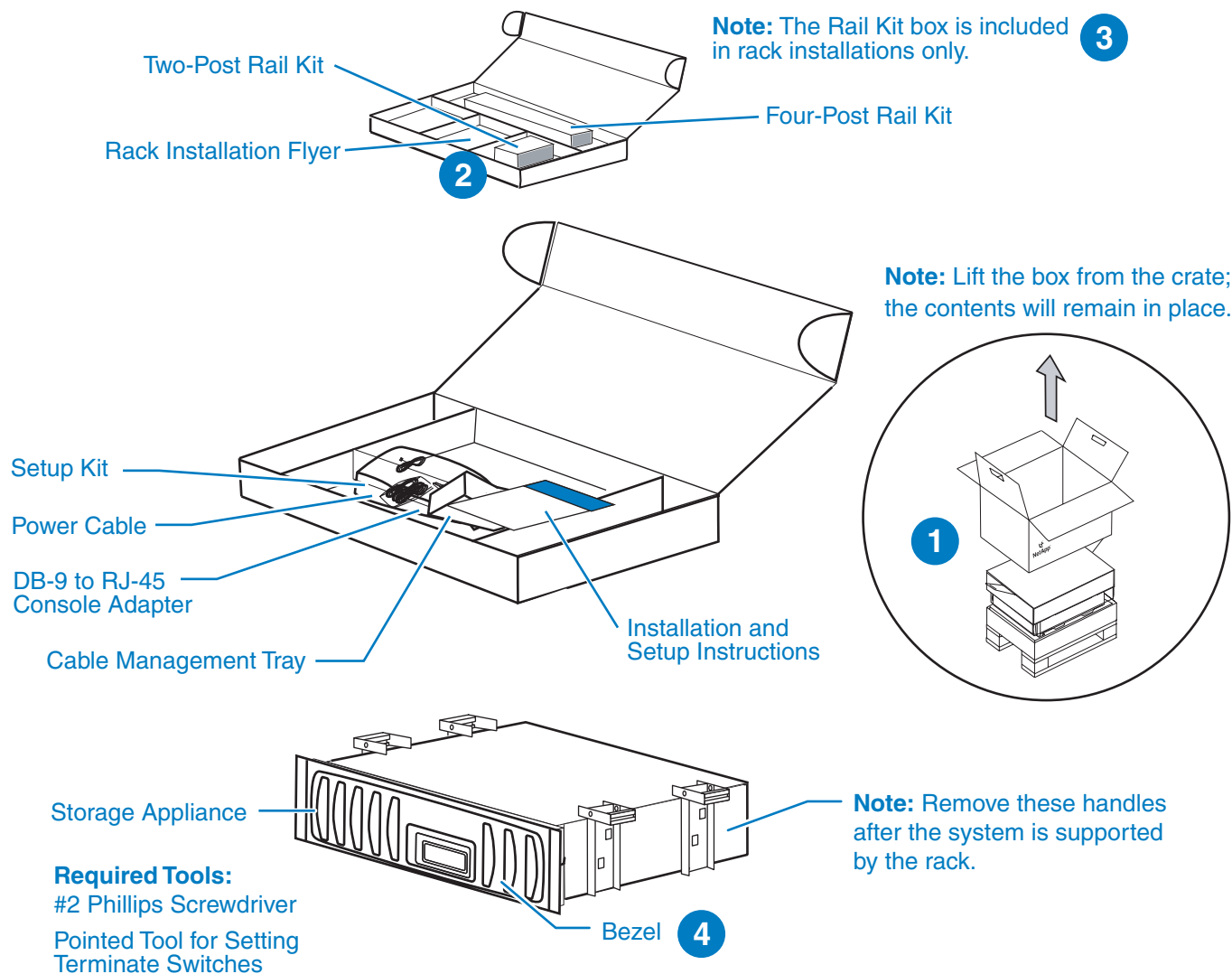
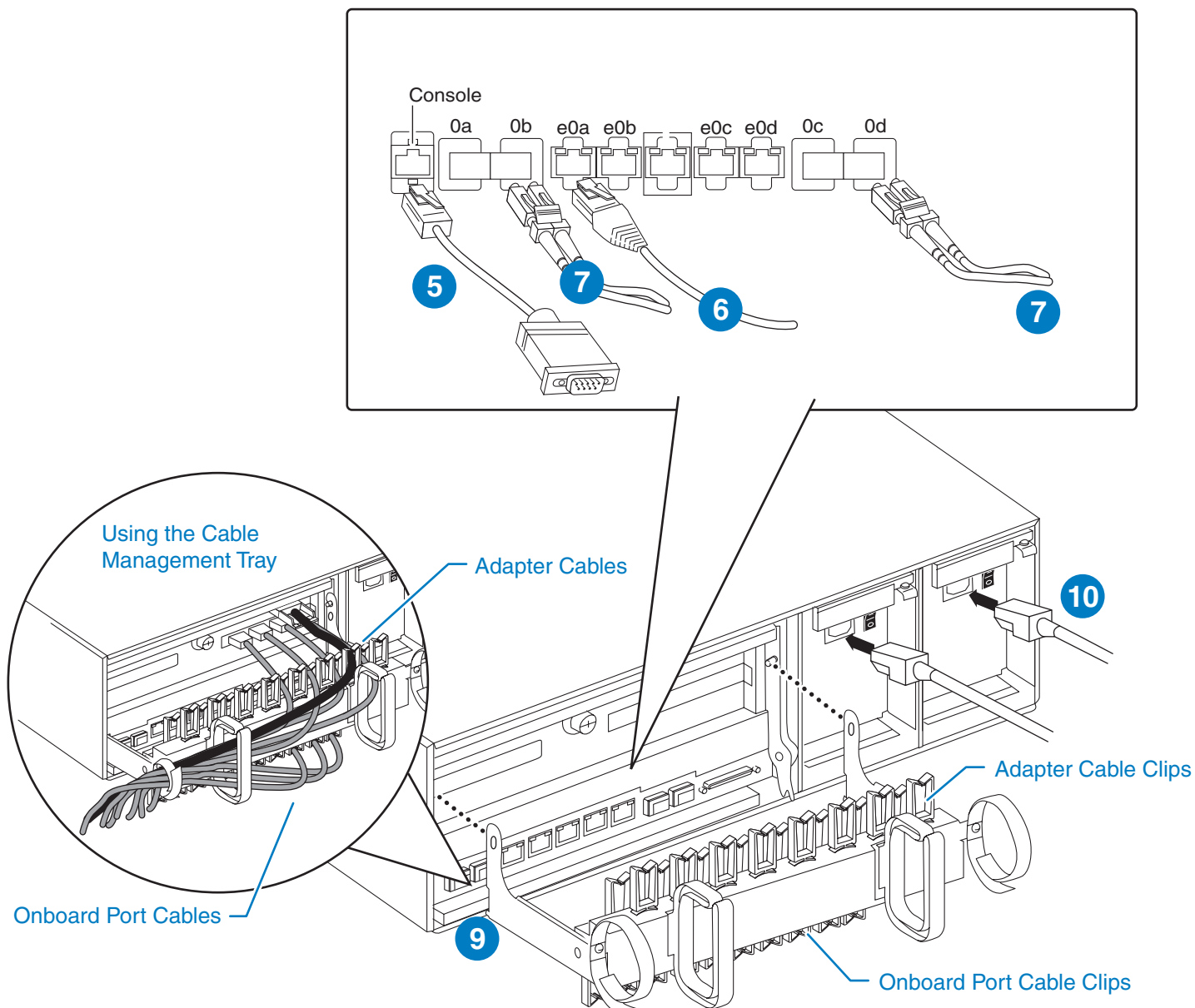


Complete NetApp documentation is available from the NOW™ site at <http://now.netapp.com>. You can view the manuals online, print them locally, or order them.

Contents Shipped



1. Inspect the contents of your shipment and carefully unpack it, using the preceding illustration as reference.
2. Use the Rack Installation Flyer in the rail kit box to install the appropriate rail kit on the rack.
3. Install the appropriate rack mount for the disk shelves, if applicable. Make sure that you leave enough room for the storage appliance.
4. Remove the bezel, install the storage appliance, and secure it to the rack, and then reinstall the bezel. Install the disk shelves as needed, using the later illustrations as reference.



5. Connect a console cable to the console port on the system. Make sure that you use the DB-9 to RJ-45 adapter kit that is included with your system. Connect the console cable to the adapter (settings are 9600, 8, none, 1).
6. Connect your system to the network by plugging the network cable into the green networking port, labeled e0a.
7. Attach the disk shelves using Fibre Channel cables. See the list of port assignments and applicable cabling diagrams on the following pages for reference.
8. (Optional) Attach a tape drive to a Fibre Channel HBA. See the tables on the following pages for a list of slot and port assignments.
9. Install your cable management tray by pinching the arms of the tray and fitting the holes in the arms through the motherboard tray pins. Then, push the cables into the cable holders, thread the adapter cables through the top rows of the cable holders, and thread the onboard port cables through the lower cable holders.

Note: You do not need to ground your system.

Note: You cable port 0a to your Fibre Channel network in “Booting your system for the first time,” later in these instructions.

10. Connect the power cords, making sure that the power supplies are connected to separate AC power sources. This ensures redundant power sources. If your appliance uses DC power, connect the cable to the power supplies, as

described in the DC Power Supply flyer accompanying the system.

Caution: Do not turn on power to your system.

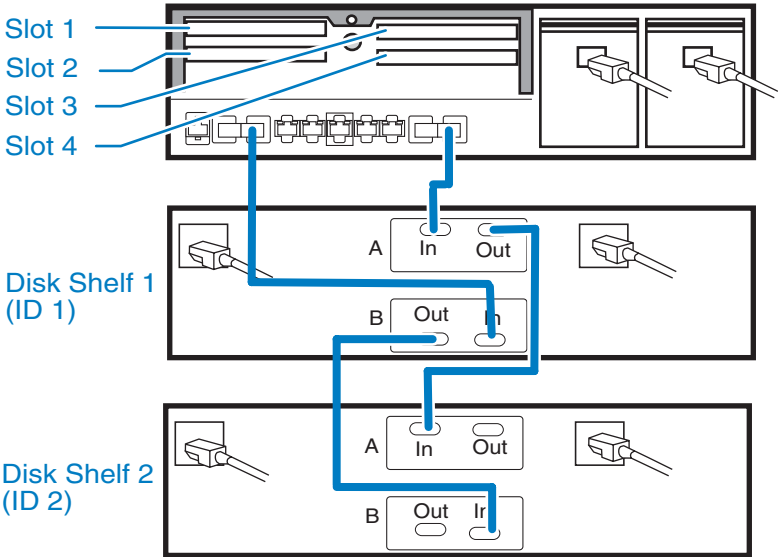
11. Go to “Booting your system for the first time.”

Ports and Connections (VTL300)

Use dualpath connections when connecting a VTL to a disk shelf, or disk shelf to disk shelf; for example, use the pair of ports 0b and 0d to connect to the first disk shelf. In this document, this pair of connections is called a disk shelf loop, or just loop.

Port	Target/ Initiator	Connect to	Connect before booting your system the first time
0a	T	host system (1st host connection)	
0b	I	disk shelf (1st disk connection)	
0c	T	host system (2nd host connection)	
0d	I	disk shelf (2nd disk connection)	
PCI1 (slot 1)		Not used	
PCI2 (slot 2)		Compression card	
PCI3 (slot3)		Not used	
PCI4 (slot 4)			
port 1/right	I	Tape device using optional HBA	
port 2/left	I	Tape device using optional HBA	

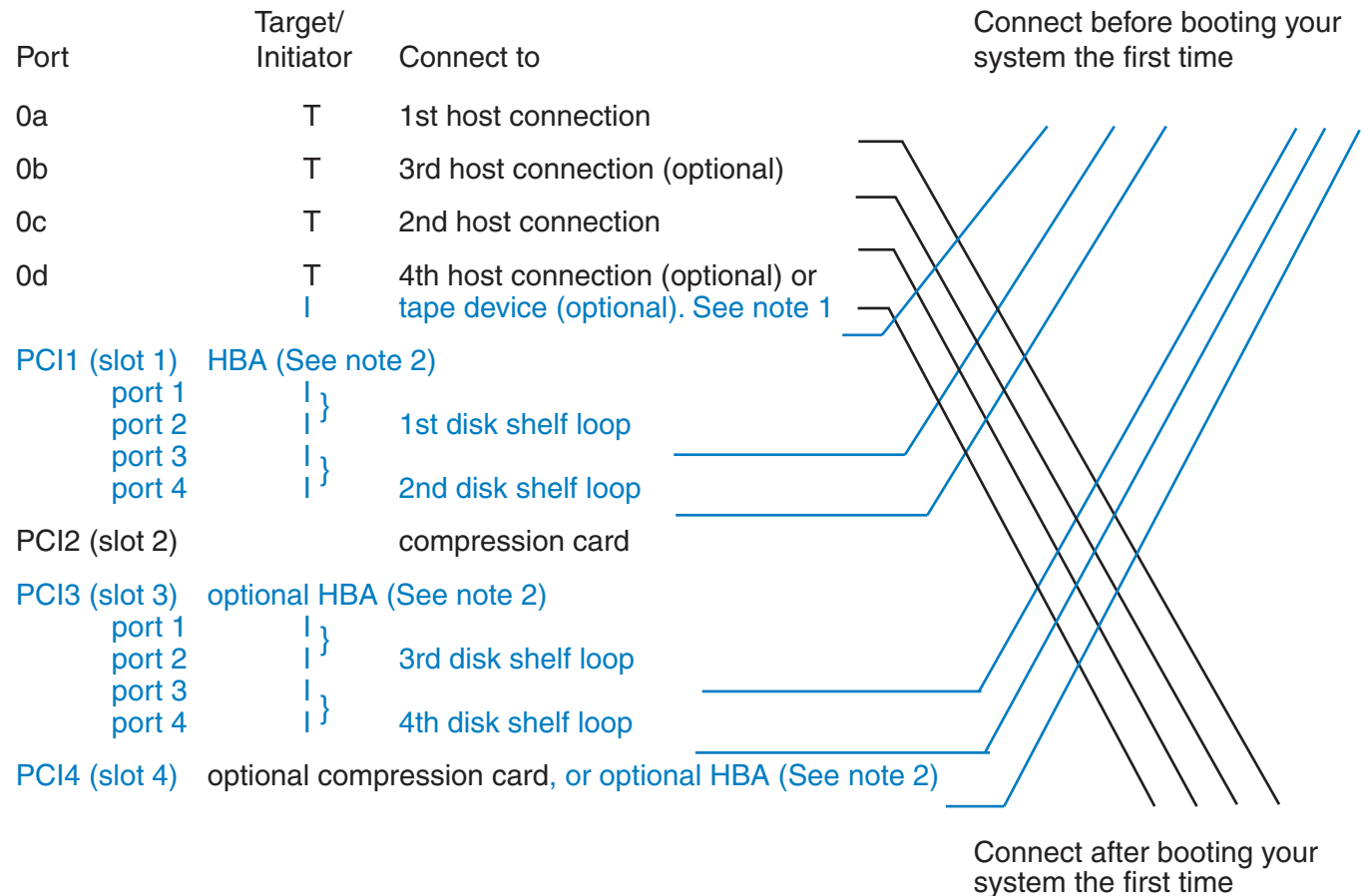
VTL300 (up to 5 Disk Shelves)



Continue with Disk Shelf 2 A Out to Disk Shelf 3 A In, B Out to B In, and so on, for a total of up to five disk shelves.

Ports and Connections (VTL700/VTL1400)

Use dualpath connections when connecting a VTL to a disk shelf, or disk shelf to disk shelf; for example, with an HBA in PCI slot 1, use the pair of ports port 1 and port 2 to connect to the first disk shelf. In this document, this pair of connections is called a disk shelf loop, or just loop.



Note 1: Use Configuration Tasks > Advanced > Options to control whether port 0d connects to a host or a tape device.

Note 2: A maximum of four loops can be used to connect to disk shelves. One loop (one pair of ports) not used to connect to a disk shelf, can be used to connect to a tape device.

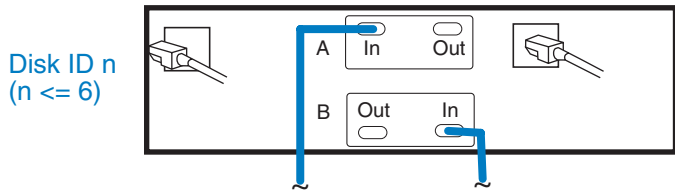
Recommended practice is to install the appliance in the middle of the rack and install shelves alternately above and below the appliance. This arrangement simplifies future expansion. Additionally, you should balance the number of shelves per loop. That is, approximately the same number of shelves should be connected to each loop.

A VTL1400 system is cabled as two independent VTL700 systems

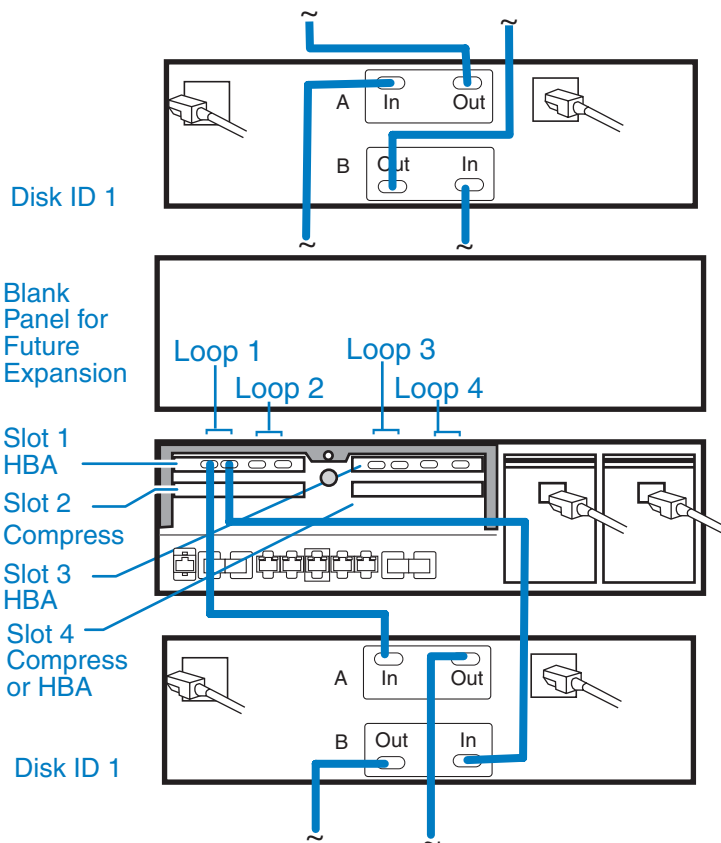
Booting Your System For The First Time

Connect a maximum of six shelves per loop.

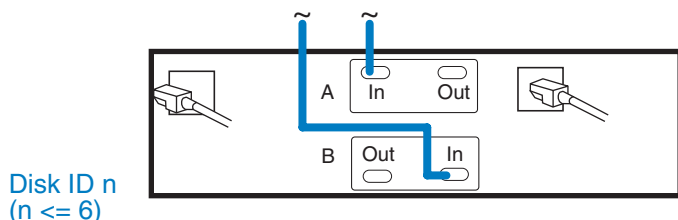
A VTL700 supports a maximum of four loops for disk shelves, for a maximum of 24 shelves.



Cable from A Out to A In and B Out to B In from one shelf to the next shelf, continuing to the last shelf in the loop.



Cable from A Out to A In and B Out to B In from one shelf to the next shelf, continuing to the last shelf in the loop.



To boot your system for the first time, complete the following steps:

1. Check that your system is properly set up. Make sure that the disk shelf IDs are properly set. For every loop, the disk shelf IDs must be unique, start with 1, and be placed in consecutive order.
2. Turn on the power to the disk shelves within 5 minutes of each other.
3. Turn on the power to the appliance.

Result: The system begins to boot. Booting takes up to 10 minutes.

4. Verify that all network LEDs are properly lit.
5. Go to the system console and set the IP address, subnet mask, and gateway address by entering the following command: `network set ipaddr mask gateway`

ipaddr is the IP address you are assigning to the appliance, **mask** is the subnet mask, and **gateway** is the IP address for the network gateway.

6. Verify that the network parameters are set correctly by entering the following command: `network show`.

Note: This is the last command from the serial console; the remaining steps are performed across the network from a workstation.

7. Verify that the appliance can be seen on the network by entering the following command from the command line of another system on the network: `ping ipaddr`.

8. From a Web browser on the network, enter the following URL: `http://ipaddr`.

ipaddr is the IP address of the VTL.

Result: The browser displays the VTL login screen.

9. Log in to the VTL using the defaults: User: `admin`, Password: `NetApp`. (Both user name and password are case sensitive.)

Result: The VTL graphical user interface (GUI) displays the Administrator Overview screen in the browser window.

10. Select the blinking **Actions Required** icon near the top of the screen.

Result: You see the list of needed actions.

Click **Resolve**.

Result: The GUI displays the **Date Setup** screen.

11. Set the time and date from the **Date Setup** screen. Either select the **Use NTP Server** button and then enter the IP address of the NTP server, or select the **Use Browser Host** button. Click **Apply**.

12. Set the appliance ID:

- Select **Miscellaneous** from the menu on the left side of the screen.
- Select the **Network Setup** tab.
- Enter a name for the appliance in the **Appliance ID:** field.
- Click **Apply**.

13. Configure e-mail (for action notification and, optionally, for AutoSupport):

- Select **Miscellaneous** from the menu on the left side of the screen.
- Select the **E-MAIL Configuration** tab.
- Enter addresses in the **E-Mail Server Address** and **Adm in E-Mail Address (from):** fields. (The e-mail address does not need to be a valid user account.)
- Optionally enter addresses in the **Action Notification E-Mail Recipients Lists** fields, and click the **Enable Action Notification** check box.
- Click **Apply**.

14. Configure AutoSupport:

- Select **Support Tools** from the menu on the left side of the screen.
- Select the **NetApp AutoSupport** tab.
- Select the delivery mechanism, either **HTTP** or **EMail**. If you select **HTTP**, the default is HTTPS (to use plain HTTP, uncheck **Secure**).
- If you select **EMail**, and you want AutoSupport e-mail to go to an address other than the NetApp AutoSupport address, enter the desired address in the "to" field. (This does not need to be a valid user account.) Otherwise, leave the default. Optionally enter a cc address.
- Click **Apply**.

15. Click **Raid Groups** under Configuration Tasks on the left side of the screen. Click the **Create Raid Group** tab, and click **Automatically Create Raid Groups**.

16. Define a virtual library:

- Select **Virtual Libraries** from the **Configuration Tasks** list on the left of the screen.
- Click the **Create Virtual Library** tab.
- At **Library Nickname**, enter a name for the library.
- Select a library type from the pull-down list of predefined library types. You can use any of the predefined library types for this test. You can go back later and redefine the library for your specific environment. Use the pull-down list to set the virtual tape drive type, and text boxes to set slot count, and drive count.
- Leave the port assignment unchanged.
- Enter a starting tape label.
- Click **Apply**.

17. Connect the backup host to Fibre Channel ports 0a, and 0c (and optionally to 0b).

18. Trigger a host OS rescan and/or configure zones as needed to make the VTL visible to the backup host and any required storage systems. For example, if the VTL is connected to a system running Data ONTAP®, you can use the Data ONTAP console command **sysconfig -t** to see if the VTL is visible to the Data ONTAP storage system; each VTL virtual tape drive shows as a physical tape drive to the backup host.

19. Test the overall configuration by labeling a tape and performing a backup and then a restore.

20. Continue with post-setup configuration as needed, using the manuals listed in the following table.

21. Register your system.

Use the Register My Products link from the NOW site Service & Support home page at <https://now.netapp.com/eservice/SupportHome.jsp>.

Where To Go For More Information

For information about...	Go to http://now.netapp.com for...
New features, enhancements, known issues, and late-breaking news for your version of the VTL software	The <i>Release Notes</i> for your version of VTL
Setting up and verifying software configuration	<i>System Administration Guide</i>
Managing all aspects of your system	<i>System Administration Guide</i>
Troubleshooting the system	<i>System Administration Guide</i>
Testing field-replaceable units and diagnosing and correcting system hardware problems	<i>AT Hardware Guide</i> <i>DiskShelf14 and DiskShelf14mk2 FC Hardware Guide</i>

Troubleshooting Tips

If your appliance does not boot when you power it on, follow these troubleshooting tips in the given order:

1. Check all cables and connections, making sure that they are secure.
2. Ensure that power is supplied and is reaching your appliance. Check the LEDs below -the power cords. They should be green.
3. Check the power supplies on your appliance and disk shelves. If the LEDs on a power supply are not illuminated, remove the power supply and reinstall it, making sure that it connects with the backplane.
4. Check the disk shelf IDs. For every loop, the disk shelf IDs must be unique, start with 1, and be placed in consecutive order.
5. Turn off your appliance and disk shelves, and then turn on the disk shelves. Check the quick reference card that came with the disk shelf for information about LED responses.
6. If your appliance still does not boot successfully, it might not have the boot image downloaded on the CompactFlash® card. Call NetApp technical support in the USA at +1(888)4-NETAPP, or outside the USA at +800 44 NETAPP.

