

Black Pearl®

Network Attached Storage



Quick Start Guide

The Spectra BlackPearl NAS Quick Start Guide helps you get your new BlackPearl NAS system up and running quickly and efficiently.

STOP

Complete all steps in the Quick Start Guide, in order, before attempting to use your BlackPearl NAS Solution. If Spectra Logic Professional Services is to install the solution, allow them to unbox the chassis and follow these instructions.

The time needed to install and configure your BlackPearl NAS solution is approximately 20-30 minutes.

Precautions

A BlackPearl NAS chassis weighs between 75 lb. (34 kg) and 119 lb. (60 kg) depending on chassis size and system configuration.

- WARNING** Observe local health and safety requirements and use a server lift to raise and stabilize the chassis during installation or removal. When installing into or removing a chassis from a rack:
- Extend the rack leveling jacks to the floor.
 - Ensure that the full weight of the rack rests on the leveling jacks.
 - Extend only one rack component at a time. Be careful not to extend the rails beyond safe limits.
 - Install stabilizing feet on the rack (recommended).
 - Use a rack bolt-down kit (recommended).
 - Do not rack-mount the chassis with the front bezel installed.

Unbox & Check Contents

- 1) If you have not already done so, find and read the Installation Overview document.
- 2) Remove the protective cushion, front bezel, and rack mount rail kit.
- 3) With assistance, lift the chassis out of the bottom nest cushion.

IMPORTANT The chassis ships with the chassis rack rails installed. The rails extend past the end of the chassis approximately 3 in. (8 cm). Make sure the rails do not catch while lifting the chassis out of the box.

- 4) Remove the wrapping from the chassis and then place the chassis on a sturdy work surface. **NOTE:** Save the packaging materials for future use.
- 5) Open the "Open Me First" box and find the Installation Overview document.
- 6) Read the document before proceeding.
- 7) Inventory the contents against the packing list.

Rack Mount the Chassis

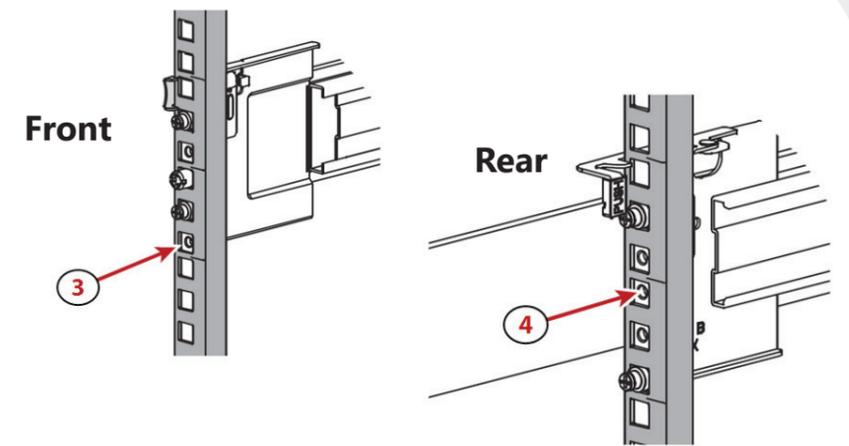
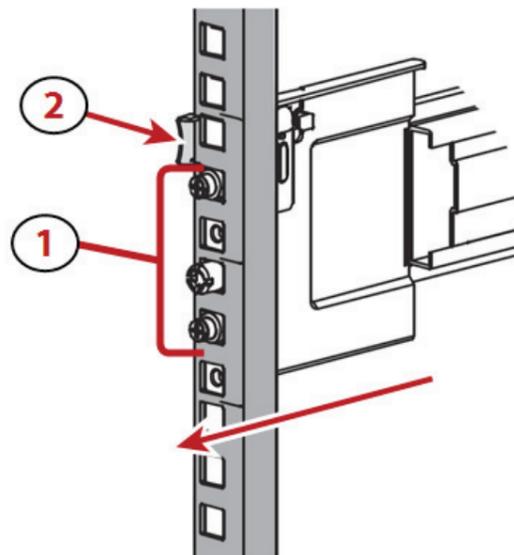
Use the instructions in this section to install the required rack hardware before installing the chassis. Rack hardware is included in the accessory box shipped with each chassis. A #2 Phillips screwdriver is required.

Install Rack Rails

- 1) Locate the position in the rack where you want to install the BlackPearl NAS chassis. The chassis should be mounted as low as possible for rack stability.
- 2) Select either the **Left** or **Right** rack rail, and use the **Front** and **Rear** markings on the rail to orient the rail correctly.
- 3) Position the studs (1) on the front of the rail inside the vertical post of the rack, and push the studs into the post holes. The latch (2) on the front of the rail audibly snaps into place.
- 4) Lower the back of the rail until the rail is approximately level. Some racks have Rack Unit markings to help you level the rail.
- 5) Position the studs on the rear of the rail inside the vertical post of the rack, and push the studs into the post holes. The latch on the rear of the rail audibly snaps into place.
- 6) Using a #2 Phillips screwdriver, secure the rail with one provided M5 screw and washer each at the front (3) and back of the rail (4).
- 7) Repeat for the second outer rack rail.

Front rack rail mount shown

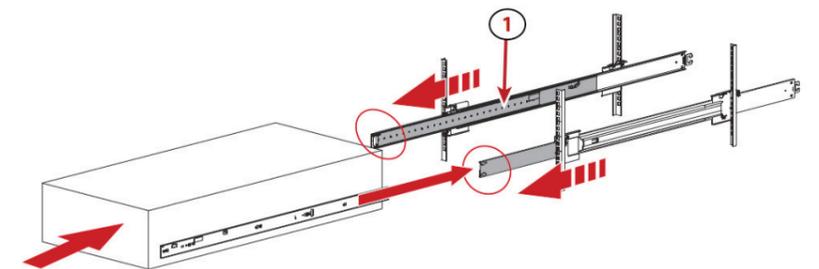
Process is the same for rear rack mount



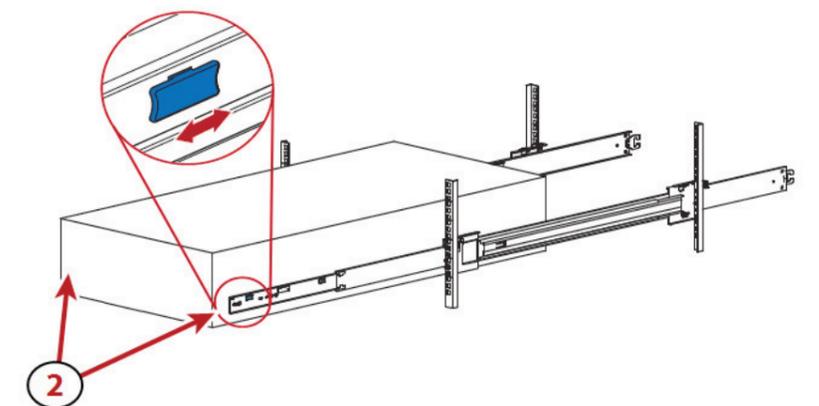
Install Chassis into Rack

Use the instructions in this section to install the BlackPearl NAS chassis into the rack.

- 1) Extend the middle section (1) of both the rack rails until they lock in place.
- 2) Using a lift, raise the chassis, and slide the chassis rails into the middle rack rails. **NOTE:** Do not rack-mount the chassis with the front bezel installed.



- 3) Pull the blue latches (2) on both sides of the chassis towards the front of the chassis.



- 4) Slide the chassis the remainder of the way into the rack.
- 5) To connect the front bezel, insert the tabs on the right side of the chassis into the slots on the right side of the bezel, then rotate the bezel towards the chassis until it snaps in place.

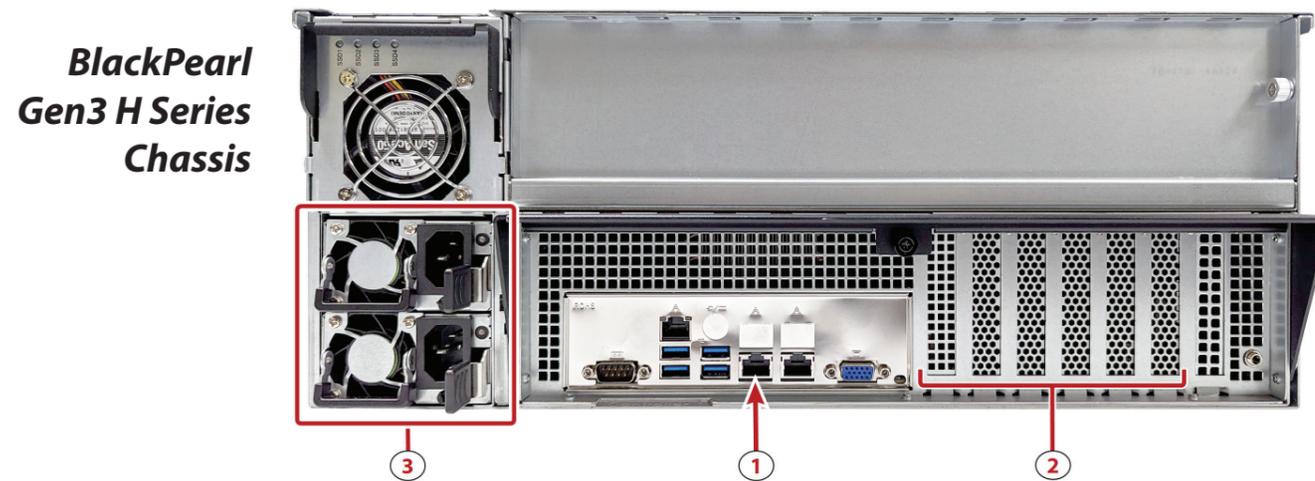
Install Data Drives

If your order included additional data drives, use the instructions in the *Data Drive Installation* instruction sheet, included in the "Open Me First" box.

Connect Cables & Power On

Use the instructions in this section to connect the management connection, data connection, and power cables.

- 1) Connect an Ethernet cable to the BlackPearl management port (1).
NOTE: This port is not used for data transfer.
- 2) Connect an Ethernet cable to the data port HBA (2) (not shown). For more advanced network configuration, including link aggregation, see **Configure the Data Connection** in the *Spectra BlackPearl NAS User Guide*.
- 3) Connect power cables to the power supplies first (3), then connect the other end to nearby power outlets. The system powers on immediately.
NOTE: For greater power redundancy, connect each power supply to a separate circuit.
- 4) Wait five minutes while the system initializes.



**BlackPearl
Gen3 H Series
Chassis**

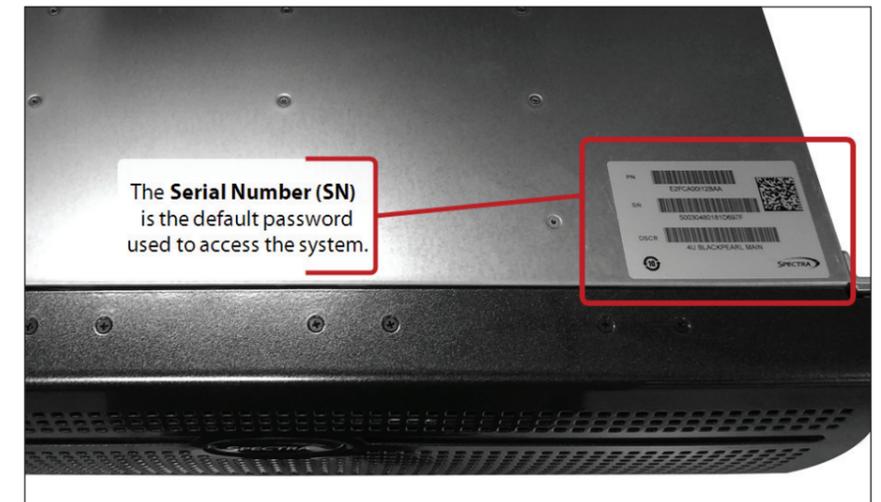
Black Pearl[®]
Network Attached Storage

Black Pearl[®]
Network Attached Storage

Log In

The BlackPearl management port is configured to use the IP address **10.0.0.2**. Spectra Logic recommends using this IP address the first time you access the BlackPearl user interface, and then changing the IP address in the user interface. If this IP address is already in use, see **Configure the BlackPearl Management Port** in the *Spectra BlackPearl NAS User Guide*.

- 1) Locate the **product serial number** on the sticker positioned on the top-front of the chassis. The product serial number is the system's default password.



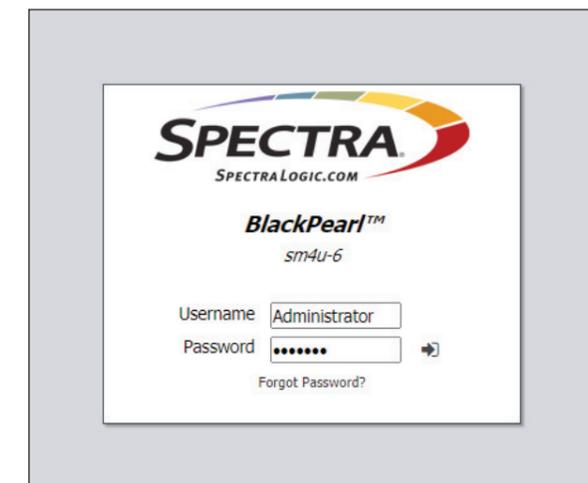
- 2) Enter the default IP address **10.0.0.2** into a web browser.
- 3) Resolve the security certificate warning.
- 4) Enter the default Username and Password. The username and password are case sensitive.

Username: **Administrator**

Password: **//product serial number//**

NOTE: The serial number is denoted by "SN" on the sticker.

- 5) Click -> to log in.
- 6) If desired use the instructions in the *Spectra BlackPearl NAS User Guide* for instructions to change the management port IP address.



User Interface Dashboard

The Dashboard screen displays when you first log into the BlackPearl management interface.

The **Menu bar** on the top of all screens helps you navigate the management interface using drop-down menus.

The left column of the Dashboard shows the status of the system **hardware**, storage **pools**, and **volumes**.

The right column displays **performance** information for both network and storage pools.

The status bar at the bottom of the interface displays system **messages**, and contains the **power** button.

Use the **Menu bar** to navigate the BlackPearl user interface.

Shows the details and status of system **Hardware**, storage **Pools**, and **Volumes**.

Shows the current **Network** configuration.

Shows the **Pool** and **Network** performance information.

Messages alert you to any problems the system may experience.

Use the **power button** to restart or power off the system.

Configure the Data Connection

Use the instructions in this section to setup a single-port data connection with an IPv4 address. For instructions on using link aggregation or IPv6 addressing, see **Configure the Data Connection** in the *Spectra BlackPearl NAS User Guide*.

- 1) Select **Configuration>Network**.
- 2) Under **Network Interfaces**, locate the **Data #** row with a green check mark next to the name, and **select** the row (1).

Network Interfaces	
Name	
Management	
Data 1	
Data 2	
Data 3	

- 3) In the upper-right corner of the user interface, select **Action>Edit**.
- 4) Click the plus sign (+) to create a new row (2).
- 5) Enter the desired **IP Address** and enter the network subnet as the **Prefix Length** (3).
- 6) If necessary, change the **Default Gateway** and **MTU** settings for your network (4).
- 7) Click **Save** (5).

Configuration DHCP

IPv4 & IPv6 Addresses Prefix Lengt...

IPv4 Default Gateway

IPv6 Default Gateway

MTU

Save

Create a Storage Pool

Use the instructions in this section to configure a basic storage pool. For descriptions of more advanced configuration options, see **Create a NAS Storage Pool** in the *Spectra BlackPearl NAS User Guide*.

IMPORTANT You need the solution summary document provided by Spectra Logic to complete the instructions below. If the storage pool is not configured as specified, you may experience performance degradation. After the NAS solution stores any data, it becomes time consuming to recreate the storage pool without deleting data in the storage pool. **Contact Spectra Logic if you do not have your solution summary document.**

- 1) Select **Configuration>NAS>Pools**.
- 2) In the upper-right corner of the user interface, select **Action>New**.
- 3) Enter a **Name** (1). Spectra Logic recommends using a short name.
- 4) Spectra Logic recommends leaving the **High Water Mark** at **80%** and leave **Power Saving Mode** as **Disabled** (2).

1 Name

2 High Water Mark %

Power Saving Mode

3 Select Drives To Use

1.5 TiB, SSD, SAS

3.6 TiB, SAS

4 Select Protection Level

None

Mirror

Single parity

Double parity

Triple parity

Select Optimization Level

Capacity Performance

5 Select Write Performance

Drives

Select Metadata Performance

1.5 TiB, SSD, SAS

- 5) Select the **Number of Drives** to use (3). Refer to the solution summary document.
- 6) Select the **Protection Level** (4). Refer to the solution summary document.
- 7) Select the number of **Write Performance** drives and the number of **Metadata Performance** drives (5). Unless you have been directed by Spectra Logic to configure performance drives, leave these settings at zero.
- 8) At the bottom of the New Pool pane, click **Create** (not shown).

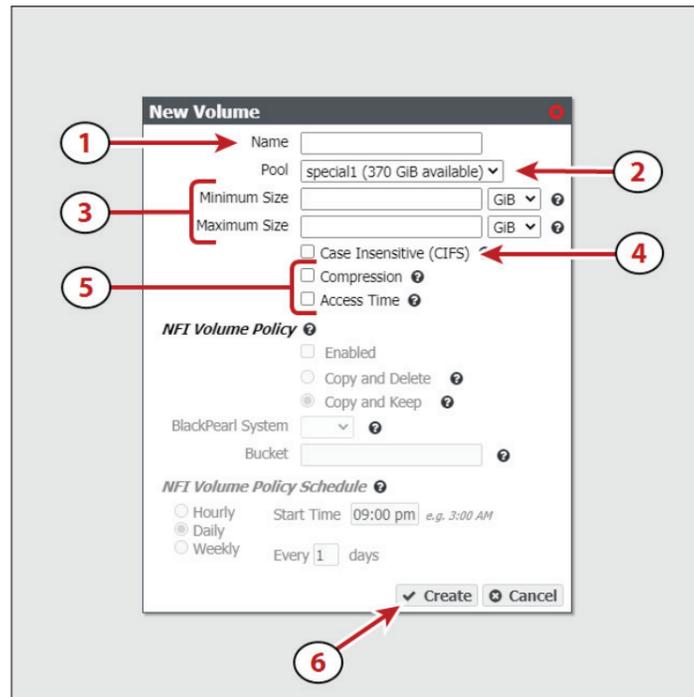
Black Pearl®

Network Attached Storage

Create a Volume

Use the instructions in this section to configure a basic volume. For descriptions of more advanced configuration options and using NFI, see **Create a Volume** in the *Spectra BlackPearl NAS User Guide*.

- 1) Select **Configuration>NAS>Volumes**.
- 2) In the upper-right corner of the user interface, select **Action>New**.
- 3) Enter a **Name (1)**. Spectra Logic recommends using a short name.
- 4) Select the **Pool** you just created (2).
- 5) Spectra Logic recommends leaving the **Minimum Size** and **Maximum Size** blank (3).
- 6) For faster performance when sharing the volume with a CIFS share, select **Case Insensitive (4)**. Do not select this option if you plan to share the volume using NFS.
- 7) If desired, select to enable **Compression** or **Access Time** for the volume (5). See the *Spectra BlackPearl NAS User Guide* for more information.
- 8) Click **Create (6)**.



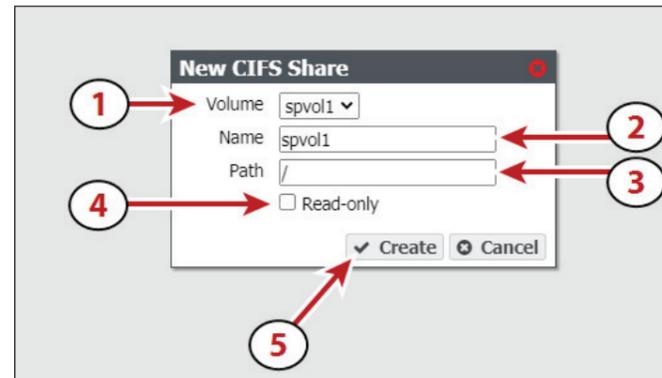
Create a Share

Use these instructions in the next column to create either a CIFS or NFS share. CIFS shares are used in a Windows environment, and NFS shares are used in a Linux environment. For more information on creating a share, see **Create a Share** in the *Spectra BlackPearl NAS User Guide*.



Create a CIFS Share

- 1) Select **Configuration>NAS>Shares>CIFS**.
- 2) In the upper-right corner of the user interface, select **Action>New**.
- 3) Select the **Volume (1)**.
- 4) Enter a **Name (2)**. Spectra Logic recommends using a short name.
- 5) The default **Path** for the volume allows full root access (3). If necessary, edit the network Path for your environment. See **Create a CIFS Share** in the *Spectra BlackPearl NAS User Guide* for information.
- 6) Optionally, select **Read-Only (4)**.
- 7) Click **Create (5)**.

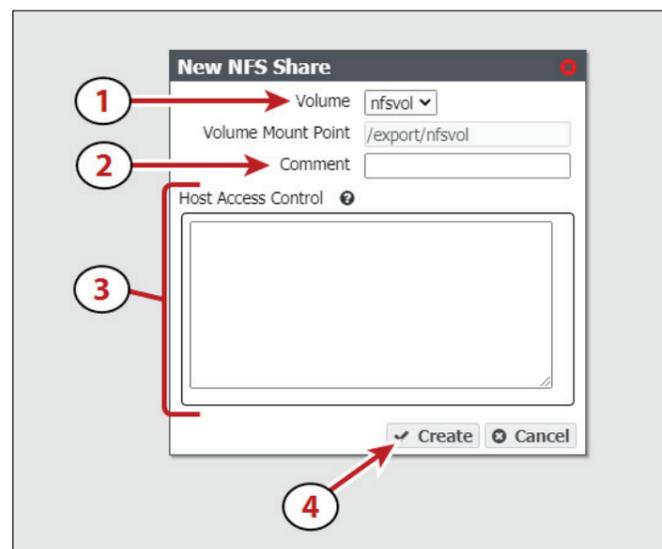


NOTE: In order to access the CIFS share, you must either create a user on the BlackPearl NAS system with CIFS access, or join the system to an Active Directory domain. For instructions, see **Create a CIFS Share** in the *Spectra BlackPearl NAS User Guide*.

Create an NFS Share

- 1) Select **Configuration>NAS>Shares>NFS**.
- 2) In the upper-right corner of the user interface, select **Action>New**.
- 3) Select the **Volume (1)**. The **Volume Mount Point** is entered automatically.
- 4) Optionally, enter a **Comment (2)**.
- 5) Enter the following in **Host Access Control (3)** to allow a host to have full root access to the share.
* `norootsquash`
- 6) Click **Create (4)**.

NOTE: For instructions on configuring other host access levels, see **Create a NFS Share** in the *Spectra BlackPearl NAS User Guide*.



Add the Share to Your Environment

Before you can use the BlackPearl NAS for data operations, you must add the NAS share to your network environment. For CIFS shares, see **Create a Share** in the *Spectra BlackPearl NAS User Guide* for additional information. Contact your network administrator if you need assistance.

Additional Documentation

Scan the QR codes below to access additional documentation related to your BlackPearl NAS solution, or go to <https://support.spectralogic.com/documentations/documentation>.

BlackPearl NAS User Guide



BlackPearl NAS Site Prep



BlackPearl NAS Network Setup Tips



BlackPearl HotPair Installation Guide



Contact Spectra Logic

Phone Support	
United States and Canada	1.800.227.4637 toll free or 1.303.449.0160
Europe	44 (0) 870.112.2185
Deutsch Sprechende Kunden	49 (0) 6028.9796.507
Australia	1.800.452.137
Mexico, Central/South America, Asia, New Zealand, Africa, Middle East	1.303.449.0160
Online Support	
Support Website	support.spectralogic.com

Trademarks

© 2024 Attack Hardened, BlackPearl, BlueScale, RioBroker, Spectra, SpectraGuard, Spectra Logic, Spectra Vail, StorCycle, TeraPack, TFinity, and TranScale are registered trademarks of Spectra Logic Corporation. All rights reserved worldwide. All other trademarks and registered trademarks are the property of their respective owners.