overland storage

Quick Start Guide

SnapScale™ X4
4U Cluster Node

10400467-001

Step 1

It is **essential** that you activate your warranty for each SnapScale node. Technical and warranty support are **not available** for the nodes until the warranty is active:

1. Go to http://www.overlandstorage.com/ and select **Service & Support > Sign-in To My Account**.
2. At the Site Login, enter your **e-mail address** and **password**, and click **GO**.
3. Click **Register New**.
4. Fill in the information and click **Submit**.

   As a registered user, your basic data is entered automatically. Only the serial number must be entered. This speeds up registering multiple nodes.

Your warranty certificate will be emailed to you. Follow the instructions included in the email to complete the registration process.

E-mail: _Enter_
Password: _Enter_
☐ Remember Me
**GO ▸**
Forgot your password? New member?

Step 2

⚠ WARNING: This device has more than one power cord. Disconnect ALL power supply cords before servicing.

Any optional internal components, such as expansion cards, need to be installed before continuing. Refer to the installation instructions and warnings that are packaged with the components.

Step 3

The X4 rail kit can be installed in either square- or round-holed 19-inch (EIA-310) racks.

NOTE: Two-post telco-style or other rack less than 29-inches in depth will NOT support this unit. Also, for threaded-hole racks, we recommend using a shelf.

LH Rail   RH Rail   Screws   Adaptors
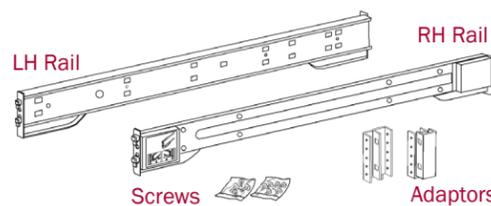
The rails are not universal. They are stamped LH (left) and RH (right) and must be mounted on the appropriate side (when facing the rack).
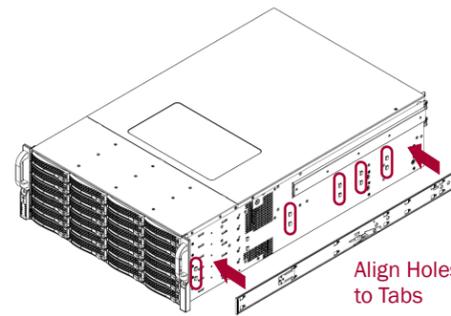

Attach Inner Rails to Chassis

1. Mark the **screw holes** where the rails are to be installed in the rack, making sure the rear holes are level with the front holes.
2. Remove the **inner rail** from the rail set:

Inner Member Release
Middle Release (Hidden)
Outer
Middle
Inner
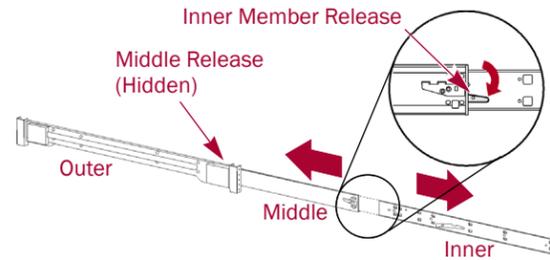
   a. Fully extend the **rail set**.
   b. Push the inner member **latch** down, and remove the **inner rail**.
   c. Release and slide the **middle member** back into the outer member.
3. Attach the **right inner** rail kit member:
   a. Facing the chassis, position the **rail** against the right side with the locking tabs going through the holes on the rail.
   b. Slide rail toward the **front** to lock.

      This may require some force as it is a tight fit.
   c. Secure rail with the Phillips **screws**.
4. Repeat Step 3 to install the **left** inner member.

Align Holes to Tabs

🔵 IMPORTANT: Depending on your rack type, continue with either the *"Square-Holed Rack Installation"* or *"Round-Holed Rack Installation"* section.

Square-Holed Rack Installation

1. Position the **left outer** rail on the inside of the front rack rail (with the hooks in line with the holes).
2. **Insert** the front bracket into the rack rail and **press down** so that the hooks catch.

   The spring-loaded tabs extend into the holes to prevent the outer slide rail from coming loose.
3. Slide the **rear segment** of the bracket rearward, **insert** the bracket into the rear rack rail, and **press down** so that the hooks catch and the tabs lock.
4. Repeat Steps 1–3 for the **right** slide rail assembly.
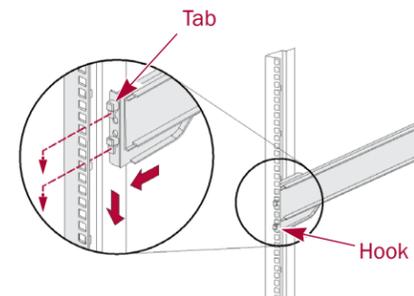
Continue with "Install the Unit in the Rack."

Tab
Hook

Round-Holed Rack Installation

Before installing the rails on an unthreaded round-holed rack, the round-hole adaptors must be installed on the ends of the outer rail members.

1. Attach the **adaptors**:
   a. Position the adaptor stamped "A" at the front of the **left** rail.

A (Front)
B (Rear)
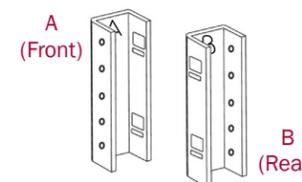
NOTE: Make sure the "A" stamp is at the top and the square adaptor holes are aligned with the rail hooks.

   b. Press the **adaptor** onto the hooks and slide it **upwards** until it locks (clicks) with the tabs snapping into place.
   c. Repeat Steps a–b for the left **rear** adaptor (stamped "B").
2. Position the **left outer** rail on the inside of the front rack rail with the holes aligned with the marked rack holes.
3. Loosely attach the slide rail **front** to the rack with the screws.
4. Slide the **rear rail segment** rearward until the **rear** adaptor holes are in line with the marked rack holes.
5. Secure the **rear** of the rail to the rack with the screws, and then tighten the front screws to secure it.
6. Repeat Steps 1–5 for the **right rail**.

"A" Stamp
Adaptor
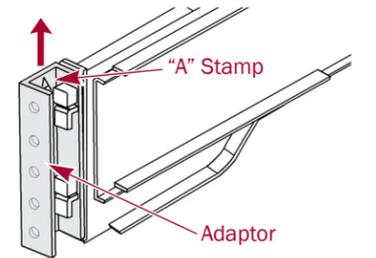
Install the Unit in the Rack

⚠ WARNING: It is recommended that a mechanical lifter (or at least two people) be used during rack installation or removal to prevent injury.

⚠ AVERTISSEMENT: Pour éviter toute blessure il est recommande qu'un monte-charge (ou deux personnes au moins) soit utilisé lors de l'installation ou de l'enlèvement du support.

1. At the front, extend both **middle** rail members until they lock (click).
2. Using a mechanical lifter (or two people), lift and engage the X4 **inner rails** with the rack rails.
3. Slide the X4 into the rack until it stops.
4. Using the **two screws** provided, secure the X4 flanges to the rack.
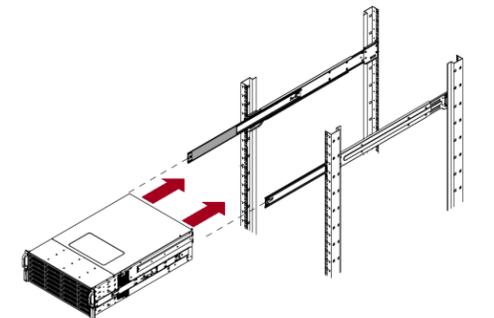
Step 4

The X4 comes with only blank drive carriers installed (drives are sold separately). Up to 12 disk drives can be installed with blank drive carriers filling in the empty slots.

🔵 IMPORTANT: To maintain proper airflow and cooling, a drive assembly or a blank drive carrier must be installed in *every* slot. No empty slots are allowed.

Install Drives

NOTE: Do not remove the disk drives from their carriers. Doing so voids the drive warranty.

Once the SnapScale node is in the rack, install the drives as follows:

1. Remove **blank drive carriers** from all the slots being used for drives.
2. Position a **drive carrier** in front of the appropriate **bay and** slide it all the way in.
3. Close the **latch**, locking the carrier in place.
4. Repeat Step 2 for **all other carriers**.
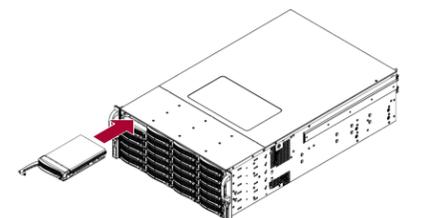
Attach the Bezel

1. Position the **bezel** with the left-side tabs inserted into the holes on the left flange.
2. Move the **right side** of the bezel toward the unit until flush with the right flange and it locks (clicks).
3. If desired, use the supplied key to lock the bezel in place.

Step 5

Cable Attachment

> ➡ IMPORTANT: The speed/duplex setting of the Ethernet ports defaults to autonegotiate. The networking switches or hubs used must also be configured to autonegotiate; otherwise, network throughput or connectivity to the X4 may be seriously impacted.
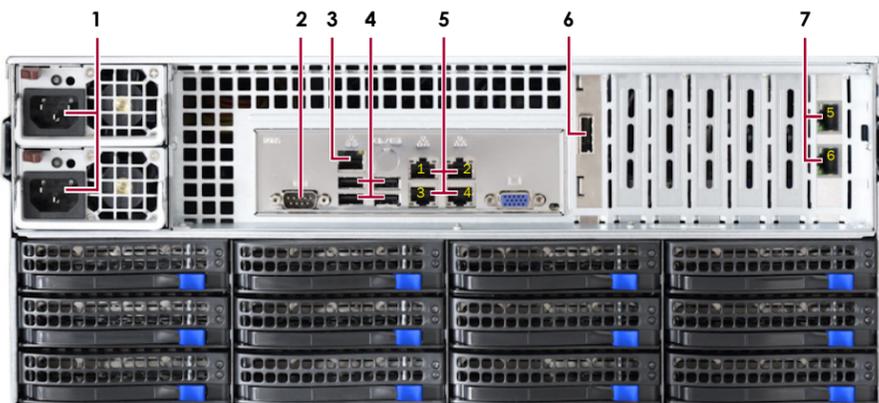
All cabling, power connections, and cooling are located on the X4 rear panel.

Ports on 1Gb Versions
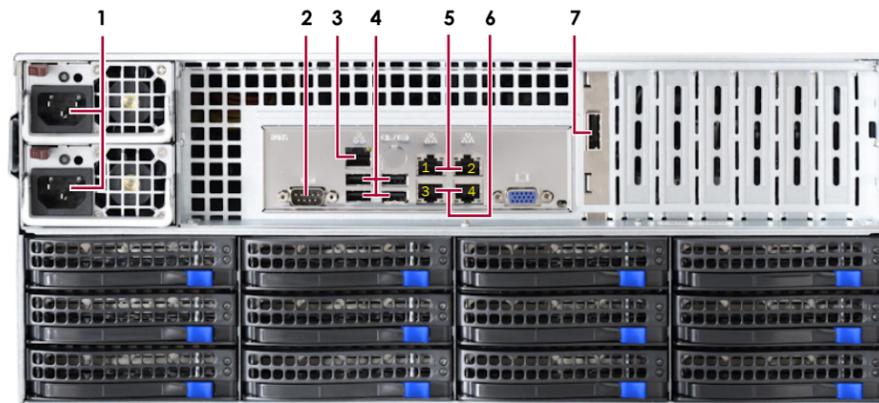

```
1 - AC Power Sockets      3 - IPMI Port*          6 - 1Gb Ports (Storage)
2 - Serial Port*          4 - USB 2.0 Ports (4)†  7 - SAS Card Port
                          5 - 1Gb Ports (Client)
                          * For use by Technical Support only.
```

Ports on Single 10Gb Versions


```
1 - AC Power Sockets      4 - USB 2.0 Ports (4)       6 - SAS Card Port
2 - Serial Port*          5 - Ethernet Ports (1-4)    7 - 10Gb Ports (Storage)
3 - IPMI Port*                (Client)
                          * For use by Technical Support only.
```

Ports on Dual 10Gb Versions
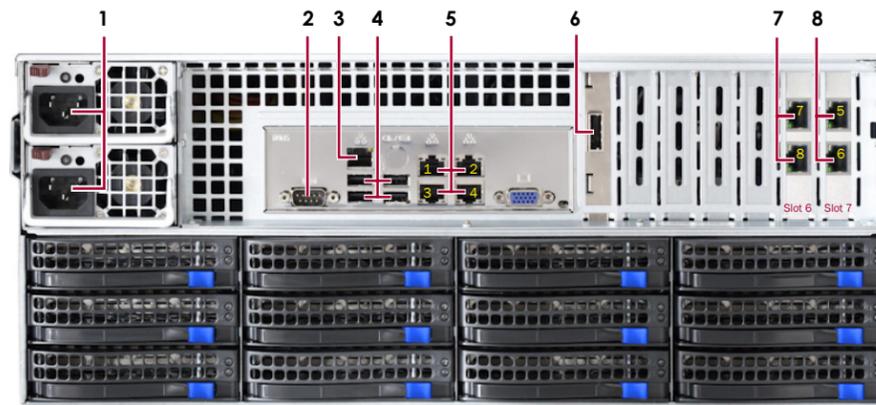

```
1 - AC Power Sockets      4 - USB 2.0 Ports (4)    7 - 10Gb Ports (Client)
2 - Serial Port*          5 - 1Gb Ports (Unused)   8 - 10Gb Ports (Storage)
3 - IPMI Port*            6 - SAS Card Port
                          * For use by Technical Support only.
```

1. Verify that all **client** and **storage switches** are connected to a UPS.

   For failover, verify that the two **storage switches** are plugged into different UPS units connected to different power sources.
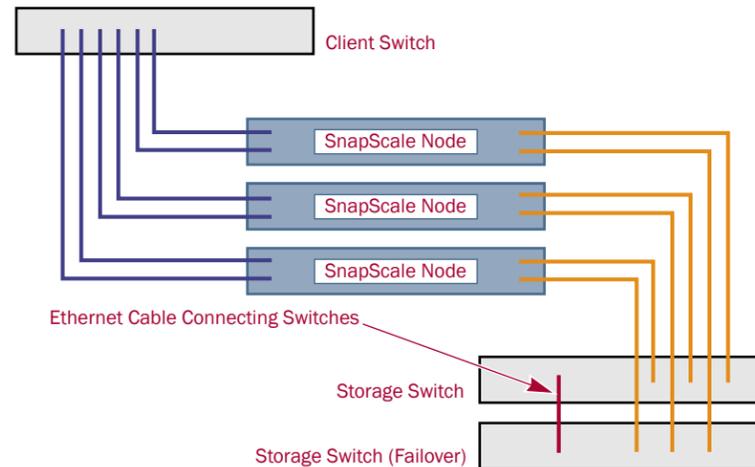
2. Using the appropriate cables, connect the node **Client ports** to the Client switch:
   - **Basic 1Gb** – Plug two 1Gb cables into Ethernet **ports 1 and 2**.
   - **Single 10Gb** – Plug four 1Gb cables into Ethernet **ports 1 – 4**.
   - **Dual 10Gb** – Plug two 10Gb cables into the two 10Gb card ports in **slot 6**.

3. Using the appropriate cables, insert them into the node's **Storage ports**:

   NOTE: The storage-side network must be isolated and exclusive to the cluster.

   - **Basic 1Gb** – Plug two 1Gb cables into Ethernet **ports 3 and 4**.
   - **Single 10Gb** – Plug two 10Gb cables into the two 10Gb card ports in **slot 7**.
   - **Dual 10Gb** – Plug two 10Gb cables into the two 10Gb card ports in **slot 7**.

4. Connect one Storage **cable** to the primary Storage switch and the other **cable** to the secondary (failover) Storage switch.

5. Connect the **two Storage switches** together with an appropriate cable.

6. Attach both supplied **power cords** to the AC power sockets on the node and the other ends to **different UPS** units.

   NOTE: SnapScale nodes are designed to work with APC-brand USB or network-based UPS devices to automatically shut down cleanly in the event of a power failure. Refer to the administrator's guide for detailed information on their use.

7. Briefly press the front **power button** to power on the node.

Important – Read This Before Continuing

After initial power up, a new SnapScale node takes up to **10 minutes** to complete the new appliance initialization process. During this time, the Status LED flashes an alternating single- and double-blink pattern.

> ⚠ CAUTION: Under no circumstances should power be removed while the system is in this state! Doing so may render the appliance inoperable.

Once complete, the system reboots and the Status LED displays a solid green color.

Step 6

Before continuing, install **all the nodes** that will make up the SnapScale cluster using the Quick Start Guide that came with them. When all the nodes are ready, continue with **Step 7** below to create the cluster.

Step 7

Connecting for the First Time

> ➡ IMPORTANT: SnapScale Independent nodes are configured to acquire an IP address from a DHCP server on the client network. If no DHCP server is found on the network, the node defaults to an IP address in the range of 169.254.xxx.xxx. You may not be able to see the appliance on your network until you discover and optionally assign an IP address.

This procedure requires that name resolution services (via DNS or an equivalent service) be operational.

NOTE: If necessary, use SnapServer Manager (SSM) to locate the new node. If not installed, go to the Overland Storage web site to download the SSM software and user guide.

1. Find the **node name** of one of the nodes.

   The default X4 node name is "Node*nnnnnnn*," where *nnnnnnn* is the node number. The node number is a unique, numeric-only string that appears on a label affixed to the bottom of the node.

2. In a web browser, enter the **node name** as the URL.

   For example, enter "http://Node*nnnnnnn*" (the default SnapScale node name).

3. Press **Enter** to connect to the Web Management Interface.

4. In the login dialog box, enter **admin** as the user name and **admin** as the password, then click **OK**.

5. Complete the **Initial Setup Wizard** to either create a new SnapScale cluster or join an existing cluster.

Step 8

Translated versions of this Quick Start Guide are also available on the Overland website. For information on configuring your SnapScale X4, refer to the *SnapScale Administrator's Guide for RAINcloudOS* or the *RAINcloudOS Release Notes* at:

http://docs.overlandstorage.com/snapscale

For warranty and general technical support information, see our Contact Us web page:

http://www.overlandstorage.com/company/contact-us/index.aspx