

SnapScale™

X2 Node



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.

Step 2

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

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

Step 3

The SnapScale comes with a sliding rail rack kit for easy installation into a 19-inch (EIA-310) rack. There is a left (L) and right (R) rail. They are installed with the end flanges pointing outward and the rail hooks opening downward.

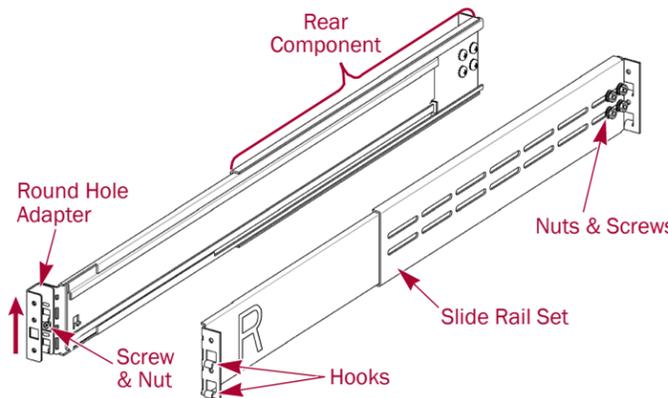
IMPORTANT: Two-post telco-style or other racks less than 29 inches in depth will NOT support this unit.

Attach the Inner Rail

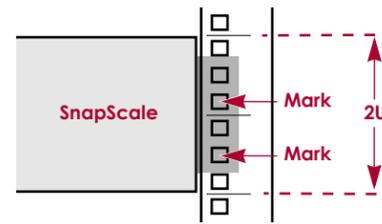
1. Take the **left (L) rail assembly** and slide the inner rail out until it stops.
2. Press the **release latch** and remove the inner rail.
3. Place an **inner rail** against the node's left side (when facing the node), aligning the screw holes with the latch release nearer the rear.

4. Secure the rail using the three M3x4mm **screws** in the countersunk holes.
5. Repeat [Steps 1–4](#) for the **right (R)** rail assembly.

Size the Outer Rails to Rack



1. Determine the 2U area where the SnapScale is to be mounted, and mark the **third and fifth holes** on both sides, front and back.
2. Note the distance between the inside edges of the rack's **front and rear rails**.
3. If installing the rails in a **round-holed rack**, attach the adapters to both ends of the left rail assembly:



NOTE: There are two sets of adapters. Each set consists of two mirror-imaged versions. They are installed with the square holes on the bottom and the open sides facing inward.

- a. With the rail **hooks** facing down, insert them through the top and bottom square holes of the adapter.
 - b. Push the **adapter** up until it is fully engaged.
 - c. With the **flat-head screw** inserted through the countersunk hole side of the **cup washer**, insert them in the hole between the hooks and tighten.
Be sure the cup washer goes into the square hole and is flush with the adapter.
4. Loosen the **four nuts and screws** holding the rear slide component.
 5. Verify that the **length** of the slide rail is slightly less than the internal distance measured between the rack's vertical rails.
If necessary, remove the four nuts and screws holding the **rear component**, slide it out the needed distance, and loosely reinstall them.
NOTE: For some racks, only two screws can be used with the rear component due to the location of the slots. This does not impact the stability of the rails.
 6. Repeat [Steps 3–5](#) for the **right** rail assembly.

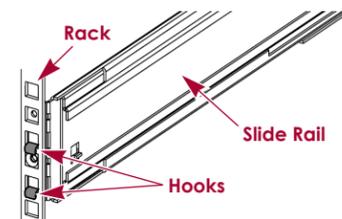
Attach Outer Rails

Depending on the type of rack, different methods of installation are used.

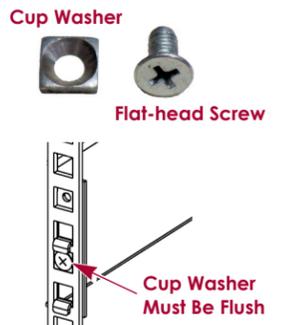
NOTE: The top hole of the rail is used by the node captive screw to secure the node.

Square-holed Racks

1. Position the **left (L) slide rail** between the left-side vertical rack rails with the flanges **inside** the rack and pointing outward.
2. Insert the front flange **hooks** into the two marked holes and press down.
3. Extend the **rear component** and hook the rear flange into the rack.



4. Repeat [Steps 1–3](#) for the **right (R) slide rail**.
5. Secure the **left slide rail** to the rack:
 - a. Insert a **flat-head screw** through the countersunk hole side of a **cup washer**.
 - b. At the front of the left rail, insert them into the **hole** between the hooks and tighten.
Be sure the cup washer goes into the square hole and is flush with the rack.
 - c. Repeat [Steps a–b](#) for the front **right** rail.
6. Repeat [Step 5](#) for the **rear** of both rails.
7. On both rails, tighten the **nuts and screws** to secure the rear components.

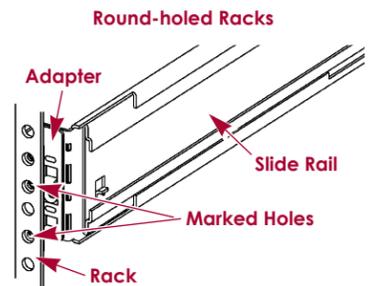


This completes the installation of the rails. Continue now with [“Install the Node.”](#)

Threaded Round-holed Racks

Two sets of adapters are provided for threaded round-holed racks.

1. At the front, screw **two pan-head screws** into the left marked rack holes until their tips are flush with the inside edge of the rack rail.
2. Repeat [Step 1](#) for the left **rear**.
3. Position the **left (L) slide rail** between the left-side vertical rack rails with the middle rail toward the **inside**.
4. Continue screwing in the **front screws** until they secure the front flange.
5. At the rear, continue screwing in the **rear screws** until they secure the rear flange.
6. Secure the rear component **nuts and screws**.
7. For the **right-side rail**, repeat [Steps 3–5](#).



This completes the installation of the rails. Continue now with [“Install the Node.”](#)

Non-threaded Round-holed Racks

Two sets of adapters are provided for non-threaded round-holed racks. The screws securing the rails are loosely installed now and are secured when the unit is installed.

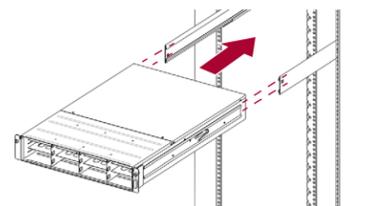
1. Position the **left (L) slide rail** between the left-side vertical rack rails with the middle rail toward the **inside**.
2. At the front, loosely install **two screws** through the marked holes into the adapter.
3. At the rear, fully extend the rear component and loosely install **two screws** through the marked holes into the adapter.
4. Repeat [Steps 1–3](#) for the **right (R) slide rail**.
5. On both rails, tighten the **nuts and screws** on the rear components.

This completes the installation of the rails. Continue now with [“Install the Node.”](#)

Install the Node

WARNING: It is recommended that a mechanical lifter (or at least two people) be used to raise and align the unit to prevent injury during installation. Use care when inserting or removing a unit into or out of a rack to prevent the accidental tipping of the rack, causing damage or personal injury.

1. Slide out the **middle** slide rails on both sides.
2. Using the mechanical lifter, position the **node** in front of the rack.
3. Insert the node **inner rails** into the middle rails and slide the node into the rack.



4. Special steps for a **round-holed rack**:
 - a. Slide the **node** back and forth once to set the rails.
 - b. Push the node in and tighten the four **rear rail** screws.
 - c. Pulling the unit out a few inches, tighten the four **front rail** screws.
 - d. Push the node all the way into the **rack**.
5. Secure the node to the rack with the **captive screws**.

Step 4

The node comes with only blank drive carriers installed. Up to 12 disk drives can be installed with blank carriers filling in the empty slots.

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

Install Drives

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

1. For slots that will be used for drives, remove the **blank drive carriers**, leaving the remaining blanks in place in the unused slots.
2. Positioning a **drive assembly** in front of the appropriate **bay**, slide it in until the **latch** clicks, locking the assembly in the bay.
3. Repeat **Step 2** for **each** remaining drive assembly.



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.

Attach the Bezel

1. Position the **bezel** with the top and bottom tabs aligned with the chassis front.
2. Move the bezel toward the unit until the **magnets** engage.
3. Verify that the bezel is **aligned** properly with all the LEDs visible and the Power Panel on the right side in line with the bezel flange hole.

Step 5

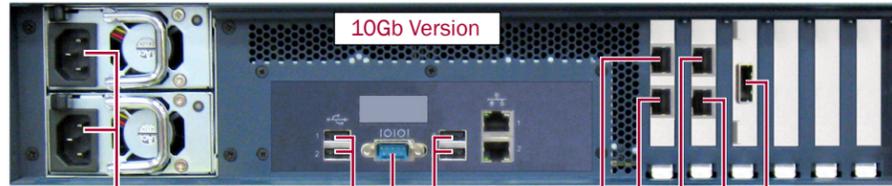
Cable Attachment

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 SnapScale may be seriously impacted.



- | | | |
|----------------------|------------------------------|-------------------------------|
| 1 - AC Power Sockets | 4 - USB 2.0 Ports | 7 - Ethernet 3 Port (Storage) |
| 2 - USB 2.0 Ports | 5 - Ethernet 1 Port (Client) | 8 - Ethernet 4 Port (Storage) |
| 3 - Serial Port* | 6 - Ethernet 2 Port (Client) | 9 - SAS Card Port |

* For use by Technical Support only.

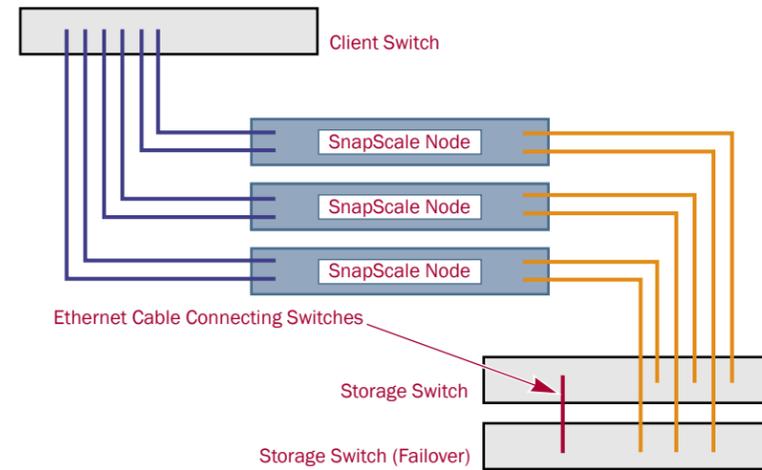


- | | | |
|----------------------|------------------------------|-------------------------------|
| 1 - AC Power Sockets | 4 - USB 2.0 Ports | 7 - Ethernet 5 Port (Storage) |
| 2 - USB 2.0 Ports | 5 - Ethernet 3 Port (Client) | 8 - Ethernet 6 Port (Storage) |
| 3 - Serial Port* | 6 - Ethernet 4 Port (Client) | 9 - 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 two included 1Gb cables or two 10Gb cables, connect the **Client Ethernet** ports on the node to the Client switch.
3. Using an included 1Gb cable or a 10Gb cable, connect the **Storage Ethernet** port on the node to one of two Storage switches.

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

4. Using an included 1Gb cable or a 10Gb cable, connect the **Storage Ethernet** port on the node to the other Storage switch (for failover).
5. Connect the two Storage switches together using an included 1Gb cable or a 10Gb 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 switch** 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 green and amber pattern.

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

Once initialization is complete, the system automatically 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.

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 SnapScale node name is “Nodennnnnnn,” 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://Nodennnnnnn” (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.

Your SnapScale system is ready to be configured for your specific environment.

Step 8

User Guides

For detailed information on cabling and configuring your SnapScale nodes, or adding more nodes to the cluster, refer to the *SnapScale Administrator's Guide* or the *RAINcloudOS Release Notes*. They are **available online** at:

<http://docs.overlandstorage.com/snapscale>



Warranty and Technical Support

For warranty and technical support information, see our [Contact Us](http://www.overlandstorage.com/contact-us/index.aspx) web page:

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

For information on contacting Overland Technical Support, visit our [Contact Support](http://docs.overlandstorage.com/support) web page at <http://docs.overlandstorage.com/support>



<http://support.overlandstorage.com>
You can get additional technical support on the Internet at the [Overland Storage Support web page](http://support.overlandstorage.com), or by contacting Overland Storage using the information found on the [Contact Us](http://www.overlandstorage.com/contact-us/index.aspx) page on our web site.
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