

NetApp H-series Element storage nodes

Installation and Setup Instructions

Prepare for installation | Stage 1



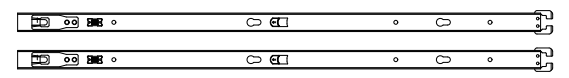
In the box



Chassis
(for H410S nodes)



H410S storage node
(order dependent)



Slide rail kit



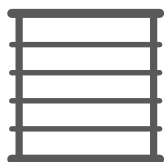
H610S storage node
(order dependent)



Power cables
(Two per chassis)



You provide



Rack space (order dependent)
H410S: 2U per chassis
H610S: 1U per chassis



USB stick (optional)



CAT5e or higher cable with RJ45 connector

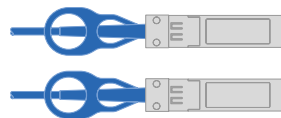
H410S storage nodes: Optional, for out-of-band management
H610S: Required for out-of-band management and cluster management



Monitor with a VGA connection and keyboard with a standard USB connection



Any operating system (OS) client with a browser



SFP28/SFP+ direct-attach cables or transceivers



Access online



- [End User License Agreement](#)
- [Hardware Universe \(HWU\)](#)
- [NetApp HCI Documentation Center](#)

- [NetApp HCI Resources page](#)
- [NetApp SolidFire Resources page](#)
- [SolidFire and Element 11.3 Documentation Center](#)



Install hardware | Stage 2



Steps 1 and 2 do not apply if you are adding a new node to an existing two rack unit (2U), four-node chassis.

1 Install the rails.

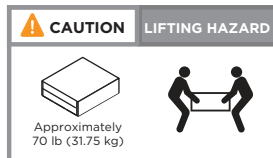
Note:

- Ensure that you have installed the rack according to the safety instructions from the manufacturer.
- Ensure that the rack is stabilized. The heaviest equipment should be at the bottom of the rack.
- Follow proper grounding practices to avoid risk of electric shock.
- Follow proper airflow and cooling requirements to prevent hardware from overheating.
- Installing the chassis requires two people.

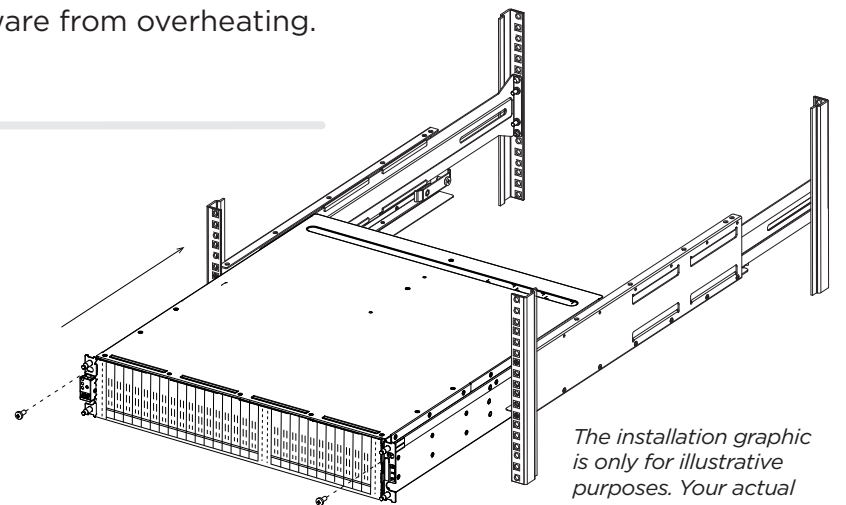
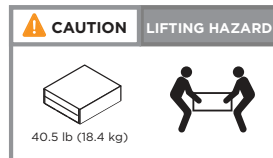
2 Install the chassis.

See [Rail Kit Installation instructions](#).

H410S



H610S



The installation graphic is only for illustrative purposes. Your actual node might differ based on what you ordered.

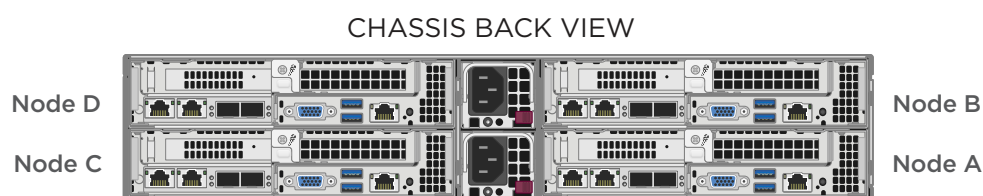


An H410S cluster requires a minimum for four nodes in a chassis. If you are expanding your existing installation, you need a minimum of one node and one chassis.

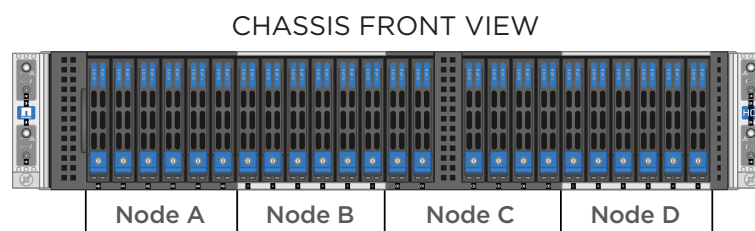


Steps 3 and 4 do not apply if you are installing H610S nodes.

3 Install nodes in the chassis.



4 Install drives for storage nodes.



1 Cable the node



If the airflow vents at the rear of the chassis are blocked by cables or labels, it can lead to premature component failures due to overheating.



If you are adding nodes to an existing installation, ensure that the cabling and network configuration of the nodes that you add are identical to the existing installation.

H610S storage node



1GbE cables

- Connect the node to a 1GbE network using two RJ45 connectors.



10/25GbE cables

- Connect the node to a 10/25GbE network using two SFP28 or SFP+ cables.



1GbE cable

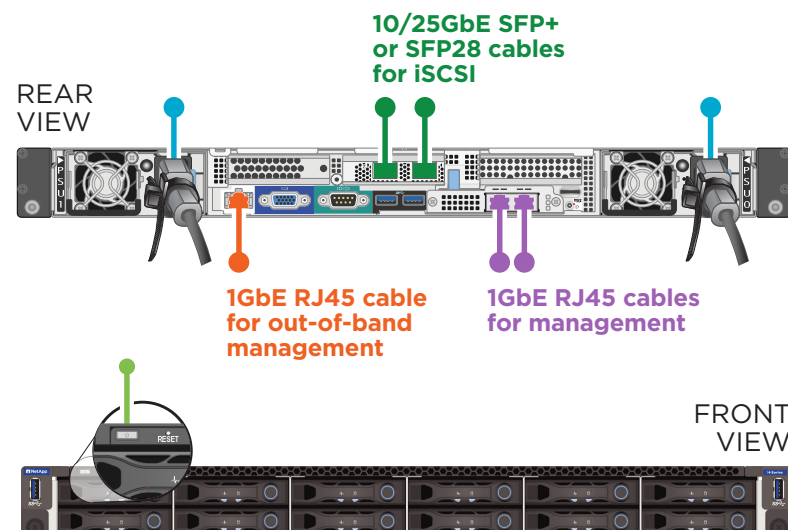
- Connect the node to a 1GbE network using an RJ45 connector in the IPMI port.



Power cables

- Connect both power cables to the node.
- Plug the power cables to a suitable power outlet. Press the power button at the front of the chassis.

Note: It takes approximately five minutes and 30 seconds for the node to boot.



H410S storage node



1/10GbE cables

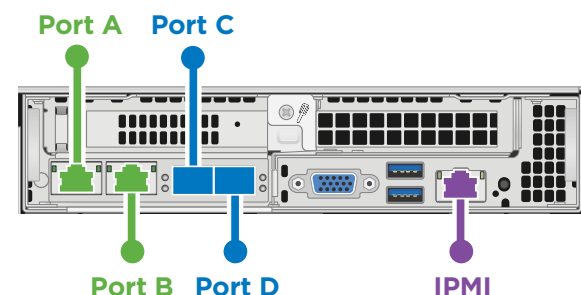
- Connect two CAT5e or higher cables in ports A and B for management connectivity.



10/25GbE cables

- Connect two SFP28/SFP+ cables or transceivers in ports C and D for storage connectivity.

- (Optional, recommended) Connect a CAT5e cable in the IPMI port for out-of-band management connectivity.

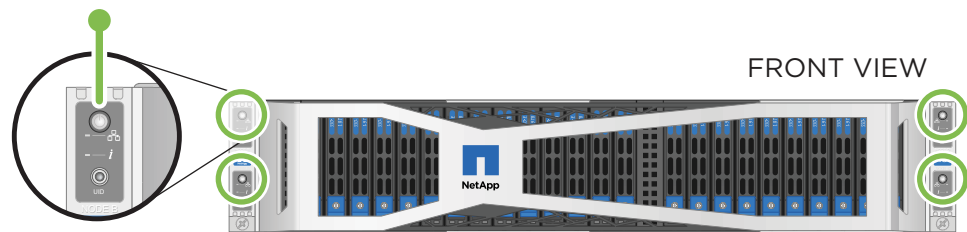


Cable the node | Stage 3 cont.

! Steps 2 and 3 do not apply if you are installing H610S nodes.

- 2 Connect the power cords to the two power supply units per chassis and plug them into 240V PDU or power outlet.
This step does not apply if you are adding a new node to an existing chassis.

- 3 Power on the nodes.



It takes approximately six minutes for the node to boot.

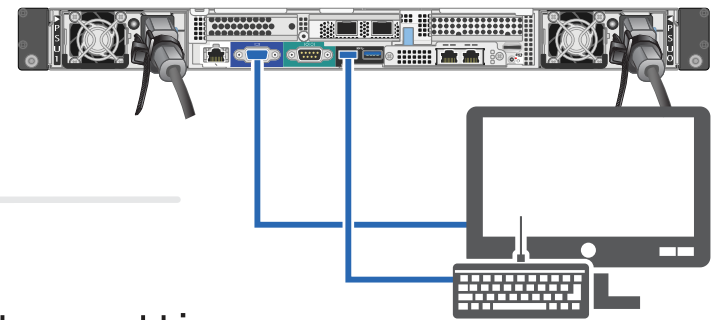
Configure the node | Stage 4

- 1 Attach a keyboard and monitor to the node.

Note: Ensure that the node is powered on.

- 2 In the terminal user interface (TUI) that is displayed, configure the network and cluster settings for the node by using the on-screen navigation.

Note: You must get the IP address of the node from the TUI. You need this in Stage 5. After you save the settings, the node is in a pending state, and can be added to a cluster. See the NetApp Element Software Setup Guide for configuration instructions. You can access the latest version of the Setup Guide from the [NetApp SolidFire Resources](#) page.



Required only for H610S nodes.

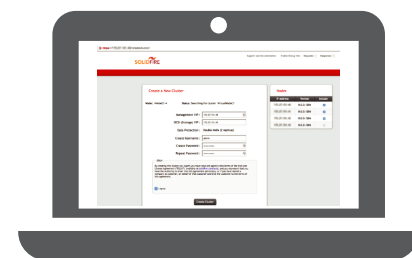
- 3 Configure out-of-band management using the Baseboard Management Controller (BMC).

- i Use a web browser and navigate to the default BMC IP address: 192.168.0.120
- ii Log in using the following default credentials: **User name:** root **Password:** calvin
- iii From the node management screen, navigate to **Settings > Network Settings**, and configure the network parameters for the out-of-band management port.

See [How to access BMC and change IP address on H610S](#).

Create a new cluster | Stage 5

- 1 From a client on the same network as the newly configured node, access the NetApp Element software UI by entering the node's IP address.



- 2 Enter the required information in the Create a New Cluster window.
See the NetApp Element Software Setup Guide for instructions. You can access the latest version of the Setup Guide from the [NetApp SolidFire Resources](#) page.