

# Arcserve

## Appliance X Series Compute Node Hardware Installation Guide



### Table of Contents

<b>Section 1</b>	Product Ratings .....	3
<b>Section 2</b>	Site Preparation .....	3
<b>Section 3</b>	Unpacking the Appliance .....	4
<b>Section 4</b>	Installing the Rails in the Rack .....	4
<b>Section 5</b>	Securing the Rails to the Rack .....	5
<b>Section 6</b>	Installing the Appliance in the Rack .....	5
<b>Section 7</b>	Securing the Appliance in the Rack .....	6
<b>Section 8</b>	Rear Panel Connections .....	7
<b>Section 9</b>	Cabling the Appliance .....	8
<b>Section 10</b>	Securing the Cables to the Rack .....	9
<b>Section 11</b>	Front Panel Operation .....	10
<b>Section 12</b>	Bezel Installation on the Appliance .....	12
<b>Section 13</b>	Run Arcserve Appliance Wizard .....	13
<b>Section 14</b>	Access Arcserve Unified Data Protection (UDP) .....	13
<b>Section 15</b>	Contact Support .....	14
<b>Section 16</b>	Warranty Information .....	14



## 1. Product Ratings

PSU	Class dissipation	Heat	Frequency	Voltage 200v 240v	High line 100-140V	Low line	Current
750 W AC	Platinum	2891 BTU/hr	50/60 Hz autoranging	100-240V AC	750 W	750 W	10.5 A - 5A

## 2. Site Preparation

### Setup location, rack and appliance precautions

- **Elevated Operating Ambient Temperature** - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.

Always keep the rack's front door and all panels and components on the appliances closed when not servicing to maintain proper cooling.

- **Reduced Air Flow** - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. Leave enough clearance, approximately 25 inches in the front, and 30 inches in the back of the rack to enable you to access appliance components and allow for sufficient air flow.

- **Mechanical Loading** - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

ALL RACKS MUST BE MOUNTED SECURELY. Ensure that all leveling jacks or stabilizers are properly attached to the rack. If installing multiple appliances in a rack, make sure the overall loading for each branch circuit does not exceed the rated capacity.

Do not slide more than one appliance out from the rack at a time. Extending more than one appliance at a time may result in the rack becoming unstable. Install your appliance in the lower part of the rack because of its weight and also for ease in accessing appliance components.

- **Circuit Overloading** - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

- **Reliable Earthing** - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

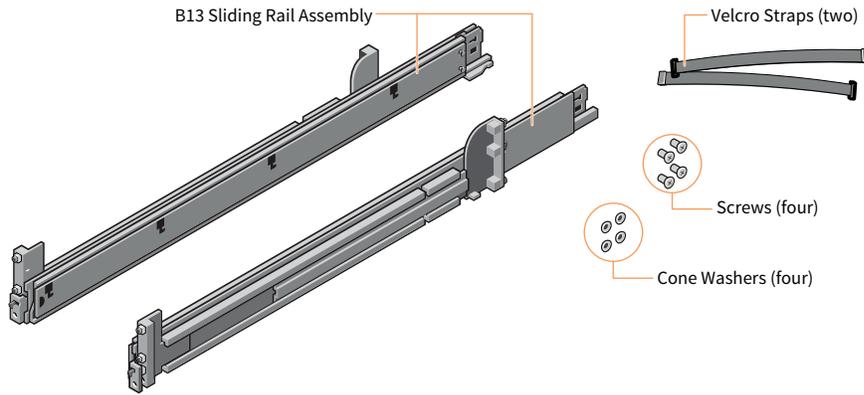
Install near appropriate AC outlets, and Ethernet hubs or individual jacks. Be sure to install an AC Power Disconnect for the entire rack assembly. The Power Disconnect must be clearly marked. Ground the rack assembly properly to avoid electrical shock.



### 3. Unpacking the Appliance

Before you begin, verify the ship kit includes the following set of installation hardware:

B13 (2U) Installation Hardware



**NOTE:** This rail kit is compatible with square, unthreaded round, and threaded hole racks.

**NOTE:** Use the hardware supplied with your specific rack if different from the hardware supplied in this kit.

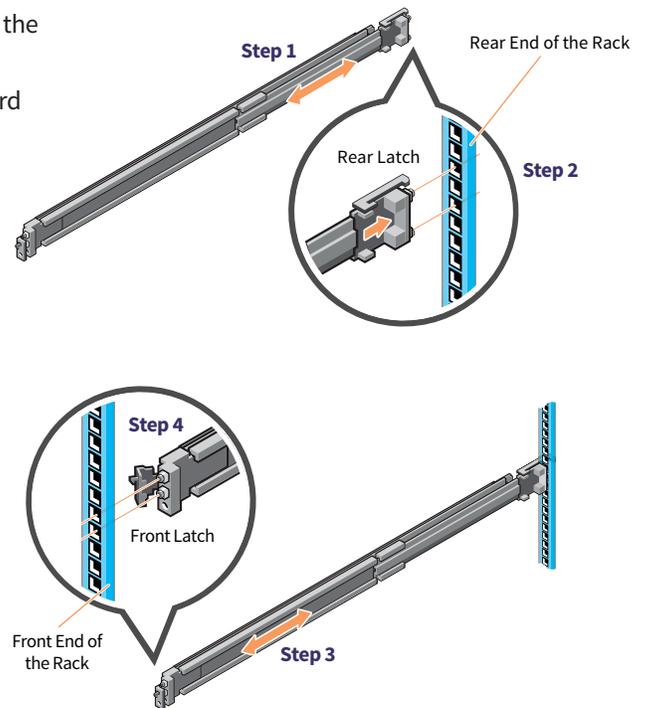
**NOTE:** The installation procedures shown in this guide are for use with the rails and hardware provided in your ship kit. If your rack requires different hardware, refer to the instructions provided with your rail's or rack's ship kit.

### 4. Installing the Rails in the Rack

Begin by installing the left rail

- Step 1:** Fully extend the rear sliding bracket of the rail so that the rail is extended as long as possible.
- Step 2:** Position the rail end piece labeled FRONT facing inward and orient the rear end piece to align with the holes on the rear rack flanges.
- Step 3:** Push the rail straight toward the rear of the rack until the latch locks into place.
- Step 4:** For the front end piece, rotate the latch outward and pull the rail forward until the pins slide into the flange, and release the latch to secure the rail in place.
- Step 5:** Repeat steps 1 through 4 to install the right rail.

**NOTE:** Make sure the quick rail assemblies are aligned in the rack not only in the front and back, but are level in height on the left and right sides for proper alignment for appliance installation.



**NOTE:** To remove the rails, open the front latch and disengage the rail from the flange. Pull the entire rail forward to release the rear end of the rail from the flange.

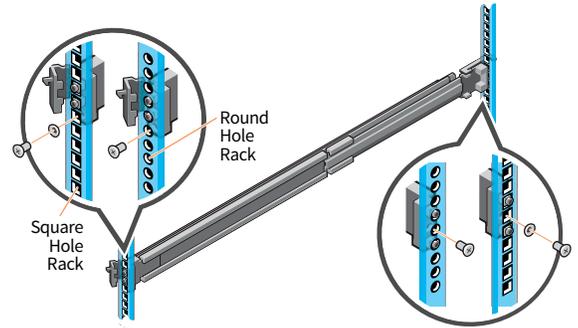


### 5. Securing the Rails to the Rack

**Step 1:** To secure the rails to the rack for shipping or in unstable environments, install the supplied screws to the rails.

- For square hole racks, install the supplied conical washer to the screw before installing the screw.
- For unthreaded round hole racks, install only the screw without the conical washer.

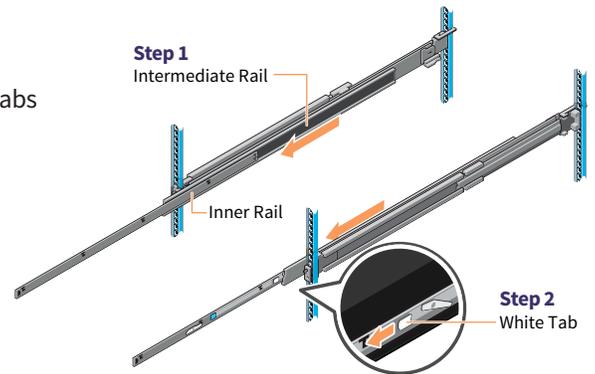
**Step 2:** Insert and tighten the two screws using the Phillips #2 screwdriver to secure the rails to the rack.



### 6. Installing the Appliance in the Rack

**Step 1:** Pull the intermediate rails out of the rack until they lock into place.

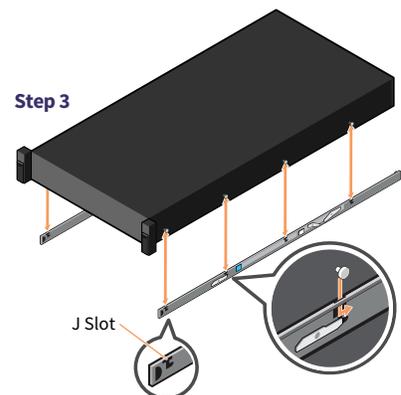
**Step 2:** Release the inner rail lock by pulling forward on the white tabs and sliding the inner rail out of the intermediate rails.



#### **CAUTION**

Use of a mechanical assistant to install and align the appliance into the rack rails is required.

**Step 3:** Attach the inner rails to the sides of the system by aligning the J-slots on the rail with the standoffs on the system and sliding forward on the system until they lock into place.



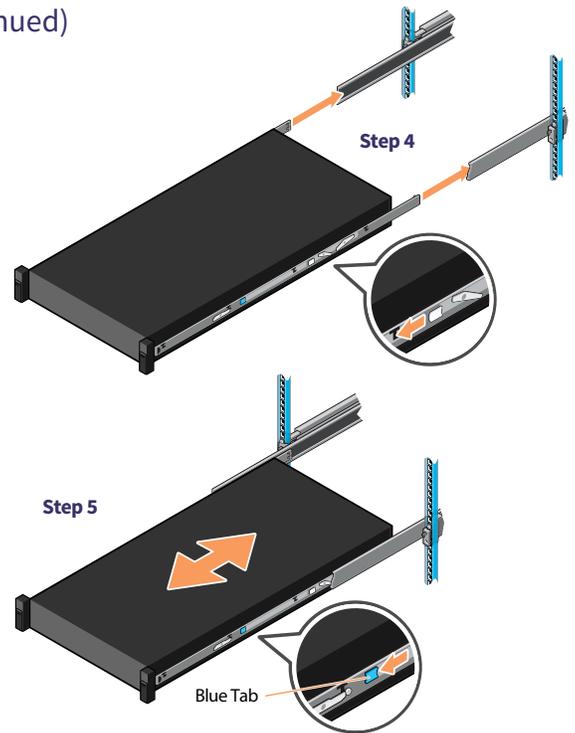
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### 6. Installing the Appliance in the Rack (continued)

**Step 4:** With the intermediate rails extended, install the system into the extended rails.

**Step 5:** Pull the blue slide release lock tabs forward on both the rails on both sides, and slide the system into the rack.

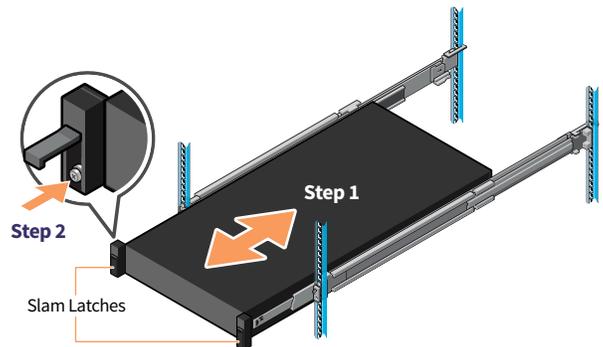


### 7. Securing the Appliance in the Rack

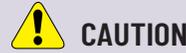
**Step 1:** Slide the appliance all the way into the rack until the slam latches engage and lock the unit into the rack.

**Step 2:** To fully secure the system in the rack; for shipment; or for use in any other unstable environments, locate the hard mount captive screw under each latch and tighten each screw using a Phillips #2 screwdriver.

**NOTE:** To remove the appliance from the rack, lift the slam latches and slide the system out of the rack. If locked, use a Phillips #2 screwdriver to unscrew the captive screws securing the system in place.

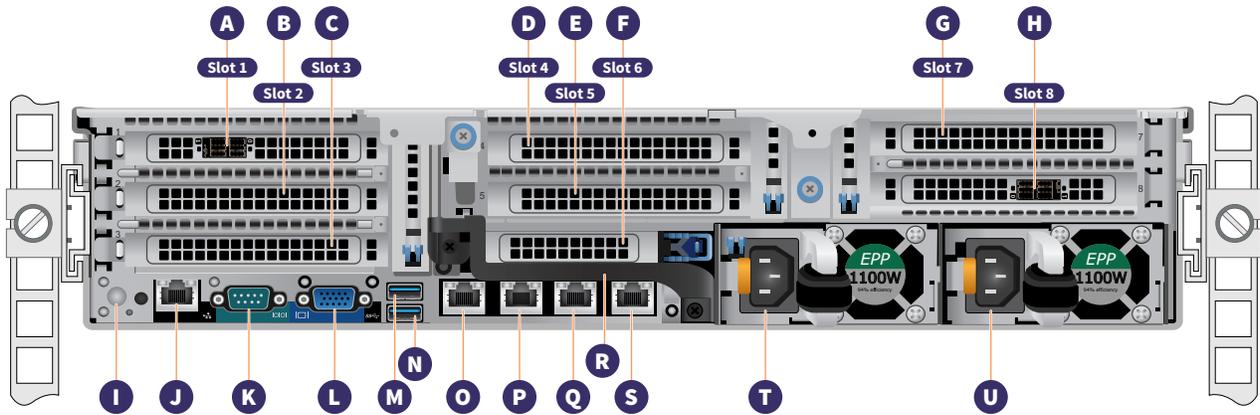


### 8. Rear Panel Connections



#### CAUTION

Slide rail/mounted equipment is not to be used as a shelf or a work space.



A	Slot 1 Full Height PCIe Expansion Slot	L	VGA Port
B	Slot 2 Full Height PCIe Expansion Slot	M	USB Port
C	Slot 3 Full Height PCIe Expansion Slot	N	USB Port
D	Slot 4 Half Height PCIe Expansion Slot	O	ETH0 (Network 1)
E	Slot 5 Full Height PCIe Expansion Slot	P	ETH1 (Network 2)
F	Slot 6 Half Height PCIe Expansion Slot	Q	ETH2 (Network 3)
G	Slot 7 Full Height PCIe Expansion Slot	R	Rear Handle
H	Slot 8 Full Height PCIe Expansion Slot	S	ETH3 (Network 4)
I	System Identification Button	T	Power Supply Module #1
J	iDRAC Dedicated Port	U	Power Supply Module #2
K	Serial Port		

#### PCI Card Slot Location

A - Slot 1	HBA Card	Always Installed
B - Slot 2	Empty	
C - Slot 3	NVME Flash to PCIe	Always Installed
D - Slot 4	NVME Flash to PCIe	Always Installed
E - Slot 5	HBA Card	Optional
F - Slot 6	HBA QLE2692	Optional
G - Slot 7	Dual 25 GB or 10 GB	Optional
H - Slot 8	HBA Card	Always Installed



#### WARNINGS and CAUTIONS

- WARNING:** Before setting up your system, follow the safety instructions included in the Safety, Environmental, and Regulatory Information document shipped with the system.
- CAUTION:** Use Extended Power Performance (EPP) compliant power supply units (PSUs), indicated by the EPP label, on your system. For more information about EPP, see the Installation and Service Manual at: [Dell.com/poweredgemanuals](http://Dell.com/poweredgemanuals).

**NOTE:** The documentation set for your system is available at: [Dell.com/poweredgemanuals](http://Dell.com/poweredgemanuals). Ensure that you always check this documentation set for all the latest updates.

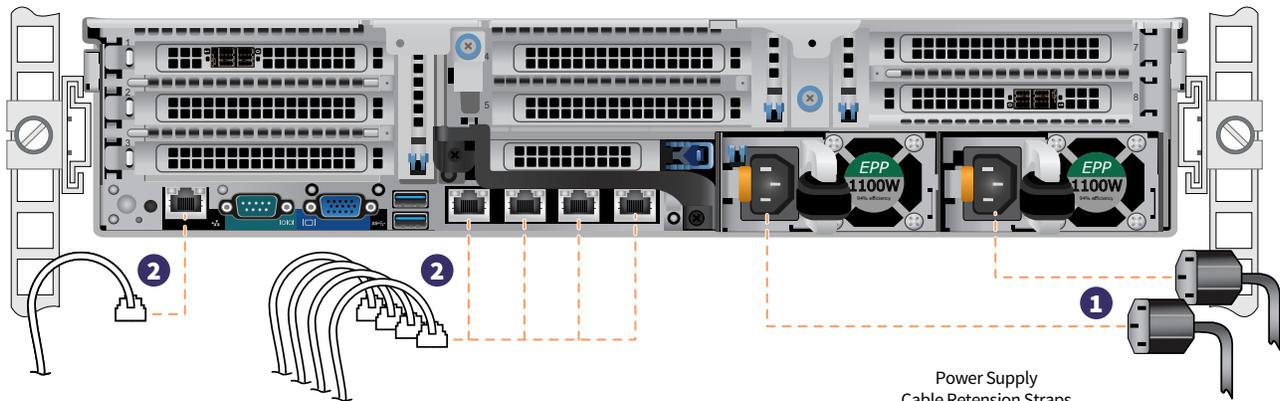
**NOTE:** Ensure that the operating system is installed before installing hardware or software not purchased with the system.

For more information about supported operating systems, see: [Dell.com/ossupport](http://Dell.com/ossupport).

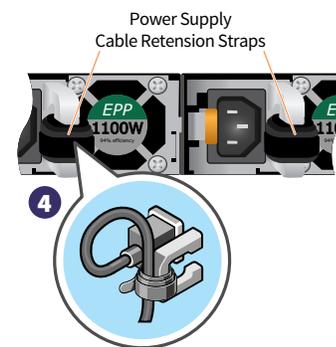
**NOTE:** The PSU input connectors may vary depending on the PSU type.



### 9. Cabling the Appliance



- Step 1:** Connect the power cord.
- Step 2:** Connect the Ethernet cables.
- Step 3:** Connect any other required cables.
- Step 4:** Loop and secure the power cable(s) using the retention strap as show on the right.

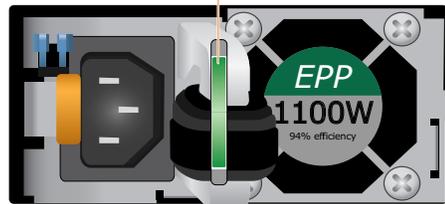


Proceed to Section 10, Securing the Cables to the Rack on page 9.

#### Power Supply Status LED

There is a Power Good LED on each power supply module located under the handle to indicate power supply status. The LED operation is defined in the table below.

Power Supply Indicator LED (Located Behind Handle)



Status	Description
Green	A valid power source is connected to the PSU and the PSU is operational.
Blinking Amber	Indicates a problem with the PSU.
Off	Power is not connected to the PSU.
Blinking Green	When the firmware of the PSU is being updated, the PSU handle blinks green.
Blinking Green and Turns Off	When hot-plugging a PSU, the PSU handle blinks green five times at a rate of 4 Hz and turns off. This indicates a PSU mismatch with respect to efficiency, feature set, health status, or supported voltage.

#### CAUTIONS

- Do not disconnect the power cord or unplug the PSU when updating firmware. If firmware update is interrupted, the PSUs do not function.
- If two PSUs are installed, both the PSUs must have the same type of label; for example, Extended Power Performance (EPP) label. Installing different PSUs is not supported, even if the PSUs have the same power rating. This results in a PSU mismatch condition or failure to turn the system on.
- When correcting a PSU mismatch, replace only the PSU with the blinking indicator. Swapping the PSU to make a matched pair can result in an error condition and unexpected system shutdown. To change from a high output configuration to a low output configuration or vice versa, you must turn off the system.
- AC PSUs support both 240V and 120V input voltages with the exception of Titanium PSUs, which support only 240V. When two identical PSUs receive different input voltages, they can output different wattages, and trigger a mismatch.
- If two PSUs are used, they must be of the same type and have the same maximum output power.
- Combining AC and DC PSUs is not supported and triggers a mismatch.



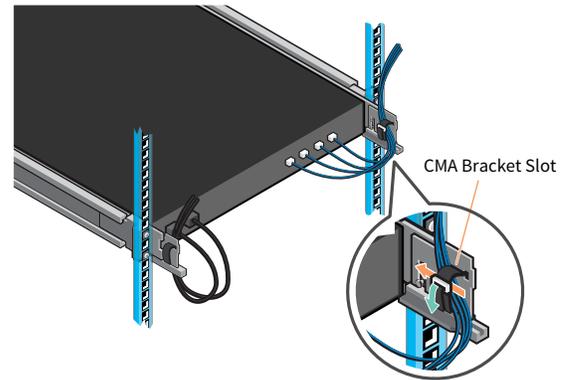
### 10. Securing the Cables to the Rack

To install the Cable Management Arm (CMA), refer to the document shipped with your CMA.

If you did not order the CMA, use the two straps provided in the rail kit to route and secure the cables at the back.

- Step 1:** Locate the CMA bracket slots on the rear end of both the rails.
- Step 2:** Bundle the cables gently, pulling them clear of the system connectors to the left and right sides.
- Step 3:** Thread the straps through the CMA bracket slots on each side of the system to hold the cable bundles in place.

**NOTE:** Ensure that there is enough space and additional length to each of the cables to allow the unit to move freely when you slide the system out of the rack.



### 11. Front Panel Operation

#### Power Button:

Press the power button to power the system on.

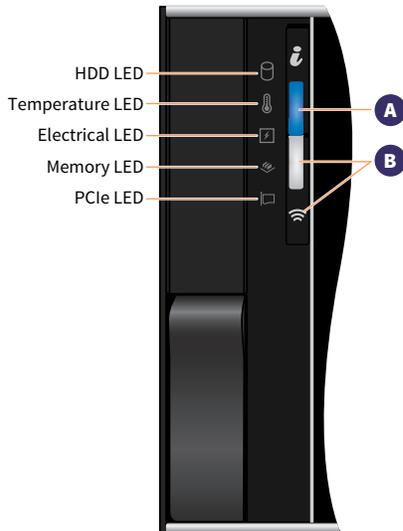


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### 11. Front Panel Operation (continued)

#### Left Control Panel



**NOTE:** The LED Indicators display solid amber if any error occurs.

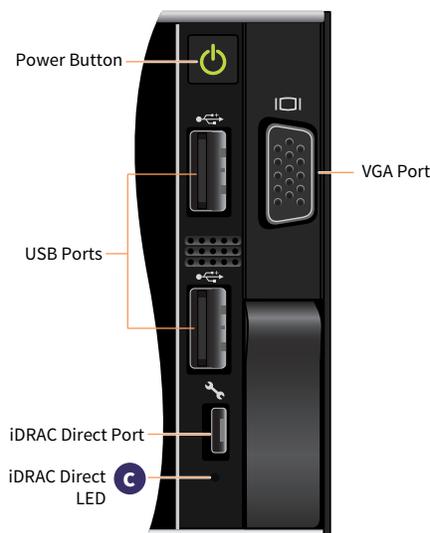
#### A System Health and System ID LED Detail Chart

Status	Description
Solid Blue	Indicates that the system is turned on, system is healthy, and system ID mode is not active. To switch to the system ID mode, press the system health and system ID button.
Blinking Blue	Indicates that the system ID mode is active. To switch to the system health mode press the system health and system ID button.
Solid Amber	Indicates that the system is in fail-safe mode.
Blinking Amber	Indicates that the system is experiencing a fault. Check the System Event Log or the LCD panel, if available on the bezel for the specific error messages. For more information about error messages, see the Dell Event and Error Messages Reference Guide ( <a href="http://Dell.com/openmanagemanuals&gt;OpenManageSoftware">Dell.com/openmanagemanuals&gt;OpenManageSoftware</a> )

#### B iDRAC Quick Sync 2 LED Detail Chart

Status	Description
Off	Indicates that the iDRAC Quick Sync 2 feature is turned off. Press the iDRAC Quick Sync 2 button to turn on the iDRAC Quick Sync 2 feature.
Solid White	Indicates that the iDRAC Quick Sync 2 is ready to communicate. To turn this feature off, press the iDRAC Sync 2 button.
Blinks White Rapidly	Indicates data transfer activity.
Blinks White Slowly	Indicates the firmware update is in progress.
Blinks White 5 times rapidly, then turns off	Indicates that the iDRAC Quick Sync 2 feature is disabled.
Solid Amber	Indicates that the system is in Fail-safe mode.
Blinking Amber	Indicates that the iDRAC Quick Sync 2 hardware is not responding properly.

#### Right Control Panel



The iDRAC Direct LED indicator lights up to indicate that the port is connected and is being used as part of the iDRAC subsystem.

You can configure iDRAC Direct by using a USB or micro USB (type AB) cable, which you can connect to your laptop or tablet. The table below describes the iDRAC Direct activity when the port is in use.

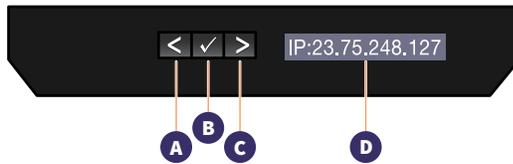
#### C iDRAC Direct LED Detail Chart

Status	Description
Solid Green for Two Seconds	Indicates that the laptop or tablet is connected.
Flashing Green (on for 2 seconds and off for 2 seconds)	Indicates that the laptop or tablet is recognized.
Turns Off	Indicates that the laptop or tablet is unplugged.



## 11. Front Panel Operation (continued)

### Front LCD Control Panel



- A** Left Arrow: Moves the cursor back in one-step increments.
- B** Select Checkmark: Selects the menu item highlighted by the cursor.
- C** Right Arrow: Moves the cursor forward in one-step increments.  
During Message Scrolling:
  - Press and hold the right button to increase scrolling speed.
  - Press and release the button to stop. The button stops scrolling when the button is released. After 45 seconds of inactivity, the display starts scrolling.

The LCD panel provides system information, status, and error messages to indicate if the system is functioning correctly or requires attention. The LCD panel can be used to configure or view the system's iDRAC IP address. For more information about error messages, see the Dell Event and Error Messages Reference Guide at: [Dell.com/openmanagemanuals](http://Dell.com/openmanagemanuals) > **OpenManage software**.

### **D** LCD Front Panel Display Status, Error Messages or iDRAC IP Address

Status	Description
White	The backlight is white during normal operating conditions
Amber	<ul style="list-style-type: none"> <li>▪ The backlight turns amber when the system needs attention. An error code will display followed by descriptive text.</li> <li>▪ If the system is connected to a power source and an error is detected, the LCD will turn amber regardless of whether the system is turned on or off.</li> </ul>
Off	<ul style="list-style-type: none"> <li>▪ The system enters standby mode and turns off with no errors after five minutes of inactivity. Press any button to turn it back on.</li> <li>▪ The LCD panel has stopped responding. Remove the bezel and reinstall it. If the problem persists, refer to the Getting Help Section at: <a href="http://Dell.com/openmanagemanuals">Dell.com/openmanagemanuals</a> &gt; <b>OpenManage software</b>.</li> <li>▪ The LCD backlight remains off if the LCD is messaging is turned off using the iDRAC utility, the LCD panel, or other tools.</li> </ul>



## 12. Bezel Installation on the Appliance

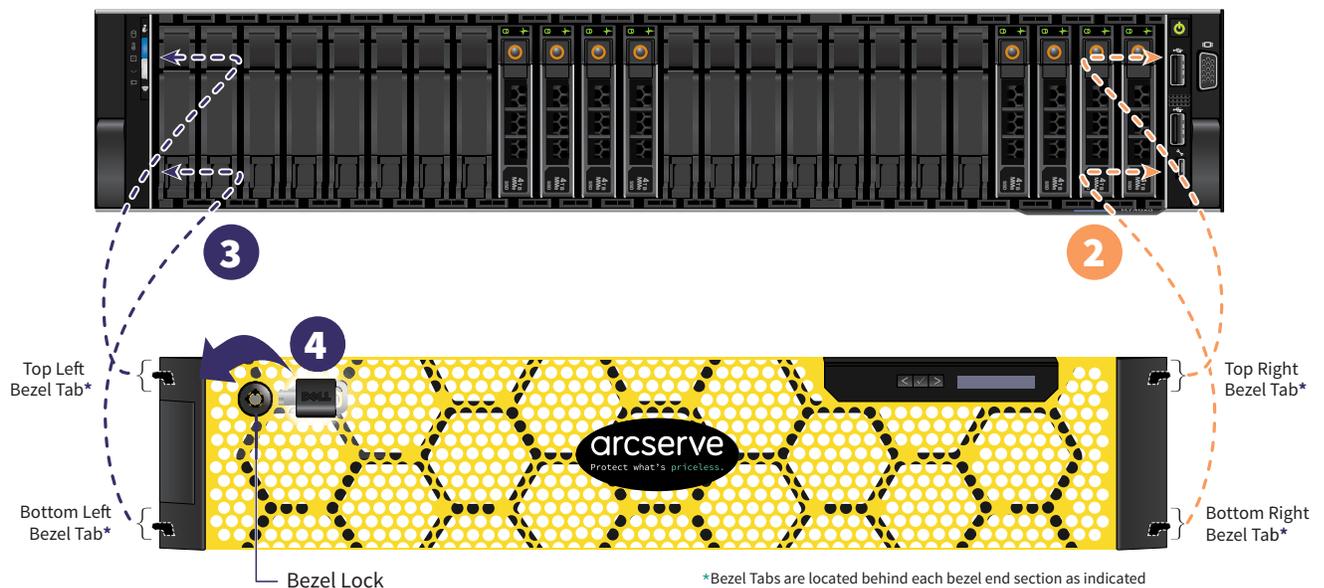
**Step 1:** Locate the bezel key taped to the inside of the bezel. Put this key aside until bezel installation is complete.



**Step 2:** Align the bezel with the front of the appliance. Insert the top and bottom bezel tabs on the right side of the bezel into the handle on the right side of the appliance.

**Step 3:** Swing the left side of the bezel in toward the appliance. Press in on the bezel to engage the top and bottom bezel tabs on the left side of the bezel into the handle on the left side of the appliance.

**Step 4:** Insert one of the bezel keys into the bezel lock, press in slightly and turn the key counterclockwise 1/4 turn until it stops. The bezel is locked in place. Save the keys for later use to remove the bezel when necessary.



## 13. Run Arcserve Appliance Wizard

1. When power is initially applied to the appliance, the Arcserve Appliance Wizard is launched. Navigate through each page of the wizard. For more information about the wizard, see the Arcserve Appliance User Guide ([arcserve.com/udp-appliance-userguide](http://arcserve.com/udp-appliance-userguide)).

**Note:** After selecting the Operating System language, a screen to enter Windows license may come up. Skip to proceed here, the OS is already licensed and activated.

### The wizard lets you perform the following tasks:

- Define the Appliance host name.
- Specify LAN connections for the Appliance.
- Configure email and alert settings.
- Create protection plans. *A protection plan lets you define source nodes, backup destination, and configure a backup schedule.*

Upon completion of the wizard, Arcserve Appliance launches the UDP console at the dashboard page.

## 14. Access Arcserve Unified Data Protection (UDP)

Arcserve UDP is a comprehensive solution to protect complex IT environments. The source-side and global deduplication solution protects your data residing in various types of nodes such as Windows, Linux, and virtual machines on VMware ESX servers or Microsoft Hyper-V servers. You can back up data to either a local machine or a recovery point server. A recovery point server is a central server where backups from multiple sources are stored and can be globally deduplicated. For more information about Arcserve UDP, see the Knowledge Center at: [arcserve.com/udp-knowledge-center](http://arcserve.com/udp-knowledge-center).

### Arcserve UDP provides the following capabilities:

- Back up the data to deduplication/non-deduplication data stores on recovery point servers
- Back up recovery points to tape
- Create virtual standby machines from backup data
- Replicate backup data to recovery point servers and remote recovery point servers
- Restore backup data and perform Bare Metal Recovery (BMR)
- Copy selected data backup files to a secondary backup location



## 15. Contact Support

If you encounter any issues with your appliance, please visit our Arcserve Support site to search our Knowledge Base for solutions to common problems or to get Live Support for immediate assistance (the serial number is located on rear of appliance) at: [arcserve.com/support](https://arcserve.com/support).

## 16. Warranty

Each Arcserve Appliance comes with a 3-year hardware warranty. For detailed information about this warranty, please visit: [arcserve.com/udp-appliance-warranty](https://arcserve.com/udp-appliance-warranty).

For more information on Arcserve, please visit [arcserve.com](https://arcserve.com), or call +1.844.639.6792

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