Installing the Extreme Networks E3120 **ExtremeCloud[™] Appliance**

Overview

E3120 controller hardware is a high-end ExtremeCloud[™] Appliance that supports five thousand standalone devices and fifty thousand users and provides availability for up to ten thousand devices and hundred thousand users, with any client distribution between controllers.



Electrical Hazard: Only qualified personnel should perform installation procedures.



Caution: To minimize Electrostatic Discharge (ESD) damage to the devices, you must wear an antistatic wrist strap while performing the following procedures.

These installation instructions provide a general outline to quickly install and configure the E3120 ExtremeCloud[™] Appliance. For product support, including documentation, visit: www.extremenetworks.com/documentation

Verifying the E3120 Box Contents

Unpack your appliance and verify the contents of the box as follows

Table 1 Contents of the E3120 Box

Quantity	Item			
1	E3120 Quick Reference			
1	ExtremeCloud E3120 appliance			
2	Shipping lock screws			
1	AC power cord bracket and retention strap kit			
1	Rack mounting kit			
1	Front panel bezel			
1	Rail kit installation instruction sheet			

Note: The power cord needs to be purchased separately for the respective deployment country. They can be ordered at https:// www.extremenetworks.com/powercords

Mounting the Appliance

If you are installing the appliance in a rack:

- 1 Read the Rail Kit Installation instruction sheet included with the rack mounting kit.
- 2 Install the rails and mount the appliance in the rack as instructed.

If you are table mounting the appliance, ensure at least 6 cm of clearance on all sides of the appliance for proper ventilation.

Connecting to a Power source

Refer to Figure 1 for the location of the back panel features.

- 1 Locate the power cord retention strap from the AC power cord bracket and cable clamp kit:
- a Insert the locking tab end of the Retention Strap into the receiver hole located to the right of Power Supply 1.
- b Adjust the slider of the Retention Strap to a desired position while pushing up the locking tab on the bottom of the slider.
- 2 Connect the two AC power cables to power supplies 1 and 2. These two power supplies combine to create an optional redundant power supply.
- 3 Optionally, wrap the slider strap over the power cord and lock it securely in place.
- 4 Plug the other end of the cables into grounded electrical outlets or to separate power sources such as an uninterrupted power supply (UPS) or a power distribution unit (PDU).
- 5 Power on the appliance. The power button is on the front control panel as shown in Figure 2 and Figure 3.

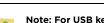
Figure 1 E3120 Back Panel Layout



- Power supply module #1 1
- 2 Retention strap receiver hole
- 3 Power supply module #2 bay for redundant power supply
- 4 Port 1 (Data Port 1) 1/10GbE, RJ45
- Port 2 (Data Port 2) 1/10GbE, RJ45 5
- Port 3 (Data Port 3) 1/10/25/40GbE, QSFP28 6
- Port 4 (Data Port 4) 1/10/25/40GbE, QSFP28 7
- 8 Video connector
- 9 RJ45 Serial-A port
- 10 USB 2.0 or 3.0 ports
- 11 RMM4 NIC port (not used, plugged)
- Management port; 1GbE, RJ45 Admin

Figure 2 E3120 Front Panel Layout





Note: For USB key storage only: Although the appliance has 5 USB connectors (two on the front panel and three on the back panel),

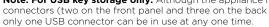
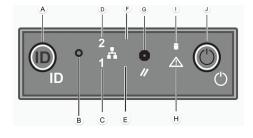


Figure 3 Front Control Panel



- A System ID button with integrated F Not used
- LED B NMI button

E Not used

C Data Port 1 activity LED

D Data Port 2 activity LED

- **G** System cold reset button
 - H Drive activity LED
 - System status LED
 - J Power button with integrated LED

Hard Drive LED Indicator Patterns

The hard drive has one LED indicator visible from the front of the system — a green LED for disk activity.

For information on Status LEDs. Refer to the ExtremeCloud Appliance E3120 Installation Guide.

Attaching the Front Bezel

The appliance comes with an optional front panel bezel, which can be attached to the front of the chassis by snapping it on the rack handles. A key lock allows you to lock the bezel in place to restrict access to the controls on the front panel. You can monitor the system status indicators with the bezel in place.

- 1 Lock the right end of the front bezel to the rack handle (see letter "A" in Figure 4).
- 2 Rotate the front bezel clockwise until the left end clicks into place (see letter "B" in Figure 4).
- 3 Lock the bezel if needed.

Figure 4 Attaching Optional Bezel



Installing a Power Supply

- If you are installing a power supply:
- 1 Remove the insert from the chassis power supply bay.
- 2 Insert the power supply module into the power supply bay. 3 Push the power supply module into the bay until it locks into place.

Removing a Power Supply

If you are removing a power supply:

- 1 Detach the power supply cord from the power supply that needs to be removed.
- 2 Pull the power supply module using the handle, while pushing the latching tab outward to disengage the power supply from the unit.

Replacing a Power Supply

The appliance will support two power supplies, supplying hotpluggable power redundancy. The system distributes the power load across both power supplies to maximize efficiency. When a power supply is removed with the system powered on, the full power load is picked up by the remaining power supply.



Note: The system ships with just one power supply and you have the option to purchase the additional redundant power supply (Ordering Part No. 30527 WS-PSI-1100W-01).

Note: The system requires one power supply to operate the system normally. Remove and replace only one power supply at a time in a system that is powered on.

Each power supply has a single bi-color LED to indicate power supply status, as described in Table 2.

Table 2 Power Supply Status LED Indicator Patterns

Power Supply Condition	LED Pattern	
Output on and OK	Green	
No AC power to all power supplies	Off	
AC present / Only 12VSB on (PS off) or PS in cold redundant state	1Hz Blinking Green	
AC power cord unplugged or AC power lost. With a 2nd PS in parallel still with AC input power	Amber	
Power supply warning events where PS continues to operate — high temp, high power, high current, slow fan	1Hz Blinking Amber	
Power supply critical event causing a shutdown, failure, OCP, OVP, fan fail	Amber	
Power supply firmware updating	2Hz Blinking Green	

Initial Network Connection and Configuration

Configuring the Management Interface via Console Port



- 1 Connect the serial port of the laptop to the E3120 console port. If the laptop does not support RS232 interface then obtain a USB to RS232 converter cable, which then connects to the RJ45-DB9F cable.
- 2 Using PuTTY, TeraTerm, or another terminal emulator, connect to the serial port connection.

Be sure that your serial connection is set properly:

- 115200 baud
- 8 data bits
- 1 stop bit
- Parity none
- Flow control none
- 3 Using the console session, perform the following:
- At the password prompt, enter user: **admin**
- For the initial password, enter: **abc123**
- Press ENTER.
- 4 Read the configuration script paragraph carefully. The configuration script will walk you through configuring the followina:
- Admin Password
- Host Attributes Settings
- Time Settings
- SNMP Settings
- Data Plane Settings
- 5 At the end of each session, if you enter **Yes**, the next session will begin. If you answer No, the session configuration is repeated.

6 Press ENTER.

After the final session is applied, the Appliance Post Installation Configuration Menu opens.

- 7 Enter **A** to apply settings and exit or a number for repeating the setup.
- 8 Connect to a port on which management access was enabled during the CLI Wizard Setup.
- 9 Open a web browser and, in the browser address bar, type: https://Your_Mgmt_Ipaddress:5825.

The ExtremeCloud[™] Appliance's logon screen is displayed.

10 On the logon screen, enter **Admin** and Password that were created when setting up the installation wizard.



Note: An installation wizard is available to help configure the E3120 for new deployments. Refer to the *ExtremeCloud* Appliance User Guide for more information.

Configuring the Management Interface via the Management Port

You can retain the default IP address of the appliance's management interface if you do not intend to connect the appliance to your enterprise network. If you do intend to connect the appliance to your network, follow these steps:



Note: The E3120 must be upgraded to the latest ExtremeCloud^{IM} Appliance firmware before installing the appliance on the network.

- 1 Connect a laptop to the management port of the appliance.
- 2 Configure the Ethernet port of the laptop with a statically assigned unused IP address in the 192.168.10.0/24 subnet.
- 3 Open a web browser and, in the browser address bar, type https://192.168.10.1:5825 (192.168.10.1 is the default IP address on the appliance management port).

The ExtremeCloud Appliance's logon screen is displayed.

- 4 Log on, as follows:
- Username: admin
- Password: abc123
- Click Login
- 5 To configure the E3120 appliance for new deployments, complete the installation.
- 6 Disconnect your laptop from the management port of the appliance.
- 7 Connect the management port of the appliance to the enterprise Ethernet LAN.
- 8 Log on to Extreme Networks.



Note: The system is now visible to the enterprise network. Refer to the ExtremeCloud Appliance User Guide for more information

Connecting the Data Ports

Data ports 1 and 2 are 1/10 GbE RJ45 ports.

- To connect twisted pair cabling:
- 1 Ensure that the device to be connected at the other end of the segment is powered on.
- 2 Connect the twisted pair segment to the appliance by inserting the RJ45 connector on the twisted pair segment into the desired RJ45 port.
- 3 Verify that a link exists by checking that the Activity Link LED is on (solid green or blinking green). If the Activity Link LED is off, perform the following steps until it is on:
- a Verify that the cabling being used is Category 5 or better, with an impedance between 85 and 111 ohms and a maximum length of 100 meters (328 feet).
- b Verify that the device at the other end of the twisted pair segment is turned on and is properly connected to the segment.
- c Verify that the RJ45 connectors on the twisted pair segment have the proper pinouts, and check the cable for continuity.

4 If a link is not established, contact Extreme Networks. Data ports 3 and 4 provide QSFP28 ports that can support 40Gbps transceivers, as well as 1, 10, and 25Gbps transceivers through special adapters. Refer to the datasheet at the following location for a list of pluggable transceivers supported for the E3120: www.extremenetworks.com/product/data-centertransceivers-and-cables/

To install a transceiver or adapter:

- 1 With an antistatic wrist strap attached to your wrist, remove the transceiver from its packaging. If there is a protective dust cover on the transceiver connector, do not remove it at this time.
- 2 Hold the transceiver so that the connector will seat properly.
- 3 Carefully align the transceiver with the port slot.
- 4 Push the transceiver into the port slot until it "clicks" and locks into place.

To connect cables to transceiver ports:

- 1 Remove the protective covers from the transceiver and from the connectors on each end of the cable.
- 2 Insert the cable connector into the transceiver connector until it clicks into place.
- 3 Plug the other end of the cable into the appropriate port on the other device.

Some fiber-optic cables may be terminated at the other end with two separate connectors, one for each fiber-optic strand. In this case, ensure that the transmit fiber-optic strand from the appliance is connected to the receive port of the other device, and the receive fiber-optic strand on the appliance is connected to the transmit port of the other device.

4 If a transceiver port is unused, install a dust cover.



Warning: Fiber-optic transceivers use Class 1 lasers. Do not use optical instruments to view the laser output. The use of optical instruments to view laser output increases eye hazard. When viewing the output optical port, power must be removed from the network adapter.

Table 3 RJ45 Port LEDs (Management Port)

LED Type	LED Pattern	Status Indication
Network Speed	Off	10Mbps
(Left)	Green	100Mbps
	Amber	1000Mbps (1Gbps)
Link Activity (Right)	Off	No link
	Solid Green	Active link
	Blinking Green	Data traffic activity

Table 4 Port LEDs (Data Ports 1 and 2)

LED Type	LED Pattern	Status Indication
Network Speed (Right)	Solid Amber	1000Mbps (1Gbps)
	Solid Green	10000Mbps (10Gbps)

Table 4 Port LEDs (Data Ports 1 and 2)

LED Type	LED Pattern	Status Indication
Link Activity (Left)	Off	No link
	Solid Green	Active link
	Blinking Green	Data traffic activity

Table 5QSFP28 Port LEDs (Data Ports 3 and 4)

LED Color and State	Description/Status Indication
Off	Physical link has not been established
Solid Yellow	Active physical link
Blinking Amber	4Hz
	Problem with the physical link
Solid Green	Valid logical (data activity) link with no active traffic
Blinking Green	Valid logical link with active traffic (data activity)

Regulatory Compliance Information

For complete regulatory compliance and safety information, refer to the document *Intel® Server Products Product Safety and Regulatory Compliance*, available at the following link:

https://www.intel.com/content/dam/support/us/en/documents/ motherboards/server/sb/g23122_004_safety_regulatory.pdf

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This product has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This product uses, generates, and can radiate radio frequency energy and if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference to radio communications. Operation of this product in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment. The customer is responsible for ensuring compliance of the modified product. Intel Corporation

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This is a class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は,情報処理装置等電波障害自主規制協議会(VCCI)の基準 に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波 妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ず るよう要求されることがあります。

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产品说明书附件 Supplement to Product Instructions

20.04. 12. 14.	有毒有害物质或元素 (Hazardous Substance)					
部件名称 (Parts)	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr ⁶)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 (Metal Parts)	×	0	0	0	0	0
电路模块 (Circuit Modules)	×	0	0	0	0	0
电缆及电缆组件 (Cables & Cable Assemblies)	×	0	0	0	0	0
塑料和聚合物部件 (Plastic and Polymeric parts)	0	0	0	0	0	0
电路开关 (Circuit Breakers)	0	0	0	0	0	0

 表示该有毒有害物质在该部件所有均原材料中的含量均在 SJT 11363-2006 标准规定的限量要求以下。 Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJT 11363-2006 standard.

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This product complies with the requirements of Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

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- The symbol above indicates that separate collection of electrical and electronic equipment is required.
 When this product has reached the end of its serviceable life, it cannot be
- 2 When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
- 3 It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
- 4 It is the users' responsibility to utilize the available collection system to ensure WEEE is properly treated. For information about the available collection system, please
- contact Extreme Environmental Compliance at Green@extremenetworks.com.

ExtremeCloud[™] Appliance E3120

Quick Reference

P/N 30139 E3120

Notice

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