

Deploy Arista CloudEOS with Equinix Bare Metal

Goal

In this deployment guide, we will show you how to deploy Arista CloudEOS Router in Equinix Network Edge, with the following high-level tasks.

- Deploy an Equinix Network Edge Device
- Configure Device Link Groups

For more information about the Arista CloudEOS Router, see [here](#) and Arista CloudVision, see [here](#). For more information about Equinix Network Edge see [here](#).

Deployment Diagram

In the following diagram, we will focus on creating one of the Equinix Network Edge Arista EOS Routers. We will deploy US-West and choose Silicon Valley for its location.

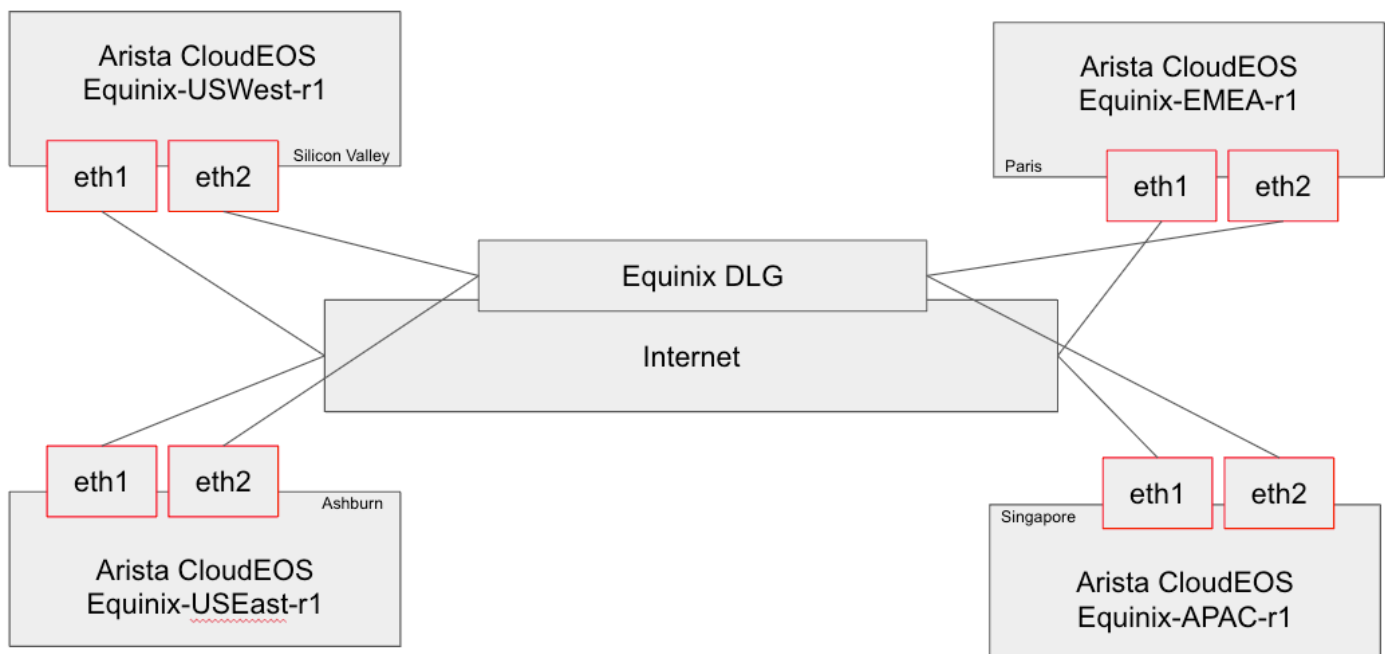


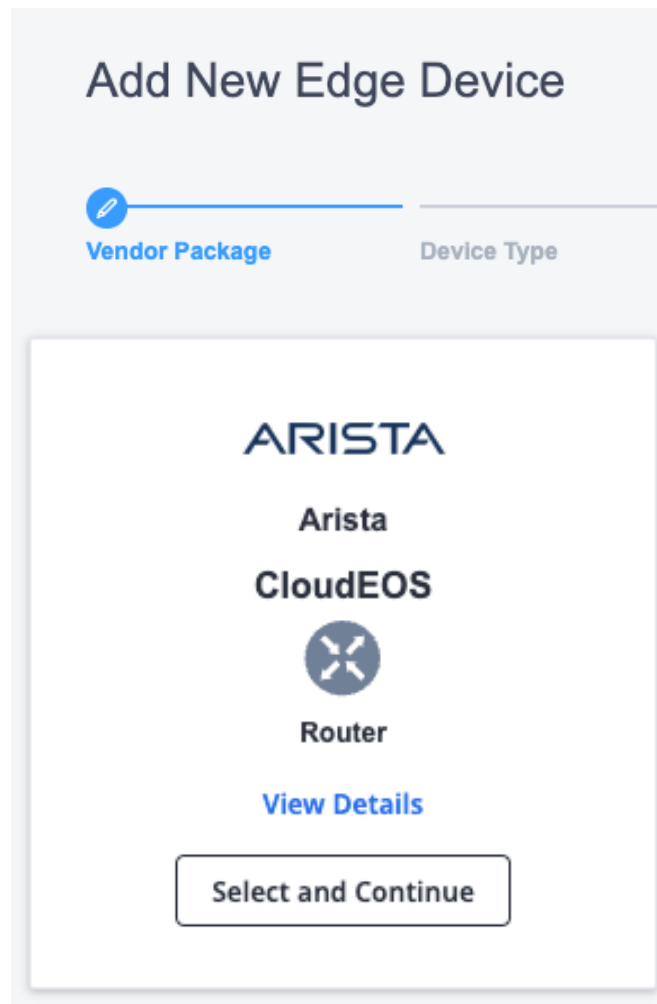
Figure 1: Connect Arista CloudEOS Router to Equinix Network Edge with Device Links

Prerequisites

1. To deploy a device, a Billing Account must be set up for the currency in each Metropolitan used within the Equinix Customer Portal.

Deployment Steps

1. From the Equinix Network Edge Console, add a new Edge Device by clicking on “Select and Continue” on the Arista Cloud EOS Router.



2. You will be able to deploy a single device or redundant devices. For this deployment we will select Single Device by clicking on that tile.

Create an Arista CloudEOS Router


✓ Vendor Package

✎ Device Type


Location

Device Details

Select Device Type [Learn More](#)



Single Device
Standalone Device
(1 device) [i](#)



Redundant Device
Active/Active Devices
(2 devices, both active) [i](#)

3. Select "Begin Creating Edge Device" at the bottom right of the screen.

Begin Creating Edge Devices

4. Choose the Metro area to deploy. Again, we will be selecting Silicon Valley for this example.

Create an Arista CloudEOS Router

✓ Vendor Package

✓ Device Type

✎ Location

Device Details

Additional Services

Review

Select Edge Device Location

Choose the Metro where this new Virtual Device will be deployed.

Select a Region

[AMER](#) 14 [EMEA](#) 10 [APAC](#) 6

Select location

Ashburn	Atlanta	Chicago	Dallas	Los Angeles
Mexico City	Miami	Montreal	New York	Seattle
Silicon Valley	Sao Paulo	Toronto	Vancouver	

5. Selecting the Metro Area will expand the page so you can select the billing account. Simply pull down the selection box to assign the billing account to the device. If you do not see the selection box, you do not have a Billing Account set up for the currency in that Metro Area.

Select Billing Account



Continue without selecting a billing account?



You can continue without selecting an account, but you will not be able to create a device.

Your accounts in this Metro

Select Billing Account



6. Select "Next" to continue.

Next: Device Details

7. Next, you will choose the Device Resources as well as the term length. In this example, we will simply be selecting the "4 cores/8Gb memory" and "Monthly" terms.

Create an Arista CloudEOS Router

[Open a Support Case](#)

✓ Vendor Package

✓ Device Type

✓ Location

✎ Device Details

Additional Services

Review and Submit

Licensing

[Learn More](#)

Bring your Own License

Use your existing software license. This option includes limited Equinix support.

Device Resources

Select the appropriate resource below.

4 Cores, 8 GB Memory

8 Cores, 16 GB Memory

Term Length

Choose your term length. Longer terms include additional savings. Charges are billed monthly.

1 month

Pricing Overview

Total Monthly Recurring Charge

Term Total

Additional taxes and/or fees may apply, depending on the Metro.

8. Once selected, the page expands to provide more options and information. The two fields that are required are the Host details and Email Address for the creation of this device. Complete filling in both of these boxes.

The first section will require a Device Name (This is the Virtual Device Name as seen in Equinix) and a Host Name Prefix (This is the actual Host Name on the Router). The FQDN of Cloudvision and the Token are also required. These two items can be obtained by logging into CloudVision and going to Network and then Device Registration. Under the Onboard Devices. First, Generate a Token and Copy into Equinix.

Generate a Token

Generate a token by clicking the **Generate** button below:

[illegible]

Next, copy the URL as shown in the Initiate Onboarding section.

Generate a Token

Generate a token by clicking the **Generate** button below:

[illegible]

An example of the FQDN to copy is shown below. **The actual FQDN will vary, so it is important to copy what is shown in your CloudVision instance.** Copy that into Equinix as well now. For complete details on CloudVision Onboarding, see the Token-Based Authentication section of the CloudVision Configuration Guide. Connecting to CloudVision Portal can be unchecked, however it is recommended to add it for the telemetry and management.

ulse,strata --cvaddr=apiserver.cv-staging.corp.arista.io

443

Device Details

Device Name

ATL-RTR-01

Host Name Prefix

Arista

☒ Connect to CloudVision Portal

Choose the CloudVision Type

☒ As-a-Service

☐ On-Premise

CloudVision Fully Qualified Domain Name

apiserver.cv-staging.corp.arista.id

CloudVision As-a-Service Port

443

Token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJkYXRhc2V0SUQ/OjM4MzIxOTESlWV4cCl6MTcwNjI4MTEwOSwia2lkoiJOitZYNTI3NmEyNmlyUmFmFINIlSIml5Ziil6MTcwNjE5Njcwc0SicmVibnIybnlvbGxEX2PvY2VzIjpbImloIX0.nvfPOnhioo4bio2D7NydsvnPEw6O-nErkUMSDrIQ4Uy_Y90aGXbgQNf6Kh-FKtCENBNAHUEP-HORCPKP-CPC-MAM-TME

Next, enter the email address in the appropriate section.

Device Status Notifications
Enter up to 5 email address(es) that will receive device status notifications.

Enter Email

Add Emails

i **Network Notifications**
Subscribe to notifications on the [Equinix Customer Portal \(ECP\)](#) to receive Network alerts.
[Learn more](#)

9. Select "Next" to continue

Next: Additional Services

10. On the Additional Services page you are presented with some more options. You will want to add a username to be used by SSH to connect to the CloudEOS Router. Additionally a SSH Key will be required. If one has not been created in your account yet, you will need to do it now as this field is required. Another required field is the Access Control List Templates. Again, if this is not created, you will need to do so at this point. Finally, by default, you will have 15 Mbps of internet bandwidth. If you would like to increase that amount, you can choose to do so now (or upgrade later). If doing so now, the price increase will be reflected.

The Access Control List is used to allow communication between the CloudEOS device and necessary services. It will need to contain access to DNS to resolve CloudVision's FQDN and access to CloudVision itself. Additional access may be added to allow SSH from a specific IP Address or Network. The FQDNs needed for CloudVision are available in the CVaaS Quick Start Guide located [here](#). At the time of publishing, the current IPs for the various regions are shown below. Although they are not anticipated to change, it's always best practice to confirm the IPs by doing a DNS Lookup.

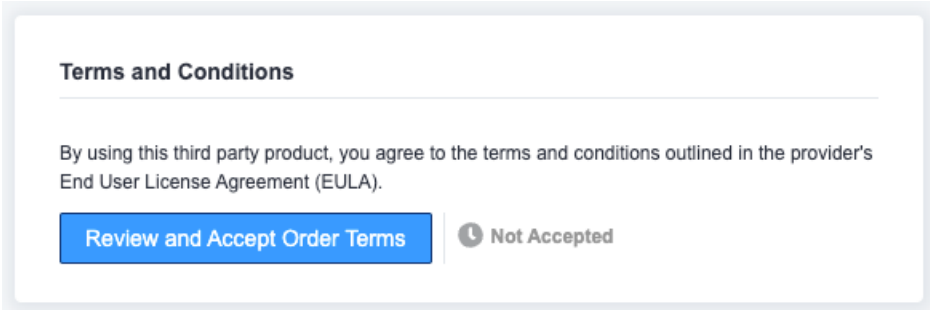
CVaaS IP Table

Region	IP	CVaaS FQDN
United States 1A CVaaS	34.67.65.165	www.arista.io
United States 1A API Server	35.192.157.156	apiserver.arista.io
United States 1C CVaaS	34.30.62.197	www.cv-prod-us-central1-c.arista.io
United States 1C API Server	34.136.239.116	apiserver.cv-prod-us-central1-c.arista.io/
Japan CVaaS	35.200.86.141	www.cv-prod-apnortheast-1.arista.io
Japan API Server	35.200.123.161	apiserver.cv-prod-apnortheast-1.arista.io/
Germany CVaaS	34.107.100.6	www.cv-prod-euwest-2.arista.io
Germany API Server	34.107.86.162	apiserver.cv-prod-euwest-2.arista.io
Australia CVaaS	35.201.26.226	www.cv-prod-ausoutheast-1.arista.io
Australia API Server	35.244.100.193	apiserver.cv-prod-ausoutheast-1.arista.io
Canada CVaaS	35.234.245.125	www.cv-prod-na-northeast1-b.arista.io
Canada API Server	34.95.43.8	apiserver.cv-prod-na-northeast1-b.arista.io

11. Select "Next" to review before submitting.

A blue rectangular button with the text "Next: Review" in white.

12. After you confirm all of your selections, you will be required to Review and Accept Order Terms.

A light gray rectangular dialog box with a white background. At the top, it has the title "Terms and Conditions" in bold. Below the title is a horizontal line. The main text reads: "By using this third party product, you agree to the terms and conditions outlined in the provider's End User License Agreement (EULA)." At the bottom, there are two buttons: a blue "Review and Accept Order Terms" button and a gray "Not Accepted" button with a clock icon.

13. Scroll through to read the terms and conditions, check the box that you have read and understand the terms and then "Accept"
- handwritten or typed modification to this Order which is not mutually agreed to in writing. If you have any questions regarding the terms of this Order, please contact your Equinix Sales Representative.

☒ I have read and understand these terms.

Cancel

Decline

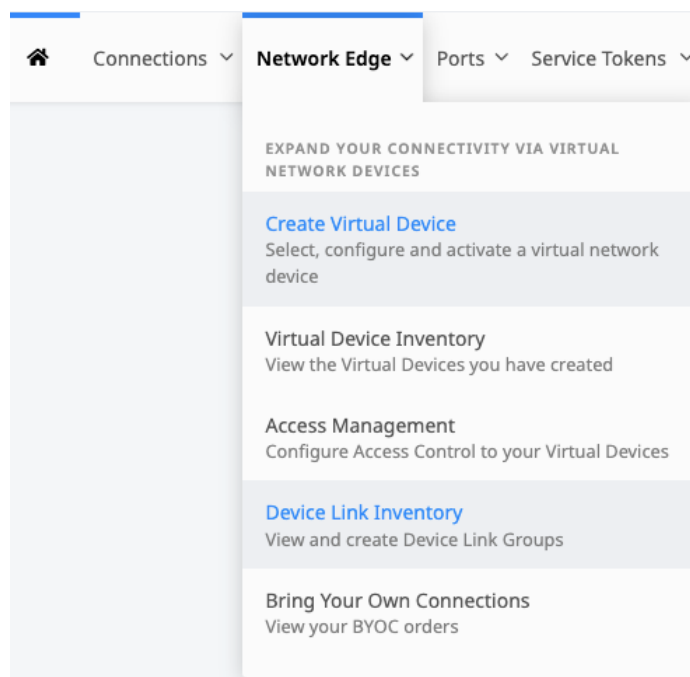
Accept

14. Select "Create Edge Device" to begin the installation process.

A blue rectangular button with the text "Create Edge Device" in white.

15. Repeat the steps above for the other devices being deployed.

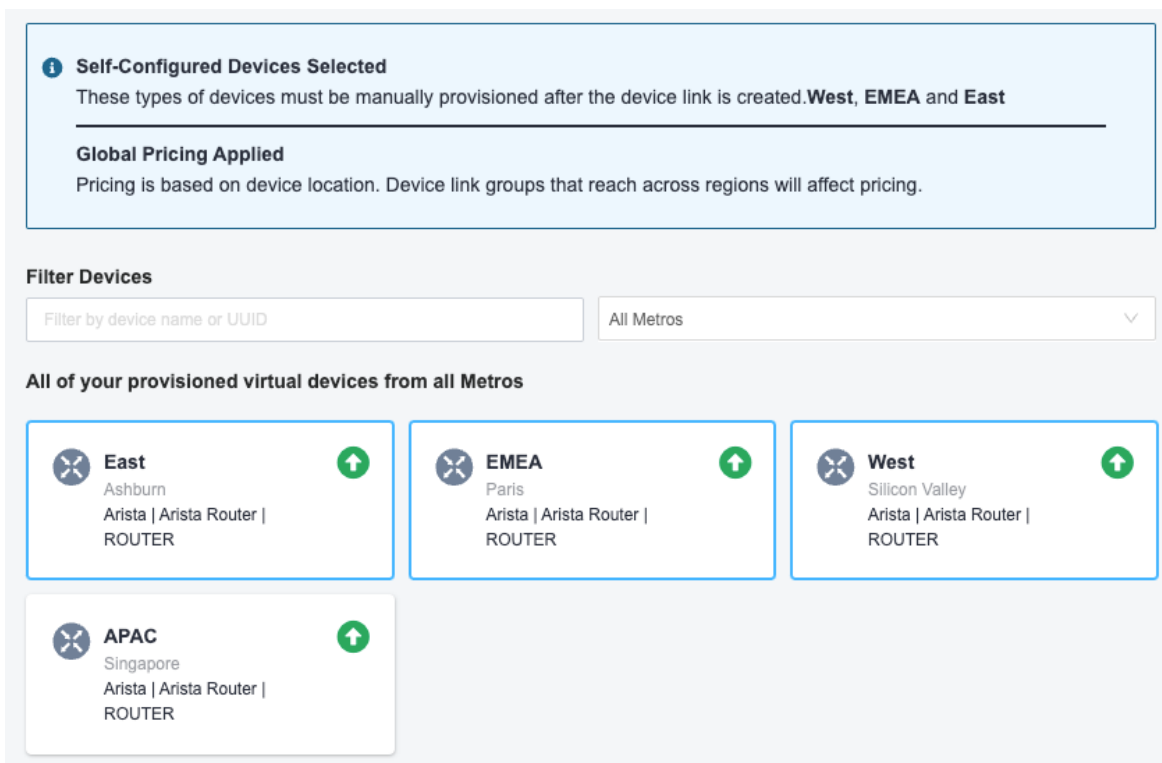
16. Next, we will mesh these all together by creating a Device Link Group. Go to Network Edge and then Device Link Inventory.



17. Select Create New Device Link Group.

Create New Device Link Group

18. Select the devices that you want to link together using the Equinix Backbone.



19. Select "Next"

Next: Device Link Details

20. Enter a name for the Device Link Group. At this point you will also enter the bandwidth for the links, as well as an option to use different bandwidth from each location. Finally we can select the interface used on CloudEOS for this Link. Since Eth1 is our internet access we will use Eth2 for the Equinix Backbone at each location.

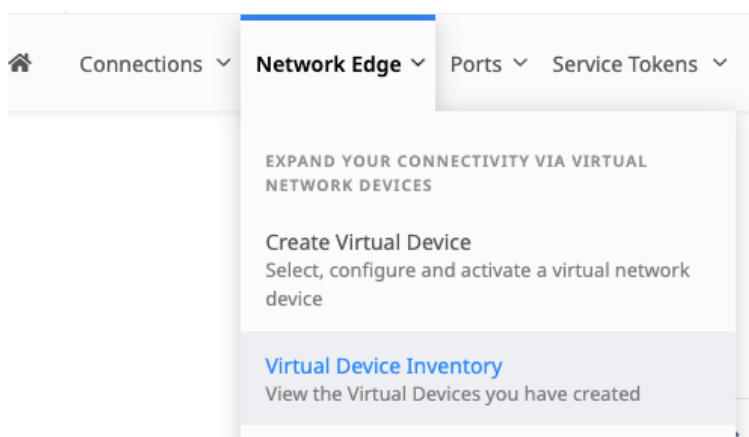
The screenshot shows two side-by-side configuration panels. The left panel, titled 'Device Link Details', contains a 'Device Link Name' field with a red border and a 'Required field' error message. Below this is the 'Connection Bandwidths' section, which has a checked checkbox for 'Individual Connection bandwidth'. It lists three locations: 'Silicon Valley', 'Paris', and 'Ashburn', each with a 'bandwidth' dropdown menu showing '50 Mbps | Up to 50 Mbps | 170.00 USD' for Silicon Valley and Paris, and '50 Mbps | Up to 50 Mbps | 360.00 EUR' for Ashburn. The right panel, titled 'Interface', contains a text block explaining that the interface is reserved for incoming connections. It has two radio buttons: 'Automatically select the next available interface on my devices' (unselected) and 'I will select the interface on my device' (selected). Below the radio buttons are three dropdown menus for 'Interface for West', 'Interface for EMEA', and 'Interface for East', each with a red border and a 'Required' error message.

21. Select "Next" to review.
22. Select "Submit" to finalize the setup.

Next: Review









23. Next, we will get CloudEOS setup. Go to Network Edge, then Virtual Device Inventory.

Submit



24. Select the device to set up.

Viewing 4 of 4 [Learn More](#)

Device Status	Device Type	Virtual Device Name
		EMEA
		APAC
		West
		West

25. Go to “Tools” and then “Open Console Session”

Inventory > Virtual Device Details

Details Connections Interfaces Additional Services Tools

Version Control

This feature is not currently supported for this device.

Backup Management

Console Access

Edit your device configuration via the console.

[Open Console Session](#)

26. Login to CloudEOS in the Console. Eth1 will be set up with DHCP already. Go to Eth2 and add an IP that will be used to communicate with the other devices via L2. There is no VLAN needing to be assigned and you can use the networking addresses of your choice as this is all internal to your routers and the Equinix Link Group. This is an example of the Eth2 configuration:

```
interface Ethernet2
description Eqx Network Edge Link
no switchport
ip address 10.10.10.3/24
```

You should now be able to reach the devices across the Equinix Backbone as well as via the Internet.

The CloudEOS is now online and ready to install any licensing, upgrade, and complete user specific configuration. The complete CloudEOS Configuration Guide can be found [here](#).

27. (Optional) If you have Arista CloudVision, you can also onboard the CloudEOS Router onto CloudVision, and you can see similar routing information and more valuable information from a historical perspective for troubleshooting and visibility. If you don't have Arista CloudVision, you can register it at <https://www.arista.io/cv>. More information about CloudVision can be found [here](#).

CloudVision
ARISTA

[Devices](#)
[Events](#)
[Provisioning](#)
[Dashboards](#)
[Topology](#)

[Devices](#) >
[equinix-west-site122-r1](#) >
[Routing](#) >
[BGP](#) >
[VRF: Default](#)

NDP Table
Bridging Capability
MAC Address Table
MLAG
VXLAN
Routing
IPv4 Routing Table
IPv6 Routing Table
IPv4 Multicast Table
BGP
IGMP
Segmentation
Traffic Flows
802.1X
Interfaces
Ethernet
Routed Ports
Port Channels
Traffic Counters

BGP Overview

Local BGP Details

BGP AS Number	65199
Configured BGP Router ID	192.168.122.1
Routing Mode	Multi-Agent
BGP Peers	2 peers
BGP Established Peers	2 peers
BGP Unestablished Peers	0 peers
BGP Learned Paths	0 paths
IPv4 BGP Learned Routes	17 routes
IPv6 BGP Learned Routes	N/A

BGP Peers

Peer ↑	State	Up/Down Since	Enabled	Local Address
--------	-------	---------------	---------	---------------

Summary

You have now completed the steps of creating and connecting the Arista CloudEOS Router in Equinix Network Edge and connected them via the Device Link Group.

Santa Clara—Corporate Headquarters

5453 Great America Parkway,
Santa Clara, CA 95054

Phone: +1-408-547-5500

Fax: +1-408-538-8920

Email: info@arista.com

Ireland—International Headquarters

3130 Atlantic Avenue
Westpark Business Campus
Shannon, Co. Clare
Ireland

Vancouver—R&D Office

9200 Glenlyon Pkwy, Unit 300
Burnaby, British Columbia
Canada V5J 5J8

San Francisco—R&D and Sales Office 1390

Market Street, Suite 800
San Francisco, CA 94102

India—R&D Office

Global Tech Park, Tower A, 11th Floor
Marathahalli Outer Ring Road
Devarabeesanahalli Village, Varthur Hobli
Bangalore, India 560103

Singapore—APAC Administrative Office

9 Temasek Boulevard
#29-01, Suntec Tower Two
Singapore 038989

Nashua—R&D Office

10 Tara Boulevard
Nashua, NH 03062



Copyright © 2023 Arista Networks, Inc. All rights reserved. CloudVision, and EOS are registered trademarks and Arista Networks is a trademark of Arista Networks, Inc. All other company names are trademarks of their respective holders. Information in this document is subject to change without notice. Certain features may not yet be available. Arista Networks, Inc. assumes no responsibility for any errors that may appear in this document. March 6, 2024