

CloudVision Mastery Workshop

CloudVision Compliance

Lab Guide 3



COMPLIANCE

CloudVision continuously computes image and configuration compliances. If a device is either configuration, image, or extension non-compliant, CVP automatically generates a non-compliant event on the Compliance dashboard and flags the device as non-compliant on the Inventory screen.

1. Navigate to **Devices > Inventory**.

The Inventory page will show that all devices are now running 4.31.3M but will also show a red **“Page”** icon in the **“Issues”** column that wasn't there before the upgrade. This icon indicates that the running configuration on the devices differs from what CloudVision thinks it should be running. This happened because **“ribd”** was the default routing model before EOS 4.30, and **“multi-agent”** was the default for EOS 4.30 and later.

NOTE: Changing the routing model protocol from **“ribd”** to **“multi-agent”** requires a reboot for the changes to take effect. This lab will skip the reboot due to time limitations.

Devices

Inventory

View all devices onboarded to CloudVision

Showing all 7 devices

Device ↑	Streaming	Issues	Model	Software	Streaming Agent	IP Address	MAC Address	Device ID
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
Leaf-1A	Active	Issues	vEOS-lab	4.31.3M	1.31.3_b9736e1e59c5d637	192.168.0.27	64:d7:be:ab:ee:62	SN-P1-Leaf1A
Leaf-1B	Active	Issues	vEOS-lab	4.31.3M	1.31.3_b9736e1e59c5d637	192.168.0.26	64:d7:80:b6:63:d2	SN-P1-Leaf1B
Leaf-2A	Active	Issues	vEOS-lab	4.31.3M	1.31.3_b9736e1e59c5d637	192.168.0.28	64:97:69:d4:18:b3	SN-P1-Leaf2A
Leaf-2B	Active	Issues	vEOS-lab	4.31.3M	1.31.3_b9736e1e59c5d637	192.168.0.25	64:b8:4e:61:19:00	SN-P1-Leaf2B
Spine-1	Active	Issues	vEOS-lab	4.31.3M	1.31.3_b9736e1e59c5d637	192.168.0.30	64:bb:ab:b0:88:39	SN-P1-Spine1
Spine-2	Active	Issues	vEOS-lab	4.31.3M	1.31.3_b9736e1e59c5d637	192.168.0.29	64:16:af:1c:47:fc	SN-P1-Spine2
sw-10.18.168.61	Active	Issues	vEOS-lab	4.28.10.1M	1.22.3	192.168.0.10	64:9a:a7:52:d2:52	SN-P1-ntpUpdate

Export to CSV

Showing 7 of 7 rows

- Click on the red **“Page”** icon next to one of the devices. This will take you to that device’s configuration **“Compare Config”** section.

Inventory

Leaf-1A

Running Config | Designed Config | **Compare Config** | Config Sources

Device Overview

System

Processes

Storage

Log Messages

Hardware Capacity

Configuration

Hardware

Snapshots

CVE and Bug Exp...

Environment

Tags

Switching

ARP Table

NDP Table

Bridging Capability

MAC Address Table

MLAG

VXLAN

Routing

IPv4 Routing Table

IPv6 Routing Table

IPv4 Multicast Table

BGP

Designed Configuration

Expand 17 lines

18 service routing protocols model **multi-agent**

Expand 122 lines

Running Configuration

18 service routing protocols model **fib**

15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Jun 3, 2024 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00

Show Live

NOTE: It’s always a good idea to validate device configuration compliance within CloudVision after an upgrade in case EOS default values have changed.

3. To bring the device configuration back into compliance, head to **Devices > Compliance Overview**

The screenshot shows the 'Compliance Overview' page for devices. The left sidebar lists navigation options: Devices, Inventory, Device Registration, Compliance Overview (selected), Endpoint Overview, Connectivity Monitor, Traffic Flows, Endpoint Search, Comparison, Multi-Cloud Dashboard, and Network Segmentation. The main content area has tabs for 'Bugs and CVEs', 'Configuration and Image', and 'End of Life'. The 'Bugs and CVEs' tab is active, showing two donut charts: 'Bug Exposure' (7 devices) and 'CVE Threats' (7 devices). Below these is a table of bugs.

Identifier ↑	Type	Summary	Severity	Device Count	Exposed Devices
500322	Bug	Management interfaces may flap with kernel message "transmit timed out, resetting" and should come back up automatically. On rare occasions an interface will remain down after such flap until the interface PCI device is reset or the system reloaded.	High	7	Leaf-1A, Leaf-1B, Leaf-2A, and 4 other devices
543510	Bug	The "show daemon" cli command displays the last PID if the agent has died and not yet restarted.	Low	1	sw-10.18.169.61
613663	Bug	"logging level" CLI in startup config does not work after reload. The workaround is to reconfigure the CLI after reload.	Low	7	Leaf-1A, Leaf-1B, Leaf-2A, and 4 other devices
672269	Bug	ConnectivityMonitor may restart unexpectedly if more than 250 http probes are configured	High	1	sw-10.18.169.61
678460	Bug	After EOS upgrade on an MLAG pair, one or both peers may show unexpected/incorrect "show mlag config-sanity" output. To workaround, restart the MLAG agent on the first upgraded peer via "agent miag terminate", preferably during a maintenance window.	Low	4	Leaf-1A, Leaf-1B, Leaf-2A, and 1 other device
712490	Bug	Any non-EAPOL packet coming from an unknown MAC address will go through the MBA process and will show up under "show dot1x hosts" as successful/failed authentication based on the AAA server settings for that particular MAC address.	Low	1	sw-10.18.169.61

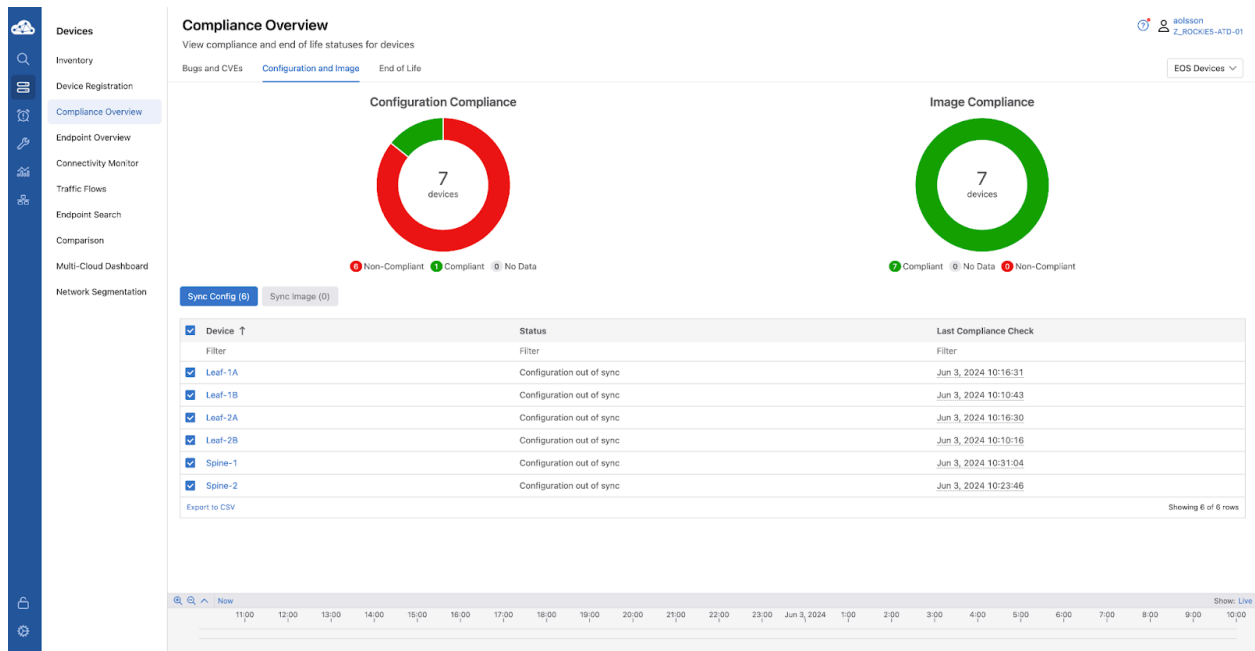
4. Select the "Configuration and Image" tab near the top.

The screenshot shows the 'Compliance Overview' page with the 'Configuration and Image' tab selected. It displays two donut charts: 'Configuration Compliance' (7 devices) and 'Image Compliance' (7 devices). Below these is a table of device compliance status.

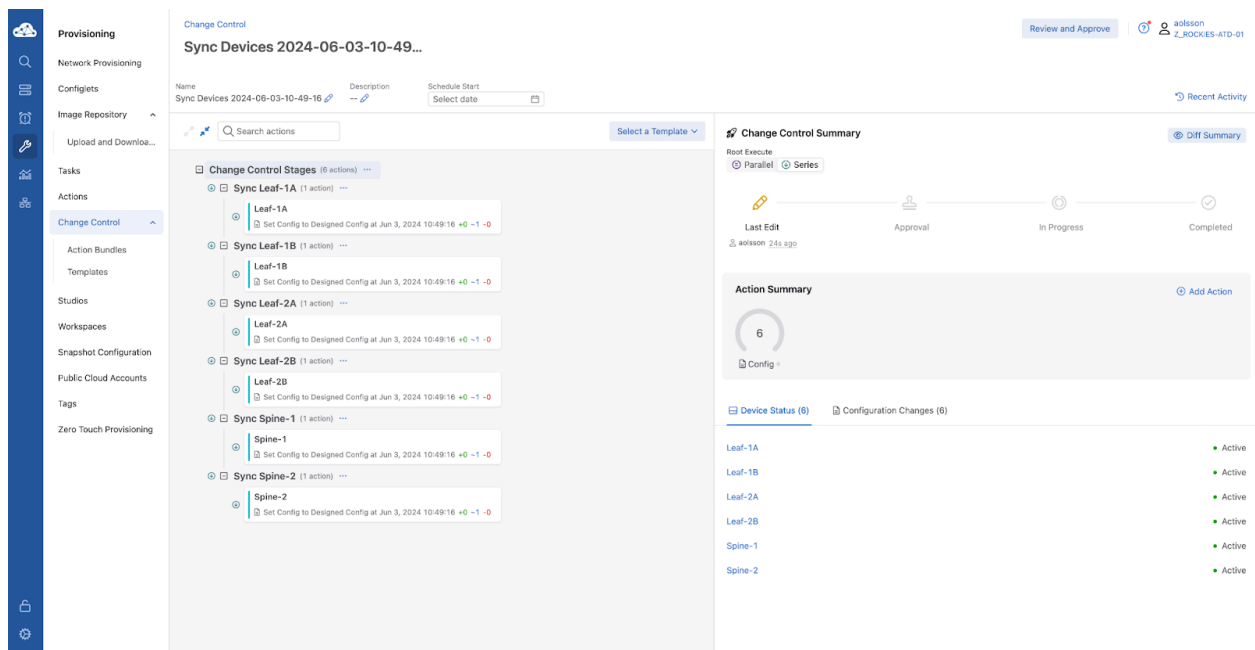
Device ↑	Status	Last Compliance Check
Leaf-1A	Configuration out of sync	Jun 3, 2024 10:16:31
Leaf-1B	Configuration out of sync	Jun 3, 2024 10:10:43
Leaf-2A	Configuration out of sync	Jun 3, 2024 10:16:30
Leaf-2B	Configuration out of sync	Jun 3, 2024 10:10:16
Spine-1	Configuration out of sync	Jun 3, 2024 10:31:04
Spine-2	Configuration out of sync	Jun 3, 2024 10:23:46

5. Select all 6 devices that need to be brought back into compliance

6. Click the blue "Sync Config" button



7. You'll be redirected to the change control overview screen for the change control created to bring the devices back into compliance.



8. By default, all change controls created using the “**Compliance Overview**” page will be in series. For this lab, we want to run all changes in parallel, so select the “**Change Control Stages**” line item at the top of the screen in the section showing the tasks to be

executed. Once the **“Change Control Stages”** line is highlighted, select the **“Parallel”** button on the right side of the screen just under the **“Change Control Summary.”**

9. Select the blue **“Review and Approve”** button on the top right of the screen.

10. The **“Review Change”** pop-up will appear, showing a single configuration change on all 6 devices. Select the blue **“Approve”** button to approve the change control.

11. Select the blue **“Execute Change Control”** button on the top right.

The screenshot shows the Arista Provisioning interface. On the left is a sidebar with navigation options: Provisioning, Network Provisioning, Configlets, Image Repository, Upload and Download..., Tasks, Actions, Change Control (selected), Action Bundles, Templates, Studios, Workspaces, Snapshot Configuration, Public Cloud Accounts, Tags, and Zero Touch Provisioning. The main content area is titled 'Change Control' and 'Sync Devices 2024-06-03-10-49...'. It includes a search bar for actions and a 'Select a Template' dropdown. Below this is a list of 'Change Control Stages' (6 actions):

- Sync Leaf-1A (1 action)
 - Leaf-1A: Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0
- Sync Leaf-1B (1 action)
 - Leaf-1B: Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0
- Sync Leaf-2A (1 action)
 - Leaf-2A: Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0
- Sync Leaf-2B (1 action)
 - Leaf-2B: Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0
- Sync Spine-1 (1 action)
 - Spine-1: Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0
- Sync Spine-2 (1 action)
 - Spine-2: Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0

On the right, the 'Change Control Summary' section shows a progress bar with stages: Last Edit (1m ago), Approved (adison), In Progress, and Completed. Below this is an 'Action Summary' showing 6 Config items. At the bottom, a 'Device Status' table lists the devices and their status:

Device	Status
Leaf-1A	Active
Leaf-1B	Active
Leaf-2A	Active
Leaf-2B	Active
Spine-1	Active
Spine-2	Active

12. The “**Execute Change Control**” pop-up will appear. Select the “**Execute**” button to continue.

The screenshot shows the same Arista Provisioning interface as before, but with a modal dialog box titled 'Execute Change Control' in the center. The dialog contains the text 'Change control will execute immediately.' and two buttons: 'Cancel' and 'Execute'.

13. Once completed, green check marks will appear next to each task, and the green “**Success**” icon will appear to the right of the change control name.

Provisioning

Network Provisioning

Configlets

Image Repository

Upload and Download...

Tasks

Actions

Change Control

Action Bundles

Templates

Studies

Workspaces

Snapshot Configuration

Public Cloud Accounts

Tags

Zero Touch Provisioning

Change Control

Sync Devices 2024-06-03-10-49-16

Success

Name

Sync Devices 2024-06-03-10-49-16

Description

Search actions

Change Control Stages (6 actions)

Sync Leaf-1A (1 action)

Leaf-1A

Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0

Sync Leaf-1B (1 action)

Leaf-1B

Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0

Sync Leaf-2A (1 action)

Leaf-2A

Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0

Sync Leaf-2B (1 action)

Leaf-2B

Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0

Sync Spine-1 (1 action)

Spine-1

Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0

Sync Spine-2 (1 action)

Spine-2

Set Config to Designed Config at Jun 3, 2024 10:49:16 +0 -1 -0

Change Control Summary

Rollback

adison z_rookies-ATD-01

Recent Activity

Diff Summary

Logs

Read Execute

Parallel

Series

Last Edit

Approved

Started

Completed

Action Summary

100%

Config

Device Status (6)

Configuration Changes (6)

Leaf-1A

Leaf-1B

Leaf-2A

Leaf-2B

Spine-1

Spine-2

Active

Active

Active

Active

Active

Active