

Campus A-01 Wired Lab Guide

Provisioning a Campus Fabric



This Lab Guide:

<https://github.com/arista-rockies/Workshops/tree/main/Campus>

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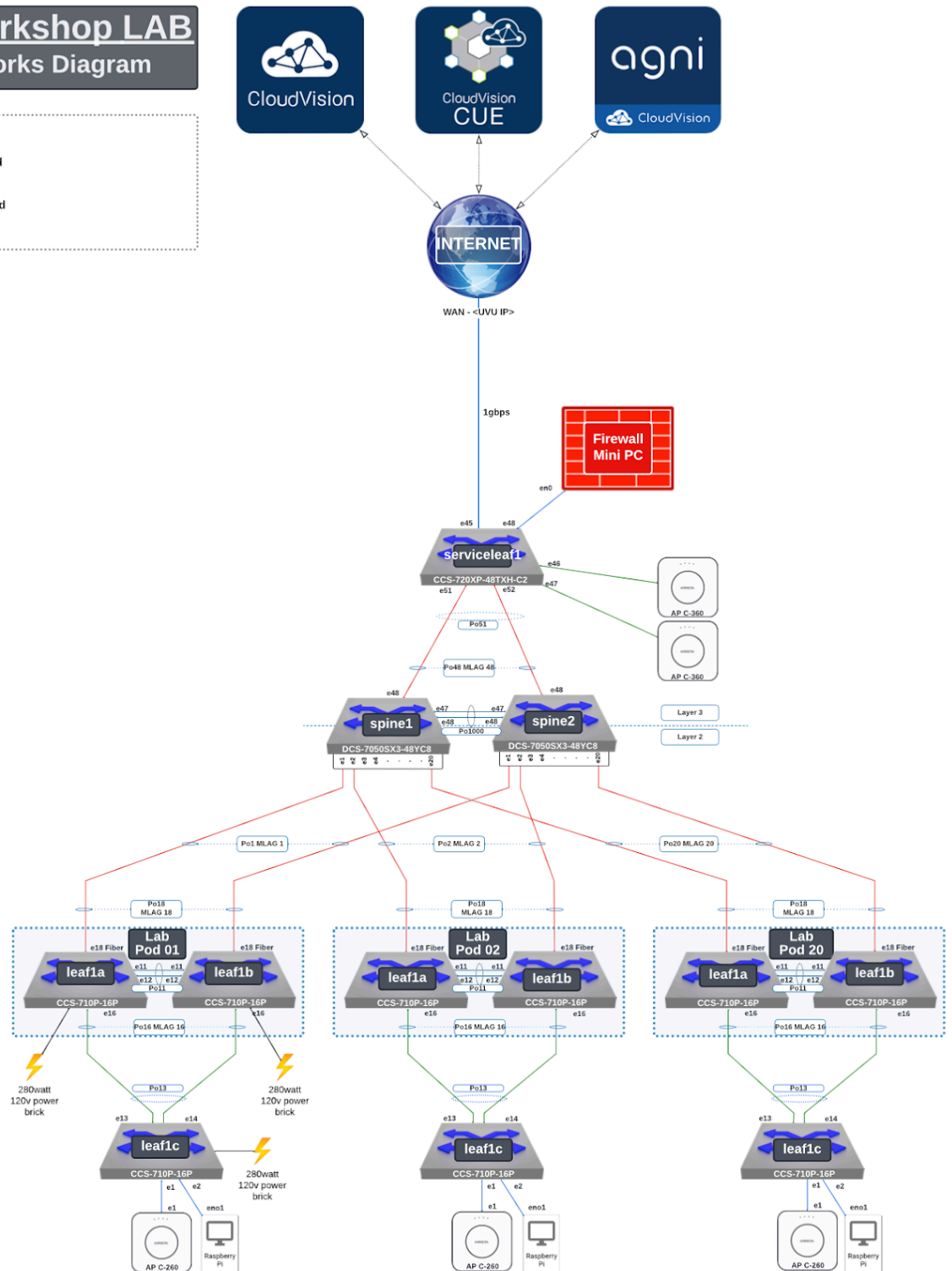
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Full Lab Topology

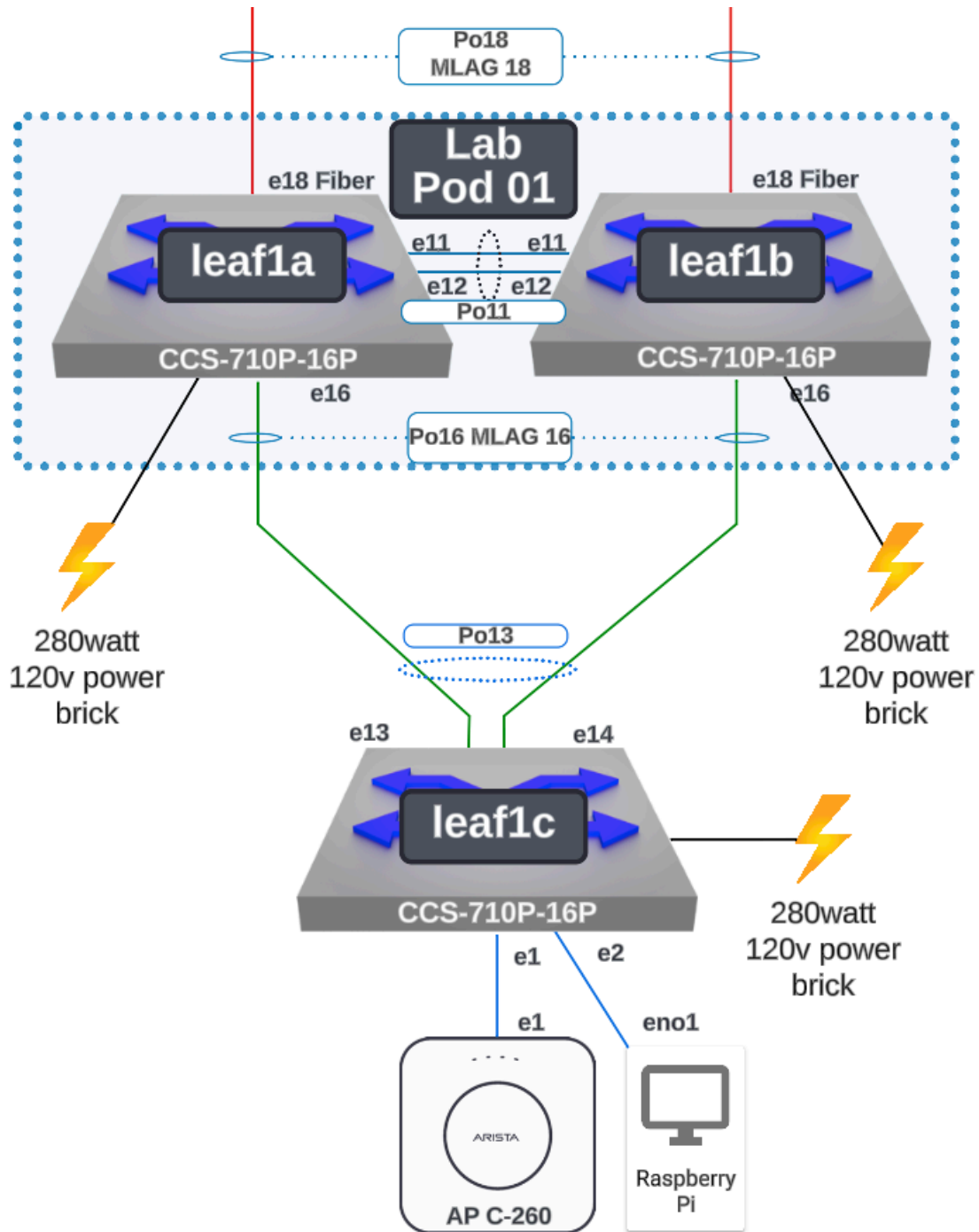
Arista Workshop LAB Lab Networks Diagram

Key:

- 10G link speed
- 5G link speed
- 2.5G link speed
- 1G link speed



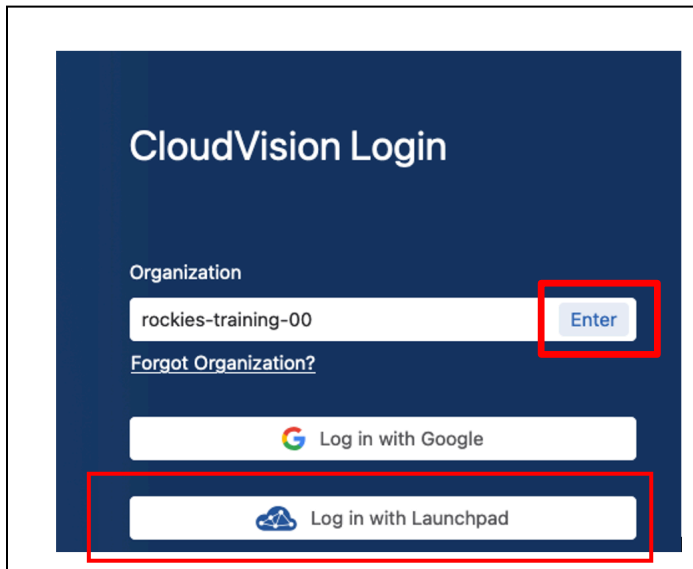
POD Topology



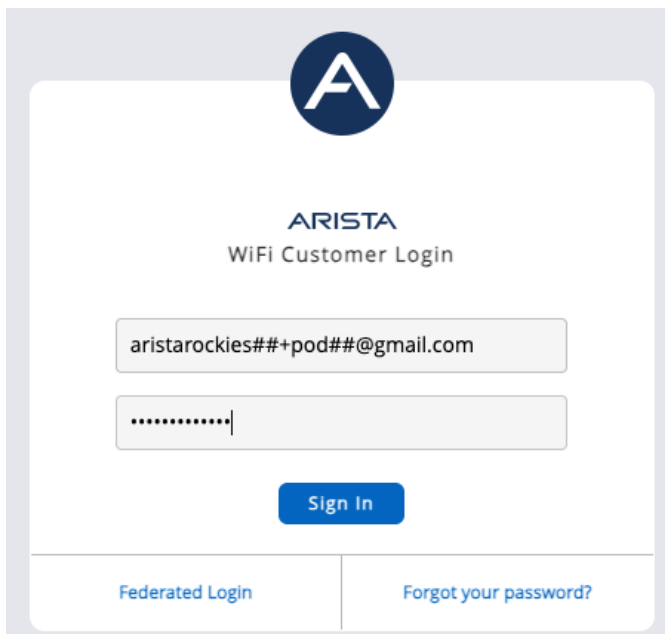
1. Accessing CloudVision as a Service

In your Google Chrome browser, enter the following URL: <https://www.arista.io/> to access CloudVision as a Service (CVaaS).

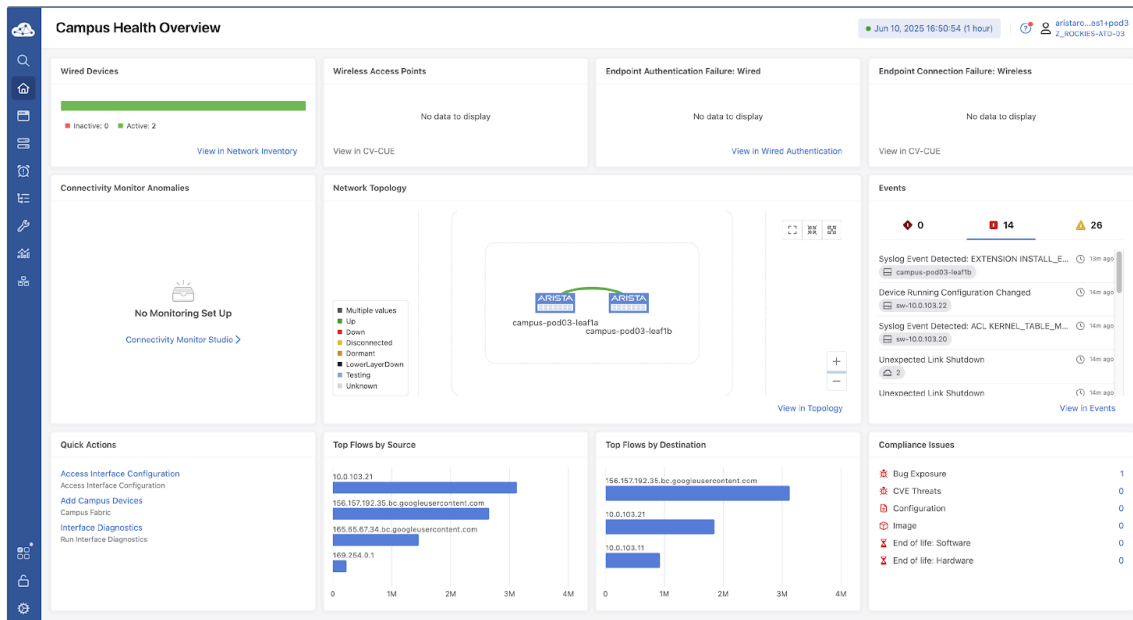
1. in the “**Organization**” box enter the Organization name “**rockies-training-##**” where **##** is a 2 digit character between 01-20 that was assigned to your lab/Pod, then click “**Enter**”.

The image shows the CloudVision Login page. It has a dark blue header with the text "CloudVision Login". Below this is a form with a label "Organization" and a text input field containing "rockies-training-00". To the right of the input field is a blue button labeled "Enter", which is highlighted with a red rectangle. Below the input field is a link "Forgot Organization?". At the bottom of the form are two buttons: "Log in with Google" and "Log in with Launchpad". The "Log in with Launchpad" button is highlighted with a red rectangle.

2. Click the Log in with Launchpad button and provide your assigned lab/Pod email address and password:

The image shows the ARISTA WiFi Customer Login page. It has a light gray header with the ARISTA logo (a blue circle with a white 'A'). Below the logo is the text "ARISTA WiFi Customer Login". The form has two input fields: the first contains the email address "aristarockies##+pod##@gmail.com" and the second is a password field with dots. Below the input fields is a blue button labeled "Sign In". At the bottom of the form are two links: "Federated Login" and "Forgot your password?".

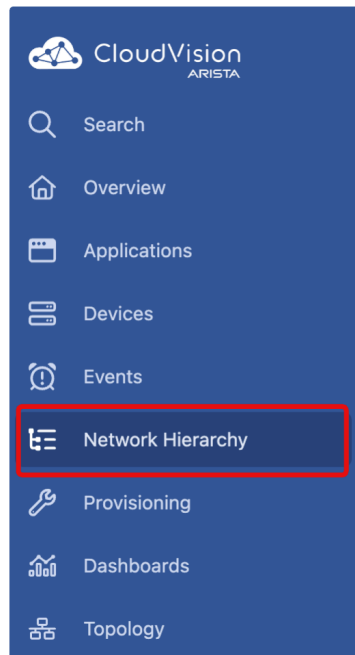
3. You will now be logged into CloudVision



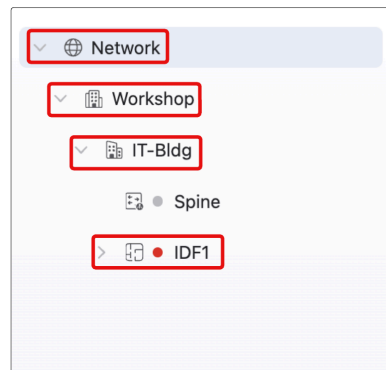
2. Onboarding a new device into CVaaS

In this lab you will be configuring the switches through CloudVision. Today you will be adding a Member Leaf Switch to an existing Campus Fabric/POD using Cloud Vision's guided workflow.

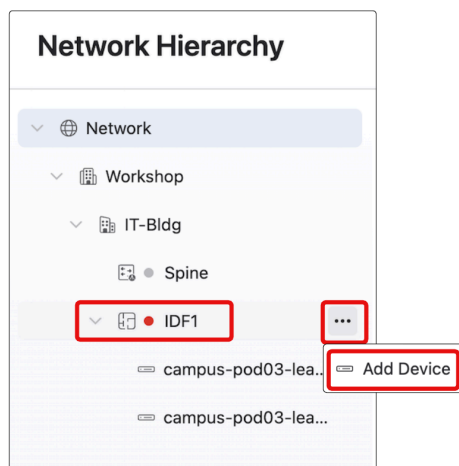
1. Login to CloudVision, then click on the **Network Hierarchy** menu option.



2. Navigate through the Network Hierarchy Tree to **Network > Workshop > IT-Bldg > IDF1**.



3. Hover your mouse over **IDF1** and select the **3 dots** that appear. Select **Add Device** to begin the device provisioning guided workflow.



4. The **Deployment Details** should be pre-populated. Verify the value in each section (provided below),
 - a. **Campus: Workshop**
 - b. **Campus-Pod: IT-Bldg**
 - c. **Access-Pod: IDF1**
 - d. Select the box for the device under **Select Available Devices** with a hostname of **sw-10.0.103.21** and then select **Continue**

Add Campus Devices

1 Deployment Details

2 Configuration

3 Management

4 Review

Workspace

Select an existing workspace or leave blank to create a new one

Select a workspace

Specify Deployment Details

Choose the locations of these devices in the network

Campus

Workshop

Campus-Pod

IT-Bldg

Access-Pod

Select an access-pod or type to create one

IDF1

Select Available Devices

Select devices that you want to add to the campus

1 Item 1 Selected

Device ID	Hostname	MAC	Model
WTW22210161	sw-10.0.103.21	2c:dd:e9:fd:97:c9	710P-16P

sw-10.0.103.21

Workshop

Cancel

Continue

5. Locate the new device being added under **Role Assignment**. Update the hostname from sw-[IP_ADDRESS] to **campus-pod[POD#]-leafc**. Select **Continue**.

Add Campus Devices

✓ Deployment Details

2 Configuration

3 Management

4 Review

Software Image Assignment

+ Add Software

Select image, streaming agent, and extension for the selected devices

Image

Select

Streaming Agent

Select

Extensions

Select

Hostname and Role Assignment

Assign a default hostname or custom hostnames and device roles

Hostname Prefix

e.g campus-pod03-leaf1

Role Assignment

3 Items

Device ID	Hostname	MAC	Model	Role
WTW22200305	campus-pod03-leaf1a	2c:dd:e9:fd:83:4d	710P-16P	Leaf
WTW22200349	campus-pod03-leaf1b	2c:dd:e9:fd:86:91	710P-16P	Leaf
WTW22210161	campus-pod3-leafc	2c:dd:e9:fd:97:c9	710P-16P	Member-Leaf

Member Leaf MLAG Pairs

List MLAG Pairs for member leaf devices

1 Item

+ Add MLAG Pair

MLAG Primary	MLAG Secondary

Back

Cancel

Continue

6. Select **Continue**
(Although not part of the lab today, this section of the workflow allows us to set the member leaf we are currently provisioning to also provide Zero Touch Provisioning workflow to switches that are downstream from this new Member Leaf.)

Add Campus Devices

✓ Deployment Details

✓ Configuration

3 Management

4 Review

Out-of-band management deployments are not currently supported in this workflow

Inband Management Details

The inband management subnet and VLAN are set per campus pod.

Inband Management Subnet

10.0.103.0/24

Inband Management VLAN

103

Inband ZTP Interfaces

If the devices below provide connectivity for any other devices, specify which interfaces should serve as downlinks to those other devices.

1 Item

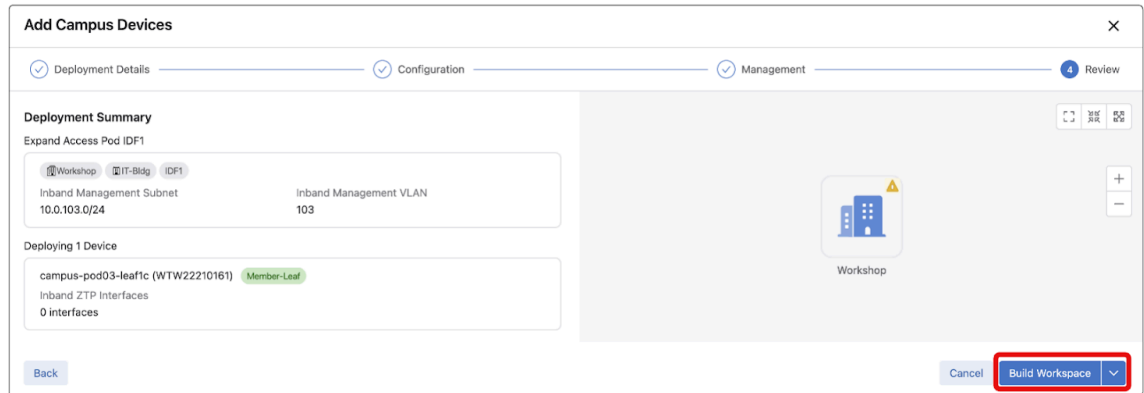
Device ID	Hostname	Role	Interfaces
WTW22210161	campus-pod03-leaf1c	Member-Leaf	Select

Back

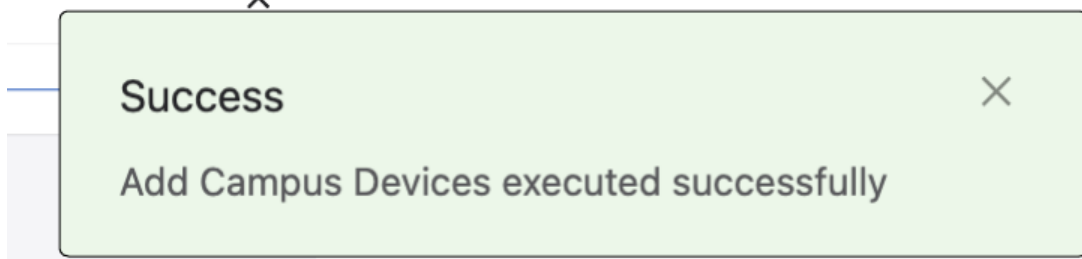
Cancel

Continue

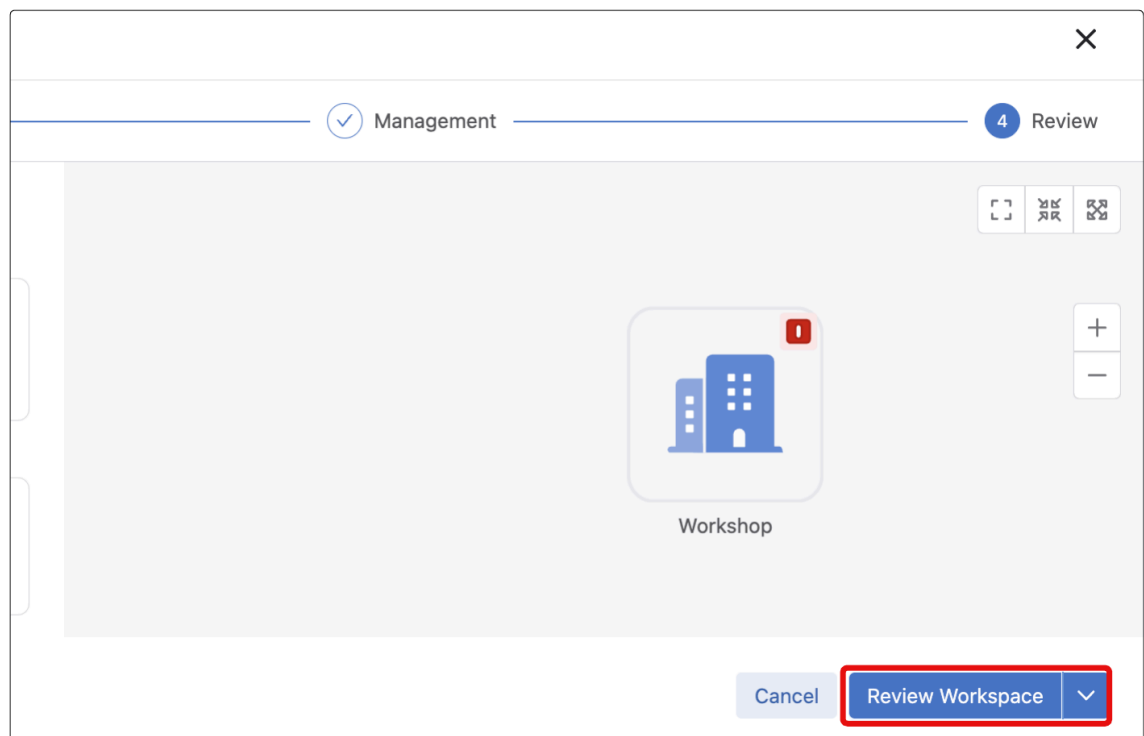
7. The inputs provided in the guided workflow will be used to generate inputs within CloudVision Studios. We will select **Build Workspace** and those inputs will generate the configuration to provision our new device. (This may take up to 1 minute)



8. After the Workspace has completed building you will get a small window pop up state **Success**. Select the **X** and continue to the next step



9. Now that CloudVision has built out the workspace, lets select **Review Workspace** to review the proposed configuration.



10. This will bring you into the Workspace that was generated from the guided workflow.. You should see 3 devices (leaf1a, leaf1b, and your newly added switch) shown under **Proposed Configuration**.
- Take some time to review the proposed configuration.
 - leaf1a/b** - Check for the creation of a new port-channel and interface configuration to leaf1c
 - leaf1c** - Complete provisioned switch configuration
 - After taking some time to review the workspace select **Submit Workspace**.

The screenshot displays the 'Workspaces' interface. At the top, there are buttons for 'Rebuild' and 'Submit Workspace' (highlighted with a red box). Below this, a 'Quick Actions' section shows 'Add Campus Devices t...' with a 'Build Succeeded' status. The main content area is divided into two columns. The left column, titled 'Summary', lists 'Studios Modified' with 'Inventory and Topology' and 'Campus Fabric (L2/L3/EVPN)' both marked as 'Input', and 'Number of Tag Changes' as 8. The right column, titled 'Build Status', shows 'Last built 2 minutes ago' and a 'Device Results' section with four green checkmarks for 'Input Validation', 'Configlet Compilation', 'Config Validation', and 'Software Validation'. Below these columns is a 'Proposed Configuration Changes' section (highlighted with a red box) containing a search bar and a table of changes:

Change	Count
> Update Config - campus-pod03-leaf1a	+9 -0 -0
> Update Config - campus-pod03-leaf1b	+9 -0 -0
> Update Config - sw-10.0.103.21	+156 -3 -264

Below the configuration changes is a 'Proposed Software Changes' section stating 'No proposed software changes available'.

11. After the Workspace is submitted select **View Change Control**.

The screenshot shows a 'Workspace Submitted' dialog box with a green checkmark icon and the text 'Success!'. Below this, it states: 'The designed configuration has been updated and a change control has been created. Approve and execute the change control to deploy the updates.' At the bottom, there are two buttons: 'Close' and 'View Change Control' (highlighted with a red box).

12. This will bring us to the Change Control that was created by the workspace submission. In this step we will be utilizing Change Control Templates . (A change control template provides the ability to create a configurable structure for repeatable change control operations)

- a. **Select a Template**
- b. From the available dropdown select **Member Leaf Provisioning**. (This template will add a 30 second delay before pushing configuration to leaf1a and leaf1b to ensure leaf1c gets the proposed configuration first)
- c. **Select Apply Template.**

Change Control

Quick Actions: Add Campus Devices to IDF1 (created by workspace)

Name: Quick Actions: Add Campus Devices to IDF1 (created by workspace) | Description: Changes from workspace "Quick Actions: Add

Search actions

Select a Template

Change Control Stages (3 actions)

- campus-pod03-leaf1b (WTW222003...) (1 action)
 - campus-pod03-leaf1b
 - Set Config to Designed Config at Jun 11, 2025 08:53:12 +9 ~0 -0
- campus-pod03-leaf1a (WTW222003...) (1 action)
 - campus-pod03-leaf1a
 - Set Config to Designed Config at Jun 11, 2025 08:53:12 +9 ~0 -0
- sw-10.0.103.21 (WTW22210161) (1 action)
 - sw-10.0.103.21
 - Set Config to Designed Config at Jun 11, 2025 08:53:12 +156 ~3 -264

Change Control Templates

Member Leaf Provisioning

Apply Template

13. The template selected will update the **Change Control Stages** into 2 sections. The first section will begin the configuration on the new Member Leaf immediately. The second section will delay pushing the configuration changes for 30 seconds, then configure the Leaf Switches.

The screenshot displays a configuration management interface with a tree view of a template. The root node is 'Change Control Stages' (5 actions). It contains two main sections, both highlighted with red rectangles:

- Provision New Member Leaf** (1 action):
 - sw-10.0.103.21:Set Configuration** (1 action):
 - sw-10.0.103.21
 - Set Config to Designed Config at Jun 11, 2025 16:45:34 +156 ~3 -264
- Wait 30 Seconds Then Apply Configu...** (4 actions):
 - campus-pod03-leaf1a:Sleep Action** (2 actions):
 - Custom Action 'Sleep'
 - campus-pod03-leaf1a
 - Set Config to Designed Config at Jun 11, 2025 16:45:34 +9 ~0 -0
 - campus-pod03-leaf1b:Sleep Action** (2 actions):
 - Custom Action 'Sleep'
 - campus-pod03-leaf1b
 - Set Config to Designed Config at Jun 11, 2025 16:45:34 +9 ~0 -0

14. Select **Review and Approve**

The screenshot displays a software interface with a top navigation bar. A button labeled "Review and Approve" is highlighted with a red rectangular border. To the right of this button are a help icon (question mark in a circle), a user profile icon, and the text "aristaro...es1+pod3" and "Z_ROCKIES-ATD-03".

Below the navigation bar, on the left, is the text "to IDF1" followed by a small blue icon. To its right is a "Schedule Start" section with a "Select date" input field. On the far right of this section is a "Recent Activity" link with a circular arrow icon.

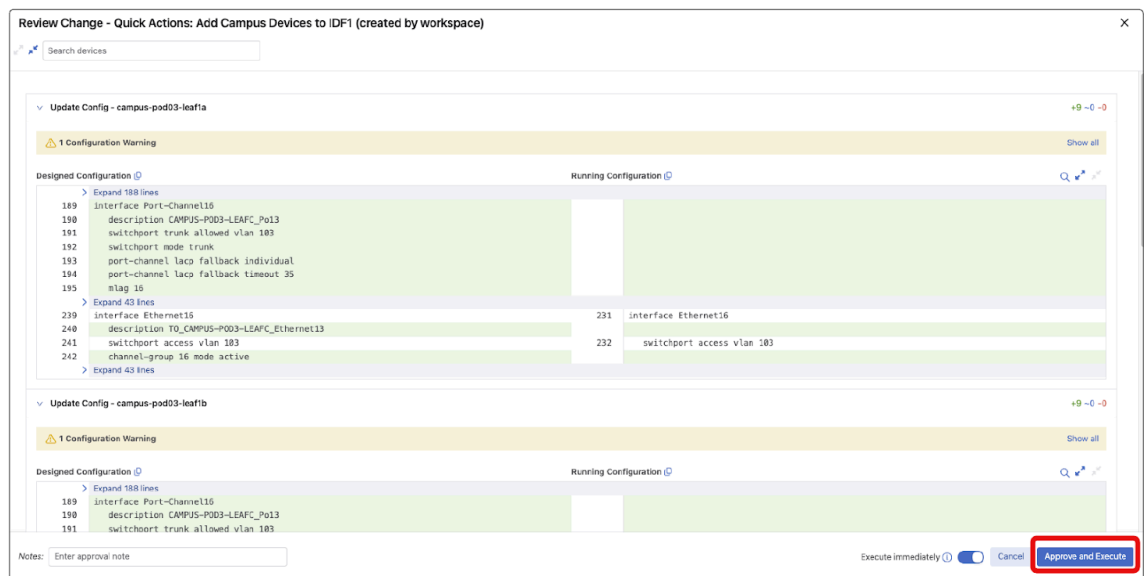
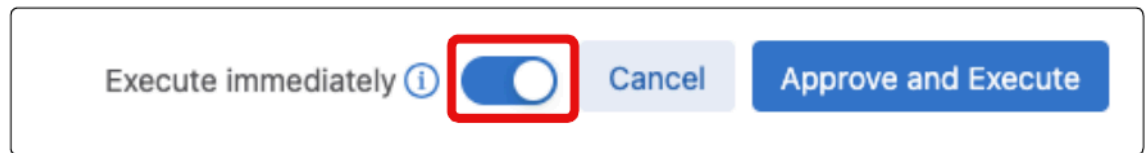
The main content area is titled "Change Control Summary" with a small icon to its left. To the right of this title is a "Diff Summary" button. Below the title, there is a "Root Execute" section with two buttons: "Parallel" (selected, with a circular arrow icon) and "Series" (with a downward arrow icon).

A horizontal timeline follows, consisting of four stages: "Last Edit" (with a pencil icon), "Approval" (with a person icon), "In Progress" (with a circular arrow icon), and "Completed" (with a checkmark icon). Below the "Last Edit" stage, the text "aristarockies1+pod3" and "3m ago" is displayed.

At the bottom, there is an "Action Summary" section. It contains two circular progress indicators: the first shows the number "3" and is labeled "Config" with a small icon; the second shows the number "2" and is labeled "Misc" with a small icon. To the right of these indicators is a "+ Add Action" link.

15. Up until this point we have not made any changes to the actual running configuration of the devices. You can take some time to once again review the proposed configuration changes then select **Approve and Execute**.

If Approve and Execute is not present select the Slider next to Execute Immediately.



16. The change control will execute and apply all the proposed configuration changes to the devices. The newly added device will be reloaded as it exits Zero Touch Provisioning (ZTP) mode and boots up with the designed configuration. You can review the Change Control logs by selecting **Logs** in the change control window.

