



Monitoring Cisco Unified Communications Ancillary Devices

Beta Version

Cisco: UC Ancillary PowerPack version 101

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Introduction

Overview

This section describes how to monitor ancillary Cisco Unified Communications component devices in the ScienceLogic platform.

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What Does the Cisco: UC Ancillary PowerPack Monitor?

The ScienceLogic platform enables you to monitor ancillary Cisco Unified Communications devices, including Cisco Unified Border Element (CUBE)-enabled devices.

To monitor these ancillary UC devices using the ScienceLogic platform, you must install the *Cisco: UC Ancillary PowerPack*. The PowerPack includes:

- An example credential you can use as a template to create SSH/Key credentials to connect to the devices you want to monitor
- Dynamic Applications to discover, model, and monitor performance metrics and/or collect configuration data for ancillary UC devices
- Device Classes for each of the ancillary UC devices that the ScienceLogic platform monitors

- Event Policies that are triggered when ancillary UC devices meet certain status criteria
- A device dashboard that displays host resource and interface information about ancillary UC devices

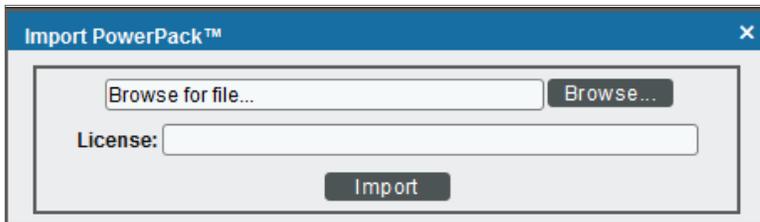
Installing the Cisco: UC Ancillary PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *Cisco: UC Ancillary PowerPack*.

To download and install a PowerPack:

TIP: By default, installing a new version of a PowerPack overwrites all content in that PowerPack that has already been installed on the target system. You can use the **Enable Selective PowerPack Field Protection** setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent new PowerPacks from overwriting local changes for some commonly customized fields. (For more information, see the **System Administration** manual.)

1. Download the PowerPack from the [ScienceLogic Customer Portal](#).
2. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
3. In the **PowerPack Manager** page, click the **[Actions]** button, then select *Import PowerPack*.
4. The **Import PowerPack** dialog box appears:



5. Click the **[Browse]** button and navigate to the PowerPack file.
6. When the **PowerPack Installer** modal page appears, click the **[Install]** button to install the PowerPack.

NOTE: If you exit the **PowerPack Installer** modal page without installing the imported PowerPack, the imported PowerPack will not appear in the **PowerPack Manager** page. However, the imported PowerPack will appear in the **Imported PowerPacks** modal page. This page appears when you click the **[Actions]** menu and select *Install PowerPack*.

Configuring Cisco UC Ancillary Devices for Monitoring

Overview

The following sections describe how to configure ancillary Cisco Unified Communications devices for monitoring by the ScienceLogic platform using the *Cisco: UC Ancillary PowerPack*:

<i>Prerequisites</i>	5
<i>Creating an SNMP Credential</i>	5
<i>Creating an SSH/Key Credential</i>	6

Prerequisites

Before performing the tasks in this chapter, you must have already properly installed and configured the ancillary Cisco UC devices that you want to monitor with the ScienceLogic platform. You must also note the following information, as appropriate, for each of the ancillary UC devices you want to monitor:

- SNMP community string
- Secure Shell (SSH) username and password to monitor Cisco voice components

Creating an SNMP Credential

The ScienceLogic platform uses SNMP to collect information about the devices that can be monitored using the Dynamic Applications in the *Cisco: UC Ancillary PowerPack*. To monitor these devices, you must first define an SNMP credential that enables the ScienceLogic platform to communicate with the devices.

To configure an SNMP credential:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Click **[Create]**.
3. In the drop-down list that appears, select *SNMP Credential*. The **Credential Editor** page appears:

The screenshot shows the 'Credential Editor [22]' window. The title bar includes 'Edit SNMP Credential #22', 'New', and 'Reset' buttons. The form is divided into three sections: 'Basic Settings', 'SNMP V1/V2 Settings', and 'SNMP V3 Settings'.
- **Basic Settings:** Profile Name (SNMP Public V2), SNMP Version ([SNMP V2]), Port (161), Timeout(ms) (1500), Retries (1).
- **SNMP V1/V2 Settings:** SNMP Community (Read-Only) (public), SNMP Community (Read/Write) (empty).
- **SNMP V3 Settings:** Security Name (empty), Security Passphrase (empty), Authentication Protocol (MD5), Security Level (No Authentication / No Encryption), SNMP v3 Engine ID (empty), Context Name (empty), Privacy Protocol (DES), Privacy Protocol Pass Phrase (empty).
At the bottom are 'Save' and 'Save As' buttons.

4. In the **Profile Name** field, type a name for the credential.
5. In the **SNMP Version** field, select *SNMP V2*.
6. In the **SNMP Community (Read Only)** field, type the community string for the device you want to monitor.
7. Optionally, supply values in the other fields in this page. In most cases, you can accept the default values for the other fields.
8. Click **[Save]**.

Creating an SSH/Key Credential

To configure the ScienceLogic platform to monitor Cisco voice devices, you must first create an SSH/Key credential that allows the Dynamic Applications in the *Cisco: UC Ancillary PowerPack* to connect with these devices. An example SSH/Key credential that you can edit for your own use is included in the *Cisco: UC Ancillary PowerPack*.

To create an SSH/Key credential to access Cisco voice devices:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Locate the **Cisco: Dial Peer - Example** credential, and then click its wrench icon (🔧). The **Edit SSH/Key Credential** modal page appears.
3. Type values in the following fields:

The screenshot shows a web interface for editing an SSH/Key credential. The title bar reads 'Edit SSH/Key Credential #64' and includes 'New' and 'Reset' buttons. The main form is titled 'Basic Settings' and contains the following fields:

- Credential Name:** Cisco: Dial Peer - Example
- Hostname/IP:** %D
- Port:** 22
- Timeout(ms):** 5000
- Username:** <USER_NAME>
- Password:** Masked with dots
- Private Key (PEM Format):** A large empty text area.

At the bottom of the form are 'Save' and 'Save As' buttons.

- **Credential Name.** Type a new name for the credential.
 - **Hostname/IP.** Type "%D".
 - **Port.** Type "22".
 - **Username.** Type the administrator username used to connect to the dial peers via SSH.
 - **Password.** Type the password used to connect to the dial peers via SSH.
 - **Private Key (PEM Format).** Leave this field blank.
4. Click **[Save As]**.
 5. When the confirmation message appears, click **[OK]**.

Discovering Cisco UC Ancillary Devices

Overview

The following sections describe the steps required to discover ancillary Cisco Unified Communications devices in the ScienceLogic platform:

- [Discovering Ancillary Cisco UC Devices](#)
- [Manually Aligning Dynamic Applications](#)
- [Viewing Ancillary Cisco UC Devices](#)

Discovering Ancillary Cisco UC Devices

To create and run a discovery session that will discover ancillary Cisco UC devices, perform the following steps:

1. Go to the **Discovery Control Panel** page (System > Manage > Discovery).
2. In the **Discovery Control Panel**, click **[Create]**.

- The **Discovery Session Editor** page appears. In the **Discovery Session Editor** page, define values in the following fields:

The screenshot shows the 'Discovery Session Editor | Editing Session [5]' window. It is divided into several sections:

- Identification Information:** Name: CUBE sim 102, Description: (empty).
- IP and Credentials:**
 - IP Address/Hostname Discovery List:** 10.2.10.102
 - SNMP Credentials:** [SNMP Public V2]
 - Other Credentials:** [Cisco: Dial Peer - sim]
- Detection and Scanning:**
 - Initial Scan Level: [System Default (recommended)]
 - Scan Throttle: [System Default (recommended)]
 - Port Scan All IPs: [System Default (recommended)]
 - Port Scan Timeout: [System Default (recommended)]
 - Detection Method & Port: [Default Method]
 - Interface Inventory Timeout (ms): 600000
 - Maximum Allowed Interfaces: 10000
 - Bypass Interface Inventory:
- Basic Settings:**
 - Discover Non-SNMP:
 - Model Devices:
 - DHCP:
 - Duplication Protection:
 - Collection Server PID: 4
 - Organization: [CUBE]
 - Apply Device Template: [Choose a Template]

Buttons at the bottom include 'Save', 'Save As', and 'Log All' (checked).

- **IP Address/Hostname Discovery List.** Type the IP addresses for the devices you want to discover.
 - **SNMP Credentials.** Select the **SNMP credential** you created for the ancillary devices.
 - **Other Credentials.** Select the **SSH/Key credential** you created for the ancillary devices.
 - **Discover Non-SNMP.** Select this checkbox.
 - **Model Devices.** Select this checkbox.
- Optionally, you can enter values in the other fields on this page. For more information about the other fields on this page, see the **Discovery & Credentials** manual.
 - Click **[Save]** to save the discovery session, and then close the **Discovery Session Editor** window.
 - The discovery session you created appears at the top of the **Discovery Control Panel** page. Click its lightning bolt icon (⚡) to run the discovery session.
 - The **Discovery Session** window appears. When the ancillary devices are discovered, click the device icon (🖨️) to view the **Device Properties** page for each device.

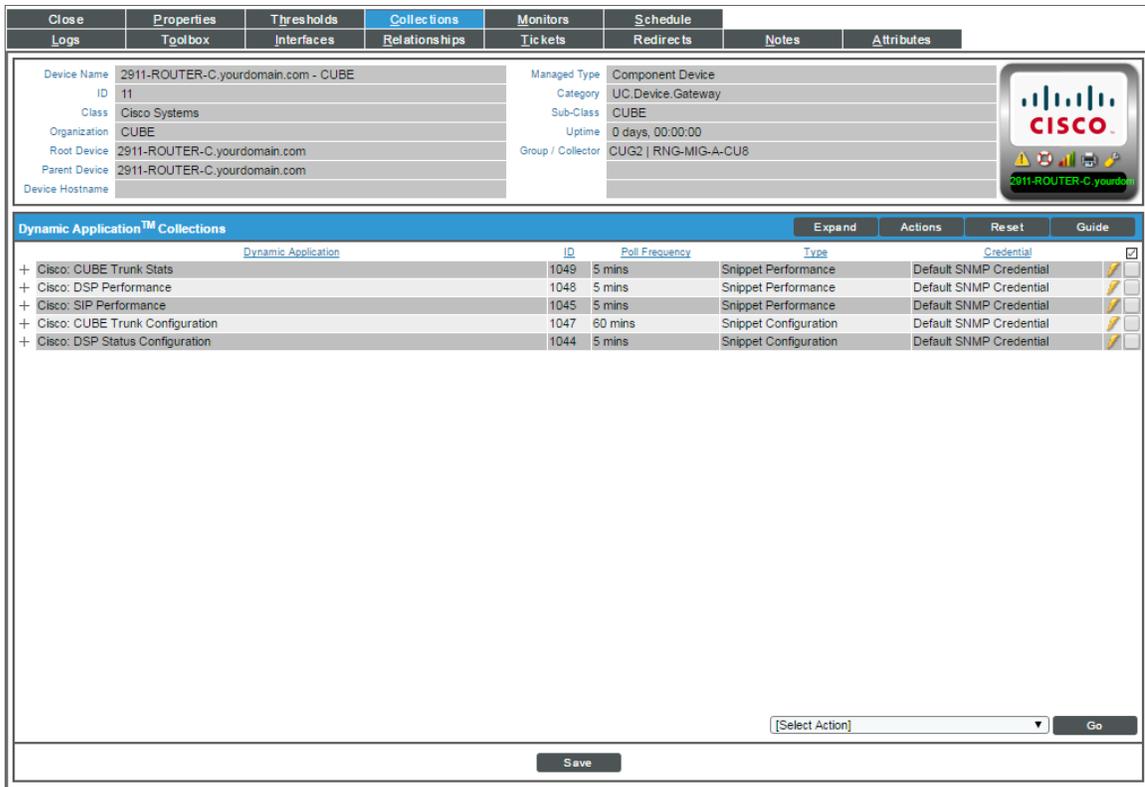
Manually Aligning Dynamic Applications

When you run the discovery session for ancillary UC devices, the ScienceLogic platform automatically aligns the necessary Dynamic Applications to the devices.

To verify that the Dynamic Applications aligned to the devices correctly:

1. After discovery has completed, click the device icon (🖨️) for any of the discovered devices. The **Device Properties** page appears.
2. From the **Device Properties** page, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
3. All applicable Dynamic Applications for the device are automatically aligned during discovery.

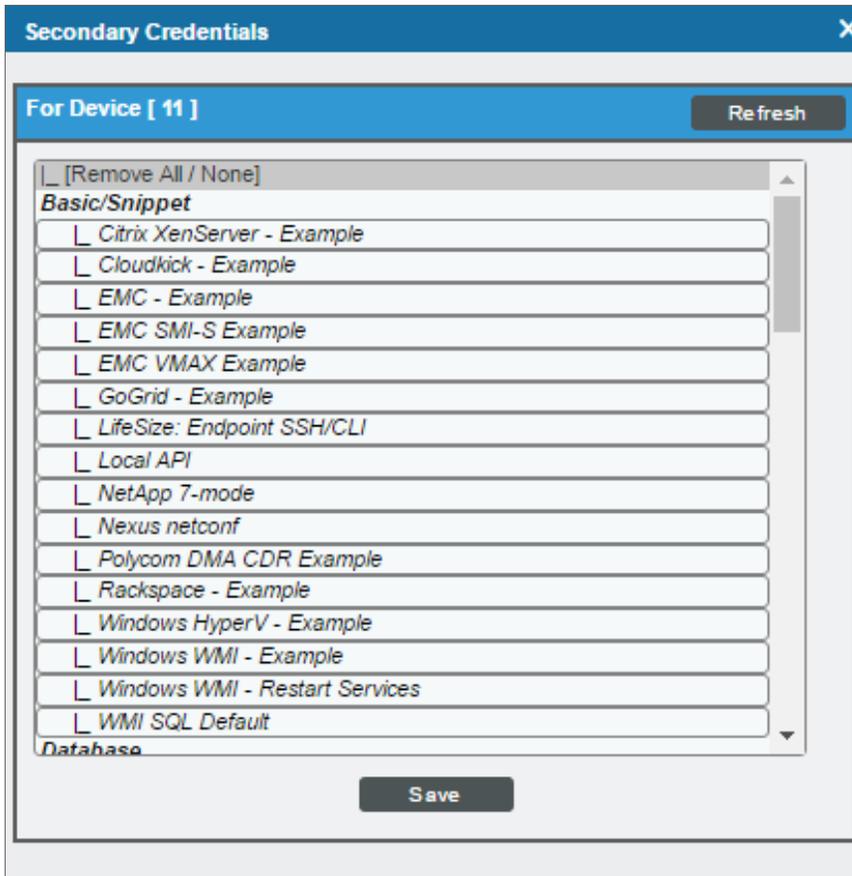
NOTE: It can take several minutes after the discovery session has completed for Dynamic Applications to appear in the **Dynamic Application Collections** page.



If the "Cisco: Dial Peer Voice Summary" or "Cisco: Active Voice Call Legs Performance" Dynamic Applications did not automatically align to a voice device, you might need to manually align the SSH/Key credential to the device and then run discovery again.

To manually align the SSH/Key credential to the device:

1. From the **Device Properties** page (Registry > Devices > wrench icon), click the **[Actions]** button, and then select *Secondary Credentials* from the menu.
2. Select the *SSH/Key credential* you created for the ancillary devices.



NOTE: If there are other credentials (for example, an SNMP credential) already aligned to the device, hold the <Ctrl> or <Command> key when selecting the SSH/Key credential to keep the other credentials aligned to the device as well.

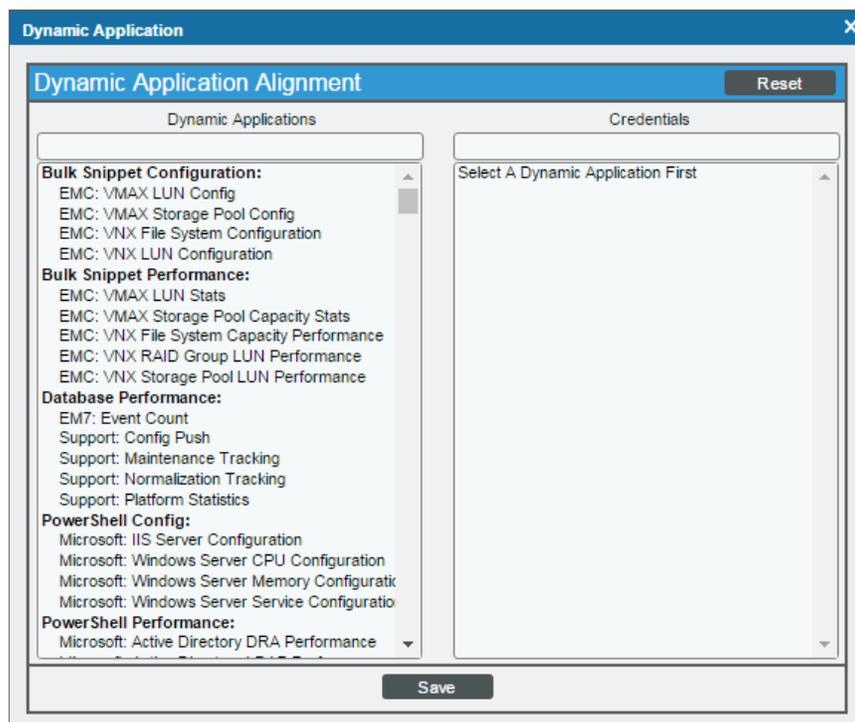
3. Click **[Save]**.
4. Close the **Device Properties** page and go to the **Discovery Control Panel** page (System > Manage > Discovery).

5. Locate the discovery session for ancillary UC devices and click its lightning bolt icon (⚡) to re-run the discovery session.

If any of the other Dynamic Applications did not automatically align to a device during discovery, you can align them manually to the device.

To manually align a Dynamic Application to a device:

1. From the **Dynamic Application Collections** page (Registry > Devices > wrench icon > Collections), click the **[Action]** button and then select *Add Dynamic Application*. The **Dynamic Application Alignment** page appears:



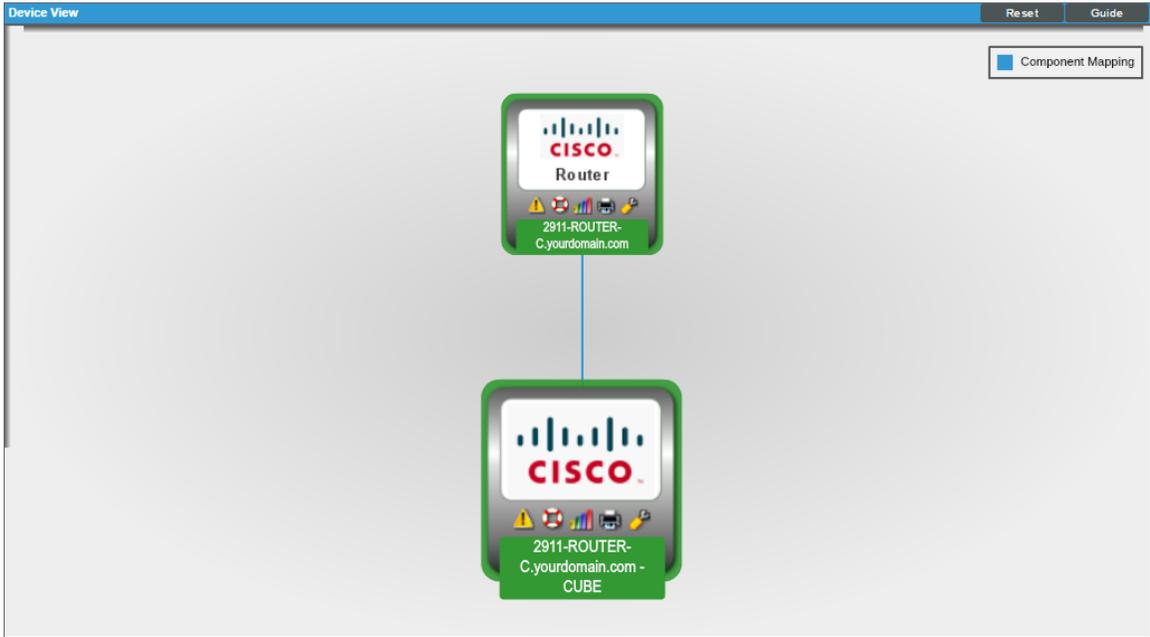
2. In the **Dynamic Applications** field, select the Dynamic Application you want to align.
3. In the **Credentials** field, select one or more of the [credentials you created for the ancillary UC devices](#).
4. Click **[Save]**.
5. Repeat steps 1-4 for any other unaligned Dynamic Applications.

Viewing Ancillary Cisco UC Devices

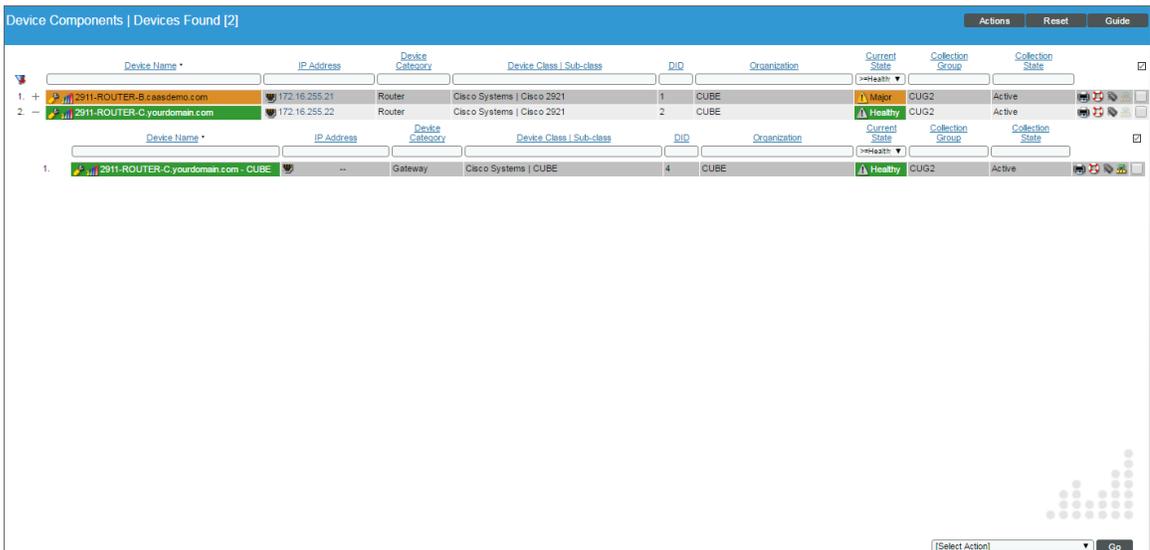
When the ScienceLogic platform discovers your ancillary UC devices, the platform creates component devices that represent each component in your ancillary UC system.

In addition to the **Device Manager** page, you can view component devices in the following places in the user interface:

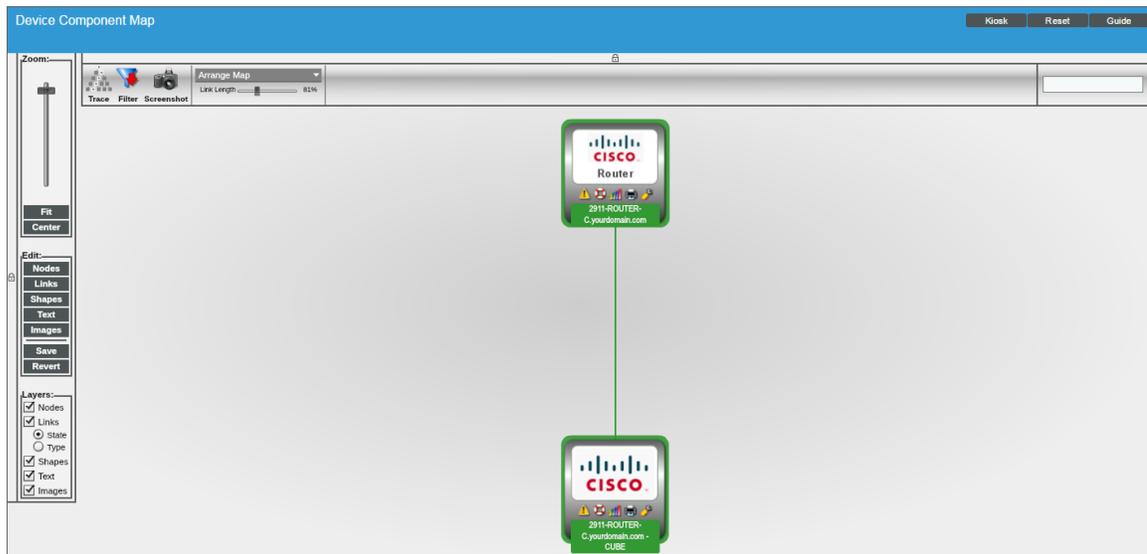
- The **Device View** modal page (click the bar-graph icon [img alt="bar-graph icon"] for a device, and then click the **Topology** tab) displays a map of the selected device and all of the devices with which it has parent-child relationships. Double-clicking any of the devices reloads the page with the selected device as the primary device:



- The **Device Components** page (Registry > Devices > Device Components) displays a list of all root devices and component devices discovered by the ScienceLogic platform, in an indented view, so you can easily view the hierarchy and relationships between child devices, parent devices, and root devices. To view the component devices associated with your ancillary UC devices, find a device cluster and click its plus icon (+):



- The **Component Map** page (Views > Device Maps > Components) allows you to view devices by root node and view the relationships between root nodes, parent components, and child components in a map. This makes it easy to visualize and manage root nodes and their components. The ScienceLogic platform automatically updates the **Component Map** as new component devices are discovered. The platform also updates each map with the latest status and event information. To view the map for your ancillary UC devices, go to the **Component Map** page and select a map from the list in the left NavBar. To learn more about the **Component Map** page, see the **Views** manual.



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