Monitoring Cisco Unified Communications Ancillary Devices

Cisco: UC Ancillary PowerPack version 103

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Chapter 1

Introduction

Overview

This manual describes how to monitor Cisco UC Ancillary devices in SL1 using the *Cisco: UC Ancillary* PowerPack.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon ( ).

The following sections provide an overview of ancillary Cisco UC devices and the *Cisco: UC Ancillary* PowerPack:

This chapter covers the following topics:

What are Ancillary Cisco UC Devices? 2
What Does the Cisco: UC Ancillary PowerPack Monitor? 2
Installing the Cisco: UC Ancillary PowerPack 2

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What are Ancillary Cisco UC Devices?

SL1 enables you to monitor ancillary Cisco UC devices, including Cisco Unified Border Element (CUBE)-enabled devices and Cisco Emergency Responder.

CUBE is a Session Border Controller that extends Session Initiation Protocol-based voice and video connectivity between networks. It can run on a variety of Cisco routers or can be deployed virtually.

Emergency Responder supplements the emergency 9-1-1 functionality offered by Cisco Unified Communications Manager (CUCM) by helping CUCM pinpoint the location of emergency callers.

What Does the Cisco: UC Ancillary PowerPack Monitor?

To monitor ancillary UC devices using SL1, 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 SL1 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.

TIP: By default, installing a new version of a PowerPack overwrites all content from a previous version of 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.)

IMPORTANT: The minimum required MySQL version is 5.6.0.

To download and install the PowerPack:

1. Search for and download the PowerPack from the **PowerPacks** page (Product Downloads > PowerPacks & SyncPacks) at the ScienceLogic Support Site.
2. In SL1, go to the **PowerPacks** page (System > Manage > PowerPacks).

3. Click the **[Actions]** button and choose *Import PowerPack*. The **Import PowerPack** dialog box appears.
4. Click **[Browse]** and navigate to the PowerPack file from step 1.
5. Select the PowerPack file and click **[Import]**. The **PowerPack Installer** modal displays a list of the PowerPack contents.
6. Click **[Install]**. The PowerPack is added to the **PowerPacks** page.

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

Chapter 2

Configuration and Credentials

Overview

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon ( ).

The following sections describe how to configure Cisco: Viptela devices for monitoring by SL1 using the *Cisco: Viptela* PowerPack:

This chapter covers the following topics:

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Creating an SNMP Credential 5
Creating an SSH/Key Credential 5

Prerequisites for Monitoring Ancillary Cisco Unified Communications Devices

To configure SL1 to monitor ancillary Cisco Unified Communications (UC) devices using the *Cisco: UC Ancillary* PowerPack, you must have already properly installed and configured the ancillary Cisco UC devices that you want to monitor. 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

SL1 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 SL1 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.
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 SL1 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:
    - ***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.

NOTE: The private key can have a maximum of 64 characters per line. Therefore, you cannot use keys in the OpenSSH format, because that format uses 70 characters per line. When you attempt to save the credential, SL1 will validate that the private key entered is in the correct format. You will be able to save the credential only if the private key is correctly formatted.

4. Click **[Save As]**.
5. When the confirmation message appears, click **[OK]**.

Chapter 3

Discovery

Overview

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon ( ).

The following sections describe how to discover ancillary Cisco Unified Communications devices for monitoring by SL1 using the *Cisco: UC Ancillary* PowerPack:

This chapter covers the following topics:

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Manually Aligning Dynamic Applications 8
Viewing Ancillary Cisco UC Devices 9

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 > Classic Discovery).
2. In the **Discovery Control Panel**, click **[Create]**.
3. The **Discovery Session Editor** page appears. In the **Discovery Session Editor** page, define values in the following fields:

    - ***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.

4. 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.
5. Click **[Save]** to save the discovery session, and then close the **Discovery Session Editor** window.
6. 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.
7. 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, SL1 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 physical router running the Cube feature set and then run discovery again.

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

1. Go to the Device Manager page (Registry > Devices > Device Manager).
2. Locate the physical router running the Cube feature set and click its wrench icon ( ). The **Device Properties** page appears.
3. Select the SSH/Key credential you created for ancillary UC 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 > Classic 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:

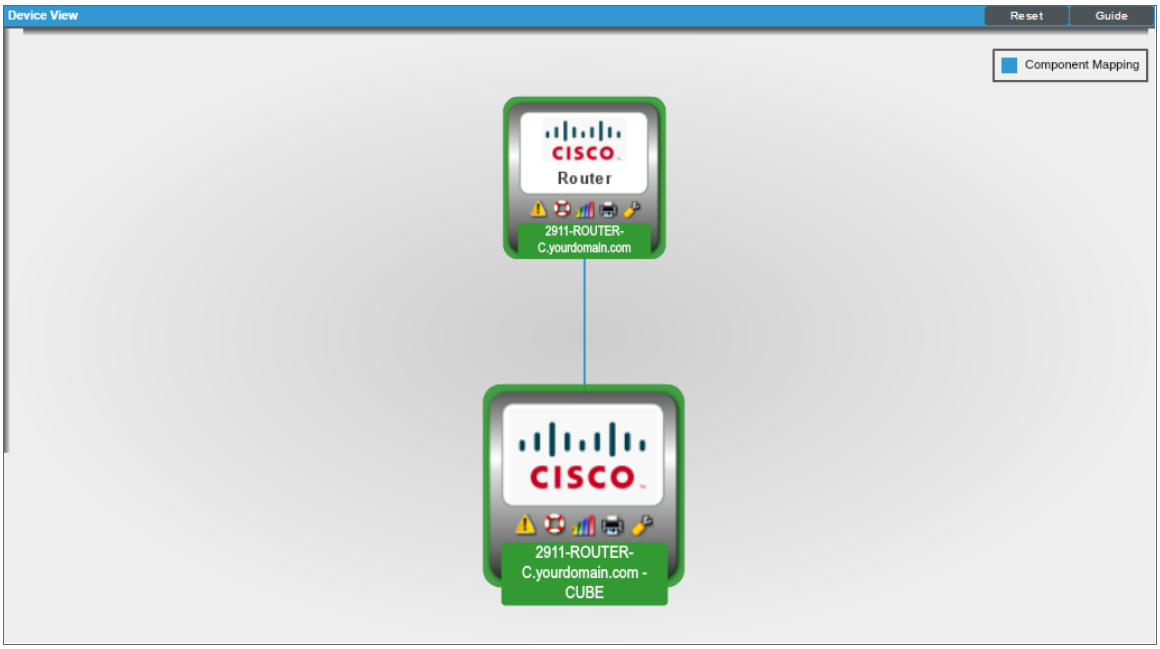
1. From the **Dynamic Application Collections** page (Registry > Devices > wrench icon > Collections), click the **[Action]** button and then select *Add Dynamic Application*. The **Dynamic Application Alignment** page appears.
2. In the ***Dynamic Applications*** field, select the Dynamic Application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

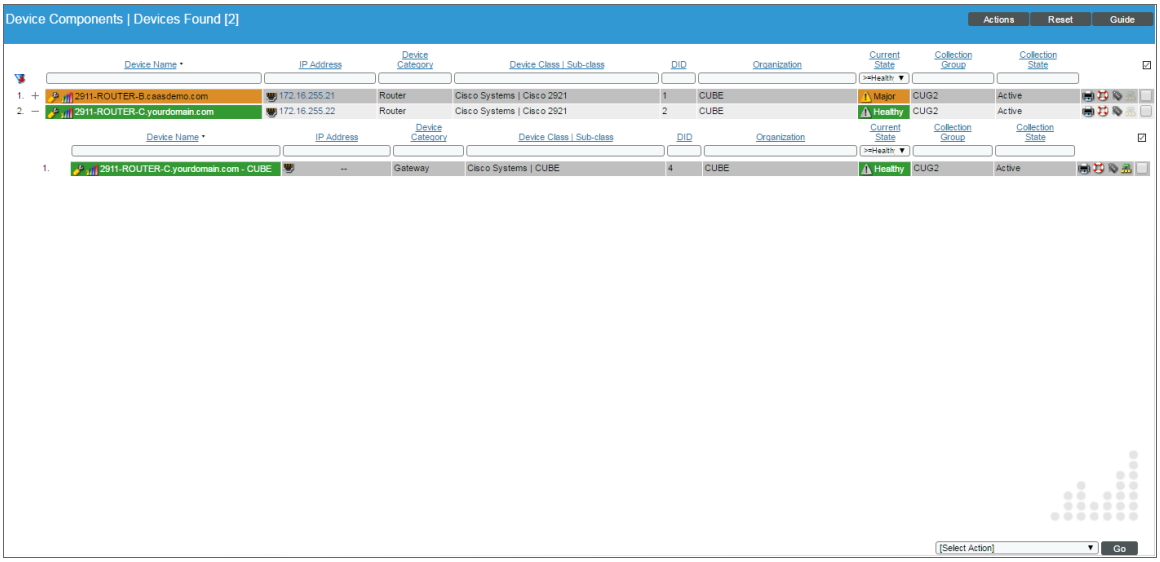
When SL1 discovers your ancillary UC devices, SL1 creates component devices that represent each component in your ancillary UC system.

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

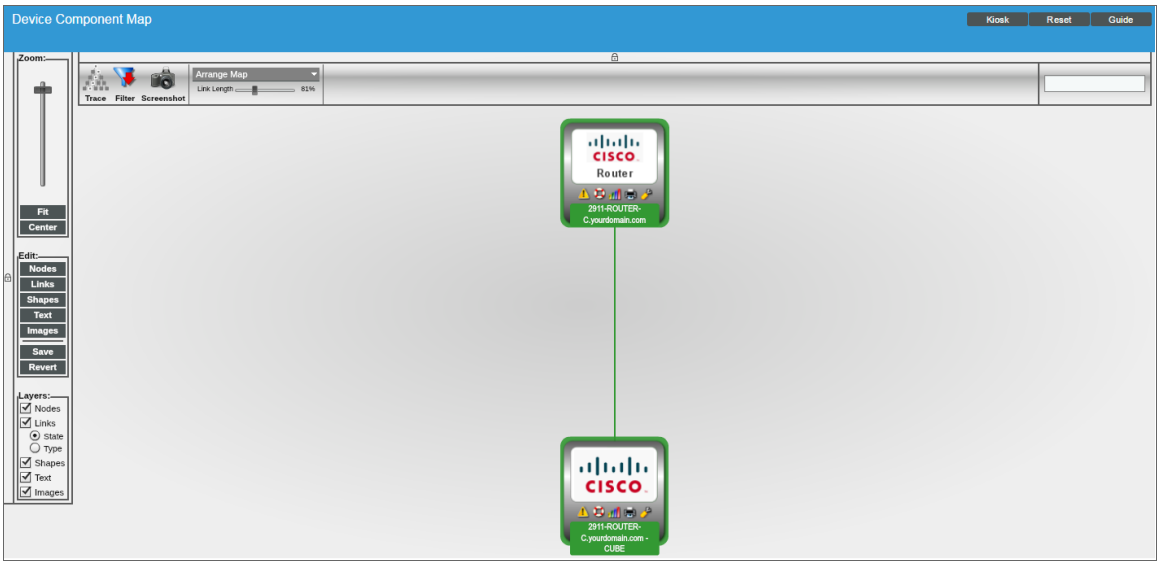
- The **Device View** modal page (click the bar-graph icon [ ] for a device, and then click the **Topology** tab) displays a map of the selected device and all of the devices with which it has parent-child relationships. Double-clicking any of the devices reloads the page with the selected device as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



- The **Device Components** page (Registry > Devices > Device Components) displays a list of all root devices and component devices discovered by SL1, 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 (Classic Maps > 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. SL1 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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