



Monitoring Silver Peak

Silver Peak PowerPack Beta version 100, Document Revision 1

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Chapter

1

Introduction

Overview

This manual describes how to monitor Silver Peak devices in SL1 using the *Silver Peak PowerPack*.

The following sections provide an overview of Silver Peak and the *Silver Peak PowerPack*:

This chapter covers the following topics:

<i>What is Silver Peak?</i>	3
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What is Silver Peak?

Silver Peak is an SD-WAN management solution that captures data and information from the Silver Peak Unity Orchestrator about devices connected through Unity EdgeConnect. Users can measure the performance and availability of these devices and the connected network, which helps determine potential service delivery issues and maintain compliance.

What Does the Silver Peak PowerPack Monitor?

To monitor Silver Peak using SL1, you must install the *Silver Peak* PowerPack. This PowerPack enables you to discover, model, and collect data about Silver Peak Unity Orchestrator and devices connected via Unity EdgeConnect.

The *Silver Peak* PowerPack includes:

- A sample credential you can use as a template to create SOAP/XML credentials to connect to the Unity Orchestrator you want to monitor
- Dynamic Applications to discover, model, and monitor performance metrics, and to collect configuration data for Unity Orchestrator and connected devices
- Device Classes for each of the Silver Peak devices that SL1 monitors
- Event Policies and corresponding alerts that are triggered when New Relic services meet certain status criteria
- A device template for Silver Peak Unity Orchestrator
- A dashboard that displays key metrics for each device

Installing the Silver Peak PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *Silver Peak* 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.)

To download and install a PowerPack:

1. Download the PowerPack from the ScienceLogic Support Site at <https://support.sciencelogic.com/s/powerpacks>.
2. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
3. In the **PowerPack Manager** page, click the **[Actions]** button, then select *Import PowerPack*. The **Import PowerPack** dialog box appears.
4. Click the **[Browse]** button and navigate to the PowerPack file.
5. When the **PowerPack Installer** modal appears, click the **[Install]** button to install the PowerPack.

NOTE: If you exit the **PowerPack Installer** modal 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. This page appears when you click the **[Actions]** menu and select *Install PowerPack*.

Chapter

2

Configuration and Discovery

Overview

The following sections describe how to configure and discover New Relic services for monitoring by SL1 using the *Silver Peak PowerPack*:

This chapter covers the following topics:

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Prerequisites for Monitoring Silver Peak

To configure the SL1 system to monitor Silver Peak Unity Orchestrator and edge devices using the *Silver Peak PowerPack*, you must have the following information about the Unity Orchestrator that you want to monitor:

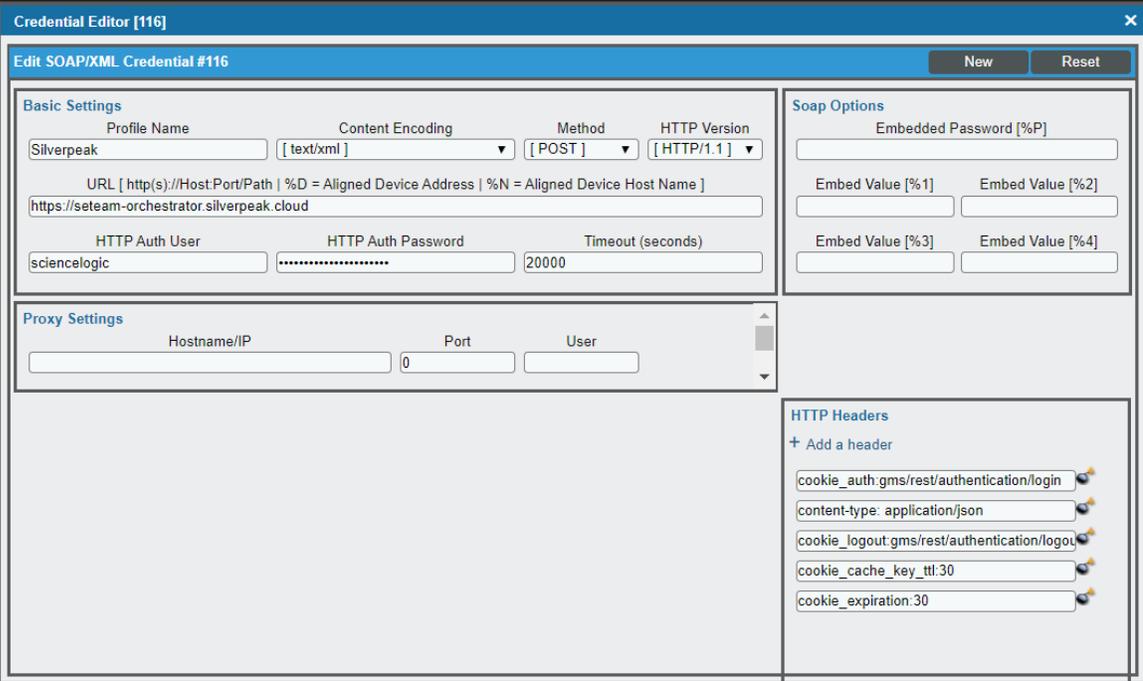
- The IP address or URL of your Orchestrator
- The username and password for the administrator account on your Orchestrator

Creating a SOAP/XML Credential for Silver Peak

To configure SL1 to monitor Silver Peak, you must create a SOAP/XML credential. This credential allows the Dynamic Applications in the *Silver Peak* PowerPack to communicate with your Silver Peak Unity Orchestrator.

To configure a SOAP/XML credential to access the Orchestrator:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Locate the **Silver Peak Cookie Example** credential, and then click its wrench icon (). The **Edit SOAP/XML Credential** modal appears.
3. Enter values in the following fields:



Basic Settings

- **Profile Name.** Enter a new name for the credential.
- **URL.** Enter the URL or IP address for the Orchestrator
- **HTTP Auth User.** Enter the username for the user account on your Orchestrator.
- **HTTP Auth Password.** Enter the password for the user account on your Orchestrator.

NOTE: As of version 9.2 of the Orchestrator, the API user for the credential in SL1 must be a "non-RBAC" user with read-only permissions and no user role applied.

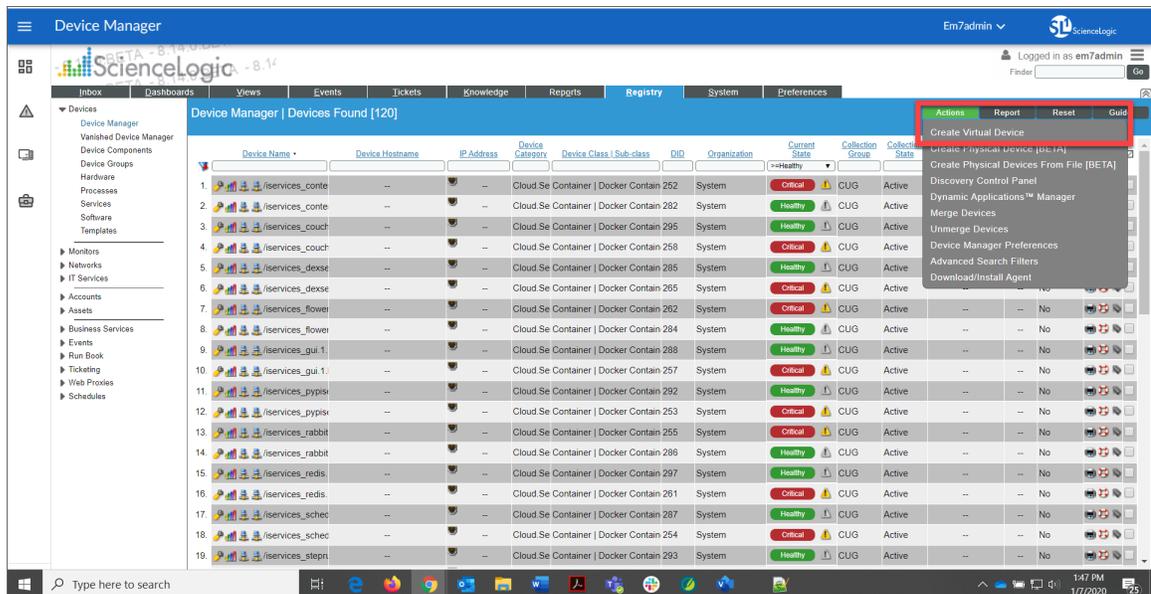
4. Add the following **HTTP Headers**:
 - cookie_auth:gms/rest/authentication/login
 - content-type: application/json
 - cookie_logout:gms/rest/authentication/logout
5. For all other fields, use the default values.
6. Click the **[Save As]** button.

Creating a Virtual Device for the Orchestrator

To configure SL1 to monitor Silver Peak, you must create a virtual device to represent your Orchestrator. The PowerPack includes a Device Class ("Silver Peak | Unity Orchestrator") for the Orchestrator.

To create a virtual device, you must complete the following tasks:

1. Go to the **Device Manager** page (Registry > Devices > Device ManagerDevices > Device Manager).



2. From the **[Actions]** menu, select *Create Virtual Device*.
3. The **Create Virtual Device** modal appears.

4. Supply a value in each of the following fields:
 - **Device Name.** Name of the virtual device. Can be any combination of alphanumeric characters, up to 32 characters in length.
 - **Organization.** Organization to associate with the virtual device. Select from the drop-down list of all organizations in SL1.
 - **Device Class.** The device class to associate with the virtual device. Select *Silver Peak | Unity Orchestrator* from the drop-down list of device classes.
 - **Collector.** Specifies which instance of SL1 will perform auto-discovery and gather data from the device. Can also specify a "virtual" poller. Select from the drop-down list of all collectors in SL1.
5. Select the **[Add]** button to save the new virtual device.

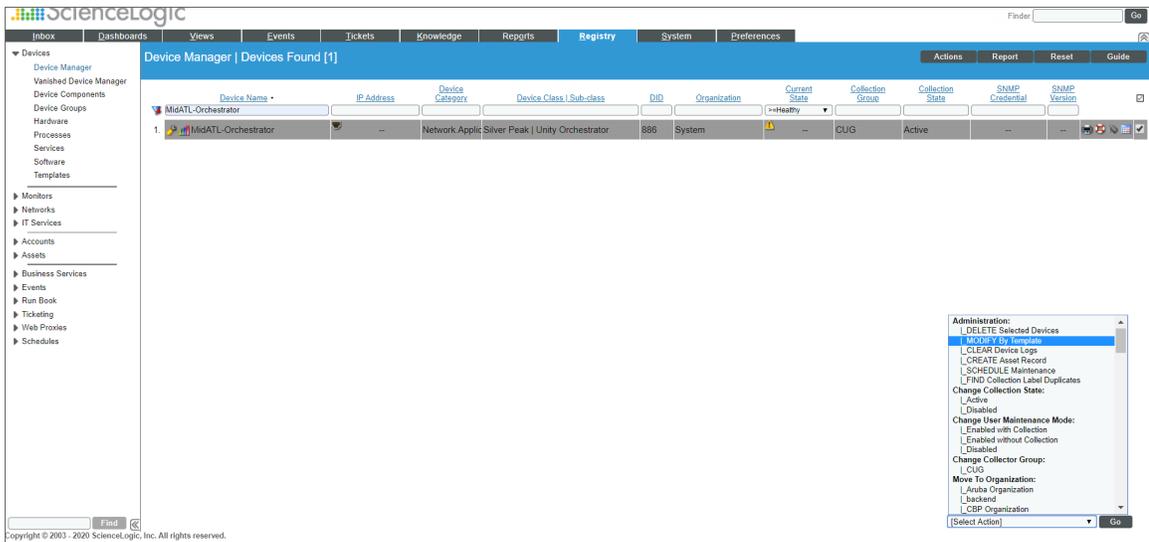
NOTE: For more information about virtual devices, see *Virtual Devices* in the Device Management manual.

Aligning the Virtual Device with the Device Template

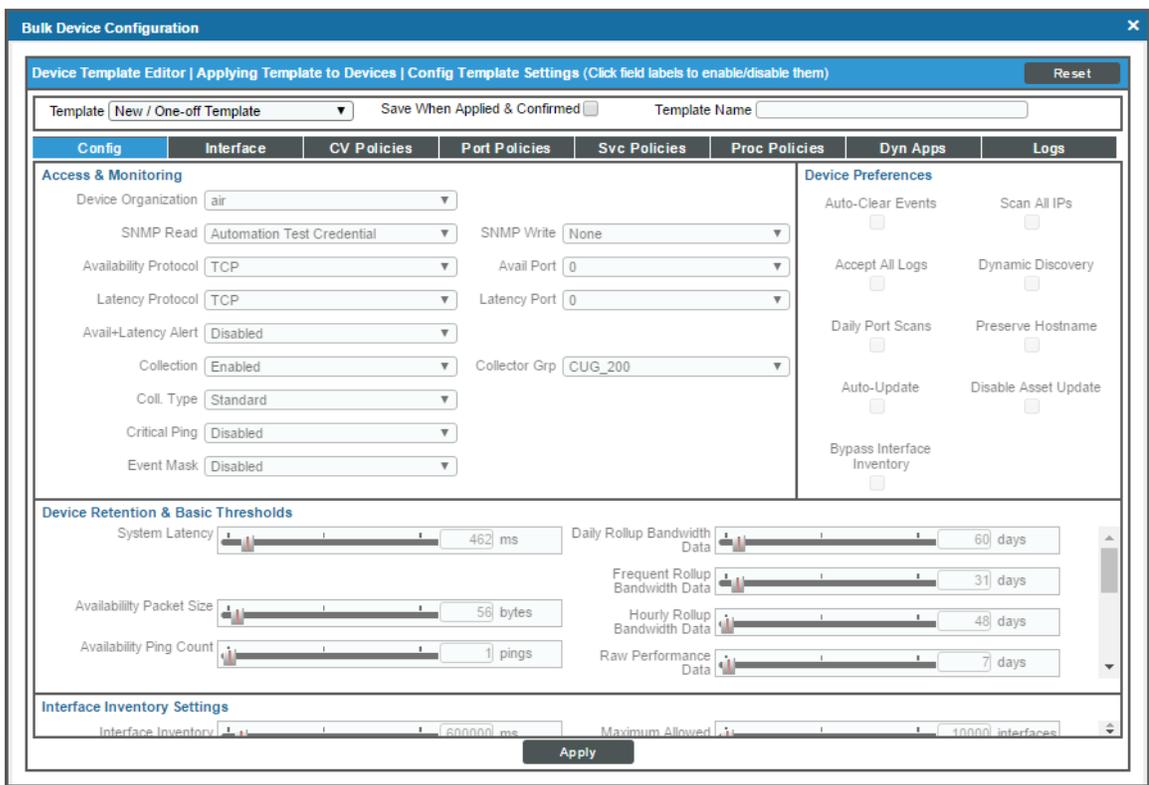
When SL1 discovers a device, SL1 applies some default configuration settings to that device. You can edit these settings or use a device template to edit the settings for one or more devices. In this step, you will use the "Silver Peak: Orchestrator Template" to apply a configuration to your Silver Peak Unity Orchestrator.

To use a device template to change the configuration of one or more devices:

1. Go to the **Device Manager** page (Registry > Devices > Device Manager).
2. In the **Device Manager** page, select the checkbox for your Orchestrator virtual device.

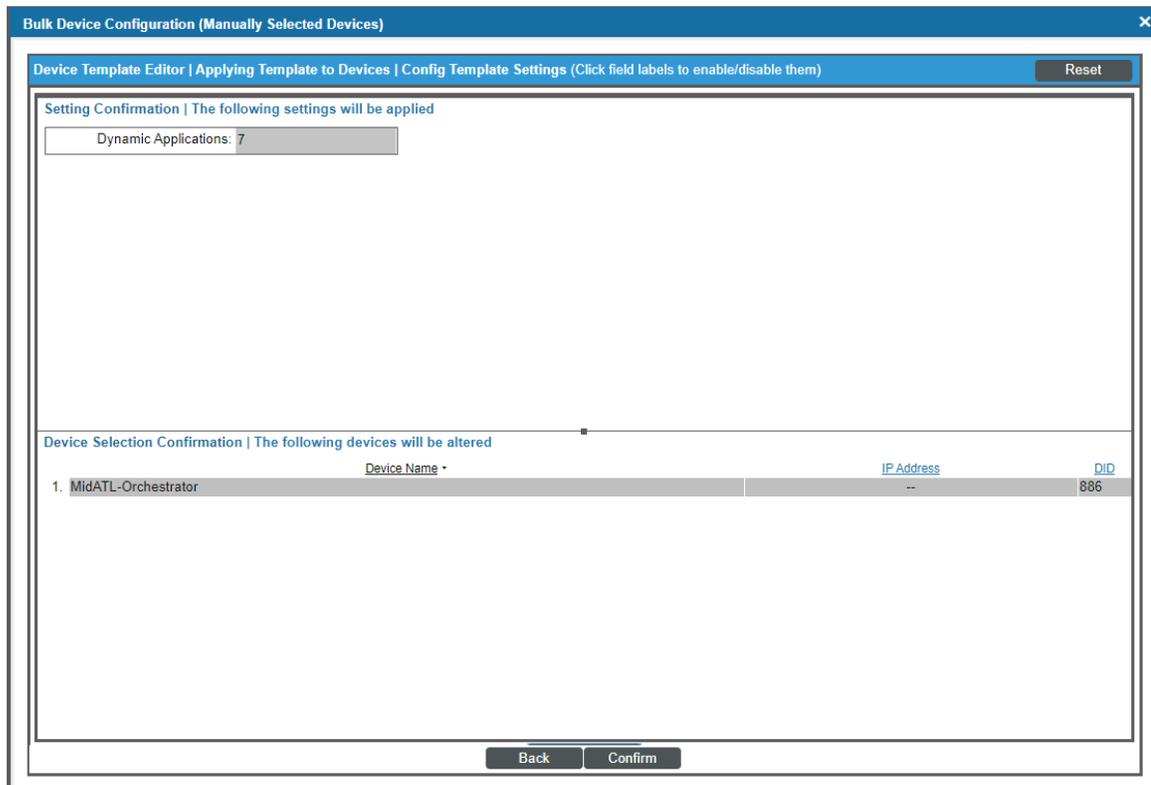


3. In the **Select Actions** field, in the lower right, select the option *Modify by Template*. Click the **[Go]** button.
4. The **Bulk Device Configuration** page appears.



- In the **Template** field, select "Silver Peak: Orchestrator Template".
- **Save When Applied & Confirmed**. From the **Bulk Device Configuration** page, you can edit the value in any of the fields in any of the tabs of the device template.

- If you select this field, any changes you make to fields in the **Bulk Device Configuration** page will be saved to the template.
 - If you don't select this field, you can edit the values in any of the fields, and the edited values won't be saved in the device template, but will be applied to the device group.
5. Click the **[Apply]** button to apply the device template and any changed field values to the selected device.
 6. The **Device Setting Confirmation** page appears.



- In this page, you can view any settings in the device template that are different from SL1 default settings.
 - You can click a field to disable it. When you disabled a field, its value will not be applied to the selected device group or selected devices.
 - You can also view a list of devices to which the device template will be applied.
7. To approve the changes and the device list, click the **[Confirm]** button in the **Device Setting Confirmation** page.
 8. The device template will be applied to the selected device.

Verifying Discovery and Dynamic Application Alignment

To verify that SL1 has automatically aligned the correct Dynamic Applications during discovery:

1. After discovery has completed, click the device icon for the Silver Peak Unity Orchestrator. From the **Device Properties** page for the Orchestrator, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
2. All applicable Dynamic Applications for the service 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.

The screenshot shows the 'Dynamic Application Collections' page in the Silver Peak Unity Orchestrator. The page is divided into several sections:

- Navigation Tabs:** Close, Properties, Thresholds, Collections (selected), Monitors, Schedule, Logs, Toolbox, Interfaces, Relationships, Tickets, Redirects, Notes, Attributes.
- Device Information:**
 - Device Name: silverpeakbigsystem
 - ID: 655
 - Class: Silver Peak
 - Organization: System
 - Device Hostname: [empty]
 - Managed Type: Virtual Device
 - Category: Network Application
 - Sub-Class: Unity Orchestrator
 - Uptime: 0 days, 00:00:00
 - Group / Collector: CUG | xsubieta-26
- Dynamic Application™ Collections Table:**

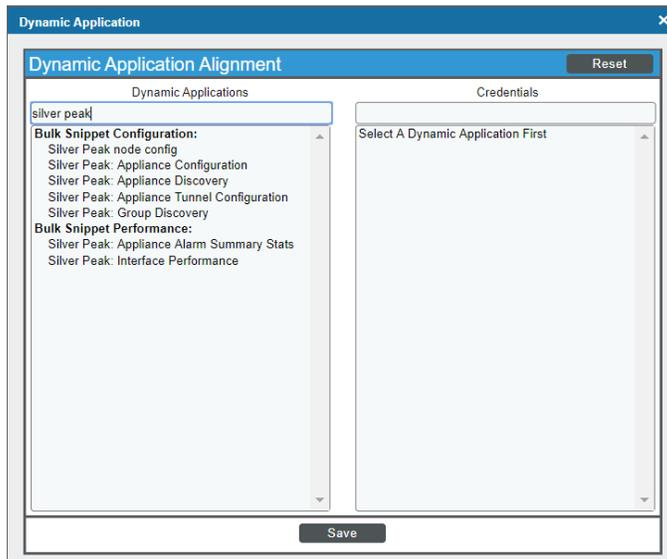
Dynamic Application	ID	Poll Frequency	Type	Credential	
+ REST: Performance Metrics Monitor	1680	1440 mins	Snippet Performance	Silverpeak	<input checked="" type="checkbox"/>
+ Silver Peak: Appliance Alarms	1678	5 mins	Snippet Configuration	Silverpeak	<input type="checkbox"/>
+ Silver Peak: Orchestrator Alarm Summary Stats	1677	5 mins	Bulk Snippet Performance	Silverpeak	<input type="checkbox"/>
+ Silver Peak: Orchestrator Performance	1676	5 mins	Bulk Snippet Performance	Silverpeak	<input type="checkbox"/>
+ Silver Peak: Orchestrator Alarms	1679	5 mins	Bulk Snippet Configuration	Silverpeak	<input type="checkbox"/>
+ Silver Peak: Orchestrator Configuration	1675	5 mins	Bulk Snippet Configuration	Silverpeak	<input type="checkbox"/>
+ Silver Peak: Root Group Discovery	1673	15 mins	Bulk Snippet Configuration	Silverpeak	<input type="checkbox"/>
- Actions:** Expand, Actions, Reset, Guide.
- Footer:** Copyright © 2003 - 2020 ScienceLogic, Inc. All rights reserved.

You should see the following Dynamic Applications aligned to the New Relic service:

- REST: Performance Metrics Monitor
- Silver Peak: Appliance Alarms
- Silver Peak: Orchestrator Alarm Summary Stats
- Silver Peak: Orchestrator Performance
- Silver Peak: Orchestrator Alarms
- Silver Peak: Orchestrator Configuration
- Silver Peak: Root Group Discovery

If the listed Dynamic Applications have not been automatically aligned during discovery, or you want to align more Dynamic Applications, you can align them manually. To do so, perform the following steps:

1. Click the **[Action]** button, and then select *Add Dynamic Application*. The **Dynamic Application Alignment** page appears:

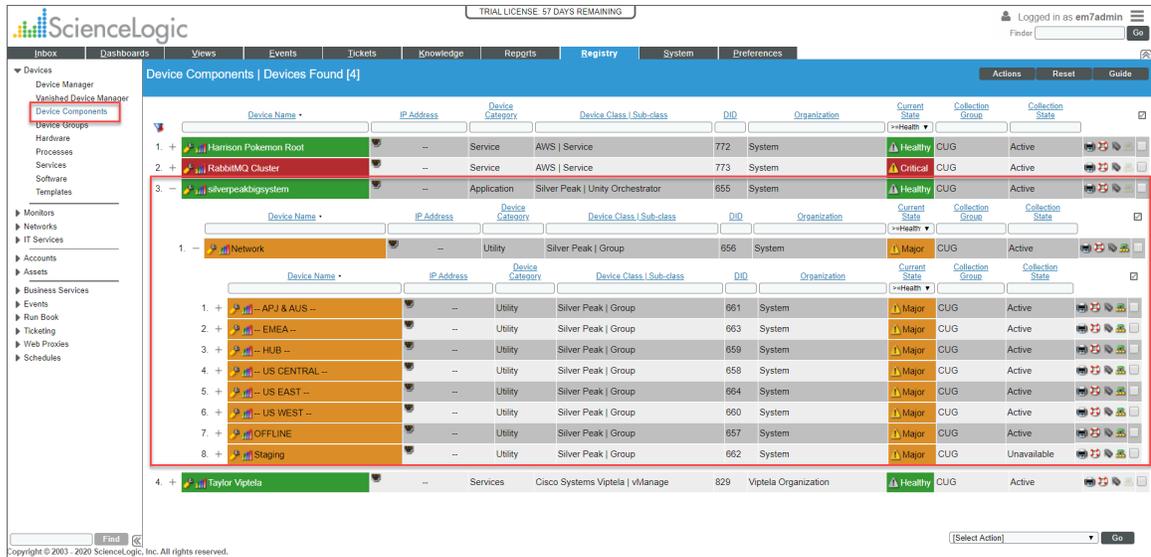


2. In the **Dynamic Applications** field, select the Dynamic Application you want to align. You can narrow the search, as shown in the example above.
3. In the **Credentials** field, select the credential specified in the table.
4. Click the **[Save]** button.
5. Repeat steps 1-4 for any other unaligned Dynamic Applications.

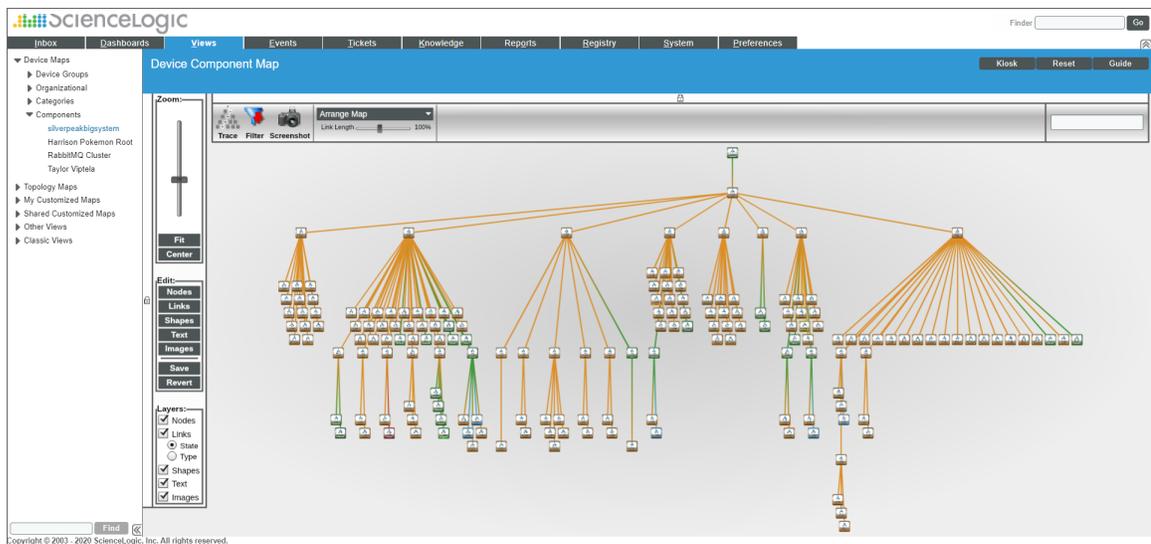
Viewing Silver Peak Devices

In addition to the **Device Manager** page (Registry > Devices > Device Manager), you can view the Silver Peak Unity Orchestrator and all connected devices in the following places in the user interface:

- 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 the Orchestrator, find the Orchestrator 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 the Orchestrator, go to the **Component Map** page and select the map from the list in the left navigation pane. To learn more about the **Component Map** page, see the **Views** manual.



Troubleshooting the Silver Peak PowerPack

This section includes troubleshooting resources and procedures to use with the Silver Peak PowerPack.

CSRF Token Check in Silver Peak

The error message "[REST-PACK]: Critical - AID 2224: Unable to communicate with API: 401 Client Error: Unauthorized. App Name: Silver Peak: Root Group Discovery" occurs when executing the "Silver Peak: Root Group Discovery" Dynamic Application. Silver Peak has a default setting enabled called "Enforce CSRF Token Check" that requires a token in the headers of the API request that SL1 makes to the orchestrator, but version 100 of the Silver Peak PowerPack does not support this.

Use cURL commands to correctly identify this issue:

1. `curl -X POST -H "Content-Type: application/json; charset=UTF-8" -k -d '{"user": "xxxxxx", "password": "xxxxxxxxxxxxxxxxxxxx"}' --cookie-jar /tmp/silverpeak-cookie-test https://URL:443/gms/rest/authentication/login`
2. `curl --cookie /tmp/silverpeak-cookie-test -X GET "https://URL:443/gms/rest/gms/group/root" --insecure`

The error message "Unable to validate CSRF Token" will display when the second command is executed. In order to disable this setting and allow the Silver Peak PowerPack to function correctly:

1. In Silver Peak Orchestrator, go to the **Advanced Security Settings** page (Configuration > Advanced Security Settings).
2. De-select the **Enforce CSRF Token Check** option.
3. Click **Save**.

Chapter

3

Dashboards

Overview

The following section describes the device dashboards that are included in the *Silver Peak* PowerPack:

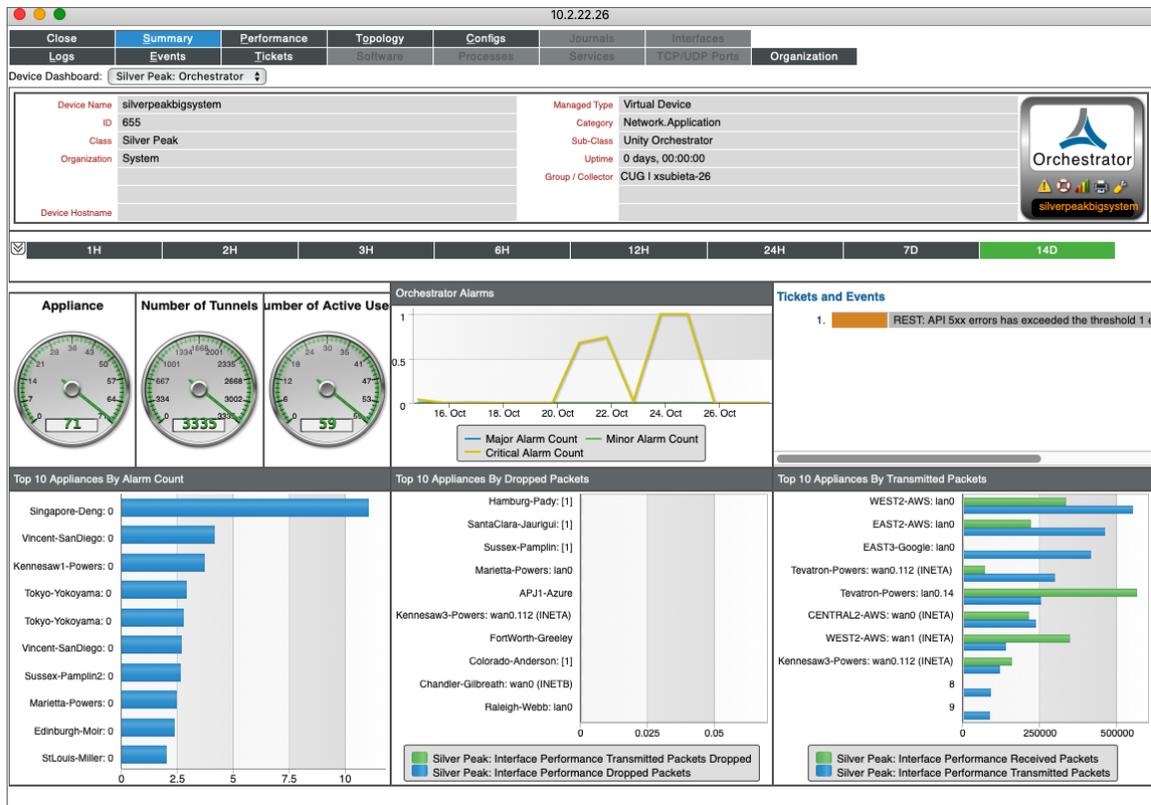
This chapter covers the following topics:

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Device Dashboards

The *Silver Peak* PowerPack includes dashboards that provide summary information for data collected from Silver Peak Unity Orchestrator and appliances.

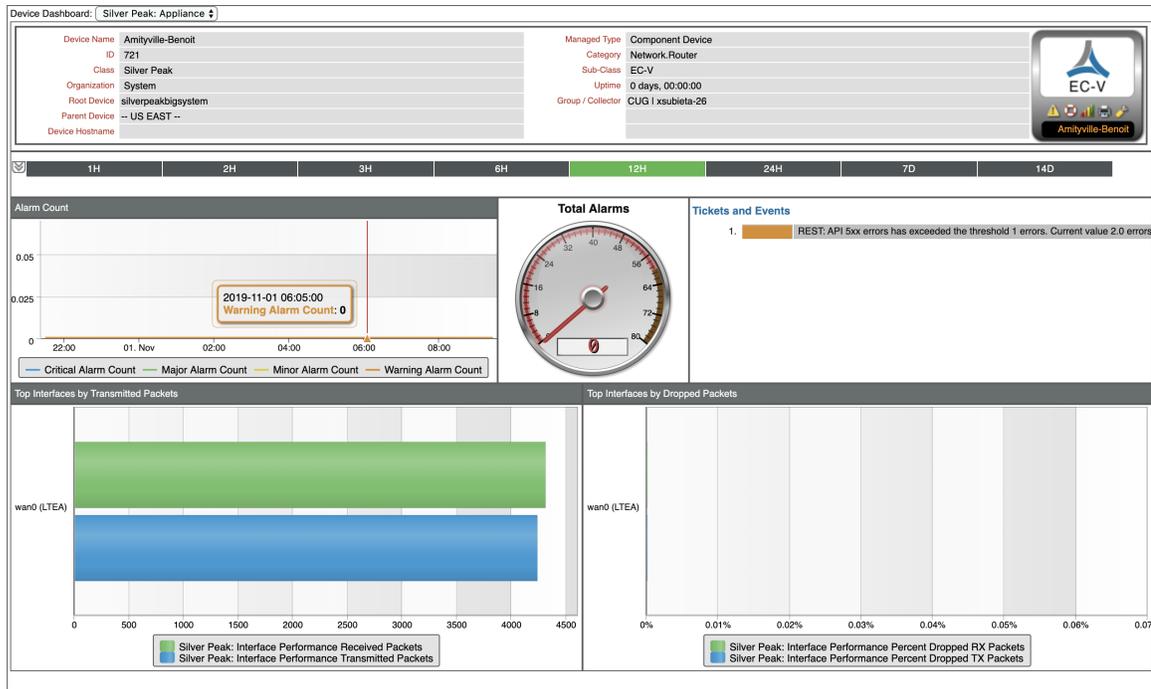
Silver Peak Orchestrator Dashboard



The Silver Peak Orchestrator Dashboard displays the following information:

- Orchestrator Alarms
- Tickets and Events
- Count of Appliances, Tunnels, and Active Users
- Top 10 Appliances by Alarm Count
- Top 10 Appliances by Dropped Packets
- Top 10 Appliances by Transmitted Packets

Silver Peak Appliances Dashboard



The Silver Peak Appliance device dashboard displays the following information for the appliance:

- Alarm Count
- Total Alarms
- Tickets and Events
- Top Interfaces by Transmitted Packets
- Top Interfaces by Dropped Packets

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ScienceLogic

800-SCI-LOGIC (1-800-724-5644)

International: +1-703-354-1010