Monitoring Dell EMC VMAX and PowerMax with Unisphere API

Dell EMC: VMAX and PowerMax Unisphere API PowerPack version 200

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Chapter 1

Introduction

Overview

This manual describes how to monitor Dell EMC VMAX and PowerMax systems in the ScienceLogic platform using the *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack.

The following sections provide an overview of the *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack:

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What Does the Dell EMC: VMAX and PowerMax Unisphere API PowerPack Monitor?

To monitor Dell EMC VMAX and PowerMax storage systems using the ScienceLogic platform, you must install the *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack, which enables you to discover, model, and collect data about VMAX and PowerMax storage arrays and their components using the Unisphere REST API.

NOTE: For information about the *EMC: VMAX* PowerPack, which uses a Dell EMC SMI-S Provider to monitor VMAX systems, see the ***Monitoring Dell EMC VMAX*** manual.

The *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack includes:

- An example Credential you can use to create SOAP/XML credentials to connect to your Dell EMC VMAX or PowerMax system
- Dynamic Applications to discover and monitor your VMAX or PowerMax system
- Device Classes for each type of device in your VMAX or PowerMax system monitored by the ScienceLogic platform
- Event Policies and corresponding alerts that are triggered when devices in your VMAX or PowerMax system meet particular criteria

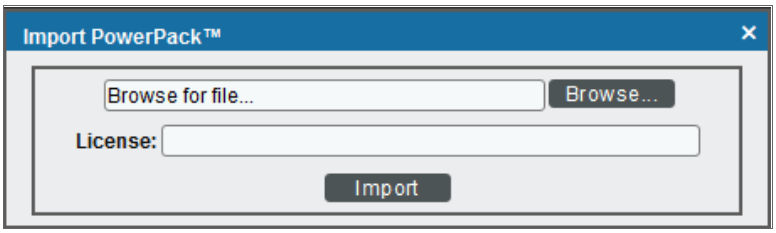
Installing the Dell EMC: VMAX and PowerMax Unisphere API PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *Dell EMC: VMAX and PowerMax Unisphere API* 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.)

To download and install a PowerPack:

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*.

Chapter 2

Monitoring Dell EMC VMAX and PowerMax Storage Systems

Overview

The following sections describe how to configure and discover Dell EMC VMAX and PowerMax systems for monitoring by the ScienceLogic platform using the *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack:

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Prerequisites for Monitoring Dell EMC VMAX and PowerMax Systems

Before you can monitor Dell EMC VMAX and PowerMax systems using the *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack, you must have the following information about the Unisphere API that has already been properly configured:

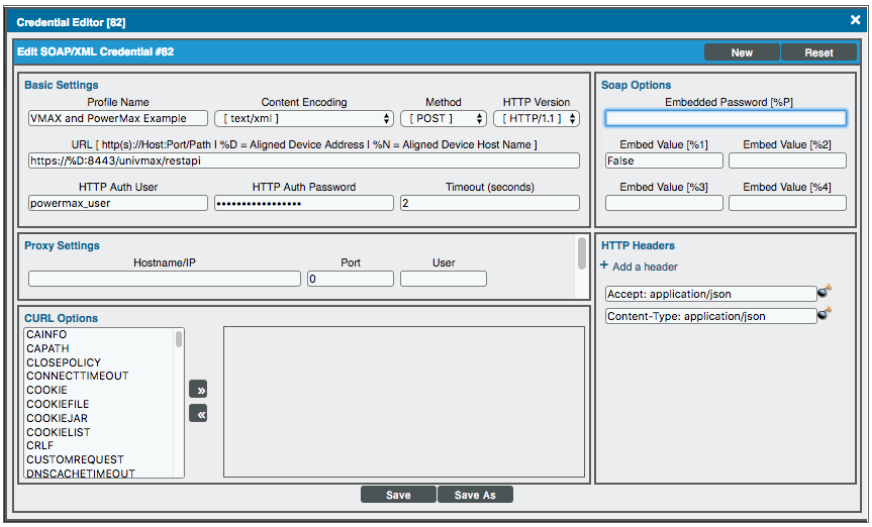
- Username and password for a user with access to the Unisphere REST API
- IP address and port for the Unisphere

Creating a Credential for Dell EMC VMAX and PowerMax Systems

To configure the ScienceLogic platform to monitor Dell EMC VMAX and PowerMax storage systems, you must first create a SOAP/XML credential. This credential allows the Dynamic Applications in the *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack to use the Unisphere REST API. An example SOAP/XML credential that you can edit for your own use is included in the *Dell EMC: VMAX and PowerMax Unisphere API* PowerPack.

To create a SOAP/XML credential to access the Unisphere REST API:

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



- ***Profile Name***. Type a new name for the Dell EMC VMAX or PowerMax credential.
- ***HTTP Auth User***. Type the username for a user with access to the Unisphere REST API.
- ***HTTP Auth Password***. Type the password for the user you specified in the ***HTTP Auth User*** field.

NOTE: The ***HTTP Headers*** that are included in the example are required to receive a response from the Unisphere REST API. Do not delete or edit them.

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

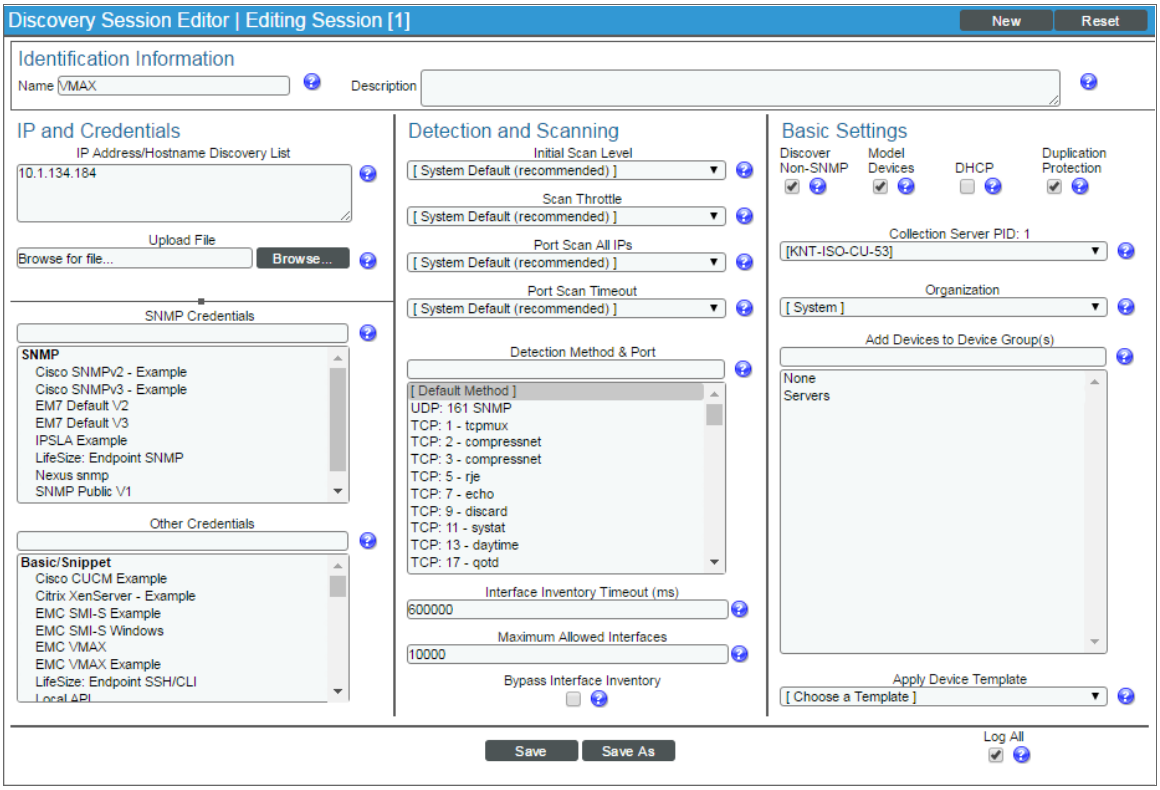
Discovering Dell EMC VMAX and PowerMax Systems

To model and monitor your Dell EMC VMAX and Powermax systems, you must run a discovery session to discover the Unisphere that the platform will use as the root device for monitoring the VMAX or PowerMax system.

The discovery session will discover the Unisphere as a pingable device using *the SOAP/XML credential that you created*. The Dynamic Applications will automatically align to the Unisphere root device to enable the ScienceLogic Platform to discover, model, and monitor the remaining component devices in your VMAX or PowerMax system.

To discover your VMAX or PowerMax storage system in the ScienceLogic platform:

1. Go to the **Discovery Control Panel** page (System > Manage > Discovery).
2. In the **Discovery Control Panel** page, click the **[Create]** button.
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 address for the Unisphere.
- ***Other Credentials***. Select the SOAP/XML credential you created for the VMAX or PowerMax system.
- ***Discover Non-SNMP***. Select this checkbox.

- ***Model Devices***. Select this checkbox.

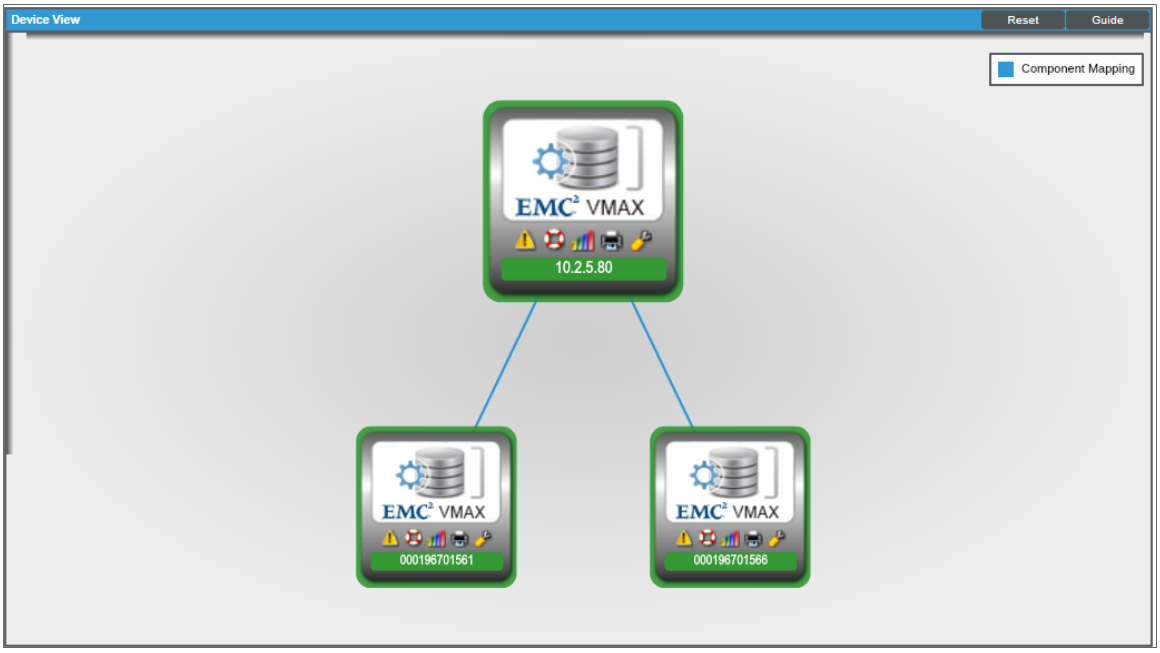
4. Optionally, you can enter values in the other fields on this page. For more information about the other fields on this page, see the ***Discovery & Credentials*** manual.
5. Click **[Save]** to save the discovery session and then close the **Discovery Session Editor** window.
6. The discovery session you created will display at the top of the **Discovery Control Panel** page. Click its lightning-bolt icon ( ) to run the discovery session.

Viewing Dell EMC VMAX and PowerMax Devices

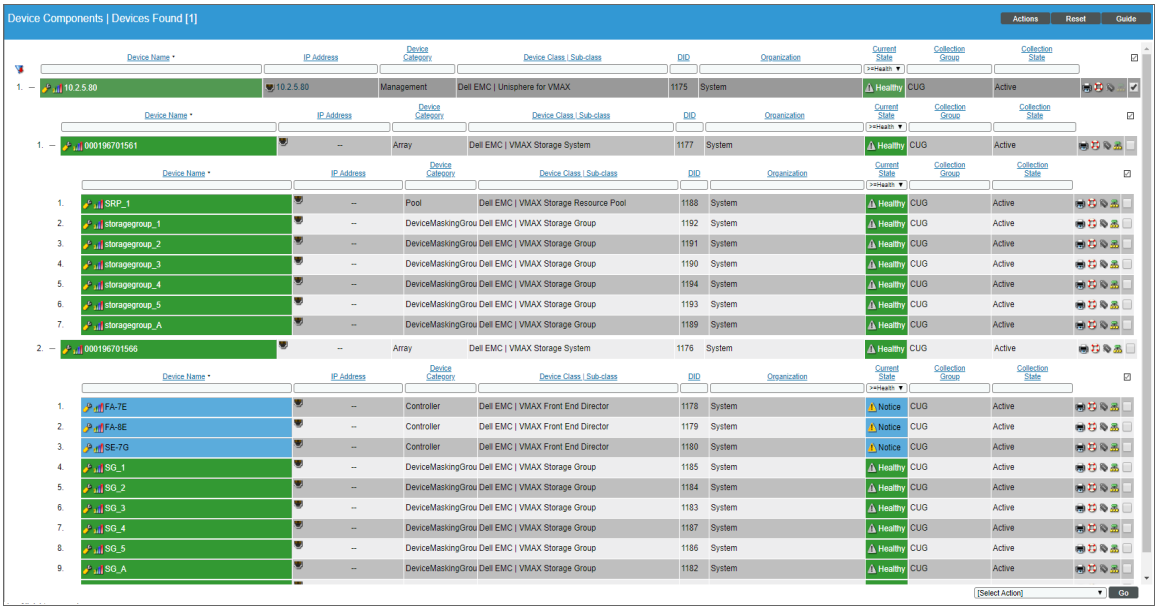
After discovering your Dell EMC VMAX or PowerMax system, the ScienceLogic platform will create component devices that represent each component in your system.

In addition to the **Device Manager** page, you can view the VMAX or PowerMax system and all associated component devices in the following places in the user interface:

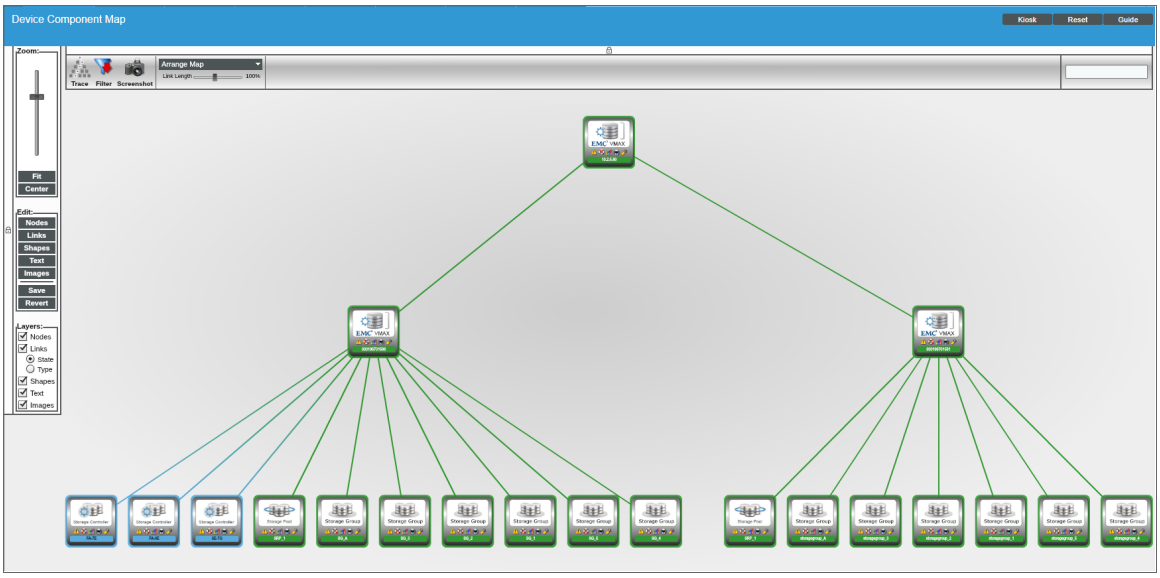
- The **Device View** modal page (click the bar-graph icon [ ]for a device, then click the **Topology** tab) displays a map of the selected device and all of the devices with which it has parent-child relationships. Double-clicking any of the devices listed reloads the page to make the selected device 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 VMAX or PowerMax system, find the root device and click its plus icon (+):



- The **Device 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 **Device Component Map** page 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 VMAX or PowerMax system, go to the **Device Component Map** page and select the map from the list in the left NavBar. To learn more about the **Device Component Map** page, see the ***Views*** manual.



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

International: +1-703-354-1010