Monitoring IBM SVC

IBM: SVC PowerPack version 100

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Chapter 1

Introduction

Overview

This manual describes how to monitor IBM SAN Volume Controllers (SVC) in the ScienceLogic platform using the *IBM: SVC*PowerPack.

The following sections provide an overview of IBM SVC and the *IBM: SVC* PowerPack:

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What is IBM SVC?

The IBM SAN Volume Controller (SVC) is a storage system that supports large-scale workloads and enables completely virtualized infrastructures to deliver reliable flexible storage solutions. ScienceLogic uses SMI-S to communicate with IBM storage and requires the storage system to use SMI-S version 1.6.0 or higher.

What Does the IBM: SVC PowerPack Monitor?

To monitor IBM SVC systems using the ScienceLogic platform, you must install the *IBM: SVC* PowerPack. This PowerPack enables you to discover, model, and collect data about IBM SVC systems.

The *IBM: SVC* PowerPack includes:

- One example credential you can use as a template to create Basic/Snippet credentials to connect to the IBM SVC systems you want to monitor
- Dynamic Applications to discover, model, and monitor performance metrics and collect configuration data for IBM SVC devices
- Device Classes for the SVC Storage Systems and SVC Storage Pools thatthe ScienceLogic platform monitors
- Event Policies and corresponding alerts that are triggered when IBM SVC devices meet certain status criteria

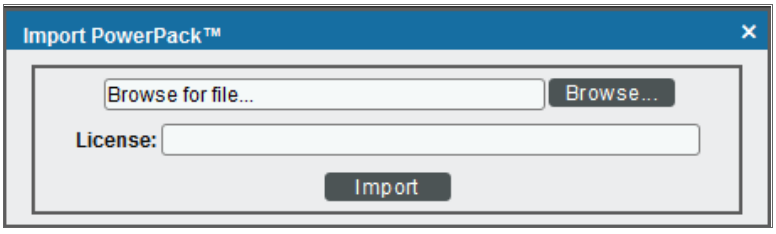
Installing the IBM: SVC PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *IBM: SVC* 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

Configuring IBM SVC Monitoring

Overview

The following sections describe how to configure and discover IBM SVC systems for monitoring by the ScienceLogic platform using the *IBM: SVC* PowerPack:

Prerequisites for Monitoring IBM SVC

To configure the ScienceLogic system to monitor IBM SVC systems using the *IBM: SVC* PowerPack, you must first have the following information about an IBM SMI-S Provider that has already been properly installed and configured:

- The username and password for a user with access to the SMI-S Provider
- IP address and port for the SMI-S Provider

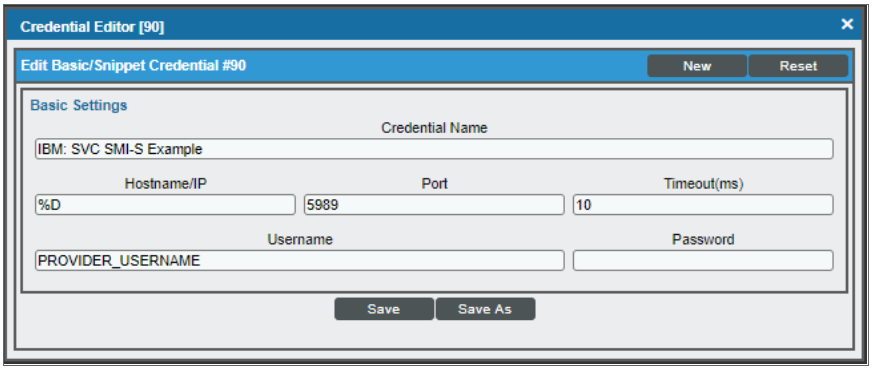
Creating a Basic/Snippet Credential for IBM SVC

To configure the ScienceLogic platform to monitor IBM SVC systems, you must first create a Basic/Snippet credential. This credential allows the Dynamic Applications in the *IBM: SVC* PowerPack to connect with an IBM SMI-S Provider.

The PowerPack includes an example Basic/Snippet credential that you can edit for your own use.

To configure a Basic/Snippet credential to access an IBM SMI-S Provider:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Locate the **IBM: SVC SMI-S Example** credential, then click its wrench icon ( ). The **Edit Basic/Snippet Credential** modal page appears:

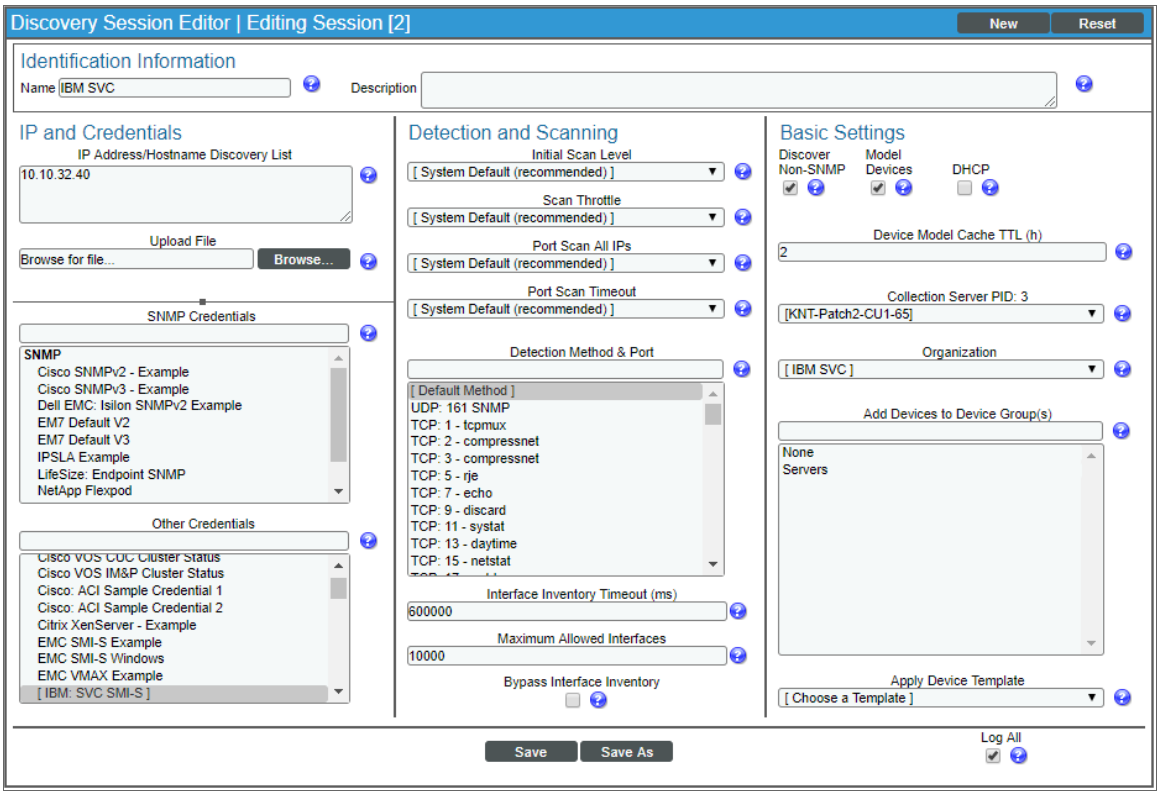


3. Complete the following fields:
   - ***Credential Name***. Type a name for the IBM SVC credential.
   - ***Username***. Type the username for a user with access to the SMI-S Provider.
   - ***Password***. Type the password for the SMI-S Provider account username.
4. Click the **[Save As]** button.

Discovering IBM SVC Component Devices

To discover an IBM SVC system:

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



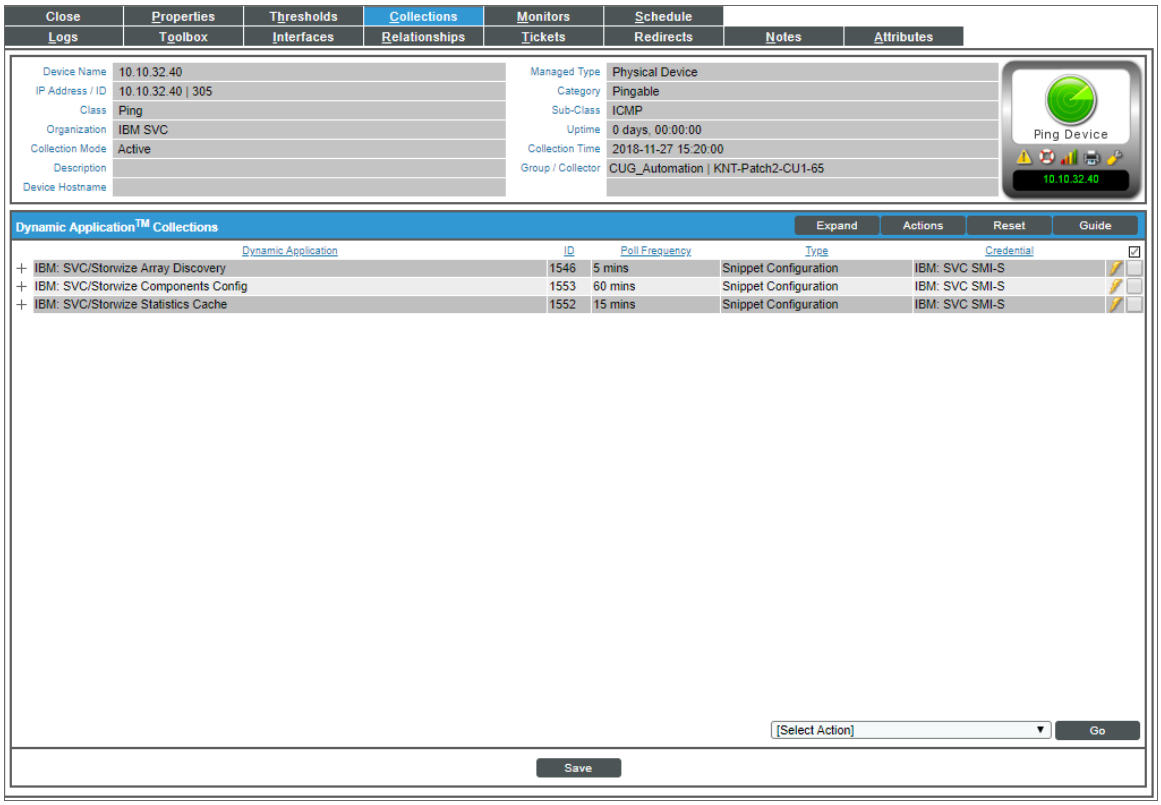
3. In the **Discovery Session Editor** page, complete the following fields:
   - ***Name***. Type a name for the discovery session.
   - ***IP Address/Hostname Discovery List***. Type the IP address for the SMI-S Provider.
   - ***Other Credentials***. Select the Basic/Snippet credential you created for the SMI-S Provider.
   - ***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 the **[Save]** button 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 cluster root device(s) are discovered, click the device icon ( ) to view the **Device Properties** page for each device.

Aligning the Dynamic Applications

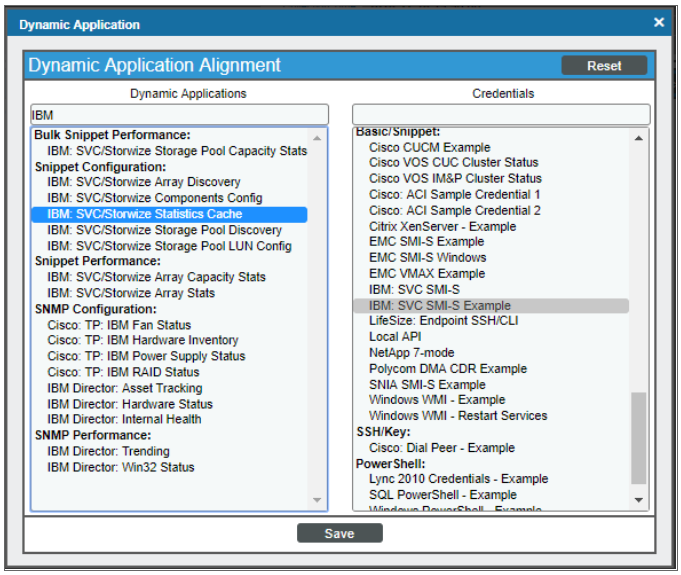
To align the IBM SVC Dynamic Applications:

1. After discovery has completed, click the device icon for the IBM SVC device ( ). From the **Device Properties** page for the IBM SVC device, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.

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



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



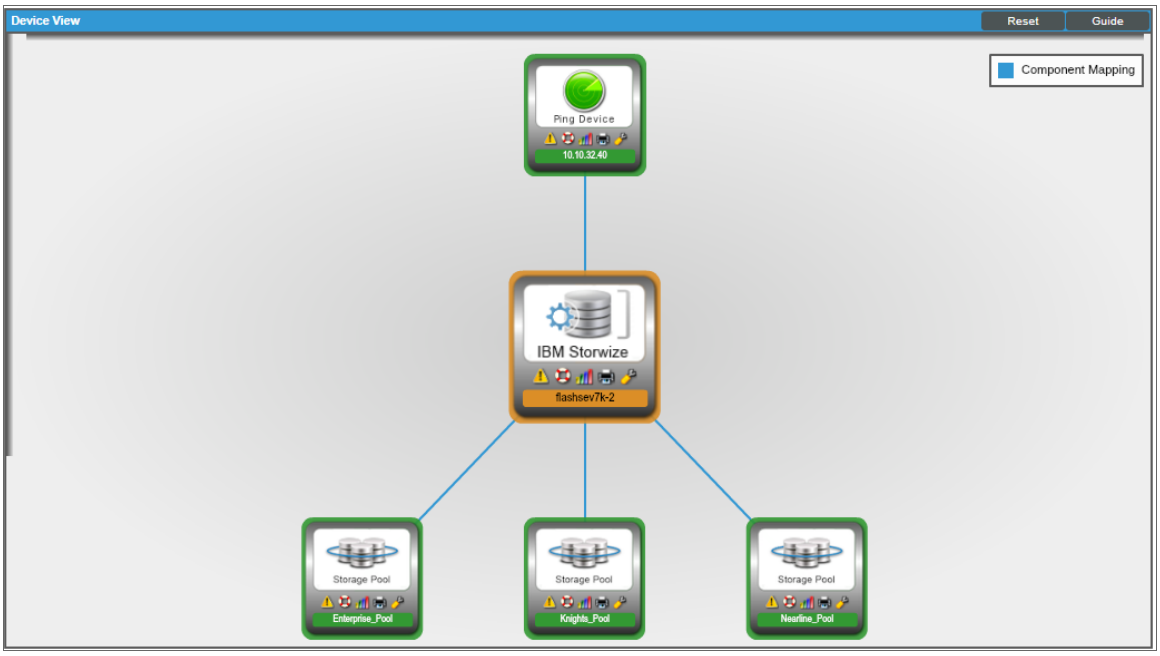
3. In the ***Dynamic Applications*** field, select the "IBM: SVC/Storwize Statistics Cache" Dynamic Application.
4. In the ***Credentials*** field, select the credential you created.
5. Click the **[Save]** button.
6. Repeat steps 1-5 for the "IBM: SVC/Storwize Array Discovery" Dynamic Application, followed by the "IBM: SVC/Storwize Components Config" Dynamic Application.

NOTE: The "IBM: SVC/Storwize Array Stats" Dynamic Application requires that a few polling cycles of the "IBM: SVC/Storwize Statistics Cache" Dynamic Application complete before it begins the Array Stats collection. The "IBM: SVC/Storwize Array Stats" Dynamic Application is the cache consumer and the "IBM: SVC/Storwize Statistics Cache" Dynamic Application is the cache producer.

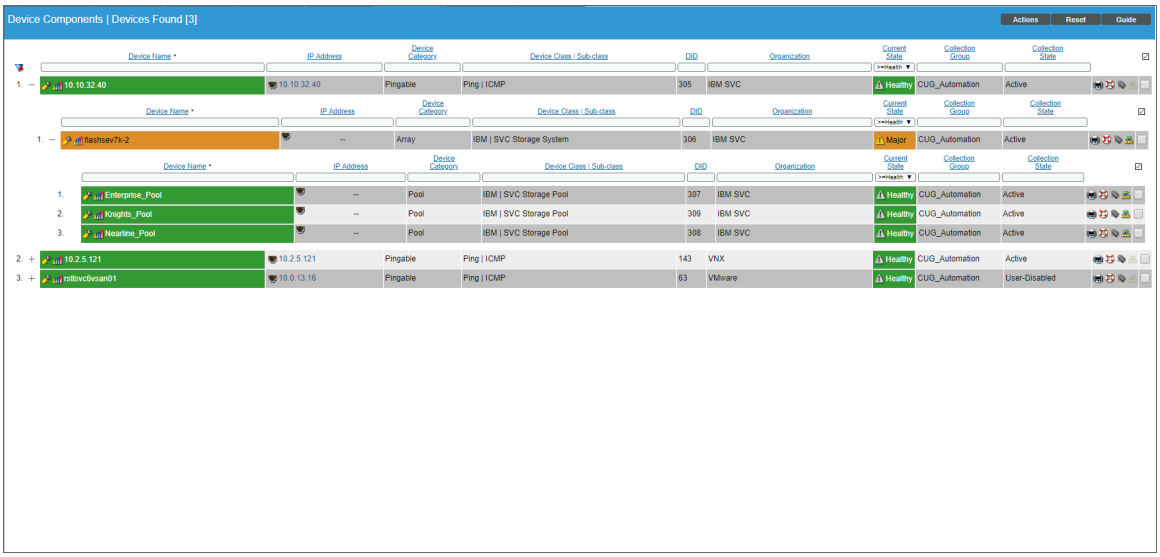
Viewing IBM SVC Component Devices

In addition to the **Device Manager** page (Registry > Devices > Device Manager), you can view the IBM SVC system and all associated component devices in the following places in the user interface:

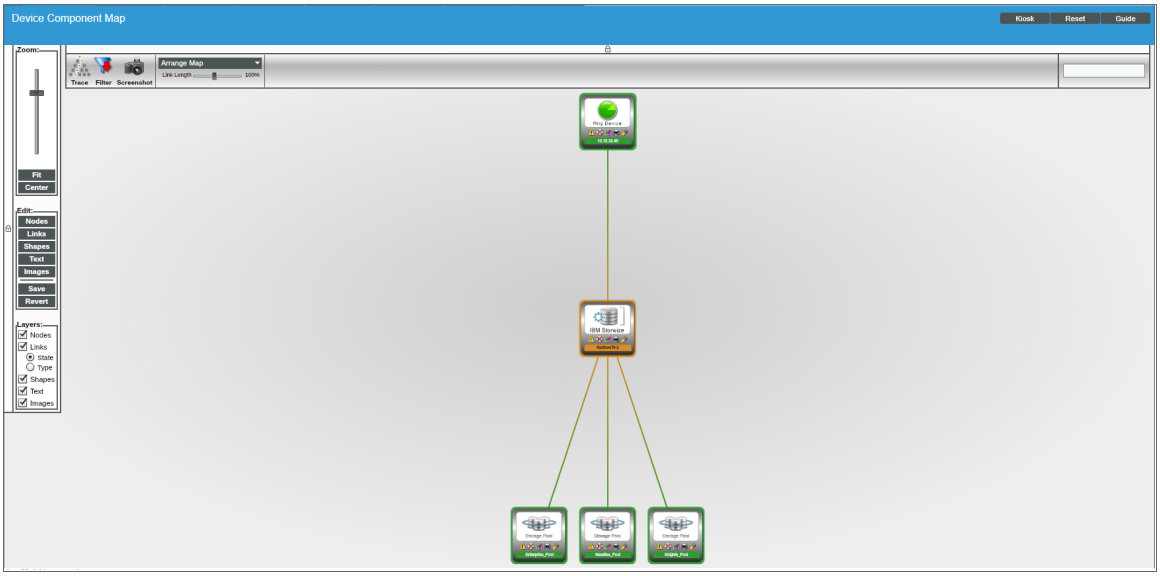
- The **Device View** modal page (click the bar-graph icon [ ] for a device, then click the **Topology** tab) displays a map of a particular device and all of the devices with which it has parent-child relationships. Double-clicking any of the devices listed reloads the page to make the selected device 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 an IBM SVC system, find the IBM SVC device 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 an IBM SVC system, go to the **Component Map** page and select the map from the list in the left NavBar. To learn more about the **Component Map** page, see the ***Views*** manual.



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