Monitoring Dell EMC Isilon

Dell EMC: Isilon PowerPack version 103 (Document revision 1)

Table of Contents

Introduction 3

What is Dell EMC Isilon? 3

What Does the Dell EMC: IsilonPowerPack Monitor? 4

Installing the PowerPack 4

Configuration and Credentials 6

Prerequisites for Monitoring Dell EMC Isilon 6

Creating a SOAP/XML Credential for Dell EMC Isilon 7

Creating an SNMP Credential for Dell EMC Isilon 7

Discovery 9

Discovering Dell EMC Isilon Component Devices 9

Verifying Discovery and Dynamic Application Alignment 10

Viewing Dell EMC Isilon Component Devices 11

Chapter 1

Introduction

Overview

This manual describes how to monitor Dell EMC Isilon storage systems in SL1 using the Dynamic Applications in the *Dell EMC: Isilon* PowerPack.

The following sections provide an overview of Dell EMC Isilon and the *Dell EMC: Isilon* PowerPack:

This chapter covers the following topics:

What is Dell EMC Isilon? 3

What Does the Dell EMC: IsilonPowerPack Monitor? 4

Installing the PowerPack 4

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What is Dell EMC Isilon?

Dell EMC Isilon is a clustered, scale-out Network Attached Storage (NAS) array. The *Dell EMC: Isilon* PowerPack uses the Isilon API to discover the storage array and collect health, configuration, performance, and capacity information.

What Does the Dell EMC: IsilonPowerPack Monitor?

To monitor Dell EMC Isilon storage devices with SL1, you must install the *Dell EMC: Isilon* PowerPack. This PowerPack lets you discover, model, and collect data about Isilon storage devices.

The *Dell EMC: Isilon* PowerPack includes:

- Dynamic Applications to discover, model, and monitor performance metrics and collect configuration data for Dell EMC Isilon devices
- Device Classes for each type of Isilon device monitored
- Example credentials that you can use as templates to create a SOAP/XML credential for connecting to Isilon devices and an SNMP credential for device class alignment

Installing the PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *Dell EMC: Isilon* 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

The following sections describe how to configure Dell EMC Isilon storage arrays for monitoring by SL1 using the *Dell EMC: Isilon* PowerPack:

This chapter covers the following topics:

Prerequisites for Monitoring Dell EMC Isilon 6

Creating a SOAP/XML Credential for Dell EMC Isilon 7

Creating an SNMP Credential for Dell EMC Isilon 7

Prerequisites for Monitoring Dell EMC Isilon

To configure the SL1 system to monitor Dell EMC Isilon storage arrays using the *Dell EMC: Isilon* PowerPack, you must have already installed and configured the storage arrays that you want to monitor.

If you are using a Secure Sockets Layer (SSL) certificate to communicate with the Isilon storage arrays you are monitoring, you must add an Isilon SSL certificate on your SL1 appliance in the following file:

```
/var/lib/em7/content/silo_core_rest/certs.crt
```

If you are not using an SSL certificate to communicate with the Isilon storage arrays, then you do not need to add a certificate.

Additionally, you should take note of the SNMP community string used by the Isilon storage arrays you want to monitor.

Creating a SOAP/XML Credential for Dell EMC Isilon

To configure SL1 to monitor Dell EMC Isilon storage arrays, you must first create a credential that allows the Dynamic Applications in the *Dell EMC: Isilon* PowerPack to communicate with your Isilon storage devices. The PowerPack includes an example SOAP/XML credential that you can edit for your own use.

To configure the SOAP/XML credential to access Dell EMC Isilon devices:

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

   Basic Settings

   - ***Profile Name***. Type a new name for the credential.
   - ***HTTP Auth User***. Type the Isilon administrator username.
   - ***HTTP Auth Password***. Type the Isilon administrator password.

   SOAP Options

   - ***Embed Value [%1]***. Do one of the following:
     - Type "True" to enable verification of the storage array's SSL certificate.
     - Type "False" or leave this field blank to disable SSL verification.

NOTE: This field is not case-sensitive.

4. Click **[Save As]**.

Creating an SNMP Credential for Dell EMC Isilon

In addition to the SOAP/XML credential, you will also need to configure an SNMP credential to enable SL1 to monitor Dell EMC Isilon storage arrays. The *Dell EMC: Isilon* PowerPack includes an example SNMP credential that you can edit for your own use.

To configure the SNMP credential to access Dell EMC Isilon devices:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Locate the **Dell EMC: Isilon SNMPv2 Example** credential, and then click its wrench icon ( ). The **Edit SNMP Credential** modal page appears.

3. Update the values in the following fields:

   Basic Settings

   - *Profile Name*. Type a new name for the credential.

   SNMP V1/V2 Settings

   - *SNMP Community (Read-Only)*. Type the Isilon storage array's SNMP community string.

4. Click [Save As].

Chapter 3

Discovery

Overview

The following sections describe how to discover Dell EMC Isilon storage arraysfor monitoring by SL1 using the *Dell EMC: Isilon* PowerPack.

This chapter covers the following topics:

Discovering Dell EMC Isilon Component Devices 9

Viewing Dell EMC Isilon Component Devices 11

Discovering Dell EMC Isilon Component Devices

To model and monitor your Dell EMC Isilon storage arrays, you must run a discovery session to discover the storage arrays that SL1 will use as the root devices for monitoring the Isilon storage system.

After the discovery session completes, the Dynamic Applications in the *Dell EMC: Isilon* PowerPack automatically align to the storage array device, and then the PowerPack discovers, models, and monitors the remaining Isilon storage devices.

NOTE: When the PowerPack is upgraded, some component devices may appear duplicated. You must manually remove existing component devices and then upgrade the PowerPack, or you will need to upgrade the PowerPack and then, manually remove the old components.

To discover the Isilon arrays that you want to monitor, perform the following steps:

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

3. Supply values in the following fields:
    - ***IP Address/Hostname Discovery List***. Type the IP address or hostname for the Isilon storage array or arrays that you want to discover.
    - ***SNMP Credentials***. Select the SNMP credential that you created for Isilon devices.
    - ***Other Credentials***. Select the SOAP/XML credential that you created for Isilon devices.
    - ***Discover Non-SNMP***. Select this checkbox.
    - ***Model Devices***. Select this checkbox.
    - ***Duplication Protection***. 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. After the devices are discovered, click the device icon ( ) to view the **Device Properties** page for each 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 Isilon Storage Array device ( ).
2. From the **Device Properties** page for the array device, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
3. All applicable Dynamic Applications for the storage array 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.

You should see the following Dynamic Applications aligned to the storage array device:

Dynamic Application	Credential Type
Dell EMC: Isilon Cluster Capacity Stats	SOAP/XML
Dell EMC: Isilon Cluster Config	SOAP/XML
Dell EMC: Isilon Cluster Stats	SOAP/XML
Dell EMC: Isilon Node Discovery	SOAP/XML

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

1. Click the **[Actions]** 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 the credential specified in the table.
4. Click the **[Save]** button.
5. Repeat steps 1-4 for the other unaligned Dynamic Applications.

Viewing Dell EMC Isilon Component Devices

In addition to the **Device Manager** page (Registry > Devices > Device Manager), you can view the Isilon storage 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 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 Dell EMC Isilon, find the Isilon component device 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 an Dell EMC Isilon arrays, 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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800-SCI-LOGIC (1-800-724-5644)

International: +1-703-354-1010