



AWS Automated Troubleshooting PowerPacks

AWS Automated Troubleshooting PowerPack version 100, revision 1

Table of Contents

Introduction	3
What is the AWS Automated Troubleshooting PowerPack?	4
Installing the AWS Automated TroubleshootingPowerPack	4
Customizing Automation Policies	5
Customizing an Automation Policy	6
Configuring Device Credentials and AWS Discovery	8
Creating the SOAP/XML Credential for AWS	9
Creating the SOAP/XML Credential for AWS in the SL1 Classic User Interface	10
Creating an AWS Virtual Device for Discovery in the SL1 Classic User Interface	11
Aligning the Discovery Dynamic Application	12
Aligning the Discovery Dynamic Application in the SL1 Classic User Interface	13
Customizing AWS Automated Troubleshooting Actions	15
Customizing Automation Actions	16

Chapter

1

Introduction

Overview

This manual describes how to use the Run Book Automation policies, Run Book Automation Action policies, and custom action types found in the *AWS Automated Troubleshooting PowerPack*.

This PowerPack requires the ScienceLogic Standard solution.

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This chapter covers the following topics:

What is the AWS Automated Troubleshooting PowerPack?	4
Installing the AWS Automated TroubleshootingPowerPack	4

What is the AWS Automated Troubleshooting PowerPack?

The *AWS Automated Troubleshooting PowerPack* includes automation policies that enrich SL1 events for Amazon Web Services devices by automatically gathering device information and recommendations.

Installing the AWS Automated Troubleshooting PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *AWS Automated Troubleshooting PowerPack*.

NOTE: The *AWS Automated Troubleshooting PowerPack* requires SL1 version 10.2.0 or later. For details on upgrading SL1, see the appropriate SL1 [Release Notes](#).

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

Customizing Automation Policies

Overview

This chapter describes how to customize automation policies using the automation actions in the *AWS Automated Troubleshooting PowerPack*.

This chapter covers the following topics:

<i>Customizing an Automation Policy</i>	6
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Customizing an Automation Policy

To customize an automation policy:

1. Go to the **Automation Policy Manager** page (Registry > Run Book > Automation).
2. Search for the *AWS Automated Troubleshooting* automation policy you want to edit and click the wrench icon (🔧) for that policy. The **Automation Policy Editor** page appears.
3. Complete the following fields as needed:
 - **Policy Name.** Type a new name for the automation policy to avoid overwriting the default policy.
 - **Policy Type.** Select whether the automation policy will match events that are active, match when events are cleared, or run on a scheduled basis. Typically, you would select *Active Events* in this field.
 - **Policy State.** Specifies whether the policy will be evaluated against the events in the system. If you want this policy to begin matching events immediately, select *Enabled*.
 - **Policy Priority.** Specifies whether the policy is high-priority or default priority. These options determine how the policy is queued.
 - **Organization.** Select the organization that will use this policy.
 - **Aligned Actions.** This field includes the actions associated with the policies from the *AWS Automated Troubleshooting* PowerPack. To add an action to the **Aligned Actions** field, select the action in the **Available Actions** field and click the right arrow (>>). To re-order the actions in the **Aligned Actions** field, select an action and use the up arrow or down arrow buttons to change that action's position in the sequence.
4. Optionally, supply values in the other fields on the **Automation Policy Editor** page to refine when the automation will trigger.
5. Click **[Save As]**.

The following table shows the automation policy, its default aligned events, and the automation action that runs in response to the events.

Automation Policy Name	Aligned Events	Automation Action
AWS Automated Troubleshooting: Get Console Output	All events	AWS Automated Troubleshooting: Get Console Output
AWS Automated Troubleshooting: Get Instance Status or Recommendation	All events	AWS Automated Troubleshooting: Instance Status or Recommendation
AWS Automated Troubleshooting: Monitor or Unmonitor Instance	All events	AWS Automated Troubleshooting: Monitor or Unmonitor Instance

NOTE: The "AWS Automated Troubleshooting: Get Console Output Automation" policy will not work for output with a string size greater than 65k.

Chapter

3

Configuring Device Credentials and AWS Discovery

Overview

This chapter describes how to configure the credentials required by the automation actions in the *AWS Automated Troubleshooting PowerPack* and discover your AWS devices.

This chapter covers the following topics:

<i>Creating the SOAP/XML Credential for AWS</i>	9
<i>Creating an AWS Virtual Device for Discovery in the SL1 Classic User Interface</i>	11
<i>Aligning the Discovery Dynamic Application</i>	12

Creating the SOAP/XML Credential for AWS

To discover AWS using the manual discovery method, you must first define an AWS credential in SL1.

NOTE: If you are using an SL1 system prior to version 11.1.0, the new user interface does not include the **Duplicate** option for sample credential(s). ScienceLogic recommends that you use [the classic user interface and the Save As button](#) to create new credentials from sample credentials. This will prevent you from overwriting the sample credential(s).

To define an AWS credential:

1. Go to the **Credentials** page (Manage > Credentials).
2. Locate the **AWS Credential** sample credential, click its **[Actions]** icon (**...**) and select **Duplicate**. A copy of the credential, called **AWS Credential copy** appears.
3. Click the **[Actions]** icon (**...**) for the **AWS Credential copy** credential and select **Edit**. The **Edit Credential** modal page appears:

4. Supply values in the following fields:
 - **Name**. Type a new name for your AWS credential.
 - **All Organizations**. Toggle on (blue) to align the credential to all organizations, or toggle off (gray) and then select one or more specific organizations from the **What organization manages this service?** drop-down field to align the credential with those specific organizations.
 - **Timeout (ms)**. Keep the default value.
 - **URL**. Enter a valid URL. This field is not used for this discovery method but must be populated with a valid URL for discovery to complete.
 - **HTTP Auth User**. Type your **Access Key ID**.

- **HTTP Auth Password.** Type your **Secret Access Key**. The characters appear as asterisks to protect your password privacy.
- **Proxy Hostname/IP.** Type the host name or IP address of the proxy server.

NOTE: The proxy fields are required only if you are discovering AWS services through a proxy server. Otherwise, leave these fields blank.

- **Proxy Port.** Type the port on the proxy server to which you will connect.
- **Proxy User.** Type the username used to access the proxy server.
- **Proxy Password.** Type the password used to access the proxy server.

CAUTION: If you are creating a credential from the **AWS Credential - Proxy** example and the proxy server does not require a username and password, then the **Proxy User** and **Proxy Password** fields must both be blank. In that scenario, if you leave the "<Proxy_User>" text in the **Proxy User** field, SL1 cannot properly discover your AWS services.

- **Embed Value [%1].** To monitor a GovCloud account, type "us-gov-west-1" or "us-gov-east-1". Otherwise, leave this field blank.

5. Click the [Save & Close] button.

Creating the SOAP/XML Credential for AWS in the SL1 Classic User Interface

To discover AWS using the manual discovery method, you must first define an AWS credential in SL1.

To define an AWS credential:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. Locate the **AWS Credential** sample credential and click its wrench icon (🔧). The **Credential Editor** modal page appears.
3. Enter values in the following fields:

Basic Settings

- **Profile Name.** Type a new name for your AWS credential.
- **URL.** Enter a valid URL. This field is not used for this discovery method but must be populated with a valid URL for discovery to complete.
- **HTTP Auth User.** Type your **Access Key ID**.
- **HTTP Auth Password.** Type your **Secret Access Key**. The characters appear as asterisks to protect your password privacy.

Proxy Settings

NOTE: The *Proxy Settings* fields are required only if you are discovering AWS services through a proxy server. Otherwise, leave these fields blank.

- **Hostname/IP.** Type the host name or IP address of the proxy server.
- **Port.** Type the port on the proxy server to which you will connect.
- **User.** Type the username used to access the proxy server.
- **Password.** Type the password used to access the proxy server.

CAUTION: If you are creating a credential from the **AWS Credential - Proxy** example and the proxy server does not require a username and password, then the **User** and **Password** fields must both be blank. In that scenario, if you leave the "<Proxy_User>" text in the **User** field, SL1 cannot properly discover your AWS services.

SOAP Options

- **Embed Value [%1].** To monitor a GovCloud account, type "us-gov-west-1" or "us-gov-east-1". Otherwise, leave this field blank.

4. Click the **[Save As]** button, and then click **[OK]**.

Creating an AWS Virtual Device for Discovery in the SL1 Classic User Interface

Because the Amazon Web Service does not have a specific IP address, you cannot discover an AWS device using discovery. Instead, you must create a **virtual device** that represents the Amazon Web Service. A virtual device is a user-defined container that represents a device or service that cannot be discovered by SL1. You can use the virtual device to store information gathered by policies or Dynamic Applications.

To create a virtual device that represents your Amazon service:

1. Go to the **Device Manager** page (Devices > Device Manager or Registry > Devices > Device Manager in the SL1 classic user interface).
2. Click the **[Actions]** button, then select *Create Virtual Device*. The **Virtual Device** modal page appears.
3. Enter values in the following fields:
 - **Device Name.** Enter a name for the device. For example, you could enter "Amazon Cloud" in this field.
 - **Organization.** Select the organization for this device. The organization the device is associated with limits the users that will be able to view and edit the device.

- **Device Class.** Select *Service | AWS Service*.
- **Collector.** Select the collector group that will monitor the device.

4. Click the **[Add]** button to create the virtual device.

Aligning the Discovery Dynamic Application

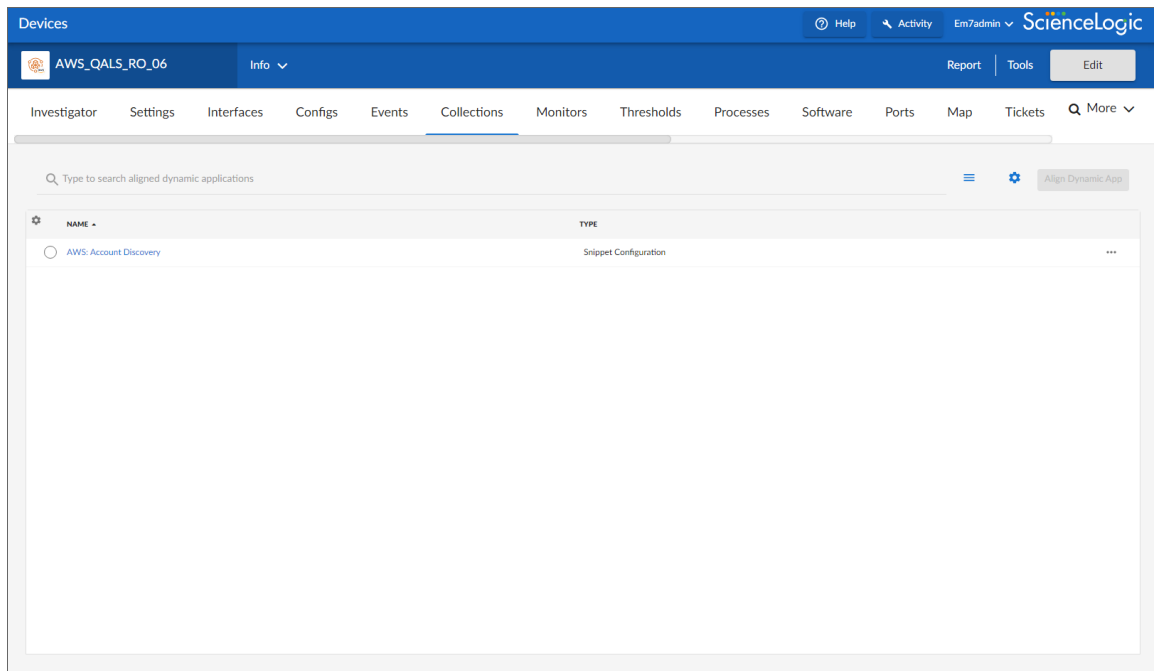
To discover your AWS account, you must manually align the "AWS: Account Discovery" Dynamic Application with the AWS virtual device. After you do so, the other Dynamic Applications in the *Amazon Web Services PowerPack* will automatically align to discover and monitor all of the components in your AWS account.

TIP: If your AWS account includes API Gateways or Lambda services to be monitored and you want SL1 to put those component devices in a "vanished" state if the platform cannot retrieve data about them for a specified period of time, ScienceLogic recommends setting the **Component Vanish Timeout Mins.** field to at least 120 minutes. For more information, see the chapter on "Vanishing and Purging Devices" in the **Device Management** manual.

To align the "AWS: Account Discovery" Dynamic Application to your virtual device:

1. Go to the **Devices** page.
2. Click the AWS virtual device and click on it to open the **Device Investigator**.
3. In the **Device Investigator**, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
4. Click the **[Edit]** button and then click the **[Align Dynamic App]** button.
5. In the **Align Dynamic Application** page, click *Choose Dynamic Application*.
6. In the **Choose Dynamic Application** page, locate the *credential you created for your AWS service* and select it.

7. Click the **[Select]** button and then click the **[Align Dynamic App]** button.



Aligning the Discovery Dynamic Application in the SL1 Classic User Interface

To discover your AWS account, you must manually align the "AWS: Account Discovery" Dynamic Application with the AWS virtual device. After you do so, the other Dynamic Applications in the *Amazon Web Services PowerPack* will automatically align to discover and monitor all of the components in your AWS account.

TIP: If your AWS account includes API Gateways or Lambda services to be monitored and you want SL1 to put those component devices in a "vanished" state if the platform cannot retrieve data about them for a specified period of time, ScienceLogic recommends setting the **Component Vanish Timeout Mins.** field to at least 120 minutes. For more information, see the chapter on "Vanishing and Purging Devices" in the **Device Management** manual.

To align the "AWS: Account Discovery" Dynamic Application to your virtual device:

1. Go to the **Device Manager** page (Registry > Devices > Device Manager).
2. Click the wrench icon (🔧) for your virtual device.
3. In the **Device Administration** panel, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
4. Click the **[Actions]** button, and then select *Add Dynamic Application* from the menu.
5. In the **Dynamic Application Alignment** modal page, select *AWS: Account Discovery* in the **Dynamic**

Applications field.

6. In the **Credentials** field, select the [credential you created for your AWS service](#).
7. Click the **[Save]** button to align the Dynamic Application.

Customizing AWS Automated Troubleshooting Actions

Overview

This chapter describes how to customize the automation actions embedded in the *AWS Automated Troubleshooting PowerPack* to create automation actions that meet your organization's specific requirements.

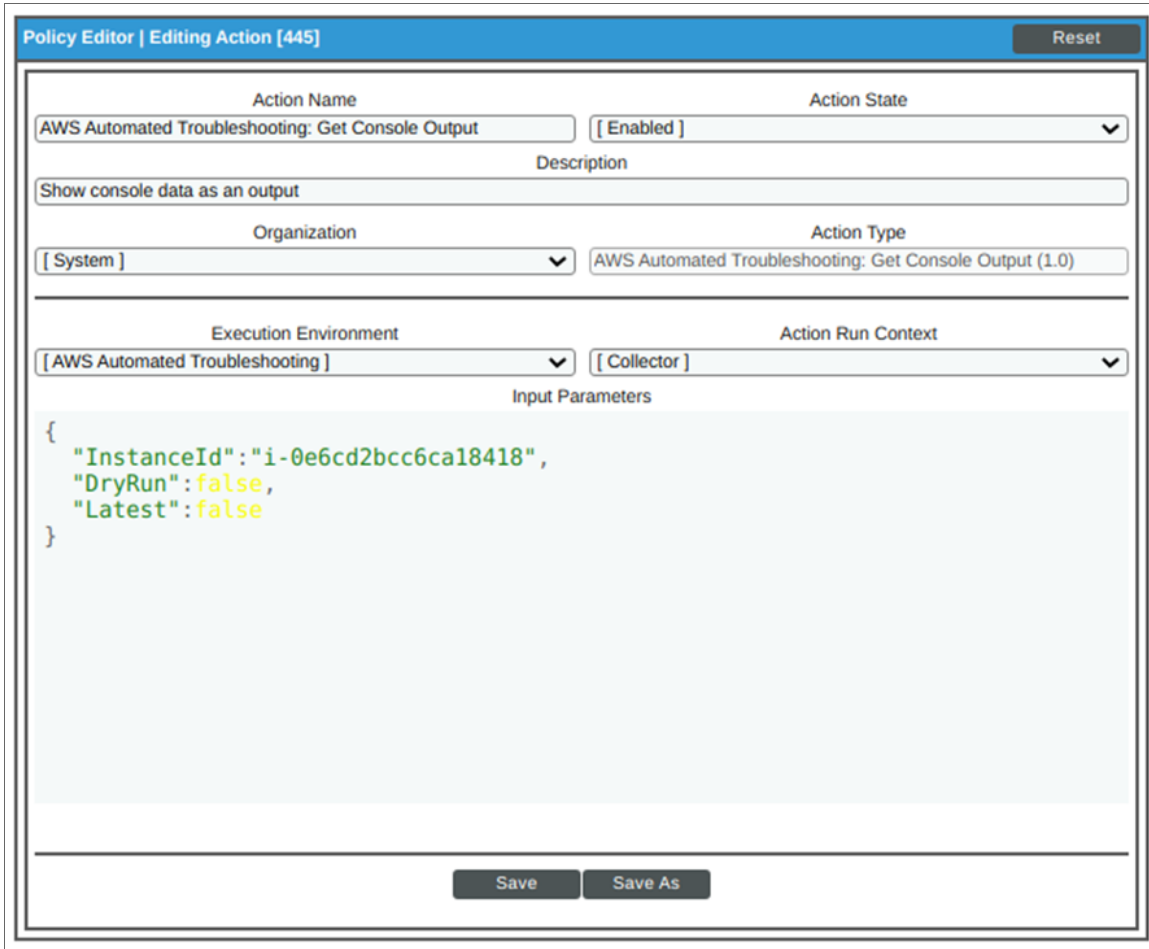
For more information about creating automation policies using custom action types, see [Creating and Customizing Automation Policies](#).

This chapter covers the following topics:

Customizing Automation Actions	16
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Customizing Automation Actions

The *AWS Automated Troubleshooting PowerPack* includes four automation actions that use its associated action type to request diagnostic information or remediate an issue. You can specify the host and the options in a JSON structure that you enter in the *Input Parameters* field in the **Action Policy Editor** modal.



The following automation actions that use the following action types that are included in the AWS Automated Troubleshooting PowerPack.

Action Name	Description	Action Type
AWS Automated Troubleshooting: Format JSON as Simple HTML	Formats JSON output from AWS to HTML	AWS Automation Troubleshooting Format HTTP Action Output
AWS Automated Troubleshooting: Get Console Output	Collects EC2 console logs information	AWS Automated Troubleshooting: Get Console Output
AWS Automated Troubleshooting: Monitor or Unmonitor Instance	Automatically turns on or off detailed monitoring for an EC2 instance	AWS Automated Troubleshooting: Monitor or Unmonitor Instance

Action Name	Description	Action Type
AWS Automated Troubleshooting: Instance Status or Recommendation	Collects recommendations for an EC2 instance	AWS Automated Troubleshooting: Instance Status or Recommendation

NOTE: The "AWS Automated Troubleshooting: Get Console Output Automation" policy will not work for output with a string size greater than 65k.

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