

## Amazon Web Services PowerPack Release Notes

Version 116

## Table of Contents

Overview	3
Before You Install or Upgrade	3
Upgrade Process from PowerPack version 100 or Later	3
Upgrade Process from PowerPack version 8.1.0 or Earlier	5
Step 1: Disable Collection for AWS Devices	5
Step 2: Uncheck the "Preserve Hostname" Option for Storage Gateway Instances	6
Step 3: Delete the "AWS Health" Dynamic Application	6
Step 4: Upgrade to the 8.10.0 or Later Release	7
Step 5 (Optional): Enable Selective PowerPack Field Protection	7
Step 6: Install Version 116 of the Amazon Web Services PowerPack	7
Step 7 (If Applicable): Edit Collection Objects	8
Step 8: Clear Data Collector Cache	8
Step 9: Unalign the AWS Custom Metrics Dynamic Application	9
Step 10: Enable Collection for AWS Devices	9
Step 11 (Optional): Disable Selective PowerPack Field Protection	10
Features	11
Enhancements and Issues Addressed	11
Known Issues and Workarounds	13

#### Overview

Amazon Web Services PowerPack version 116 adds a number of new Dynamic Applications, and includes a new Run Book Automation Policy and Run Book Action to align AWS Regions to their corresponding AWS Region device class.

• Minimum Required Platform Version: 8.10.0

• Support Status: GA

This document describes:

- Pre-install or pre-upgrade information
- The upgrade process for systems running version 100 or later of the PowerPack
- The upgrade process for systems running version 8.1.0 or earlier of the PowerPack
- The features included in version 116
- The enhancements and issues addressed in version 116
- The known issues in version 116

### Before You Install or Upgrade

Ensure that you are running version 8.10.0 or later of SL1 before installing the *Amazon Web Services* PowerPack version 116. Additionally, the Data Collectors used to monitor the AWS account must be running the Oracle Linux 7.2 operating system.

If your SL1 system is not currently running version 8.10.0 or later, you must upgrade to 8.10.0 or later as part of the upgrade process for version 116 of the PowerPack. If your SL1 system has been upgraded to a later release, you should go to the **PowerPack Manager** page (System > Manage > PowerPacks) and ensure that the Amazon Web Services PowerPack has been upgraded to the most recent version.

NOTE: For details on upgrading SL1, see the appropriate Release Notes.

### Upgrade Process from PowerPack version 100 or Later

This section describes the upgrade process when upgrading from version 100 or later of the Amazon Web Services PowerPack.

Overview 3

TIP: By default, installing a new version of a PowerPack will overwrite 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 local changes for some commonly customized fields from being overwritten.

To upgrade from version 100 or later of the Amazon Web Services PowerPack:

- 1. Familiarize yourself with the *Known Issues* for this release.
- Disable collection for AWS devices. To do so, go to the **Device Components** page (Registry > Devices >
   Device Components) and then select the checkbox for all Amazon Web Services root devices. In the **Select** Actions drop-down list, select Change Collection State: Disabled (recursive), and then click the [Go] button.
- 3. If you are upgrading from a version of the Amazon Web Services PowerPack prior to version 116, you must ensure that the **Preserve Hostname** checkbox is not selected for any Storage Gateway Instances. To do so, go to the **Device Manager** page (Registry > Devices > Device Manager) and then type "AWS | Storage Gateway Instance" in the **Device Class** | **Sub-class** column filter field. For each Storage Gateway Instance component device in the list, click the wrench icon ( ), uncheck the **Preserve Hostname** checkbox, and then click [Save].

**NOTE**: If desired, you can select the *Preserve Hostname* checkbox again for these devices *after* you have completed the upgrade to version 116.

4. Delete the "AWS Health" Dynamic Application. To do so, go to the **Dynamic Applications Manager** page (System > Manage > Applications) and then select the checkbox for the "AWS Health" Dynamic Application. In the **Select Actions** drop-down list, select *DELETE Application*, and then click the **[Go]** button.

CAUTION: You should *not* delete any of the AWS Service Health Dynamic Applications, nor any other Dynamic Applications that include "Health" in the name. Only the "AWS Health" Dynamic Application should be deleted.

5. If you have not done so already, upgrade your system to the 8.10.0 or later release.

**NOTE**: For versions 8.6.0 and later of SL1, the Amazon Web Services PowerPack content library will not update until you enable collection for your AWS devices.

6. If you are upgrading from a version of the Amazon Web Services PowerPack between versions 104 and 107, you must delete any LightSail Instances that were previously discovered by the "AWS LightSail EC2 Instance Discovery" Dynamic Application. To do so, go to the Device Manager page (Registry > Devices > Device Manager), type "LightSail EC2 Instance" in the Device Class | Sub-class column search field, and then select the checkboxes for all of the devices listed. In the Select Action drop-down list, select DELETE Selected Devices, and then click the [Go] button.

**NOTE**: Deleting these devices results in the loss of any historical data collected by the beta EC2 LightSail Dynamic Applications between versions 104 and 107.

- 7. Download version 116 of the Amazon Web Services PowerPack from the Customer Portal to a local computer.
- 8. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Click the **[Actions]** menu and choose *Import PowerPack*. When prompted, import version 116 of the *Amazon Web Services* PowerPack.
- 9. After importing the PowerPack, you will be prompted to install the PowerPack. Click the **[Install]** button to install the PowerPack.

## Upgrade Process from PowerPack version 8.1.0 or Earlier

This section describes the upgrade process when upgrading from version 8.1.0 or earlier of the Amazon Web Services PowerPack to version 116.

To upgrade from version 8.1.0 or earlier, you must perform the following general steps:

- 1 Disable collection for AWS devices.
- 2. Uncheck "Preserve Hostname" for Storage Gateway Instances
- 3. Delete the "AWS Health" Dynamic Application.
- 4. Upgrade to the 8.10.0 or later release.
- 5. If you have made changes to the AWS PowerPack, optionally enable selective PowerPack field protection.
- 6. Install the AWS 116 PowerPack.
- 7. If you enabled selective PowerPack field protection, edit collection objects.
- 8. Clear the cache on all Data Collectors.
- 9. Unalign the AWS Custom Metrics Dynamic Application.
- 10. Enable collection for AWS devices.
- 11. If you enabled selective PowerPack field protection, optionally disable selective PowerPack field protection after the installation.

#### Step 1: Disable Collection for AWS Devices

To disable collection for AWS devices:

- 1. Go to the **Device Components** page (Registry > Devices > Device Components).
- 2. Select the checkbox for all Amazon Web Services root devices.
- 3. In the **Select Actions** drop-down list, select Change Collection State: Disabled (recursive).
- 4. Click the [Go] button.

# Step 2: Uncheck the "Preserve Hostname" Option for Storage Gateway Instances

To ensure that the **Preserve Hostname** checkbox is not selected for any Storage Gateway Instance component devices:

- 1. Go to the **Device Manager** page (Registry > Devices > Device Manager).
- 2. In the **Device Class | Sub-class** column filter field, type "AWS | Storage Gateway Instance".
- 3. For each Storage Gateway Instance component device in the list, click the wrench icon ( Properties page appears.
- 4. Uncheck the **Preserve Hostname** checkbox.
- 5. Click [Save].

**NOTE**: If desired, you can select the **Preserve Hostname** checkbox again for these devices after you have completed the upgrade to version 116.

#### Step 3: Delete the "AWS Health" Dynamic Application

To delete the "AWS Health" Dynamic Application:

- 1. Go to the **Dynamic Applications Manager** page (System > Manage > Applications).
- 2. Locate the "AWS Health" Dynamic Application and then select its checkbox.
- 3. In the **Select Actions** drop-down list, select DELETE Application.
- 4. Click the [Go] button.

CAUTION: You should *not* delete any of the AWS Service Health Dynamic Applications, nor any other Dynamic Applications that include "Health" in the name. Only the "AWS Health" Dynamic Application should be deleted.

#### Step 4: Upgrade to the 8.10.0 or Later Release

If you have not previously done so, upgrade or migrate your system to an 8.10.0 or later release using the documentation applicable to your current version:

- For systems running an 8.x release, see the 8.10.0 Release Notes.
- For systems running a 7.x release, see the 8.10.0 Migration Steps document.

**NOTE**: For versions 8.6.0 and later of the ScienceLogic platform, the *Amazon Web Services* PowerPack content library will not update until you enable collection for your AWS devices.

#### Step 5 (Optional): Enable Selective PowerPack Field Protection

If you have made changes to the Amazon Web Service PowerPack on your system, you can use the **Enable Selective PowerPack Field Protection** option to preserve changes to some fields. For a full list of fields that are preserved by this option, click the [Guide] button on the **Behavior Settings** page (System > Settings > Behavior). If you use the **Enable Selective PowerPack Field Protection** option, you must perform the steps listed in the **Step 7** (If Applicable): Edit Collection Objects section after installing version 116 of the Amazon Web Services

PowerPack.

To enable selective PowerPack field protection:

- 1. Go to the **Behavior Settings** page (System > Settings > Behavior).
- 2. Enable the **Enable Selective PowerPack Field Protection** checkbox.
- 3. Click the [Save] button.

#### Step 6: Install Version 116 of the Amazon Web Services PowerPack

To install version 116 of the Amazon Web Services PowerPack:

- 1. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
- 2. Click the [Actions] button and select Import PowerPack. The Import PowerPack modal page appears.
- 3. Click the [Browse] button and select the PowerPack file in your file browser.
- 4. Click the [Import] button. A confirmation dialog appears.
- 5. Click the [OK] button. The PowerPack Installer modal page appears.
- 6. Click the [Install] button. A confirmation dialog appears.
- 7. Click the [OK] button.

#### Step 7 (If Applicable): Edit Collection Objects

If you performed the steps listed in the Step 5(Optional): Enable Selective PowerPack Field Protection section, you must perform the following steps:

- 1. Go to the **Dynamic Applications Manager** page (System > Manage > Application).
- 2. Click the wrench icon ( ) for the "AWS CloudFront Origin" Dynamic Application. The **Dynamic** Applications Properties Editor page appears.
- 3. Click the [Collections] tab.
- 4. Click the wrench icon ( ) for the Distinguished Name collection object.
- 5. Select the Hide Object checkbox.
- 6. Click the [Save] button.

#### Step 8: Clear Data Collector Cache

Beginning with Amazon Web Services PowerPack version 112, ScienceLogic libraries are delivered with the PowerPack. However, you must ensure that Amazon Web Services PowerPack versions 108-111 that were installed on Data Collectors prior to updating to SL1 version 8.11.0 still work and that the silo\_aws system library is set to 2.9.5.

**NOTE**: All versions of the ScienceLogic libraries appear on the **ScienceLogic Library Manager** page (System > Customize > ScienceLogic Libraries). The default silo\_aws library is indicated by a **System** setting of *True*.

After validating the ScienceLogic library versions on the Data Collectors, you must also clear the Data Collectors' cache.

Perform the following steps for every Data Collector used to monitor an AWS account:

- 1. Log in to the command-line of the appliance as the em7admin user.
- 2. Validate the versions of the ScienceLogic libraries on the Data Collector at the paths below:
  - \$ cd /opt/em7/envs/<PP GUID>/lib/python2.7/cl-packages/silo\_aws \$ cd /opt/em7/envs/system/lib/python2.7/cl-packages/silo aws
  - The library versions might be the same if you have not yet upgraded the Amazon Web Services PowerPack to the latest version that was delivered in SL1.
  - The library versions might be different if you have upgraded the Amazon Web Services PowerPack to the latest version that was delivered in SL1.

3. On the Data Collector, ensure that the current content library version matches the version installed in the PowerPack:

```
$ cat version.txt
```

**NOTE**: For versions 8.6.0 and above of the ScienceLogic platform, the content library version listed in the version.txt file will not update until you **enable collection for your AWS devices**.

4. Execute the following command to open a MariaDB prompt:

```
$ sudo bash
[sudo] password for root:
# silo mysql
```

5. Execute the following command:

```
DELETE FROM cache.dynamic_app WHERE `key` LIKE 'AWS_SELF_MONITOR_%';
```

#### Step 9: Unalign the AWS Custom Metrics Dynamic Application

A previous release of the *Amazon Web Services* PowerPack erroneously aligned the "AWS Custom Metrics" Dynamic Application to certain types of devices. To unalign the "AWS Custom Metrics" Dynamic Application from these devices:

- 1. Copy the provided aws\_unalign\_custom\_metrics\_app.py file to the home directory of the em7admin user on an appliance in your system:
  - If your system includes All-In-One Appliances, use the primary All-In-One Appliance.
  - If your system includes Database Servers where the user interface/API has not been disabled on the Database Servers, use the primary Database Server.
  - If your system includes Database Servers where the user interface/API has been disabled on the Database Servers, use an Administration Portal.

**NOTE**: The aws\_unalign\_custom\_metrics\_app.py file can be found by clicking the "Contrib Files" link for the most recent version of the Amazon Web Services PowerPack on the ScienceLogic customer portal.

- 2. Log in to the command-line of the appliance as the em7admin user.
- 3. Execute the following command:

```
sudo python aws_unalign_custom_metrics_app.py --base-url http://[IP address of
appliance] --username [username of administrator user] --password [password of
administrator user]
```

The output will show information about each device from which the "AWS Custom Metrics" Dynamic Application was unaligned.

#### Step 10: Enable Collection for AWS Devices

To enable collection for AWS devices:

- 1. Go to the **Device Components** page (Registry > Devices > Device Components).
- 2. Select the checkbox for all AWS Web Services root devices.
- 3. In the **Select Actions** drop-down list, select Change Collection State: Enabled (recursive).
- 4. Click the [Go] button.

#### Step 11 (Optional): Disable Selective PowerPack Field Protection

If you performed the steps listed in the Step 5 (Optional): Enable Selective PowerPack Field Protection section and want to disable the option for future PowerPack updates, perform the following steps:

- 1. Go to the **Behavior Settings** page (System > Settings > Behavior).
- 2. Disable the **Enable Selective PowerPack Field Protection** checkbox.
- 3. Click the [Save] button.

#### **Features**

Amazon Web Services version 116 includes the following features:

- Dynamic Applications that discover, model, and collect data from AWS component devices
- Event Policies and corresponding alerts that are triggered when AWS component devices meet certain status criteria

NOTE: Many of the Event Policies included in the Amazon Web Services PowerPack are disabled by default. You must manually enable the Event Policies that you want to use. To do so, go to the **Event Policy Editor** page (Registry > Events > Event Manager > create or edit) and change the **Operational**State to Enabled.

- Device Classes for each of the AWS component devices monitored
- Sample credentials for discovering AWS component devices
- Reports and dashboards that display information about AWS instances and component devices
- Run Book Action and Automation policies that can automate certain AWS monitoring processes
- The ScienceLogic Libraries that are utilized by this PowerPack:
  - aws explorer
  - o boto3
  - content
  - recordreplay
  - o silo apps
  - o silo aws
  - o silo aws args
  - o silo\_credentials
  - silo\_snippet
  - o silo\_vmware

#### Enhancements and Issues Addressed

Version 116 of the Amazon Web Services PowerPack includes the following enhancements and addressed issues:

- The following Dynamic Applications have been added to the PowerPack:
  - AWS Account Resource Count Performance

Features 11

**NOTE**: The "AWS Account Resource Count Performance" Dynamic Application is disabled by default. This Dynamic Application must be enabled to use the "AWS Region Resource Count Performance" Dynamic Application.

- AWS EKS Cluster Instance Configuration
- AWS EKS Cluster Instance Discovery
- AWS EKS Service Discovery
- AWS IoT Service Discovery
- AWS IoT Service Performance
- AWS IoT Thing Instance Configuration
- AWS loT Thing Instance Discovery
- AWS KMS Configuration
- AWS KMS Performance
- AWS KMS Service Discovery
- AWS Region Device Class Discovery
- AWS Region Resource Count Performance

**NOTE**: The "AWS Region Resource Count Performance" Dynamic Application is disabled by default. To use this Dynamic Application, you must also enable the "AWS Account Resource Count Performance" Dynamic Application.

- AWS SES Service Discovery
- AWS SES Service Performance

**NOTE:** To monitor the AWS EKS service, you must have an IAM role that includes the "AmazonEKSClusterPolicy" and "AmazonEKSServicePolicy" permissions policies.

- The following device classes have been added to the PowerPack:
  - EKS Service
  - EKS Cluster Instance
  - loT Service
  - loT Thing Instance
  - KMS Service
  - Region Middle East (Bahrain)
  - SES Service

 Users can now discover specific regions based on the AWS Config service or by filtering the AWS namespace in the AWS Region Discovery snippet.

**NOTE**: For more information on configuring AWS to monitor AWS Regions with AWS Config enabled, see the Configuration and Discovery chapter of the **Monitoring Amazon Web Services** manual.

 The "AWS: Region Device Class Alignment" Run Book Action and Run Book Automation Policy were added to the PowerPack to automatically align AWS Region Device Classes.

NOTE: For more information, see the Run Book Actions and Automations chapter of the Monitoring Amazon
Web Services manual

- Support for the Middle East (Bahrain) region was added to the PowerPack.
- The PowerPack was updated to include the most recent version of the Boto3 AWS SDK content library (version 1.10.6).
- The "AWS: RDS Instance Performance" Dynamic Application was updated to add the AWS: RDS Disk Space Has Exceeded Threshold and AWS: RDS Disk Space Has Returned to Normal alerts.
- The "AWS CloudWatch Alarms Performance" Dynamic Application was updated to collect EKS Cluster alarms from the CloudWatch API.
- The silo\_aws content library region discovery was updated to verify metrics related to Container Insights.
- An issue was addressed in which AWS regions without resources were appearing in DCM trees.

#### Known Issues and Workarounds

The following known issues affect version 116 of the Amazon Web Services PowerPack:

- Some disk-related alerts and events were removed from the "AWS LightSail Instance Performance" Dynamic Application as of Amazon Web Services PowerPack version 108. If you are upgrading from a version prior to version 108, then you must manually delete the thresholds relating to these removed alerts and events. To do so, go to the **Dynamic Applications Threshold Objects** page (System > Manage > Applications > wrench icon > Thresholds) for the "AWS LightSail Instance Performance" Dynamic Application, and then click the bomb icon ( ) for the following thresholds:
  - o AWS: LightSail Disk IOPS High
  - AWS: LightSail Disk GB Usage High
- AWS does not currently support IPv6 addresses for LightSail services. However, the "AWS LightSail Instance Configuration" Dynamic Application includes support for IPv6 addresses in the event that AWS adds support in the future.
- Because AWS Government accounts do not support all of the services supported by AWS Commercial accounts, some expected errors will appear when discovering AWS Government Accounts. For example:

Unable to process AWS request: AID: 402, SID: 415, DID: 3, Class: AwsOpsWorksServiceDisc UnrecognizedClientException The security token included in the request is invalid.

Unable to process AWS request: AID: 279, SID: 275, DID: 84, Class: AwsOpsWorksServiceDisc UnrecognizedClientException The security token included in the request is invalid. Invalid credentials for billing metric retrieval.

If you are discovering **only** an AWS Government account, then a simple workaround to these errors is to disable and delete the Dynamic Applications relating to services that are not supported by the AWS Government account.

**NOTE:** For more information about which services are supported by AWS Government accounts, see <a href="https://aws.amazon.com/about-aws/global-infrastructure/regional-product-services">https://aws.amazon.com/about-aws/global-infrastructure/regional-product-services</a>.

**WARNING**: If you are discovering both AWS Government and Commercial accounts, you should not disable or delete any AWS Dynamic Applications.

- SSL EOF error messages might appear in the system log when connecting to AWS through a proxy server. The error does not seem to prevent or cause issues with data collection.
- "Read operation timed out" and "Connection reset by peer" error messages might appear in the system log and device logs when upgrading the Amazon Web Services PowerPack from versions prior to 108.

© 2003 - 2019, ScienceLogic, Inc.

All rights reserved.

#### LIMITATION OF LIABILITY AND GENERAL DISCLAIMER

ALL INFORMATION AVAILABLE IN THIS GUIDE IS PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. SCIENCELOGIC™ AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

Although ScienceLogic<sup> $\top$ </sup> has attempted to provide accurate information on this Site, information on this Site may contain inadvertent technical inaccuracies or typographical errors, and ScienceLogic<sup> $\top$ </sup> assumes no responsibility for the accuracy of the information. Information may be changed or updated without notice. ScienceLogic<sup> $\top$ </sup> may also make improvements and / or changes in the products or services described in this Site at any time without notice.

#### Copyrights and Trademarks

ScienceLogic, the ScienceLogic logo, and EM7 are trademarks of ScienceLogic, Inc. in the United States, other countries, or both.

Below is a list of trademarks and service marks that should be credited to ScienceLogic, Inc. The  $^{\circledR}$  and  $^{\intercal}$  symbols reflect the trademark registration status in the U.S. Patent and Trademark Office and may not be appropriate for materials to be distributed outside the United States.

- ScienceLogic<sup>™</sup>
- EM7<sup>™</sup> and em7<sup>™</sup>
- Simplify IT<sup>™</sup>
- Dynamic Application<sup>™</sup>
- Relational Infrastructure Management<sup>™</sup>

The absence of a product or service name, slogan or logo from this list does not constitute a waiver of ScienceLogic's trademark or other intellectual property rights concerning that name, slogan, or logo.

Please note that laws concerning use of trademarks or product names vary by country. Always consult a local attorney for additional guidance.

#### Other

If any provision of this agreement shall be unlawful, void, or for any reason unenforceable, then that provision shall be deemed severable from this agreement and shall not affect the validity and enforceability of any remaining provisions. This is the entire agreement between the parties relating to the matters contained herein.

In the U.S. and other jurisdictions, trademark owners have a duty to police the use of their marks. Therefore, if you become aware of any improper use of ScienceLogic Trademarks, including infringement or counterfeiting by third parties, report them to Science Logic's legal department immediately. Report as much detail as possible about the misuse, including the name of the party, contact information, and copies or photographs of the potential misuse to: legal@sciencelogic.com



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

International: +1-703-354-1010