

# Monitoring RabbitMQ Systems

AMQP: RabbitMQ PowerPack version 103

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# Chapter

1

## Introduction

### Overview

This manual describes how to monitor HPE: Edge Connect (Silver Peak) systems in SL1 using the Dynamic Applications in the HPE: Edge Connect (Silver Peak) PowerPack.

The following sections provide an overview of RabbitMQ and the AMQP: RabbitMQ PowerPack:

This chapter covers the following topics:

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### What is RabbitMQ?

RabbitMQ is a message broker that uses the Advanced Message Queueing Protocol. RabbitMQ can be installed on servers running Linux or Windows.

What is RabbitMQ?

### What Does the AMPQ: RabbitMQ PowerPack Monitor?

To monitor RabbitMQ using SL1, you must install the AMPQ: RabbitMQ PowerPack. This PowerPack enables you to collect data about the RabbitMQ application. The AMPQ: RabbitMQ PowerPack can monitor RabbitMQ systems running version 3.5.1 and later.

The AMPQ: RabbitMQ PowerPack includes:

- An example credential you can use as a template to create a Basic/Snippet credential to connect to the RabbitMQ API
- Dynamic Applications to monitor performance metrics and collect configuration data for RabbitMQ
- A Device Class that can be manually aligned to a device on which a RabbitMQ system is installed
- Event Policies and corresponding alerts that are triggered when a RabbitMQ system meets certain status criteria

## Installing the AMPQ: RabbitMQ PowerPack

Before completing the steps in this manual, you must import and install the latest version of the AMQP: RabbitMQ 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 section on *Global Settings*.

To download and install the PowerPack:

- Search for and download the PowerPack from the PowerPacks page (Product Downloads > PowerPacks & SyncPacks) at the <u>ScienceLogic Support Site</u>.
- 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

## **Credentials and Discovery**

### Overview

The following sections describe how to configure and discover a RabbitMQ system for monitoring by SL1 using the AMQP: RabbitMQ PowerPack:

This chapter covers the following topics:

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## Prerequisites for Monitoring RabbitMQ

To configure SL1 to monitor a RabbitMQ system using the AMQP: RabbitMQ PowerPack, you must first have the following information:

- The IP address of the server running the RabbitMQ system
- The username and password for a RabbitMQ user that has read permission to the RabbitMQ API. For
  information about configuring users in RabbitMQ, see <a href="https://www.rabbitmq.com/management.html">https://www.rabbitmq.com/management.html</a>.

## Creating a Credential for RabbitMQ

To configure SL1 to monitor a RabbitMQ system, you must first create a Basic/Snippet credential. This credential allows the Dynamic Applications in the AMQP: RabbitMQ PowerPack to communicate with your RabbitMQ

system.

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

To configure a Basic/Snippet credential to access a RabbitMQ system:

- 1. Go to the **Credential Management** page (System > Manage > Credentials).
- 2. Locate the RabbitMQ EXAMPLE credential, then click its wrench icon ( ). The Edit Basic/Snippet Credential modal page appears.
- 3. Enter values in the following fields:
  - Profile Name. Enter a name for the RabbitMQ credential.
  - Hostname/IP. Use the provided "http://%D".

**NOTE**: The IP address in the *Hostname/IP* field must be preceded by "http://".

- Username. Enter the username for a RabbitMQ user that has read permission to the RabbitMQ API.
- Password. Enter the password for the user you entered in the Username field.
- 4. Leave all other fields set to the default values. Click the [Save As] button.

### Discovering RabbitMQ Devices

To monitor your RabbitMQ system, you must run a discovery session to discover the server on which RabbitMQ is installed.

To discover the server on which RabbitMQ is installed, perform the following steps:

- 1. Go to the **Discovery Control Panel** page (System > Manage > Classic Discovery).
- 2. In the Discovery Control Panel, 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. Enter the IP address for the server on which RabbitMQ is installed
  - **SNMP Credentials**. Optionally, select the SNMP credential for the Linux or Windows server you are discovering.
  - Other Credentials. Select the Basic/Snippet credential you created for the RabbitMQ API.
  - Discover Non-SNMP. 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 device is discovered, click the device icon ( ) to view the **Device Properties** page for the device.

## Verifying Discovery and Dynamic Application Alignment

To verify that SL1 automatically aligned the correct Dynamic Applications during discovery:

- 1. From the **Device Properties** page for the server on which RabbitMQ is installed, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
- 2. All applicable Dynamic Applications for RabbitMQ 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.

The following Dynamic Applications should be aligned to the device:

- AMQP: RabbitMQ Configuration
- AMQP: RabbitMQ Performance

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 [Action] 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 Basic/Snippet credential you created for the RabbitMQ API.
- 4. Click the [Save] button.
- 5. Repeat steps 1-4 for the other unaligned Dynamic Applications.

## Aligning the RabbitMQ Device Class

By default, SL1 discovers the server running the RabbitMQ system as a Linux, Windows, or Pingable device. Optionally, you can align the AMQP | RabbitMQ device class to the device.

To align the device class:

- 1. Go to the **Device Manager** page (Devices > Classic Devices, or Registry > Devices > Device Manager in the classic SL1 user interface).
- 2. Find the device you want to edit. Click its wrench icon (🅕).
- 3. In the **Device Properties** page, find the Device Class field. Click the toolbox icon (•).

- 4. In the **Select New Device Class** modal page, select the AMQP | RabbitMQ device class.
- 5. Click the **[Apply]** button.
- 6. In the **Device Properties** page, deselect the **Auto-Update** checkbox.
- 7. Click the **[Save]** button.

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