



Kubernetes PowerPack Release Notes

Version 103

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Overview

Version 103 of the *Kubernetes* PowerPack includes support for the discovery of multiple EKS clusters in different regions, the option to not align Dynamic Applications from the *Linux Base Pack*, and addresses a number of issues.

- **Minimum Required Platform Version:** 8.12.2.6

This document describes:

- [Pre-install information](#)
- [The installation process for the PowerPack](#)
- [The features included in version 103](#)
- [The enhancements and issues addressed in version 103](#)
- [The known issues in Version 103](#)

Before You Install or Upgrade

Ensure that you are running version 8.12.2.6 or later of SL1 before installing or upgrading the *Kubernetes* PowerPack version 103.

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

In addition, before installing or upgrading the *Kubernetes* PowerPack version 103, you must first import and install the *Linux Base Pack* PowerPack version 103. The *Kubernetes* PowerPack leverages this PowerPack and will not work properly if it is not also installed.

If you are upgrading from version 101 to version 102 or later of the *Kubernetes* PowerPack, you must delete the version 101 dashboards on SL1. To do so, perform the following steps:

1. Go to the **Device Dashboards** page (System > Customize > Device Dashboards).
2. Search for "Kubernetes" in the *Device Dashboard Name* column.
3. Select the checkbox for each Kubernetes dashboard.
4. In the **Select Actions** drop-down field, select *Delete Dashboards*.
5. Click the Go button.
6. Click the OK button to confirm.

Installation and Upgrade Process

To install version 103 of the *Kubernetes* PowerPack, perform the following steps:

1. Familiarize yourself with the [Known Issues](#) for this release.
2. If you have not done so already, upgrade your system to the 8.12.2.6 or later release.
3. If you have not done so already, install the *Linux Base Pack* PowerPack version 103.

NOTE: If you are upgrading from version 100 or greater of the Kubernetes PowerPack, install the Docker PowerPack version 102 or greater before upgrading, if you have not done so already.

4. Download version 103 of the *Kubernetes* PowerPack from the Support Site to a local computer.
5. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Click the Actions menu and choose *Import PowerPack*. When prompted, import version 103 of the *Kubernetes* PowerPack.
6. If you are upgrading from version 101 to version 102 or later, ensure the dashboards are marked as "install" in the **Action** column of the **PowerPack Installer** modal.
7. After importing the PowerPack, you will be prompted to install the PowerPack. Click the Install button to install the PowerPack.
8. See the manual **Monitoring Kubernetes** for instructions on using the new PowerPack.

Included Features

The following features are included in version 103 of the *Kubernetes* PowerPack:

- Dynamic Applications to discover and monitor Kubernetes devices
- Device Classes for each of the Kubernetes devices the *Kubernetes* PowerPack can monitor
- Event Policies and corresponding alerts that are triggered when Kubernetes devices meet certain status criteria
- A Dashboard and Dashboard Widget that you must use to create Credentials for discovering Kubernetes devices
- An SSH/Key Credential that the Kubernetes Token Entry Dashboard uses as a template for creating additional SSH/Key Credentials for monitoring Kubernetes clusters

NOTE: You must use the Kubernetes Token Entry Dashboard that is included in the *Kubernetes* PowerPack to create a master SSH/Key Credential, a node SSH/Key Credential, and a SOAP/XML Credential. By doing so, you can specify the Kubernetes device topology that you want to discover. For more information, see the **Monitoring Kubernetes** manual.

NOTE: You must not edit the SSH/Key Credential that is included in the *Kubernetes* PowerPack.

- Run Book Action and Automation policies that do the following:
 - Automatically create Kubernetes clusters whenever the ScienceLogic platform discovers a Kubernetes host

- Align Dynamic Applications from the *Linux Base Pack* PowerPack to Kubernetes nodes and report if a successful alignment has occurred to the ScienceLogic Data Collector or All-in-One Appliance
- Ensure that Namespaces (and their children) have a 1-hour vanishing timer, to properly reflect topology changes

Enhancements and Issues Addressed

The following enhancements and addressed issues are included in version 103 of the *KubernetesPowerPack*:

- Users can now configure discovery to make the inclusion of *Linux Base Pack* PowerPack Dynamic Applications optional.
- The "Kubernetes: Node Performance" Dynamic Application was added to the PowerPack. This Dynamic Application requires that the Kubernetes Metrics Server be installed in the Kubernetes cluster.
- Support was added for the automatic discovery of multiple EKS clusters in different regions.
- The **Kubernetes Token Entry** dashboard was updated to address an issue in which users, who had updated to SL1 version 10.1.6 or later, could not create or modify Kubernetes credentials using the dashboard.
- An issue was addressed in which component devices would switch between multiple parent devices with the same device ID, but in different namespaces, resulting in clogged device logs.
- An issue was addressed in which discovered GKE Kubernetes clusters were using the GCP project name as the virtual root device name. This has been updated so they will now appear using the cluster name.
- An issue was addressed in the "Kubernetes: Events Configuration" and "Kubernetes: Pod Configuration" Dynamic Applications in which they were unable to receive the auth-token for an EKS cluster.
- An issue was addressed in which the root Kubernetes cluster was not created after the "Kubernetes: Cluster Creation" Dynamic Application was aligned in systems with customized SL1 API ports.

Known Issues

The following known issue affects *Kubernetes* PowerPack version 103:

- The poll frequency of the "Kubernetes: Events Configuration" Dynamic Application was updated to 15 minutes in order to reduce the potential of SIGTERM during discovery, depending on the number of events. It is recommended that you change the poll frequency to 5 minutes for each Kubernetes | Namespace component after a couple of hours.
- In systems in which a Kubernetes cluster is deleted or shut down, errors and exceptions may continue to appear in system and device logs. If your cluster has been deleted, you can disable data collection to stop the creation of more system log exceptions.
- Users can discover Elastic Kubernetes Service (EKS) and Google Kubernetes Engine (GKE) clusters with the *Kubernetes* PowerPack version 103, but full support and testing for EKS and GKE has not yet been implemented.

- When using SL1 platform version 8.14.0 with this PowerPack, Kubernetes device discovery will fail. Therefore it is not recommended to use this version of the PowerPack. SL1 platform version 8.14.1 and later accurately discovers Kubernetes devices.

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