Microsoft: Azure PowerPack Release Notes

Version 112

Table of Contents

Overview

Microsoft: Azure PowerPack version 112 adds support for a number of services, with new Dynamic Applications, Device Classes, and Alerts.

- **Minimum Required Platform Version**: 8.12.0
- **Support Status**: GA

This document describes:

- *Pre-install or pre-upgrade information*
- *The installation process for the PowerPack*
- *The upgrade process for the PowerPack*
- *The features included in version 112*
- *The enhancements and issues addressed in version 112*
- *The known issues that affect version 112*

Before You Install or Upgrade

Ensure that you are running version 8.12.0 or later of SL1 before installing the *Microsoft: Azure* PowerPack version 112.

NOTE: As of *Microsoft: Azure* PowerPack version 106, Data Collectors running CentOS can no longer discover and monitor Microsoft Azure.

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

TIP: Prior to using the multiple subscription functionality introduced in version 104, ScienceLogic recommends that you review your device capacity and load limits to determine the best method for implementation.

Installing Microsoft: Azure PowerPack version 112

To install the *Microsoft: Azure* PowerPack ***for the first time*** (that is, if you have never installed a *Microsoft: Azure* PowerPack before), perform the following steps:

1. Familiarize yourself with the ***Known Issues*** for this release.
2. See the ***Before You Install or Upgrade*** section. If you have not done so already, upgrade your system to the 8.12.0 or later release.
3. Download version 112 of the *Microsoft: Azure* PowerPack from the Customer Portal to a local computer.
4. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Click the **[Actions]** menu and choose *Import PowerPack*. When prompted, import version 112 of the *Microsoft: Azure* PowerPack.
5. After importing the PowerPack, you will be prompted to install the PowerPack. Click the **[Install]** button to install the PowerPack.
6. See the manual ***Monitoring Microsoft Azure*** for instructions on using the new PowerPack.

Upgrading the Microsoft: Azure PowerPack from Version 104 and Later

> **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 the new version of the PowerPack from overwriting local changes for some commonly customized fields.

To upgrade the *Microsoft: Azure*PowerPack from version 104 and later:

1. Familiarize yourself with the ***Known Issues*** for this release.
2. See the ***Before You Upgrade*** section. If you have not done so already, upgrade your system to the 8.12.0 or later release.
3. Download version 112 of the *Microsoft: Azure* PowerPack from the Customer Portal to a local computer.
4. Before importing and installing version 112 of the PowerPack, you must disable the existing tree of Azure parent and component devices, recursively. To do so:
   - Go to the **Device Components** page (Registry > Devices > Device Components)
   - Collapse the root Azure component device.
   - Select the root Azure device's checkbox.
   - Click the ***Select Action*** drop-down menu. Under **Change Collection State**, select *Disabled (recursive)*, and then click **[Go]**.
5. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Click the **[Actions]** menu and choose *Import PowerPack*. Import the *Microsoft: Azure* version 112 PowerPack. For details on importing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.

6. Click the **[Install]** button. For details on installing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.
7. If you are implementing the multiple subscription feature, go to the **Credential Management** page (System > Manage > Credentials) and create a new credential or edit an existing one as needed for use with the multiple subscription configuration. (For more information, see the manual ***Monitoring Microsoft Azure***.)
8. You must now enable the existing tree of Azure parent and component devices, recursively. To do so:
    - Go to the **Device Components** page (Registry > Devices > Device Components)
    - Collapse the root Azure component device.
    - Select the root Azure component device's checkbox.
    - Click the ***Select Action*** drop-down menu. Under **Change Collection State**, select *Active (recursive)*, and then click **[Go]**.

Upgrading from a Microsoft: Azure PowerPack Version Prior to v104

To upgrade the *Microsoft: Azure* PowerPack from a version earlier than v104:

1. Familiarize yourself with the ***Known Issues*** for this release.
2. See the ***Before You Upgrade*** section. If you have not done so already, upgrade your system to the 8.12.0 or later release.
3. Download version 112 of the *Microsoft: Azure* PowerPack from the Customer Portal to a local computer.
4. Before importing and installing version 112 of the PowerPack, you must disable the existing tree of Azure parent and component devices, recursively. To do so:
    - Go to the **Device Components** page (Registry > Devices > Device Components).
    - Collapse the root Azure component device.
    - Select the root Azure component device's checkbox.
    - Click the ***Select Action*** drop-down menu. Under **Change Collection State**, select *Disabled (recursive)*, and then click **[Go]**.
5. Because the following Dynamic Applications were force-removed from v103 and v104, when you upgrade to version 112, you must manually remove the device components discovered by these Dynamic Applications.
    - Microsoft: Azure Backup Jobs Discovery
    - Microsoft: Azure Backup Policies Service Discovery
    - Microsoft: Azure Backup Policy Discovery
    - Microsoft: Azure Recovery Jobs Service Discovery
    - Microsoft: Azure Storage Blob Configuration
    - Microsoft: Azure Storage Blob Discovery

- Microsoft: Azure Storage Container Discovery
- Microsoft: Azure Storage Table Discovery
- Microsoft: Azure Storage Queue Discovery

6. Go to the **Device Manager** page (Registry > Devices > Device Manager).
7. Filter the list of devices by *Device Class | Sub-Class*. Type the following in the filter:

   Azure Storage Container, Azure Storage Blob, Azure Storage Queue, Azure Storage Table, *Backup Policies Service, Backup Policy, Jobs Service, Backup Job*

8. The **Device Manager** page now displays only devices with the specified Device Classes. Click the **Select All** checkbox in the upper right to select all these devices.
9. Click on the **[Select Action]** field, and choose ***DELETE Selected Devices***. Click the **[Go]** button. Confirm that you want to delete the device.
10. Next, you must delete the Device Classes associated with the Dynamic Applications that were force-removed. Go to the **Device Class Editor** page (System > Customize > Device Classes).
11. Filter the list of Device Classes. To do so, enter the following:

    - ***Device Class***. In this field, type *Microsoft*.
    - ***Description***. In this field , type *Backup Policies Service, Backup Policy, Jobs Service, Backup Job*, *Azure Storage Container, Azure Storage Blob, Azure Storage Queue, Azure Storage Table*.

12. The **Device Class Editor** page should now display only the following Device Classes:

    - Azure Backup Job
    - Azure Backup Policies Service
    - Azure Backup Policy
    - Azure Jobs Service
    - Microsoft Azure Storage Container
    - Microsoft Azure Storage Blob
    - Microsoft Azure Storage Table
    - Microsoft Azure Storage Queue

13. Click the **[Select Action]** field, choose ***DELETE Device Classes***, and click the **[Go]** button. Confirm that you want to delete the device.
14. Go to the **PowerPack Manager** page (System > Manage > PowerPacks). Click the **[Actions]** menu and choose *Import PowerPack*. Import the *Microsoft: Azure* version 112 PowerPack. For details on importing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.
15. Click the **[Install]** button. For details on installing PowerPacks, see the chapter on *Installing a PowerPack* in the ***PowerPacks*** manual.

16. Enable the existing tree of Azure parent and component devices, recursively. To do so:
    - Go to the **Device Components** page (Registry > Devices > Device Components).
    - Collapse the root Azure component device.
    - Select the root Azure component device's checkbox.
    - Click the ***Select Action*** drop-down menu. Under **Change Collection State**, select *Enabled (recursive)*, and then click **[Go]**.
17. See the manual ***Monitoring Microsoft Azure*** for instructions on using the new PowerPack.

Features

Microsoft: Azure PowerPack version 112 includes the following features:

- Dynamic Applications that enable SL1 to discover, model, and monitor performance metrics and collect configuration data for Azure resources
- Event Policies that are triggered when Azure resources meet certain status criteria
- Device Classes for each Azure data center location and all of the Azure resources that SL1 monitors
- Example credentials for discovering Azure resources
- A Credential Test to ensure that your Azure credential works as expected
- Run Book Action and Automation policies that can automate certain Azure monitoring processes

Enhancements and Issues Addressed

The following changes are included in version 112 of the *Microsoft: Azure* PowerPack:

- The following Dynamic Applications were added to the PowerPack:
    - Microsoft: Azure Batch Account Configuration
    - Microsoft: Azure Batch Account Discovery
    - Microsoft: Azure Batch Account Job Configuration
    - Microsoft: Azure Batch Account Job Pool Task Performance
    - Microsoft: Azure Batch Account Node Performance
    - Microsoft: Azure Batch Account Pool Configuration
    - Microsoft: Azure Batch Account Service Discovery
    - Microsoft: Azure Cache for Redis Configuration
    - Microsoft: Azure Cache for Redis Discovery
    - Microsoft: Azure Cache for Redis Keys Performance
    - Microsoft: Azure Cache for Redis Operations Performance
    - Microsoft: Azure Cache for Redis Performance

NOTE: The alerts in the "Microsoft: Azure Cache for Redis Performance" Dynamic Application are disabled by default. If you enable the alerts, see the section *Setting Thresholds for Dynamic Applications* in the ***Device Management*** manual for more information.

- Microsoft: Azure Cache for Redis Service Discovery
- Microsoft: Azure Cache for Redis System Performance
- Microsoft: Azure CDN Endpoint Configuration
- Microsoft: Azure CDN Endpoint Discovery
- Microsoft: Azure CDN Profile Configuration
- Microsoft: Azure CDN Profile Discovery
- Microsoft: Azure CDN Service Discovery
- Microsoft: Azure Database for MySQL DB Configuration
- Microsoft: Azure Database for MySQL Discovery
- Microsoft: Azure Database for MySQL Parameters Configuration
- Microsoft: Azure Database for MySQL Performance
- Microsoft: Azure Database for MySQL Server Configuration
- Microsoft: Azure Database for MySQL Service Discovery
- Microsoft: Azure Database for PostgreSQL DB Configuration
- Microsoft: Azure Database for PostgreSQL Discovery
- Microsoft: Azure Database for PostgreSQL Params Configuration
- Microsoft: Azure Database for PostgreSQL Server Configuration
- Microsoft: Azure Database for PostgreSQL Server Performance
- Microsoft: Azure Database for PostgreSQL Service Discovery
- Microsoft: Azure Function App Discovery
- Microsoft: Azure Function App Performance
- Microsoft: Azure Function List Configuration
- Microsoft: Azure Key Vault Configuration
- Microsoft: Azure Key Vault Discovery
- Microsoft: Azure Key Vault Performance
- Microsoft: Azure Key Vault Service Discovery
- Microsoft: Azure Kubernetes Cluster Configuration
- Microsoft: Azure Kubernetes Cluster Discovery
- Microsoft: Azure Kubernetes Cluster Performance

NOTE: For Government accounts, the "Microsoft: Azure Kubernetes Cluster Performance" Dynamic Application will collect data for only the US Gov Virginia location.

  - Microsoft: Azure Kubernetes Service Discovery
  - Microsoft: Azure Service Bus Configuration
  - Microsoft: Azure Service Bus Discovery
  - Microsoft: Azure Service Bus Performance
  - Microsoft: Azure Service Bus Queues Configuration
  - Microsoft: Azure Service Bus Service Discovery
  - Microsoft: Azure Service Bus Topics Configuration
  - Microsoft: Azure WAF on Application Gateway Policy Configuration
  - Microsoft: Azure WAF on Application Gateway Policy Discovery
  - Microsoft: Azure WAF on Application Gateway Service Discovery
  - Microsoft: Azure WAF on CDN Policy Configuration
  - Microsoft: Azure WAF on CDN Policy Discovery
  - Microsoft: Azure WAF on CDN Policy Performance
  - Microsoft: Azure WAF on CDN Service Discovery
- Four Event Policies were added for Microsoft: Azure Apps.
- Ten Event Policies were added for Microsoft: Azure Batch Accounts.
- Eighteen Event Policies were added for Microsoft: Azure Cache for Redis.
- Two Event Policies were added for Microsoft: Azure CDN Endpoint Resource.
- Sixteen Event Policies were added for Microsoft: Azure DB for MySQL.
- Eighteen Event Policies were added for Microsoft: Azure DB for PostgreSQL.
- Four Event Policies were added for Microsoft: Azure Key Vault.
- Four Event Policies were added for Microsoft: Azure Kubernetes.
- Added the "Microsoft: Azure Network Interruption" Event Policy to the PowerPack. This Event Policy will be raised at the root device when the PowerPack experiences a network issue, such as a 500 HTTP error. This will in turn prevent device components from becoming unavailable.
- Ten Event Policies were added for Microsoft: Azure Service Bus.
- Two Event Policies were added for Microsoft: Azure WAF on CDN.
- Two Event Policies were added for Microsoft: Azure WAF on Application Gateway.
- The following Device Classes were added to the PowerPack:
  - Azure Batch Account
  - Azure Batch Account Service
  - Azure Cache for Redis Service
  - Azure CDN Endpoint

    - Azure CDN Profile
    - Azure CDN Service
    - Azure Database for MySQL Server
    - Azure Database for MySQL Service
    - Azure Database for PostgreSQL Server
    - Azure Database for PostgreSQL Service
    - Azure Function App Linux Container
    - Azure Key Vault
    - Azure Key Vault Service
    - Azure Kubernetes Cluster
    - Azure Kubernetes Service
    - Azure Service Bus Namespace
    - Azure Service Bus Service
    - Azure WAF on Application Gateway Policy
    - Azure WAF on Application Gateway Service
    - Azure WAF on CDN Policy
    - Azure WAF on CDN Service
- The following Device Categories were added to the PowerPack:
    - Cloud.Container
    - Cloud.Integration
    - Cloud.KeyVault
- The following Device Dashboards were added to the PowerPack:
    - Microsoft: Azure Key Vault
    - Microsoft: Azure Service Bus Namespace
    - Microsoft: Azure Kubernetes Cluster
    - Microsoft: Azure WAF on CDN Policy
    - Microsoft: Azure PostgreSQL Server
    - Microsoft: Azure Batch Account
    - Microsoft: Azure Cache for Redis
    - Microsoft: Azure MySQL Server
- Users can enable logging by adding "LOGGING" to the header field of the credential. The log file can be located at /tmp/azure.log
- New SVG Icons for the new user interface and classic icons were added to the Device Classes in the PowerPack for the following services:
    - Azure Function App
    - Azure Function App Linux Container

    - Azure Key Vault
    - Azure Key Vault Service
    - Azure MySQL Server
    - Azure MySQL Service
    - Azure PostgreSQL Service
    - Azure PostgreSQL Single Server
    - Azure Redis Cache Instance
    - Azure Redis Cache Service
    - Azure Service Bus Namespace
    - Azure Service Bus Service
- SSL Certification Verification has been enabled by default in the PowerPack. This can be enabled or disabled in the credential. To disable certification verification, add "verify:false" to the header. To enable it again, remove the header.
- The PowerPack was updated to create and model relationships between the following Device Classes:
    - Azure Batch Accounts and Azure Key Vaults
    - Azure Batch Accounts and Azure Resource Groups
    - Azure Batch Accounts and Azure Storage Accounts
    - Azure CDN Profiles and Azure Resource Groups
    - Azure Key Vaults and Azure Resource Groups
    - Azure Key Vaults and Azure Virtual Networks
    - Azure Key Vault Rules and Azure Subnets
    - Azure Kubernetes Agent Pools and Azure Subnets
    - Azure MySQL Servers and Azure MySQL Server Replicas
    - Azure MySQL Servers and Azure Subnets
    - Azure MySQL Servers and Azure Resource Groups
    - Azure MySQL Servers and Azure Virtual Networks
    - Azure MySQL Servers and Azure Virtual Network Subnets
    - Azure PostgreSQL Servers and Azure Resource Groups
    - Azure PostgreSQL Servers and Azure Subnets
    - Azure PostgreSQL Servers and Azure PostgreSQL Server Replicas
    - Azure PostgreSQL Servers and Azure Virtual Networks
    - Azure Redis Caches and Azure Subnets
    - Azure Redis Cache Servers and Azure Redis Cache Servers
    - Azure Redis Caches and Azure Resource Groups
    - Azure Redis Caches and Azure Virtual Networks
    - Azure Service Bus Namespaces and Azure Resource Groups

    - Azure Service Bus Namespaces and Azure Service Bus Namespaces
    - Azure Service Bus Namespaces and Azure Subnets
    - Azure Service Bus Namespaces and Azure Virtual Networks
    - Azure WAF CDN Policies and Azure Endpoints
    - Azure WAF CDN Policies and Azure Resource Groups
    - Azure WAF Gateway Policies and Azure Application Gateways
    - Azure WAF Gateway Policies and Azure Resource Groups
- Updated size metrics were added to the "Microsoft: Azure Virtual Machine Configuration" Dynamic Application.
- The strip() function was added to snippets in Dynamic Applications to remove whitespace from credential fields.
- The "Microsoft: Azure Virtual Machine Discovery" Dynamic Application was updated to make availability dependent on the powerstate of the virtual machine. If a virtual machine is powered off it will not be discovered. This does not apply to the "Microsoft: Azure VMSS Virtual Machine Discovery" Dynamic Application.
- An issue was addressed in which monitoring would not work when a customer was using an SSL inspector on their proxy server.
- An issue was addressed in which error messages were received when running the Azure credential test.

Known Issues

- The PowerPack will not install on SL1 systems configured to be Federal Information Processing Standards (FIPS)-compliant until the new user interface available with SL1 version 8.12.0 and later supports FIPS systems.
- Azure CosmosDB SVG icons for device classes are not available in this version.
- The default metric System Availability requires an availability report every five minutes by default. However, the "Microsoft Azure: Virtual Machine Discovery" Dynamic Application runs every 15 minutes by default, which causes gaps in the data. To avoid seeing gaps in System Availability, reduce the default poll time for the Discovery Dynamic Application to five minutes.
- When discovering a large number of component devices, the discovery process can cause the appearance of numerous critical events with the message, "`Large backlog of asynchronous jobs detected`".
- The Dynamic Application "Microsoft: Azure Backup Policy Configuration" retrieves an additional parameter (HourlyLogBackup) that is not displayed in the Azure portal. The parameter does not contain a value. This issue is caused by a parameter being available in the Azure API but not in the Azure portal.

> **NOTE**: This issue does not occur for Microsoft Azure Government subscribers.

- In Microsoft Azure, no count appears for Recovery Service Vault > Backup items > Azure Backup Server. This is a bug in the Azure API.

- The API for Microsoft Azure Government does not currently provide performance data for Azure Application Gateways. This is a bug in the Azure API.
- The API for Microsoft Azure Government does not currently support the following performance data for Azure SQL Databases: deadlock, dtu_consumption_percent, dtu_limit, dtu_used, log_write_percent, sessions_percent, storage, storage_percent, workers_percent, and xtp_storage_percent. This is a bug in the Azure API.

Workarounds

Version 103 fixed an issue where the Dynamic Application "Microsoft: Azure Virtual Machine Discovery" was not automatically assigning a device class to each discovered device.

As a result, if you are upgrading from a version of the *Microsoft: Azure* PowerPack prior to version 103, after the upgrade you must either re-discover the Azure Virtual Machine devices that previously had no device class, or you must manually assign the device class "Microsoft | Azure Virtual Machine Service" to each of those devices.

To manually re-discover the Azure Virtual Machine devices that previously had no device class:

1. Go to the Dynamic Applications Manager page (System > Manage > Applications).
2. Find the Dynamic Application "Microsoft: Azure Virtual Machine Discovery" and select its checkbox.
3. Click the **[Select Action]** field and choose ***DISCOVER Applications***. Click the **[Go]** button.

To manually assign a device class to the Azure Virtual Machine devices, perform these steps on each device:

1. Go to the **Device Manager** page (Registry > Devices > Device Manager).
2. Find the device you want to edit and select its wrench icon ().
3. In the **Device Properties** page, find the ***Device Class*** field and select the toolbox icon ().
4. In the **Select New Device Class** modal page, select the device class that matches the Azure Virtual Machine in both size and type.
5. The newly selected device class is now associated with the device.

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 ® and ™ 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™
- EM7™ and em7™
- Simplify IT™
- Dynamic Application™
- Relational Infrastructure Management™

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