Microsoft: Azure PowerPack Release Notes

Version 109

Table of Contents

Overview

Microsoft: Azure PowerPack version 109 adds the ability to monitor Azure DNS services and ExpressRoute services, as well as new device component map relationships between Azure Active Directory tenants and Office 365 tenants. It includes new and updated Dynamic Applications, Device Classes, and Run Book Actions.

- **Minimum Required Platform Version**: 8.7.0
- **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 109*
- *The enhancements and issues addressed in version 109*
- *The known issues that affect version 109*

Before You Install or Upgrade

Ensure that you are running version 8.7.0 or later of SL1 before installing the *Microsoft: Azure* PowerPack version 109.

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 109

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 8.7.0 or later release.
3. Download version 109 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 109 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 8.7.0 or later release.
3. Download version 109 of the *Microsoft: Azure* PowerPack from the Customer Portal to a local computer.
4. Before importing and installing version 109 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 109 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 8.7.0 or later release.
3. Download version 109 of the *Microsoft: Azure* PowerPack from the Customer Portal to a local computer.
4. Before importing and installing version 109 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 109, 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. You must filter the list of device classes. To do so, enter the following:

    - ***Device Class***. In this filter, 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 109 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. 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 *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 109 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
- Run Book Action and Automation policies that can automate certain Azure monitoring processes

Enhancements and Issues Addressed

The following changes are included in version 109 of the *Microsoft: Azure* PowerPack:

- The following Dynamic Applications were added to the PowerPack to support the ability to monitor the Azure DNS Service:
    - Microsoft: Azure DNS Service Discovery
    - Microsoft: Azure DNS Zone Discovery
    - Microsoft: Azure DNS Zone Configuration
    - Microsoft: Azure DNS Zone Performance
- The following Dynamic Applications were added to the PowerPack to support the ability to monitor the Azure ExpressRoute Service:
    - Microsoft: Azure ExpressRoute Service Discovery
    - Microsoft: Azure ExpressRoute Circuit Discovery
    - Microsoft: Azure ExpressRoute Circuit Configuration
    - Microsoft: Azure ExpressRoute Circuit Performance
    - Microsoft: Azure ExpressRoute Circuit Connection Discovery
    - Microsoft: Azure ExpressRoute Circuit Connection Configuration

    - Microsoft: Azure ExpressRoute Peering Discovery
    - Microsoft: Azure ExpressRoute Peering Configuration
    - Microsoft: Azure ExpressRoute Peering Performance

- The following Dynamic Applications were also added to the PowerPack:
    - Microsoft: Azure Standard Load Balancer Discovery
    - Microsoft: Azure Standard Load Balancer Performance
    - Microsoft: Azure Storage Account File Performance
    - Microsoft: Azure Traffic Manager Profile Performance
- The "Microsoft: Azure Active Directory Tenant Configuration" Dynamic Application was updated to remove the Domain ID collection object and to utilize a new method of authentication.
- The "Microsoft: Azure Active Directory Tenant Configuration" Dynamic Application was also updated to create device component map relationships between Azure tenants and Office 365 tenants, for users who also have the forthcoming *Microsoft: Office 365* PowerPack v101 installed.
- The "Microsoft: Azure Active Directory Tenant Discovery" Dynamic Application was updated to utilize a new method of authentication.
- The "Microsoft: Azure Application Gateway Performance" Dynamic Application was updated to collect additional metrics.
    - Current Connections
    - Failed Request
    - Healthy Host Count
    - Response Status
    - Total Request
    - Unhealthy Host Count
- The "Microsoft: Azure Load Balancer Discovery" Dynamic Application was renamed to "Microsoft: Azure Basic Load Balancer Discovery".
- The "Microsoft: Azure Unified Alerts Performance" Dynamic Application was updated to support unified alerts for DNS, ExpressRoute, and Load Balancer components.
- Alerts were disabled for the "Microsoft: Azure Virtual Machine Discovery" and "Microsoft: Azure VMSS Virtual Machine Discovery" Dynamic Applications, due to an issue with the Microsoft API that was causing false positive alerts to appear in the device log.
- The "Microsoft: Azure VMSS Configuration" Dynamic Application was updated to collect public IP address information from virtual machine scale sets.
- The "Microsoft: Azure VPN Gateway Discovery" Dynamic Application was renamed to "Microsoft: Azure Virtual Network Gateway Discovery".
- The "Microsoft: Azure VPN Gateway Configuration" Dynamic Application was renamed to "Microsoft: Azure Virtual Network Gateway Configuration".

- The "Microsoft: Azure VPN Gateway Performance" Dynamic Application was renamed to "Microsoft: Azure Virtual Network Gateway Performance". The Dynamic Application was also updated to collect the following additional metrics:
    - Gateway P2S Bandwidth
    - Gateway S2S Bandwidth
    - P2S Connection Count
- The following Device Classes were added to the PowerPack to support the ability to monitor the Azure DNS Service:

Device Class	Device Tier
Azure DNS Service	1
Azure DNS Zone	2

- The following Device Classes were added to the PowerPack to support the ability to monitor the Azure ExpressRoute Service:

Device Class	Device Tier
Azure ExpressRoute Service	1
Azure ExpressRoute Circuit	3
Azure ExpressRoute Circuit Connection	1
Azure ExpressRoute Gateway	3
Azure ExpressRoute Microsoft Peering	1
Azure ExpressRoute Private Peering	1
Azure ExpressRoute Public Peering	1

- A new "Azure Standard Load Balancer" Device Class was added to the PowerPack with a Device Tier of "3".
- The "Azure Load Balancer" Device Class was renamed to "Azure Basic Load Balancer."
- All of the sample Credentials included in the PowerPack were updated with new URLs that use token 2.0.
- An issue was addressed that was causing the "Microsoft: Azure Merge Physical with Component" Run Book Action to not work as intended due to it using an incorrect URI when the device belonged to the "System" organization.

Known Issues

- The sample Credentials included in the PowerPack have been updated to use the latest required permissions to access the Azure Portal. These changes are causing the Azure Credential Test to fail when testing the credentials' ability to make Azure Active Directory requests. However, if you follow the instructions for creating Credentials as written in the ***Monitoring Microsoft Azure*** manual, the Credentials should discover Azure with no issues.
- If you edit the "Disable By VM Tag" Run Book Action or the "Microsoft Azure: Merge with VM" Run Book Action on a system running version 8.9.0 of SL1, the action fails because of a configuration issue. This issue was addressed in version 8.9.1.1 of the platform.
- 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.
- After installing version 109 of this PowerPack, you might encounter a message that begins with the following text: `Unhandled exception during collection, process Data Collection: Dynamic App: Traceback (most recent call last)`. This issue was addressed in version 8.9.1.1 of SL1.
- When Azure components are discovered in the default System organization, the "Microsoft Azure: Merge Physical with Component" Run Book Action will not work. To work around this issue, use a different organization instead of System.
- 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