ScienceLogic

Microsoft: Azure PowerPack Release Notes

Version 117

Overview

Version 117 of the *Microsoft: Azure* PowerPack includes newDynamic Applications, new Device Classes, and updates to Dynamic Applications to work with the latest version of the Azure API.

- **Minimum Required SL1 Version**: 10.2.0

This document covers the following topics:

Before You Install or Upgrade

Ensure that you are running version 10.2.0 or later of SL1 before installing *Microsoft: Azure* version 117.

> **NOTE:** For details on upgrading SL1, see the appropriate [Release Notes](#).

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

> **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.

Installation Process

To install this PowerPack:

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 10.2.0 or later release.

3. Download the *Microsoft: Azure* version 117 PowerPack from the Support Site 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 *Microsoft: Azure* version 117.

5. Click the [Install] button. For details on installing PowerPacks, see the chapter on *Installing a PowerPack* in the **PowerPacks** manual.

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 minimum required platform version or later release.

3. Download this version of the PowerPack from the Support Site to a local computer.

4. Before importing and installing this version 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 Version 117 of the *Microsoft: Azure* 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 minimum required platform version or later release.

3. Download this version of the PowerPack from the Support Site to a local computer.

4. Before importing and installing this version 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 111, 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 this version of the 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

Version 117 of the *Microsoft: Azure* PowerPack 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 enhancements and addressed issues are included in version 117 of the *Microsoft: Azure* PowerPack:

- The following Dynamic Applications were added to the PowerPack:
    - Microsoft: Azure API Management APIS Configuration
    - Microsoft: Azure API Management APIS Discovery
    - Microsoft: Azure API Management APIS Operations Configuration
    - Microsoft: Azure API Management APIS Products Configuration
    - Microsoft: Azure API Management Configuration
    - Microsoft: Azure API Management Discovery
    - Microsoft: Azure API Management Performance
    - Microsoft: Azure API Management Service Discovery
    - Microsoft: Data Lake Storage Account Discovery
    - Microsoft: Azure Databricks Configuration
    - Microsoft: Azure Databricks Discovery
    - Microsoft: Azure Databricks Service Discovery

- ○ Microsoft: Azure Firewall Configuration
- ○ Microsoft: Azure Firewall Discovery
- ○ Microsoft: Azure Firewall Performance
- ○ Microsoft: Azure Firewall Service Discovery
- The following Dynamic Applications were updated to use the latest version of the Azure API endpoint:
  - ○ Microsoft: Azure App Configuration
  - ○ Microsoft: Azure App Discovery
  - ○ Microsoft: Azure Application Gateway Configuration
  - ○ Microsoft: Azure Backup Job Performance
  - ○ Microsoft: Azure Backup Policy Configuration
  - ○ Microsoft: Azure Backup Protected Items Configuration
  - ○ Microsoft: Azure Batch Account Configuration
  - ○ Microsoft: Azure Batch Account Job Configuration
  - ○ Microsoft: Azure Batch Account Pool Configuration
  - ○ Microsoft: Azure Cache for Redis Configuration
  - ○ Microsoft: Azure CDN Endpoint Configuration
  - ○ Microsoft: Azure CDN Endpoint Discovery
  - ○ Microsoft: Azure CDN Profile Configuration
  - ○ Microsoft: Azure CDN Service Discovery
  - ○ Microsoft: Azure CosmosDB Configuration
  - ○ Microsoft: Azure CosmosDB Discovery
  - ○ Microsoft: Azure CosmosDB Location Discovery
  - ○ Microsoft: Azure CosmosDB Location Performance
  - ○ Microsoft: Azure DNS Service Discovery
  - ○ Microsoft: Azure ExpressRoute Circuit Connection Discovery
  - ○ Microsoft: Azure ExpressRoute Peering Discovery
  - ○ Microsoft: Azure ExpressRoute Service Discovery
  - ○ Microsoft: Azure Function App Discovery
  - ○ Microsoft: Azure Function List Configuration
  - ○ Microsoft: Azure Key Vault Configuration
  - ○ Microsoft: Azure Kubernetes Cluster Configuration
  - ○ Microsoft: Azure Load Balancer Configuration
  - ○ Microsoft: Azure Managed Disks Configuration
  - ○ Microsoft: Azure Network Security Group Configuration
  - ○ Microsoft: Azure Recovery Services Vault Configuration
  - ○ Microsoft: Azure Resource Group Configuration

- ○ Microsoft: Azure Site Recovery Plans Configuration
- ○ Microsoft: Azure Site Recovery Policy Configuration
- ○ Microsoft: Azure Site Recovery Protected Items Configuration
- ○ Microsoft: Azure SQL Database Configuration
- ○ Microsoft: Azure SQL Database Discovery
- ○ Microsoft: Azure SQL Database Performance
- ○ Microsoft: Azure SQL Managed Instance Configuration
- ○ Microsoft: Azure SQL Managed Instance Database Configuration
- ○ Microsoft: Azure SQL Managed Instance Database Discovery
- ○ Microsoft: Azure SQL Managed Instance Failover Configuration
- ○ Microsoft: Azure SQL Server Configuration
- ○ Microsoft: Azure SQL Server Discovery
- ○ Microsoft: Azure Storage Account Configuration
- ○ Microsoft: Azure Storage Account Discovery
- ○ Microsoft: Azure Traffic Manager Service Discovery
- ○ Microsoft: Azure Unified Alerts Performance
- ○ Microsoft: Azure Virtual Network Configuration
- ○ Microsoft: Azure Virtual Network Discovery
- ○ Microsoft: Azure Virtual Network Gateway Configuration
- ○ Microsoft: Azure Virtual Network Subnet Configuration
- ○ Microsoft: Azure Virtual Network Subnet Discovery
- ○ Microsoft: Azure VMSS Configuration
- ○ Microsoft: Azure VMSS Profiles Configuration
- ○ Microsoft: Azure VMSS Virtual Machine Configuration
- ○ Microsoft: Azure WAF on Application Gateway Policy Configuration
- ○ Microsoft: Azure WAF on CDN Policy Configuration
- The following device classes were added to the PowerPack:
  - ○ Azure API Management
  - ○ Azure API Management API
  - ○ Azure API Management Service
  - ○ Azure Data Lake Storage Account
  - ○ Azure Databricks Resource
  - ○ Azure Databricks Service
  - ○ Azure Firewall
  - ○ Azure Firewall Service

- The "Microsoft: Azure Resource Reclassification" and "Microsoft: Azure Data Lake Classification" run book actions and run book automation policies were added to the PowerPack. These run book actions will reclassify the device class of the following resources after upgrading the PowerPack:
    - Azure API Management
    - Azure Data Lake Storage Account
    - Azure ExpressRoute Circuit
    - Azure HDInsight Cluster
- The following event policies were added to the PowerPack:
    - Microsoft: Azure API Management API Product state is published
    - Microsoft: Azure API Management API Product state is not published
    - Microsoft: Azure API Management API Revision Change
    - Microsoft: Azure API Management Provisioning State Succeeded
    - Microsoft: Azure API Management Provisioning State Not Succeeded
    - Microsoft: Azure API Mgmt instance capacity exceeded threshold
    - Microsoft: Azure API Mgmt instance capacity returned to normal
    - Microsoft: Azure Data Lake Devices Classification Required
    - Microsoft: Azure Firewall Health is below the threshold
    - Microsoft: Azure Firewall Health returned to normal
    - Microsoft: Azure Firewall Provisioning State Not Succeeded
    - Microsoft: Azure Firewall Provisioning State Succeeded
    - Microsoft: Azure Resource Reclassification
- The following updates were made to the "Microsoft: Azure SQL Database Configuration" Dynamic Application:
    - Added the "SKU Family" collection object
    - Updated the following collection objects due to the API update:
        - The "Edition" collection object is now "SKU Tier"
        - The "Service Level Objective" collection object is now "SKU Name"
    - Deleted the "Requested Service Objective Id" collection object
- The "Microsoft: Azure SQL Database Discovery" Dynamic Application was updated to use a new snippet code format to collect data and the ID collected has been re-formatted for use by the "Microsoft: Azure SQL Database Performance" Dynamic Application.

> **NOTE:** Due to database ID changes, SQL databases will be rediscovered and historical data will be lost.

- The following collection objects were added to the "Microsoft: Azure Virtual Network Subnet Configuration" Dynamic Application:

- Delegations
- Private Endpoint Network Policies
- Private Link Service Network Policies

- The following collection objects were added to the "Microsoft: Azure Virtual Network Configuration" Dynamic Application:
  - DDOS Protection
  - Delegations
  - Virtual Network Peering
  - Virtual Network Subnet

- The following collection objects were added to the "Microsoft: Azure Storage Account Configuration" Dynamic Application:
  - IP Rule
  - Virtual Network
  - Virtual Network Relationship

- The following collection objects were added to the "Microsoft: Azure HDInsight Cluster Configuration" Dynamic Application:
  - HDInsight Cluster/Datalake
  - Name

- Updated Service Bus Relationships in the "Microsoft: Azure Service Bus Configuration" Dynamic Application to address an issue in which the relationships were not being built properly.

- Added new SVG icons for the following device classes:
  - Azure API Management
  - Azure Automation Service
  - Azure Batch Accounts
  - Azure CDN Profiles
  - Azure CosmosDB
  - Azure Data Factory
  - Azure Data Lake Storage
  - Azure Databricks
  - Azure Firewall
  - Azure HDInsight
  - Azure Key Vaults
  - Azure Kubernetes Services
  - Azure Logic App
  - Azure MySQL
  - Azure PostgreSQL
  - Azure Service Bus

- ◦ Azure SQL Managed Instance
- ◦ Azure Web App Firewall
- ◦ Azure Windows Virtual Desktop
- The following device relationships were added to the "Microsoft: Azure Databricks Configuration" Dynamic Application:
  - ◦ Azure Databricks and Resource Groups
  - ◦ Azure Databricks and Storage Accounts
- Addressed an issue in which the "Microsoft: Azure Cache for Redis Configuration" Dynamic Application was not building device relationships properly.
- All Azure resources that are classified as "Resource List" will be rediscovered after upgrading the PowerPack. The old resources will become unavailable and vanish.

Known Issues

The following known issues affect version 117 of the *Microsoft: Azure* PowerPack:

- After upgrading to version 117, you may notice critical events for SQL database resources at the Azure root component level. This is expected and should disappear after a few polling cycles. If this does not resolve, contact ScienceLogic Support.
- If you encounter a 529 error, this is usually a temporary issue with the Microsoft API service.
- Some environments could experience an issue when installing the PowerPack in which the installation window will show that the PowerPack is still installing when the PowerPack has finished being installed. If this occurs, users can close the window and check the PowerPack version number in the **PowerPack Manager** page (System > Manage > PowerPacks) to confirm that installation has completed.
- 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 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.

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