Microsoft: Azure PowerPack Release Notes

Version 106

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Overview

Microsoft: Azure PowerPack version 106 adds the ability to discover and monitor Azure Virtual Machine Scale Sets (VMSS) and VMSS virtual machines. Version 106 also includes updates to numerous Dynamic Applications and Device Classes.

- **Minimum Required Platform Version**: 8.4.0
- **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 106*
- *The enhancements and issues addressed in version 106*
- *The known issues that affect version 106*

Before You Install or Upgrade

Ensure that you are running version 8.4.0 or later of the ScienceLogic platform before installing the *Microsoft: Azure* PowerPack version 106.

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 the ScienceLogic platform, 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 106

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 8.4.0 or later release.
3. Download version 106 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 106 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* 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 8.4.0 or later release.
3. Download version 106 of the *Microsoft: Azure* PowerPack from the Customer Portal to a local computer.
4. Before importing and installing version 106 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 106 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* 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 8.4.0 or later release.
3. Download version 106 of the *Microsoft: Azure* PowerPack from the Customer Portal to a local computer.
4. Before importing and installing version 106 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 106, 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 106 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 106 includes the following features:

- Dynamic Applications that enable the ScienceLogic platform 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, each Azure Government location, and all of the Azure resources that the ScienceLogic platform monitors
- Example credentials for discovering Azure resources, including an example credential for Microsoft Azure Government subscribers

Enhancements and Issues Addressed

The following changes are included in version 106 of the *Microsoft: Azure* PowerPack:

- To support the discovery and monitoring of Azure Virtual Machine Scale Sets (VMSS) and VMSS virtual machines, the following Dynamic Applications were added to the PowerPack:
    - Microsoft: Azure VMSS Service Discovery
    - Microsoft: Azure VMSS Discovery
    - Microsoft: Azure VMSS Configuration
    - Microsoft: Azure VMSS Performance
    - Microsoft: Azure VMSS Virtual Machine Discovery
    - Microsoft: Azure VMSS Virtual Machine Configuration
    - Microsoft: Azure VMSS Virtual Machine Performance
- The "Microsoft: Azure VPN Gateway Performance" Dynamic Application was added to collect performance data about Azure Virtual Private Network Gateways.
- The "Microsoft: Azure VPN Gateway Configuration" Dynamic Application was updated to collect information about the VPN Gateway's connection status and to alert users when the VPN Gateway is not connected.

- The PowerPack's Dynamic Applications were updated to create relationships between the following component devices:
    - Load Balancers and Resource Groups
    - VMSS and Load Balancers
    - VMSS and Resource Groups
    - VMSS and Subnets
    - VMSS Virtual Machines and Resource Groups
- The "Microsoft: Azure Virtual Machine Configuration" Dynamic Application was updated to collect caching data and the storage type (managed or unmanaged) for OS disks and data disks, plus additional virtual machine diagnostic profile configuration data.
- The "Microsoft: Azure Virtual Machine Performance" Dynamic Application was updated to collect data about the total number of CPU credits consumed by and still available to Azure virtual machines. The Dynamic Application now also alerts users when virtual machines CPU credits are low as well as when they are renewed.
- The "Microsoft: Azure Traffic Manager Profile Configuration" Dynamic Application was updated to support profiles that use the "Geographic" routing method.
- The following new Device Classes were added to the PowerPack:

Device Class	Description	Category	Device Class Tier
Microsoft	Azure Virtual Machine Standard B1s	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard B1ms	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard B2s	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard B2ms	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard B4ms	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard B8ms	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D2 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D4 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D8 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D16 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D32 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D64 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D2s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D4s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D8s v3	Cloud.Compute	3

Device Class	Description	Category	Device Class Tier
Microsoft	Azure Virtual Machine Standard D16s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D32s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard D64s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E2 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E4 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E8 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E16 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E32 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E64 v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC6s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC12s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC24s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC24rs v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E2s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E4s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E8s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E16s v3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E32s v3.2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard E64s v3.2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard M64s	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard M64ms	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard M128s 2.3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard M128ms 2.3	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC6s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC12s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC24s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard NC24rs v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard ND6s	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard ND12s	Cloud.Compute	3

Device Class	Description	Category	Device Class Tier
Microsoft	Azure Virtual Machine Standard ND24s	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard ND24rs	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F2s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F4s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F8s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F16s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F32s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F64s v2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F72 v2.2	Cloud.Compute	3
Microsoft	Azure Virtual Machine Standard F72s v2	Cloud.Compute	3
Microsoft	Azure VM Scale Sets	Cloud.Compute	3
Microsoft	Azure VM Scale Sets Service	Cloud.Service	1
Microsoft	Azure VM Scale Sets Virtual Machine	Cloud.Compute	3

- The "Azure Subscription" and "Azure Virtual Private Gateway" Device Class tiers were updated to "3".
- An issue was addressed that was causing the "Microsoft: Azure Load Balancer Discovery" Dynamic Application to discover only a single load balancer when there were multiple load balancers with the same name in different resource groups.

Known Issues

- After upgrading from a single subscription to a multi-subscription by removing the Subscription ID in the credential's ***Embed Value [%3]*** field, a "`Storage Object Failure due to DEADLOCK`" error appears in the system log. This error is erroneous and might repeat a few times.
- 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.

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