

Monitoring Microsoft Azure

Microsoft: Azure PowerPack version 115

Table of Contents

| Introduction | |
|---|----------|
| What Does the Microsoft: Azure PowerPack Monitor? | |
| What are Azure Locations? | 7 |
| Installing the Microsoft: Azure PowerPack | |
| Configuration and Credentials | |
| Configuring an Azure Active Directory Application | |
| Creating an Active Directory Application in the Azure Portal | 11 |
| Adding Microsoft Graph APIs Permissions to the Application | |
| Generating the Secret Key | 15 |
| Locating the Application ID and Tenant ID | |
| Locating the Subscription ID | |
| Adding Reader Access to the Active Directory Application | |
| Setting Up a Proxy Server | |
| Creating an Azure Credential | |
| Testing the Azure Credential Using the Credential Tester Panel | |
| Creating a SOAP/XML Credential for Azure | |
| Load-Balancing an Account with Multiple Subscriptions | |
| Testing the Azure Credential | 25 |
| Creating a SOAP/XML Credential for Azure in the SL1 Classic User Interface | |
| Load-Balancing an Account with Multiple Subscriptions | |
| Testing the Azure Credential in the SL1 Classic User Interface | |
| Discovery | |
| Microsoft Azure Guided Discovery | |
| Creating an Azure Virtual Device for Discovery in the SL1 Classic User Interface | |
| Aligning the Azure Dynamic Applications | |
| Discovering Azure Component Devices | |
| Viewing Azure Component Devices | |
| Relationships Between Component Devices | |
| Azure Unified Alerts | |
| Prerequisites for Configuring Azure Unified Alerts | |
| Azure Unified Alert Event Policies | |
| Enabling the "Microsoft: Azure Unified Alerts Performance" Dynamic Application | |
| Viewing Azure Unified Alert Counts | |
| Azure Run Book Actions and Automations | |
| About the Azure Run Book Actions and Automations | |
| Disabling VMs or Storage Disks by VM Tag | |
| Run Book Automation Policy: Disable and Discover from IP | |
| Run Book Automation Policy: Disable Storage Disks | |
| Configuration Steps | |
| Modifying the Parameters of the "Disable By VM Tag" Run Book Action | |
| Enabling the "Component Device Record Created" Event Policy | |
| Enabling the Run Book Automation Policies | |
| Preserving Automation Changes | |
| Discovering VMs and Merging Physical Devices with Components | |
| Run Book Automation Policy: Discover from IP | |
| Run Book Automation Policy: Merge with VM | |
| Configuration Steps | |
| Modifying the Parameters of the Run Book Actions | |
| Enabling the "Component Device Record Created" Event Policy (Discover from IP Only) | 57 57 |
| LINGDING THE TREVICE RECORD CRECIEG I VEHI FOUCV | :17 |

| Enabling the Run Book Policies | |
|--|-----|
| Preserving Automation Changes | 59 |
| Vanishing Terminated or Terminating VM Instances | 60 |
| Enabling the Run Book Automation Policies | 61 |
| Preserving Automation Changes | |
| Dashboards | |
| Device Dashboards | 62 |
| Microsoft: Azure Batch Account | 63 |
| Microsoft: Azure Cache for Redis | |
| Microsoft: Azure Key Vault | |
| Microsoft: Azure Kubernetes Cluster | 66 |
| Microsoft: Azure MySQL Server | 67 |
| Microsoft: Azure PostgreSQL Server | 68 |
| Microsoft: Azure Service Bus Namespace | |
| Microsoft: Azure WAF on CDN Policy | 70 |
| Key Metrics Collected by the PowerPack | 72 |
| Azure Active Directory Tenant Service | 73 |
| Azure App Service | 74 |
| Azure Application Gateway Service | |
| Azure Backup Policies Service | 78 |
| Azure Batch Service | 79 |
| Azure Cache for Redis | 84 |
| Azure Content Delivery Network | 88 |
| Azure CosmosDB Service | 91 |
| Azure Data Factory | 94 |
| Azure Database for MySQL | 96 |
| Azure Database for PostgreSQL | 99 |
| Azure DNS Service | 103 |
| Azure ExpressRoute Service | 104 |
| Azure Function App Service Plan | 106 |
| Azure Functions | 107 |
| Azure Key Vault | 107 |
| Azure Kubernetes Service (AKS) | 110 |
| Azure Load Balancer Service | |
| Azure Managed Disks Service | 114 |
| Azure Network Security Group Service | |
| Azure Recovery Service Vault | |
| Azure Resource Group Service | 119 |
| Azure Resource List Services | 120 |
| Azure Service Bus (Relay) | 121 |
| Azure Site Recovery | 124 |
| Azure SQL Managed Instance Service | 126 |
| Azure SQL Servers Service | 128 |
| Azure Storage Service | 131 |
| Azure Traffic Manager Service | |
| Azure Virtual Machines Service | |
| Azure Virtual Network Service | |
| Azure VM Scale Sets Service | |
| Azure Web Application Firewall (WAF) | 153 |
| Other Supported Services | 156 |
| | |

Chapter

1

Introduction

Overview

This manual describes how to monitor Microsoft Azure resources that are managed with Azure Resource Manager (ARM) in SL1 using the Microsoft: Azure PowerPack.

The following sections provide an overview of Microsoft Azure and the Microsoft: Azure PowerPack:

| What Does the Microsoft: Azure PowerPack Monitor? | 5 |
|---|---|
| What are Azure Locations? | 7 |
| Installing the Microsoft: Azure PowerPack | 9 |

NOTE: ScienceLogic provides this documentation for the convenience of ScienceLogic customers. Some of the configuration information contained herein pertains to third-party vendor software that is subject to change without notice to ScienceLogic. ScienceLogic makes every attempt to maintain accurate technical information and cannot be held responsible for defects or changes in third-party vendor software. There is no written or implied guarantee that information contained herein will work for all third-party variants. See the End User License Agreement (EULA) for more information.

What Does the Microsoft: Azure PowerPack Monitor?

To monitor Microsoft Azure resources using SL1, you must install the Microsoft: Azure PowerPack. This PowerPack enables you to discover, model, and collect data about Azure resources.

The Microsoft: Azure PowerPack includes:

- Dynamic Applications to discover, model, and monitor performance metrics and/or collect configuration data for the following Azure resources:
 - Active Directory tenants
 - Archive storage
 - Application gateways
 - Application services
 - o Azure Blob storage
 - o Azure Cache for Redis
 - Azure Data Factory
 - Azure Database for MySQL
 - Azure Database for PostgreSQL
 - Azure Functions
 - Azure Kubernetes Services (AKS)
 - o Azure Service Buses (Relay)
 - Batch Accounts
 - Content Delivery Networks
 - o Cosmos DB accounts
 - o Data Science virtual machines
 - Disk storage
 - o DNS zones
 - ExpressRoute circuits
 - ExpressRoute gateways
 - o Function apps
 - o Key Vaults
 - Load balancers
 - Managed storage disks
 - Network security groups
 - Queue storage
 - Recovery Services vaults
 - o Resource groups

- ° Site recovery configurations
- Spot virtual machines
- SQL databases
- SQL managed instances
- SQL servers
- Storage accounts
- ° Table storage
- o Traffic Manager profiles
- Virtual machine scale sets
- Virtual machines
- Virtual network subnets
- Virtual network gateways
- Virtual networks
- VPN gateways
- ° Web apps
- Web Application Firewalls (WAF)
- Device Classes for each Azure data center location and all of the Azure resources SL1 monitors
- Event Policies and corresponding alerts that are triggered when Azure resources meet certain status criteria
- Example credentials you can use as templates to create SOAP/XML credentials to connect to Azure
- 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
- Limited are available for services based on the Azure Resource List and Azure Resource Health APIs. The services are modeled as device components which can be used for CMDB syncing. Availability information is collected and used for alerts, and Azure alerts are collected and aligned to the related service. There is no performance monitoring, so all the device components created by the "AWS: Resource List Discovery" Dynamic Application are non-billable. The services included are:
 - o API Management
 - o Azure Analysis Services
 - Azure Arc
 - Azure Bastion
 - o Azure Cognitive Services
 - o Azure Data Lake Storage
 - ° Azure Database for MariaDB
 - o Azure Database for MySQL Flexible Server
 - o Azure Database for PostgreSQL Flexible Server
 - ° Azure Database Migration Service
 - o Azure Dedicated Host

- Azure Digital Twins
- Azure Front Door
- Azure IoT Hub
- Azure Purview
- Azure Service Fabric
- Azure Spring Cloud
- o Azure Stream Analytics
- Azure Synapse Analytics
- Data Lake Analytics
- Event Hubs
- o HDInsight
- Log Analytics
- Media Services
- Microsoft Purview
- ° Mobile Apps
- Notification Hubs
- Power BI Embedded

What are Azure Locations?

An Azure location is an individual data center located in a specific geographic locale. The Dynamic Applications in the *Microsoft: Azure* PowerPack create a "location" component device for each discovered data center location.

The PowerPack supports the following Azure data center locations:

- Australia Central (Canberra)
- Australia Central 2 (Canberra)
- Australia East (New South Wales)
- Australia Southeast (Victoria)
- Brazil South (Sao Paulo)
- Canada Central (Toronto)
- Canada East (Quebec)
- Central India (Pune)
- Central US (Iowa)
- China East (Shanghai)
- China East 2 (Shanghai)
- China North (Beijing)

- China North 2 (Beijing)
- East Asia (Hong Kong)
- East US (Virginia)
- East US 2 (Virginia)
- France Central (Paris)
- France South (Marseille)
- Germany Central (Frankfurt)
- Germany North
- Germany Northeast (Magdeburg)
- Germany West Central
- Japan East (Saitama)
- Japan West (Osaka)
- Korea Central (Seoul)
- Korea South (Busan)
- North Central US (Illinois)
- North Europe (Ireland)
- South Central US (Texas)
- South India (Chennai)
- Southeast Asia (Singapore)
- US DoD Central (for Microsoft Azure Government only)
- US DoD East (for Microsoft Azure Government only)
- US Gov Arizona (for Microsoft Azure Government only)
- US Gov Iowa (for Microsoft Azure Government only)
- US Gov Texas (for Microsoft Azure Government only)
- US Gov Virginia (for Microsoft Azure Government only)
- UK South (London)
- UK West (Cardiff)
- West Central US
- West Europe (Netherlands)
- West India (Mumbai)
- West US (California)
- West US 2

Installing the Microsoft: Azure PowerPack

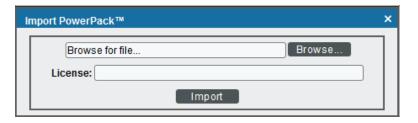
Before completing the steps in this manual, you must import and install the latest version of the *Microsoft: Azure PowerPack*.

NOTE: The following instructions describe how to install the *Microsoft*: Azure PowerPack for the first time. If you are upgrading to the latest version from a previous version, see the *Microsoft*: Azure PowerPack Release Notes for specific upgrade instructions.

TIP: By default, installing a new version of a PowerPack overwrites all content from a previous version of 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 new PowerPacks from overwriting local changes for some commonly customized fields. (For more information, see the *System Administration* manual.)

To download and install a PowerPack:

- 1. Download the PowerPack from the ScienceLogic Support Site.
- 2. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
- 3. In the **PowerPack Manager** page, click the **[Actions]** button, then select *Import PowerPack*.
- 4. The Import PowerPack dialog box appears:



- 5. Click the [Browse] button and navigate to the PowerPack file.
- 6. When the **PowerPack Installer** modal appears, click the [Install] button to install the PowerPack.

NOTE: If you exit the PowerPack Installer modal without installing the imported PowerPack, the imported PowerPack will not appear in the PowerPack Manager page. However, the imported PowerPack will appear in the Imported PowerPacks modal. This page appears when you click the [Actions] menu and select Install PowerPack.

Chapter

2

Configuration and Credentials

Overview

The following sections describe how to configure Microsoft Azure resources for monitoring by SL1 using the Microsoft: Azure PowerPack:

NOTE: The Microsoft: Azure PowerPack can monitor Microsoft Azure resources, Microsoft Azure Government resources, and Microsoft Azure resources in Germany and China regions.

| Configuring an Azure Active Directory Application | 11 |
|--|----|
| Creating an Active Directory Application in the Azure Portal | 11 |
| Adding Microsoft Graph APIs Permissions to the Application | 13 |
| Generating the Secret Key | 15 |
| Locating the Application ID and Tenant ID | 16 |
| Locating the Subscription ID | 16 |
| Adding Reader Access to the Active Directory Application | 17 |
| Setting Up a Proxy Server | 19 |
| Creating an Azure Credential | 19 |
| Testing the Azure Credential Using the Credential Tester Panel | 21 |
| Creating a SOAP/XML Credential for Azure | 22 |
| Load-Balancing an Account with Multiple Subscriptions | 24 |
| Testing the Azure Credential | 25 |
| Creating a SOAP/XML Credential for Azure in the SL1 Classic User Interface | 26 |
| Load-Balancing an Account with Multiple Subscriptions | 28 |

Configuring an Azure Active Directory Application

To create a SOAP/XML credential that allows SL1 to access Microsoft Azure, you must provide the following information about an Azure application that is already registered with an Azure AD tenant:

- Application ID
- Subscription ID (if monitoring a single subscription)
- Tenant ID
- Secret key

To capture the above information, you must first create (or already have) an application that is registered with Azure Active Directory. The registered application must have Reader access in the subscription. You can then enter the required information about the application when configuring the SOAP/XML credential in SL1. The registered application and the ScienceLogic credential allow SL1 to retrieve information from Microsoft Azure.

TIP: For details on registering an Azure application, see https://docs.microsoft.com/en-us/azure/activedirectory/develop/quickstart-register-app.

Creating an Active Directory Application in the Azure Portal

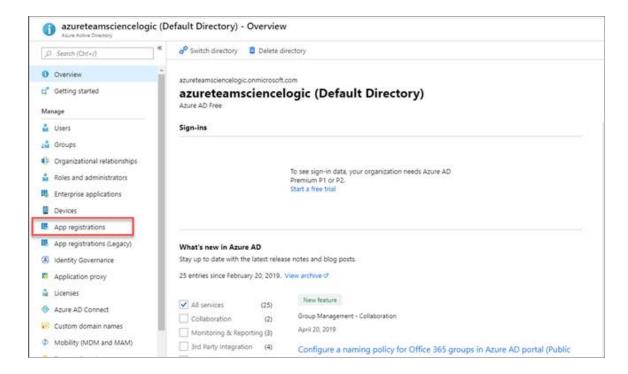
When configuring a SOAP/XML credential in SL1, you must provide the application ID, subscription ID, tenant ID, and secret key of an application that is registered with Azure Active Directory. You will use this registered application to authenticate your Azure account.

NOTE: You must have Service Administrator rights to create an Azure Active Directory application.

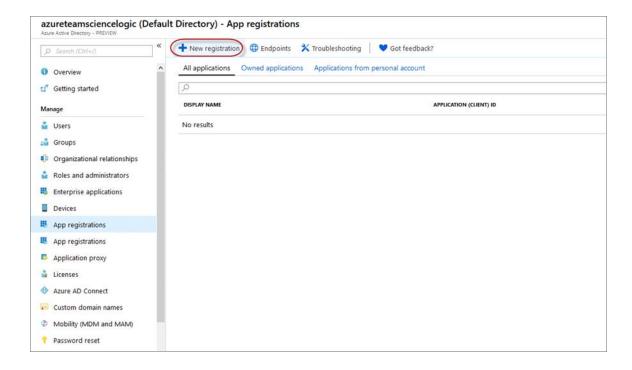
To create an application in Azure and register it with Azure Active Directory:

1. Log in to the Azure portal and type "active directory" in the Search field at the top of the window.

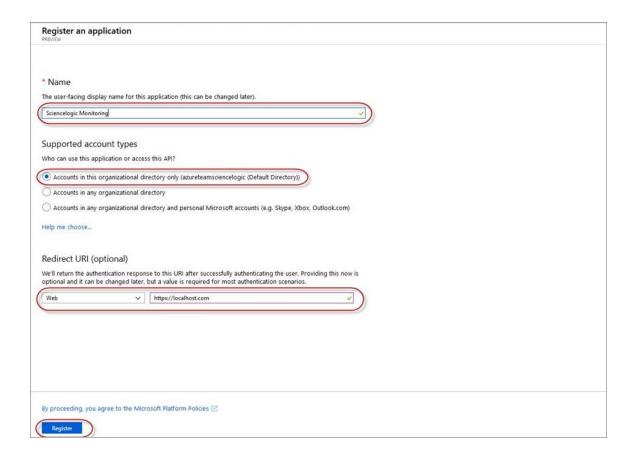
2. From the search results, select Azure Active Directory, and then click **App registrations**. The **App registrations** page appears:



3. Click the [New registration] button.



- 4. When the **Register an application page** appears, enter your application's registration information:
 - Name. Type a name for the application.
 - Supported account types. Select Accounts in this organizational directory only.
 - Redirect URI (optional). Select Web in the drop-down menu and type a valid URL.



5. Click the [Register] button. A message appears confirming that your application was added.

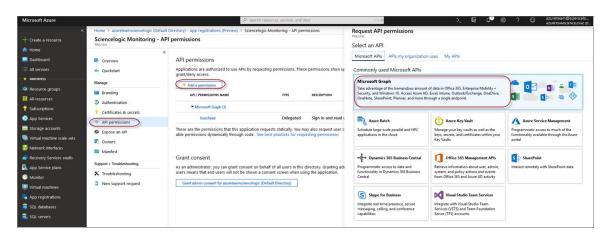
Adding Microsoft Graph APIs Permissions to the Application

By default, any new Application has Microsoft Graph API permission. At a minimum, the Microsoft Graph APIs must have permission to directly read data.

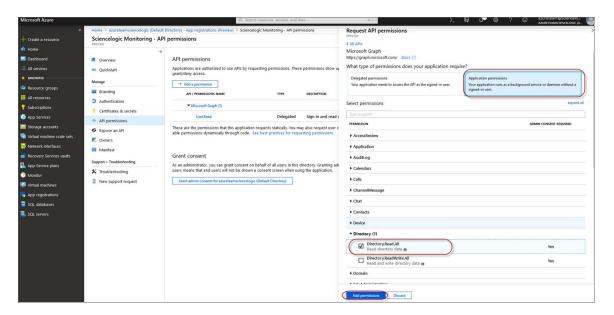
To add the Microsoft Graph APIs:

1. In the **Search** field of the Azure portal (https://portal.azure.com), type "active directory".

- 2. Click [App registrations], and then click on the name of the Azure Active Directory application you will use to authenticate your Azure account.
- 3. Click API Permissions, and then click [Add a permission]. Next, select the Microsoft Graph option.

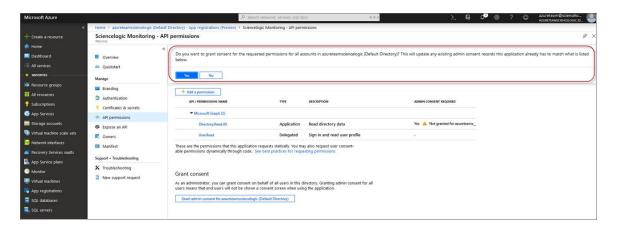


4. In the **Request API permissions** pane, under Select permissions, click the arrow next to **Directory** to open the submenu and select the checkbox for **Directory.Read.all** permission.



- 5. After you have added the Read directory data, in the **API permissions** page, click the **[Add Permissions]** button.
- 6. Click [Grant admin consent for [Directory Name]].

7. A pop-up window appears asking if you grant consent for the required permissions for all accounts in your directory. Click **[Yes]**.

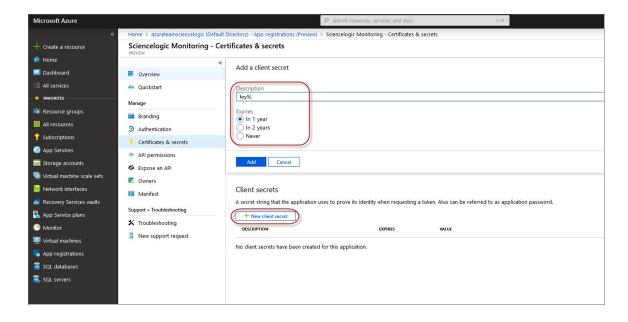


Generating the Secret Key

When configuring a SOAP/XML credential for Azure in SL1, you need to provide a secret key for the Azure Active Directory application that you will use to authenticate your account.

To generate a secret key:

- 1. Log in to the Azure portal at https://portal.azure.com, and type "active directory" in the **Search** field at the top of the window.
- 2. From the search results, select Azure Active Directory, and then click **App registrations**.
- 3. Select the app and then click [Certificates & secrets].
- 4. In the Client secrets pane, click [+ New client secret].



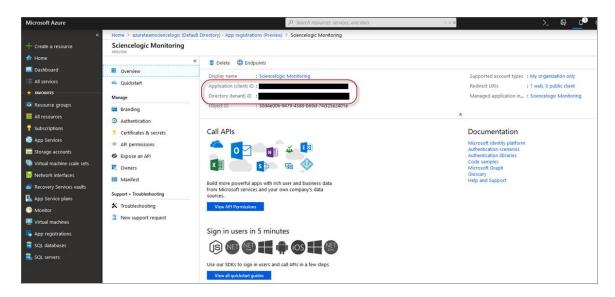
- 5. In the **Add a client secret** pane, type a name in the **Description** field and select a duration in the **Expires** field.
- 6. Click [Add] to generate the secret key. A new key value displays in the Client secrets pane.
- 7. Copy and save the key value.

Locating the Application ID and Tenant ID

When configuring a SOAP/XML credential for Azure in SL1, you need to provide the Application ID of the Azure Active Directory application you will use to authenticate your Azure account.

To locate the Application ID:

- 1. Log in to the Azure portal at https://portal.azure.com, and type "active directory" in the **Search** field at the top of the window.
- 2. From the search results, select Azure Active Directory, and then click **App registrations**.
- 3. Click the name of the Active Directory application you will use to authenticate your Azure account. The Application ID and Tenant ID appear in the **Overview** section.



4. Copy and save the values in the corresponding credential fields.

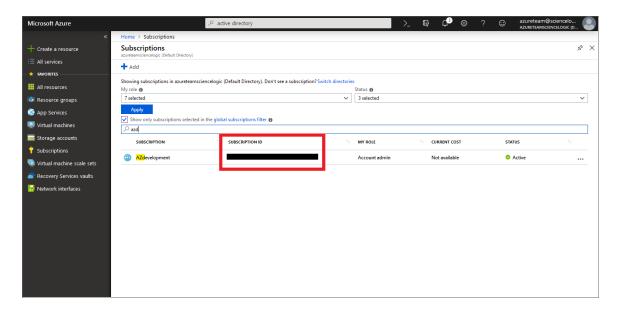
Locating the Subscription ID

If you are monitoring only a single Azure subscription, you must provide the Subscription ID of the Azure Active Directory application you will use to authenticate your account when you configure your SOAP/XML credential for Azure in SL1.

NOTE: If you are monitoring an account with multiple child subscriptions, you can skip this section.

To locate the Subscription ID:

- 1. In the left pane of the Azure portal (https://portal.azure.com), click [Subscriptions].
- 2. Copy and save the **Subscription ID** of the subscription where you created the Azure Active Directory application you will use to authenticate your account.



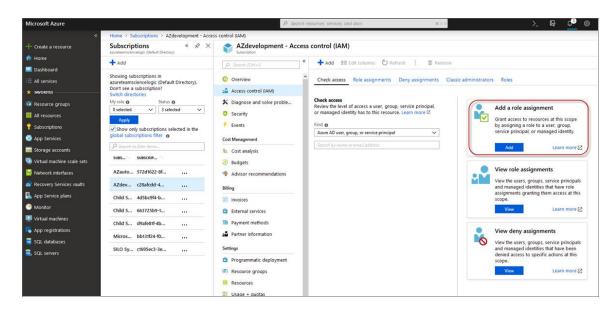
Adding Reader Access to the Active Directory Application

To allow ScienceLogic to access your Azure account, you must specify the type of access the user whose information you will use in your SOAP/XML credential has to the Active Directory application used to authenticate your account. Use the **Reader** access role, which is a read-only user that can view everything but cannot make changes.

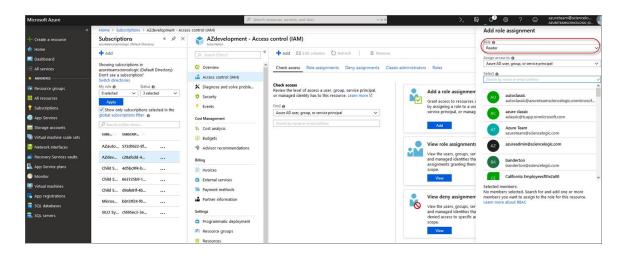
To specify the access role to the Azure Active Directory application:

- 1. In the left pane of the Azure Portal (https://portal.azure.com), click [Subscriptions].
- 2. Click the name of your subscription, and then click [Access control (IAM)].

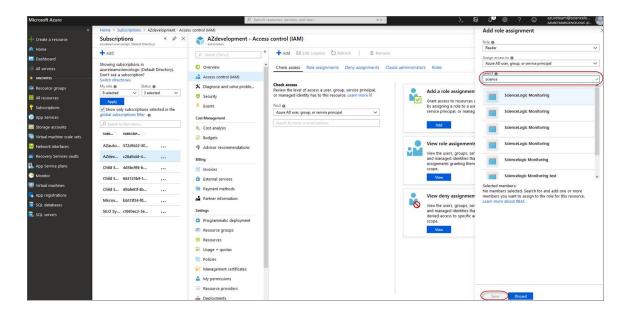
3. In the Access Control (IAM) pane, click the [Add] button in the Add a role assignment section.



4. In the Add a role assignment pane, select Reader in the Role field.



5. In the **Select** field, type the name of the Azure Active Directory application you will use to authenticate your account.



6. Select the application from the search results and click [Save].

Setting Up a Proxy Server

Depending on your needs, you can optionally enable SL1 to connect to Azure through a third-party proxy server such as SQUID. With this configuration, SL1 connects to the proxy server, which then connects to Azure. Azure relays information to the proxy server and SL1 then retrieves that information from the proxy.

NOTE: You can connect to Azure via a proxy server regardless of whether you are monitoring a single subscription or an account with multiple child subscriptions. You can connect to Microsoft Azure, Microsoft Azure Government, and Microsoft Azure Germany and China regions via a proxy server.

NOTE: The Microsoft: Azure PowerPack is certified to work with SQUID version 3.5.12 proxy servers.

If you choose to use a proxy server, configure the third-party proxy server based on the third-party documentation. Depending on the type of authentication you require, you might need to specify a user name and password for the proxy server configuration. Also, make a note of the port you opened for the configuration, as this information is needed when creating the SOAP/XML credential.

Creating an Azure Credential

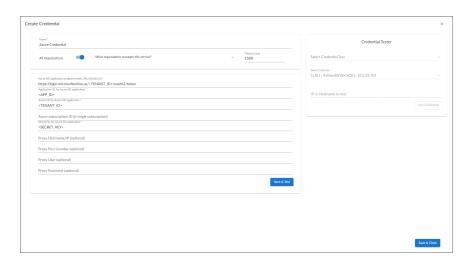
To configure SL1 to monitor Microsoft Azure, you must first create an Azure credential. This credential allows the Dynamic Applications in the Microsoft: Azure Power Pack to connect with the Azure Active Directory Application.

SL1 includes an Azure credential type that you can use to connect with the Azure service during guided discovery. This credential type uses field names and terminology that are specific to the Azure service.

NOTE: Alternatively, you could monitor Azure using a generic SOAP/XML credential that does not include Azure-specific fields. For more information, see the *Monitoring Microsoft Azure* manual.

To define an Azure-specific credential:

- 1. Go to the **Credentials** page (System > Manage > Credentials).
- 2. Click the [Create New] button and then select Create Azure Credential. The Create Credential modal page appears:



- 3. Supply values in the following fields:
 - Name. Name of the credential. Can be any combination of alphanumeric characters.
 - All Organizations. Toggle on (blue) to align the credential to all organizations, or toggle off (gray)
 and then select one or more specific organizations from the What organization manages this
 service? drop-down field to align the credential with those specific organizations.
 - *Timeout (ms)*. Time, in milliseconds, after which SL1 will stop trying to communicate with the device from which you want to retrieve data.
 - Azure AD application endpoint token URL (OAuth2.0). The AD application endpoint token URL for the Azure Active Directory application.
 - Application ID for Azure AD application. The Application ID for the Azure Active Directory
 application.
 - Tenant ID for Azure AD application. The Tenant ID for the Azure Active Directory application.
 - Azure subscription ID (if single subscription). The subscription ID for the Azure Active Directory application. This field is required only if you are monitoring a single Azure subscription.
 - Secret key for Azure AD application. The secret key for the Azure Active Directory application.

Proxy Settings

If you use a proxy server in front of the Azure Active Directory applications you want to communicate with, enter values in these fields. Otherwise, you can skip these fields.

- Proxy Hostname/IP. The host name or IP address of the proxy server.
- Proxy Port. Port on the proxy server to which you will connect.
- Proxy User. Username to use to access the proxy server.
- Proxy Password. Password to use to access the proxy server.
- 4. Click [Save & Close].

NOTE: If you would like to test your credential using the Credential Tester panel, click [Save & Test]. For detailed instructions on using the Credential Tester panel, see the Testing the Azure Credential section.

Testing the Azure Credential Using the Credential Tester Panel

The Microsoft: Azure PowerPack includes a Credential Test for Microsoft Azure. Credential Tests define a series of steps that SL1 can execute on demand to validate whether a credential works as expected.

To test the Azure credential using the Credential Tester panel:

- After defining an Azure credential, click the [Save & Test] button. This activates the Credential Tester fields
- 2. In the Credential Tester panel, supply values in the following fields:
 - Select Credential Test. Select a credential test to run. This drop-down list includes the ScienceLogic
 Default Credential Tests, credential tests included in any PowerPacks that have been optionally
 installed on your system, and credential tests that users have created on your system.
 - Select Collector. Select the All-In-One Appliance or Data Collector that will run the test.
 - IP or Hostname to test. Type a hostname or IP address that will be used during the test. For example, if you are testing an SNMP credential, the hostname/IP address you supply will be used to perform a test SNMP request.
- 3. Click [Run Test] button to run the credential test. The Testing Credential window appears.

The **Testing Credential** window displays a log entry for each step in the credential test. The steps performed are different for each credential test. The log entry for each step includes the following information:

- Step. The name of the step.
- **Description**. A description of the action performed during the step.
- Log Message. The result of the step for this execution of the credential test.

- **Status**. Whether the result of this step indicates the credential and/or the network environment is configured correctly (Passed) or incorrectly (Failed).
- **Step Tip**. Mouse over the question mark icon (?) to display the tip text. The tip text recommends what to do to change the credential and/or the network environment if the step has a status of "Failed".

Creating a SOAP/XML Credential for Azure

If you want to create a SOAP/XML credential without Azure-specific fields, note the application ID, subscription ID, tenant ID, and secret key of the application (that is registered with Azure Active Directory) that you will use to authenticate your Azure account. This credential allows the Dynamic Applications in the Microsoft: Azure PowerPack to communicate with your Azure subscriptions.

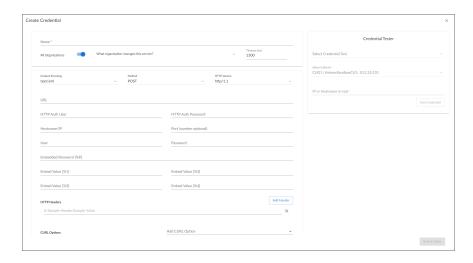
If you want to connect to your Azure account through a third-party proxy server, you must also add the proxy information in the credential. This applies to Microsoft Azure, Microsoft Azure Government, and the Microsoft Azure German and Chinese regions.

The Microsoft: Azure PowerPack includes multiple sample credentials you can use as templates for creating SOAP/XML credentials for Azure. They are:

- Azure Credential China, for users who connect to an Azure data center in a Chinese region
- Azure Credential Germany, for users who connect to an Azure data center in a German region (requires a subscription in Germany or Europe)
- Azure Credential Gov Example, for users who subscribe to Microsoft Azure Government
- Azure Credential Proxy Example, for users who connect to Azure through a third-party proxy server
- Azure Credential Example, for all other users.

NOTE: If you are using an SL1 system prior to version 11.1.0, the new user interface does not include the Duplicate option for sample credential(s). ScienceLogic recommends that you use the classic user interface and the Save As button to create new credentials from sample credentials. This will prevent you from overwriting the sample credential(s). To create a SOAP/XML credential for Azure:

- 1. Go to the **Credentials** page (Manage > Credentials).
- 2. Locate the sample credential you want to use, click its [Actions] icon (--) and select **Duplicate**. A copy of the credential appears.
- 3. Click the [Actions] icon (--) for the credential copy and select *Edit*. The *Edit Credential* modal page appears.



- 4. Supply values in the following fields:
 - Name. Type a new name for the Azure credential.
 - All Organizations. Toggle on (blue) to align the credential to all organizations, or toggle off (gray)
 and then select one or more specific organizations from the What organization manages this
 service? drop-down field to align the credential with those specific organizations.
 - Timeout (ms). Type "120".
 - Content Encoding. Select text/xml.
 - Method. Select POST.
 - HTTP Version. Select HTTP/1.1.
 - URL. Type the tenant ID in the appropriate place in the URL provided in the sample credential.
 - HTTP Auth User. Leave this field blank.
 - HTTP Auth Password. Leave this field blank.

Proxy Settings

- Hostname/IP. If you are connecting to Azure via a proxy server, type the server's hostname or IP address. Otherwise, leave this field blank.
- **Port**. If you are connecting to Azure via a proxy server, type the port number you opened when setting up the proxy server. Otherwise, leave this field blank.

- **User**. If you are connecting to Azure via a proxy server using basic authentication, type the server's administrator username. Otherwise, leave this field blank.
- **Password**. If you are connecting to Azure via a proxy server using basic authentication, type the server's administrator password. Otherwise, leave this field blank.

SOAP Options

- Embedded Password [%P]. Type the secret key for the Azure Active Directory application.
- Embed Value [%1]. Type the Application ID for the Azure Active Directory application.
- Embed Value [%2]. Type the Tenant ID for the Azure Active Directory application.
- **Embed Value [%3]**. If you are monitoring only a single Azure subscription, type the Subscription ID for the Azure Active Directory application. If you are monitoring multiple subscriptions, leave this field blank.
- Embed Value [%4]. Leave this field blank.

HTTP Headers

- HTTP Headers. Leave this field blank, unless one of the following scenarios applies to you:
 - If you are using Microsoft Azure Government, this field contains the text "AZGOV".
 - If you are monitoring Microsoft Azure resources in Germany, this field contains the text "AZGER".
 - ° If you are monitoring Microsoft Azure resources in China, this field contains the text "AZCHINA".
 - $^{\circ}$ If you would like to enable extended logging, enter "LOGGING" in to a header field. The log file is located at /tmp/azure.log
 - SSL certification verification is enabled by default, but you can disable it in a header field by entering "VERIFY:FALSE".

cURL Options

- CURL Options. Do not make any selections in this field.
- 5. Click [Save & Close].

NOTE: If you would like to test your credential using the Credential Tester panel, click [Save & Test]. For detailed instructions on using the Credential Tester panel, see the *Using the Credential Tester Panel* section.

Load-Balancing an Account with Multiple Subscriptions

When monitoring an account with multiple child subscriptions, instead of discovering all child subscriptions in a single dynamic component map under their parent account, you can load-balance subscriptions and their components across multiple Data Collectors.

To do this:

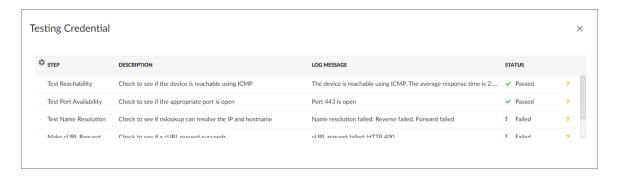
- The Collector Group that discovers a group of subscriptions can contain only one Data Collector. You cannot use multiple Data Collectors to discover the Azure components in a single dynamic component map or discover the same device in multiple dynamic component maps.
- To group multiple Azure subscriptions into a single dynamic component map, you need to create a shared credential for that group of subscriptions.
- To create the credential:
 - Perform all of the steps in the section on Configuring an Azure Active Directory Application.
 - ° Align each subscription in the group with the same application that you registered with Azure AD.
 - In the credential, enter the application ID in the **Embed Value [%1]** field.
 - In the credential, leave the **Embed Value [%3]** field blank.
- During discovery, use this credential to discover the group of subscriptions.
- During discovery, specify the Data Collector you want to use for the group of subscriptions.
- The discovered subscriptions will reside in a common dynamic component map.
- Repeat these steps for each group of subscriptions.

Testing the Azure Credential

You can test a credential from the Credentials page using a predefined credential test.

To run a credential test from the **Credentials** page:

- 1. Go to the **Credentials** page (Manage > Credentials).
- 2. Click the **Actions** button (--) of the credential that you want to test, and then select Test.
- 3. The Credential Test Form modal page appears. Fill out the following fields on this page:
 - Credential. Select the credential to test. This drop-down list includes only credentials that you have access to. (If you clicked the Actions button (—) and then selected Test for a specific credential, then this field is read-only.)
 - Select Credential Test. Select a credential test to run. This drop-down list includes the ScienceLogic
 Default Credential Tests, credential tests included in any PowerPacks that have been optionally
 installed on your system, and credential tests that users have created on your system.
 - Collector. Select the All-In-One Appliance or Data Collector that will run the test.
 - IP or Hostname to Test. Type a hostname or IP address that will be used during the test. For example, if you are testing an SNMP credential, the hostname/IP address you supply will be used to perform a test SNMP request.
- 4. Click [Run Test] button to run the credential test. The Testing Credential window appears:



The **Testing Credential** window displays a log entry for each step in the credential test. The steps performed are different for each credential test. The log entry for each step includes the following information:

- Step. The name of the step.
- **Description**. A description of the action performed during the step.
- Log Message. The result of the step for this execution of the credential test.
- **Status**. Whether the result of this step indicates the credential and/or the network environment is configured correctly (Passed) or incorrectly (Failed).
- **Step Tip**. Mouse over the question mark icon (?) to display the tip text. The tip text recommends what to do to change the credential and/or the network environment if the step has a status of "Failed".

Creating a SOAP/XML Credential for Azure in the SL1 Classic User Interface

After you note the application ID, subscription ID, tenant ID, and secret key of the application (that is registered with Azure Active Directory) that you will use to authenticate your Azure account, you can create a SOAP/XML credential for Azure in SL1. This credential allows the Dynamic Applications in the *Microsoft: Azure* PowerPack to communicate with your Azure subscriptions.

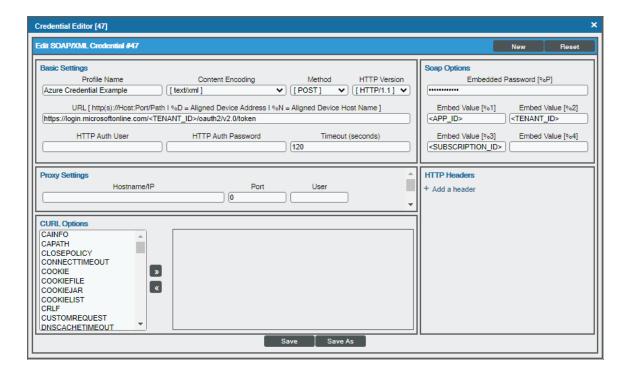
If you want to connect to your Azure account through a third-party proxy server, you must also add the proxy information in the credential. This applies to Microsoft Azure, Microsoft Azure Government, and the Microsoft Azure German and Chinese regions.

The Microsoft: Azure PowerPack includes multiple sample credentials you can use as templates for creating SOAP/XML credentials for Azure. They are:

- Azure Credential China, for users who connect to an Azure data center in a Chinese region
- Azure Credential Germany, for users who connect to an Azure data center in a German region (requires a subscription in Germany or Europe)
- Azure Credential Gov Example, for users who subscribe to Microsoft Azure Government
- Azure Credential Proxy Example, for users who connect to Azure through a third-party proxy server
- Azure Credential Example, for all other users.

To create a SOAP/XML credential for Azure:

- 1. Go to the **Credential Management** page (System > Manage > Credentials).
- 2. Locate the sample credential you want to use and then click its wrench icon (). The Edit SOAP/XML Credential modal page appears:



3. Enter values in the following fields:

Basic Settings

- Profile Name. Type a new name for the Azure credential.
- Content Encoding. Select text/xml.
- Method. Select POST.
- HTTP Version. Select HTTP/1.1.
- URL. Type the tenant ID in the appropriate place in the URL provided in the sample credential.
- HTTP Auth User. Leave this field blank.
- HTTP Auth Password. Leave this field blank.
- Timeout (seconds). Type "120".

Proxy Settings

• Hostname/IP. If you are connecting to Azure via a proxy server, type the server's hostname or IP address. Otherwise, leave this field blank.

- **Port**. If you are connecting to Azure via a proxy server, type the port number you opened when setting up the proxy server. Otherwise, leave this field blank.
- **User**. If you are connecting to Azure via a proxy server using basic authentication, type the server's administrator username. Otherwise, leave this field blank.
- **Password**. If you are connecting to Azure via a proxy server using basic authentication, type the server's administrator password. Otherwise, leave this field blank.

CURL Options

• CURL Options. Do not make any selections in this field.

SOAP Options

- Embedded Password [%P]. Type the secret key for the Azure Active Directory application.
- *Embed Value [%1]*. Type the Application ID for the Azure Active Directory application.
- Embed Value [%2]. Type the Tenant ID for the Azure Active Directory application.
- Embed Value [%3]. If you are monitoring only a single Azure subscription, type the Subscription ID for the Azure Active Directory application. If you are monitoring multiple subscriptions, leave this field blank.
- Embed Value [%4]. Leave this field blank.

HTTP Headers

- HTTP Headers. Leave this field blank, unless one of the following scenarios applies to you:
 - o If you are using Microsoft Azure Government, this field contains the text "AZGOV".
 - If you are monitoring Microsoft Azure resources in Germany, this field contains the text "AZGER".
 - o If you are monitoring Microsoft Azure resources in China, this field contains the text "AZCHINA".
 - If you would like to enable extended logging, enter "LOGGING" in to a header field. The log file is located at /tmp/azure.log
 - SSL certification verification is enabled by default, but you can disable it in a header field by entering "VERIFY:FALSE".
- 4. Click [Save As].
- 5. In the confirmation message, click [OK].

Load-Balancing an Account with Multiple Subscriptions

When monitoring an account with multiple child subscriptions, instead of discovering all child subscriptions in a single dynamic component map under their parent account, you can load-balance subscriptions and their components across multiple Data Collectors.

To do this:

- The Collector Group that discovers a group of subscriptions can contain only one Data Collector. You cannot use multiple Data Collectors to discover the Azure components in a single dynamic component map or discover the same device in multiple dynamic component maps.
- To group multiple Azure subscriptions into a single dynamic component map, you need to create a shared credential for that group of subscriptions.
- To create the credential:
 - Perform all of the steps in the section on Configuring an Azure Active Directory Application.
 - ° Align each subscription in the group with the same application that you registered with Azure AD.
 - In the credential, enter the application ID in the *Embed Value [%1]* field.
 - In the credential, leave the **Embed Value [%3]** field blank.
- During discovery, use this credential to discover the group of subscriptions.
- During discovery, specify the Data Collector you want to use for the group of subscriptions.
- The discovered subscriptions will reside in a common dynamic component map.
- Repeat these steps for each group of subscriptions.

Testing the Azure Credential in the SL1 Classic User Interface

The Microsoft: Azure PowerPack includes a Credential Test for Microsoft Azure. Credential Tests define a series of steps that SL1 can execute on demand to validate whether a credential works as expected.

The "Azure Credential Test - ARM" can be used to test a SOAP/XML credential for monitoring Azure using the Dynamic Applications in the *Microsoft: Azure PowerPack*.

CAUTION: When testing Azure credentials for version 110 or greater of the Microsoft: Azure PowerPack, you should use the "Azure Credential Test - ARM" that is included in the PowerPack rather than the "Azure Credential Test" that is included by default in SL1. The "Azure Credential Test - ARM" supports proxy server entries in the credential being tested and can test that your Azure credential has the latest required permissions in Azure, whereas the older "Azure Credential Test" cannot do these things.

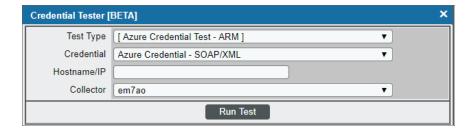
The "Azure Credential Test - ARM" performs the following steps:

- Test Port Availability. Performs an NMAP request to test the availability of the Azure endpoint HTTPS port.
- Test Name Resolution. Performs an nslookup request on the Azure endpoint.
- Make connection to Azure account. Attempts to connect to the Azure service using the account specified in the credential.
- Validate Azure Microsoft Graph Permission. Verifies that the Azure Active Directory application has Microsoft Graph API permissions.

• Validate Azure subscription assignments. Verifies that the Azure Active Directory application is assigned to the subscription.

To test the Azure credential:

- 1. Go to the **Credential Test Management** page (System > Customize > Credential Tests).
- 2. Locate the Azure Credential Test ARM and click its lightning bolt icon (). The Credential Tester modal page appears:



- 3. Supply values in the following fields:
 - **Test Type**. This field is pre-populated with the credential test you selected.
 - Credential. Select the credential to test. This drop-down list includes only credentials that you have
 access to that can be tested using the selected credential test.
 - Hostname/IP. Leave this field blank.
 - Collector. Select the All-In-One Appliance or Data Collector that will run the test.
- 4. Click the [Run Test] button. The Test Credential window appears, displaying a log entry for each step in the credential test. The steps performed are different for each credential test. The log entry for each step includes the following information:
 - Step. The name of the step.
 - Description. A description of the action performed during the step.
 - Log Message. The result of the step for this credential test.
 - **Status**. Whether the result of this step indicates the credential or the network environment is configured correctly (Passed) or incorrectly (Failed).
 - Step Tip. Mouse over the question mark icon () to display the tip text. The tip text recommends what to do to change the credential or the network environment if the step has a status of "Failed".

Chapter

3

Discovery

Overview

The following sections describe how to discover Microsoft Azure resources for monitoring by SL1 using the Microsoft: Azure PowerPack.

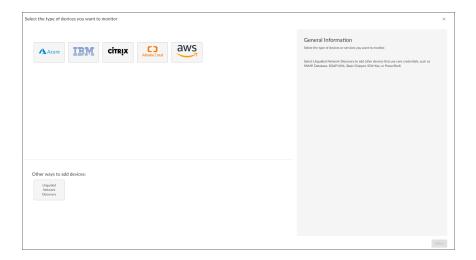
| Microsoft Azure Guided Discovery | 31 |
|--|----|
| Creating an Azure Virtual Device for Discovery in the SL1 Classic User Interface | 34 |
| Aligning the Azure Dynamic Applications | 35 |
| Discovering Azure Component Devices | 35 |
| Viewing Azure Component Devices | 39 |
| Relationships Between Component Devices | 41 |

Microsoft Azure Guided Discovery

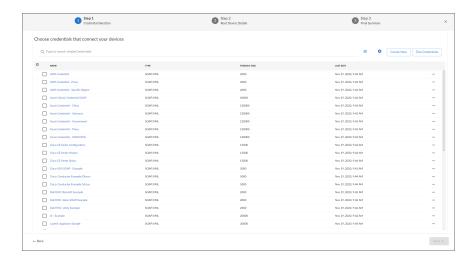
You can use the Universal Discovery Framework process in SL1 that guides you through a variety of existing discovery types in addition to traditional SNMP discovery. This process, which is also called "guided discovery", lets you pick a discovery type based on the type of devices you want to monitor. The Universal Discovery workflow includes a button for Microsoft Azure.

To run a guided or Universal Discovery:

1. On the **Devices** page () or the **Discovery Sessions** page (Devices > Discovery Sessions), click the **[Add Devices]** button. The **Select** page appears.

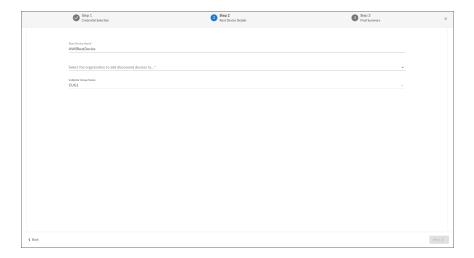


- 2. Select the **Microsoft Azure** button. Additional information about the requirements for device discovery appears in the **General Information** pane to the right.
- 3. Click [Select]. The Credential Selection page appears.

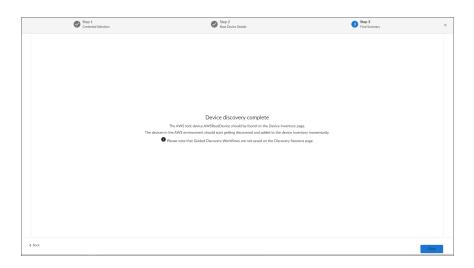


NOTE: During the guided discovery process, you cannot click **[Next]** until the required fields are filled on the page, nor can you skip to future steps. However, you can revisit previous steps that you have already completed.

4. On the **Credential Selection** page of the guided discovery process, select the Azure credential that you configured, and then click **[Next]**. The **Root Device Details** page appears.



- 5. Complete the following fields:
 - **Root Device Name**. Type the name of the root device for the Microsoft Azure root device you want to monitor.
 - Select the organization to add discovered devices to. Select the name of the organization to which you want to add the discovered device.
 - **Collector Group Name**. Select an existing collector group to communicate with the discovered device. This field is required.
- 6. Click [Next]. SL1 creates the Microsoft Azure root device with the appropriate Device Class assigned to it and aligns the relevant Dynamic Applications. The **Final Summary** page appears.



7. Click [Close].

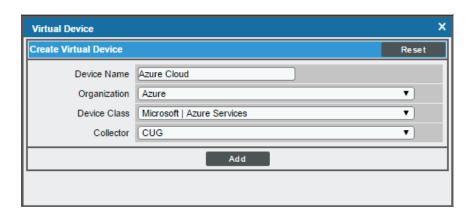
NOTE: The results of a guided discovery do not display on the **Discovery Sessions** page (Devices > Discovery Sessions).

Creating an Azure Virtual Device for Discovery in the SL1 Classic User Interface

Because the Azure service does not have a static IP address, you cannot discover an Azure device using discovery. Instead, you must create a *virtual device* that represents the Azure service. A virtual device is a user-defined container that represents a device or service that cannot be discovered by SL1. You can use the virtual device to store information gathered by policies or Dynamic Applications.

To create a virtual device that represents your Azure service:

- 1. Go to the **Device Manager** page (Devices > Device Manager, or Registry > Devices > Device Manager in the classic SL1 user interface).
- 2. Click the [Actions] button and select Create Virtual Device from the menu. The Virtual Device modal page appears.
- 3. Enter values in the following fields:



- Device Name. Enter a name for the device. For example, "Azure Cloud".
- Organization. Select the organization for this device. The organization you associate with the device limits the users that will be able to view and edit the device. Typically, only members of the organization will be able to view and edit the device.
- Device Class. Select Microsoft | Azure Services.
- Collector. Select the collector group that will monitor the device.

TIP: When monitoring an account with multiple child subscriptions, you can load-balance how SL1 monitors your Azure components by discovering groups of subscriptions and their components across multiple collectors. For details, see the section on **Load-Balancing an Account with Multiple Subscriptions**.

4. Click [Add] to create the virtual device.

Aligning the Azure Dynamic Applications

The Dynamic Applications in the Microsoft: Azure PowerPack are divided into the following types:

- **Discovery**. These Dynamic Applications poll Azure for new instances of services or changes to existing instances of services.
- **Configuration**. These Dynamic Applications retrieve configuration information about each service instance and retrieve any changes to that configuration information.
- Performance. These Dynamic Applications poll Azure for performance metrics.

When configuring SL1 to monitor Azure services, you can manually align Dynamic Applications to discover Azure component devices.

Discovering Azure Component Devices

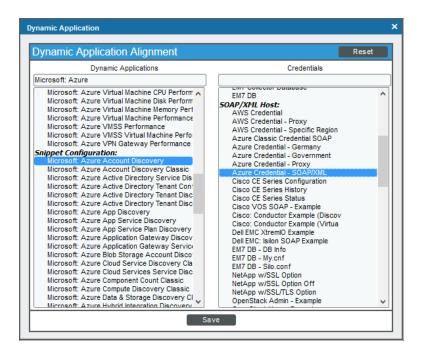
To discover all the components of your Azure platform, you must manually align the "Microsoft: Azure Account Discovery" Dynamic Application with the Azure virtual device.

TIP: When monitoring an account with multiple child subscriptions, ScienceLogic recommends that you first review your device capacity and load limits to determine the best method for implementation prior to discovery. For details, see the section on Load-Balancing an Account with Multiple Subscriptions.

To manually align the "Microsoft: Azure Account Discovery" Dynamic Application:

- 1. Go to the **Device Manager** page (Devices > Device Manager, or Registry > Devices > Device Manager in the classic SL1 user interface).
- 2. Click the wrench icon () for your Azure virtual device.
- 3. In the **Device Administration** panel, click the **[Collections]** tab. The **Dynamic Application Collections** page appears.
- 4. Click the [Actions] button and select Add Dynamic Application from the menu.

5. In the **Dynamic Application Alignment** modal:



- In the **Dynamic Applications** field, select Microsoft: Azure Account Discovery.
- In the **Credentials** field, select the credential you created for your Azure service.
- 6. Click [Save] to align the Dynamic Application with the Azure virtual device.

When you align the "Microsoft: Azure Account Discovery" Dynamic Application with the Azure virtual device, SL1 does one of the following, depending on your subscription model:

- If you are monitoring an account with multiple child subscriptions, SL1 creates a root component device
 representing the Azure account and one or more child component devices representing all of your Azure
 subscriptions.
- If you are monitoring a single subscription, SL1 creates a root component device representing your Azure subscription.

TIP: When monitoring an account with multiple child subscriptions, you can load-balance how SL1 monitors your Azure components by discovering groups of subscriptions and their components across multiple collectors. For details, see the section on **Load-Balancing an Account with Multiple Subscriptions**.

SL1 then automatically aligns several other Dynamic Applications to the subscription component devices. These additional Dynamic Applications discover and create component devices for Active Directory tenants, Traffic Manager profiles, and each location used by the Azure account.

Under each location, SL1 then discovers the following component devices:

- Application Gateway Services
 - Application Gateways

- App Services
 - ° App Service Plan
 - Function App
 - Web App
- Azure Cache for Redis
- Azure Data Factory Service
 - Azure Data Factory
- Azure Database for MySQL Services
 - ° Azure Database for MySQL Servers
- Azure Database for PostgreSQL Services
 - ° Azure Database for PostgreSQL Servers
- Azure Functions
- Azure Kubernetes Services (AKS)
 - o Azure Kubernetes Clusters
- Azure Service Buses (Relay)
- Batch Accounts
- Content Delivery Networks
 - o CDN Profiles
 - CDN Endpoints
- Cosmos DB Accounts
- DNS Services
 - o DNS Zones
- ExpressRoute Services
 - ° ExpressRoute Circuits
 - ExpressRoute Peering
 - ExpressRoute Circuit Connections
- Key Vaults
- Load Balancer Services
 - Load Balancers
- Network Security Group Services
 - Network Security Groups
- Recovery Service Vaults Services
 - Recovery Service Vaults
- Resource Groups Services
 - Resource Groups

- SQL Managed Instance Service
 - SQL Managed Instance
 - SQL Managed Instance Database
- SQL Server Services
 - SQL Servers
 - SQL Databases
- Storage Manage Disks
 - Manage Disk Service
 - Manage Disk
- Storage Services
 - ° Storage Accounts
- Virtual Machines Services
 - Virtual Machines
- Virtual Network Services
 - Virtual Networks
 - ExpressRoute Gateways
 - Virtual Network Gateways
 - Virtual Network Subnets
- VM Scale Set Services
 - ° VM Scale Sets
 - Virtual Machines
- Web Application Firewalls (WAF)
 - WAF on CDN Policies
 - WAF on Application Gateway Policies

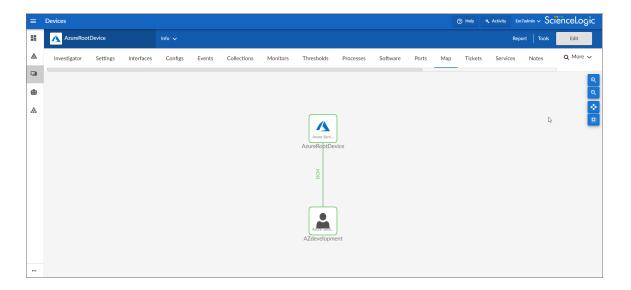
NOTE: SL1 might take several minutes to align these Dynamic Applications and create the component devices in your Azure service.

NOTE: When discovering a large number of component devices, such as when discovering an account with multiple child subscriptions, the discovery process can cause the appearance of numerous critical events with the message, "Large backlog of asynchronous jobs detected". This will occur only during the initial discovery session.

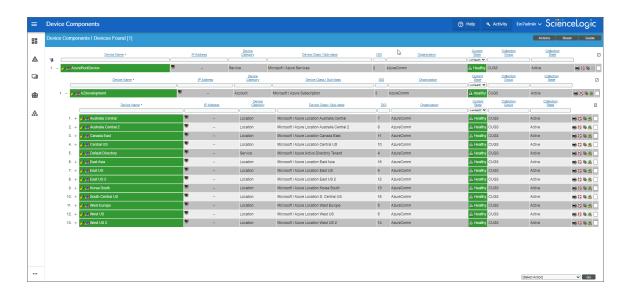
Viewing Azure Component Devices

In addition to the **Devices** page, you can view the Azure service and all associated component devices in the following places in the user interface:

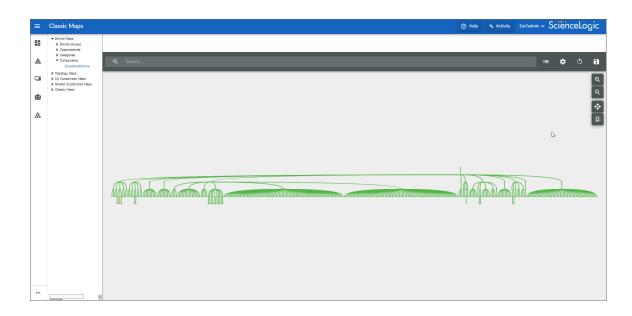
• The **Device Investigator** Map page (click **Map** in the **Device Investigator** page) displays a map of a particular device and all of the devices with which it has parent-child relationships. Double-clicking any of the listed devices reloads the page to make the selected device the primary device.



The Device Components page (Devices > Device Components) displays a list of all root devices and
component devices discovered by SL1. The Device Components page displays all root devices and
component devices in an indented view, so you can easily view the hierarchy and relationships between
child devices, parent devices, and root devices. To view the component devices associated with an Azure
service, find the Azure service and click its plus icon (+).



• The Component Map page (Classic Maps > Device Maps > Components) allows you to view devices by root node and view the relationships between root nodes, parent components, and child components in a map. This makes it easy to visualize and manage root nodes and their components. SL1 automatically updates the Component Map as new component devices are discovered. The platform also updates each map with the latest status and event information. To view the map for an Azure service, go to the Component Map page and select the map from the list in the left NavBar. To learn more about the Component Map page, see the Maps manual.



Relationships Between Component Devices

In addition to parent/child relationships between component devices, SL1 also creates relationships between the following component devices:

- Apps and Resource Groups
- Application Gateways and Resource Groups
- Application Gateways and Virtual Network Subnets
- Azure CosmosDB and Resource Groups
- Azure CosmosDB and Virtual Networks
- Azure CosmosDB and Virtual Network Subnets
- Azure Traffic Managers and Traffic Managers
- Batch Accounts and Key Vaults
- Batch Accounts and Resource Groups
- Batch Accounts and Storage Groups
- CDN Profiles and Resource Groups
- Key Vaults and Resource Groups
- Key Vaults and Virtual Networks
- Key Vault Rules and Subnets
- Kubernetes Agent Pools and Subnets
- Load Balancers and Resource Groups
- Managed Disks and Resource Groups
- Managed Disks and Virtual Machines
- Network Security Groups and Resource Groups
- Network Security Groups and Virtual Network Subnets
- PostgreSQL Servers and Resource Groups
- PostgreSQL Servers and Subnets
- PostgreSQL Servers and PostgreSQL Server Replicas
- PostgreSQL Servers and Virtual Networks
- Recovery Service Vaults and Resource Groups
- Redis Cache Servers and Redis Cache Servers
- Redis Caches and Resource Groups
- Redis Caches and Subnets
- Redis Caches and Virtual Networks
- Service Bus Namespaces and Resource Groups
- Service Bus Namespaces and Service Bus Namespaces

- Service Bus Namespaces and Subnets
- Service Bus Namespaces and Virtual Networks
- SQL Databases and Resource Groups
- SQL Servers and Resource Groups
- SQL Servers and Server Replicas
- SQL Servers and Subnets
- SQL Servers and Virtual Networks
- SQL Servers and Virtual Network Subnets
- Storage Accounts and Resource Groups
- Traffic Manager Profiles and Resource Groups
- Virtual Machines and Network Security Groups
- Virtual Machines and Resource Groups
- Virtual Machines and Storage Accounts
- Virtual Machines and Virtual Networks
- Virtual Machines and Virtual Network Subnets
- Virtual Machine Scale Sets and Load Balancers
- Virtual Machine Scale Sets and Resource Groups
- Virtual Machine Scale Sets and Virtual Network Subnets
- Virtual Machine Scale Set Virtual Machines and Resource Groups
- Virtual Networks and Resource Groups
- VPN Gateways and Resource Groups
- VPN Gateways and Virtual Network Subnets
- WAF CDN Policies and Endpoints
- WAF CDN Policies and Resource Groups
- WAF Gateway Policies and Application Gateways
- WAF Gateway Policies and Resource Groups

Additionally, the platform can automatically build relationships between Azure component devices and other associated devices:

- If you discover Cisco Cloud Center devices using the Dynamic Applications in the Cisco: CloudCenter PowerPack version 103 or later, SL1 will automatically create relationships between Azure Virtual Machines and Cisco Cloud Center applications.
- If you discover Dynatrace environments using the Dynamic Applications in the *Dynatrace* PowerPack, SL1 will automatically create relationships between the following device types:
 - ° Azure Virtual Machines and Dynatrace Hosts
 - o Azure Virtual Machine Scale Sets and Dynatrace Hosts

| • | If you discover Office 365 services using the Dynamic Applications in the <i>Microsoft: Office 365</i> PowerPack version 101 or later, SL1 will automatically create relationships between Azure Active Directory tenants and Office 365 Active Directory tenants. | |
|---|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Chapter

4

Azure Unified Alerts

Overview

The following sections describe the Azure unified alert Event Policies that are included in the *Microsoft:* Azure PowerPack and information about configuring Azure and SL1 to generate events based on Azure unified alerts:

| Prerequisites for Configuring Azure Unified Alerts | 44 |
|--|----|
| Azure Unified Alert Event Policies | 45 |
| Enabling the "Microsoft: Azure Unified Alerts Performance" Dynamic Application | 45 |
| Viewing Azure Unified Alert Counts | 46 |

Prerequisites for Configuring Azure Unified Alerts

In addition to SL1 collecting metrics for Azure resources, you can configure Azure to send alert information to SL1 via API. SL1 can then generate an event for each alert.

However, before you can monitor Azure unified alerts in SL1 using the *Microsoft: Azure* PowerPack, you must first configure Azure to proactively send alerts when important conditions are found in your Azure monitoring data. These alerts are based on metrics and activity logs, and are raised when the alert's monitor condition is set to "fired".

You must also create alert rules in Azure that determine the following:

- The resource that the alert is targeting
- The signal from the target resource that could trigger the alert
- The logic that determines whether the signal from the target resource actually triggers the alert

For details about how to create and manage alert rules, see https://docs.microsoft.com/en-us/azure

Azure Unified Alert Event Policies

The Microsoft: Azure PowerPack includes several pre-defined event policies for unified alerts, based on their severity:

| Event Policy Name | Event Source | Severity |
|--|--------------|----------|
| Microsoft: Azure Alert Severity 0 | API | Critical |
| Microsoft: Azure Alert Severity 1 | API | Major |
| Microsoft: Azure Alert Severity 2 | API | Minor |
| Microsoft: Azure Alert Severity 3 | API | Notice |
| Microsoft: Azure Alert Severity 4 | API | Notice |
| Microsoft: Azure Alert Severity O Resolved Microsoft: Azure Alert Severity 1 Resolved Microsoft: Azure Alert Severity 2 Resolved Microsoft: Azure Alert Severity 3 Resolved Microsoft: Azure Alert Severity 4 Resolved | API | Healthy |

These events are aligned to Azure component devices in the following way:

- If the alert is targeted to a component device that is discovered in SL1, then the event in SL1 will be aligned with that component device.
- If the alert is targeted to a component device that either is not discovered in SL1 or if SL1 cannot determine
 the appropriate component device, then that alert will be aligned to the Azure subscription component
 device.

NOTE: The **Healthy** events are raised when the alert's monitor condition is "resolved" or the alert state is "acknowledged" or "closed".

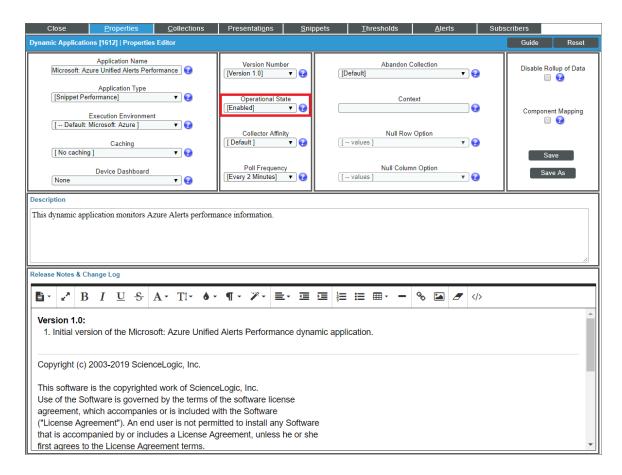
Enabling the "Microsoft: Azure Unified Alerts Performance" Dynamic Application

The Microsoft: Azure PowerPack also includes a "Microsoft: Azure Unified Alerts Performance" Dynamic Application. This Dynamic Application collect alerts from the Azure API for all available resources and associates the alerts with the appropriate Azure component devices in SL1, if applicable. If an appropriate component device does not exist in SL1 or cannot be determined, the alert is instead associated with the component device for the Azure subscription.

This Dynamic Application must be enabled if you want SL1 to generate unified alert events.

To enable the "Microsoft: Azure Unified Alerts Performance" Dynamic Application:

- 1. Go to the **Dynamic Applications Manager** page (System > Manage > Dynamic Applications), or (System > Manage > Applications) in the classic SL1 user interface.
- 2. Locate the "Microsoft: Azure Unified Alerts Performance" Dynamic Application and then click its wrench icon (). The **Dynamic Applications Properties Editor** page appears.



- 3. In the **Operational State** field, select *Enabled*.
- 4. Click [Save].

Viewing Azure Unified Alert Counts

After you have enabled the "Microsoft: Azure Unified Alerts Performance" Dynamic Application and it has begun collecting alerts from the Azure API, you can view a count of the total number of alerts generated for each severity level for a given component device.

NOTE: By default, the "Microsoft: Azure Unified Alerts Performance" Dynamic Application collects alerts over a 1-day period.

To view Azure unified alert counts:

- 1. Go to the **Device Components** page (Devices > Device Components), or (Registry > Devices > Device Components) for the classic SL1 user interface.
- 2. Click the plus-sign icon (+) for your Azure service until you locate the Azure component device for which you want to see an alert count. Click its graph icon (****). The **Device Summary** page appears.
- 3. Click the [Performance] tab. The Device Performance page appears.
- 4. Click the Microsoft: Azure Unified Alerts Performance link to expand the options listed, and then select the alert severity for which you want to see metrics. The performance graph displays a graph detailing the count for your selected alert severity over the selected timespan.



Chapter

5

Azure Run Book Actions and Automations

Overview

The following sections describe how to use the Run Book Action policies and Run Book Automation policies that are included in the *Microsoft: Azure PowerPack:*

| About the Azure Run Book Actions and Automations | |
|---|----|
| Disabling VMs or Storage Disks by VM Tag | 50 |
| Run Book Automation Policy: Disable and Discover from IP | 50 |
| Run Book Automation Policy: Disable Storage Disks | 51 |
| Configuration Steps | 51 |
| Modifying the Parameters of the "Disable By VM Tag" Run Book Action | 51 |
| Enabling the "Component Device Record Created" Event Policy | 53 |
| Enabling the Run Book Automation Policies | 53 |
| Preserving Automation Changes | 54 |
| Discovering VMs and Merging Physical Devices with Components | 54 |
| Run Book Automation Policy: Discover from IP | 54 |
| Run Book Automation Policy: Merge with VM | 55 |
| Configuration Steps | 55 |
| Modifying the Parameters of the Run Book Actions | 56 |
| Enabling the "Component Device Record Created" Event Policy (Discover from IP Only) | 57 |
| Enabling the "Device Record Created" Event Policy | 57 |
| Enabling the Run Book Policies | 58 |
| Preserving Automation Changes | 59 |

| Vanishing | g Terminated or Terminating VM Instances | .60 |
|-----------|--|-----|
| Enabling | g the Run Book Automation Policies | 61 |
| Preservi | ing Automation Changes | 61 |

About the Azure Run Book Actions and Automations

The Microsoft: Azure PowerPack includes Run Book Actions and Run Book Automation policies that can be used to:

- Automatically disable data collection for Virtual Machines, Virtual Machine Scale Sets (VMSS), and Storage Disks based on their VM tag
- Automatically create and start a discovery session using the public or private IP address of a Virtual Machine, and after the device is discovered, merge the physical device with the corresponding component
- Automatically move a Virtual Machine to a vanished state if the component is in a terminated state

The following table describes the Run Book Automation policies and what they do:

| Run Book Automation Policy Name | Result |
|---|---|
| Microsoft Azure: Disable and Discover from IP | If a component device belongs to the Virtual Machines device group and has a relevant Azure tag, SL1 disables the device. |
| Microsoft Azure: Disable Storage Disks | If a component device belongs to the Storage Disks device group and has a relevant Azure tag, SL1 disables the device. |
| Microsoft Azure: Discover from IP | SL1 automatically discovers VM instances by public or private IP address. |
| Microsoft Azure: Merge with VM | If SL1 finds the "Device Record Created" event on the newly discovered physical device, SL1 merges the newly discovered physical device with the corresponding component device. |
| Microsoft Azure: Vanish Terminated VMs | If a device is in a terminated or terminating state, SL1 un-merges the VM instance and physical device (if applicable), clears the device's associated events, and then moves the device to a vanished state. |

NOTE: The Run Book Automation policies in the *Microsoft*: Azure PowerPack are disabled by default. To use these Run Book Automations, you must enable the Run Book Automation policies and modify the parameters in the Run Book Actions as needed. See the following procedures for more information.

As a prerequisite for discovering physical devices, make sure that traffic to the following ports is allowed in the inbound security rules on the Azure Portal for a Virtual Machine:

- Port 161. Allows the discovery session to use SNMP credentials.
- Ports 5985, 5986. Allows the discovery session to use PowerShell credentials.

If the above ports are not open or cannot be opened, you can include extra credentials for the discovery session by modifying the following parameter in the "Microsoft Azure: Discover from IP" Run Book Action, using a comma-separated list of credential IDs:

```
EXTRA CREDS = "<ID1>, <ID2>, <ID3>"
```

NOTE: When a discovery session is given a list of credentials, the first credential that successfully authenticates is used to discover a physical device.

For more information about Microsoft Azure inbound security rules, see the following Microsoft article: <u>How to open ports to a virtual machine with the Azure portal.</u>

Disabling VMs or Storage Disks by VM Tag

NOTE: The following Run Book Automation policies do not enable data collection for Azure VMs or Storage Disks. You must manually enable data collection for these VMs or Storage Disks.

Run Book Automation Policy: Disable and Discover from IP

The "Disable and Discover from IP" Run Book Automation policy runs only on newly discovered VMs. The policy takes no action for existing VMs.

The automation for disabling Azure VMs or Azure VMSSs includes the following Run Book Actions, which are executed in the following order:

- Microsoft Azure: Get Unique ID. This action retrieves the unique ID of the component. This action runs on the Database Server.
- Microsoft Azure: Collect VM Configuration. This action retrieves the VM configuration, including the tags used to disable the VM. This action runs on the Collector.
- Microsoft Azure: Disable By VM Tag. If a newly discovered VM contains the tags specified in the snippet, this action disables collection for this component.
- Microsoft Azure: Discover from IP. If the VM is running and is newly discovered, this action creates the discovery session and runs automatically to discover the physical device. This action will not create a discovery session for a discovered VM that was disabled right after being discovered. By default the snippet uses the public IP address and PowerShell (unless you specify SNMP) to create the discovery session. You can update these parameters as needed.

The following Run Book Automation policy triggers the above Run Book Actions:

• Microsoft Azure: Disable and Discover from IP. This Run Book Automation policy executes when the "Component Device Record Created" event is active on the matching devices, immediately after the devices are discovered in the system. Enable this Run Book Automation policy if you want to disable VM instances by Azure tag and want to enable automated discovery of VM instances by public or private IP address. This policy is configured to run both processes in the correct order for VM instances.

Run Book Automation Policy: Disable Storage Disks

The "Disable Storage Disks" Run Book Automation policy runs only on newly discovered Storage Disks. The policy takes no action for existing Storage Disks.

The automation for disabling Azure Storage Disks includes the following Run Book Actions, which are executed in the following order:

- Microsoft Azure: Get Unique ID. This action retrieves the unique ID of the component. This action runs on the Database Server.
- Microsoft Azure: Collect Storage Disk Configuration. This action retrieves disk and VM configurations, including the tags that belong to the VM used by the Storage Disk. This action runs on the Collector.
- Microsoft Azure: Disable By VM Tag. If a newly discovered Storage Disk belongs to a VM that contains the tags specified in the snippet, this action disables collection for the component.

The following Run Book Automation policy triggers the above actions:

• Microsoft Azure: Disable Storage Disks. This Run Book Automation policy executes when the "Component Device Record Created" event is active on the matching devices, immediately after the devices are discovered in the system. Enable this policy if you want to disable Storage Disk instances by Azure tag, but do not want to enable automated discovery of Storage Disk instances by public or private IP address.

Configuration Steps

To use these automations, you must:

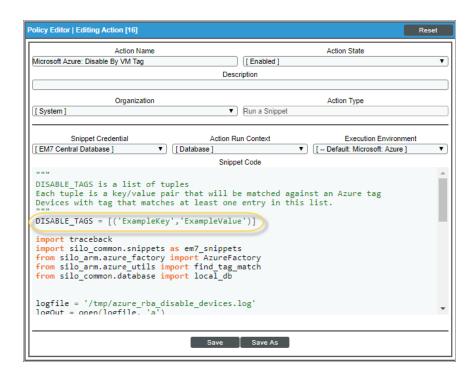
- Modify the parameters of the "Disable By VM Tag" Run Book Action
- Enable the "Component Device Record Created" event policy
- Enable the Run Book Automation policies
- Configure your system to preserve these changes

Modifying the Parameters of the "Disable By VM Tag" Run Book Action

The snippet for the "Microsoft Azure: Disable by VM Tag" Run Book Action includes the pre-defined list of key/value pairs that SL1 compares to the tags collected from Azure. You must modify this list to include the key/value pairs that you want to use to disable VM instances.

To modify the parameters for the "Microsoft Azure: Disable by VM Tag" Run Book Action:

- 1. Go to the **Action Policy Manager** page (Registry > Run Book > Actions).
- 2. Click the wrench icon (📂) for the "Microsoft Azure: Disable by VM Tag" Run Book Action.



3. In the **Snippet Code** field, locate and edit the following line:

```
DISABLE TAGS = [('ExampleKey','ExampleValue')]
```

The line must be in the following format, with each key and each value inside single-quotes and each key/value pair comma-separated inside parentheses, with commas separating each key/value pair.

```
DISABLE_TAGS [('Key','Value'),('Key','Value'),...,('Key','Value')]
```

For example, suppose you want to disable a VM instance where the "Environment" key is either "dev" or "test" or the "Owner" key is "Sales". You would update the line so it looks like this:

```
DISABLE_TAGS [('Environment','dev'),('Environment','test'),('Owner','Sales')]
```

4. When you are done editing, click the [Save] button.

Enabling the "Component Device Record Created" Event Policy

To enable the "Component Device Record Created" event policy:

- 1. Go to the **Event Policy Manager** page (Registry > Events > Event Manager).
- 2. Click the wrench icon (🎤) for the "Component Device Record Created" event policy.
- 3. In the **Operational State** field, select *Enabled*.
- 4. Click [Save].

To prevent this change from being overwritten when the PowerPacks installed on the system are updated, you can enable the **Selective PowerPack Field Protection** option. To enable this option:

- 1. Go to the **Behavior Settings** page (System > Settings > Behavior).
- 2. Check the Enable Selective PowerPack Field Protection checkbox.
- 3. Click [Save].

Enabling the Run Book Automation Policies

To enable one or more Run Book Automation policies in the Microsoft: Azure PowerPack:

- 1. Go to the **Automation Policy Manager** page (Registry > Run Book > Automation).
- 2. Click the wrench icon () for the Run Book Automation policy you want to enable.
- 3. In the **Policy State** field, select Enabled.
- 4. Click [Save].

Preserving Automation Changes

If you have modified Run Book Actions and Run Book Automation policies that are included in the Microsoft: Azure PowerPack, those changes will be overwritten when the PowerPack is updated in your system. If you have modified Run Book Actions and Run Book Automation policies that are included in the PowerPack, you can:

- Re-implement those changes after each update of the Microsoft: AzurePowerPack.
- Remove the content from the PowerPack on your system. When the Microsoft: AzurePowerPack is updated in
 your system, updated versions of this content will not be installed on your system and your local changes will
 be preserved.

To remove Run Book Action or Run Book Automation policy content from the *Microsoft: Azure* PowerPack on your system:

- 1. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
- 2. Click the wrench icon (🎤) for the Microsoft: Azure PowerPack. The **Editing PowerPack** page appears.
- 3. In the left NavBar of the **Editing PowerPack** page, select the type of content you want to remove:
 - To remove a Run Book Action, click Run Book Actions. The Embedded Run Book Actions and Available Run Book Actions panes appear.
 - To remove a Run Book Automation policy, click **Run Book Policies**. The **Embedded Run Book Policies** and **Available Run Book Policies** panes appear.
- 4. In the upper pane, click the bomb icon () for each Run Book Action or Run Book Automation policy that you want to remove from the *Microsoft: Azure PowerPack* on your system.

Discovering VMs and Merging Physical Devices with Components

Run Book Automation Policy: Discover from IP

The "Discover from IP" Run Book Automation policy runs only on newly discovered VMs. The policy takes no action for existing VMs.

The automation for discovering Azure VMs or VMSSs by public or private IP addresses and then discovering the physical device includes three Run Book Actions that are executed in the following order:

- Microsoft Azure: Get Unique ID. This action retrieves the unique ID of the component. This action runs on the Database Server.
- Microsoft Azure: Collect VM Configuration. This action retrieves the VM configuration, including public or private IP address and open ports. This action runs on the Collector.
- Microsoft Azure: Discover from IP. If the VM is running and is newly discovered, this action creates the discovery session and runs automatically to discover the physical device. The discovery session name uses the following format: Azure_VM-IP_address.

The following Run Book Automation policy triggers the above Run Book Actions:

Microsoft Azure: Discover From IP. This Run Book Automation policy executes when the "Component Device Record Created" event is active on the matching devices, immediately after the devices are discovered in the system. Use this action to enable automated discovery of VM instances by public or private IP address. By default the snippet uses the public IP address and PowerShell (unless you specify SNMP) to create the discovery session. You can update these parameters as needed.

Note: If a VM was created as "Stopped" by default, and that VM was discovered by the PowerPack, the Run Book Action will not create a discovery session. The action cannot collect an IP address for a stopped VM.

Run Book Automation Policy: Merge with VM

When the "Merge with VM" Run Book Automation policy finds the "Device Record Created" event on the newly discovered physical device, the policy triggers the following Run Book Action:

• Microsoft Azure: Merge Physical with Component. This action merges the newly discovered physical device with the corresponding component device.

The "Merge with VM" Run Book Automation policy runs only on newly discovered devices. The policy takes no action for existing VMs. The discovery session created with the "Discover from IP" Run Book Action, above, will discover the physical device.

Configuration Steps

To use these automations, you must:

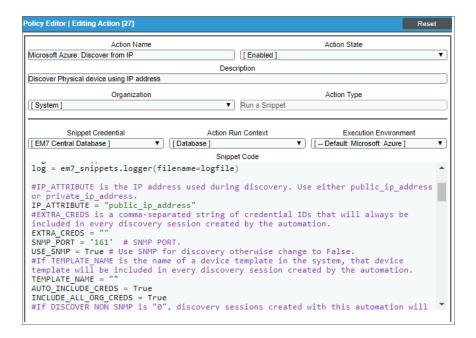
- Modify the parameters of the Run Book Actions
- Enable the "Component Device Record Created" event policy (Discover from IP policy only)
- Enable the "Device Record Created" event policy
- Enable the Run Book Automation policies
- Configure your system to preserve these changes

Modifying the Parameters of the Run Book Actions

The snippet for the "Microsoft Azure: Discover from IP" Run Book Action includes parameters that define how the Run Book Action creates discovery sessions. By default the snippet uses the public IP address and PowerShell (unless you specify SNMP) to create the discovery session. You can update these parameters as needed.

To modify the parameters for the "Microsoft Azure: Discover from IP" Run Book Action:

- 1. Go to the **Action Policy Manager** page (Registry > Run Book > Actions).
- 2. Click the wrench icon () for the "Microsoft Azure: Discover from IP" Run Book Action.
- 3. In the **Snippet Code** field, locate and edit the lines for the parameters you want to change:



- 4. As needed, update the following lines:
 - Discovery will use the PowerShell credential by default.

NOTE: For Linux servers, add the user-defined credentials in the EXTRA CREDS parameter.

• To change from the default public IP address to private IP address:

```
IP_ATTRIBUTE = 'private_ip_address'
```

If you change the IP address value to private for this Run Book Action, then you must also update the following line in the "Microsoft Azure: Merge with VM" Run Book Action: IP_ATTRIBUTE = 'c-VM-public_ipaddress".

• To include additional user-defined credentials in the discovery session, use a comma-separated list of credential IDs:

```
EXTRA CREDS = "<ID1>, <ID2>, <ID3>"
```

If you want to use EXTRA_CREDS only, set AUTO_INCLUDE_CREDS to False:

```
AUTO INCLUDE CREDS = False
```

 To apply a device template to all newly discovered physical devices, specify the name of the template:

```
TEMPLATE NAME = "<Name>"
```

• To disable the automatic alignment of credentials to the discovery session, change this line to:

```
AUTO INCLUDE CREDS = False
```

If INCLUDE_ALL_ORG_CREDS is "True" and the AUTO_INCLUDE_CREDS parameter is "True",
credentials that are aligned with all organizations (credentials that do not have an explicit
organization alignment) are automatically included in the discovery session when that credential
meets the other requirements for being automatically included in the discovery session.

```
INCLUDE_ALL_ORG_CREDS = True
```

• To enable discovery using SNMP credentials, update the following lines:

```
USE_SNMP = True
DISCOVER NON SNMP = '0'
```

5. When you are done editing, click the [Save] button.

Enabling the "Component Device Record Created" Event Policy (Discover from IP Only)

To enable the "Component Device Record Created" event policy:

- 1. Go to the **Event Policy Manager** page (Registry > Events > Event Manager).
- 2. Click the wrench icon () for the "Component Device Record Created" event policy.
- 3. In the **Operational State** field, select *Enabled*.
- 4. Click [Save].

To prevent this change from being overwritten when the PowerPacks installed on the system are updated, you can enable the **Selective PowerPack Field Protection** option. To enable this option:

- 1. Go to the **Behavior Settings** page (System > Settings > Behavior).
- 2. Check the Enable Selective PowerPack Field Protection checkbox.
- 3. Click [Save].

Enabling the "Device Record Created" Event Policy

To enable the "Device Record Created" event policy:

- 1. Go to the **Event Policy Manager** page (Registry > Events > Event Manager).
- 2. Click the wrench icon () for the "Device Record Created" event policy.
- 3. In the **Operational State** field, select *Enabled*.
- 4. Click [Save].

To prevent this change from being overwritten when the PowerPacks installed on the system are updated, you can enable the **Selective PowerPack Field Protection** option. To enable this option:

- 1. Go to the **Behavior Settings** page (System > Settings > Behavior).
- 2. Check the **Enable Selective PowerPack Field Protection** checkbox.
- 3. Click [Save].

Enabling the Run Book Policies

To enable one or more Run Book Automation policies in the Microsoft: Azure PowerPack:

- 1. Go to the **Automation Policy Manager** page (Registry > Run Book > Automation).
- 2. Click the wrench icon () for the Run Book Automation policy you want to enable.
- 3. In the **Policy State** field, select Enabled.
- 4. Click [Save].

Preserving Automation Changes

If you have modified Run Book Actions and Run Book Automation policies that are included in the Microsoft: Azure PowerPack, those changes will be overwritten when the PowerPack is updated in your system. If you have modified Run Book Actions and Run Book Automation policies that are included in the PowerPack, you can:

- Re-implement those changes after each update of the Microsoft: AzurePowerPack.
- Remove the content from the PowerPack on your system. When the *Microsoft: Azure*PowerPack is updated in your system, updated versions of this content will not be installed on your system and your local changes will be preserved.

To remove Run Book Action or Run Book Automation policy content from the *Microsoft*: Azure PowerPack on your system:

- 1. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
- 2. Click the wrench icon (🎤) for the Microsoft: Azure PowerPack. The **Editing PowerPack** page appears.
- 3. In the left NavBar of the **Editing PowerPack** page, select the type of content you want to remove:
 - To remove a Run Book Action, click **Run Book Actions**. The **Embedded Run Book Actions** and **Available Run Book Actions** panes appear.
 - To remove a Run Book Automation policy, click **Run Book Policies**. The **Embedded Run Book Policies** and **Available Run Book Policies** panes appear.
- 4. In the upper pane, click the bomb icon () for each Run Book Action or Run Book Automation policy that you want to remove from the *Microsoft: Azure* PowerPack on your system.

Vanishing Terminated or Terminating VM Instances

If a device is in a terminated or terminating state, the "Vanish Terminated VMs" Run Book Action un-merges the VM instance and physical device (if applicable), clears the device's associated events, and then moves the device to a vanished state.

The "Vanish Terminated VMs" Run Book Automation policy runs only on newly discovered VMs. The policy takes no action for existing VMs.

The automation for vanishing terminated VM instances includes the following Run Book Actions:

- Microsoft Azure: Get Unique ID. This action retrieves the unique ID of the component. This action runs on the Database Server.
- Microsoft Azure: Check VM Availability. This action uses the unique ID of the component to get the device availability status. If the device availability status is "Terminated", this action moves to the following Run Book Action, "Vanish Terminated VMs". This action runs on the Collector.
- Microsoft Azure: Vanish Terminated VMs. This action moves the device to the Vanish state when the VM
 has been terminated in the Azure Portal. This action runs on the Database Server. This action determines if
 the component was merged with a physical device:
 - If the component was not merged, the action will delete the device's events and move the device to a Vanish state.
 - If the component was merged, the action will un-merge the component with the physical device, and then it will clear the device's events and move the device to a Vanish state.
 - If the component was merged, but the VM was powered off, the action will not do anything until the VM is powered on, at which point the action will update the IP address of the physical device.

When a merged device is un-merged, the component device vanishes, and the physical device is moved to an automatically created Collector group named "Virtual Group".

The following Run Book Automation policy triggers the above actions:

 Microsoft Azure: Vanish Terminated Instances. This Run Book Automation policy executes when the "Availability Check Failed" event is raised on the virtual machine when it terminated.

To use this automation, you must:

- Enable the Run Book Automation policies
- · Configure your system to preserve this change

Enabling the Run Book Automation Policies

To enable one or more Run Book Automation policies in the Microsoft: Azure PowerPack:

- 1. Go to the **Automation Policy Manager** page (Registry > Run Book > Automation).
- 2. Click the wrench icon (🎤) for the Run Book Automation policy you want to enable.
- 3. In the **Policy State** field, select Enabled.
- 4. Click [Save].

Preserving Automation Changes

If you have modified Run Book Actions and Run Book Automation policies that are included in the Microsoft: Azure PowerPack, those changes will be overwritten when the PowerPack is updated in your system. If you have modified Run Book Actions and Run Book Automation policies that are included in the PowerPack, you can:

- Re-implement those changes after each update of the Microsoft: AzurePowerPack.
- Remove the content from the PowerPack on your system. When the *Microsoft: Azure*PowerPack is updated in your system, updated versions of this content will not be installed on your system and your local changes will be preserved.

To remove Run Book Action or Run Book Automation policy content from the *Microsoft: Azure* PowerPack on your system:

- 1. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
- 2. Click the wrench icon () for the Microsoft: Azure PowerPack. The Editing PowerPack page appears.
- 3. In the left NavBar of the **Editing PowerPack** page, select the type of content you want to remove:
 - To remove a Run Book Action, click **Run Book Actions**. The **Embedded Run Book Actions** and **Available Run Book Actions** panes appear.
 - To remove a Run Book Automation policy, click **Run Book Policies**. The **Embedded Run Book Policies** and **Available Run Book Policies** panes appear.
- 4. In the upper pane, click the bomb icon () for each Run Book Action or Run Book Automation policy that you want to remove from the Microsoft: Azure PowerPack on your system.

Chapter

6

Dashboards

Overview

The following sections describe the device dashboards that are included in the Microsoft: Azure PowerPack:

| Device Dashboards | |
|--|----|
| Microsoft: Azure Batch Account | 63 |
| Microsoft: Azure Cache for Redis | 64 |
| Microsoft: Azure Key Vault | 65 |
| Microsoft: Azure Kubernetes Cluster | 66 |
| Microsoft: Azure MySQL Server | 67 |
| Microsoft: Azure PostgreSQL Server | 68 |
| Microsoft: Azure Service Bus Namespace | 69 |
| Microsoft: Azure WAF on CDN Policy | 70 |

Device Dashboards

The Microsoft: Azure PowerPack includes device dashboards that provide summary information for Kubernetes component devices. The following device dashboards in the Microsoft: Azure PowerPack are aligned as the default device dashboard for the equivalent device class.

Device Dashboards 62

Microsoft: Azure Batch Account



The Microsoft: Azure Batch Account device dashboard displays the following information:

- The basic information about the device
- Task Fail Events
- Topology Map
- Node Counts
- Device Logs

Microsoft: Azure Cache for Redis

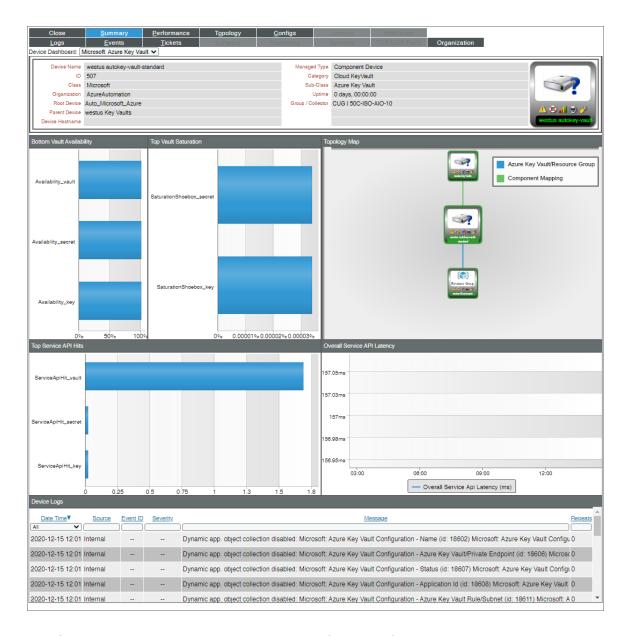


The Microsoft: Azure Cache for Redis device dashboard displays the following information:

- The basic information about the device
- Top CPU Usage
- Top Memory Usage
- Top Server Load
- Top Errors
- Cache Latency
- Top Evicted Keys

- Top Operations per Second
- Device Logs

Microsoft: Azure Key Vault

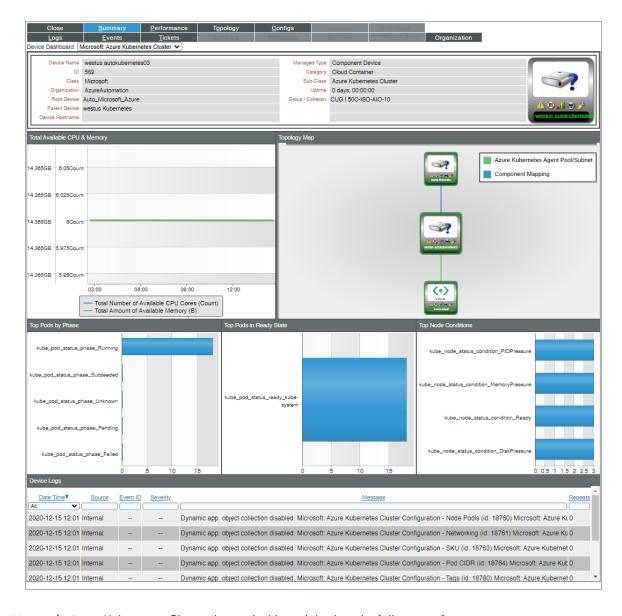


The Microsoft: Azure Key Vault device dashboard displays the following information:

- The basic information about the device
- Bottom Vault Availability
- Top Vault Saturation
- Topology Map

- Top Service API Hits
- Overall Service API Latency
- Device Logs

Microsoft: Azure Kubernetes Cluster



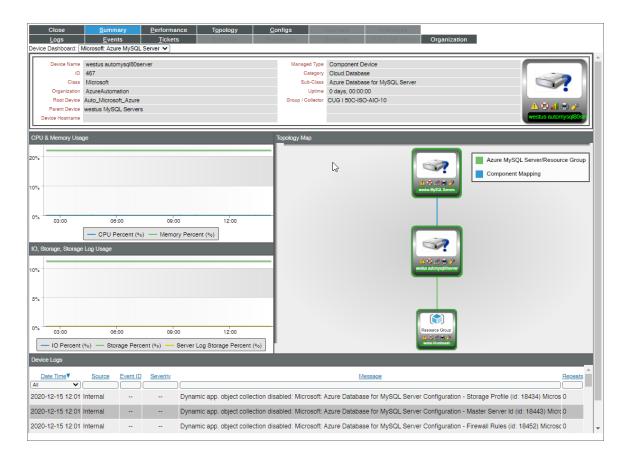
The Microsoft: Azure Kubernetes Cluster device dashboard displays the following information:

- The basic information about the device
- Total Available CPU & Memory
- Topology Map
- Top Pods by Phase

66

- Top Pods in Ready State
- Top Node Conditions
- Device Logs

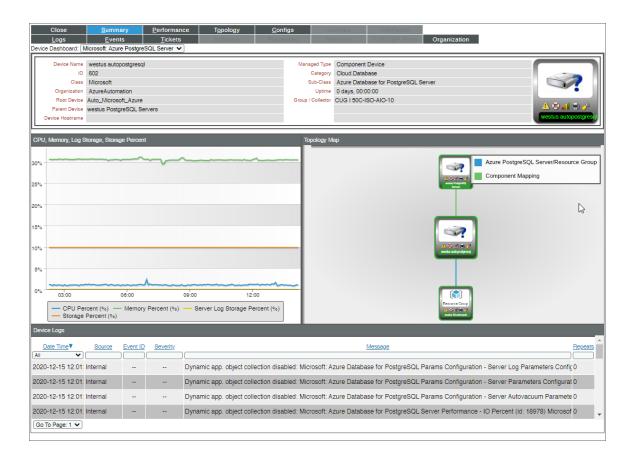
Microsoft: Azure MySQL Server



The Microsoft: Azure MySQL Server device dashboard displays the following information:

- The basic information about the device
- CPU & Memory Usage
- IO, Storage, Storage Log Usage
- Topology Map
- Device Logs

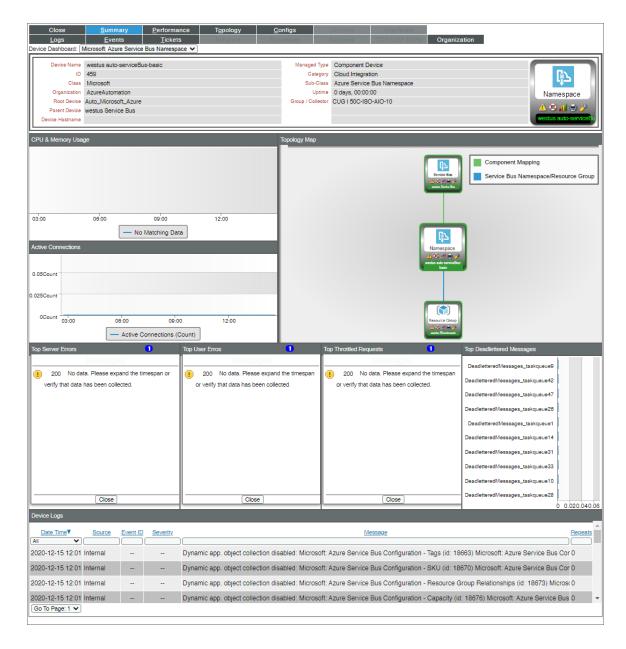
Microsoft: Azure PostgreSQL Server



The Microsoft: Azure PostgreSQL Server device dashboard displays the following information:

- The basic information about the device
- CPU, Memory, Log Storage, Storage Percent
- Topology Map
- Device Logs

Microsoft: Azure Service Bus Namespace

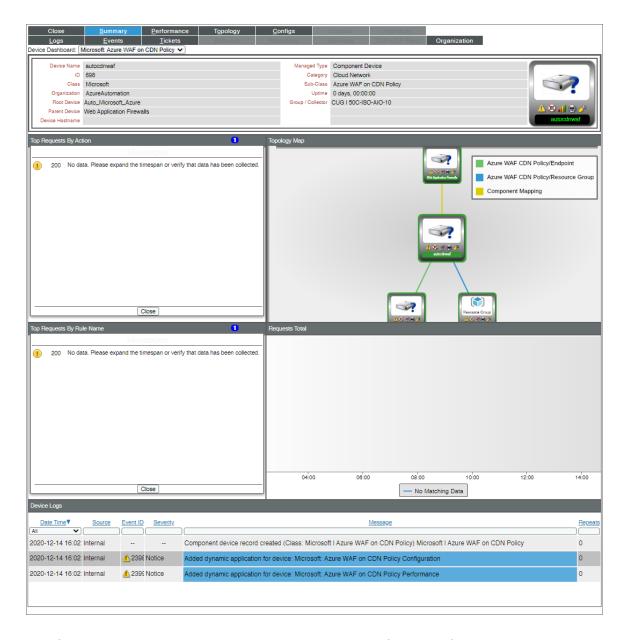


The Microsoft: Azure Service Bus Namespace device dashboard displays the following information:

- The basic information about the device
- CPU & Memory Usage
- Active Connections
- Topology Map
- Top Server Errors

- Top User Errors
- Top Throttled Requests
- Top Deadlettered Messages
- Device Logs

Microsoft: Azure WAF on CDN Policy



The Microsoft: Azure WAF on CDN Policy device dashboard displays the following information:

• The basic information about the device

- Top Requests By Action
- Topology Map
- Top Requests By Rule Name
- Requests Total
- Device Logs

71 Device Dashboards

Key Metrics Collected by the PowerPack

Overview

This section lists the key metrics for Microsoft Azure services that the Microsoft: Azure PowerPack collects by Dynamic Application. Coverage of these services uses service-specific APIs that collect performance and configuration metrics that generate alerts and events. Coverage also includes DCM+R to Resource Groups, Networks, Network Security Groups, Subnets, Storage Accounts, etc., and collects any alerts generated by Azure and aligns them to component devices.

Partial coverage exists for some services which is not service-specific and includes some configuration information, such as health status from the Resource Health API, CMDB sync, status events, and Azure Unified Alerts.

| Azure Active Directory Tenant Service | |
|---------------------------------------|-----|
| Azure App Service | 74 |
| Azure Application Gateway Service | 76 |
| Azure Backup Policies Service | 78 |
| Azure Batch Service | 79 |
| Azure Cache for Redis | 84 |
| Azure Content Delivery Network | 88 |
| Azure CosmosDB Service | 91 |
| Azure Data Factory | 94 |
| Azure Database for MySQL | 96 |
| Azure Database for PostgreSQL | 99 |
| Azure DNS Service | 103 |
| Azure ExpressRoute Service | 104 |
| Azure Function App Service Plan | 106 |
| Azure Functions | 107 |

| Azure Key Vault | |
|--------------------------------------|-----|
| Azure Kubernetes Service (AKS) | 110 |
| Azure Load Balancer Service | 112 |
| Azure Managed Disks Service | 114 |
| Azure Network Security Group Service | 114 |
| Azure Recovery Service Vault | 119 |
| Azure Resource Group Service | 119 |
| Azure Resource List Services | 120 |
| Azure Service Bus (Relay) | 121 |
| Azure Site Recovery | 124 |
| Azure SQL Managed Instance Service | 126 |
| Azure SQL Servers Service | 128 |
| Azure Storage Service | 131 |
| Azure Traffic Manager Service | 137 |
| Azure Virtual Machines Service | 138 |
| Azure Virtual Network Service | 143 |
| Azure VM Scale Sets Service | 146 |
| Azure Web Application Firewall (WAF) | 153 |
| Other Supported Services | 156 |

Azure Active Directory Tenant Service

| Microsoft: Azure Active Directory Tenant Configuration | | |
|--|--|--|
| Object Name | Object Description | |
| Organization ID | Organization Identifier. | |
| Assigned Plans | The group label for the assigned plans group. | |
| Country Letter Code | The ISO 2-alpha code for the country; for example, "US" or "UK". | |
| Default Domain | True if this is the default domain associated with the tenant; otherwise, false. | |

| Directory Sync Enabled | True if this object is synced from an on-premises directory; false if this object was originally synced from an on-premises directory but is no longer synced; null if this object has never been synced from an on-premises directory (default). |
|--------------------------------------|---|
| Domain Capabilities | The Capabilities of an Azure active directory. For example, "Email", "OfficeCommunicationsOnline". |
| Domain Name | The domain name of the active directory tenant. |
| Domain Type | The type of an Azure active directory domain. For example, "Managed". |
| ID | The ID of an Azure active directory tenant. |
| Last On-Premise Sync Time | The time and date at which the tenant was last synced with the on-premise directory. |
| Office 365 AD Tenant/Azure AD Tenant | Office 365 namespace. |
| Service | The name of the service; for example, "SharePoint", "MicrosoftOffice", or "Exchange". |
| Service Plan ID | A GUID that identifies the service plan. |
| Status | The status of an assigned plan. For example, "Enabled". |
| Tenant Name | The display name of an Azure active directory tenant. |
| Timestamp | The date and time at which the plan was assigned; for example: 2013-01-02T19:32:30Z. |
| Verified Domains | The group label for the verified domains group. |

Azure App Service

| Microsoft: Azure App Configuration | |
|------------------------------------|--|
| Object Name | Object Description |
| Name | Resource Group Name. |
| Admin Enabled | Admin enabled state. |
| Availability State | Management information availability state for the app. |
| Azure App/Resource Group | Resource Group identifier. |
| Container Size | Size of the function container. |

Azure App Service 74

| Daily Memory Time Quota | Maximum allowed daily memory-time quota (applicable on dynamic apps only). |
|-------------------------|---|
| Default Host Name | Default hostname of the app. Read-only. |
| Enabled | true if the app is enabled; otherwise, false. Setting this value to false disables the app (takes the app offline). |
| Kind | Kind of resource. |
| Max Number Of Workers | Maximum number of workers. This only applies to Functions container. |
| Name | Name of the app. |
| Name | Key of the tag. |
| Repository Site Name | Name of the repository site. |
| Sku | Sku type. |
| State | Current state of the app. |
| Usage State | State indicating whether the app has exceeded its quota usage. Read-only. |
| Value | Value of the tag. |
| Web Space | Web Space of the app. |

| Microsoft: Azure App Performance | |
|----------------------------------|--|
| Object Name | Object Description |
| App Connections | The average of App Connections. |
| Average Memory Working Set | Average of memory working set. |
| Average Response Time | Average of Response Time. |
| Bytes Received | Total bytes received. |
| Bytes Sent | Total bytes sent. |
| Сри Time | Total of CPU Time. |
| Current Assemblies | Average of current Assemblies. |
| File System Usage | File System Usage. |
| Gen 0 Collections | Total number of Gen 0 Garbage Collections. |
| Gen 1 Collections | Total number of Gen 1 Garbage Collections. |
| Gen 2 Collections | Total number of Gen 2 Garbage Collections. |

75 Azure App Service

| Handles | Average of Handle Count. |
|--------------------------------|---|
| Health Check Status | Health check status. |
| Http Response Time | Response Time. |
| Http101 | Total of Http 101 responses. |
| Http2xx | Total of Http 2xx responses. |
| Http3xx | Total of Http 3xx responses. |
| Http401 | Total of Http 401 responses. |
| Http403 | Total of Http 403 responses. |
| Http404 | Total of Http 404 responses. |
| Http406 | Total of Http 406 responses. |
| Http4xx | Total of Http 4xx responses. |
| Http5xx | Total of Http 5xx errors. |
| Io Other Bytes Per Second | Total of IO Other Bytes Per Second. |
| lo Other Operations Per Second | Total of IO Other Operations Per Second. |
| Io Read Bytes Per Second | Total of IO Read Bytes Per Second. |
| lo Read Operations Per Second | Total of IO Read Operations Per Second. |
| Io Write Bytes Per Second | Total of IO Write Bytes Per Second. |
| Io Write Operations Per Second | Total of IO Write Operations Per Second. |
| Memory Working Set | Average of Memory working set. |
| Private Bytes | Total of Private bytes. |
| Requests | Total number of Requests. |
| Requests In Application Queue | Average of Requests In Application Queue. |
| Threads | Average of Thread Count. |
| Total App Domains | Total of App Domains. |
| Total App Domains Unloaded | Total of App Domains Unloaded. |

Azure Application Gateway Service

| Microsoft: Azure Applicati | on Gateway Configuration |
|----------------------------|--------------------------|
| Object Name | Object Description |

| Name | Name of Frontend IP configuration. |
|--|--|
| Name | Name of the listener. |
| Port | Associated port. |
| Protocol | Listener protocol. |
| Resource Group Name | Azure Resource Group Name associated with Azure Application Gateway. |
| Subnet Name | Subnet name of the Application Gateway configuration for relationship. |
| Туре | Frontend IP configuration type. |
| Virtual Network | Virtual Network |
| Azure Application Gateway/Resource Group | Azure Resource Group ID associated with Azure Application Gateway. |
| Azure Application Gateway/Subnets | Azure Subnet ID associated with Azure Application Gateway. |
| Frontend IP Configuration Name | Associated Frontend IP configuration. |
| Instance Count | The instance count of the Application Gateway. |
| IP Address | IP address for Frontend configuration. |
| IP Allocation Method | Private IP allocation method. |
| Key | Tag key. |
| Location | Application Gateway location. |
| Name | Application Gateway name. |
| Operational State | Operational state of the Application Gateway. Possible values Stopping Starting Running |
| Provisioning State | Provision state of the Application Gateway. Possible values: Updating Succeeded Failed |
| SKU Name | Gateway identifier. Possible values Standard_Small Standard_Medium Standard_Large WAF_Medium WAF_Large |
| Tier | Application Gateway tier. Possible values Standard WAF. |
| Value | Tag value. |

Microsoft: Azure Application Gateway Performance

| Object Name | Object Description |
|------------------------------------|---|
| Avg Request Count Per Healthy Host | Average request count per minute per healthy backend host in a pool. |
| Cpu Utilization | Current CPU utilization of the Application Gateway. |
| Current Connections | The most recent total Current Conections metric for an Azure Application Gateway. |
| Failed Requests | The most recent total Failed Request metric for an Azure Application Gateway. |
| Healthy Host Count | The most recent average Healthy Host Count metric for an Azure Application Gateway. |
| Response Status | The most recent total Response Status metric for an Azure Application Gateway. |
| Throughput | The most recent total Throughput metric for an Azure Application Gateway. |
| Total Requests | The most recent total Total Request metric for an Azure Application Gateway. |
| Unhealthy Host Count | The most recent Average Unhealthy Host Count metric for an Azure Application Gateway. |

Azure Backup Policies Service

| Microsoft: Azure Backup Job Performance | |
|---|--|
| Object Name | Object Description |
| Completed Jobs | The number of Backup Jobs completed or completed with warnings in the last 24 hours. |
| Failed Jobs | The number of Backup Jobs failed, cancelled or in the cancelling state in the last 24 hours. |

| Microsoft: Azure Backup Policy Configuration | |
|--|--------------------------------|
| Object Name | Object Description |
| Name | The name of the backup policy. |

| Backup Frequency | The schedule frequency. We have 2 possible values:daily and weekly. |
|------------------------|---|
| Backup Management Type | The backup management type. |
| Backup Time | The scheduled time to execute the backup. |
| Days of Week | The schedule days to execute the backup. |

| Microsoft: Azure Backup Protected Items Configuration | |
|---|--|
| Object Name | Object Description |
| Item Name | The item name associated with the resource. |
| Backup Policy Name | Backup Policy Name. |
| Last Backup Status | Status could be: In progress, Completed, Completed with Information, Completed with Errors, Failed, Canceled, Canceling, Waiting for action. |
| Backup Management Type | Backup Management Type. |
| Backup Protected Items | All the backup protected items. |
| Number of Backup Protected Items | Number of protected items. |
| Protected Item ID | Protected Item ID |
| Protected Item Type | Protected Item Type. |
| Protection State | Protection State. |
| Protection Status | Protection Status. |
| Workload Type | WorkLoad Type. |

Azure Batch Service

| Microsoft: Azure Batch Account Configuration | |
|--|---|
| Object Name | Object Description |
| Id | The ID of the resource. |
| Account Endpoint | The account endpoint used to interact with the Batch service. |

| Active Job And Job Schedule Quota | The active job and job schedule quota for the Batch account. |
|---|--|
| Azure Batch Account/Key Vault | Azure Key Vault ID associated with Azure Batch Account. |
| Azure Batch Account/Resource Group | Azure Resource Group ID associated with the Azure Batch Account. |
| Azure Batch Account/Storage Account | Azure Storage Account Id associated with Azure Batch Account. |
| Azure Key Vault Name | The name of the Azure Key Vault. |
| Azure Key Vault URL | The URL of the Azure Key Vault. |
| Azure Resource Group Name | The Resource Group Name. |
| Azure Storage Account Name | The name of the Azure Storage Account. |
| Dedicated Core Quota | The dedicated core quota for the Batch account. For accounts with PoolAllocationMode set to UserSubscription, quota is managed on the subscription so this value is not returned. |
| Dedicated Core Quota Per VM Family Enforced | A value indicating whether the core quota for the Batch Account is enforced per Virtual Machine family or not.Batch is transitioning its core quota system for dedicated cores to be enforced per Virtual Machine family. During this transitional phase, the dedicated core quota per Virtual Machine family may not yet be enforced. If this flag is false, dedicated core quota is enforced via the old dedicatedCoreQuota property on the account and does not consider Virtual Machine family. If this flag is true, dedicated core quota is enforced via the dedicatedCoreQuotaPerVMFamily property on the account, and the old dedicatedCoreQuota does not apply. |
| Location | The location of the resource. |
| Low Priority Core Quota | The low-priority core quota for the Batch account. For accounts with PoolAllocationMode set to UserSubscription, quota is managed on the subscription so this value is not returned. |
| Name | The name of the resource. |
| Pool Allocation Mode | The allocation mode to use for creating pools in the Batch account. The allocation mode for creating pools in the Batch account. |
| Pool Quota | The pool quota for the Batch account. |
| L | |

| Provisioning State | The provisioned state of the resource. |
|-----------------------|--|
| Public Network Access | The network interface type for accessing Azure Batch service and Batch account operations. If not specified, the default value is 'enabled'. |
| Tag Key | Tags key. |
| Tag Value | Tags values. |

| Microsoft: Azure Batch Account Job Configuration | |
|--|---|
| Object Name | Object Description |
| Name | A string that uniquely identifies the Job within the Account. |
| State | The current state of the Job. |
| Pool | The ID of an existing Pool. All the Tasks of the Job will run on the specified Pool. |
| Priority | The priority of the Job. Priority values can range from - 1000 to 1000, with -1000 being the lowest priority and 1000 being the highest priority. |
| Failed Tasks | The total number of Tasks in the Job that failed during the given time range. |
| Succeeded Tasks | The total number of Tasks successfully completed in the Job during the given time range. |
| All Tasks Complete Policy | The action the Batch service should take when all Tasks in the Job are in the completed state. |
| Max Task Retry Count | The maximum number of times each Task may be retried. The Batch service retries a Task if its exit code is nonzero. |
| Task Failure Policy | The action the Batch service should take when any Task in the Job fails. |
| Use Task Dependencies | Whether Tasks in the Job can define dependencies on each other. |
| Creation Date | The creation time of the Job. |

Microsoft: Azure Batch Account Job Pool Task Performance

| Object Name | Object Description |
|-------------------------------|---|
| Job Delete Complete Events | Total number of jobs that have been successfully deleted. |
| Job Delete Start Events | Total number of jobs that have been requested to be deleted. |
| Job Disable Complete Events | Total number of jobs that have been successfully disabled. |
| Job Disable Start Events | Total number of jobs that have been requested to be disabled. |
| Job Start Events | Total number of jobs that have been successfully started. |
| Job Terminate Complete Events | Total number of jobs that have been successfully terminated. |
| Job Terminate Start Events | Total number of jobs that have been requested to be terminated. |
| Pool Create Events | Total number of pools that have been created. |
| Pool Delete Complete Events | Total number of pool deletes that have completed. |
| Pool Delete Start Events | Total number of pool deletes that have started. |
| Pool Resize Complete Events | Total number of pool resizes that have completed. |
| Pool Resize Start Events | Total number of pool resizes that have started. |
| Task Complete Events | Total number of tasks that have completed. |
| Task Fail Events | Total number of tasks that have completed in a failed state. |
| Task Start Events | Total number of tasks that have started. |

| Microsoft: Azure Batch Account Node Performance | |
|---|---|
| Object Name | Object Description |
| Creating Node Count | Number of nodes being created. |
| Dedicated Core Count | Total number of dedicated cores in the batch account. |
| Dedicated Node Count | Total number of dedicated nodes in the batch account. |
| Idle Node Count | Number of idle nodes. |
| Leaving Pool Node Count | Number of nodes leaving the Pool. |

| Low-Priority Node Count | Total number of low-priority nodes in the batch account. |
|-----------------------------------|--|
| LowPriority Core Count | Total number of low-priority cores in the batch account. |
| Offline Node Count | Number of offline nodes. |
| Preempted Node Count | Number of preempted nodes. |
| Rebooting Node Count | Number of rebooting nodes. |
| Reimaging Node Count | Number of reimaging nodes. |
| Running Node Count | Number of running nodes. |
| Start Task Failed Node Count | Number of nodes where the Start Task has failed. |
| Starting Node Count | Number of nodes starting. |
| Unusable Node Count | Number of unusable nodes. |
| Waiting For Start Task Node Count | Number of nodes waiting for the Start Task to complete. |

| Microsoft: Azure Batch Account Pool Configuration | |
|---|---|
| Object Name | Object Description |
| Name | The name of the resource. |
| Allocation State | Whether the pool is resizing. |
| Provisioning State | The current state of the pool. |
| Tasks Per Node | The number of task slots that can be used to run concurrent tasks on a single compute node in the pool. |
| Dedicated Nodes | The number of compute nodes currently in the pool. |
| Low Priority Nodes | The number of low priority compute nodes currently in the pool. |
| Os Type | The publisher of the Azure Virtual Machines Marketplace image. |
| Os Version | The version of the Azure Virtual Machines Marketplace image. |
| Vm Size | The size of virtual machines in the pool. All VMs in a pool are the same size. |
| Inter Node Communication | Whether the pool permits direct communication between nodes. |

| Node Deallocation | Determines what to do with a node and its running task (s) if the pool size is decreasing. |
|-------------------|---|
| Node Fill Type | How tasks should be distributed across compute nodes. |
| Scale Type | Defines the desired size of the pool. This can either be fixedScale where the requested targetDedicatedNodes is specified, or autoScale which defines a formula which is periodically reevaluated. If this property is not specified, the pool will have a fixed scale with 0 targetDedicatedNodes. |
| Creation Date | The creation time of the pool. |

| Microsoft: Azure Cache for Redis Configuration | |
|--|---|
| Object Name | Object Description |
| Name | Resource name for the Redis cache. |
| Name | Subnet resource name. |
| Name | The type of Redis cache to deploy. Valid values: (Basic, Standard, Premium) |
| Name | Name of the Redis config property. |
| Name | Resource name for the Redis cache firewall rule. |
| Name | The name of the redis cache associated with the linked server. |
| Name | The name of the resource associated with the resource group. |
| Name | Virtual Network resource name. |
| Redis Configuration | All Redis Settings |
| SSL Port | Redis SSL port. |
| Start IP | lowest IP address included in the range |
| Azure Redis Cache Server/Redis Cache Server | Fully qualified resourceld of the linked redis cache server. |
| Azure Redis Cache/Resource Group | The resource Id associated with the resource group. |

| Azure Redis Cache/Subnet | The full resource ID of a subnet in a virtual network to deploy the Redis cache in. |
|--------------------------------------|--|
| Azure Redis Cache/Virtual Network | The Virtual Network resource id. |
| Capacity | The size of the Redis cache to deploy. Valid values: for C (Basic/Standard) family (0, 1, 2, 3, 4, 5, 6), for P (Premium) family (1, 2, 3, 4). |
| End IP | highest IP address included in the range |
| Family | The SKU family to use. Valid values: (C, P). (C = Basic/Standard, P = Premium). |
| Host Name | Redis host name. |
| Linked Servers Relationships | Gets the list of linked servers associated with this redis cache (requires Premium SKU). |
| Location | The geo-location where the resource lives. |
| Minimal TLS Version | Minimal version requires clients to use a specified TLS version. |
| Non-SSL Port | Specifies whether the non-ssl Redis server port is enabled. |
| Port | Redis non-SSL port. |
| Provisioning State | Redis instance provisioning status. |
| Provisioning State | Terminal state of the link between primary and secondary redis cache. |
| Redis Version | Redis version. |
| Shard Count | The number of shards to be created on a Premium Cluster Cache. |
| Static IP | Static IP address. Required when deploying a Redis cache inside an existing Azure Virtual Network. |
| Tag Key | An Azure redis cache tag key. |
| Tag Value | An Azure redis cache tag value. |
| Tags | Resource tags. |
| Value | Value of the Redis Config Property. |
| Virtual Network Subnet Relationships | Gets the list of virtual network subnets associated with the redis cache. |

| Microsoft: Azure Cache for Redis Keys Performance | |
|---|--|
| Object Name | Object Description |
| Evicted Keys | The number of items evicted from the cache during the specified reporting interval due to the maxmemory limit. This number maps to evicted_keys from the Redis INFO command. |
| Evicted Keys Labels | Evicted Keys Labels |
| Expired Keys | The number of items expired from the cache during the specified reporting interval. This value maps to expired_keys from the Redis INFO command. |
| Expired Keys Labels | Expired Keys Labels |
| Total Keys | The maximum number of keys in the cache during the past reporting time period. This number maps to keyspace from the Redis INFO command. Due to a limitation of the underlying metrics system, for caches with clustering enabled, Total Keys returns the maximum number of keys of the shard that had the maximum number of keys during the reporting interval. |
| Total Keys Labels | Total Keys Labels |

| Microsoft: Azure Cache for Redis Operations Performance | |
|---|---|
| Object Name | Object Description |
| Gets | The Redis Cache Gets Total Count. |
| Gets Labels | The Redis Cache Gets Total Count labels. |
| Operations per Second | The Redis Cache Operations per Second Count. |
| Operations per Second Labels | The Redis Cache Operations per Second Count labels. |
| Sets | The Redis Cache Sets Total Count. |
| Sets Labels | The Redis Cache Sets Total Count labels. |
| Total Operations | The Redis Cache Total Operations Count. |
| Total Operations Labels | The Redis Cache Total Operations Count labels |

| Microsoft: Azure Cache for Redis Performance | |
|--|----------------------|
| Object Name | Object Description |
| Cache Hits | Cache hits. |
| Cache Hits Labels | Cache Hits Labels |
| Cache Latency | Cache latency. |
| Cache Misses | Cache misses. |
| Cache Misses Labels | Cache Misses Labels. |
| Cache Read | Cache read. |
| Cache Read Labels | Cache Read Labels. |
| Cache Write | Cache write. |
| Cache Write Labels | Cache Write Labels. |

| Microsoft: Azure Cache for Redis System Performance | |
|---|--|
| Object Name | Object Description |
| Clients Connected | The number of client connections to the cache during the specified reporting interval. |
| Clients Connected Labels | Clients Connected Labels. |
| CPU Usage | The CPU utilization of the Azure Cache for Redis server as a percentage during the specified reporting interval. |
| CPU Usage Labels | CPU Usage Labels. |
| Errors | Specific failures and performance issues that the cache could be experiencing during a specified reporting interval. |
| Errors Labels | Errors Labels. |
| Memory Usage | The percentage of total memory that is being used during the specified reporting interval. |
| Memory Usage Labels | Memory Usage Labels. |
| Server Load | Percentage of cycles in which the Redis server is busy processing and not waiting idle for messages. |
| Server Load Labels | Server Load Labels. |

Azure Content Delivery Network

| Microsoft: Azure CDN Endpoint Configuration | |
|---|--|
| Object Name | Object Description |
| Name | Name of the endpoint. |
| Name | Custom domain resource name. |
| Origin Name | Origin name which must be unique within the endpoint. |
| Host Name | The host name of the custom domain. Must be a domain name. |
| Origin Enable | Origin is enabled for load balancing or not. By default, origin is always enabled. |
| Origin Group Name | Origin group name which must be unique within the endpoint. |
| Origin Host Header | The host header value sent to the origin with each request. If you leave this blank, the request hostname determines this value. Azure CDN origins, such as Web Apps, Blob Storage, and Cloud Services require this host header value to match the origin hostname by default. If endpoint uses multiple origins for load balancing, then the host header at endpoint is ignored and this one is considered. |
| Origin Host Name | The address of the origin. It can be a domain name, IPv4 address, or IPv6 address. This should be unique across all origins in an endpoint. |
| Priority | Priority of origin in given origin group for load balancing. Higher priorities will not be used for load balancing if any lower priority origin is healthy. Must be between 1 and 5. |
| Relative Path | Relative path applicable to geo filter. (e.g. /mypictures, /mypicture/kitty.jpg, and etc.) |
| Resource State | Resource status of the custom domain. |
| Weight | Weight of the origin in given origin group for load balancing. Must be between 1 and 1000 |
| Action | Action of the geo filter, i.e. allow or block access. |

| Content Type | Content type on which compression apply. |
|------------------------------------|--|
| Country Codes | Two letter country codes defining user country access in a geo filter, e.g. AU, MX, US. |
| Custom Https Provisioning State | Provisioning status of Custom Https of the custom domain. |
| Custom Https Provisioning Substate | Provisioning substate shows the progress of custom HTTPS enabling/disabling process step by step. |
| Host Name | The host name of the endpoint structured as {endpointName}.{DNSZone}, e.g. contoso.azureedge.net |
| HTTP Port | The value of the HTTP port. Must be between 1 and 65535. |
| HTTPS Port | The value of the HTTPS port. Must be between 1 and 65535. |
| Is Compression Enabled | Indicates whether content compression is enabled on CDN. Default value is false. If compression is enabled, content will be served as compressed if user requests for a compressed version. Content won't be compressed on CDN when requested content is smaller than 1 byte or larger than 1 MB. |
| Is Http Allowed | Indicates whether HTTP traffic is allowed on the endpoint. Default value is true. At least one protocol (HTTP or HTTPS) must be allowed. |
| Is Https Allowed | Indicates whether HTTPS traffic is allowed on the endpoint. Default value is true. At least one protocol (HTTP or HTTPS) must be allowed. |
| Optimization Type | Specifies what scenario the customer wants this CDN endpoint to optimize for, e.g. Download, Media services. With this information, CDN can apply scenario driven optimization. |
| Origin Host Header | The host header value sent to the origin with each request. This property at Endpoint can only be set allowed when endpoint uses single origin. If you leave this blank, the request hostname determines this value. Azure CDN origins, such as Web Apps, Blob Storage, and Cloud Services require this host header value to match the origin hostname by default. |
| Origin Path | A directory path on the origin that CDN can use to retrieve content from, e.g. contoso.cloudapp.net/originpath. |

| Probe Interval | The number of seconds between health probes. Default is 240sec. |
|--------------------------------|---|
| Probe Path | Path to a file hosted on the origin which helps accelerate delivery of the dynamic content and calculate the most optimal routes for the CDN. This is relative to the origin path. This property is only relevant when using a single origin. |
| Probe Path | The path relative to the origin that is used to determine the health of the origin. |
| Probe Protocol | Protocol to use for health probe. |
| Probe Request Type | The type of health probe request that is made. |
| Provisioning State | Provisioning status of the endpoint. |
| Provisioning State | Provisioning status of the custom domain. |
| Query String Caching Behavior | Defines how CDN caches requests that include query strings. You can ignore any query strings when caching, bypass caching to prevent requests that contain query strings from being cached, or cache every request with a unique URL. |
| Resource State | Resource status of the endpoint. |
| Tag Key | Tags key. |
| Tag Value | Tags values. |
| Traffic Restoration Time (Min) | Time in minutes to shift the traffic to the endpoint gradually when an unhealthy endpoint comes healthy or a new endpoint is added. Default is 10 mins. This property is currently not supported. |

| Microsoft: Azure CDN Profile Configuration | |
|--|--|
| Object Name | Object Description |
| Name | Resource name. |
| Name | The Resource Group Name. |
| Azure CDN Profile/Resource Group | Azure Resource Group ID associated with the Azure CDN Profile. |
| Location | Resource location. |
| Provisioning State | Provisioning status of the profile. |
| Resource State | Resource status of the profile. |

| Sku Name | Name of the pricing tier. |
|-----------|---------------------------|
| Tag Key | Tags key. |
| Tag Value | Tags values. |
| Туре | Resource type. |

Azure CosmosDB Service

| Microsoft: Azure CosmosDB Configuration | | |
|---|--|--|
| Object Name | Object Description | |
| Name | Cosmos DB database account name. | |
| Kind | Indicates the type of database account. This can only be set at database account creation. | |
| Location | The location of the resource group to which the resource belongs. | |
| Database Account Offer Type | The offer type for the database - Standard. | |
| Enable Automatic Failover | Enables automatic failover of the write region in the rare event that the region is unavailable due to an outage. Automatic failover will result in a new write region for the account and is chosen based on the failover priorities configured for the account. | |
| Enable Multiple Write Locations | Enables the account to write in multiple locations. | |
| EnabledApiTypes | The API types enabled to cosmos db account. | |
| IP Range Filter | Cosmos DB Firewall Support: This value specifies the set of IP addresses or IP address ranges in CIDR form to be included as the allowed list of client IPs for a given database account. IP addresses/ranges must be comma separated and must not contain any spaces. | |
| Is Virtual Network Filter Enabled | Flag to indicate whether to enable/disable Virtual Network ACL rules. | |
| Azure CosmosDB/Virtual Network Subnets | Resource ID of a subnet. | |
| ID | The Fail over policy unique identifier. | |
| Location Name | The name of the region. | |
| Provisioning State | The provisioning state to cosmos db account. | |

91 Azure CosmosDB Service

| Subnet Name | The Virtual Network subnet Name. |
|--------------------------------------|--|
| Azure CosmosDB/Resource Group | The resource group id. |
| Azure CosmosDB/Virtual Network | The Virtual network id. |
| Default Consistency Level | The default consistency level and configuration settings of the Cosmos DB account Eventual, Session, BoundedStaleness, Strong, ConsistentPrefix. |
| Document Endpoint | Write location document endpoint. |
| Document Endpoint | Read location document endpoint. |
| Failover Priority | The failover priority of the region. A failover priority of 0 indicates a write region. The maximum value for a failover priority = (total number of regions - 1). Failover priority values must be unique for each of the regions in which the database account exists. |
| Failover Priority | Write location failover priority. |
| Failover Priority | Read location failover priority. |
| Ignore Missing VNet Service Endpoint | Create firewall rule before the virtual network has vnet service endpoint enabled. |
| Кеу | The tag key of the resource. |
| Location Name | Write location name. |
| Location Name | Read location name. |
| Max Interval In Seconds | When used with the Bounded Staleness consistency level, this value represents the time amount of staleness (in seconds) tolerated. Accepted range for this value is 5 - 86400. Required when defaultConsistencyPolicy is set to BoundedStaleness. |
| Max Staleness Prefix | When used with the Bounded Staleness consistency level, this value represents the number of stale requests tolerated. |
| Name | The resource group name. |
| Name | The Virtual network name. |
| Provisioning State | Write location provisioning state. |
| Provisioning State | Read location provisioning state. |
| Value | The tag value of the resource. |

Azure CosmosDB Service 92

| Microsoft: Azure CosmosDB Location Performance | |
|--|--|
| Object Name | Object Description |
| Available Storage | Total available storage reported at 5 minutes granularity. |
| Data Usage | Total data usage reported at 5 minutes granularity. |
| Document Count | Total document count reported at 5 minutes granularity. |
| Document Quota | Total storage quota reported at 5 minutes granularity. |
| Index Usage | Total index usage reported at 5 minutes granularity. |
| Metadata Requests | Count of metadata requests. Cosmos DB maintains system metadata collection for each account, that allows you to enumerate collections, databases, etc, and their configurations, free of charge. |
| Mongo Request Charge | Mongo Request Units Consumed. |
| Mongo Requests | Number of Mongo Requests Made. |
| Total Request Units | Request Units consumed. |
| Total Requests | Number of requests made. |

| Microsoft: Azure CosmosDB Performance | |
|---------------------------------------|---|
| Object Name | Object Description |
| Available Storage | Used to monitor available storage capacity (applicable only for fixed storage collections) Minimum granularity should be 5 minutes. |
| Cassandra Connection Closures | Number of Cassandra Connections closed. |
| Cassandra Request Charges | Units consumed by Cassandra API requests. |
| Cassandra Requests | Number of Cassandra API requests made. |
| Data Usage | Total data usage reported at 5-minutes granularity per region. |
| Document Count | Total document count reported at 5-minutes granularity per region. |
| Document Quota | Used to monitor total quota at container and region, minimum granularity should be 5 minutes. |

93 Azure CosmosDB Service

| Index Usage | Used to monitor total data usage at container and region, minimum granularity should be 5 minutes. |
|------------------------|--|
| Metadata Requests | Count of metadata requests. Azure Cosmos DB maintains system metadata container for each account, that allows you to enumerate collections, databases, etc., and their configurations, free of charge. |
| Mongo Request Charge | Mongo Request Units Consumed. |
| Mongo Requests | Number of Mongo Requests Made. |
| Provisioned Throughput | Provisioned throughput at container granularity. |
| Service Availability | Account requests availability at one hour granularity. |
| Total Request Units | Request Units consumed. |
| Total Requests | Number of requests made. |

Azure Data Factory

| Microsoft: Azure Data Factory Configuration | |
|---|---|
| Object Name | Object Description |
| Azure Data Factory / Resource Group | Resource ID of the Resource Group. |
| Create Time | Time the factory was created in ISO8601 format. |
| Factory Size | The size of the data factory in GB. |
| Location | The resource location. |
| Max Allowed Factory Size | The max allowed size of the data factory in GB. |
| Max Allowed Resource Count | The max allowed resource count of the data factory. |
| Name | Resource Group name. |
| Name | The resource name. |
| Provisioning State | Factory provisioning state. |
| Tag Key | Tags key. |
| Tag Value | Tags value. |
| Total Resource Count | The resource count of the data factory. |
| Туре | The resource type. |
| Version | Version of the factory. |

Azure Data Factory 94

| Microsoft: Azure Data | a Factory Performance |
|---|--|
| Object Name | Object Description |
| Activity Cancelled Runs | The total number of activity runs that were canceled within a minute window. |
| Activity Failed Runs | The total number of activity runs that failed within a minute window. |
| Activity Succeeded Runs | The total number of activity runs that succeeded within a minute window. |
| Factory Size in Gb Units | Total factory size (GB unit). |
| Integration Runtime Available Memory | Integration runtime available memory. |
| Integration Runtime Available Node Number | Integration runtime available node count. |
| Integration Runtime Average Task Pickup Delay | Integration runtime queue duration. |
| Integration Runtime Cpu Percentage | Integration runtime CPU utilization. |
| Integration Runtime Queue Length | Integration runtime queue length. |
| Max Allowed Factory Size in Gb Units | Maximum allowed factory size (GB unit). |
| Max Allowed Resource Count | Maximum allowed entities count. |
| Pipeline Cancelled Runs | The total number of pipeline runs that were canceled within a minute window. |
| Pipeline Elapsed Time Runs | Number of times, within a minute window, a pipeline runs longer than user-defined expected duration. |
| Pipeline Failed Runs | The total number of pipeline runs that failed within a minute window. |
| Pipeline Succeeded Runs | The total number of pipeline runs that succeeded within a minute window. |
| Resource Count | Total entities count. |
| Ssisintegration Runtime Start Cancel | The total number of SSIS integration runtime starts that were canceled within a minute window. |
| Ssisintegration Runtime Start Failed | The total number of SSIS integration runtime starts that failed within a minute window. |
| Ssisintegration Runtime Start Succeeded | The total number of SSIS integration runtime starts that succeeded within a minute window. |
| Ssisintegration Runtime Stop Stuck | The total number of SSIS integration runtime stops that were stuck within a minute window. |

95 Azure Data Factory

| Ssisintegration Runtime Stop Succeeded | The total number of SSIS integration runtime stops that succeeded within a minute window. |
|--|---|
| Ssispackage Execution Cancel | The total number of SSIS package executions that were canceled within a minute window. |
| Ssispackage Execution Failed | The total number of SSIS package executions that failed within a minute window. |
| Ssispackage Execution Succeeded | The total number of SSIS package executions that succeeded within a minute window. |
| Trigger Cancelled Runs | The total number of trigger runs that were canceled within a minute window. |
| Trigger Failed Runs | The total number of trigger runs that failed within a minute window. |
| Trigger Succeeded Runs | The total number of trigger runs that succeeded within a minute window. |

Azure Database for MySQL

| Microsoft: Azure Database for MySQL DB Configuration | |
|--|--------------------------------|
| Object Name | Object Description |
| Name | The name of the resource. |
| Charset | The charset of the database. |
| Collation | The collation of the database. |

| Microsoft: Azure Database for MySQL Parameters Configuration | |
|--|-------------------------------------|
| Object Name | Object Description |
| Parameter Name | The name of the resource |
| Parameter Name | The name of the resource |
| Parameter Name | The name of the resource |
| Default Value | Default value of the configuration. |
| Default Value | Default value of the configuration. |
| Default Value | Default value of the configuration. |

| Current Value | Value of the configuration. |
|---|---|
| Current Value | Value of the configuration. |
| Current Value | Value of the configuration. |
| Allowed Values | Allowed values of the configuration. |
| Allowed Values | Allowed values of the configuration. |
| Allowed Values | Allowed values of the configuration. |
| Pending Restart | Represents if the server needs to be restart, cause one or more static properties were changed. |
| Pending Restart | Represents if the server needs to be restart, cause one or more static properties were changed. |
| Pending Restart | Represents if the server needs to be restart, cause one or more static properties were changed. |
| Source | Source of the configuration. |
| Source | Source of the configuration. |
| Source | Source of the configuration. |
| Description | Description of the configuration. |
| Description | Description of the configuration. |
| Description | Description of the configuration. |
| Server Innodb Parameters Configuration | Label for the group |
| Server Log Parameters Configuration | Label for the group |
| Server Parameters Overall Configuration | Label for the group |

| Microsoft: Azure Database for MySQL Performance | |
|---|---|
| Object Name | Object Description |
| Active Connections | The number of active connections to the server. |
| Backup Storage Used | The amount of backup storage used. |
| CPU Percent | The percentage of CPU in use. |
| Failed Connections | The number of failed connections to the server. |
| IO Percent | The percentage of IO in use.(Not applicable for Basic tier servers) |
| Memory Percent | The percentage of memory in use. |

| Network In | Network In across active connections. |
|----------------------------|--|
| Network Out | Network Out across active connections. |
| Replication Lag in Seconds | The number of seconds the replica server is lagging against the master server. (Not applicable for Basic tier servers) |
| Server Log Storage Limit | The maximum server log storage for this server. |
| Server Log Storage Percent | The percentage of server log storage used out of the server's maximum server log storage. |
| Server Log Storage Used | The amount of server log storage in use. |
| Storage Limit | The maximum storage for this server. |
| Storage Percent | The percentage of storage used out of the server's maximum. |
| Storage Used | The amount of storage in use. The storage used by the service may include the database files, transaction logs, and the server logs. |

| Microsoft: Azure Database for MySQL Server Configuration | |
|--|--|
| Object Name | Object Description |
| Firewall Rule Name | Name for firewall rule. |
| Name | Name of the Replica. |
| Name | Resource Group Name. |
| Name | The virtual network resource name. |
| Rule Name | Virtual Network Rule Name. |
| Start IP | Start IP address for the MySQL firewall rule. |
| Administrator Login | The MySQL Server Administrator Login. |
| Azure MySQL Server/MySQL Server Replica | Resource id of the MySQL Server Replica. |
| Azure MySQL Server/Resource Group | Resource id of the Resource Group. |
| Azure MySQL Server/Subnet | Resource id of the virtual network subnet. |
| Azure MySQL Server/Virtual Network | Resource id of the Virtual Network. |
| Backup Retention Days | Backup retention days for the server. |
| By OK Enforcement | Status showing whether the server data encryption is enabled with customer-managed keys. |

| Earliest Restore Date | Earliest restore point creation time (ISO8601 format). |
|-----------------------------|--|
| End IP | End IP address for the MySQL firewall rule. |
| Fully Qualified Domain Name | The fully qualified domain name of a server. |
| Geo Redundant Backup | Enable Geo-redundant or not for server backup. |
| Infrastructure Encryption | Status showing whether the server enabled infrastructure encryption. |
| Кеу | The MySQL Server tag keys. |
| Location | The geo-location where the resource lives. |
| Master Server Id | The master server id of a replica server. |
| Minimal TLS Version | Enforce a minimal Tls version for the server. |
| Name | The administrators login name of a server. |
| Public Network Access | Whether or not public network access is allowed for this server. Value is optional but if passed in, must be 'Enabled' or 'Disabled' |
| Replication Role | The replication role of the server. |
| SSL Enforcement | Enable ssl enforcement or not when connect to server. |
| State | A state of a server that is visible to user. |
| Storage Autogrow | Enable Storage Auto Grow. |
| Storage(MB) | Max storage allowed for a server. |
| Value | The MySQL Server tag values. |
| Version | The MySQL Server version. |

Azure Database for PostgreSQL

| Microsoft: Azure Database for PostgreSQL DB Configuration | |
|---|--------------------------------|
| Object Name | Object Description |
| Name | The name of the resource. |
| Collation | The collation of the database. |
| Charset | The charset of the database. |

| Microsoft: Azure Database for PostgreSQL Params Configuration | |
|---|---|
| Object Name | Object Description |
| Parameter Name | The name of the resource Parameter config. |
| Parameter Name | The name of the resource Parameter config. |
| Parameter Name | The name of the resource Parameter config. |
| Value | Value of the configuration. |
| Value | Value of the configuration. |
| Value | Value of the configuration. |
| Data Type | Data type of the configuration. |
| Data Type | Data type of the configuration. |
| Data Type | Data type of the configuration. |
| Default Value | Default value of the configuration. |
| Default Value | Default value of the configuration. |
| Default Value | Default value of the configuration. |
| Pending Restart | if the parameter requires a server restart. |
| Pending Restart | if the parameter requires a server restart. |
| Pending Restart | if the parameter requires a server restart. |
| Description | Description of the configuration. |
| Description | Description of the configuration. |
| Description | Description of the configuration. |

| Microsoft: Azure Database for PostgreSQL Server Configuration | |
|---|--|
| Object Name | Object Description |
| Firewall Rule Name | The Firewall Rule name of the resource. |
| Name | The name of the sku, typically, tier + family + cores, e.g. B_Gen4_1, GP_Gen5_8. |
| Rule Name | A virtual network rule name. |
| Name | The name of the postgreSQL resource. |
| Name | Resource Group Name. |

| Name | The replica name of the resource |
|---|--|
| Name | The virtual network resource name. |
| Start Ip | The start IP address of the server firewall rule. Must be IPv4 format. |
| State | Virtual Network Rule State |
| Tier | The tier of the particular SKU, e.g. Basic. |
| Administrator Login | The administrator's login name of a server. Can only be specified when the server is being created (and is required for creation). |
| Azure PostgreSQL Server/PostgreSQL Server Replica | PostgreSQL resource ID. |
| Azure PostgreSQL Server/Resource Group | Resource id of the Resource Group. |
| Azure PostgreSQL Server/Subnet | The ARM resource id of the virtual network subnet. |
| Azure PostgreSQL Server/Virtual Network | Resource id of the Virtual Network. |
| Backup Retention Days | Backup retention days for the server. |
| By Ok Enforcement | Status showing whether the server data encryption is enabled with customer-managed keys. |
| Capacity | The scale up/out capacity, representing server's compute units. |
| Earliest Restore Date | Earliest restore point creation time (ISO8601 format) |
| End Ip | The end IP address of the server firewall rule. Must be IPv4 format. |
| Family | The family of hardware. |
| Fully Qualified Domain Name | The fully qualified domain name of a server. |
| Geo Redundant Backup | Enable Geo-redundant or not for server backup. |
| Ignore Missing Vnet Service Endpoint | Create firewall rule before the virtual network has vnet service endpoint enabled. |
| Infrastructure Encryption | Status showing whether the server enabled infrastructure encryption. |
| Кеу | The PostgreSQL Server tag keys. |
| Master Server Id | The master server id of a replica server. |
| Minimal Tls Version | Enforce a minimal TIs version for the server. |
| Principal Id | The Azure Active Directory principal id. |

| Public Network Access | Whether or not public network access is allowed for this server. Value is optional but if passed in, must be Enabled or Disabled. |
|-----------------------|---|
| Replica Capacity | The maximum number of replicas that a master server can have. |
| Replication Role | The replication role of the server. |
| Replication Role | The replication role of the server. |
| Size | The size code, to be interpreted by resource as appropriate. |
| Ssl Enforcement | Enable ssl enforcement or not when connect to server. |
| Storage (MB) | Max storage allowed for a server. |
| Storage Autogrow | Enable Storage Auto Grow. |
| Tenant Id | The Azure Active Directory tenant id. |
| Туре | The identity type. Set this to 'SystemAssigned' in order to automatically create and assign an Azure Active Directory principal for the resource. |
| User Visible State | A state of a server that is visible to user. |
| Value | The PostgreSQL Server tag values. |
| Version | Server version. |

| Microsoft: Azure Database for PostgreSQL Server Performance | | |
|---|---|--|
| Object Name | Object Description | |
| Active Connections | Active Connections. | |
| Backup Storage Used | Backup Storage Used. | |
| CPU Percent | CPU percent. | |
| Failed Connections | Failed Connections. | |
| IO Percent | IO percent.(Not applicable for Basic tier servers.) | |
| Max Lag Across Replicas | Lag in bytes of the most lagging replica. | |
| Memory Percent | Memory percent. | |
| Network In | Network In across active connections. | |
| Network Out | Network Out across active connections. | |
| Replica Lag | Replica lag in seconds. | |

| Server Log Storage Limit | Server Log storage limit. |
|----------------------------|-----------------------------|
| Server Log Storage Percent | Server Log storage percent. |
| Server Log Storage Used | Server Log storage used. |
| Storage Limit | Storage limit. |
| Storage Percent | Storage percent. |
| Storage Used | Storage used. |

Azure DNS Service

| Microsoft: Azure DNS Zone Configuration | |
|---|---|
| Object Name | Object Description |
| Resource Group Name | Azure resource group Name assosiated with Azure DNS Zone. |
| Azure DNS/Resource Group | Azure resource group ID assosiated with Azure DNS Zone. |
| ID | The ID of an Azure DNS zone. |
| Кеу | Key of the tag pair. |
| Location | The location of an Azure DNS zone. |
| Max Number of Record Sets | The maximum number of record sets of an Azure DNS zone. |
| Name | The name of an Azure DNS zone. |
| Name Servers | The name servers of an Azure DNS zone. |
| Number of Record Sets | The number of record sets of an Azure DNS zone. |
| Value | Value of the tag pair. |

| Microsoft: Azure DNS Zone Performance | |
|---------------------------------------|--|
| Object Name | Object Description |
| Query Volume | Number of queries served for a DNS zone. |
| Record Set Capacity Utilization | Percent of Record Set capacity utilized by a DNS zone. |
| Record Set Count | Number of Record Sets in a DNS zone. |

103 Azure DNS Service

Azure ExpressRoute Service

| Microsoft: Azure ExpressRoute Circuit Configuration | |
|---|-------------------------------|
| Object Name | Object Description |
| Bandwidth | Bandwith in Mbps |
| Circuit Provisioning State | The State of provisioning |
| ID | the id of circuit |
| Location | the location of circuit |
| Name | the name of circuit |
| Peering Location | the location of peering |
| Provisioning State | the state of circuit |
| Service Key | the service key of circuit |
| Service Provider Name | the service provider name |
| Service Provider Provisioning State | The state of service provider |

| Microsoft: Azure ExpressRoute Circuit Connection Configuration | |
|--|--|
| Object Name | Object Description |
| Address Prefix | The ExpressRoute Circuit Connection address prefix. |
| Circuit Connection State | The ExpressRoute Circuit Connection Status. |
| ID | The ID of the ExpressRoute Circuit Connection. |
| Name | The ExpressRoute Circuit Connection name. |
| Peer Circuit Peering ID | The ExpressRoute Peer Circuit; Peering ID. |
| Provisioning State | The Provisioning State of the ExpressRoute Circuit Connection. |

Microsoft: Azure ExpressRoute Circuit Performance

Azure ExpressRoute Service 104

| Object Name | Object Description |
|---------------------|----------------------------------|
| Bits In Per Second | Bits ingressing Azure per second |
| Bits Out Per Second | Bits egressing Azure per second |

| Microsoft: Azure ExpressRoute Peering Configuration | |
|---|--|
| Object Name | Object Description |
| Advertised Public Prefixes | The reference of AdvertisedPublicPrefixes. |
| Advertised Public Prefixes | The reference of AdvertisedPublicPrefixes. |
| Advertised Public Prefixes State | AdvertisedPublicPrefixState of the Peering resource. Possible values are NotConfigured, Configuring, Configured, and ValidationNeeded. |
| Azure ASN | The Azure ASN. |
| Customer ASN | The CustomerASN of the peering. |
| ID | Resource ID. |
| Last Modified By | Gets whether the provider or the customer last modified the peering. |
| Name | The name of the Peering resource. |
| Peer ASN | The peer ASN. |
| Peering Type | The Peering type. Possible values are: AzurePublicPeering, AzurePrivatePeering, and MicrosoftPeering. |
| Primary Azure Port | The primary port. |
| Primary Peer Address Prefix | The primary address prefix. |
| Primary Peer Address Prefix | The primary address prefix. |
| Provisioning State | The provisioning state of the public IP resource. Possible values are: Succeeded, Updating, Deleting and Failed. |
| Secondary Azure Port | The secondary port. |
| Secondary Peer Address Prefix | The secondary address prefix. |
| Secondary Peer Address Prefix | The secondary address prefix. |
| State | The state of peering. Possible values are: Disabled and Enabled. |

| | The state of peering. Possible values are: Disabled and Enabled. |
|---------|--|
| VLAN ID | The VLAN ID. |

| Microsoft: Azure ExpressRoute Peering Performance | |
|---|----------------------------------|
| Object Name | Object Description |
| Bits In Per Second | Bits ingressing Azure per second |
| Bits Out Per Second | Bits egressing Azure per second |

Azure Function App Service Plan

| Microsoft: Azure Function App Performance | |
|---|--|
| Object Name | Object Description |
| App Connections | The average of App Connections. |
| Average Memory Working Set | Average of memory working set. |
| Bytes Received | Total bytes received. |
| Bytes Sent | Total bytes sent. |
| Current Assemblies | Average of current Assemblies. |
| File System Usage | File System Usage. |
| Function Execution Count | Function Execution Count for the Function App. |
| Function Execution Units | Function Execution Units for the Function App. |
| Gen 0 Collections | Total number of Gen 0 Garbage Collections. |
| Gen 1 Collections | Total number of Gen 1 Garbage Collections. |
| Gen 2 Collections | Total number of Gen 2 Garbage Collections. |
| Handles | Average of Handle Count. |
| Health Check Status | Health check status. |
| Ннр5хх | Total of Http 5xx errors. |
| Io Other Bytes Per Second | Total of IO Other Bytes Per Second. |
| Io Other Operations Per Second | Total of IO Other Operations Per Second. |

| Io Read Bytes Per Second | Total of IO Read Bytes Per Second. |
|--------------------------------|---|
| lo Read Operations Per Second | Total of IO Read Operations Per Second. |
| Io Write Bytes Per Second | Total of IO Write Bytes Per Second. |
| Io Write Operations Per Second | Total of IO Write Operations Per Second. |
| Memory Working Set | Average of Memory working set. |
| Private Bytes | Total of Private bytes. |
| Requests In Application Queue | Average of Requests In Application Queue. |
| Threads | Average of Thread Count. |
| Total App Domains | Total of App Domains. |
| Total App Domains Unloaded | Total of App Domains Unloaded. |

Azure Functions

| Microsoft: Azure Function List Configuration | |
|--|--|
| Object Name | Object Description |
| Function URL | The Function URL. |
| Language | The Function language. |
| Name | The Function name. |
| Status | The value indicating whether the function is disabled. |

Azure Key Vault

| Microsoft: Azure Key Vault Configuration | |
|--|--|
| Object Name | Object Description |
| Name | Resource key vault name. |
| Azure Active Directory Tenant ID | The Azure Active Directory tenant ID that should be used for authenticating requests to the key vault. |
| Azure Key Vault/Private Endpoint | Full identifier of the private endpoint resource. |

107 Azure Functions

| Name | The subnet resource name. |
|----------------------------------|---|
| Name | Virtual Network resource name. |
| Name | SKU name to specify whether the key vault is a standard vault or a premium vault. |
| Name | The name of the resource associated with the resource group. |
| Object Id | The object ID of a user, service principal or security group in the Azure Active Directory tenant for the vault. The object ID must be unique for the list of access policies. |
| Status | Indicates whether the connection has been approved, rejected or removed by the key vault owner. |
| URI | The URI of the vault for performing operations on keys and secrets. |
| Application Id | Application ID of the client making request on behalf of a principal. |
| Azure Active Directory Tenant ID | The Azure Active Directory tenant ID that should be used for authenticating requests to the key vault. |
| Azure Key Vault Rule/Subnet | A rule governing the accessibility of a vault from a specific virtual network. |
| Azure Key Vault/Resource Group | The resource Id associated with the resource group. |
| Azure Key Vault/Virtual Network | Virtual Network Resource Id. |
| Deployment | Property to specify whether Azure Virtual Machines are permitted to retrieve certificates stored as secrets from the key vault. |
| Description | The reason for approval or rejection of the linked private network. |
| Disk Encryptation | Property to specify whether Azure Disk Encryption is permitted to retrieve secrets from the vault and unwrap keys. |
| Family | SKU family name. |
| IP Rule | A rule governing the accessibility of a vault from a specific ip address or ip range. An IPv4 address range in CIDR notation, such as 124.56.78.91 (simple IP address) or 124.56.78.0/24 (all addresses that start with 124.56.78). |

Azure Key Vault

| Network bypass | Tells what traffic can bypass network rules. This can be 'AzureServices' or 'None'. If not specified the default is 'AzureServices'. |
|---------------------------------|--|
| Network Default Action | The default action when no rule from ipRules and from virtualNetworkRules match. This is only used after the bypass property has been evaluated. |
| Permissions to Certificates | Permissions to certificates. |
| Permissions to Keys | Permissions to keys. |
| Permissions to Secrets | Permissions to secrets. |
| Permissions to Storage Accounts | Permissions to storage accounts |
| Provisioning State | The current provisioning state. |
| Rbac Authorization | Property that controls how data actions are authorized. When true, the key vault will use Role Based Access Control (RBAC) for authorization of data actions, and the access policies specified in vault properties will be ignored (warning: this is a preview feature). When false, the key vault will use the access policies specified in vault properties, and any policy stored on Azure Resource Manager will be ignored. If null or not specified, the vault is created with the default value of false. Note that management actions are always authorized with RBAC. |
| Sof Delete Retention (Days) | Soft Delete data retention days. It accepts >=7 and <=90. |
| Soft Delete | Property to specify whether the ' soft delete' functionality is enabled for this key vault. If it' s not set to any value(true or false) when creating new key vault, it will be set to true by default. Once set to true, it cannot be reverted to false. |
| Tag Key | Tags key. |
| Tag Value | Tags values. |
| Template Deployment | Property to specify whether Azure Resource Manager is permitted to retrieve secrets from the key vault. |

| Microsoft: Azure Key Vault Performance | |
|--|---|
| Object Name | Object Description |
| Overall Service Api Latency | Overall latency of service api requests |

109 Azure Key Vault

| Overall Service Api Latency Labels | Service Api Latency Labels based on Activity Type. |
|------------------------------------|--|
| Overall Vault Availability | Vault requests availability. |
| Overall Vault Availability Labels | Availability Labels based on Activity Type. |
| Overall Vault Saturation | Vault capacity used. |
| Overall Vault Saturation Labels | Saturation Shoebox Labels based on Activity Type. |
| Total Service Api Hits | Number of total service api hits. |
| Total Service Api Hits Labels | Service Api Hit Labels based on Activity Type. |
| Total Service Api Results | Number of total service api results. |
| Total Service Api Results Labels | Service Api Result Labels based on Activity Type. |

Azure Kubernetes Service (AKS)

| Microsoft: Azure Kubernetes Cluster Configuration | |
|---|--|
| Object Name | Object Description |
| Name | Unique name of the agent pool profile in the context of the subscription and resource group. |
| Subnet Name | Azure virtual network subnet Name associated with Azure kubernetes agent pool. |
| API server address | FQDN for the master pool. |
| Azure Kubernetes Agent Pool/Subnet | Azure virtual network subnet ID associated with Azure kubernetes agent pool. |
| DNS Prefix | DNS prefix specified when creating the managed cluster. |
| DNS Service IP | An IP address assigned to the Kubernetes DNS service. It must be within the Kubernetes service address range specified in serviceCidr. |
| Docker Bridge CIDR | A CIDR notation IP range assigned to the Docker bridge network. It must not overlap with any Subnet IP ranges or the Kubernetes service address range. |
| Kubernetes Version | Version of Kubernetes specified when creating the managed cluster. |
| Kubernetes Version | Version of orchestrator specified when creating the managed cluster. |

| Load Balancer SKU | The load balancer sku for the managed cluster. |
|----------------------------------|---|
| Location | Location of the resource. |
| Max Agent Pools | The max number of agent pools for the managed cluster. |
| Max Pods | Maximum number of pods that can run on a node. |
| Mode | Represents mode of an agent pool. |
| Name | Resource name. |
| Network Plugin | Network plugin used for building Kubernetes network. |
| Node Count | Number of agents (VMs) to host docker containers. Allowed values must be in the range of 0 to 100 (inclusive) for user pools and in the range of 1 to 100 (inclusive) for system pools. The default value is 1. |
| Node Image Version | Version of node image. |
| Node Resource Group | Name of the resource group containing agent pool nodes. |
| Node Sizes | Size of agent VMs. |
| OS Disk Size(GB) | OS Disk Size in GB to be used to specify the disk size for every machine in this master/agent pool. If you specify 0, it will apply the default osDisk size according to the vmSize specified. |
| OS Disk Type | OS disk type to be used for machines in a given agent pool. Allowed values are "Ephemeral" and "Managed". Defaults to "Managed". May not be changed after creation. |
| OS Type | OsType to be used to specify os type. Choose from Linux and Windows. Default to Linux. |
| Pod CIDR | A CIDR notation IP range from which to assign pod IPs when kubenet is used. |
| Power State | Describes whether the Agent Pool is Running or Stopped. |
| Power State | Represents the Power State of the cluster. |
| Provisioning State | The current deployment or provisioning state, which only appears in the response. |
| Provisioning State | The current deployment or provisioning state, which only appears in the response. |
| Role-Based Access Control (RBAC) | Whether to enable Kubernetes Role-Based Access Control. |

| Service CIDR | A CIDR notation IP range from which to assign service cluster IPs. It must not overlap with any Subnet IP ranges. |
|--------------|---|
| SKU Name | Name of a managed cluster SKU. |
| SKU Tier | Tier of a managed cluster SKU. |
| Tag Key | Tags key. |
| Tag Value | Tags values. |
| Туре | Represents types of an agent pool. |
| Туре | Resource type. |

| Microsoft: Azure Kubernetes Cluster Performance | | |
|---|---|--|
| Object Name | Object Description | |
| Number of Pods by Phase | Number of pods by phase. | |
| Number of Pods by Phase Labels | Phase of the Pod. | |
| Number of Pods in Ready State | Number of pods in Ready state. | |
| Number of Pods in Ready State Labels | Namespace of the Pod. | |
| Statuses for Various Node Conditions | Statuses for various node conditions. | |
| Statuses for Various Node Conditions Labels | Condition Type Represented on this metric. | |
| Total Amount of Available Memory | Total amount of available memory in a managed cluster. | |
| Total Number of Available CPU Cores | Total number of available cpu cores in a managed cluster. | |

Azure Load Balancer Service

| Microsoft: Azure Load Balancer Configuration | |
|--|--|
| Object Name | Object Description |
| Azure Resource Group Name | The name of the Resource Group. |
| Azure Load Balancer/Resource Group | Azure Resource Group ID associated with Azure Load Balancer. |

Azure Load Balancer Service

| IP Address | Private IP Address to assign to the Load Balancer. |
|--------------------|---|
| IP Address Type | The type of IP Address configuration. Possible values are: 'Public' or 'Private'. |
| IP Allowed Method | The public or private IP allocation method. Possible values are: 'Static' or 'Dynamic'. |
| Location | Specifies the supported Azure location of the Load Balancer. |
| Name | User-defined name of the Backend Address Pool. |
| Name | The name of the Load Balancer. |
| Name | User-defined name of the Frontend IP configuration. |
| Provisioning State | Provisioning state of the Backend Address Pool. |
| Provisioning State | Provisioning state of the Load Balancer. |
| Tag Key | The key of tag pair, these keys are used by the Load Balancer. |
| Tag Value | The value of tag pair, these values are used by the Load Balancer. |

| Microsoft: Azure Standard Load Balancer Performance | |
|---|--|
| Object Name | Object Description |
| Allocated Snat Ports | Total number of SNAT ports allocated within time period. |
| Byte Count | Total number of Bytes transmitted within time period. |
| Data Path Availability | Average Load Balancer data path availability per time duration. |
| Health Probe Status | Average Load Balancer health probe status per time duration. |
| Packet Count | Total number of Packets transmitted within time period. |
| SNAT Connection Count | Total number of new SNAT connections created within time period. |
| SYN Count | Total number of SYN Packets transmitted within time period. |
| Used Snat Ports | Total number of SNAT ports used within time period. |

113 Azure Load Balancer Service

Azure Managed Disks Service

| Microsoft: Azure Managed Disks Configuration | |
|--|--|
| Object Name | Object Description |
| Azure Virtual Machine Name | Virtual Machine name. |
| Resource Group Name | Resource Group Name. |
| Azure Managed Disk/Resource Group | Resource Group identifier. |
| Azure Managed Disk/Virtual Machine | Virtual Machine identifier. |
| Create Option | This enumerates the possible sources of a disk's creation. |
| Disk Size GB | The disk size. |
| Disk State | The disk state. |
| Image Reference | Image reference name. |
| Name | Name of the managed disk. |
| Name | The sku name. |
| Name | Key of the tag. |
| OS Type | OS Type. |
| Repository Site Name | Name of the repository site. |
| Tier | The sku tier. |
| Time Created | The time when the disk was created. |
| Value | Value of the tag. |

Azure Network Security Group Service

| Microsoft: Azure Network Security Group Configuration | |
|---|--|
| Object Name | Object Description |
| Azure Resource Group Name | The Resource Group Name. |
| Access | The access policy of the default inbound security rule associated with the Azure network security group. |

| Access | The access policy of the outbound default security rule associated with the Azure network security group. |
|---|---|
| Access | The access policy of the inbound security rule associated with the Azure network security group. |
| Access | The access policy of the outbound security rule associated with the Azure network security group. |
| Azure Network Security Group/Resource Group | Relationship between Azure Network Security Group and Resource Group. |
| Description | The description of the outbound default security rule associated with the Azure network security group. |
| Description | The description of the inbound default security rule associated with the Azure network security group. |
| Description | The description of the inbound security rule associated with the Azure network security group. |
| Description | The description of the outbound security rule associated with the Azure network security group. |
| Destination Address Prefix | The destination address prefix of the inbound default security rule associated with the Azure network security group. The destination filter can be Any, an IP address range, or a default tag. It specifies the outgoing traffic from a specified destination IP address range that will be allowed or denied by this rule. |
| Destination Address Prefix | The destination address prefix of the outbound default security rule associated with the Azure network security group. The destination filter can be Any, an IP address range, or a default tag. It specifies the outgoing traffic from a specified destination IP address range that will be allowed or denied by this rule. |
| Destination Address Prefix | The destination address prefix of the inbound security rule associated with the Azure network security group. The destination filter can be Any, an IP address range, or a default tag. It specifies the outgoing traffic from a specified destination IP address range that will be allowed or denied by this rule. |
| Destination Address Prefix | The destination address prefix of the outbound security rule associated with the Azure network security group. The destination filter can be Any, an IP address range, or a default tag. It specifies the outgoing traffic from a specified destination IP address range that will be allowed or denied by this rule. |

| Destination Port Range | The destination port range of the inbound default |
|------------------------|---|
| | security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |
| Destination Port Range | The destination port range of the outbound default security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |
| Destination Port Range | The destination port range of the inbound security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |
| Destination Port Range | The destination port range of the outbound security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |
| Direction | The direction of the inbound default security rule associated with the Azure network security group. |
| Direction | The direction of the outbound default security rule associated with the Azure network security group. |
| Direction | The direction of the inbound security rule associated with the Azure network security group. |
| Direction | The direction of the outbound security rule associated with the Azure network security group. |
| Name | The name of the inbound default security rule associated with the Azure network security group. |
| Name | The name of the outbound default security rule associated with the Azure network security group. |
| Name | The name of the Azure network security group. |
| Name | The name of the inbound security rule associated with the Azure network security group. |
| Name | The name of the outbound security rule associated with |

| Priority | The priority of the inbound default security rule associated with the Azure network security group. Rules are processes in priority order; the lower the number, the higher the priority. It is recommended to add gaps between rules - 100, 200, 300 etc. |
|--------------------|---|
| Priority | The priority of the inbound security rule associated with the Azure network security group. Rules are processes in priority order; the lower the number, the higher the priority. It is recommended to add gaps between rules - 100, 200, 300 etc. |
| Priority | The priority of the outbound security rule associated with the Azure network security group. Rules are processes in priority order; the lower the number, the higher the priority. It is recommended to add gaps between rules - 100, 200, 300 etc. |
| Priority | The priority of the outbound default security rule associated with the Azure network security group. Rules are processes in priority order; the lower the number, the higher the priority. It is recommended to add gaps between rules - 100, 200, 300 etc. |
| Protocol | The protocol of the inbound security rule associated with the Azure network security group. |
| Protocol | The protocol of the outbound default security rule associated with the Azure network security group. |
| Protocol | The protocol of the outbound security rule associated with the Azure network security group. |
| Protocol | The protocol of the inbound default security rule associated with the Azure network security group. |
| Provisioning State | The state of the inbound security rule associated with the Azure network security group. |
| Provisioning State | The state of the outbound default security rule associated with the Azure network security group. |
| Provisioning State | The state of the Azure network security group. |
| Provisioning State | The state of the outbound security rule associated with the Azure network security group. |
| Provisioning State | The state of the inbound default security rule associated with the Azure network security group. |
| | |

| Source Address Prefix | The source address prefix of the inbound security rule associated with the Azure network security group. The source filter can be Any, an IP address range, or a default tag. It specifies the incoming traffic from a specified source IP address range that will be allowed or denied by this rule. |
|-----------------------|--|
| Source Address Prefix | The source address prefix of the inbound default security rule associated with the Azure network security group. The source filter can be Any, an IP address range, or a default tag. It specifies the incoming traffic from a specified source IP address range that will be allowed or denied by this rule. |
| Source Address Prefix | The source address prefix of the outbound default security rule associated with the Azure network security group. The source filter can be Any, an IP address range, or a default tag. It specifies the incoming traffic from a specified source IP address range that will be allowed or denied by this rule. |
| Source Address Prefix | The source address prefix of the outbound security rule associated with the Azure network security group. The source filter can be Any, an IP address range, or a default tag. It specifies the incoming traffic from a specified source IP address range that will be allowed or denied by this rule. |
| Source Port Range | The source port range of the outbound security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |
| Source Port Range | The source port range of the inbound default security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |
| Source Port Range | The source port range of the outbound default security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |
| Source Port Range | The source port range of the inbound security rule associated with the Azure network security group. A single port, such as 80, or a port range, such as 1024-65535, can be specified. This specifies the ports at which traffic will be allowed or denied. |

| Tag Key | An Azure network security group tag key. |
|-----------|--|
| Tag Value | An Azure network security group tag value. |

Azure Recovery Service Vault

| Microsoft: Azure Recovery Services Vault Configuration | |
|--|---|
| Object Name | Object Description |
| Resource Group Name | The name of the resource group. |
| Azure Recovery Vault/Resource Group | The relationship identifier with resource group. |
| Location | The recovery vault location. |
| Sku Name | The sku is a unique identifier of the resource. Possible values RSO |
| Sku Type | The sku is a unique identifier of the resource. Possible values Standard. |
| Tag Key | The key of the tag. |
| Tag Value | The value of the tag. |
| Vault Name | The name of the recovery vault. |
| Vault Provisioning State | The provision state of the vault. |

Azure Resource Group Service

| Microsoft: Azure Resource Group Configuration | |
|---|-------------------------------|
| Object Name | Object Description |
| Resource Name | The name of the resource. |
| Resource Type | The type of the resource. |
| Resource Location | The location of the resource. |
| Tag Key | The key of tag pair. |
| Tag Value | The value of tag pair. |

Azure Resource List Services

| Microsoft: Azure Resource List Configuration | | |
|--|---|--|
| Object Name | Object Description | |
| Availability State | Availability status of the resource. When it is null, this object represents an availability impacting event. | |
| Azure Resource/Resource Group | Resource group unique identifier that this resource belongs to. | |
| Capacity | The SKU capacity. | |
| Detailed Status | Details of the availability status. | |
| Family | The SKU family. | |
| ID | Resource unique identifier. | |
| Last Update | Timestamp for when last change in health status occurred. | |
| Model | The SKU model. | |
| Name | Resource tag key. | |
| Name | Resource group name that this resource belongs to. | |
| Name | The name of SKU. | |
| Reason Chronicity | Chronicity of the availability transition. | |
| Reason Type | When the resource's availability state is Unavailable, it describes where the health impacting event was originated. Examples are planned, unplanned, user initiated or an outage, etc. | |
| Resource Name | Resource name. | |
| Size | The SKU size. | |
| Summary | Summary description of the availability status. | |
| Tier | The tier of SKU. | |
| Туре | Resource service type. | |
| Value | Resource tag value. | |

Azure Resource List Services

Azure Service Bus (Relay)

| Microsoft: Azure Service Bus Configuration | | |
|---|---|--|
| Object Name | Object Description | |
| IP Mask | IP Mask. | |
| Name | Name of this SKU. | |
| Name | The name of the resource associated with the resource group. | |
| Name | Virtual Network resource name. | |
| Namespace Alias Name | The namespace alias name. | |
| Role | role of namespace in GEO DR - possible values Primary or PrimaryNotReplicating or Secondary | |
| Tier | The billing tier of this particular SKU. | |
| Action | The IP Filter Action | |
| Azure Service Bus Namespace/ Service Bus Namespace | ARM Id of the Primary/Secondary eventhub namespace name, which is part of GEO DR pairing. | |
| Azure Service Bus Namespace/Resource Group | The resource Id associated with the resource group. | |
| Azure Service Bus Namespace/Subnet | Resource ID of Virtual Network Subnet. | |
| Azure Service Bus Namespace/Virtual Network | Resource ID of Virtual Network. | |
| Capacity | The specified messaging units for the tier. For Premium tier, capacity are 1,2 and 4. | |
| Created At | The time the namespace was created. | |
| Endpoint | Endpoint you can use to perform Service Bus operations. | |
| Ignore Missing | Value that indicates whether to ignore missing VNet Service Endpoint | |
| Location | The Geo-location where the resource lives. | |
| Metric Id | Identifier for Azure Insights metrics. | |
| Name | Azure Service Bus Resource name | |
| Network Default Action | Default Action for Network Rule Set | |
| Provisioning State | Provisioning state of the namespace. | |

| Status | Status of the Namespace. |
|-----------|--------------------------|
| Tag Key | Tags key. |
| Tag Value | Tags values. |

| Microsoft: Azure Service Bus Performance | | |
|--|--|--|
| Object Name | Object Description | |
| Active Connections | Total Active Connections for Microsoft.ServiceBus. | |
| Active Messages | Count of active messages in a Queue/Topic. | |
| Active Messages | Count of active messages in a Queue/Topic. | |
| Connections Closed | Connections Closed for Microsoft.ServiceBus. | |
| Connections Closed | Connections Closed for Microsoft.ServiceBus. | |
| Connections Opened | Connections Opened for Microsoft.ServiceBus. | |
| Connections Opened | Connections Opened for Microsoft.ServiceBus. | |
| Deadlettered Messages | Count of dead-lettered messages in a Queue/Topic. | |
| Deadlettered Messages | Count of dead-lettered messages in a Queue/Topic. | |
| Incoming Messages | Incoming Messages for Microsoft.ServiceBus. | |
| Incoming Messages | Incoming Messages for Microsoft.ServiceBus. | |
| Incoming Requests | Incoming Requests for Microsoft.ServiceBus. | |
| Incoming Requests | Incoming Requests for Microsoft.ServiceBus. | |
| Messages | Count of messages in a Queue/Topic. | |
| Messages | Count of messages in a Queue/Topic. | |
| Namespace CPU Usage | Service bus premium namespace CPU usage metric. | |
| Namespace Memory Usage | Service bus premium namespace memory usage metric. | |
| Outgoing Messages | Outgoing Messages for Microsoft.ServiceBus. | |
| Outgoing Messages | Outgoing Messages for Microsoft.ServiceBus. | |
| Scheduled Messages | Count of scheduled messages in a Queue/Topic. | |
| Scheduled Messages | Count of scheduled messages in a Queue/Topic. | |
| Server Errors | Server Errors for Microsoft.ServiceBus. | |
| Server Errors | Server Errors for Microsoft.ServiceBus. | |

Azure Service Bus (Relay)

| Size | Size of an Queue/Topic in Bytes. |
|---------------------|--|
| Size | Size of an Queue/Topic in Bytes. |
| Successful Requests | Total successful requests for a namespace |
| Successful Requests | Total successful requests for a namespace |
| Throttled Requests | Throttled Requests for Microsoft.ServiceBus. |
| Throttled Requests | Throttled Requests for Microsoft.ServiceBus. |
| User Errors | User Errors for Microsoft.ServiceBus. |
| User Errors | User Errors for Microsoft.ServiceBus. |

| Microsoft: Azure Service Bus Queues Configuration | |
|---|--|
| Object Name | Object Description |
| Name | Resource name |
| Status | Enumerates the possible values for the status of a messaging entity. |
| Current Size (MB) | The size of the queue, in megabytes. |
| Max Size (MB) | The maximum size of the queue in megabytes, which is the size of memory allocated for the queue. |
| Dead Letter | A value that indicates whether this queue has dead letter support when a message expires. |
| Enable Express | A value that indicates whether Express Entities are enabled. An express queue holds a message in memory temporarily before writing it to persistent storage. |
| Enable Partitioning | A value that indicates whether the queue is to be partitioned across multiple message brokers. |
| Max Delivery | The maximum delivery count. |
| Requires Session | A value that indicates whether the queue supports the concept of sessions. |
| Created Time | The exact time the message was created. |

Microsoft: Azure Service Bus Topics Configuration

| Object Name | Object Description |
|---------------------|--|
| Name | Resource Topic name. |
| Status | Enumerates the possible values for the status of a messaging entity. |
| Subscription Count | Number of subscriptions. |
| Current Size (B) | Size of the topic, in bytes. |
| Max Size (MB) | Maximum size of the topic in megabytes, which is the size of the memory allocated for the topic. Default is 1024. |
| Enable Express | Value that indicates whether Express Entities are enabled. An express topic holds a message in memory temporarily before writing it to persistent storage. |
| Enable Partitioning | Value that indicates whether the topic to be partitioned across multiple message brokers is enabled. |
| Created Time | Exact time the message was created. |

Azure Site Recovery

| Microsoft: Azure Site Recovery Plans Configuration | |
|--|-------------------------------------|
| Object Name | Object Description |
| Name | The name of the Site Recovery plan. |
| Primary Fabric Name | The primary fabric name. |
| Recovery Fabric Name | The recovery fabric name. |
| Allowed Operations | The list of allowed operations. |
| Failover Deployment Model | The failover deployment model. |
| Number of Site Recovery Plans | The number of Site Recovery plans. |
| Replication Providers | The list of replication providers. |
| Туре | The type of the Site Recovery plan. |

| Microsoft: Azure Site Reco | overy Policy Configuration |
|----------------------------|----------------------------|
| Object Name | Object Description |

Azure Site Recovery 124

| Name | The name of the Site Recovery policy. |
|----------------------------------|--|
| Instance Type | Gets the class type. Overridden in derived classes. |
| App Consistent Frequency | The app consistent snapshot frequency in minutes. |
| Crash Consistent Frequency | The crash consistent snapshot frequency in minutes. |
| Multi VM Sync Status | A value indicating whether multi-VM sync has to be enabled. |
| Number of Site Recovery Policies | Number of policies. |
| Recovery Point | The duration in minutes until which the recovery points need to be stored. |
| Recovery Point Threshold | The recovery point threshold in minutes. |
| Туре | The type of the Site Recovery policy. |

| Microsoft: Azure Site Recovery Protected Items Configuration | | |
|--|--|--|
| Object Name | Object Description | |
| Item Name | The name associated with the resource. | |
| Site Recovery Policy Name | Site Recovery Policy Name. | |
| Primary Fabric Name | The friendly name of the primary fabric. | |
| Recovery Fabric Name | The friendly name of recovery fabric. | |
| Active Location | The Current active location of the PE. | |
| Failover Health | The consolidated failover health for the VM. | |
| Number of Site Recovery Protected Items | Number of protected items. | |
| Protected Item ID | Protected Item ID. | |
| Protected Item Type | Protected Item Type. | |
| Protection State | Protection State. | |
| Replication Health | The consolidated protection health for the VM taking any issues with SRS as well as all the replication units associated with the VM's replication group into account. | |
| Site Recovery Protected Items | All the site recovery protected items. | |
| Test Failover State | The Test failover state. | |

125 Azure Site Recovery

Azure SQL Managed Instance Service

| Microsoft: Azure SQL Managed Instance Configuration | |
|---|--|
| Object Name | Object Description |
| Administrator Login | Administrator Login |
| Azure SQL Managed Instance / Resource Group | Resource id of the Resource Group. |
| Azure SQL Managed Instance / Virtual Network | The Virtual Network resource id. |
| Azure SQL Managed Instance / Virtual Network Subnet | The full resource ID of a subnet in a virtual network that this resource belongs to. |
| Capacity | An ARM Resource Capacity of the particular SKU. |
| Collation | Collation of the managed instance. |
| Current Backup Storage Redundancy | The storage account type used to store backups for this instance. The options are Local (LocallyRedundantStorage), Zone (ZoneRedundantStorage), Geo (GeoRedundantStorage) and GeoZone (GeoZoneRedundantStorage). |
| Dns Zone | The DNS Zone that the managed instance is in. |
| Family | If the service has different generations of hardware, for the same SKU, then that can be captured here. |
| Fully Qualified Domain Name | The fully qualified domain name of the managed instance. |
| License Type | The license type. Possible values are 'LicenseIncluded' (regular price inclusive of a new SQL license) and 'BasePrice' (discounted AHB price for bringing your own SQL licenses). |
| Location | Resource location. |
| Minimal Tls Version | Minimal TLS version. Allowed values:'None', '1.0','1.1', '1.2'. |
| Name | The name of the SKU, typically, a letter + Number code, e.g. P3. |
| Name | Resource name. |
| Name | Resource Group Name. |
| Name | Subnet resource name. |

| Name | The Virtual Network resource name. |
|-------------------------------------|--|
| Provisioning State | The resource provisioning state. |
| Proxy Override | Connection type used for connecting to the instance. |
| Public Data Endpoint Enabled | Whether or not the public data endpoint is enabled. |
| Requested Backup Storage Redundancy | The storage account type to be used to store backups for this instance. The options are Local (LocallyRedundantStorage), Zone (ZoneRedundantStorage), Geo (GeoRedundantStorage) and GeoZone (GeoZoneRedundantStorage). |
| The state of the managed instance. | The state of the managed instance. |
| Storage Size in Gb | Storage size in GB. Minimum value: 32. Maximum value: 8192. Increments of 32 GB allowed only. |
| Subnet Id | Subnet resource ID for the managed instance. |
| Tag Key | Tags Key. |
| Tag Value | Tags Value. |
| Tier | The tier or edition of the particular SKU, e.g. Basic, Premium. |
| Timezone Id | ld of the timezone. Allowed values are timezones supported by Windows. |
| Туре | The identity type. Set this to 'SystemAssigned' in order to automatically create and assign an Azure Active Directory principal for the resource. |
| V Cores | The number of vCores. Allowed values: 8, 16, 24, 32, 40, 64, 80. |
| Zone Redundant | Whether or not the multi-az is enabled. |

| Microsoft: Azure SQL Managed Instance Database Configuration | |
|--|---|
| Object Name | Object Description |
| Collation | Collation of the managed database. |
| Creation Date | Creation date of the database. |
| Default Secondary Location | Geo paired region. |
| Earliest Restore Point | Earliest restore point in time for point in time restore. |
| Location | Resource location. |

| Name | Resource name. |
|--------|-------------------------|
| Status | Status of the database. |

| Microsoft: Azure SQL Managed Instance Failover Configuration | | |
|--|--|--|
| Object Name | Object Description | |
| Group Name | Resource name. | |
| Instance Replication Role | Local replication role of the failover group instance: Primary, Secondary | |
| Replication State | Replication state of the failover group instance. | |
| Id | Resource ID. | |

| Microsoft: Azure SQL Managed Instance Performance | |
|---|-------------------------|
| Object Name | Object Description |
| Average CPU Percentage | Average CPU percentage. |
| IO Bytes Read | IO bytes read. |
| IO Bytes Written | IO bytes written. |
| IO Requests Count | IO requests count. |
| Storage Space Reserved | Storage space reserved. |
| Storage Space Used | Storage space used. |
| Virtual Core Count | Virtual core count. |

Azure SQL Servers Service

| Microsoft: Azure SQL Database Configuration | |
|---|---|
| Object Name | Object Description |
| Azure Resource Group Name | The Resource Group Name. |
| Azure SQL Database/Resource Group | Azure Resource Group ID associated with Azure SQL Database. |
| Collation | Specifies the name of the SQL database collation. |

Azure SQL Servers Service 128

| Creation Date | Specifies the date and time that the database was created. |
|--------------------------------|--|
| Database ID | Specifies the identifier of the database. |
| Database Name | The name of the SQL database. |
| Default Secondary Location | Specifies the default location of the secondary Azure server. |
| Earliest Restore Date | Specifies the date and time that the database was restored. |
| Edition | Specifies the edition of the database. |
| Kind | Specifies the SQL Server version and the database type. |
| Location | The location of the SQL database component. |
| Maximum Size (GB) | Specifies the maximum size to which the database may grow. |
| Requested Service Objective Id | Specifies the identifier of the requested service level. |
| Server Version | Displays the version of SQL Server. |
| Service Level Objective | Specifies the performance level of the database. |
| Status | The status of the SQL database component. |
| Subscription ID | The subscription identifier value. |
| Tag | Tags are key/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. |
| Tag Key | Key of the tag pair. |
| Tag Value | Value of the tag pair. |

| Microsoft: Azure SQL Database Performance | |
|---|---|
| Object Name | Object Description |
| Blocked by Firewall | Specifies the count of connection attempts blocked by the firewall. |
| CPU Percentage | Specifies the average CPU utilization. |
| Data IO Percentage | Specifies the average IO utilization. |
| Database Size Percentage | Specifies the percent of the maximum size for the database. |

129 Azure SQL Servers Service

| Deadlock | Specifies the count of deadlocks. |
|--------------------------------|--|
| DTU Limit | Specifies the current DTU limit for the database. |
| DTU Percentage | Specifies the average DTU utilization. |
| DTU Used | Specifies the average DTU utilization. |
| Failed Connections | Specifies the count of failed connections. |
| In-Memory OLTP Storage Percent | Specifies the percent of In-Memory OLTP storage. |
| Log IO Percentage | Specifies the average log utilization. |
| Sessions Percentage | Specifies the percent of maximum concurrent active sessions. |
| Successful Connections | Specifies the count of successful connections. |
| Total Database Size | Specifies the total size of the database. |
| Workers Percentage | Specifies the percent of maximum concurrent active workers (requests). |

| Microsoft: Azure SQL Server Configuration | |
|---|---|
| Object Name | Object Description |
| Azure Resource Group Name | The Resource Group Name. |
| Azure SQL Server/Resource Group | Resource Group Id. |
| FQDN | Azure SQL Server Fully Qualified Domain Name. |
| ID | Azure SQL Server ID. |
| Location | Azure SQL Server location. |
| Name | Azure SQL Server Name. |
| State | Azure SQL Server state. |
| Tag Key | Tag Key. |
| Tag Value | Tag Value. |
| Туре | Azure SQL Server type. |
| Version | Azure SQL Server version. |

Azure SQL Servers Service

| Microsoft: Azure Storage Account Blob Performance | |
|---|---|
| Object Name | Object Description |
| Average Availability | The percentage of availability for the storage service or the specified API operation. Availability is calculated by taking the TotalBillableRequests value and dividing it by the number of applicable requests, including those that produced unexpected errors. All unexpected errors result in reduced availability for the storage service or the specified API operation. |
| Average E2E Latency | The average end-to-end latency of successful requests made to a storage service or the specified API operation, in milliseconds. This value includes the required processing time within Azure Storage to read the request, send the response, and receive acknowledgment of the response. |
| Average Server Latency | The average latency used by Azure Storage to process a successful request, in milliseconds. This value does not include the network latency specified in AverageE2ELatency. |
| Index Capacity | The amount of storage used by ADLS Gen2 (Hierarchical) Index in bytes. |
| Total Blob Capacity | The amount of storage used by the storage account's Blob service, in bytes. |
| Total Blob Container | The number of blob containers in the storage account's Blob service. |
| Total Blob Count | The number of committed and uncommitted blobs in the storage account's Blob service. |
| Total Egress | The amount of egress data, in bytes. This number includes egress from an external client into Azure Storage as well as egress within Azure. As a result, this number does not reflect billable egress. |
| Total Ingress | The amount of ingress data, in bytes. This number includes ingress from an external client into Azure Storage as well as ingress within Azure. |

| Total Transactions | The number of requests made to a storage service or |
|--------------------|---|
| | the specified API operation. This number includes |
| | successful and failed requests, as well as requests |
| | which produced errors. |

| Microsoft: Azure Storage Account Configuration | |
|--|---|
| Object Name | Object Description |
| Azure Resource Group Name | The Resource Group Name. |
| Azure Storage Account/Resource Group | Azure Resource Group ID associated with Azure storage account. |
| Creation Time | Gets the creation date and time of the storage account in UTC. |
| Kind | Indicates the type of storage account. |
| Location | Resource location |
| Name | Resource name. |
| Name | Gets the sku name. |
| Primary Endpoint Name | The primary endpoint name |
| Primary Endpoint Value | The primary endpoint value |
| Primary Location | Gets the location of the primary data center for the storage account. |
| Primary Status | Gets the status indicating whether the primary location of the storage account is available or unavailable. |
| Provisioning State | Gets the status of the storage account at the time the operation was called. |
| Secondary Endpoint Name | The secondary endpoint name |
| Secondary Endpoint Value | The secondary endpoint value |
| Secondary Location | Gets the location of the geo-replicated secondary for the storage account. Only available if the accountType is Standard_GRS or Standard_RAGRS. |
| Secondary Status | Gets the status indicating whether the secondary location of the storage account is available or unavailable. Only available if the SKU name is Standard_GRS or Standard_RAGRS. |
| Tag Key | An Azure storage account tag key. |
| Tag Value | An Azure storage account tag value. |

| Microsoft: Azure Storage Account File Performance | |
|---|---|
| Object Name | Object Description |
| Average Availability | The percentage of availability for the storage service or the specified API operation. Availability is calculated by taking the TotalBillableRequests value and dividing it by the number of applicable requests, including those that produced unexpected errors. All unexpected errors result in reduced availability for the storage service or the specified API operation. |
| Average E2E Latency | The average end-to-end latency of successful requests made to a storage service or the specified API operation, in milliseconds. This value includes the required processing time within Azure Storage to read the request, send the response, and receive acknowledgment of the response. |
| Average File Capacity | The amount of storage used by the storage account's File service in bytes. |
| Average File Count | The number of file in the storage account's File service. |
| Average File Share Count | The number of file shares in the storage account's File service. |
| Average Server Latency | The average latency used by Azure Storage to process a successful request, in milliseconds. This value does not include the network latency specified in AverageE2ELatency. |
| File Share Capacity Quota | The upper limit on the amount of storage that can be used by Azure Files Service in bytes. |
| File Share Snapshot Count | The number of snapshots present on the share in storage account's Files Service. |
| File Share Snapshot Size | The amount of storage used by the snapshots in storage account's File service in bytes. |
| Total Egress | The amount of egress data, in bytes. This number includes egress from an external client into Azure Storage as well as egress within Azure. As a result, this number does not reflect billable egress. |

| Total Ingress | The amount of ingress data, in bytes. This number includes ingress from an external client into Azure Storage as well as ingress within Azure. |
|--------------------|---|
| Total Transactions | The number of requests made to a storage service or the specified API operation. This number includes successful and failed requests, as well as requests which produced errors. Use ResponseType dimension for the number of different type of response. |

| Microsoft: Azure Storage Account Performance | | |
|--|--|--|
| Object Name | Object Description | |
| Average Availability | The percentage of availability for the storage service or the specified API operation. Availability is calculated by taking the total billable requests value and dividing it by the number of applicable requests, including those requests that produced unexpected errors. All unexpected errors result in reduced availability for the storage service or the specified API operation. | |
| Average E2E Latency | The average end-to-end latency of successful requests made to a storage service or the specified API operation, in milliseconds. This value includes the required processing time within Azure Storage to read the request, send the response, and receive acknowledgment of the response. | |
| Average Server Latency | The average latency used by Azure Storage to process a successful request, in milliseconds. This value does not include the network latency specified in AverageE2ELatency. | |
| Total Egress | The amount of egress data, in bytes. This number includes egress from an external client into Azure Storage as well as egress within Azure. As a result, this number does not reflect billable egress. | |
| Total Ingress | The amount of ingress data, in bytes. This number includes ingress from an external client into Azure Storage as well as ingress within Azure. | |
| Total Transactions | The number of requests made to a storage service or the specified API operation. This number includes successful and failed requests, as well as requests which produced errors. | |

| The amount of storage used by the storage account. For standard storage accounts, it's the sum of capacity used by blob, table, file, and queue. For premium storage accounts and Blob storage accounts, it is the |
|--|
| storage accounts and Blob storage accounts, it is the same as BlobCapacity. |

| Microsoft: Azure Storage Account Queue Performance | |
|--|---|
| Object Name | Object Description |
| Average Availability | The percentage of availability for the storage service or the specified API operation. Availability is calculated by taking the TotalBillableRequests value and dividing it by the number of applicable requests, including those that produced unexpected errors. All unexpected errors result in reduced availability for the storage service or the specified API operation. |
| Average E2E Latency | The average end-to-end latency of successful requests made to a storage service or the specified API operation, in milliseconds. This value includes the required processing time within Azure Storage to read the request, send the response, and receive acknowledgment of the response. |
| Average Server Latency | The average latency used by Azure Storage to process a successful request, in milliseconds. This value does not include the network latency specified in AverageE2ELatency. |
| Total Egress | The amount of egress data, in bytes. This number includes egress from an external client into Azure Storage as well as egress within Azure. As a result, this number does not reflect billable egress. |
| Total Ingress | The amount of ingress data, in bytes. This number includes ingress from an external client into Azure Storage as well as ingress within Azure. |
| Total Queue Capacity | The amount of storage used by the storage account's Queue service, in bytes. |
| Total Queue Count | The number of queues in the storage account's Queue service. |
| Total Queue Message Count | The number of message queues in the storage account's Queue service. |

| Total Transactions | The number of requests made to a storage service or |
|--------------------|---|
| | the specified API operation. This number includes |
| | successful and failed requests, as well as requests |
| | which produced errors. |

| Μ: | ^ T - - D |
|----------------------------|---|
| Microsoff: Azure Storage / | Account Table Performance |
| Object Name | Object Description |
| Average Availability | The percentage of availability for the storage service or the specified API operation. Availability is calculated by taking the TotalBillableRequests value and dividing it by the number of applicable requests, including those that produced unexpected errors. All unexpected errors result in reduced availability for the storage service or the specified API operation. |
| Average E2E Latency | The average end-to-end latency of successful requests made to a storage service or the specified API operation, in milliseconds. This value includes the required processing time within Azure Storage to read the request, send the response, and receive acknowledgment of the response. |
| Average Server Latency | The average latency used by Azure Storage to process a successful request, in milliseconds. This value does not include the network latency specified in AverageE2ELatency. |
| Total Egress | The amount of egress data, in bytes. This number includes egress from an external client into Azure Storage as well as egress within Azure. As a result, this number does not reflect billable egress. |
| Total Ingress | The amount of ingress data, in bytes. This number includes ingress from an external client into Azure Storage as well as ingress within Azure. |
| Total Table Capacity | The amount of storage used by the storage account's Table service, in bytes. |
| Total Table Count | The number of tables in the storage account's Table service. |
| Total Table Entity Count | The number of entity tables in the storage account's Table service. |
| Total Transactions | The number of requests made to a storage service or the specified API operation. This number includes successful and failed requests, as well as requests which produced errors. |

Azure Traffic Manager Service

| Microsoft: Azure Traffic Manager Profile Configuration | |
|--|--|
| Object Name | Object Description |
| Azure Resource Group Name | The Resource Group Name. |
| Azure Traffic Manager Name | The name of the Traffic Manager Profile. |
| Azure Traffic Manager Profile/Resource Group | Azure Resource Group ID associated with Azure traffic manager profile. |
| Azure Traffic Manager/Traffic Manager | Specifies the em7 resource ID of the child profile that this endpoint will direct traffic to. |
| DNS TTL | Specifies the DNS Time-to-Live (TTL), in seconds. |
| FQDN | The fully-qualified domain name of the Traffic Manager profile. This is a read-only property, formed from the concatenation of the relativeName with the DNS domain used by Azure Traffic Manager. |
| ID | The ID of an Azure traffic manager profile. |
| ID | Specifies the ARM resource ID of the endpoint. Each endpoint is a child resource of the parent profile resource, hence each endpoint has a unique ARM resource ID. |
| Key | A tag key for an Azure traffic manager profile. |
| Location | Specifies the location of the endpoint. This value is used in the 'Performance' traffic-routing method when determining which endpoint is closest to the end user. |
| Monitor Status | Indicates the overall health status for the Traffic Manager profile. |
| Monitor Status | Indicates the health status for the endpoint. |
| Name | The name of an Azure traffic manager profile. |
| Name | Specifies the name (ARM resource name) of the endpoint. |
| Priority | Specifies the priority of this endpoint when using the 'Priority' traffic routing method. |
| Relative Name | Specifies the relative DNS name provided by this Traffic Manager profile. |

| Routing Method | The traffic routing method of an Azure traffic manager profile. |
|-----------------|--|
| Status | Specifies whether the profile should be enabled or disabled. |
| Status | Specifies the status of the endpoint. If the endpoint is Enabled, it is probed for endpoint health and is included in the traffic routing method. |
| Target Resource | The fully-qualified DNS name of the endpoint. Traffic Manager returns this value in DNS responses when it directs traffic to this endpoint. Applicable to endpoints of type 'AzureEndpoints' and 'ExternalEndpoints' only. |
| Туре | Specifies the type of the endpoint. |
| Value | A tag value for an Azure traffic manager profile. |
| Weight | Specifies the weight assigned by Traffic Manager to the endpoint. |

| Microsoft: Azure Traffic Manager Profile Performance | |
|--|--|
| Object Name | Object Description |
| Endpoint Status by Endpoint | 1 if an endpoint probe status is "Enabled", 0 otherwise. |
| Queries by Endpoint Returned | Number of times a Traffic Manager endpoint was returned in the given time frame. |

Azure Virtual Machines Service

| Microsoft: Azure Virtual Machine Configuration | |
|--|---|
| Object Name | Object Description |
| Name | The name of a data disk that is aligned with a Azure virtual machine. |
| Name | The name of SKU. |
| Family | The Family of this particular SKU. |
| Name | The virtual machine OS Disk. |
| Size | The Size of the SKU. |

| Size (GB) | The size of a data disk that is aligned with a Azure virtual machine. |
|--|---|
| Tier | Specifies the tier of virtual machines in a scale set. |
| Enabled | Whether boot diagnostics is enabled on the Virtual Machine. |
| Туре | The type of a data disk that is aligned with a Azure virtual machine. |
| Туре | The operating system disk type of an Azure virtual machine. |
| Azure Virtual Network Name | The name of the virtual network. |
| CPU Core Count | Number of vCPUs for this specific machine. |
| Host | Host name. |
| Installed Memory(GB) | Installed memory in Gigabytesfor this machine. |
| Max Disk Count | Max quantity of disks for this machine |
| OS Disk Size (GB) | OS Disk Size in Gigabytes for this machine. |
| Resource Disk Size (MB) | Max Resource Disk Size in Megabytes. |
| Storage Account Name | The Storage Account Name associated with the Azure Virtual machine. |
| Storage Account Type | Specifies the storage account type for the managed disk. Possible values are: Standard_LRS Premium_LRS. |
| Storage Account Type | Specifies the storage account type for the managed disk. Possible values are: Standard_LRS Premium_LRS. |
| Automatic Updates | Indicates whether or not automatic updates are enabled. |
| Azure Network Security Group Name | The Network Security Group Name. |
| Azure Resource Group Name | The Resource Group Name. |
| Azure Subnet Name | The Subnet Name associated with the Azure Virtual machine. |
| Azure Virtual Machine Identifier Namespace | The namespace used to link the CCC application. |
| Azure Virtual Machine Name | The name of the Virtual machine. |
| Azure Virtual Machine/Network Security Group | Azure Network Security Group ID associated with network interface. |

| Azure Virtual Machine/Resource Group | Azure Resource Group ID associated with Azure virtual machine. |
|---------------------------------------|--|
| Azure Virtual Machine/Storage Account | Azure Storage Account ID that contains the OS disk of Virtual Machine, and it is associated with Azure virtual machine. |
| Azure Virtual Machine/Subnet | Azure Subnet ID associated with Azure virtual machine. |
| Azure Virtual Machine/Virtual Network | Azure Virtual Network ID associated with Azure virtual machine. |
| Caching | Specifies the caching requirements. Possible values are: None ReadOnly ReadWrite. |
| Caching | Specifies the caching requirements. Possible values are: None ReadOnly ReadWrite. |
| Certificate Url | Specifies the URL of the certificate with which new virtual machines are provisioned. |
| Code | Specifies the code of disk statuses from virtual machines. |
| Computer Name | The computer name of an Azure virtual machine. |
| Config Name | An Azure IP configuration name, utilized by an Azure virtual machine. |
| Created From | Method in which Azure virtual machine was created. |
| Deployment Status | The deployment status of an Azure virtual machine |
| Display Status | Specifies the display status of disks from virtual machines. |
| Dynatrace Host/Azure Virtual Machine | Dynatrace namespace. |
| Hardware Type | The Azure virtual machine hardware type. This will let Azure know the configuration that is needed by a virtual machine. |
| ID | Specifies the identifying URL of the virtual machine |
| Interface MAC Address | Azure network interface MAC Address |
| Interface Name | Azure network interface name utilized by an Azure virtual machine. |
| Interface Resource GUID | Azure network interface global unique identifier. |
| IP Allocation Method | The Private IP Address Allocation Method for an Azure network interface. Expected to be either Dynamic or Static. |

| IP Version | The Private IP Address version for an Azure network interface. Expected to be either IPv6 or IPv4. |
|------------------------------|--|
| Level | Specifies the level of disk statuses from virtual machines. |
| Location | The location where an Azure virtual machine resides. |
| Location | Specifies the supported Azure location where the availability set exists. |
| Name | The name of an Azure virtual machine. |
| Name | Specifies the name of the availability set. |
| Name | Specifies the name of disk from virtual machines. |
| Network Interface Name | Network interface that belongs to a network security group. |
| OS SKU | The operating system release SKU of an Azure virtual machine. |
| OS Type | The operating system type of an Azure virtual machine. |
| OS Version | The operating system version of an Azure virtual machine. |
| Platform Fault Domain Count | Specifies the fault domain of the virtual machine. |
| Platform Update Domain Count | Specifies the update domain of the virtual machine. |
| Private IP Address | The Private IP Address for an Azure network interface. |
| Protocol | Specifies the protocol of listener. |
| Sku | Specifies the sku of the image used to create the virtual machine. |
| SKU | Virtual Machine Subscription Information |
| Status | The name of an Azure virtual machine status. |
| Status Level | The priority level of an Azure virtual machine status entry. |
| Status Message | The message for an Azure virtual machine status entry. |
| Status Time | The time of occurrence for an Azure virtual machine status entry. |
| Storage Uri | Uri of the storage account to use for placing the console output and screenshot. |
| Tag Key | An Azure virtual machine tag key. |
| Tag Value | An Azure virtual machine tag value. |
| | |

| Time | Specifies the timestamp of last disk statuses from virtual machines. |
|-------|--|
| Туре | Specifies the type of compute resource. |
| URI | The uri of a data disk that is aligned with a Azure virtual machine. |
| URI | The virtual machine OS disk URI. |
| VM ID | Specifies the VM unique ID, which is a 128-bits identifier that is encoded and stored in all Azure laaS VMs SMBIOS and can be read using platform BIOS commands. |

| Microsoft: Azure Virtual Machine Performance | | |
|--|---|--|
| Object Name | Object Description | |
| CPU Average | The most recent average CPU counter for an Azure virtual machine. | |
| CPU Credits Consumed | Total number of credits consumed by the Virtual Machine. | |
| CPU Credits Remaining | Total number of credits available to burst. | |
| Disk Read Bytes | Total bytes read from disk during monitoring period. | |
| Disk Read Operations/Second | Total number of read I/O operations per second. | |
| Disk Write Bytes | Total bytes written to disk during monitoring period. | |
| Disk Write Operations/Second | Total number of write I/O operations per second. | |
| Inbound Flows | Inbound Flows are number of current flows in the inbound direction (traffic going into the VM). | |
| Inbound Flows Maximum Creation Rate | The maximum creation rate of inbound flows (traffic going into the VM). | |
| Network In | The number of bytes received on all network interfaces by the Virtual Machine(s) (Incoming Traffic) | |
| Network Out | The number of bytes out on all network interfaces by the Virtual Machine(s) (Outgoing Traffic) | |
| Outbound Flows | Outbound Flows are number of current flows in the outbound direction (traffic going out of the VM). | |
| Outbound Flows Maximum Creation Rate | The maximum creation rate of outbound flows (traffic going out of the VM). | |

Azure Virtual Network Service

| Microsoft: Azure Virtual Network Configuration | | |
|--|--|--|
| Object Name | Object Description | |
| Name | The name of the Virtual Network Peering. | |
| Address Prefix | The address prefix associated with the Virtual Network.This is a comma-separated list. | |
| Allow Forwarded Traffic | Possible values are:True: Forwarded traffic (traffic not originating from the VMs in the peer Virtual Network) will be allowed.False: Forwarded traffic (traffic not originating from the VMs in the peer Virtual Network) will not be allowed. | |
| Allow Gateway Transit | Indicates if peer Virtual Networks can access the Virtual Network's Gateway. It does not indicate if the Gateway is already being used. Possible values are:True: The peer Virtual Network can use the Virtual network Gateway of this Virtual network for connecting to onpremises networks.False: The peer Virtual Network can not use the Virtual network Gateway of this Virtual network for connecting to on-premises networks. | |
| Allow VNet Access | Indicates if communication between the two virtual networks is possible by automatic opening of ACLs. Possible values are:True: (default) The peer Virtual Network's address is included as part of the VIRTUAL_NETWORK tagFalse: The peer Virtual Network's address is not included as part of VIRTUAL_NETWORK tag. The VMs in the peer Virtual Network space would not be able to access the VMs in local Virtual Network space. You would have to set explicit NSG rules to allow communication between the Virtual Networks. | |
| Peering State | State of the Virtual Network peering. Possible values are: Initiated, Connected, or Disconnected. | |
| Provisioning State | Provisioning state of the Virtual Network Peering. | |

143 Azure Virtual Network Service

| Use Remote Gateways | Possible values are:True: If the flag is set to true, and allowGatewayTransit on peer Virtual Network is also true, the Virtual Network will use the Gateway of the peer Virtual Network for transit. Only 1 peering can have this flag set to true.False: If this flag is set to false, the Virtual Network is not able to use the remote Gateway for transit. |
|--|---|
| Address Space | AddressSpace contains an array of IP address ranges that can be used by subnets of the virtual network. |
| Azure Resource Group Name | The Resource Group Name. |
| Azure Virtual Network/Resource Group | Azure Resource Group ID associated with Azure virtual network. |
| Azure Virtual Network/Virtual Network Relationship | The identifying URI of the peer Virtual Network. |
| DNS Servers | An array of DNS servers available to VMs deployed in the virtual network. |
| Provisioning State | Provisioning state of the Virtual Network. |
| Subnet Address Prefix | Virtual network prefixes of subnet. |
| Subnet Name | A virtual network corresponding subnet name. |
| Subnet Provisioning State | Provisioning state of the subnet. |
| Tag Key | Key of the tag pair. |
| Tag Value | Value of the tag pair. |
| Virtual Network Location | Specifies the supported Azure location of the virtual network. |
| Virtual Network Name | The name of a virtual network. |

| Microsoft: Azure Virtual Network Gateway Configuration | | |
|--|--|--|
| Object Name | Object Description | |
| Name | Name of the Virtual Network Gateway connection. | |
| Address Prefixes | A list of address blocks reserved for this virtual network in CIDR notation. | |
| Azure Virtual Network Gateway/Resource Group | The Resource Group ID of the Virtual Network Gateway. | |
| Azure Virtual Network Gateway/Subnet | The Subnet ID of the Virtual Network Gateway. | |
| Gateway Type | The type of this Virtual Network Gateway. Possible values are: Vpn and ExpressRoute. | |

Azure Virtual Network Service

| ID | The ID of the Virtual Network Gateway. |
|------------------------------|--|
| IP address | Public IP of the virtual Network Gateway. |
| Is BGP enabled | Whether BGP is enabled for this Virtual Network Gateway or not. |
| Кеу | The Key of a tag. |
| Name | The name of the Virtual Network Gateway. |
| Provisioning State | The provisioning state of the Virtual Network Gateway resource. Possible values are: Updating, Deleting, and Failed. |
| Provisioning State | The provisioning state of the public IP resource. Possible values are: Updating, Deleting, and Failed. |
| Resource Group Name | The Resource Group Name which contains the Virtual Network Gateway. |
| Resource ID | The Resource ID of the public IP address. |
| SKU tier | The Gateway SKU tier. |
| Status | The status of the connection. |
| Subnet Name | The Subnet name of the Virtual Network Gateway. |
| Туре | The connection type. |
| Value | The value of the tag. |
| Virtual Network Gateway Type | The type of this Virtual Network Gateway. Possible values are: PolicyBased and RouteBased. |

| Microsoft: Azure Virtual Network Gateway Performance | |
|--|--|
| Object Name | Object Description |
| Gateway P2S Bandwidth | Average point-to-site bandwidth in bytes per second for Virtual Network Gateway. |
| Gateway S2S Bandwidth | Average site-to-site bandwidth in bytes per second for Virtual Network Gateway. |
| P2S Connection Count | Point-to-site connection count for Virtual Network Gateway. |
| Tunnel Bandwidth | Average bandwidth of tunnel in bytes per second for Virtual Network Gateway. |
| Tunnel Egress Bytes | Outgoing bytes of tunnel for Virtual Network Gateway. |

| Tunnel Egress Packet Drop TS Mismatch | Outgoing packet drop count from traffic selector mismatch of tunnel for Virtual Network Gateway. |
|--|--|
| Tunnel Egress Packets | Outgoing packet count of tunnel for Virtual Network Gateway. |
| Tunnel Ingress Bytes | Incoming bytes of tunnel for Virtual Network Gateway. |
| Tunnel Ingress Packet Drop TS Mismatch | Incoming packet drop count from traffic selector mismatch of tunnel for Virtual Network Gateway. |
| Tunnel Ingress Packets | Incoming packet count of tunnel for Virtual Network Gateway. |

| Microsoft: Azure Virtual Network Subnet Configuration | |
|---|---|
| Object Name | Object Description |
| Address Prefix | Virtual network prefixes of subnet. |
| Azure Network Security Group Name | The Network Security Group Name. |
| Azure Virtual Network Subnet/Network Security Group | Reference to the network security group that will be applied to all corresponding subnets. |
| Network Security Group | Network security group (NSG) contains a list of access control list (ACL) rules that allow or deny network traffic to your VM instances in a Virtual Network. |
| Provisioning State | Provisioning state of the Virtual Network subnet. |
| Route Table | Azure Route Tables, or User Defined Routing, allow you to create network routes so that your F-Series Firewall VM can handle the traffic both between your subnets and to the Internet. |
| Subnet Name | A virtual network corresponding subnet name. |

| Microsoft: Azure VMSS Configuration | |
|-------------------------------------|---|
| Object Name | Object Description |
| Size (GB) | The size of a data disk that is aligned with a Azure virtual machine scale set. |

| Туре | The type of a data disk that is aligned with a Azure virtual machine scale set. |
|--|--|
| Туре | The type of a os disk that is aligned with a Azure virtual machine scale set. |
| Name | Name of the resource group. |
| Name | Name of the sub-net. |
| Name | Name of the load balancer. |
| Storage Account Type | The Storage Account Type associated with the Azure virtual machine scale set. |
| Storage Account Type | Specifies the storage account type for the managed disk. Possible values are: Standard_LRS Premium_LRS. |
| Automatic OS Upgrade | Whether OS upgrades should automatically be applied to scale set instances in a rolling fashion when a newer version of the image becomes available. |
| Autoscaling | Whether or not auto-scaling feature is enabled in the scale set. Possible values are: "On" and "Off" |
| Availability Zone | Availability zones for the virtual machine scale set. |
| Azure VMSS/Load Balancer | Load balancer identifier. |
| Azure VMSS/Resource Group | Resource Group identifier. |
| Azure VMSS/Subnet | Subnet identifier. |
| Caching | The caching requirements of an Azure virtual machine scale set. |
| Caching | Specifies the caching requirements. Possible values are: None ReadOnly ReadWrite. |
| Computer Name Prefix | The computer name prefix of an Azure virtual machine scale set. |
| Creation Option | The operating system creation option of an Azure virtual machine scale set. |
| Dynatrace Host/Azure Virtual Machine Scale Set | VMSS namespace. |
| Enabled Accelerated Network | Specifies whether the network interface is accelerated networking-enabled. |
| IP Configurations | The IP configuration name. |
| Key | Key of the tag pair. |
| Location | The location where an Azure virtual machine scale set resides. |

| Mode | Specifies the mode of an upgrade to virtual machines in the scale set. Possible values are: Manual Automatic |
|---------------------------------|--|
| Name | The IP Address Name |
| Name | The network configuration name. |
| Name | The name of an Azure virtual machine scale set. |
| Offer | Specifies the offer of the platform image or marketplace image used to create the virtual machine. |
| Primary | Specifies the primary network interface in case the virtual machine has more than 1 network interface. |
| Private IP Address Version | It represents whether the specific ipconfiguration is IPv4 or IPv6. Possible values are: IPv4 IPv6 |
| Provisioning State | Provisioning state of the Azure virtual machine scale set. Possible values: Updating Succeeded Failed |
| Public IP | Public IP Address. |
| Publisher | The image publisher. |
| Single Placement Group | The single placement group of an Azure virtual machine scale set of max size 100 virtual machines. |
| SKU | The image SKU. |
| Sku Capacity | Specifies the number of virtual machines in the scale set. |
| Sku Name | The sku name. |
| Sku Tier | Specifies the tier of virtual machines in a scale set. Possible values are: Standard Basic |
| Туре | Specifies the type of an Azure virtual machine scale set. |
| Value | Value of the tag pair. |
| Version | Specifies the version of the platform image or marketplace image used to create the virtual machine. |
| VMSS Name Dynatrace Host Name | VMSS name |

| Microsoft: Azure VMSS Performance | |
|-----------------------------------|---|
| Object Name | Object Description |
| CPU Average | The percentage of allocated compute units that are currently in use by the Virtual Machine(s) |

| CPU Credits Consumed | Total number of credits consumed by the Virtual Machine. |
|------------------------------|--|
| CPU Credits Remaining | Total number of credits available to burst. |
| Disk Read Bytes | Total bytes read from disk during monitoring period. |
| Disk Read Operations/Second | Disk Read IOPS. |
| Disk Write Bytes | Total bytes written to disk during monitoring period. |
| Disk Write Operations/Second | Disk Write IOPS. |
| Network In | The number of bytes received on all network interfaces by the Virtual Machine Scale Set (Incoming Traffic) |
| Network Out | The number of bytes out on all network interfaces by the Virtual Machine scale set(Outgoing Traffic) |

| Microsoft: Azure VMSS Profiles Configuration | |
|--|---|
| Object Name | Object Description |
| Name | The name of the profile. |
| Mode | The mode of the profile. |
| Profile Name | The profile name. |
| Default Limit | The number of instances that will be set if metrics are not available for evaluation. The default is only used if the current instance count is lower than the default. |
| Max Limit | The maximum number of instances for the resource. The actual maximum number of instances is limited by the cores that are available in the subscription. |
| Metric Name | The name of the metric that defines what the rule monitors. |
| Min Limit | The minimum number of instances for the resource. |
| Number of Rules | The number of rules in the profile. |
| Time Zone | The timezone for the hours of the profile. |
| Direction | The scale direction. Whether the scaling action increases or decreases the number of instances. |
| Start Date | The start time for the profile in ISO 8601 format. |

| Cooldown | The amount of time to wait since the last scaling action before this action occurs. It must be between 1 week and 1 minute in ISO 8601 format. |
|------------------|--|
| Enabled | The enabled flag. Specifies whether automatic scaling is enabled for the resource. The default value is 'true'. |
| End Date | The end time for the profile in ISO 8601 format. |
| Name | Azure resource name. |
| Operator | The operator that is used to compare the metric data and the threshold. |
| Recurrence | The collection of days that the profile takes effect on. Possible values are Sunday through Saturday. |
| Statistic | The metric statistic type. How the metrics from multiple instances are combined. |
| Threshold | The threshold of the metric that triggers the scale action. |
| Time Aggregation | Time aggregation type. How the data that is collected should be combined over time. The default value is Average. |
| Time Grain | The granularity of metrics the rule monitors. Must be one of the predefined values returned from metric definitions for the metric. Must be between 12 hours and 1 minute. |
| Time Window | The range of time in which instance data is collected. This value must be greater than the delay in metric collection, which can vary from resource-to-resource. Must be between 12 hours and 5 minutes. |
| Value | The number of instances that are involved in the scaling action. This value must be 1 or greater. The default value is 1. |

| Microsoft: Azure VMSS Virtual Machine Configuration | |
|---|--|
| Object Name | Object Description |
| Azure VMSS Virtual Machine/Resource Group | The resource group device identifier. |
| Caching Requirements | Specifies the caching requirements. Possible values are: None, ReadOnly and ReadWrite. |
| Code | Disk statuses code. |

| C 1 | V/A 1 1 1 |
|-------------------------|---|
| Code | VM statuses code. |
| Code | VM Agent statuses code. |
| Computer Name | The computer name assigned to the virtual machine. |
| Config Name | The IP configuration name. |
| Created From | Specifies how the virtual machine should be created. Possible values are: Attach and FromImage. |
| Deployment Status | The instance provisioning state. |
| Hardware Type | The stock keeping unit name. |
| Instance ID | The virtual machine instance ID. |
| Interface MAC Address | The MAC address of the network interface. |
| Interface Name | The network interface name. |
| Interface Resource GUID | The resource GUID property of the network interface resource. |
| IP Allocation Method | Defines how a private IP address is assigned. Possible values are: "Static" and "Dynamic". |
| IP Version | It represents whether the specific ipconfiguration is IPv4 or IPv6. |
| Кеу | The instance tag name. |
| Latest Model Applied | Specifies whether the latest model has been applied to the virtual machine. |
| Level | Disk statuses level. |
| Level | VM statuses level. |
| Level | VM Agent statuses level. |
| Location | The resource location. |
| Message | VM Agent statuses message. |
| Name | The device name. |
| Name | The disk name. |
| Name | Disk statuses. |
| OS Disk Size GB | Specifies the size of an empty data disk in gigabytes. This value cannot be larger than 1023 GB. |
| OS Offer | Specifies the offer of the platform image or marketplace image used to create the virtual machine. |
| OS Publisher | The image publisher. |

| OS Type This property allows you to specify the type of the OS that is included in the disk. Possible values are Windows and Linux. OS Version Specifies the version of the platform image or marketplace image used to create the virtual maching platform Fault Domain Count Platform Fault Domain Count Platform Update Domain Count Private IP Address Private IP Address Private IP address of the IP configuration. Resource Group Name The resource group device name. Status Disk statuses displayStatus. Status VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_LRS. | |
|--|----|
| Placement Group Id Platform Fault Domain Count Platform Update Domain Count Private IP Address Resource Group Name Status Status Status The resource group device name. VM Agent statuses displayStatus. VM Agent statuses displayStatus. Storage Account Type marketplace image used to create the virtual machin VM Platform Update VM Platform Update Domain Count. Private IP address of the IP configuration. The resource group device name. Disk statuses displayStatus. VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| Platform Fault Domain Count VM Platform Update Domain Count. Private IP Address Private IP address of the IP configuration. Resource Group Name The resource group device name. Status Disk statuses displayStatus. Status VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | e. |
| Platform Update Domain Count Private IP Address Private IP address of the IP configuration. Resource Group Name The resource group device name. Status Disk statuses displayStatus. VM statuses displayStatus. Status VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| Private IP Address Private IP address of the IP configuration. Resource Group Name The resource group device name. Status Disk statuses displayStatus. VM statuses displayStatus. Status VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| Resource Group Name The resource group device name. Status Disk statuses displayStatus. VM statuses displayStatus. Status VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| Status Disk statuses displayStatus. VM statuses displayStatus. Status VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| Status VM statuses displayStatus. VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| Status VM Agent statuses displayStatus. Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| Storage Account Type Specifies the storage account type for the managed disk. Possible values are Standard_LRS or Premium_ | |
| disk. Possible values are Standard_LRS or Premium_ | |
| | |
| Time Disk statuses time. | |
| Time VM statuses time. | |
| Time VM Agent statuses time. | |
| Uri Specifies the virtual hard disk's uri. | |
| Value The instance tag value. | |
| VM Agent Version Specifies the version of the agent in the virtual machine. | |
| VM ID Azure Virtual Machine unique ID. | |

| Microsoft: Azure VMSS Virtual Machine Performance | |
|---|--|
| Object Name | Object Description |
| CPU Credits Consumed | Total number of credits consumed by the Virtual Machine. |
| CPU Credits Remaining | Total number of credits available to burst. |

| CPU Utilization | The percentage of allocated compute units that are currently in use by the Virtual Machine(s) |
|------------------------------|--|
| Disk Read Bytes | Total bytes read from disk during monitoring period. |
| Disk Read Operations/Second | Disk Read IOPS. |
| Disk Write Bytes | Total bytes written to disk during monitoring period. |
| Disk Write Operations/Second | Disk Write IOPS. |
| Network In | The number of bytes received on all network interfaces by the Virtual Machine Scale Set Virtual Machine (Incoming Traffic) |
| Network Out | The number of bytes out on all network interfaces by the Virtual Machine Scale Set Virtual Machine (Outgoing Traffic) |

Azure Web Application Firewall (WAF)

| Microsoft: Azure WAF on Application Gateway Policy Configuration | | |
|--|--|--|
| Object Name | Object Description | |
| Match Variable | The variable to be excluded RequestHeaderNames, RequestCookieNames, RequestArgNames | |
| Name | The application Gateway Resource Name. | |
| Name | The application HTTP Listener Resource Name. | |
| Name | The name of the resource that is unique within a policy. This name can be used to access the resource. | |
| Action | Type of Actions Allow, Block, Log | |
| Azure Resource Group Name | The Resource Group Name. | |
| Azure WAF Gateway Policy/Application Gateway | The application Gateway Resource Id. | |
| Azure WAF Gateway Policy/HTTP Listener | The application HTTP Listener Resource Id. | |
| Azure WAF Gateway Policy/Resource Group | Azure Resource Group ID associated. | |
| File Upload Limit (Mb) | Maximum file upload size in Mb for WAF. | |
| Match Operator | When matchVariable is a collection, operate on the selector to specify which elements in the collection this exclusion applies to Equals, Contains, StartsWith, EndsWith, EqualsAny. | |

| Max Request Body Size (Kb) | Maximum request body size in Kb for WAF. |
|----------------------------|--|
| Mode | he mode of the policy Prevention or Detection. |
| Name | The name of the policy. |
| Priority | Priority of the rule. Rules with a lower value will be evaluated before rules with a higher value. |
| Provisioning State | The Provisioning state of the Policy. |
| Request Body Check | Whether to allow WAF to check request Body. |
| Rule Set Type | Defines the rule set type to use. |
| Rule Set Version | Defines the version of the rule set to use. |
| Rule Type | The rule type MatchRule or Invalid. |
| Selector | When matchVariable is a collection, operator used to specify which elements in the collection this exclusion applies to. |
| State | The state of the policy Disabled or Enabled. |
| Tag Key | Tags key. |
| Tag Value | Tags values. |

| Microsoft: Azure WAF on CDN Policy Configuration | |
|--|---|
| Object Name | Object Description |
| Enabled State | Describes if the policy is in enabled state or disabled state. Disabled or Enabled. |
| Mode | Describes if it is in detection mode or prevention mode at policy level. Prevention or Detection. |
| Azure Resource Group Name | The Resource Group Name. |
| Default Redirect Url | Default Redirect Url. |
| Endpoint Name | CDN profile endpoint name. |
| Name | Defines the name of the custom rule. |
| Name | Defines the name of the custom rule. |
| Name | The name of the Cdn Web Application Firewall Policy. |
| Rule Set Type | Defines the rule set type to use. |
| Rule Set Version | Defines the version of the rule set to use. |

| Action | Describes what action to be applied when rule matches. Allow, Block, Log, Redirect. |
|---|--|
| Action | Describes what action to be applied when rule matches Allow, Block, Log, Redirect. |
| Anomaly Score | Verizon only: If the rule set supports anomaly detection mode, this describes the threshold for blocking requests. |
| Azure WAF CDN Policy/Resource Group | Azure Resource Group ID associated. |
| Default Custom Block Response Body | If the action type is block, customer can override the response body. The body must be specified in base64 encoding. |
| Default Custom Block Response Status Code | If the action type is block, this field defines the default customer overridable http response status code. |
| Enabled State | Describes if the custom rule is in enabled or disabled state. |
| Enabled State | Describes if the custom rule is in enabled or disabled state. |
| Location | Resource location. |
| Priority | Defines in what order this rule be evaluated in the overall list of custom rules. |
| Priority | Defines in what order this rule be evaluated in the overall list of rules. |
| Provisioning State | The provision state on WAF CDN Policy. |
| Rate Limit Duration (Min) | Defines rate limit duration. Default is 1 minute. |
| Rate Limit Threshold | Defines rate limit threshold. |
| Resource State | Resource State of the azure WAF cdn resource. |
| SKU Name | Pricing Tier |
| Tag Key | Tags key. |
| Tag Value | Tags values. |

| Microsoft: Azure WAF on CDN Policy Performance | |
|--|---|
| Object Name | Object Description |
| Requests By Action | The number of client requests processed by the Web Application Firewall by Action Name. |

| Requests By Action Label | WAF requests by action label. |
|-----------------------------|---|
| Requests By Rule Name | The number of client requests processed by the Web Application Firewall by Rule Name. |
| Requests By Rule Name Label | WAF requests by rule name label. |
| Requests Total | The total number of client requests processed by the Web Application Firewall. |

Other Supported Services

The following services are fully supported using performance metrics within already supported services:

| Azure Service | Service in Which it is Fully Supported |
|-------------------------------|--|
| Azure Disk Storage | Azure Managed Disks Service |
| Archive Storage | Azure Storage Service |
| Azure Blob Storage | |
| Queue Storage | |
| Table Storage | |
| Azure Spot Virtual Machines | All Azure VM Services |
| Data Science Virtual Machines | |
| VPN Gateway | Azure Virtual Network Service |

The following services have partial coverage with configuration information, health status, and Azure alerts:

| Azure Service | Service in Which it is Partially Supported |
|---|--|
| API Management | Resource List |
| Azure Analysis Services | |
| Azure Arc | |
| Azure Bastion | |
| Azure Cognitive Services | |
| Azure Data Lake Storage | |
| Azure Database for MariaDB | |
| Azure Database for MySQL Flexible Server | |
| Azure Database for PostgreSQL Flexible Server | |
| Azure Database for Migration Service | |
| Azure Dedicated Host | |
| Azure Digital Twins | |
| Azure Front Door | |
| Azure IoT Hub | |
| Azure Purview | |
| Azure Service Fabric | |
| Azure Spring Cloud | |
| Azure Stream Analytics | |
| Azure Synapse Analytics | |
| Data Lake Analytics | |
| Event Hubs | |
| HDInsight | |
| Log Analytics | |
| Media Services | |
| Microsoft Purview | |
| Mobile Apps | |
| Notification Hubs | |
| PowerBI Embedded | |

© 2003 - 2022, ScienceLogic, Inc.

All rights reserved.

LIMITATION OF LIABILITY AND GENERAL DISCLAIMER

ALL INFORMATION AVAILABLE IN THIS GUIDE IS PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. SCIENCELOGIC™ AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

Although ScienceLogic^{\top} has attempted to provide accurate information on this Site, information on this Site may contain inadvertent technical inaccuracies or typographical errors, and ScienceLogic^{\top} assumes no responsibility for the accuracy of the information. Information may be changed or updated without notice. ScienceLogic^{\top} may also make improvements and / or changes in the products or services described in this Site at any time without notice.

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 $^{\circledR}$ and $^{\intercal}$ 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