# **■** NetApp

# **Microsoft**

**Cloud Insights** 

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### **Microsoft**

# Configuring the Azure NetApp Files data collector

Cloud Insights uses the Azure NetApp Files data collector to acquire inventory and performance data.

#### Requirements

You need the following information to configure this data collector.

- Port requirement: 443 HTTPS
- Azure Management Rest IP (management.azure.com)
- · Azure service principal client ID (user account)
- · Azure service principal authentication key (user password)
- · You need to set up an Azure account for Cloud Insights discovery.

Once the account is properly configured and you register the application in Azure, you will have the credentials required to discover the Azure instance with Cloud Insights. The following link describes how to set up the account for discovery:

https://docs.microsoft.com/en-us/azure/active-directory/develop/howto-create-service-principal-portal

#### Configuration

Enter data into the data collector fields according to the table below:

| Field  | Description  |
|--|--|
| Azure Service Principal Client ID                | Sign-in ID to Azure  |
| Azure Tenant ID                                  | Azure Tenant ID  |
| Azure Service Principal Authentication Key       | Login authentication key   |
| I understand Microsoft bills me for API requests | Check this to verify your understanding that Microsoft bills you for API requests made by Insight polling. |

### **Advanced Configuration**

| Field                         | Description       |
|-------------------------------|-------------------|
| Inventory Poll Interval (min) | The default is 60 |

#### **Troubleshooting**

- The credentials used by your ANF data collector must not have access to any Azure subscriptions that contain ANF volumes.
- If Reader access causes performance collection to fail, try granting contributor access on a resource group level.

Additional information on this Data Collector may be found from the Support page or in the Data Collector Support Matrix.

# Microsoft Hyper-V data collector

The Microsoft Hyper-V data collector acquires inventory and performance data from the virtualized server computing environment. This data collector can discover a standalone Hyper-V host, or an entire cluster - create one collector per standalone host or cluster.

#### **Terminology**

Cloud Insights acquires the following inventory information from the Microsoft Hyper-V (WMI). For each asset type acquired by Cloud Insights, the most common terminology used for this asset is shown. When viewing or troubleshooting this data collector, keep the following terminology in mind:

| Vendor/Model Term                              | Cloud Insights Term |
|--|---------------------|
| Virtual Hard Disk                              | Virtual Disk        |
| Host   | Host                |
| Virtual Machine                                | Virtual Machine     |
| Cluster Shared Volumes (CSV), Partition Volume | Data Store          |
| Internet SCSI Device, Multi Path SCSI LUN      | LUN                 |
| Fiber Channel Port                             | Port                |

Note: These are common terminology mappings only and might not represent every case for this data collector.

#### Requirements

The following are required to configure this data collector:

- The Hyper-V requires port 5985 opened for data collection and remote access/management.
- IP address or FQDN of cluster or standalone hypervisor. Using the floating cluster hostname or IP is likely the most reliable approach versus pointing the collector at just one specific node in a cluster.
- Administrative-level user account that works on all the hypervisors in the cluster.
- WinRM needs to be enabled and listening on all hypervisors
- Port requirements: Port 135 via WMI & Dynamic TCP ports assigned 1024-65535 for Windows 2003 and older and 49152-65535 for Windows 2008.
- DNS resolution must succeed, even if the data collector is pointed at only an IP address
- Each Hyper-V hypervisor must have "Resource Metering" turned on for every VM, on every host. This allows each hypervisor to have more data available for Cloud Insights on each guest. If this is not set, fewer performance metrics are acquired for each guest. More information on Resource metering can be found in the Microsoft documentation:

Hyper-V Resource Metering Overview

**Enable-VMResourceMetering** 



### Configuration

| Field                                       | Description  |
|---|--|
| Cluster IP address or floating cluster FQDN | The IP address or fully-qualified domain name for the the cluster, or a standalone, non-clustered hypervisor |
| User Name                                   | Administrator user name for the hypervisor   |
| Password                                    | Password for the hypervisor  |
| DNS domain suffix                           | The hostname suffix that combines with the simple hostname to render the FQDN of a hypervisor                |

### **Advanced configuration**

| Field                         | Description                |
|-------------------------------|----------------------------|
| Inventory Poll Interval (min) | The default is 20 minutes. |

### **Troubleshooting**

Additional information on this Data Collector may be found from the Support page or in the Data Collector Support Matrix.

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