



NetApp Astra Data Store data collector

Cloud Insights

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October 07, 2021

This PDF was generated from https://docs.netapp.com/us-en/cloudinsights/task_dc_na_astra_data_store.html on October 26, 2021. Always check docs.netapp.com for the latest.

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NetApp Astra Data Store data collector

The NetApp Astra Data Store data collector monitors and reports configuration and performance data for a single Astra Data Store (ADS) cluster.

Terminology

Cloud Insights acquires inventory and performance data from this collector. For each asset type acquired, the most common terminology used for the asset is shown. When viewing or troubleshooting this data collector, keep the following terminology in mind:

Vendor/Model Term	Cloud Insights Term
AstraDSVolume	Internal Volume
AstraDSNodeInfo.status.drives	Disk
AstraDSNodeInfo	Storage Node
AstraDSExportPolicy	Share / Share Initiator
AstraDSCluster	Storage

Requirements

- The Acquisition Unit must be running in a Kubernetes pod inside the Astra Data Store Kubernetes cluster. See [Acquisition Unit installation](#) for more details.
 - To install the Acquisition Unit, you will need a Cloud Insights [API Key](#) with Read/Write permissions to the categories: *Acquisition Unit*, *Data Collection*, *Data Ingestion*
 - The Kubernetes API token used must grant read-only access to the *astrads.netapp.io* apiGroup
- To retrieve the API token for the astrads-system default service account, run the following commands in a bash shell:

```
SECRET_NAME=$(kubectl get secrets -n astrads-system | grep ^default | cut -f1 -d ' ' )
kubectl describe secret $SECRET_NAME -n astrads-system | grep -E '^token' | cut -f2 -d ':' | tr -d " "
```

Configuration

Field	Description
Kubernetes API Server IP Address	The IP address of the Kubernetes API server.
Kubernetes API Server Port	The port of the Kubernetes API server. Default is 6443.
Kubernetes API Token	Base64 encoded Kubernetes API token.

Advanced Configuration

Field	Description
Inventory Poll Interval (min)	Interval between inventory polls. The default is 60 minutes.
Performance Poll Interval (sec)	Interval between performance polls. The default is 300 seconds.
Included ADS Cluster Names	Comma-separated list of ADS cluster names to include in polling. Leave blank to monitor all clusters.

Install Acquisition Unit, Telegraf, and Fluent Bit

The NetApp Monitoring Operator will be installed in the Kubernetes cluster with Astra Data Store. The Monitoring Operator manages the installation and configuration of an Acquisition Unit, a Telegraf agent for advanced metrics, and a Fluent Bit agent for logs.

To configure the operator, follow these steps:

1. Copy the custom resource definition snippet below

```

spec:
  au:
    isEnabled: true
    #storageClassName: ""
  telegraf:
    - name: "open-metric"
      run-mode:
        - ReplicaSet
      substitutions:
        - key: URLs
          values:
            - "http://astrads-metrics-service.astrads-
system.svc.cluster.local:9341"
        - key: METRIC_TYPE
          value: "ads-metrics"
      outputs:
        - sink: CI
  fluent-bit:
    - name: "ads-tail-ci"
      substitutions:
        - key: TAG
          value: "ads-logs"
        - key: ADS_CLUSTER_NAME
          value: "<INSERT_CLUSTER_NAME>"
        - key: LOG_FILE
          values:
            - "/var/log/firetap/*/ems/ems"
            - "/var/log/firetap/ems/*/ems/ems"
      outputs:
        - sink: CI
  output-sink:
    - api-key: "<INSERT_CI_API_KEY>"
      domain-name: "<INSERT_CI_DOMAIN_NAME>"
      name: CI

```

2. If there is not a Storage Provisioner configured in the Kubernetes cluster, uncomment *storageClassName* and supply the name of the StorageClass containing PVs for the Acquisition Unit. These PVs must already be created. Leave blank to use the default StorageClass.
3. Replace <INSERT_CLUSTER_NAME> with the name of the Astra Data Store cluster
4. Replace <INSERT_CI_API_KEY> with the Cloud Insights API Access Token
5. Replace <INSERT_CI_DOMAIN_NAME> with the Cloud Insights tenant domain name
6. Run the following command to edit the Monitoring Operator agent spec:

```
kubectl --namespace netapp-monitoring edit agent acc-monitoring
```

7. Merge the custom resource definition snippet above with the existing Monitoring Operator agent spec.
8. Save and close the editor window.

The Monitoring Operator will now install the Acquisition Unit, Telegraf and Fluent Bit. This may take several minutes to complete.

Periodically run the following command to check the Acquisition Unit status until the status is UP. Alternatively, you can wait for the new Acquisition Unit to appear in the Cloud Insights UI.

```
kubectl --namespace netapp-monitoring get agent -o jsonpath='{.status.acquisition-unit-status}' acc-monitoring
```

Once the Acquisition Unit is installed, you may add the Astra Data Store collector from the Cloud Insights UI.

Troubleshooting

Some things to try if you encounter problems with this data collector:

Problem:	Try this:
You see an "Unauthorized" message	Check that the Kubernetes API Token has permission to call APIs in the <i>astrads.netapp.io</i> apiGroup
"Unknown host: astrads-metrics-service.astrads-system.svc.cluster.local: Name or service not known"	Verify the collector is installed in an Acquisition Unit pod running inside the ADS Kubernetes cluster. Verify the astrads-metrics-service is running the astrads-system namespace.

Additional information on this Data Collector may be found from the [Support](#) page or in the [Data Collector Support Matrix](#).

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