



# **ONTAP Essentials**

## **Cloud Insights**

NetApp  
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# Table of Contents

- ONTAP Essentials ..... 1
  - Overview ..... 1
  - Data Protection..... 2
  - Alerts ..... 2
  - Infrastructure ..... 3
  - Networking ..... 4
  - Workloads ..... 4

# ONTAP Essentials

ONTAP Essentials is a set of dashboards and workflows that provide detailed overviews of your ONTAP inventories and workloads. You may see the following terms used when working in ONTAP Essentials:

- Infrastructure/Inventory: Objects that provide storage/networking services to user data
- Workloads: Objects that provide interface to users to read/write data.
- Data Protection: Objects that can be protected using NetApp data protection technologies

For additional terms and definitions related to ONTAP, see the [ONTAP Data Collector](#) documentation.

ONTAP Essentials requires at least one working ONTAP data collector with data collected within the last seven days.

## Overview

To begin exploring, select **ONTAP Essentials** from the main Cloud Insights menu.



The **Overview** dashboard displays useful information like the number of clusters in your environment with their overall capacity and performance percentages. You will also see predictive data regarding the number of expected days until storage capacity or performance capacity runs out of space. Additionally, if any controllers in your infrastructure are running with their CPU at more than 65%—potentially putting your cluster at risk in case of failover—ONTAP Essentials shows those as "Hot" controllers.

Informative graphs give you a look into performance over time as well as breakdowns of capacity usage.

Each of these graphs or data points can be used as a starting point for exploration or investigation.

Note: A "days to full" number of "0" (zero) indicates that days to full is estimated at greater than 90 days. In other words, your systems aren't in danger of running out of space any time soon.

## Data Protection

Select the **Data Protection** page to view SnapMirror relationships. Click through to source or destination volume information, or click the gear icon to add columns for the data you wish to view.

hhndks4 / Data-protection / All Relationships - Protection Last 3 Hours

netapp\_ontap.snapmirrorAll Relationships


Filter Bycluster\_vendorNetAppGroupnetapp\_ontap.snapmirror

28 items found

| Table Row Grouping                             | Metrics & Attributes |            |                |                       |                      |                      |                       |
|--|----------------------|------------|----------------|-----------------------|----------------------|----------------------|-----------------------|
| netapp_ontap.snapmirror                        | relationship...      | is_healthy | lag_time (sec) | last_successful_u...  | policy_name          | source.volume_n...   | destination.volu...   |
| dpsvm01:leafy_SL_unified_dest_01               | idle                 | ✓          |                | N/A                   | MirrorAndVault       | leafy_SL_unified_... | leafy_SL_unified_...  |
| dpsvm01:dpsvm01_vol_NSLM_VOL_LUN_1592          | idle                 | ✓          | 1,842.00       | 2022-07-27 13:35:0... | XDPDefault           | vol_NSLM_VOL_L...    | dpsvm01_vol_NSL...    |
| dpsvm01:a_demo_volume_dest01                   | idle                 | ✓          | 142.00         | 2022-07-27 13:35:0... | LEAFTYSLVAULT        |                      | a_demo_volume_...     |
| mattsvm07:mattsvm07_volume3                    | idle                 | ✓          |                | 2022-07-13 20:08:1... | SVM-DR-identity-p... |                      | mattsvm07_volum...    |
| dpsvm01:rtp_demo_01_leafydemo01_Asynch         | idle                 | ✓          | 11,107,543.00  | 2022-07-27 13:10:0... | XDPDefault           |                      | rtp_demo_01_lea...    |
| rtp-sa-cl07-svm-01:test_Phil_mirror_create_tes | idle                 | ✓          | 135,033,424.00 | N/A                   | MirrorAllSnapshots   |                      | test_Phil_mirror_c... |
| mattsvm07:mattsvm07_volume4                    | idle                 | ✓          |                | 2022-07-13 20:08:1... | SVM-DR-identity-p... |                      | mattsvm07_volum...    |
| dpsvm01:vol_LEAFTYDEMOLUN01_dest               | idle                 | ✓          | 1,843.00       | 2022-07-27 13:05:0... | Asynchronous         |                      | vol_LEAFTYDEMOL...    |
| rtp-sa-cl07-svm-01:mirror_samplesource1_desi   | idle                 | ✓          | 1,843.00       | 2022-07-27 13:05:0... | Asynchronous         |                      | mirror_samplesou...   |
| astra_301:vol1_dp                              | idle                 | ✓          | 8,299,460.00   | N/A                   | XDPDefault           | vol1                 | vol1_dp               |
| rtp-sa-cl07-svm-01:vol_pgb_sm_fanout_srcsv_    | idle                 | ✓          | 48,343.00      | 2022-07-27 00:10:0... | pgb_mirror_vault     |                      | vol_pgb_sm_fano...    |

## Alerts

Here you can view the Active alerts in your environment and quickly drill down into potential problems. Select the *Resolved* tab to view alerts that have been resolved.

 **ONTAP Essentials**

Overview

Data Protection

**Alerts**

Infrastructure

Networking

Workloads

Active (86)      Resolved (0)

|           |             |                        |   |        |       |              |   |   |                 |           |            |   |   |   |   |
|-----------|-------------|------------------------|---|--------|-------|--------------|---|---|-----------------|-----------|------------|---|---|---|---|
| Filter By | triggeredOn | cluster_vendor: NetApp | X | status | New X | In process X | X | X | currentSeverity | Warning X | Critical X | X | X | + | ? |
|-----------|-------------|------------------------|---|--------|-------|--------------|---|---|-----------------|-----------|------------|---|---|---|---|

Alerts (86)

Change All Alerts Status

| alertId   | triggeredTime ↓                     | currentSeverity         | monitor                      | triggeredOn   | status | hasCorrective Actions |
|-----------|-------------------------------------|-------------------------|------------------------------|---|--------|-----------------------|
| AL-356704 | 12 hours ago<br>Sep 9, 2022 2:16 AM | <span>🔴</span> Critical | Snapshot Reserve Space ...   | cluster_name: rtp-sa-cl04<br>vserver_name: test_ran<br>volume_name: thick_vol_2<br>cluster_uuid: f34cd2c8-f1b3-11e9-b97f-00a0985f6587<br>cluster_vendor: NetApp<br>cluster_model: AFF8040             | New    | ✓                     |
| AL-355988 | a day ago<br>Sep 8, 2022 11:00 AM   | <span>🟡</span> Warning  | User Quota Capacity Soft ... | cluster_name: rtp-sa-cl06<br>volume: qtreesvol1<br>quota_type: user<br>user_or_group: 16716<br>cluster_uuid: da294f0d-ad92-11e6-9969-00a0987b8fe8<br>cluster_vendor: NetApp<br>cluster_model: FAS2552 | New    | ✓                     |

## Infrastructure

The ONTAP Essentials **Infrastructure** page gives you a view of cluster health and performance, using pre-built (yet further customizable) queries on all the basic ONTAP objects. Select the object type you wish to explore (cluster, storage pool, etc.) and choose whether to view health or performance information. Set filters to dive deeper into individual systems.

The screenshot shows the 'All Storage Pools - Health' page in the NetApp OnCommand System Manager. The breadcrumb navigation at the top reads: `-service-multi...` / Infrastructure / All Storage Pools - Health. Below the breadcrumb, the 'netapp\_ontap.aggregate' dropdown is open, displaying a list of storage pools: 'All Storage Pools' (highlighted in blue), 'Health', 'Performance', 'All Storage Pools' (light blue), 'Capacity', and 'All Storage Pools'. The 'Filter By' dropdown is set to 'cluster\_vendor', and the 'Group' dropdown is set to 'netapp\_ontap.aggregate'. The table below shows the following items found:

| Table Row Grouping     |
|------------------------|
| netapp_ontap.aggregate |
| harvest_astra_aggr1    |
| aggr_SnapLock_02       |

Infrastructure page showing cluster health:

Observability

ONTAP Essentials

Overview

Data Protection

Infrastructure

Workloads

Security

hhdks4 / Infrastructure / All Clusters - Health

Last 3 Hours

netapp\_ontap.cluster

All Clusters

Filter By

cluster\_vendor

NetApp

×

×

+

?

Group

netapp\_ontap.cluster


×

3 items found

| Table Row Grouping   | Metrics & Attributes |  |            |                            |
|----------------------|----------------------|--|------------|----------------------------|
| netapp_ontap.cluster | fips_enabled ↑       | cluster_version                          | node_count | cluster_location           |
| rtp-sa-cl07          | false                | NetApp Release 9.8P13: Fri Jul 15 22:... | 2          | SA East Lab, RTP 1.3, _jxx |
| umeng-af300-05-06    | false                | NetApp Release 9.9.1P9X3: Tue Apr 1...   | 2          | GDL QQ 22                  |
| umeng-af300-01-02    | false                | NetApp Release Metropolitan_9.11....     | 2          | GDL                        |

# Networking

ONTAP Essentials Networking gives you views into your FC, NVME FC, Ethernet, and iSCSI infrastructure. On these pages you can explore things like ports in your clusters and their nodes.


ONTAP Essentials

Overview

Data Protection

Alerts

Infrastructure

Networking

Workloads

Active (86)

Resolved (0)

Filter By

triggeredOn

cluster\_vendor: NetApp

status

New

In process

currentSeverity

Warning

Critical

+

?

Alerts (86)

Change All Alerts Status

| alertId   | triggeredTime ↓                     | currentSeverity       | monitor                      | triggeredOn   | status | hasCorrective Actions |
|-----------|-------------------------------------|-----------------------|------------------------------|---|--------|-----------------------|
| AL-356704 | 12 hours ago<br>Sep 9, 2022 2:16 AM | <span>Critical</span> | Snapshot Reserve Space ...   | cluster_name: rtp-sa-cl04<br>vserver_name: test_ran<br>volume_name: thick_vol_2<br>cluster_uuid: f34cd2c8-f1b3-11e9-b97f-00a0985f6587<br>cluster_vendor: NetApp<br>cluster_model: AFF8040             | New    | ✓                     |
| AL-355988 | a day ago<br>Sep 8, 2022 11:00 AM   | <span>Warning</span>  | User Quota Capacity Soft ... | cluster_name: rtp-sa-cl06<br>volume: qtreesvol1<br>quota_type: user<br>user_or_group: 16716<br>cluster_uuid: da294f0d-ad92-11e6-9969-00a0987b8fe8<br>cluster_vendor: NetApp<br>cluster_model: FAS2552 | New    | ✓                     |

## Workloads

View and explore workloads on LUNs/Volumes, NFS or SMB Shares, or Qtrees in your environment.

netapp\_ontap.lun

All LUNs

Filter By

cluster\_vendor

NetApp

X

X

+

?

Group

netapp\_ontap.lun

X

13 items found

| Table Row Grouping                           | Metrics & Attributes |                   |                  |                    |                    |                   |              |                  |      |
|--|----------------------|-------------------|------------------|--------------------|--------------------|-------------------|--------------|------------------|------|
| netapp_ontap.lun                             | total_lat...         | total_iops (IO/s) | total_through... | size (B)           | size_used (B)      | volume            | vserver_name | aggregate_name   | node |
| /vol/ste/ste                                 | 0.00                 | 0.00              | 0.00             | 53,694,627,840...  | 0.00               | ste               | vs_test      | umeng_aff300...  | ui   |
| /vol/kubebug/kubebuglun1                     | 0.00                 | 0.00              | 0.00             | 85,905,637,376...  | 1,489,985,536.00   | kubebug           | vs_test      | umeng_aff300...  | ui   |
| /vol/trident_pvc_3ef5a87c_4149_44e8_8113...  | 0.00                 | 0.00              | 0.00             | 1,073,741,824.00   | 0.00               | trident_pvc_3e... | vs_test      | umeng_aff300...  | ui   |
| /vol/trident_pvc_0bf4ffd4_3f11_4d63_aa01_... | 0.00                 | 0.00              | 0.00             | 1,073,741,824.00   | 0.00               | trident_pvc_0b... | vs_test      | umeng_aff300...  | ui   |
| /vol/NSLM_VOL_LUN_1597772263794/matts...     | 0.00                 | 0.00              | 0.00             | 1,073,741,824.00   | 0.00               | NSLM_VOL_LU...    | VMware_test  | aggr_data_01_... | rt   |
| /vol/mattlun12345/mattlun12345               | 0.00                 | 0.00              | 0.00             | 1,073,741,824.00   | 0.00               | mattlun12345      | VMware_test  | aggr_data_01_... | rt   |
| /vol/kubebug1/kubebuglun2                    | 0.00                 | 0.00              | 0.00             | 85,904,826,368...  | 0.00               | kubebug1          | vs_test      | umeng_aff300...  | ui   |
| /vol/trident_pvc_d66d7f51_a623_4fc3_8cda...  | 0.00                 | 0.00              | 0.00             | 1,073,741,824.00   | 0.00               | trident_pvc_d6... | vs_test      | umeng_aff300...  | ui   |
| /vol/Rah/Rah                                 | 0.00                 | 0.00              | 0.00             | 57,576,960.00      | 0.00               | Rah               | vs_test      | umeng_aff300...  | ui   |
| /vol/chap_test_lun_vol/chap_test_lun         | 0.00                 | 0.00              | 0.00             | 107,374,182,40...  | 0.00               | chap_test_lun_... | VMware_test  | aggr_data_01_... | rt   |
| /vol/windows_iscsi_example/windows_iscsi...  | 0.00                 | 0.00              | 1.04             | 1,073,741,824.00   | 10,911,744.00      | windows_iscsi...  | VMware_test  | aggr_data_01_... | rt   |
| /vol/vol_test/lun1                           | 0.04                 | 0.10              | 0.00             | 1,073,741,824.00   | 0.00               | vol_test          | vs_test      | umeng_aff300...  | ui   |
| /vol/osc_iscsi_vol01/osc_iscsi_vol01         | 2.11                 | 116.83            | 2,737,374.33     | 4,398,046,511,1... | 2,535,381,008,3... | osc_iscsi_vol01   | osc          | umeng_aff300...  | ui   |

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