



# **ONTAP Essentials**

## **Cloud Insights**

NetApp  
November 16, 2022

This PDF was generated from [https://docs.netapp.com/us-en/cloudinsights/concept\\_ontap\\_essentials.html](https://docs.netapp.com/us-en/cloudinsights/concept_ontap_essentials.html) on November 16, 2022. Always check docs.netapp.com for the latest.

# 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. And if any controllers in your infrastructure are running at high temperatures, ONTAP Essentials will show you those.

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.snapmirror

All Relationships

Filter By cluster\_vendor NetApp


Group netapp\_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 Sep 9, 2022 2:16 AM	 Critical	Snapshot Reserve Space ...	cluster_name: rtp-sa-cl04 vserver_name: test_ran volume_name: thick_vol_2 cluster_uuid: f34cd2c8-f1b3-11e9-b97f-00a0985f6587 cluster_vendor: NetApp cluster_model: AFF8040	New	✓
AL-355988	a day ago Sep 8, 2022 11:00 AM	 Warning	User Quota Capacity Soft ...	cluster_name: rtp-sa-cl06 volume: qtreesvol1 quota_type: user user_or_group: 16716 cluster_uuid: da294f0d-ad92-11e6-9969-00a0987b8fe8 cluster_vendor: NetApp 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 Insight web interface. The breadcrumb navigation at the top reads: `-service-multi...` / Infrastructure / All Storage Pools - Health. Below the breadcrumb, the 'netapp\_ontap.aggregate' dropdown is set to 'All Storage Pools'. The 'Filter By' dropdown is set to 'cluster\_vendor', and the 'Group' dropdown is set to 'netapp\_ontap.aggregate'. A dropdown menu is open for 'All Storage Pools', showing options: 'Health' (selected), 'All Storage Pools', 'Performance', 'All Storage Pools', 'Capacity', and 'All Storage Pools'. The 'Items found' section shows a table with one row: 'netapp\_ontap.aggregate'. The 'Table Row Grouping' section shows 'netapp\_ontap.aggregate'. The 'harvest\_astra\_aggr1' section shows 'nna'. The 'aggr\_SnapLock\_02' section shows 'hdd'.

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 Sep 9, 2022 2:16 AM	Critical	Snapshot Reserve Space ...	cluster_name: rtp-sa-cl04 vserver_name: test_ran volume_name: thick_vol_2 cluster_uuid: f34cd2c8-f1b3-11e9-b97f-00a0985f6587 cluster_vendor: NetApp cluster_model: AFF8040	New	✓
AL-355988	a day ago Sep 8, 2022 11:00 AM	Warning	User Quota Capacity Soft ...	cluster_name: rtp-sa-cl06 volume: qtreevol1 quota_type: user user_or_group: 16716 cluster_uuid: da294f0d-ad92-11e6-9969-00a0987b8fe8 cluster_vendor: NetApp 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

Group
netapp\_ontap.lun

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_0b4ffd4_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

## Copyright information

Copyright © 2022 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.