# **■** NetApp

## **ONTAP Essentials**

**Cloud Insights** 

NetApp December 21, 2022

# **Table of Contents**

NTAP 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.



### **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.





#### 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.



Infrastructure page showing cluster health:



## **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.



## **Workloads**

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





13 items found 0 Table Row Grouping netapp\_ontap.lun total\_late... † 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 vs\_test umeng\_aff300... /vol/kubebug/kubebuglun1 0.00 0.00 0.00 85,905,637,376.... 1,489,985,536.00 umeng\_aff300... kubebug vs\_test /vol/trident\_pvc\_3ef5a87c\_4149\_44e8\_8113... 0.00 0.00 0.00 1,073,741,824.00 0.00 umeng\_aff300... ur trident\_pvc\_3e... vs\_test /vol/trident\_pvc\_0bf4ffd4\_3f11\_4d63\_aa01\_... 0.00 0.00 1,073,741,824.00 0.00 trident\_pvc\_0b... vs\_test umeng\_aff300... ur 0.00 /vol/NSLM\_VOL\_LUN\_1597772263794/matts... NSLM\_VOL\_LU... VMware\_test 0.00 0.00 0.00 1,073,741,824.00 0.00 aggr\_data\_01\_... rt /vol/mattlun12345/mattlun12345 0.00 0.00 1,073,741,824.00 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 umeng\_aff300... /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 /vol/Rah/Rah 57,576,960.00 Rah umeng\_aff300... ui 0.00 0.00 0.00 0.00 vs\_test /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 1.04 1,073,741,824.00 10,911,744.00 windows\_iscsi... VMware\_test aggr\_data\_01\_... rt 0.00 /vol/vol\_test/lun1 1,073,741,824.00 0.00 umeng\_aff300... ui 0.10 0.00 vol test vs test 0.04 umeng\_aff300... ui /vol/osc\_iscsi\_vol01/osc\_iscsi\_vol01 2.11 116.83 4,398,046,511,1... 2,535,381,008,3... osc\_iscsi\_vol01 2,737,374,33 OSC

#### 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 <a href="http://www.netapp.com/TM">http://www.netapp.com/TM</a> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.