



ONTAP Data Management data collector

Cloud Insights

Tony Lavoie
April 24, 2020

This PDF was generated from https://docs.netapp.com/us-en/cloudinsights/task_dc_na_ontap.html on May 18, 2020. Always check docs.netapp.com for the latest.

Table of Contents

- ONTAP Data Management data collector 1
 - Terminology..... 1
 - Requirements 1
 - Configuration..... 2
 - Advanced configuration..... 2
 - Troubleshooting..... 2

ONTAP Data Management data collector

This data collector acquires inventory and performance data from storage systems running ONTAP Data management software using read-only API calls from an administrator account.

Terminology

Cloud Insights acquires inventory and performance data from the ONTAP Data management software data 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
Disk	Disk
Raid Group	Disk Group
Cluster	Storage
Node	Storage Node
Aggregate	Storage Pool
LUN	Volume
Volume	Internal Volume

Requirements

The following are requirements to configure and use this data collector:

- You must have access to an account used for read-only API calls.
- Target IP is the cluster management LIF.
- FCP license and mapped/masked volumes required for Cloud Insights discovery.
- CIFS and/or NFS license and CIFS shares or NFS exports required for Cloud Insights NAS discovery.
- Access validation: Telnet or SSH to the cluster management LIF from the acquisition unit, using the username and password.
- For Clustered ONTAP you need the IP cluster management LIF or the management IP of the cluster. Additionally, requires username (with read-only role name to ontapi application to the default Vserver, see below) and password to log into NetApp cluster.

To create a read-only user account (may be slightly different on different ONTAP versions), log into the NetApp storage system by using an SSH client and run the following command (case sensitive) and use your own user account variables:

```
security login role create -role test -cmddirname DEFAULT -access readonly
security login create - user-or-group-name useraccount -application ontap -authmethod
password -role test-vserver storagename
```

Configuration

Field	Description
NetApp Management IP	IP address or fully-qualified domain name of the NetApp cluster
User Name	User name for NetApp cluster
Password	Password for NetApp cluster

Advanced configuration

Field	Description
Connection Type	HTTPS or HTTP, also displays the default port
Override Connection Port	If blank, use the default port in the Connection Type field, otherwise enter the connection port to use
Inventory Poll Interval (min)	Default is 20 minutes.
Performance Poll Interval (sec)	Default is 300 seconds.

Troubleshooting

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

Inventory

Problem:	Try this:
Receive 401 HTTP response or 13003 ZAPI error code and ZAPI returns “Insufficient privileges” or “not authorized for this command”	Check username and password, and user privileges/permissions.
Cluster version is < 8.1	Cluster minimum supported version is 8.1. Upgrade to minimum supported version.
ZAPI returns "cluster role is not cluster_mgmt LIF"	AU needs to talk to cluster management IP. Check the IP and change to a different IP if necessary

Problem:	Try this:
Error: “7 Mode filers are not supported”	This can happen if you use this data collector to discover 7 mode filer. Change IP to point to cdot filer instead.
ZAPI command fails after retry	AU has communication problem with the cluster. Check network, port number, and IP address. User should also try to run a command from command line from the AU machine.
AU failed to connect to ZAPI via HTTP	Check whether ZAPI port accepts plaintext. If AU tries to send plaintext to an SSL socket, the communication fails.
Communication fails with SSLException	AU is attempting to send SSL to a plaintext port on a filer. Check whether the ZAPI port accepts SSL, or use a different port.
<p>Additional Connection errors:</p> <p>ZAPI response has error code 13001, “database is not open”</p> <p>ZAPI error code is 60 and response contains “API did not finish on time”</p> <p>ZAPI response contains “initialize_session() returned NULL environment”</p> <p>ZAPI error code is 14007 and response contains “Node is not healthy”</p>	Check network, port number, and IP address. User should also try to run a command from command line from the AU machine.

Performance

Problem:	Try this:
“Failed to collect performance from ZAPI” error	<p>This is usually due to perf stat not running. Try the following command on each node:</p> <pre>> system node systemshell -node * -command "spmctl -h cmd -stop; spmctl -h cmd -exec"</pre>

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

Copyright Information

Copyright © 2020 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.