

## Advanced troubleshooting

**OnCommand Insight** 

NetApp June 10, 2024

This PDF was generated from https://docs.netapp.com/us-en/oncommand-insight/configadmin/configuring-the-number-of-hours-to-ignore-dynamic-data.html on June 10, 2024. Always check docs.netapp.com for the latest.

# **Table of Contents**

Advanced troubleshooting	. 1
Configuring the number of hours to ignore dynamic data	. 1
Generating logs for Customer Support	. 2
Displaying system information	. 3
Listing installed OnCommand Insight components	. 3
Calculating the number of database objects	. 3
Restarting the OnCommand Insight Server	. 4
Moving MySQL data using the migrate option	. 4
Forcing annotation updates	. 5
Checking the status of server resources	. 6
Finding ghost data sources	. 6
Adding a missing disk model	. 6

# Advanced troubleshooting

To complete your OnCommand Insight configuration, you must use the advanced troubleshooting tools. These tools run in the browser and are opened from the **Admin > Troubleshooting** page.

To open the advanced troubleshooting tools in the browser, click the **Advanced Troubleshooting** link at the bottom of the page.

The advanced troubleshooting tools allow you to view various reports, system information, installed packages, and logs, as well as perform numerous actions such as restarting the server or acquisition units, update DWH annotations, and import annotations.

See the Advanced Troubleshooting page for all available options.

## Configuring the number of hours to ignore dynamic data

You can configure the number of hours during which OnCommand Insight ignores updating dynamic data, such as used capacity. If the default of six hours is used and no configuration changes occur, reports will not be updated with dynamic data until after the default number of hours. This option improves performance because this option defers updates when only the dynamic data changes.

### About this task

If a value is set for this option, OnCommand Insight will update dynamic data based on the following rules:

- If no configuration changes occur but capacity data changes, data will not be updated.
- Dynamic data (other than configuration changes) will be updated only after the timeout specified in this option.
- If configuration changes occur, configuration and dynamic data is updated.

Dynamic data impacted by this option includes the following:

- · Capacity violation data
- · File Systems Allocated Capacity and Used Capacity
- Hypervisor
  - Virtual Disk Used Capacity
  - · Virtual Machine Used Capacity
- Internal Volume
  - Data Allocated Capacity
  - Data Used Capacity
  - Deduplication Savings
  - Last Known Access Time
  - Last Snapshot Time

- Other Used Capacity
- Snapshot Count
- Snapshot Used Capacity
- Total Used Capacity
- iSCSI Session Initiator IPs, Target Session ID, and Initiator Session ID
- Qtree Quota Used Capacity
- Quota Used Files and Used Capacity
- Storage Efficiency Technology, Gain/Loss, and Potential Gain/Loss
- Storage Pool
  - Data Used Capacity
  - Deduplication Savings
  - Other Used Capacity
  - Snapshot Used Capacity
  - Total Used Capacity
- Volume
  - Deduplication Savings
  - Last Known Access Time
  - Used Capacity

### Steps

- 1. On the Insight toolbar, click Admin and select Troubleshooting.
- 2. At the bottom of the page in the Other tasks area, click the **Advanced Troubleshooting** link.
- 3. Click the **Advanced settings** tab, in the Acquisition Dynamic Attributes section enter the number of hours that OnCommand Insight should ignore dynamic data for Acquisition Dynamic Attributes.
- 4. Click Save.
- 5. (Optional) To restart the acquisition unit, click the Restart Acquisition Unit link.

Restating the local acquisition unit reloads all of the OnCommand Insight data source views. This change is applied during the next poll, so you do not have to restart the Acquisition Unit.

## **Generating logs for Customer Support**

If requested by Customer Support, generate a server, acquisition, or remote log for troubleshooting purposes.

### About this task

If NetApp Customer Support requests, use this option to generate the logs.

### Steps

- 1. On the Insight toolbar, click Admin and select Troubleshooting.
- 2. At the bottom of the page in the Other tasks area, click Advanced Troubleshooting.
- 3. On the next page in the Advanced menu, click the Troubleshooting link.
- 4. Click the **Logs** tab and select the log file to download.

A dialog box opens allowing you to open the log or save the log locally.

## **Displaying system information**

You can display the Microsoft Windows IP configuration information about the system on which OnCommand Insight server is deployed.

### Steps

- 1. On the Insight toolbar, click Admin and select Troubleshooting.
- 2. At the bottom of the page in the Other tasks area, click the **Advanced Troubleshooting** link.
- 3. On the Advanced Troubleshooting page, click the **Reports** tab.
- 4. Click System Information.

The Windows IP configuration includes information such as the host name, DNS, IP address, subnet mask, OS information, memory, boot device, and connection name.

## Listing installed OnCommand Insight components

You can display a list of the installed OnCommand Insight components including, among others, inventory, capacity, dimensions, and the Data Warehouse views. Customer Support might ask you for this information, or you might want to see what software versions were installed and when they were installed.

### Steps

- 1. On the Insight toolbar, click **Admin** and select **Troubleshooting**.
- 2. At the bottom of the page in the Other tasks area, click the **Advanced Troubleshooting** link.
- 3. On the Advanced Troubleshooting page, click the **Reports** tab.
- 4. Click Installed Software Packages.

## Calculating the number of database objects

To determine the number of objects in the OnCommand Insight database, use the Calculate Scale feature.

### Steps

- 1. On the Insight toolbar, click Admin and select Troubleshooting.
- 2. At the bottom of the page in the Other tasks area, click the Advanced Troubleshooting link.
- 3. On the Advanced Troubleshooting page, click the **Reports** tab.
- 4. Click Calculated Scale.

## **Restarting the OnCommand Insight Server**

When you restart the OnCommand Insight Server, refresh the page and log into the OnCommand Insight Portal again.

### About this task



Both of these options should only be used upon request by NetApp Customer Support. There is no confirmation prior to restart.

### Steps

- 1. On the Insight toolbar, click Admin and select Troubleshooting.
- 2. At the bottom of the page in the Other tasks area, click the **Advanced Troubleshooting** link.
- 3. On the next page in the Advanced menu, click the Actions tab.
- 4. Click Restart Server.

## Moving MySQL data using the migrate option

You can use migrate MySQL data directory to a different directory. You can retain the current data directory. You can use the migrate option on the Troubleshooting menu or you can use the command line. This procedure describes how to use the **Troubleshooting > Migrate MySQL data** option.

#### About this task

If you retain the current data directory, it will be kept as a backup and renamed.

### Steps

- 1. In the web UI, click Admin and select Troubleshooting.
- 2. Click Advanced Troubleshooting.
- 3. Select the Actions tab
- 4. Select Migrate MySQL Data.
- 5. Enter the path to which you want to migrate the data.
- 6. To retain the existing data directory, check Keep existing data directory.
- 7. Click Migrate.

### Moving MySQL data using the command line

You can use migrate MySQL data directory to a different directory. You can retain the current data directory. You can use the migrate option on the Troubleshooting menu or alternatively, you can use the command line. This procedure describes how to use the command line.

#### About this task

If you retain the current data directory, it will be kept as a backup and renamed.

You can use the Migrate MySQL Data utility or you can use a java -jar mysqldatamigrator.jar option in the OnCommand Insight path of \bin\mysqldatamigrator where the following parameters should be used:

- Mandatory parameters
  - -path

The new data path to which the data folder will be copied.

- Optional parameters
  - -myCnf <my .cnf file>

The path for the .cnf file. The default is <install path>\mysql\my.cnf. Use this flag only if a non-default MySQL is used.

• -doBackup

If this flag is set, the current data folder will be renamed but not deleted.

#### Steps

 Access the command line tool here: <installation path> \bin\mysqldatamigrator\mysqldatamigrator.jar``

#### Example usage

java -jar mysqldatamigrator.jar -path "C:\<new path>" -doBackup

## Forcing annotation updates

If you have changed the annotations and want to use them in reports immediately, use one of the force annotation options.

#### Steps

- 1. In the web UI, click Admin and select Troubleshooting.
- 2. On the bottom of the page, click the **Advanced Troubleshooting** link.

- 3. Click the Actions tab.
- 4. Select one of these options:
  - **Update DWH Annotations** to force the update of annotations in data warehouse to be used for reports.
  - **Update DWH Annotations (incl. deleted)** to force an annotations update (including deleted objects) in the data warehouse to be used for reports.

### Checking the status of server resources

This option displays the OnCommand Insight Server's information including server memory, disk space, OS, and CPU and OnCommand Insight database information including innoDB data size and the disk free space where the database resides.

#### Steps

- 1. On the Insight toolbar, click Admin and select Troubleshooting.
- 2. At the bottom of the page in the Other tasks area, click the OnCommand Insight Portal link.
- 3. On the next page in the Advanced menu, click the Troubleshooting link.
- 4. Click Server Resources Status.

**For advanced OnCommand Insight users:** The administrator can run some SQL tests to check the database and server's response time from the button at the end of the information summary. This option displays a warning if server resource is low.

## Finding ghost data sources

If you have removed a device but the device data remains, you can locate any ghost data sources so that you can remove them.

#### Steps

- 1. In the web UI, click Admin and select Troubleshooting.
- 2. At the bottom of the page in the Other tasks area, click the Advanced Troubleshooting link.
- 3. On the **Reports** tab, click the **Ghost Data Sources** link.

OnCommand Insight produces a list of originators with their device information.

## Adding a missing disk model

If acquisition fails due to an unknown disk model, you can add the missing disk model to the new disk models.txt file and run acquisition again.

#### About this task

As part of a poll of a storage device by OnCommand Insight acquisition, the disk models on the storage device

are read. If a vendor has added new disk models to their array that Insight doesn't know about, or if there is a mismatch between the model number Insight looks for and the one returned by the storage device, acquisition of that data source will fail with an error. In order to prevent these errors, it is necessary to update the disk model information known to Insight. New disk models are added to Insight with updates, patches and maintenance releases. However, you may decide to update this information manually instead of waiting for a patch or update.

Because OnCommand Insight reads the disk model file every five minutes, any new data model information you enter is updated automatically. You do not need to restart the server for the changes to take effect, but you can opt to restart the server and any remote acquisition units (RAUs) to have the changes take effect before the next update.

Disk model updates are added to the new\_disk\_models.txt file located in the<SANScreenInstallDir>\wildfly\standalone\deployments\datasources.war directory. Understand the information needed to describe your new disk model before updating the new\_disk\_models.txt file. Inaccurate information in the file produces incorrect system data and could result in failed acquisition.

Follow these instructions to manually update Insight disk models:

#### Steps

- 1. Locate the proper information for your disk model.
- 2. Using a text editor, open the new\_disk\_models.txt file.
- 3. Add the required information for the new data source.
- 4. Save the file in the <SANScreenInstallDir>\wildfly\standalone\deployments\datasources.war directory on your server.
- 5. Back up the new\_disk\_models.txt file to a safe location. During any subsequent OnCommand Insight upgrade, this file will be overwritten. If your disk model information is not present in the upgraded file, you will need to re-enter it.

#### Locating required information for new disk model

To locate the disk model information, identify the vendor and model number and run an Internet search.

#### About this task

Locating disk model information is as simple as running an internet search. Be sure to note the vendor name and disk model number before searching.

#### Steps

- 1. It is recommended to use an advanced internet search for the vendor, model, and document type "PDF" to find the vendor's data sheet and/or installation guide for the drive. These data sheets are usually the best source for vendor disk information.
- 2. Vendor specifications do not always provide all of the necessary information based on the full model number. It is often useful to search for different parts of the model number string on the vendor's site to locate all of the information.

3. Locate the disk vendor name, full model number, disk size and speed, and the interface type in order to define the new disk model in OnCommand Insight You can use the following table as a guide to help note this information as you find it:

For this field:	Which is:	Enter this:
Model number (aka Key)	Required	
Vendor	Required	
Disk speed (RPM)	Required	
Size (in GB)	Required	
Interface Type (select one)	Required	ATA, SATA, SATA2, SATA3, FC, SAS, FATA, SSD, OTHER
Seek time in ms	Optional	
Maximum transfer rate in MB/sec	Optional	
Interface transfer rate in MB/sec	Optional	
Link to vendor/model information	Optional but recommended	

4. Enter that information into the new\_disk\_models.txt file. See Content of the new\_disk\_models.txt file for format, order, and examples.

#### Content of the new\_disk\_models.txt file

The new\_disk\_models.txt file has required and optional fields. The fields are comma separated, so do not use commas *within* the fields.

All fields are required except for seek time, transfer rates and additional\_info. If available, include the vendor/model website link in the additional\_info field.

Using a text editor, enter the following information in this order, separated by commas, for each new disk model you wish to add:

- 1. **key**: use the model number (required)
- 2. **vendor**: name (required)
- 3. model number: full number (usually the same value as in "key") (required)
- 4. rpm of the disk: for example 10000 or 15000 (required)
- 5. size: capacity in GB (required)
- 6. interface type: ATA, SATA, FC, SAS, FATA, SSD, OTHER (required)
- 7. seek time: in ms (optional)

- 8. **potential transfer rate**: the potential transfer rate in MB/sec. Maximum transfer rate of the disk itself. (optional)
- 9. interface transfer rate: the rate to and from the host in MB/sec (optional).
- 10. **Additional Info**: Any additional information you want to capture. Best practice is to enter the link to the vendor page where the specs are found, for reference (optional)

For any optional fields left blank, be sure to include the comma.

Examples (each on one line with no spaces):

ST373405, Seagate, ST373405, 10000, 73, FC, 5.3, 64, 160, http://www.seagate.com/staticfil es/support/disc/manuals/enterprise/cheetah/73(LP)/100109943e.pdf

SLR5B-M400SS, HITACHI, SLR5B-M400SS, 1000000, 400, SSD, , , ,

X477\_THARX04TA07,TOSHIBA,X477\_THARX04TA07,7200,4000,SATA,9.5,,,https://storage.to shiba.eu/export/sites/toshiba-sdd/media/products/datasheets/MG03ACAxxxY.pdf

#### **Copyright information**

Copyright © 2024 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.