



Analyzing Data

Data Infrastructure Insights

NetApp
February 03, 2026

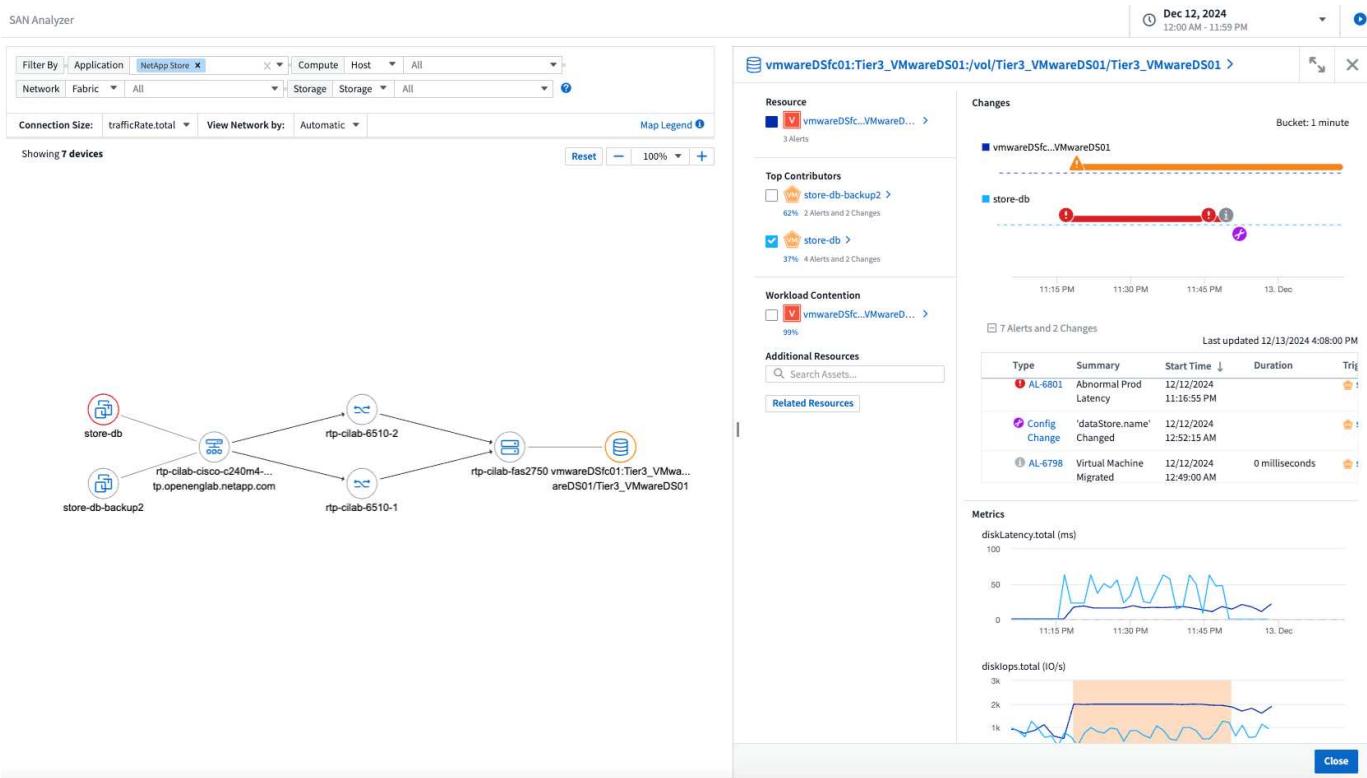
Table of Contents

Analyzing Data	1
SAN Analyzer Overview	1
Explore connections among your assets	1
Troubleshooting Tips	3
VM Analyzer Overview	4
Explore connections among your assets	4
See it in Action	5
Monitor Infrastructure Health	5
The Infrastructure Health dashboard	5
Configure Monitors to use for infrastructure health	6
Health scores explained	6

Analyzing Data

SAN Analyzer Overview

SAN plays a crucial role in handling vital workloads, but its complexity can result in significant outages and customer disruptions. With DII's **SAN Analyzer**, managing SAN becomes simpler and more efficient. This powerful tool offers end-to-end visibility, mapping dependencies from VM/Host to network to LUN and storage. By providing an interactive topology map, SAN Analyzer enables you to pinpoint issues, understand changes, and enhance comprehension of data flow. Streamline SAN management in complex IT environments with SAN Analyzer and increase your visibility into block workloads.



Explore connections among your assets

Select **Observability > Analyze > SAN Analyzer** to view the SAN Analyzer. Set a filter for Application, Host, Fabric, and/or Storage.

The map for the objects is displayed, showing connected objects. Hover over an object to view traffic metrics for those connections.



Most SAN Analyzer filters (including those you may add) are contextual; when you select an object in one of these filters, the choices presented in the other filter drop-downs are refreshed in context with the selected object or objects. The only exceptions to this are Application, Port, and Switch; these filters are not contextual.

Clicking on an object or group opens a slideout panel providing additional details about the object and its connections. The slideout panel displays a summary, which provides details about the selected object (for example, IP, Hypervisor, Connected Fabrics, etc., depending on the type of object), and charts showing metrics for the object such as latency or IOPS, and changes and alerts if relevant. You can select to display metrics for Top Correlated objects on the charts as well, if desired.

In addition to the Summary tab, the slideout panel displays tabs for things like Port details or Zone information, as applicable to the chosen object.

Port	type	fabrics.name	connectedPorts.device.name	speed (Gb/s)	trafficRate (MiB/s)
cbc-fab02-sw02:fc0/33	F_PORT	fab02 VF:128	cbc-esxi58.muccbc.h...	32	0.11
cbc-fab02-sw02:fc0/34	F_PORT	fab02 VF:128	redhook-w1.muccbc....	32	0.00
cbc-fab02-sw02:fc0/35	F_PORT	fab02 VF:128	cbc-demosrv02	32	0.06
cbc-fab02-sw02:fc0/38	F_PORT	fab02 VF:128	cbc-demosrv01	32	0.21
cbc-fab02-sw02:fc0/39	F_PORT	fab02 VF:128	grenada	32	0.24
cbc-fab02-sw02:fc0/40	F_PORT	fab02 VF:128	grenada	32	0.03

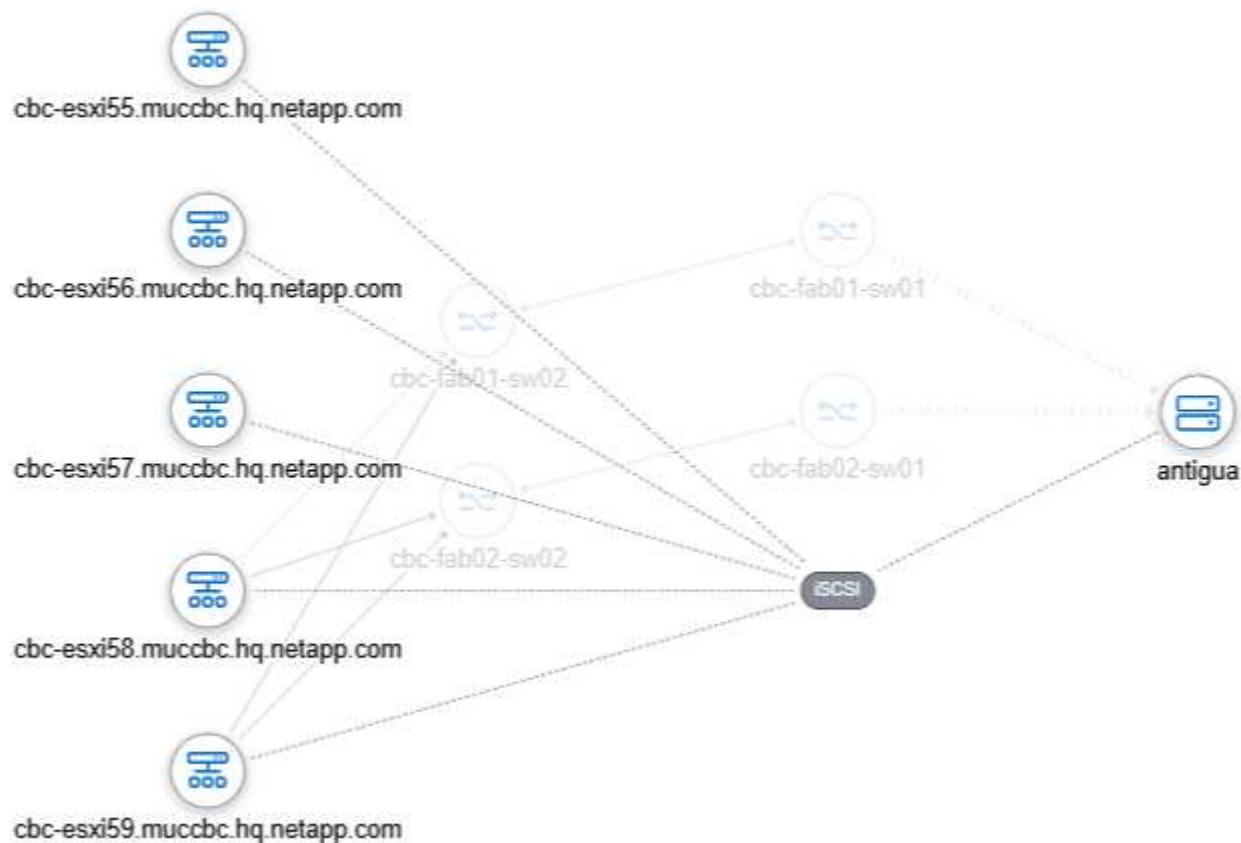
If your environment has different protocols, you can filter by iSCSI or FC:

Filter By Application All ▾ X Host All ▾ X

Protocol: All ▾ Connection Size: trafficRate.total ▾ View Network by: Automatic ▾

All
FC
iSCSI

If your environment includes iSCSI devices, hovering over the *iSCSI* object highlights the connections related to those relevant iSCSI devices.



Troubleshooting Tips

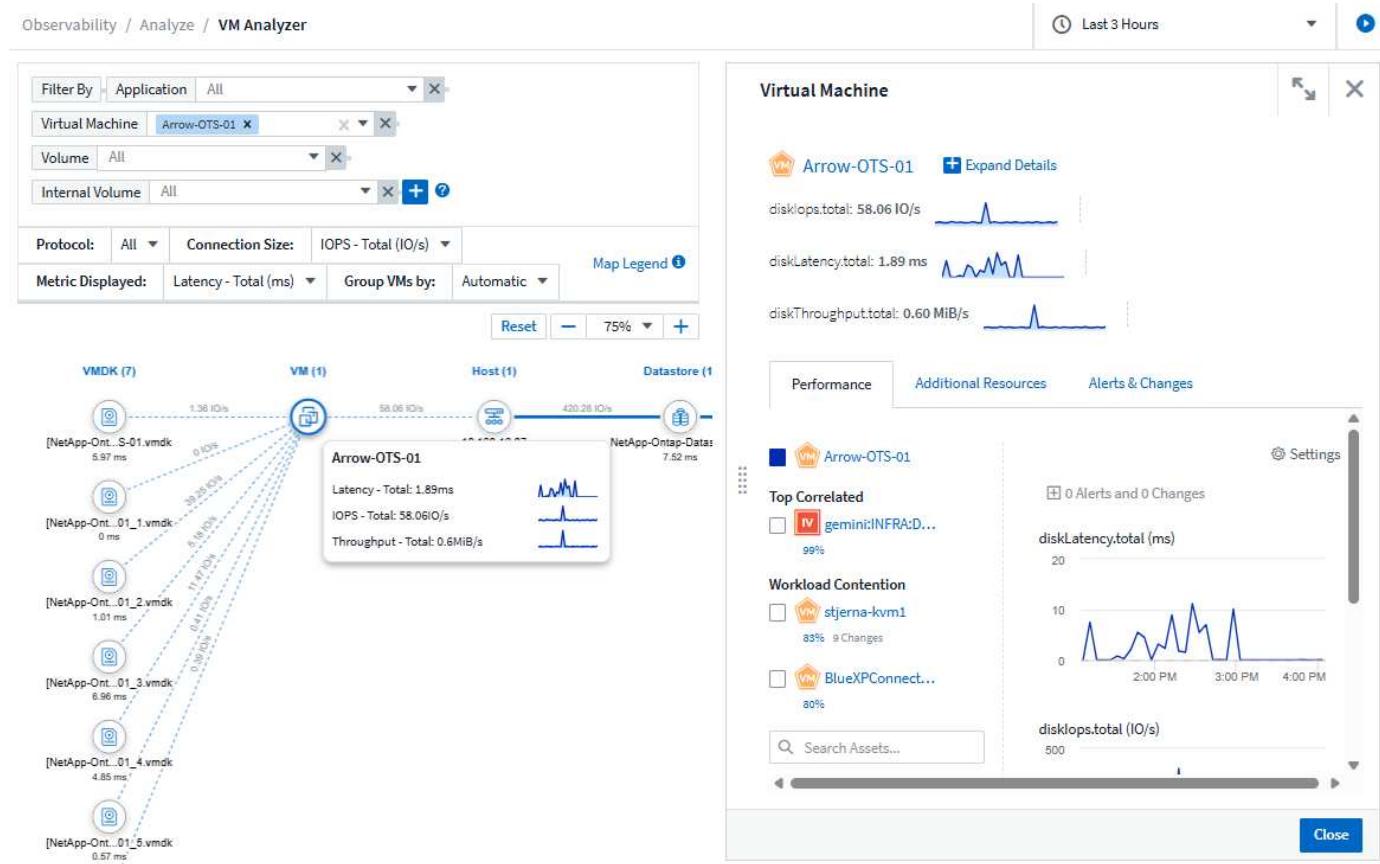
Some things to try if you encounter problems:

Problem:	Try this:
I see <0, =0 or >0 in the legend for metrics such as <i>trafficUtilization</i> or <i>trafficRate</i> .	This might happen in very rare case where the metric values are below two decimal places, like 0.000123. Expanding the time window might help with analyzing the metric more effectively.

VM Analyzer Overview

With DII's **VM Analyzer**, managing your virtual assets becomes simpler and more efficient. This powerful tool offers end-to-end visibility, mapping dependencies from VMDK/VM to Host to Datastore to Internal Volume/Volume to Storage.

By providing an interactive topology map, VM Analyzer enables you to pinpoint issues, understand changes, and enhance comprehension of data flow. Streamline VM management and increase your visibility into virtual workloads.



Explore connections among your assets

Select **Observability > Analyze > VM Analyzer** to view the VM Analyzer. Set a filter for Application, Virtual Machine, Volume, Internal Volume, or add your own filters. The map for the objects is displayed, showing connected objects. Hover over an object to view traffic metrics for those connections.



Most VM Analyzer filters (including those you may add) are contextual; when you select an object in one of these filters, the choices presented in the other filter drop-downs are refreshed in context with the selected object or objects.

Clicking on an object or group opens a slideout panel providing additional details about the object and its connections. The slideout panel displays a summary, which provides details about the selected object (for example, throughput or utilization, depending on the type of object), and charts showing metrics for the object such as latency or IOPS. Additional tabs allow you to explore related additional resources or changes and alerts. You can select to display metrics for Top Correlated or contending objects on the charts as well, if desired.

See it in Action

[Simplified troubleshooting with VM Analyzer \(Video\)](#)

Monitor Infrastructure Health

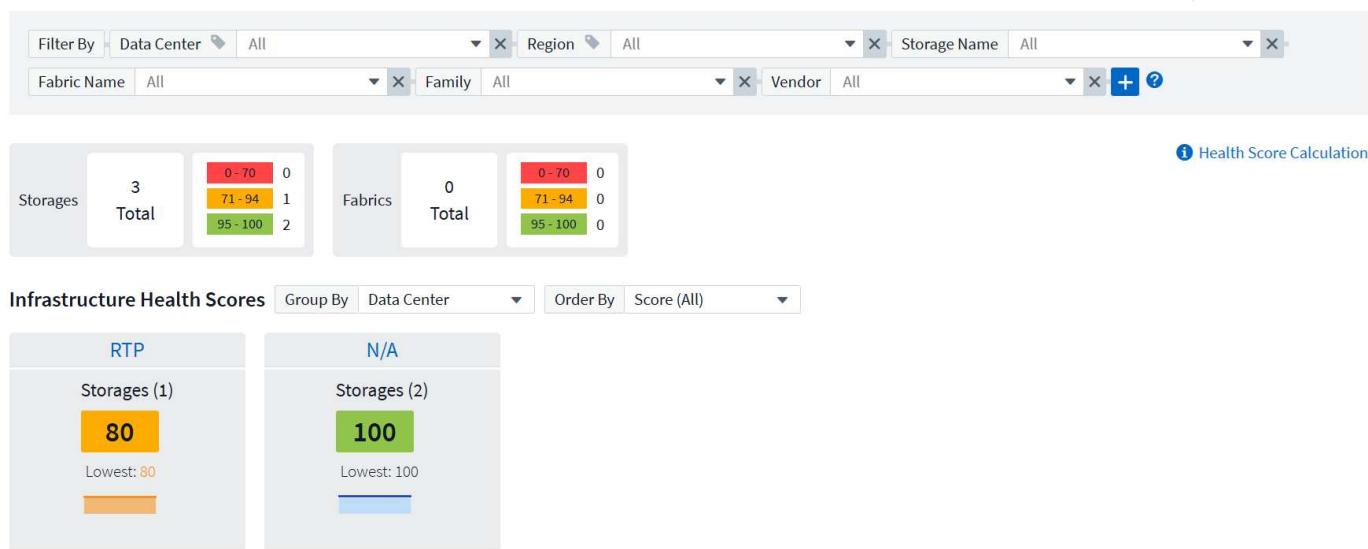
Data Infrastructure Insights provides comprehensive infrastructure health monitoring that tracks the performance, capacity, configuration, and component status of your storage environment. Health scores are calculated based on monitor alerts across these categories, giving you a unified view of system health and enabling proactive issue resolution.

The Infrastructure Health dashboard



Monitoring Infrastructure Health is a [Preview](#) feature and is subject to change.

Navigate to **Observability > Analyze** and select **Infrastructure Health**. The dashboard provides an overview of your system health, based on monitor alert categories and scores as explained below. Set filters at the top to narrow down the focus of your investigation.



By default, health scores are grouped by data center; you can select the grouping that works best for your session.

Configure Monitors to use for infrastructure health

Health scores are driven by alerts that are configured for inclusion in system health calculations.

When creating a monitor for an infrastructure object, you can choose whether to include alerts from the monitor in the calculations. At the bottom of the screen, expand the Advanced Configuration and select to *Include in Infrastructure Health Calculation*. Select a category to which to apply the calculation for the monitor:

- **Component Health** - fan failure, service processor offline, etc.
- **Performance Health** - high storage node utilization, abnormal spike in node latency, etc.
- **Capacity Health** - storage Pool capacity approaching full, insufficient space for LUN snapshot, etc.
- **Configuration Health** - cloud tier unreachable, SnapMirror relationship out of sync, etc.

Advanced Configuration

Associate to an Infrastructure Health Category (optional)

Include in Infrastructure Health Calculation

Select a Health Category

- Capacity
- Components
- Configuration
- Performance

Health scores explained

Scores are presented on a scale of 0 to 100, with 100 being at full health. Monitored infrastructure objects currently or recently experiencing issues will lower this score according to the following weighted averages:

- Components, Performance, or Capacity: 30% each

- Configuration: 10%

Health scores are impacted by alerts generated by the monitors you configured to include in infrastructure health calculations in the following ways:

- Critical alerts drop the health score by the *full* category weight
- Warning alerts drop the score by *half* the category weight.

If any categories are not reporting, the weighted average will adjust accordingly.

For example: 1 critical alert on Components (-30) and 1 warning alert on Performance (50% of 30 = -15) yield a health score of 55 (100 minus 45).

When alerts are resolved, these health score reductions gradually fade, and the score fully recovers within 2 hours.

Copyright information

Copyright © 2026 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.