



Scanning for and resolving storage failover interconnect link down conditions

Active IQ Unified Manager

NetApp
May 24, 2022

Table of Contents

- Scanning for and resolving storage failover interconnect link down conditions 1
- Performing corrective action for storage failover interconnect links down 2

Scanning for and resolving storage failover interconnect link down conditions


This workflow provides an example of how you might scan for, evaluate, and resolve downed storage failover interconnect link conditions. In this scenario, you are an administrator using Unified Manager to scan for storage failover risks before starting an ONTAP version upgrade on your nodes.

What you'll need

You must have the Operator, Application Administrator, or Storage Administrator role.

If storage failover interconnections between HA pair nodes fail during a nondisruptive upgrade attempt, the upgrade fails. Therefore, common practice is for the administrator to monitor and confirm storage failover reliability on the cluster nodes targeted for upgrade before the start of an upgrade.

Steps

1. In the left navigation pane, click **Event Management**.
2. In the **Event Management** inventory page, select **Active Availability events**.
3. At the top of the **Event Management** inventory page **Name** column, click  and enter `*failover` in the text box to limit the event to display to storage failover-related events.

All past events related to storage failover conditions are displayed.

In this scenario, the Unified Manager displays the event, "Storage Failover Interconnect One or More Links Down" in its Availability Incidents section.

4. If one or more events related to storage failover are displayed on the **Event Management** inventory page, perform the following steps:
 - a. Click the event title link to display event details for that event.

In this example, you click the event title "Storage Failover Interconnect One or More Links Down".

The Event details page for that event is displayed.

- b. On the Event details page, you can perform one or more of the following tasks:
 - Review the error message in the Cause field and evaluate the issue.
 - Assign the event to an administrator.
 - Acknowledge the event.

Related information

[Event details page](#)

[Unified Manager user roles and capabilities](#)

Performing corrective action for storage failover interconnect links down

When you display the Event details page of a storage failover-related event, you can review the summary information of the page to determine the urgency of the event, possible cause of the issue, and possible resolution to the issue.

What you'll need

You must have the Operator, Application Administrator, or Storage Administrator role.

In this example scenario, the event summary provided on the Event details page contains the following information about the storage failover interconnect link down condition:

```
Event: Storage Failover Interconnect One or More Links Down
```

Summary

```
Severity: Warning
```

```
State: New
```

```
Impact Level: Risk
```

```
Impact Area: Availability
```

```
Source: aardvark
```

```
Source Type: Node
```

```
Acknowledged By:
```

```
Resolved By:
```

```
Assigned To:
```

```
Cause: At least one storage failover interconnected link  
       between the nodes aardvark and bonobo is down.  
       RDMA interconnect is up (Link0 up, Link1 down)
```

The example event information indicates that a storage failover interconnect link, Link1, between HA pair nodes aardvark and bonobo is down, but that Link0 between Apple and Boy is active. Because one link is active, the remote dynamic memory access (RDMA) is still functioning and a storage failover job can still succeed.

However, to ensure against both links failing and storage failover protection being totally disabled, you decide to further diagnose the reason for Link1 going down.

Steps

1. From the **Event** details page, you can click the link to the event specified in the Source field to obtain further details of other events that might be related to the storage failover interconnection link down condition.

In this example, the source of the event is the node named aardvark. Clicking that node name displays the HA Details for the affected HA pair, aardvark and bonobo, on the Nodes tab of the Cluster / Health details page, and displays other events that recently occurred on the affected HA pair.

2. Review the **HA Details** for more information relating to the event.

In this example, the relevant information is in the Events table. The table shows the “Storage Failover Connection One or More Link Down” event, the time the event was generated, and, again, the node from which this event originated.

Using the node location information in the HA Details, request or personally complete a physical inspection and repair of the storage failover issue on the affected HA pair nodes.

Related information

[Event details page](#)

[Unified Manager user roles and capabilities](#)

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.

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.