



Scanning for and resolving storage failover interconnect link down conditions

OnCommand Unified Manager 9.5

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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.

Before you begin

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


About this task

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. To check for recent availability events related to storage failover issues, check the Availability Incidents section and the Availability Risks listings on the **Dashboards/Overview** page.
2. To check further for all availability events related to storage failover issues, perform the following steps:
 - a. Click the **Availability Incidents** link on the **Dashboards/Overview** page.

The Events inventory page displays all events on the monitored clusters.

- b. On the **Events** inventory page, select the options **Incident** and **Risk** in the Filter column.
- c. At the top of the **Events** inventory page Names 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.

3. If one or more events related to storage failover are displayed either on the **Dashboards/Overview** page or on the **Events** 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. [Performing corrective action for storage failover interconnect links down](#)

- Assign the event to an administrator. [Assigning events](#)
- Acknowledge the event. [Acknowledging and resolving events](#)

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.

Before you begin

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

About this task

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 Health/Cluster 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.

After you finish

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.

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