



Fixing ONTAP issues directly from Unified Manager

Active IQ Unified Manager 9.8

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Fixing ONTAP issues directly from Unified Manager

You can fix certain ONTAP issues directly from the Unified Manager user interface instead of having to use ONTAP System Manager or the ONTAP CLI.

A feature called “Management Actions” provides fixes to a number of ONTAP issues that have triggered Unified Manager events. Management Actions are available from the Dashboard, from the Event details page, and from the Workload Analysis selection on the left-navigation menu.

There are certain issues that Unified Manager can diagnose thoroughly and provide a single resolution. When available, those resolutions are displayed in Management Actions with a **Fix It** button. Click the **Fix It** button to fix the issue. You must have the Application Administrator or Storage Administrator role.

Unified Manager sends ONTAP commands to the cluster to make the requested fix. When the fix is complete the event is obsoleted.

Some management actions enable you to fix the same issue on multiple storage objects using the **Fix All** button. For example, there may be 5 volumes that have the “Volume Space Full” event that could be resolved by clicking the **Fix All** management action for “Enable volume autogrow”. One click enables you to fix this issue on 5 volumes.

What options do I have when I see the Fix It or Fix All button

The **Fix It** button and **Fix All** button enable you to fix issues that Unified Manager has been notified about through an event.

We recommend that you click the **Fix It** or **Fix All** button to fix an issue when it is available. However, if you are not sure that you want to resolve the issue as recommended by Unified Manager, you can perform the following actions:

What do you want to do?	Action
Have Unified Manager fix the issue on all identified objects.	Click the Fix All button.
Do not fix the issue for any of the identified objects at this time and hide this management action until the event is raised again.	Click the down arrow and click Dismiss All .
Fix the issue on only some of the identified objects.	Click the name of the management action to expand the list and show all individual Fix It actions. Then follow the steps for fixing or dismissing individual management actions.

What do you want to do?	Action
Have Unified Manager fix the issue.	Click the Fix It button.

What do you want to do?	Action
Do not fix the issue at this time and hide this management action until the event is raised again.	Click the down arrow and click Dismiss .
Display the details for this event so you can better understand the issue.	<ul style="list-style-type: none"> • Click the Fix It button and review the fix that will be applied in the resulting dialog box. • Click the down arrow and click View Event Detail to display the Event details page. <p>Then click Fix It from either of these resulting pages if you want to fix the issue.</p>
Display the details for this storage object so you can better understand the issue.	Click the name of the storage object to display details in either the Performance Explorer or Health Details page.

In some cases the fix is reflected in the next 15 minute configuration poll. In other cases it can take up to many hours for the configuration change to be verified and for the event to be obsoleted.

To see the list of completed and in progress management actions, click  in the top of the Management Actions panel and select **Completed** or **In Progress**.

Fix All operations run in a serial fashion, so when you view the **In Progress** panel some objects will have the Status **In Progress** whereas others will have the Status **Scheduled**; meaning they are still waiting to be implemented.

Viewing the status of management actions you have chosen to fix

You can view the status of all management actions that you have chosen to fix in the Management Actions page. Most actions are shown as **Completed** fairly quickly after Unified Manager sends the ONTAP command to the cluster. However, some actions, such as moving a volume, can take a longer period of time.

About this task

There are three views available on the Management Actions page:

- **Completed** shows both management actions that completed successfully and those that have failed. **Failed** actions provide a reason for the failure so that you can address the issue manually.
- **In Progress** shows both those management actions that are being implemented, and those that are scheduled to be implemented.
- **Recommended** shows all the management actions that are currently active for all monitored clusters.

Steps

1. Click  in the top of the **Management Actions** panel and select the View you want to see.

The Management Actions page is displayed

2. You can click the caret icon next to the management action in the **Description** field to see details about the issue and the command that is being used to fix the issue.
3. To view any actions that **failed**, sort on the **Status** column in the **Completed** View. You can use the **Filter** tool for this same purpose.
4. If you want to view more information about a Failed management action, or if you decide that you want to fix a Recommended management action, you can click **View Event Detail** from the expanded area after you click the caret icon next to the management action. A **Fix It** button is available from that page.

What ONTAP issues can Unified Manager fix

This table describes the ONTAP issues that Unified Manager can resolve directly from the Unified Manager user interface by clicking the **Fix It** or **Fix All** button.

Event Name and Description	Management Action	“Fix It” Operation
Volume Space Full The volume is almost out of space and it has breached the capacity full threshold. This threshold is set by default to 90% of the volume size.	Enable volume autogrow	Unified Manager determines that volume autogrow is not configured for this volume, so it enables this feature so the volume will grow in capacity when needed.
Inodes Full This volume has run out of inodes and cannot accept any new files.	Increase number of inodes on volume	Increases the number of inodes on the volume by 2 percent.
Storage Tier Policy Mismatch Detected The volume has lots of inactive data and the current tiering policy is set to “snapshot-only” or “none”.	Enable automatic cloud tiering	Since the volume already resides on a FabricPool, it changes the tiering policy to “auto” so that inactive data is moved to the lower cost cloud tier.
Storage Tier Mismatch Detected The volume has lots of inactive data, but it does not reside on a cloud-enabled storage tier (FabricPool).	Change volumes’ storage tier	Moves the volume to cloud-enabled storage tier and sets the tiering policy to “auto” to move inactive data to the cloud tier.

Event Name and Description	Management Action	“Fix It” Operation
<p>Audit Log Disabled</p> <p>The audit log is not enabled for the storage VM</p>	<p>Enable audit logging for the storage VM</p>	<p>Enables audit logging on the storage VM.</p> <p>Note that the storage VM must already have either a local or remote audit log location configured.</p>
<p>Login Banner Disabled</p> <p>The login banner for the cluster should be enabled to increase security by making access restrictions clear.</p>	<p>Set login banner for the cluster</p>	<p>Sets the cluster login banner to “Access restricted to authorized users”.</p>
<p>Login Banner Disabled</p> <p>The login banner for the storage VM should be enabled to increase security by making access restrictions clear.</p>	<p>Set login banner for the storage VM</p>	<p>Sets the storage VM login banner to “Access restricted to authorized users”.</p>
<p>SSH is Using Insecure Ciphers</p> <p>Ciphers with the suffix “-cbc” are considered insecure.</p>	<p>Remove insecure ciphers from the cluster</p>	<p>Removes the insecure ciphers — such as aes192-cbc and aes128-cbc — from the cluster.</p>
<p>SSH is Using Insecure Ciphers</p> <p>Ciphers with the suffix “-cbc” are considered insecure.</p>	<p>Remove insecure ciphers from the storage VM</p>	<p>Removes the insecure ciphers — such as aes192-cbc and aes128-cbc — from the storage VM.</p>
<p>AutoSupport HTTPS transport disabled</p> <p>The transport protocol used to send AutoSupport messages to technical support should be encrypted.</p>	<p>Set HTTPS as the transport protocol for AutoSupport messages</p>	<p>Sets HTTPS as the transport protocol for AutoSupport messages on the cluster.</p>
<p>Cluster Load Imbalance Threshold Breached</p> <p>Indicates that the load is imbalanced among the nodes in the cluster. This event is generated when the performance capacity used variance is more than 30% between nodes.</p>	<p>Balance cluster workloads</p>	<p>Unified Manager identifies the best volume to move from one node to the other to reduce the imbalance, and then moves the volume.</p>

Event Name and Description	Management Action	“Fix It” Operation
<p>Cluster Capacity Imbalance Threshold Breached</p> <p>Indicates that the capacity is imbalanced among the aggregates in the cluster. This event is generated when the used capacity variance is more than 70% between aggregates.</p>	<p>Balance cluster capacity</p>	<p>Unified Manager identifies the best volume to move from one aggregate to another to reduce the imbalance, and then moves the volume.</p>
<p>Performance Capacity Used Threshold Breached</p> <p>Indicates that the load on the node could become over utilized if you don't reduce the utilization by one or more highly active workloads. This event is generated when the node performance capacity used value is more than 100% for more than 12 hours.</p>	<p>Limit high load on node</p>	<p>Unified Manager identifies the volume with the highest IOPS and it applies a QoS policy using the historical expected and peak IOPS levels to reduce the load on the node.</p>
<p>Dynamic Event Warning Threshold Breached</p> <p>Indicates that the node is already operating in an overloaded state due to the abnormally high load of some of the workloads.</p>	<p>Reduce overload in node</p>	<p>Unified Manager identifies the volume with the highest IOPS and it applies a QoS policy using the historical expected and peak IOPS levels to reduce the load on the node.</p>
<p>Takeover is not possible</p> <p>Failover is currently disabled, so access to the node's resources during an outage or reboot would be lost until the node became available again.</p>	<p>Enable node failover</p>	<p>Unified Manager sends the appropriate command to enable failover on all nodes in the cluster.</p>
<p>Option Cf.takeover.on_panic is Configured OFF</p> <p>The nodeshell option “cf.takeover.on_panic” is set to off, which could cause an issue on HA-configured systems.</p>	<p>Enable takeover on panic</p>	<p>Unified Manager sends the appropriate command to the cluster to change this setting to on.</p>

Event Name and Description	Management Action	“Fix It” Operation
<p>Disable nodeshell option snapmirror.enable</p> <p>The old nodeshell option “snapmirror.enable” is set to on, which could cause an issue during boot after upgrading to ONTAP 9.3 or greater.</p>	<p>Set snapmirror.enable option to off</p>	<p>Unified Manager sends the appropriate command to the cluster to change this setting to off.</p>
<p>Telnet enabled</p> <p>Indicates a potential security issue because Telnet is insecure and passes data in an unencrypted manner.</p>	<p>Disable Telnet</p>	<p>Unified Manager sends the appropriate command to the cluster to disable Telnet.</p>

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