

What Event Management System events are

Active IQ Unified Manager

NetApp May 23, 2022

Table of Contents

V	/hat Event Management System events are	1
	EMS events that are added automatically to Unified Manager	2
	Subscribing to ONTAP EMS events	5

What Event Management System events are

The Event Management System (EMS) collects event data from different parts of the ONTAP kernel and provides event forwarding mechanisms. These ONTAP events can be reported as EMS events in Unified Manager. Centralized monitoring and management eases configuration of critical EMS events and alert notifications based on these EMS events.

The Unified Manager address is added as a notification destination to the cluster when you add the cluster to Unified Manager. An EMS event is reported as soon as the event occurs in the cluster.

There are two methods for receiving EMS events in Unified Manager:

- A certain number of important EMS events are reported automatically.
- You can subscribe to receive individual EMS events.

The EMS events that are generated by Unified Manager are reported differently depending on the method in which the event was generated:

Functionality	Automatic EMS messages	Subscribed EMS messages
Available EMS events	Subset of EMS events	All EMS events
EMS message name when triggered	Unified Manager event name (converted from EMS event name)	Non-specific in the format "Error EMS received". The detailed message provides the dot-notation format of the actual EMS event
Messages received	As soon as the cluster has been discovered	After adding each required EMS event to Unified Manager, and after the next 15 minute polling cycle
Event life cycle	Same as other Unified Manager events: New, Acknowledged, Resolved, and Obsolete states	The EMS event is made obsolete after the cluster is refreshed, after 15 minutes, from when the event was created
Captures events during Unified Manager downtime	Yes, when the system starts up it communicates with each cluster to acquire missing events	No
Event details	Suggested corrective actions are imported directly from ONTAP to provide consistent resolutions	Corrective actions not available in Event Details page



Some of the new automatic EMS events are Informational events that indicate that a previous event has been resolved. For example, the "FlexGroup Constituents Space Status All OK" Informational event indicates that the "FlexGroup Constituents Have Space Issues" Error event has been resolved. Informational events cannot be managed using the same event life cycle as other event severity types, however, the event is obsoleted automatically if the same volume receives another "Space Issues" Error event.

EMS events that are added automatically to Unified Manager

The following ONTAP EMS events are added automatically to Unified Manager. These events will be generated when triggered on any cluster that Unified Manager is monitoring.

The following EMS events are available when monitoring clusters running ONTAP 9.5 or greater software:

Unified Manager Event name	EMS Event name	Affected resource	Unified Manager severity
Cloud Tier Access Denied for Aggregate Relocation	arl.netra.ca.check.failed	Aggregate	Error
Cloud Tier Access Denied for Aggregate Relocation During Storage Failover	gb.netra.ca.check.failed	Aggregate	Error
FabricPool Mirror Replication Resync Completed	wafl.ca.resync.complete	Cluster	Error
FabricPool Space Nearly Full	fabricpool.nearly.full	Cluster	Error
NVMe-oF Grace Period Started	nvmf.graceperiod.start	Cluster	Warning
NVMe-oF Grace Period Active	nvmf.graceperiod.active	Cluster	Warning
NVMe-oF Grace Period Expired	nvmf.graceperiod.expired	Cluster	Warning
LUN Destroyed	lun.destroy	LUN	Information
Cloud AWS MetaDataConnFail	cloud.aws.metadataConn Fail	Node	Error

Unified Manager Event name	EMS Event name	Affected resource	Unified Manager severity
Cloud AWS IAMCredsExpired	cloud.aws.iamCredsExpir ed	Node	Error
Cloud AWS IAMCredsInvalid	cloud.aws.iamCredsInvali d	Node	Error
Cloud AWS IAMCredsNotFound	cloud.aws.iamCredsNotF ound	Node	Error
Cloud AWS IAMCredsNotInitialized	cloud.aws.iamNotInitialize d	Node	Information
Cloud AWS IAMRoleInvalid	cloud.aws.iamRoleInvalid	Node	Error
Cloud AWS IAMRoleNotFound	cloud.aws.iamRoleNotFou nd	Node	Error
Cloud Tier Host Unresolvable	objstore.host.unresolvable	Node	Error
Cloud Tier Intercluster LIF Down	objstore.interclusterlifDow n	Node	Error
Request Mismatch Cloud Tier Signature	osc.signatureMismatch	Node	Error
One of NFSv4 Pools Exhausted	Nblade.nfsV4PoolExhaust	Node	Critical
QoS Monitor Memory Maxed	qos.monitor.memory.max ed	Node	Error
QoS Monitor Memory Abated	qos.monitor.memory.abat ed	Node	Information
NVMeNS Destroy	NVMeNS.destroy	Namespace	Information
NVMeNS Online	NVMeNS.offline	Namespace	Information
NVMeNS Offline	NVMeNS.online	Namespace	Information
NVMeNS Out of Space	NVMeNS.out.of.space	Namespace	Warning

Unified Manager Event name	EMS Event name	Affected resource	Unified Manager severity
Synchronous Replication Out Of Sync	sms.status.out.of.sync	SnapMirror relationship	Warning
Synchronous Replication Restored	sms.status.in.sync	SnapMirror relationship	Information
Synchronous Replication Auto Resync Failed	sms.resync.attempt.failed	SnapMirror relationship	Error
Many CIFS Connections	Nblade.cifsManyAuths	SVM	Error
Max CIFS Connection Exceeded	Nblade.cifsMaxOpenSam eFile	SVM	Error
Max Number of CIFS Connection Per User Exceeded	Nblade.cifsMaxSessPerU srConn	SVM	Error
CIFS NetBIOS Name Conflict	Nblade.cifsNbNameConfli ct	SVM	Error
Attempts to Connect Nonexistent CIFS Share	Nblade.cifsNoPrivShare	SVM	Critical
CIFS Shadow Copy Operation Failed	cifs.shadowcopy.failure	SVM	Error
Virus Found By AV Server	Nblade.vscanVirusDetect ed	SVM	Error
No AV Server Connection for Virus Scan	Nblade.vscanNoScanner Conn	SVM	Critical
No AV Server Registered	Nblade.vscanNoRegdSca nner	SVM	Error
No Responsive AV Server Connection	Nblade.vscanConnInactiv e	SVM	Information
AV Server too Busy to Accept New Scan Request	Nblade.vscanConnBackPr essure	SVM	Error
Unauthorized User Attempt to AV Server	Nblade.vscanBadUserPriv Access	SVM	Error

Unified Manager Event name	EMS Event name	Affected resource	Unified Manager severity
FlexGroup Constituents Have Space Issues	flexgroup.constituents.hav e.space.issues	Volume	Error
FlexGroup Constituents Space Status All OK	flexgroup.constituents.spa ce.status.all.ok	Volume	Information
FlexGroup Constituents Have Inodes Issues	flexgroup.constituents.hav e.inodes.issues	Volume	Error
FlexGroup Constituents Inodes Status All OK	flexgroup.constituents.ino des.status.all.ok	Volume	Information
Volume Logical Space Nearly Full	monitor.vol.nearFull.inc.sa v	Volume	Warning
Volume Logical Space Full	monitor.vol.full.inc.sav	Volume	Error
Volume Logical Space Normal	monitor.vol.one.ok.inc.sav	Volume	Information
WAFL Volume AutoSize Fail	wafl.vol.autoSize.fail	Volume	Error
WAFL Volume AutoSize Done	wafl.vol.autoSize.done	Volume	Information
WAFL READDIR File Operation Timeout	wafl.readdir.expired	Volume	Error

Subscribing to ONTAP EMS events

You can subscribe to receive Event Management System (EMS) events that are generated by systems that are installed with ONTAP software. A subset of EMS events are reported to Unified Manager automatically, but additional EMS events are reported only if you have subscribed to these events.

What you'll need

Do not subscribe to EMS events that are already added to Unified Manager automatically as this can cause confusion when receiving two events for the same issue.

You can subscribe to any number of EMS events. All the events to which you subscribe are validated, and only the validated events are applied to the clusters you are monitoring in Unified Manager. The *ONTAP 9 EMS Event Catalog* provides detailed information for all of the EMS messages for the specified version of ONTAP 9

software. Locate the appropriate version of the *EMS Event Catalog* from the ONTAP 9 Product Documentation page for a list of the applicable events.

ONTAP 9 Product Library

You can configure alerts for the ONTAP EMS events to which you subscribe, and you can create custom scripts to be executed for these events.



If you do not receive the ONTAP EMS events to which you have subscribed, there might be an issue with the DNS configuration of the cluster which is preventing the cluster from reaching the Unified Manager server. To resolve this issue, the cluster administrator must correct the DNS configuration of the cluster, and then restart Unified Manager. Doing so will flush the pending EMS events to the Unified Manager server.

Steps

- 1. In the left navigation pane, click **Storage Management > Event Setup**.
- 2. In the Event Setup page, click the **Subscribe to EMS events** button.
- 3. In the Subscribe to EMS events dialog box, enter the name of the ONTAP EMS event to which you want to subscribe.

To view the names of the EMS events to which you can subscribe, from the ONTAP cluster shell, you can use the event route show command (prior to ONTAP 9) or the event catalog show command (ONTAP 9 or later).

How to configure and receive alerts from ONTAP EMS Event Subscription in Active IQ Unified Manager

4. Click Add.

The EMS event is added to the Subscribed EMS events list, but the Applicable to Cluster column displays the status as "Unknown" for the EMS event that you added.

- 5. Click **Save and Close** to register the EMS event subscription with the cluster.
- 6. Click Subscribe to EMS events again.

The status "Yes" appears in the Applicable to Cluster column for the EMS event that you added.

If the status is not "Yes", check the spelling of the ONTAP EMS event name. If the name is entered incorrectly, you must remove the incorrect event, and then add the event again.

When the ONTAP EMS event occurs, the event is displayed on the Events page. You can select the event to view details about the EMS event in the Event details page. You can also manage the disposition of the event or create alerts for the event.

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