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Deciding whether to use the EMS Configuration Express Guide

This guide describes how to quickly configure ONTAP 9 to send important EMS (Event Management System) event notifications directly to an email address, a syslog server, or a Simple Management Network Protocol (SNMP) traphost so that you are immediately notified of system issues that require prompt attention.

To monitor the most important activities in your system, you must monitor the important EMS events.

Because important event notifications are not enabled by default, you must configure the EMS to send notifications to either an email address, a syslog server, or an SNMP traphost.

Use this guide to configure EMS event notifications for important events if the following are true:

- You are implementing one of the following scenarios:
  - You are setting up a new system running ONTAP 9 that does not have EMS configured.
  - You have an existing system running ONTAP 9 that does not have EMS configured.
  - You are upgrading to ONTAP 9 that does not have EMS configured.
  - You have just completed a transition from Data ONTAP operating in 7-Mode to ONTAP 9.
- You want to use best practices, not explore every available option.
- You do not want to read a lot of conceptual background.

If this guide is not suitable for your situation, you should see the following documentation instead:

- **System administration**
  Describes general system administration of a cluster, including the command-line interface (CLI), cluster access, node management, storage virtual machine (SVM) setup, user account management, event monitoring, and performance evaluation.

**Note:** If the AutoSupport **noteto** parameter is configured with email addresses, they are automatically copied into EMS notification destinations when upgrading to ONTAP 9. A new EMS notification is also created that maps the **important-events** filter to these addresses. As a result, you will start receiving two email notifications for each callhome event until you remove the email addresses from the AutoSupport **noteto** parameter. You will also start receiving email notifications about other important events, in addition to the AutoSupport events originally configured.
EMS configuration workflow

You must configure important EMS event notifications to be sent either as email, forwarded to a syslog server, or forwarded to an SNMP traphost. This helps you to avoid system disruptions by taking corrective actions in a timely manner.

Deciding where to send important event notifications

Before you configure important EMS event notifications, you need to decide whether to send the notifications to an email address, a syslog server, or an SNMP traphost.

About this task

If your environment already contains a syslog server for aggregating the logged events from other systems, such as servers and applications, then it is easier to use that syslog server also for important event notifications from storage systems.

If your environment does not already contain a syslog server, then it is easier to use email for important event notifications.

If you already forward event notifications to an SNMP traphost, then you might want to monitor that traphost for important events.

- Set EMS to send event notifications.
### Configuring important EMS events to send email notifications

To receive email notifications of the most important events, you must configure the EMS to send email messages for events that signal important activity.

**Before you begin**

DNS must be configured on the cluster to resolve the email addresses.

**About this task**

You can perform this task any time the cluster is running by entering the commands on the ONTAP command line.

**Steps**

1. Configure the event SMTP mail server settings:
   ```bash
   event config modify -mail-server mailhost.your_domain -mail-from cluster_admin@your_domain
   ```

2. Create an email destination for event notifications:
   ```bash
   event notification destination create -name storage-admins -email your_email@your_domain
   ```

3. Configure the important events to send email notifications:
   ```bash
   event notification create -filter-name important-events -destinations storage_admins
   ```

### Configuring important EMS events to forward notifications to a syslog server

To log notifications of the most severe events on a syslog server, you must configure the EMS to forward notifications for events that signal important activity.

**Before you begin**

DNS must be configured on the cluster to resolve the syslog server name.

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About this task

If your environment does not already contain a syslog server for event notifications, you must first create one. If your environment already contains a syslog server for logging events from other systems, then you might want to use that one for important event notifications.

You can perform this task any time the cluster is running by entering the commands on the ONTAP command line.

Steps

1. Create a syslog server destination for important events:
   ```bash
event notification destination create -name syslog-ems -syslog syslog-server-address
   ```
2. Configure the important events to forward notifications to the syslog server:
   ```bash
event notification create -filter-name important-events -destinations syslog-ems
   ```

Configuring SNMP traphosts to receive event notifications

To receive event notifications on an SNMP traphost, you must configure a traphost.

Before you begin

- SNMP and SNMP traps must be enabled on the cluster.
  
  **Note:** SNMP and SNMP traps are enabled by default.

- DNS must be configured on the cluster to resolve the traphost names.

About this task

If you do not already have an SNMP traphost configured to receive event notifications (SNMP traps), you must add one.

You can perform this task any time the cluster is running by entering the commands on the ONTAP command line.

Step

1. If your environment does not already have an SNMP traphost configured to receive event notifications, add one:
   ```bash
   system snmp traphost add -peer-address snmp_traphost_name
   ```

   All event notifications that are supported by SNMP by default are forwarded to the SNMP traphost.
Where to find additional information

There are other reference manuals to help you configure EMS events.

The following documentation provides more detailed information:

- **System administration**
  Describes general system administration of a cluster, including the CLI interface, cluster access, node management, storage virtual machine (SVM, formerly known as Vserver) setup, user account management, event monitoring, and performance evaluation.

- **SNMP express configuration**
  Describes how to configure SNMP at the cluster management level, how to add communities, security users, and traphosts, and how to test the SNMP communication.

- **NetApp Technical Report 4220: SNMP Support in Data ONTAP**
  Describes SNMP support in ONTAP, including a detailed comparison of SNMP support for Data ONTAP operating in 7-Mode and ONTAP, and a list of all default events that are supported by SNMP traps.

- **ONTAP concepts**
  Describes conceptual information about SNMP support in ONTAP, including a detailed comparison of SNMP support for Data ONTAP operating in 7-Mode and ONTAP, and a list of all default events that are supported by SNMP traps.

- **NetApp Documentation: Product Library A-Z**
  Lists all of the NetApp products. Select ONTAP 9 and look in the More Resources section to find the appropriate version of the ONTAP 9 EMS Event Catalog. The EMS event catalog provides detailed information for all of the EMS messages for the specified version of ONTAP 9 software.
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