



# **Update deprecated EMS event mapping**

## **ONTAP 9**

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# Update deprecated EMS event mapping

## EMS event mapping models

Prior to ONTAP 9.0, EMS events could only be mapped to event destinations based on event name pattern matching. The ONTAP command sets (`event destination`, `event route`) that use this model continue to be available in the latest versions of ONTAP, but they have been deprecated starting with ONTAP 9.0.

Beginning with ONTAP 9.0, the best practice for ONTAP EMS event destination mapping is to use the more scalable event filter model in which pattern matching is done on multiple fields, using the `event filter`, `event notification`, and `event notification destination` command sets.

If your EMS mapping is configured using the deprecated commands, you should update your mapping to use the `event filter`, `event notification`, and `event notification destination` command sets.

There are two types of event destinations:

1. **System-generated destinations:** There are five system-generated event destinations (created by default)

- `allevents`
- `asup`
- `criticals`
- `pager`
- `traphost`

Some of the system-generated destinations are for special purpose. For example, the `asup` destination routes `callhome.*` events to the AutoSupport module in ONTAP to generate AutoSupport messages.

2. **User-created destinations:** These are manually created using the `event destination create` command.

```
cluster-1::event*> destination show
```

| Name   | Mail Dest. | SNMP Dest. | Syslog Dest. |
|--------|------------|------------|--------------|
| Params |            |            |              |

|           |       |       |       |
|-----------|-------|-------|-------|
| -----     | ----- | ----- | ----- |
| -----     |       |       |       |
| allevents | -     | -     | -     |
| false     |       |       |       |
| asup      | -     | -     | -     |
| false     |       |       |       |
| criticals | -     | -     | -     |
| false     |       |       |       |
| pager     | -     | -     | -     |
| false     |       |       |       |
| traphost  | -     | -     | -     |
| false     |       |       |       |

5 entries were displayed.

+

```
cluster-1::event*> destination create -name test -mail test@xyz.com
```

This command is deprecated. Use the "event filter", "event notification destination" and "event notification" commands, instead.

+

```
cluster-1::event*> destination show
```

+

| Name   | Mail Dest. | SNMP Dest. | Syslog Dest. |
|--------|------------|------------|--------------|
| Params |            |            |              |

|           |              |       |       |
|-----------|--------------|-------|-------|
| -----     | -----        | ----- | ----- |
| -----     |              |       |       |
| allevents | -            | -     | -     |
| false     |              |       |       |
| asup      | -            | -     | -     |
| false     |              |       |       |
| criticals | -            | -     | -     |
| false     |              |       |       |
| pager     | -            | -     | -     |
| false     |              |       |       |
| test      | test@xyz.com | -     | -     |
| false     |              |       |       |
| traphost  | -            | -     | -     |
| false     |              |       |       |

6 entries were displayed.

In the deprecated model, EMS events are individually mapped to a destination using the `event route add-destinations` command.

```
cluster-1::event*> route add-destinations -message-name raid.aggr.*
-destinations test
This command is deprecated. Use the "event filter", "event notification
destination" and "event notification" commands, instead.
4 entries were acted on.
```

```
cluster-1::event*> route show -message-name raid.aggr.*
```

| Time                       | Severity      | Destinations | Freq | Threshd |
|----------------------------|---------------|--------------|------|---------|
| raid.aggr.autoGrow.abort   | NOTICE        | test         | 0    | 0       |
| raid.aggr.autoGrow.success | NOTICE        | test         | 0    | 0       |
| raid.aggr.lock.conflict    | INFORMATIONAL | test         | 0    | 0       |
| raid.aggr.log.CP.count     | DEBUG         | test         | 0    | 0       |

4 entries were displayed.

The new, more scalable EMS event notifications mechanism is based on event filters and event notification destinations. Refer to the following KB article for detailed information on the new event notification mechanism:

- [Overview of Event Management System for ONTAP 9](#)

Legacy routing based model



Event notification based model



## Update EMS event mapping from deprecated ONTAP commands

If your EMS event mapping is currently configured using the deprecated ONTAP command sets (`event destination`, `event route`), you should follow this procedure to update your mapping to use the `event filter`, `event notification`, and `event notification destination` command sets.

### Steps

1. List all the event destinations in the system using the `event destination show` command.

```
cluster-1::event*> destination show
```

Hide

| Name | Mail Dest. | SNMP Dest. | Syslog Dest. |
|------|------------|------------|--------------|
|------|------------|------------|--------------|

Params

|           |              |   |   |
|-----------|--------------|---|---|
| allevents | -            | - | - |
| false     |              |   |   |
| asup      | -            | - | - |
| false     |              |   |   |
| criticals | -            | - | - |
| false     |              |   |   |
| pager     | -            | - | - |
| false     |              |   |   |
| test      | test@xyz.com | - | - |
| false     |              |   |   |
| traphost  | -            | - | - |
| false     |              |   |   |

6 entries were displayed.

2. For each destination, list the events being mapped to it using the `event route show -destinations <destination name>` command.

```
cluster-1::event*> route show -destinations test
```

| Time                       | Severity      | Destinations | Freq | Threshd |
|----------------------------|---------------|--------------|------|---------|
| raid.aggr.autoGrow.abort   | NOTICE        | test         | 0    | 0       |
| raid.aggr.autoGrow.success | NOTICE        | test         | 0    | 0       |
| raid.aggr.lock.conflict    | INFORMATIONAL | test         | 0    | 0       |
| raid.aggr.log.CP.count     | DEBUG         | test         | 0    | 0       |

4 entries were displayed.

3. Create a corresponding event filter which includes all these subsets of events. For example, if you want to include only the `raid.aggr.*` events, use a wildcard for the message-name parameter when creating the filter. You can also create filters for single events.



You can create up to 50 event filters.

```
cluster-1::event*> filter create -filter-name test_events

cluster-1::event*> filter rule add -filter-name test_events -type
include -message-name raid.aggr.*

cluster-1::event*> filter show -filter-name test_events
Filter Name Rule      Rule      Message Name      SNMP Trap Type
Severity
      Position Type
-----
test_events
      1      include  raid.aggr.*      *      *
      2      exclude  *      *      *
2 entries were displayed.
```

4. Create an event notification destination for each of the event destination endpoints (i.e., SMTP/SNMP/syslog)

```
cluster-1::event*> notification destination create -name dest1 -email
test@xyz.com

cluster-1::event*> notification destination show
Name      Type      Destination
-----
dest1      email      test@xyz.com (via "localhost" from
"admin@localhost", configured in "event config")
snmp-traphost  snmp      - (from "system snmp traphost")
2 entries were displayed.
```

5. Create an event notification by mapping the event filter to the event notification destination.

```
cluster-1::event*> notification create -filter-name asup_events
-destinations dest1

cluster-1::event*> notification show
ID  Filter Name      Destinations
---
1   default-trap-events  snmp-traphost
2   asup_events          dest1
2 entries were displayed.
```

6. Repeat steps 1-5 for each event destination that has an event route mapping.





Events routed to SNMP destinations should be mapped to the `snmp-traphost` event notification destination. The SNMP traphost destination uses the system configured SNMP traphost.

```
cluster-1::event*> system snmp traphost add 10.234.166.135

cluster-1::event*> system snmp traphost show
      scspr2410142014.gdl.englab.netapp.com
(scspr2410142014.gdl.englab.netapp.com) <10.234.166.135>   Community:
public

cluster-1::event*> notification destination show -name snmp-traphost

      Destination Name: snmp-traphost
      Type of Destination: snmp
      Destination: 10.234.166.135 (from "system snmp
traphost")
      Server CA Certificates Present?: -
      Client Certificate Issuing CA: -
      Client Certificate Serial Number: -
      Client Certificate Valid?: -
```

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