



Update deprecated EMS event mapping

ONTAP 9

NetApp
January 25, 2023

Table of Contents

- Update deprecated EMS event mapping 1
 - EMS event mapping models 1
 - Update EMS event mapping from deprecated ONTAP commands 4

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.

- 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 | Message | Severity | Destinations | Threshd | Freq |
|----------------------------|---------------|----------|--------------|---------|------|
| 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.

- 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?: -
```

Copyright information

Copyright © 2023 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.