Managing scripts

Active IQ Unified Manager 9.11

NetApp
July 19, 2022

This PDF was generated from https://docs.netapp.com/us-en/active-iq-unified-manager/health-checker/concept_how_scripts_work_with_alerts.html on July 19, 2022. Always check docs.netapp.com for the latest.

Table of Contents

Managing scripts 1
How scripts work with alerts 1
Adding scripts 2
Deleting scripts 3
Testing script execution 3

Managing scripts

You can use scripts to automatically modify or update multiple storage objects in Unified Manager. The script is associated with an alert. When an event triggers an alert, the script is executed. You can upload custom scripts and test their execution when an alert is generated.

The ability to upload scripts to Unified Manager and run them is enabled by default. If your organization does not want to allow this functionality because of security reasons, you can disable this functionality from **Storage Management** > **Feature Settings**.

How scripts work with alerts

You can associate an alert with your script so that the script is executed when an alert is raised for an event in Unified Manager. You can use the scripts to resolve issues with storage objects or identify which storage objects are generating the events.

When an alert is generated for an event in Unified Manager, an alert email is sent to the specified recipients. If you have associated an alert with a script, the script is executed. You can get the details of the arguments passed to the script from the alert email.

If you have created a custom script and associated it with an alert for a specific event type, actions are taken based on your custom script for that event type, and the **Fix it** actions are not available by default on the Management Actions page or Unified Manager dashboard.

The script uses the following arguments for execution:

- `-eventID`
- `-eventName`
- `-eventSeverity`
- `-eventSourceID`
- `-eventSourceName`
- `-eventSourceType`
- `-eventState`
- `-eventArgs`

You can use the arguments in your scripts and gather related event information or modify storage objects.

Example for obtaining arguments from scripts

```
print "$ARGV[0] : $ARGV[1]\n"
print "$ARGV[7] : $ARGV[8]\n"
```

When an alert is generated, this script is executed and the following output is displayed:

```
-eventID : 290
-eventSourceID : 4138
```

Adding scripts

You can add scripts in Unified Manager, and associate the scripts with alerts. These scripts are executed automatically when an alert is generated, and enable you to obtain information about storage objects for which the event is generated.

What you'll need

- You must have created and saved the scripts that you want to add to the Unified Manager server.
- The supported file formats for scripts are Perl, Shell, PowerShell, Python, and `.bat` files.

Platform on which Unified Manager is installed	Supported languages
VMware	Perl and Shell scripts
Linux	Perl, Python, and Shell scripts
Windows	PowerShell, Perl, Python, and .bat scripts

  - For Perl scripts, Perl must be installed on the Unified Manager server. For VMware installations, Perl 5 is installed by default and scripts will support only what Perl 5 supports. If Perl was installed after Unified Manager, you must restart the Unified Manager server.
  - For PowerShell scripts, the appropriate PowerShell execution policy must be set on the Windows server so that the scripts can be executed.

  If your script creates log files to track the alert script progress, you must make sure that the log files are not created anywhere within the Unified Manager installation folder.

- You must have the Application Administrator or Storage Administrator role.

You can upload custom scripts and gather event details about the alert.

If you do not see this capability available in the user interface it is because the functionality has been disabled by your administrator. If required, you can enable this functionality from **Storage Management** > **Feature Settings**.

Steps

1. In the left navigation pane, click **Storage Management** > **Scripts**.
2. In the **Scripts** page, click **Add**.
3. In the **Add Script** dialog box, click **Browse** to select your script file.
4. Enter a description for the script that you select.
5. Click **Add**.

Deleting scripts

You can delete a script from Unified Manager when the script is no longer required or valid.

What you'll need

- You must have the Application Administrator or Storage Administrator role.
- The script must not be associated with an alert.

Steps

1. In the left navigation pane, click **Storage Management** > **Scripts**.
2. In the **Scripts** page, select the script that you want to delete, and then click **Delete**.
3. In the **Warning** dialog box, confirm the deletion by clicking **Yes**.

Testing script execution

You can verify that your script is executed correctly when an alert is generated for a storage object.

- You must have the Application Administrator or Storage Administrator role.
- You must have uploaded a script in the supported file format to Unified Manager.

Steps

1. In the left navigation pane, click **Storage Management** > **Scripts**.
2. In the Scripts page, add your test script.
3. In the left navigation pane, click **Storage Management** > **Alert Setup**.
4. In the **Alert Setup** page, perform one of the following actions:

To…	Do this…
Add an alert	a. Click **Add**. b. In the Actions section, associate the alert with your test script.
Edit an alert	a. Select an alert, and then click **Edit**. b. In the Actions section, associate the alert with your test script.

5. Click **Save**.
6. In the **Alert Setup** page, select the alert that you added or modified, and then click **Test**.

   The script is executed with the "-test" argument, and a notification alert is sent to the email addresses that were specified when the alert was created.

Copyright Information

Copyright © 2022 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.