



Managing encryption settings for Cloud Volumes ONTAP

Cloud Manager 3.5

Ben Cammett
November 01, 2018

Table of Contents

- Managing encryption settings for Cloud Volumes ONTAP 1
 - Renewing the Cloud Manager intermediate CA certificate 1
 - Managing available key managers and CA certificates 1

Managing encryption settings for Cloud Volumes ONTAP

You might need to periodically manage Cloud Manager encryption settings to ensure that Cloud Volumes ONTAP systems in AWS can communicate with key managers.



Data-at-rest encryption provided by Cloud Volumes ONTAP is no longer supported when launching new Cloud Volumes ONTAP systems in AWS. Existing systems that use this feature are still supported. See [What's new in Cloud Manager](#) for more details.

Renewing the Cloud Manager intermediate CA certificate

You must renew the Cloud Manager certificate before it expires; otherwise, Cloud Manager cannot sign client certificates for Cloud Volumes ONTAP.

About this task

If you renew the Cloud Manager intermediate CA certificate, Cloud Manager uses the renewed certificate to generate client certificates for *new* Cloud Volumes ONTAP systems. You can renew client certificates for *existing* Cloud Volumes ONTAP systems from the working environment.

Steps

1. In the upper-right corner of the Cloud Manager console, click the task drop-down list, and then click **Encryption Setup**.
2. In the Intermediate CA tab, click **Renew Intermediate CA**.
3. Click **Generate CSR**.
4. Use the CSR to submit a certificate request to a CA.

The intermediate CA certificate must use the Privacy Enhanced Mail (PEM) Base-64 encoded X. 509 format.

5. Copy the contents of the signed certificate and paste it in the Cloud Manager certificate field.
6. Click **Install Cloud Manager Certificate**.

Managing available key managers and CA certificates

You can modify the key managers and key manager CA certificates that Cloud Manager users can use with their Cloud Volumes ONTAP systems. For example, you can add a new key manager that is available in your environment and you can add a new CA certificate, if a previous certificate expired.

About this task

The changes that you make from the Encryption Setup page affect only new Cloud Volumes ONTAP systems. Changes to existing Cloud Volumes ONTAP systems must be made from the working environment.

Steps

1. In the upper-right corner of the Cloud Manager console, click the task drop-down list, and then click **Encryption Setup**.
2. Click **Key Manager**.

3. Manage your key managers as necessary:

Action	Steps
Change the KMIP port for communicating with key managers	<p>Modify the port and then click Save.</p> <p>The port change affects only new Cloud Volumes ONTAP systems.</p> <p>To change the port for an existing Cloud Volumes ONTAP system, connect to the CLI and then run the security key-manager setup command.</p>
Add a new key manager	<p>Click Add, enter details about the key manager, and then click Add again.</p> <p>This action does not add the key manager to existing Cloud Volumes ONTAP systems. You must add the key manager from the working environment, if necessary.</p>
Edit the details for a key manager	<p>Select the menu icon next to the key manager, click Edit, modify the details, and then click Save.</p> <p>Any changes affect only new Cloud Volumes ONTAP systems that will use this key manager. To apply this change to existing Cloud Volumes ONTAP systems, go to the working environment, remove the key manager, and then add it back.</p>
Delete an existing key manager	<p>Select the menu icon next to the key manager, click Delete, and then click Delete again.</p> <p>If you delete a key manager, you cannot configure Cloud Volumes ONTAP systems to use it. Existing systems that are using this key manager can continue to use it.</p>

4. Manage the key managers' CA certificates as necessary:

Action	Steps
Add a new certificate	Click Add , paste the certificate, and then click Add again.
View a certificate	Select the menu icon next to the key manager and click View .
Delete a certificate	<p>Select the menu icon next to the certificate, click Delete, and then click Delete again.</p> <p>If you delete a certificate, you cannot configure Cloud Volumes ONTAP systems to use it. Existing systems that are using the certificate can continue to use it.</p>

Copyright Information

Copyright © 2020 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.