

Installing Cleondris: NetApp HCI DR with Cleondris

NetApp Solutions

Kevin Hoke, Dorian Henderson February 19, 2021

Table of Contents

stalling Cleondris: NetApp HCI DR with Cleondris
Prerequisites
Download Information
License
Deployment
Initial Configuration
Patching Cleondris
Software Used

Installing Cleondris: NetApp HCI DR with Cleondris

This section will detail the prerequisites and deployment steps for installing Cleondris.

Prerequisites

There are several things to have ready before you start with the installation.

This technical report assumes that you have your NetApp HCI infrastructure working at both your production site and your disaster recovery site.

- DNS. You should have DNS prepared for your HCC disaster recovery tool when you install it.
- FQDN. A fully qualified domain name for the disaster recovery tool should be prepared before installation.
- IP address. The IP will be part of the FQDN before it is put into DNS.
- NTP. You need a Network Time Protocol (NTP) server address. It can be either your own internal or external address, but it needs to be accessible.
- Storage location. When you install HCC, you must know which datastore it should be installed to.
- vCenter Server service account. You will need to have a service account created in vCenter Server on both the disaster recovery and production side for HCC to use. It does not require administrator-level permissions at the root level. If you like, you can find exactly what is required in the HCC user guide.
- **NetApp HCI service account.** You need a service account in your NetApp HCI storage for both the disaster recovery and production side for HCC to use. Full access is required.
- **Test network.** This network should be connected to all your hosts in the disaster recovery site, and it should be isolated and nonrouting. This network is used to make sure applications work during a test failover. The built-in test network that is temporary only is a one-host network. Therefore, if your test failover has VMs scattered on multiple hosts, they will not be able to communicate. I recommend that you create a distributed port group in the disaster recovery site that spans all hosts but is isolated and nonrouting. Testing is important to success.
- RTOs. You should have RTOs approved by management for your application groups. Often it is 1 or 2 hours for tier 1 applications; for tier 4 applications, it can be as long as 12 hours. These decisions must be approved by management because they will determine how quickly things work after a critical outage. These times will determine replication schedules.
- Application information. You should know which application you need to protect first, and what it needs to work. For example, Microsoft Exchange needs a domain controller that has a role of Global Catalog to start. In my own experience, a customer said that they had one email server to protect. It did not test well, and when I investigated, I discovered the customer had 24 VMs that were part of the email application.

Download Information

You can download HCC from the Cleondris site. When you buy it, you receive an email with a download link as well.

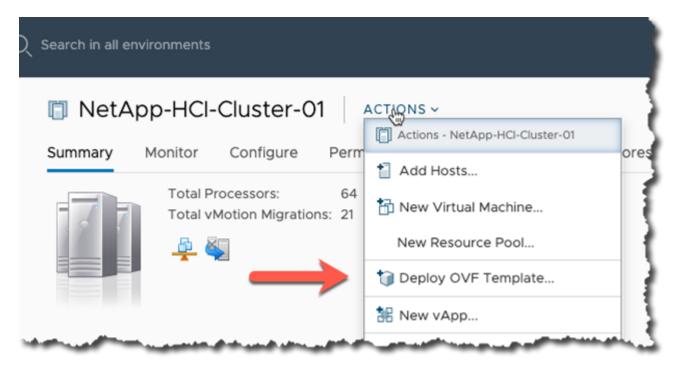
License

Your license will arrive in an email when you purchase or if you get a not-for-resale (NFR) version. You can get a trial license through the Cleondris Support Portal.

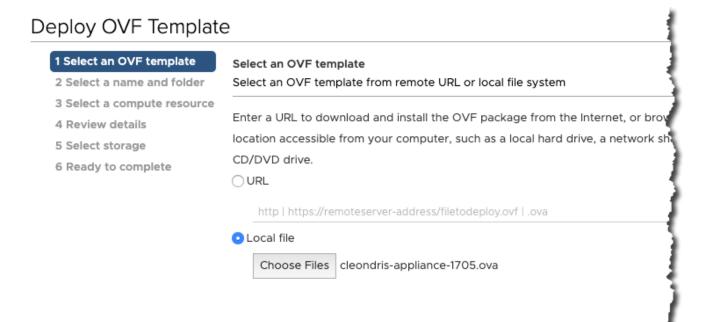
Deployment

You download an OVF file, so it is deployed like many other things.

1. Start by using the Actions menu available at the cluster level.

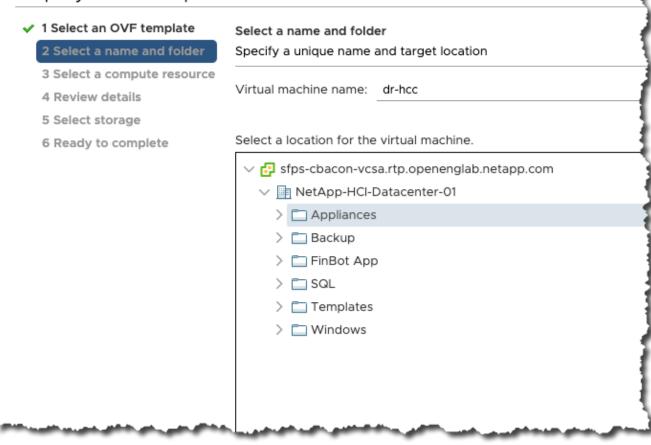


2. Select the file.



3. Name the appliance and select the location for it in the vCenter infrastructure.

Deploy OVF Template



- 4. Select the Compute location.
- 5. Confirm the details.
- 6. Accept the license details.
- Select the appropriate storage location.
- 8. Select the network that our appliance will work on.
- 9. Review the details again and click Finish.
- 10. Now wait for the appliance to be deployed, and then power it up. As it powers up, you might see a message saying that VMware tools are not installed. You can ignore this message; it will go away automatically.

Initial Configuration

To start the initial configuration, complete the following steps:

1. This phase involves doing the configuration in the Appliance Configurator, which is the VM console. So, after the appliance powers up, change to work in the console by using the VMware Remote Console (VMRC) or the HTML5 VMRC version. Look for a blue Cleondris screen.

Cleondris Appliance Configurator

The web GUI is available at http(s)://10.193.136.224 http(s)://fe80::250:56ff:fe93:8b0a

Hostname: cdm.localdomain MAC: 00:50:56:93:8B:0A

NTP time sync not available

Local Time: Thu Mar 5 20:04:14 2020 CET

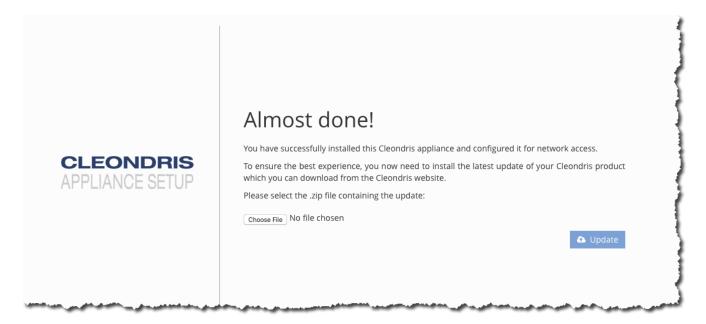
Press any key to continue

- 2. Press any key to proceed, and configure the following:
 - The web administrator password
 - The network configuration: IP, DNS, and so on
 - The time zone
 - NTP
- 3. Select the Reboot and Activate Network/NTP Settings. You will see the appliance reboot. Afterward, do a ping test to confirm the FQDN and IP.

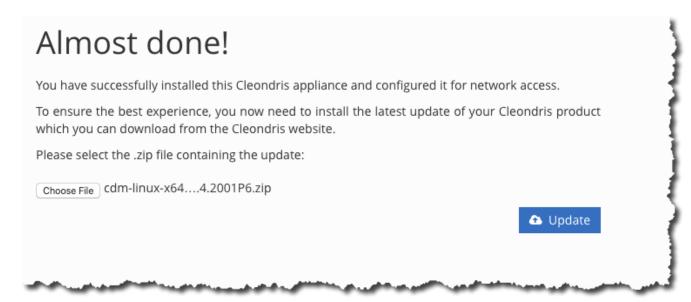
Patching Cleondris

To update your Cleondris product, complete the following steps:

1. When you first log in to the appliance, you see a screen like the following:



2. Click Choose File to select the update you downloaded from the Cleondris website.



3. Upload the patch. After the appliance reboots, the following login screen is displayed:



4. You can now see the new version and build information; confirming that the update was successful. Now you can continue with the configuration.

Software Used

This technical report uses the following software versions:

- vSphere 6.5 on production
- vSphere 6.7 U3 on DR
- NetApp Element 11.5 on production
- NetApp Element 12.0 on DR
- Cleondris HCC 8.0.2007 Build 20200707-1555 and 8.0.2007X2 build 20200709-1936.

Copyright Information

Copyright © 2021 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.