NetApp HCI product overview

amitha, Ann-Marie Grissino June 10, 2020

HCI

This PDF was generated from https://docs.netapp.com/us-en/hci/docs/concept_hci_product_overview.html on September 18, 2020. Always check docs.netapp.com for the latest.



Table of Contents

Ne	tApp HCI product overview	1
(Components of NetApp HCI	1
1	NetApp HCI URLs	2

NetApp HCI product overview

NetApp HCI is an enterprise-scale hybrid cloud infrastructure design that combines storage, compute, networking, and hypervisor—and adds capabilities that span public and private clouds.

NetApp's disaggregated hybrid cloud infrastructure allows independent scaling of compute and storage, adapting to workloads with guaranteed performance.

- · Meets hybrid multicloud demand
- · Scales compute and storage independently
- · Simplifies data services orchestration across hybrid multiclouds

Components of NetApp HCI

Here is an overview of the various components of the NetApp HCI environment:

- NetApp HCI provides both storage and compute resources. You use the **NetApp Deployment Engine** wizard to deploy NetApp HCI. After successful deployment, compute nodes appear as ESXi hosts and you can manage them in VMware vSphere Web Client.
- Management services or microservices include the Active IQ collector, QoSSIOC for the vCenter Plug-in, and mNode service; they are updated frequently as service bundles. As of the Element 11.3 release, management services are hosted on the management node, allowing for quicker updates of select software services outside of major releases. The management node (mNode) is a virtual machine that runs in parallel with one or more Element software-based storage clusters. It is used to upgrade and provide system services including monitoring and telemetry, manage cluster assets and settings, run system tests and utilities, and enable NetApp Support access for troubleshooting.



Learn more about management services releases.

- **NetApp Hybrid Cloud Control** enables you to manage NetApp HCI. You can upgrade management services, expand your system, collect logs, and monitor your installation by using NetApp SolidFire Active IQ. You log in to NetApp Hybrid Cloud Control by browsing to the IP address of the management node.
- The NetApp Element Plug-in for vCenter Server (VCP) is a web-based tool integrated with the vSphere user interface (UI). The plug-in is an extension and scalable, user-friendly interface for VMware vSphere that can manage and monitor storage clusters running NetApp Element software. The plug-in provides an alternative to the Element UI. You can use the plug-in user interface to discover and configure clusters, and to manage, monitor, and allocate storage from cluster capacity to configure datastores and virtual datastores (for virtual volumes). A cluster appears on the network as a single local group that is represented to hosts and administrators by

virtual IP addresses. You can also monitor cluster activity with real-time reporting, including error and alert messaging for any event that might occur while performing various operations.



Learn more about VCP.

• By default, NetApp HCI sends performance and alert statistics to the **NetApp SolidFire Active IQ** service. As part of your normal support contract, NetApp Support monitors this data and alerts you to any performance bottlenecks or potential system issues. You need to create a NetApp Support account if you do not already have one (even if you have an existing SolidFire Active IQ account) so that you can take advantage of this service.



Learn more about NetApp SolidFire Active IQ.

NetApp HCI URLs

Here are the common URLs you use with NetApp HCI:

URL	Description
https://[IPv4 address of Bond1G interface on a storage node]	Access the NetApp Deployment Engine wizard to install and configure NetApp HCI. Learn more.
https://[management node IP address]	Access NetApp Hybrid Cloud Control to upgrade, expand, and monitor your NetApp HCI installation, and update management services. Learn more.
https://[IP address]:442	From the per-node UI, access network and cluster settings and utilize system tests and utilities. Learn more.
https://[management node IP address]:9443	Register the vCenter Plug-in package in the vSphere Web Client.
https://activeiq.solidfire.com	Monitor data and receive alerts to any performance bottlenecks or potential system issues.
https://[management node IP address]/mnode	Manually update management services using the REST API UI from the management node.
https://[storage cluster MVIP address]	Access the NetApp Element software UI.

Find more information

- NetApp HCI Documentation Center
- NetApp HCI Resources page

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 systemwithout 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.