



ONTAP Select with VMware vSphere: NetApp HCI and Cisco ACI

NetApp Solutions

Kevin Hoke, Dorian Henderson
April 06, 2021

This PDF was generated from https://docs.netapp.com/us-en/netapp-solutions/infra/hcicaci_ontap_select_with_vmware_vsphere.html on August 18, 2021. Always check docs.netapp.com for the latest.

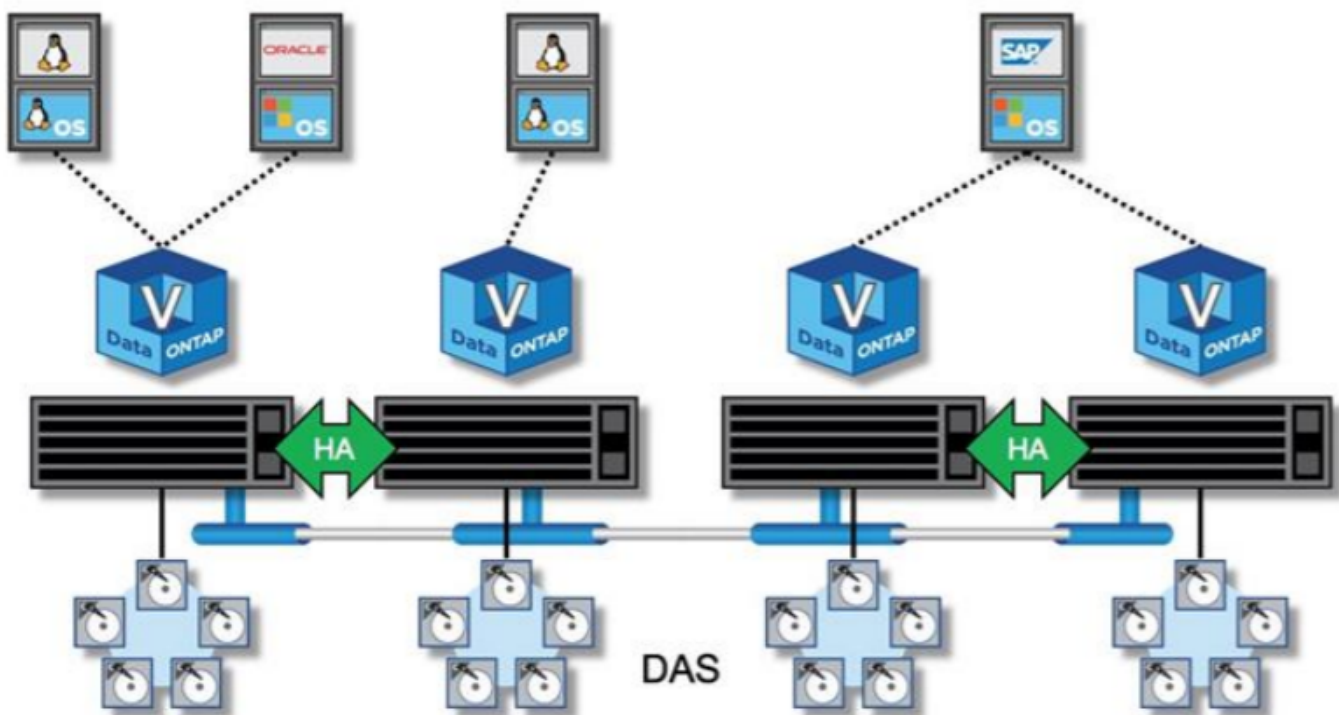
Table of Contents

ONTAP Select with VMware vSphere: NetApp HCI and Cisco ACI	1
Workflow	1

ONTAP Select with VMware vSphere: NetApp HCI and Cisco ACI

NetApp ONTAP Select is the NetApp solution for software-defined storage (SDS), bringing enterprise-class storage management features to the software-defined data center. ONTAP Select extends ONTAP functionality to extreme edge use cases including IoT and tactical servers as a software-defined storage appliance that acts as a full storage system. It can run as a simple VM on top of a virtual environment to provide a flexible and scalable storage solution.

Running ONTAP as software on top of another software application allows you to leverage much of the qualification work done by the hypervisor. This capability is critical for helping us to rapidly expand our list of supported platforms. Also, positioning ONTAP as a virtual machine (VM) allows customers to plug into existing management and orchestration frameworks, which allows rapid provisioning and end-to-end automation from deployment to sunsetting. The following figure provides an overview of a four-node ONTAP Select instance.




Deploying ONTAP Select in the environment to use the storage offered by NetApp HCI extends the capabilities of NetApp Element.

Workflow

The following workflow was used to set up the environment. In this solution, we deployed a two-node ONTAP Select cluster. Each of these steps might involve several individual tasks.

1. Create an L2 BD and EPG for the OTS cluster's internal communication and attach the VMM domain to the EPG in the Native switching mode (in case of a Cisco AVE virtual switch) with Pre-Provision Resolution Immediacy.

EPG - HCI-Select-Internal



Properties

Contract Exception Tag:

QoS class: Unspecified

Custom QoS:

Data-Plane Policer:

Intra EPG Isolation:


Preferred Group Member:

Flood on Encapsulation:

Configuration Status: applied

Configuration Issues:

Label Match Criteria:

Bridge Domain: 

Resolved Bridge Domain: HCI-Infra/SELECT-Internal

Monitoring Policy:

FHS Trust Control Policy:

2. Verify that you have a VMware vSphere license.
3. Create a datastore that hosts OTS.
4. Deploy and configure ONTAP Select according to the [ONTAP Select documentation](#).

Cluster Details

Name	hci-aci-ontap-select	Cluster Size	2 node cluster (1 HA Pairs)
ONTAP Image Version	9.7	Licensing	evaluation
IPv4 Address	172.22.9.81	Cluster MTU	9000
Netmask	255.255.255.0	Domain Names	cie.netapp.com
Gateway	172.22.9.1	Server IP Addresses	10.61.184.251, 10.61.184.252
Mediator Status	HA Active	NTP Server	10.61.184.48
Last Refresh	-		

Node Details

> HA Pair 1



Node 1 hci-aci-ontap-select... — 2 TB +
Node 2 hci-aci-ontap-select... — 2 TB +

Host 1 172.22.9.61 — (Small (4 CPU, 16 GB Memory))
Host 2 172.22.9.60 — (Small (4 CPU, 16 GB Memory))

5. Create additional datastores using ONTAP Select to make use of additional capabilities.

[Next: StorageGRID with VMware vSphere: NetApp HCI and Cisco ACI](#)

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.