



# Configure VMware vSphere HCI

NetApp  
March 08, 2022

This PDF was generated from [https://docs.netapp.com/us-en/hci/docs/concept\\_nde\\_config\\_vsphere\\_overview.html](https://docs.netapp.com/us-en/hci/docs/concept_nde_config_vsphere_overview.html) on March 08, 2022. Always check docs.netapp.com for the latest.

# Table of Contents

- Configure VMware vSphere ..... 1
  - VMware vSphere configuration ..... 1
  - Configure a new VMware vSphere environment ..... 1
  - Join an existing VMware vSphere deployment ..... 2

# Configure VMware vSphere

## VMware vSphere configuration

NetApp HCI uses the vCenter Server and ESXi components of VMware vSphere. vCenter Server is used to manage and monitor the VMware ESXi hypervisor installed on each compute node. You can install and configure a new vSphere deployment, which also installs the NetApp Element Plug-in for vCenter Server, or you can join and extend an existing vSphere deployment.

Be aware of the following caveats when you use the NetApp Deployment Engine to install a new vSphere deployment:

- The NetApp Deployment Engine installs the new vCenter Server Appliance with the Small deployment size option.
- The vCenter Server license is a temporary evaluation license. For continued operation after the evaluation period, you need to obtain a new license key from VMware and add it to the vCenter Server license inventory.



If your vSphere inventory configuration uses a folder to store the NetApp HCI cluster within the vCenter datacenter, some operations, such as expanding NetApp HCI compute resources, will fail. Ensure that the NetApp HCI cluster is directly under the datacenter in the vSphere web client inventory tree, and is not stored in a folder. See the NetApp Knowledgebase article for more information.

If you install a new vCenter Server, you can install a vSphere standard switch or a vSphere distributed switch (VDS) during network configuration. A VDS enables a simplified, centralized management of virtual machine network configuration after NetApp HCI deployment. Cloud data services functionality on NetApp HCI requires a VDS; vSphere standard switches are not supported for cloud data services.

### Find more information

- [Firmware and driver versions in NetApp HCI and NetApp Element software](#)

## Configure a new VMware vSphere environment

You can deploy a new vSphere environment as part of the NetApp HCI installation process by providing some of the network information that vSphere should use. Note that if you configure vSphere using an IP address, the address cannot be changed after installation.

### What you'll need

You have obtained the network information for the planned vSphere environment.

### Steps

1. Click **Configure a new vSphere deployment**.
2. Select which version of vSphere the system should install during deployment.
3. Configure the new vSphere environment using one of the following options:

Option	Steps
Use a domain name (recommended).	<ol style="list-style-type: none"> <li>Click <b>Configure Using a Fully Qualified Domain Name</b>.</li> <li>Enter the vCenter Server domain name in the <b>vCenter Server Fully Qualified Domain Name</b> field.</li> <li>Enter the DNS server IP address in the <b>DNS Server IP Address</b> field.</li> <li>Click <b>Continue</b>.</li> </ol>
Use an IP address.	<ol style="list-style-type: none"> <li>Click <b>Configure Using an IP Address</b>.</li> <li>Click <b>Continue</b>.</li> </ol>

## Find more information

- [Firmware and driver versions in NetApp HCI and NetApp Element software](#)

## Join an existing VMware vSphere deployment

You can configure NetApp HCI to take advantage of an existing vSphere deployment by providing the vCenter Server network information and credentials.

### What you'll need

- If you are joining an existing vSphere 6.7 deployment, make sure vCenter Server is running version 6.7 Update 1.
- If you are joining an existing vSphere 6.5 deployment, make sure vCenter Server is running version 6.5 Update 2 or later.
- Obtain the network details and administrator credentials for your existing vSphere deployment.
- If the NetApp Element Plug-in for vCenter Server is registered to the existing vCenter instance, you need to [unregister](#) it before continuing. The plug-in is re-registered after NetApp HCI deployment is complete.

### About this task

If you join multiple vCenter Server systems that are connected using vCenter Linked Mode, NetApp HCI only recognizes one of the vCenter Server systems.



Using the NetApp Element Plug-in for vCenter Server to manage cluster resources from other vCenter Servers using [vCenter Linked Mode](#) is limited to local storage clusters only.

### Steps

1. Click **Join and extend an existing vSphere deployment**.
2. Enter the domain name or IP address in the **vCenter Server Domain Name or IP address** field.  
If you enter a domain name, you also need to enter the IP address of an active DNS server in the **DNS Server IP Address** field that appears.
3. Enter the credentials of a vSphere administrator in the **User Name and Password** fields.

4. Click **Continue**.



If the NetApp Element Plug-in for vCenter Server was registered during this step, an error message appears requiring that you [unregister](#) the plug-in. Do so before continuing NetApp HCI deployment. The plug-in is re-registered after deployment is complete.

## Find more information

- [Firmware and driver versions in NetApp HCI and NetApp Element software](#)

## 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.