



# Configure VMware vSphere

HCI

NetApp

February 04, 2025

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# 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

- [Supported firmware and ESXi driver versions for NetApp HCI and firmware versions for NetApp HCI storage nodes](#)

## 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

- [Supported firmware and ESXi driver versions for NetApp HCI and firmware versions for NetApp HCI storage nodes](#)

## 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.



- Beginning with Element Plug-in for vCenter Server 5.0, to use [vCenter Linked Mode](#), you register the Element Plug-in from a separate management node for each vCenter Server that manages NetApp SolidFire storage clusters (recommended).
- Using Element Plug-in for vCenter Server 4.10 and earlier 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

- [Supported firmware and ESXi driver versions for NetApp HCI and firmware versions for NetApp HCI storage nodes](#)

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