

THE EUC GUY



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VMware Horizon® version 2006

Installation Guide with Initial Configuration

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Introduction

The purpose of this document is to provide you with guidance on the installation of VMware Horizon® version 2006.

This guide assumes that the required infrastructure and prerequisites are in place to set up the VMware Horizon environment.

Please keep checking back on my blog, <http://www.theeucguy.com> for new guides relating to VMware end-user computing solutions.

For any feedback or suggestions, you can reach out to me at:

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VMware Horizon Connection Server Installation

The VMware Horizon Connection Server is the component that brokers the connection between the user (client) and the virtual desktop and hosted applications.

Horizon Connection Server Hardware and Software Requirements

The following hardware and software requirements are applicable to any type of Horizon Connection Server role, whether it is the standard, replica, security or the enrollment server.

In most organisations, the Horizon Connection Server is deployed as a virtual machine rather than on a physical server. Having this component running as a virtual machine means that it can benefit from all the high-availability and the ease-of-manageability that you get from a virtual infrastructure.

Table 1: Horizon Connection Server Hardware Requirements

Hardware Component	Recommended	Description
Processor	4 CPUs	Recommended processor is Pentium IV 2.0GHz or higher.
Memory	12GB	Even though the Horizon Connection Server can be installed with a lower memory size, the optimal size recommended is 12GB. Giving the server more than this provides no benefits.
Network Adapter	1	Single network adapter connected to the server management network
Disk	70GB	Provides sufficient space for the guest operating system, updates and software installation.

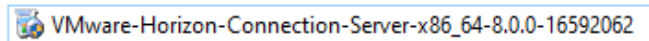
Table 2: Horizon Connection Server Software Requirements

Software Component	Recommended
Operating System	Windows Server 2019 Standard (64-bit), Datacenter (64-bit) Windows Server 2016 Standard (64-bit), Datacenter (64-bit) Windows Server 2012 R2 Standard (64-bit), Datacenter (64-bit)

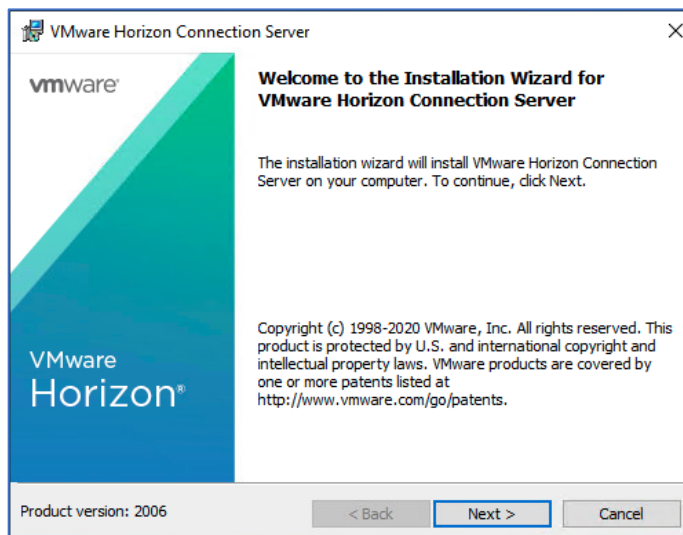
Note The Horizon Connection Server should be joined to an Active Directory domain and have a static IP address.

Horizon Connection Server Installation Steps

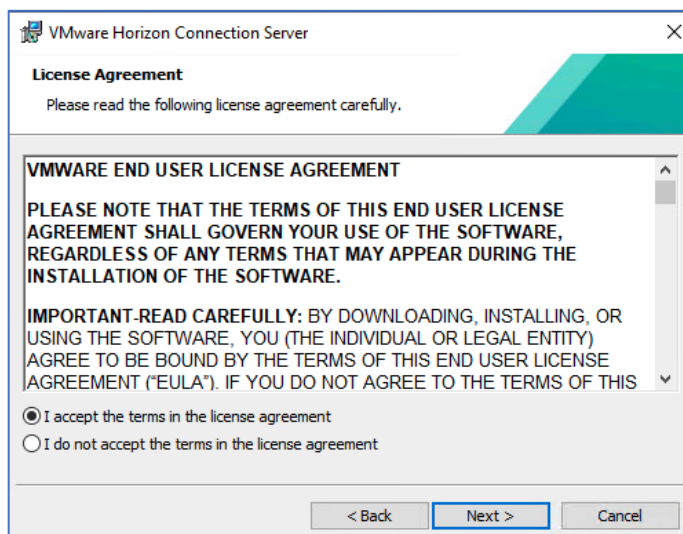
1. Ensure you are logged onto the server as a domain user but with administrator privileges to run the installer.
2. Double-click on the Horizon Connection Server installer.



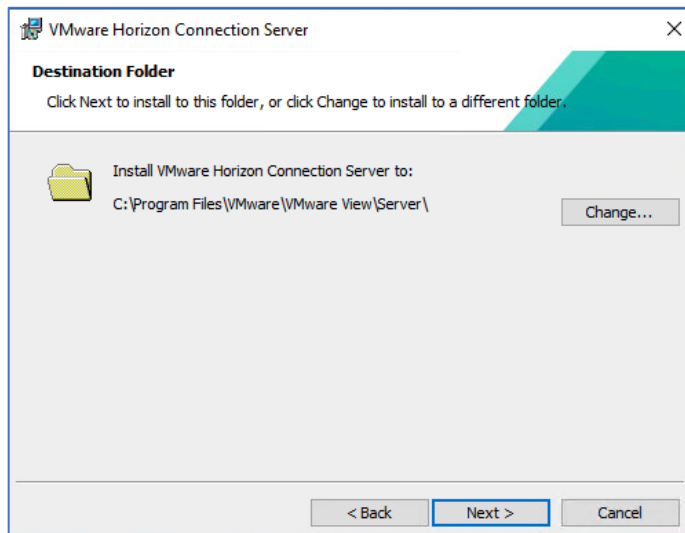
3. On the *Welcome to the Installation Wizard for VMware Horizon Connection Server* screen, click **Next**.



4. On the *License Agreement* screen, select **I accept the terms in the license agreement** and click **Next**.



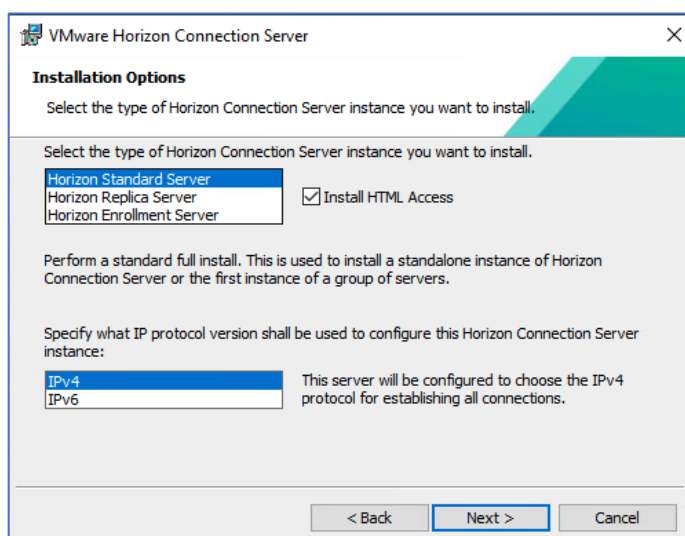
5. On the *Destination Folder* screen, click the **Change...** tab to specify an installation folder location or leave the default location and click **Next**.



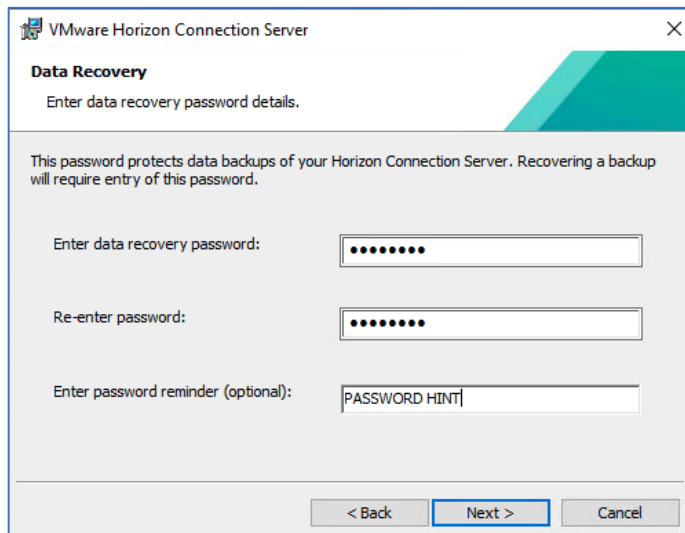
6. On the *Installation Options* screen, as this is the first Horizon Connection Server to be installed, ensure that **Horizon Standard Server** is selected (default).

If you are **not** planning to allow HTML Access (web-based access without the need of the Horizon Client, remove the check against **Install HTML Access**. This is checked by default.

Select the IP protocol based on your environment. **IPv4** is selected by default. Click **Next**.

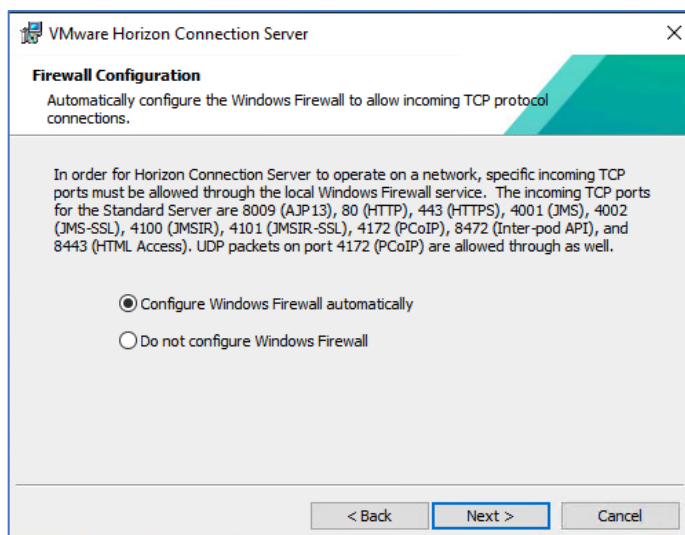


7. On the *Data Recovery* screen, enter a data recovery password. This password is required during a restoration of the Horizon configuration. Click **Next**.



The screenshot shows the 'Data Recovery' window of the VMware Horizon Connection Server. The window title is 'VMware Horizon Connection Server'. The main heading is 'Data Recovery' with the instruction 'Enter data recovery password details.' Below this, a note states: 'This password protects data backups of your Horizon Connection Server. Recovering a backup will require entry of this password.' There are three input fields: 'Enter data recovery password:' with a masked password of seven dots, 'Re-enter password:' also with a masked password of seven dots, and 'Enter password reminder (optional):' with the text 'PASSWORD HINT'. At the bottom, there are three buttons: '< Back', 'Next >' (which is highlighted with a blue border), and 'Cancel'.

8. On the *Firewall Configuration* screen, select **Configure Windows Firewall automatically** (default) and click **Next**.



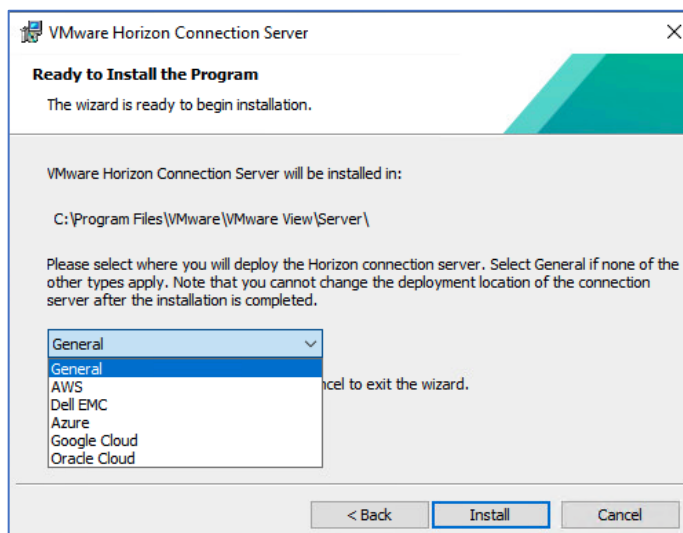
The screenshot shows the 'Firewall Configuration' window of the VMware Horizon Connection Server. The window title is 'VMware Horizon Connection Server'. The main heading is 'Firewall Configuration' with the instruction 'Automatically configure the Windows Firewall to allow incoming TCP protocol connections.' Below this, a detailed note explains: 'In order for Horizon Connection Server to operate on a network, specific incoming TCP ports must be allowed through the local Windows Firewall service. The incoming TCP ports for the Standard Server are 8009 (AJP13), 80 (HTTP), 443 (HTTPS), 4001 (JMS), 4002 (JMS-SSL), 4100 (JMSIR), 4101 (JMSIR-SSL), 4172 (PCoIP), 8472 (Inter-pod API), and 8443 (HTML Access). UDP packets on port 4172 (PCoIP) are allowed through as well.' There are two radio button options: 'Configure Windows Firewall automatically' (which is selected) and 'Do not configure Windows Firewall'. At the bottom, there are three buttons: '< Back', 'Next >' (which is highlighted with a blue border), and 'Cancel'.

9. On the *Initial Horizon Administrators* screen, either select **Authorize the local Administrators group** (not recommended if there are other users in the Administrators group that will not be part of the Horizon administration) or select **Authorize a specific domain user or domain group** (recommended) and enter the domain user or domain group that will be the Horizon administrator. Click **Next**.

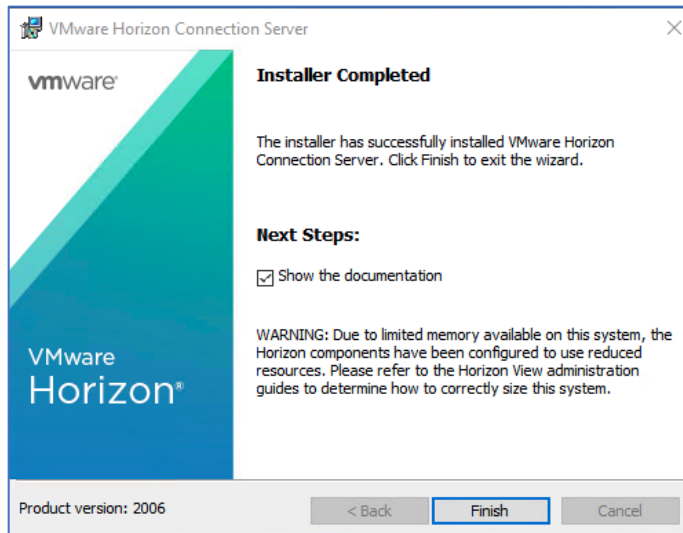
10. On the *User Experience Improvement Program* screen, either leave the **Join the VMware Customer Experience Improvement Program** checkbox selected (default) or uncheck it to opt out. Click **Next**.

11. On the *Ready to Install the Program* screen, depending on the platform you are installing onto, select from the following options:
- **General** - selected by default, when conducting a Horizon 2006 on-premises installation or when installing on a platform not listed in the options
 - **AWS** - select this option when installing Horizon 8 2006 onto VMC on AWS
 - **Dell EMC** - select this option when installing Horizon 8 2006 onto VMC on Dell EMC
 - **Azure** - select this option when installing Horizon 8 2006 on Azure or on Azure VMware Solution (AVS)
 - **Google Cloud** - select this option when installing Horizon 8 2006 on Google Cloud or on Google VMware Cloud Engine (GCVE)
 - **Oracle Cloud** - select this option when installing Horizon 8 2006 on Oracle Cloud or on Oracle VMware Cloud Solution (OCVS)

Click **Install** once you have made your selection.



12. Once the installation completes, uncheck **Show the documentation** if you do not wish to review the documentation (checked by default). Click **Finish**.



This concludes the installation of the first Horizon Connection Server.

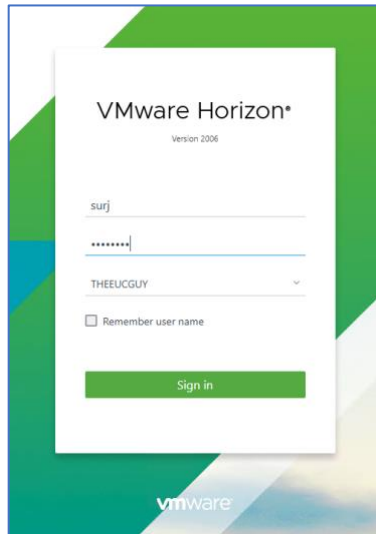
Horizon Connection Server Initial Configuration Steps

Licensing Horizon

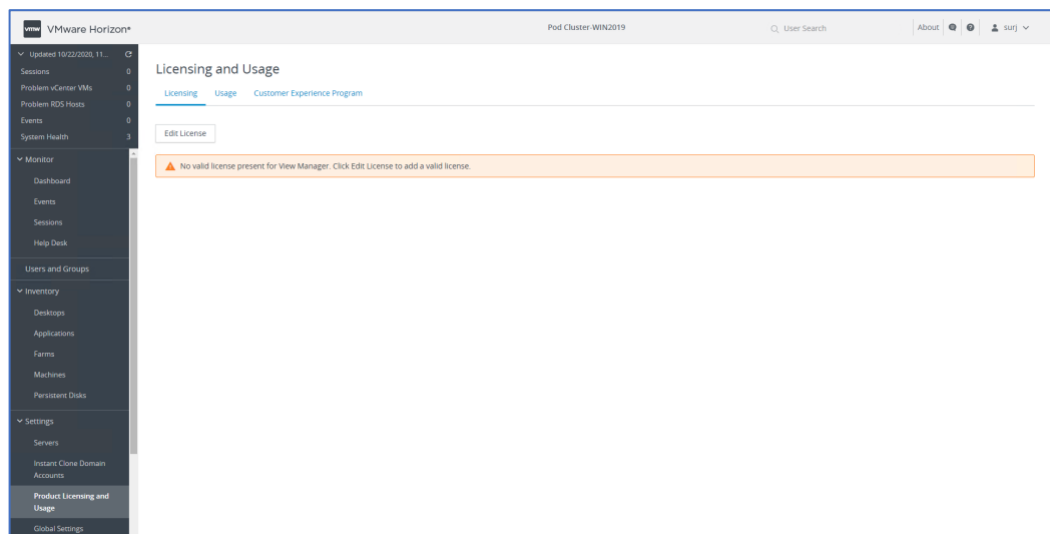
1. Open a Web Browser and enter the following URL format:

https://<connection_server_fqdn>admin.

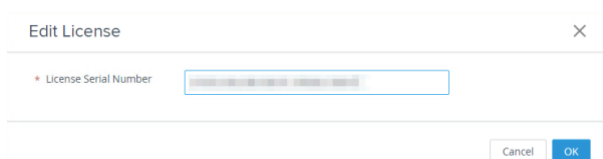
When prompted, enter the **username** and **password** for the account that has been granted access to the Horizon Console and click **Sign in**.



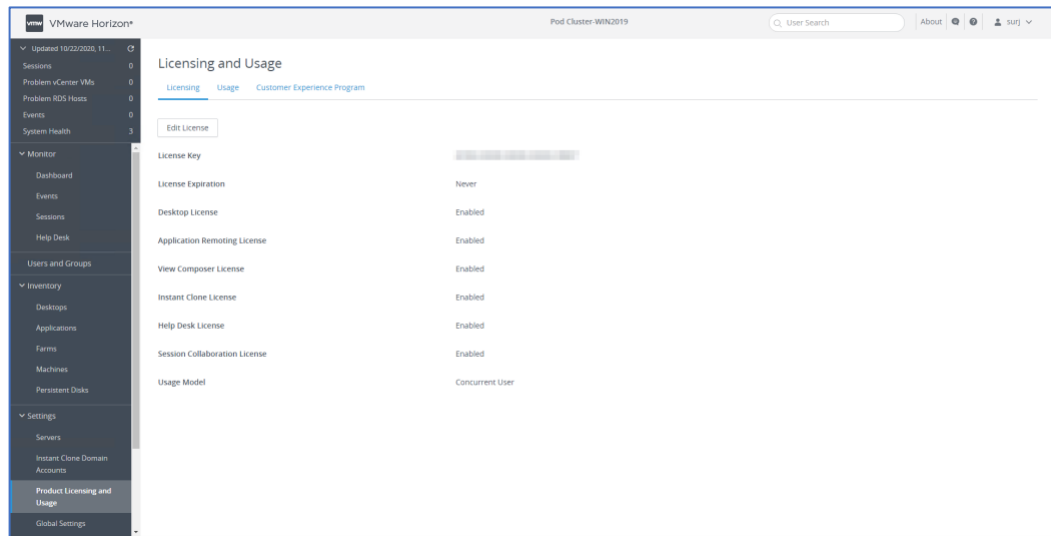
2. As soon as you log into the Horizon Console, you are prompted to add a license key. Click on **Edit License**.



3. Enter a valid license key and click **OK**.



4. Confirm that the license key has correctly been applied.



Add vCenter Server

Before adding vCenter Server to the Horizon Console, Horizon requires permissions on the vCenter Server to carry out provisioning activities. It is strongly recommended to create a service account in AD, which is added to vCenter Server with the privileges detailed in Table 3: vCenter Server Privileges.

Table 3: vCenter Server Privileges

Group	Privilege
Folder	Create folder
	Delete folder
Datastore	Allocate space
	Browse datastore
	Low level file operations
Host	Under Inventory:
	Modify cluster
Virtual machine	Under Configuration:
	All
	Under Interaction:
	Power off
	Power on

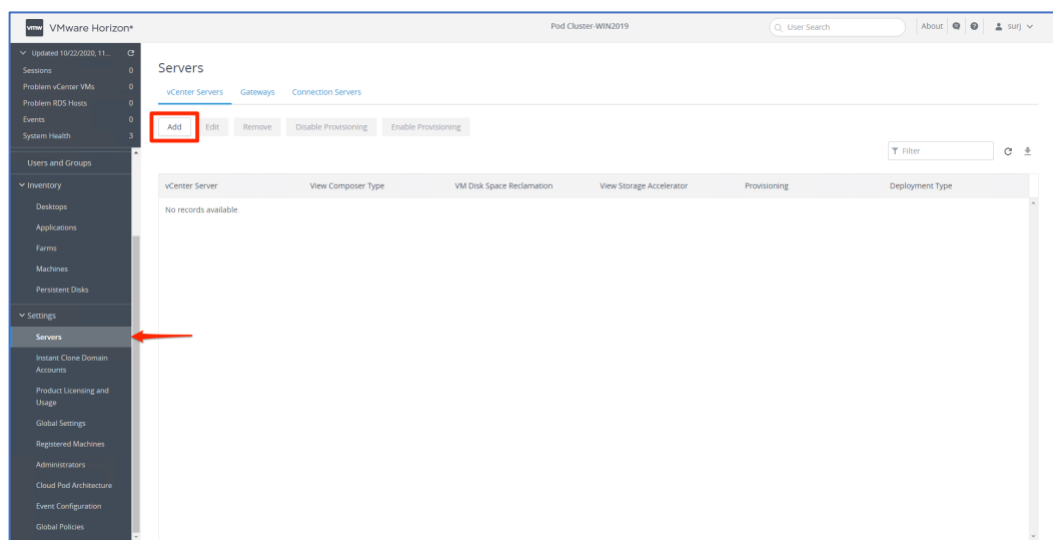
Group	Privilege
	Reset
	Suspend
	Perform wipe or shrink operations
	Device connection
	Under Inventory:
	All
	Under Snapshot management:
	All
	Under Provisioning:
	Customize
	Deploy template
	Read customization specifications
	Clone template
	Clone virtual machine
	Allow disk access
Resource	Assign virtual machine to resource pool

Group	Privilege
Global	Enable methods
	Disable methods
	System tag
	Manage custom attributes
	Act as vCenter Server (required if enabling View Storage Accelerator)
Network	All
Profile Driven Storage	All (if using vSAN datastores or Virtual Volumes)
Storage views	View
Cryptographic operations	If using Instant Clones VMs with vTPM:
	Clone
	Decrypt

Group	Privilege
	Direct Access
	Encrypt
	Manage KMS
	Migrate
	Register Host

- Under **Settings**, click on **Servers**.

Ensure *vCenter Servers* is selected and click **Add**.



- Enter the **FQDN** of your vCenter Server that will be managing the virtual desktop resources.
- Enter the **username** and **password** for the account with permissions to connect to vCenter Server. Typical other settings are left as defaults. Click **Next**.

Add vCenter Server

1 vCenter Information
2 View Composer
3 Storage
4 Ready to Complete

* Server address

* User Name

* Password

Description

* Port

443

Advanced Settings

Specify the concurrent operation limits.

* Max concurrent vCenter provisioning operations

20

* Max concurrent power operations

50

* Max concurrent maintenance operations

12

* Max concurrent View Composer provisioning operations

8

* Max concurrent Instant Clone Engine provisioning operations

20

Cancel Previous Next

7. Select whether you are planning to use **View Composer**. Take a moment to read the information banner that View Composer will longer be available in future releases of Horizon. Take this into consideration when planning your use-cases. Make the required settings and click **Next**.

Add vCenter Server

1 vCenter Information
2 View Composer
3 Storage
4 Ready to Complete

View Composer linked clones are being deprecated in Horizon 8.0 and will not be available in Horizon 8.1 and later versions. If you currently use this feature, select instant clones instead.

View Composer Settings

☒ Do not use View Composer

☐ View Composer co-installed with vCenter Server

Choose this if View Composer is installed on the same server as vCenter.

* Port

18443

☐ Standalone View Composer Server

Choose this if View Composer is installed on a separate server from vCenter.

* Server address

* User Name

User Name

* Password

Password

* Port

18443

Cancel Previous Next

8. The next page is where you can configure Storage Settings. Review the settings can click **Next**.

Add vCenter Server

✓ vCenter Information

✓ View Composer

3 Storage

4 Ready to Complete

Storage Settings

☒ Reclaim VM disk space
 ☒ Enable View Storage Accelerator

Default Host Cache Size MB
Cache must be between 100 MB and 32,768 MB.

Hosts

☐ Show All Hosts
[Edit Cache Size](#)

Host	Cache Size (MB)
	Default

Cancel

Previous

Next

9. Review your settings and click **Submit**.

Add vCenter Server

✓ vCenter Information

✓ View Composer

✓ Storage

4 Ready to Complete

vCenter Server

User Name

Password

Description

Server Port

Max Provision

Max Power

Max View Composer Operations

Max View Composer Provision

Max Instant Clone Engine Provision

View Composer State

Enable View Storage Accelerator

Default host cache size (MB)

VM Disk Space Reclamation

Deployment Type

-

443

20

50

12

8

20

Do not use View Composer

Yes

1,024

Yes

General

Cancel

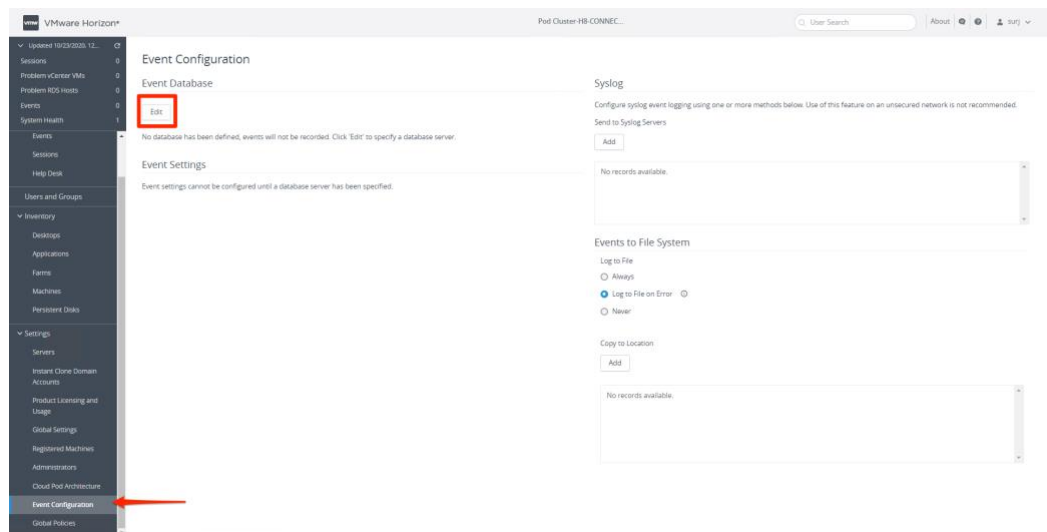
Previous

Submit

Configure Events Database

The final part of the initial configuration is configuring Horizon with the Events database.

10. Under **Settings**, click on **Event Configuration** and then click **Edit**.



11. Enter the **FQDN** of your database server.
Select the **Database Type** from the drop-down list.
If required, change the **Port** to communicate with the database server.
Enter the **username** and **password** to the database.
Enter a **Table Prefix** and click **OK**.

Edit Event Database

×

* Database Server

Database Type

Microsoft SQL Server

* Port

1433

* Database Name

* User Name

* Password

* Confirm Password

Table Prefix

H8_

Cancel

OK