vCenter Server Appliance 6.7 Install Guide:-

About VCSA:-

The VCSA is a pre-configured virtual appliance built on Project Photon OS. Since the OS has been developed by VMware it benefits from enhanced performance and boot times over the previous Linux based appliance.

Software Considerations:-

* VCSA 6.7 must be deployed to an ESXi host or vCenter running v5.5 or above. However, all hosts you intend to connect to vCenter Server 6.7 should be running ESXi 6.0 or above, hosts running 5.5 and earlier cannot be managed by vCenter 6.7 and do not have a direct upgrade path to 6.7.
* You must check compatibility of any third party products and plugins that might be used for backups, anti-virus, monitoring, etc. as these may need upgrading for vSphere 6.7 compatibility.
* To check version compatibility with other VMware products.
* The points above are especially important since at the time of writing vSphere 6.7 is new enough that other VMware and third party products may not have released compatible versions.

## **Other Considerations:-**

## The VCSA with embedded PSC requires the following hardware resources (disk can be thin provisioned)

## Tiny (up to 10 hosts, 100 VMs) – 2 CPUs, 10 GB RAM.

## Small (up to 100 hosts, 1000 VMs) – 4 CPUs, 16 GB RAM.

## Medium (up to 400 hosts, 4000 VMs) – 8 CPUs, 24 GB RAM.

## Large (up to 1000 hosts, 10,000 VMs) – 16 CPUs, 32 GB RAM.

## X-Large (up to 2000 hosts, 35,000 VMs) – 24 CPUs, 48 GB RAM – new to v6.5.

## Storage requirements for the smallest environments start at 250 GB and increase depending on your specific database requirements.

## Where the PSC is deployed as a separate appliance this requires 2 CPUs, 4 GB RAM, 60 GB disk.

## Environments with ESXi host(s) with more than 512 LUNs and 2048 paths should be sized large or x-large.

## The ESXi host on which you deploy the VCSA should not be in lockdown or maintenance mode.

## All vSphere components should be configured to use an NTP server. The installation can fail or the vCenter Server Appliance vpxd service may not be able to start if the clocks are unsynchronized.

## FQDN resolution should be in place when deploying vCenter Server.

## The configuration maximums for vSphere 6.7 can be found [here](https://configmax.vmware.com/).

## In vSphere 6.7 TLS 1.2 is enabled by default. TLS 1.0 and TLS 1.1 are disabled by default, review the [Release Notes](https://docs.vmware.com/en/VMware-vSphere/6.7/rn/vsphere-esxi-vcenter-server-67-release-notes.html) for more information.

## There are a number of Intel and AMD CPUs no longer supported with vSphere 6.7, review the [Release Notes](https://docs.vmware.com/en/VMware-vSphere/6.7/rn/vsphere-esxi-vcenter-server-67-release-notes.html) for a full list of unsupported processors.

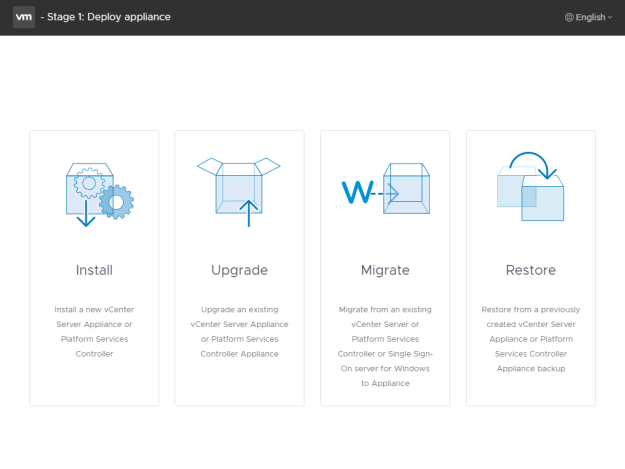
## Features:-

## The VCSA scales up to 2000 hosts and 35,000 virtual machines. A couple of releases ago the VCSA reached feature parity with its Windows counterpart, and is now the preferred deployment method for vCenter Server. Features such as Update Manager are bundled into the VCSA, as well as file based backup and restore, and [vCenter High Availability](https://esxsi.com/2018/10/21/vcsa67-ha/" \t "_blank). The appliance also saves operating system license costs and is quicker and easier to deploy and patch.

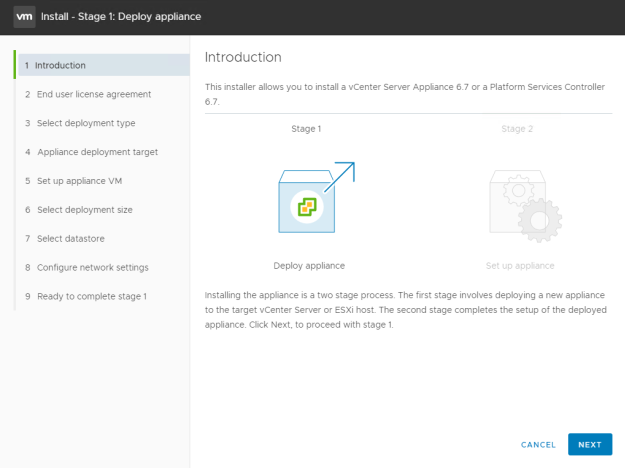
## **Installation:-**

Download the VMware vCenter Server Appliance 6.7 ISO from VMware downloads: [v6.7.0](https://my.vmware.com/web/vmware/details?downloadGroup=VC670&productId=742&rPId=22641).

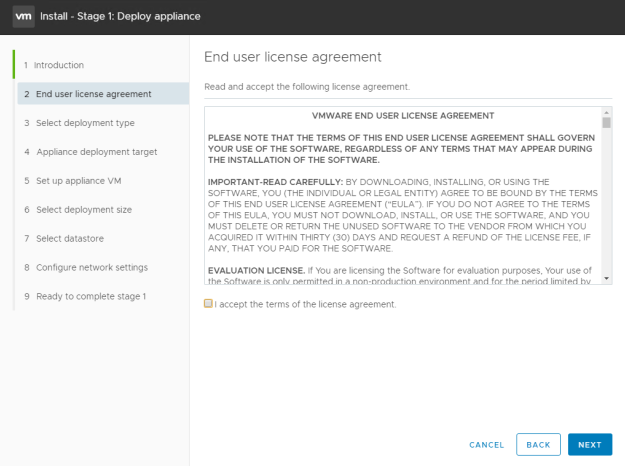
Mount the ISO on your computer. The VCSA 6.7 installer is compatible with Mac, Linux, and Windows. Browse to the corresponding directory for your operating system, e.g. \vcsa-ui-installer\win32. Right click **Installer** and select **Run as administrator**. As we are installing a new instance click **Install**.

The installation is split into 2 stages, we begin with deploying the appliance. Click **Next**.

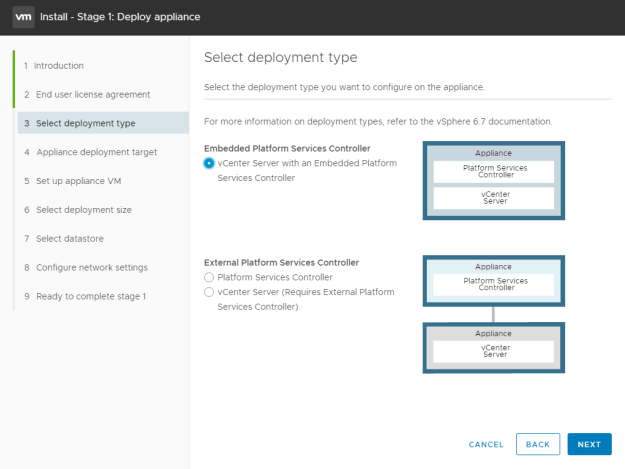
The installation is split into 2 stages, we begin with deploying the appliance. Click **Next**.



Accept the license agreement and click **Next**.



Select the deployment model, in this example we will be using an embedded deployment combining the vCenter Server and Platform Services Controller in one appliance, click **Next**.



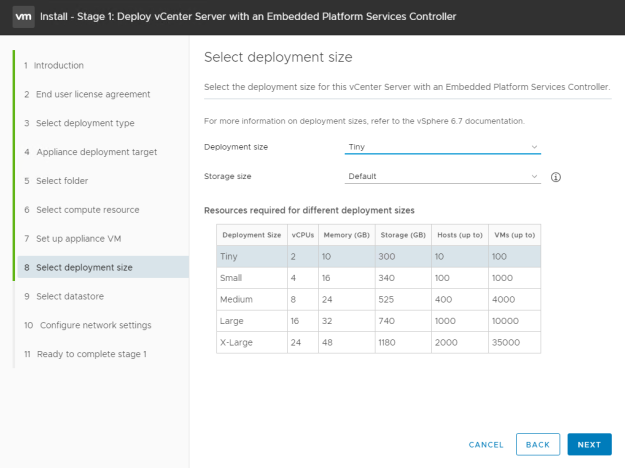
## Enter the FQDN or IP address of the host, or vCenter upon which you wish to deploy the new VCSA. Enter the credentials of an administrative or root user and click ****Next****. The installer will validate access, if prompted with an untrusted SSL certificate message click ****Yes**** to continue. Tip – connect to the vCenter for visibility of any networks using a distributed switch, connecting to the host direct will only pull back networks using a standard switch.

## 

## Enter the VM name for the VCSA and a root password, click ****Next****.

## 

Select the deployment size in line with the number of hosts and virtual machines that will be managed, click **Next**.



Select the datastore where the VCSA will be deployed, select thin provisioning if required, and click **Next**. Configure the network settings for the appliance and click **Next**.

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## On the summary page click **Finish**. The appliance will now be deployed.

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## With the VCSA now deployed we can move on to stage 2, click ****Continue****.

## 

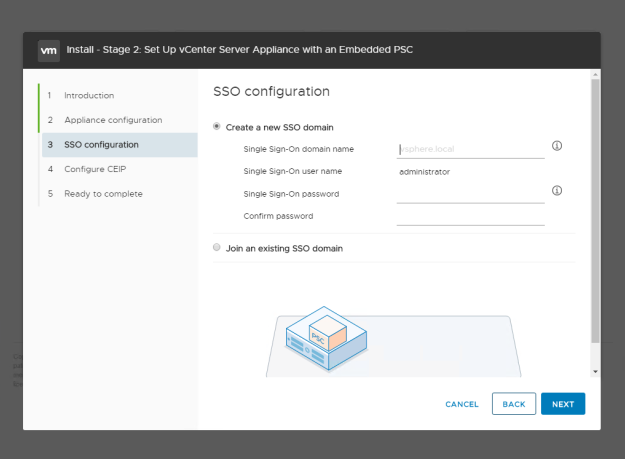
## Click ****Next**** to being the VCSA setup.

## 

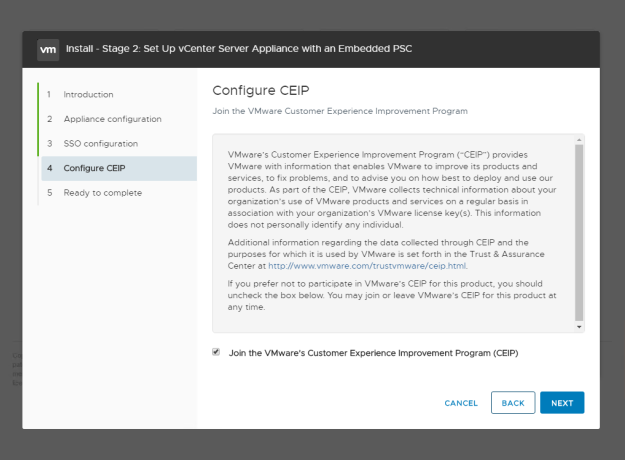
## Configure the NTP servers, enable SSH access if required, and click ****Next****.

## 

## Enter a unique SSO domain name, the default is vsphere.local. ****The SSO domain name should not be the same as your Active Directory Domain****. Configure a password for the SSO administrator, click ****Next****.



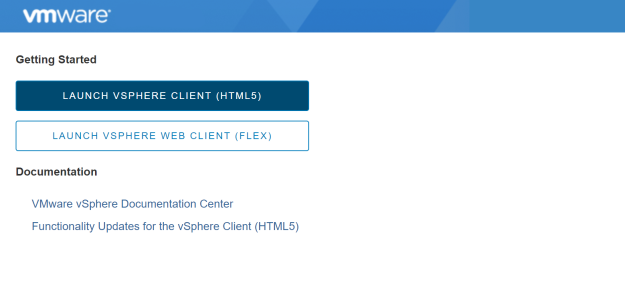
Select or deselect the customer experience improvement program box and click **Next**.



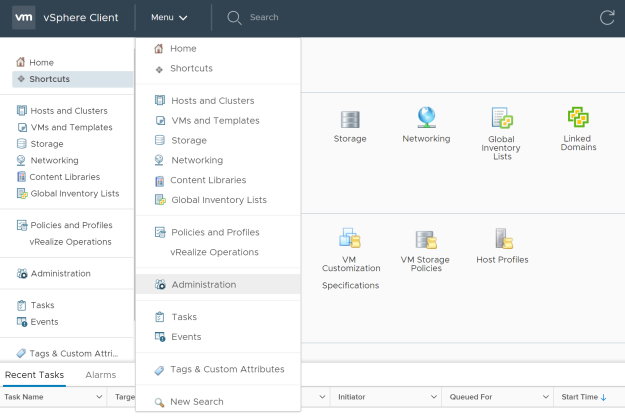
Review the details on the summary page and click **Finish**. Click **Ok** to acknowledge that the VCSA setup cannot be paused or stopped once started. When the installer is complete click **Close** to close the wizard.

## ****Post-Installation:-****

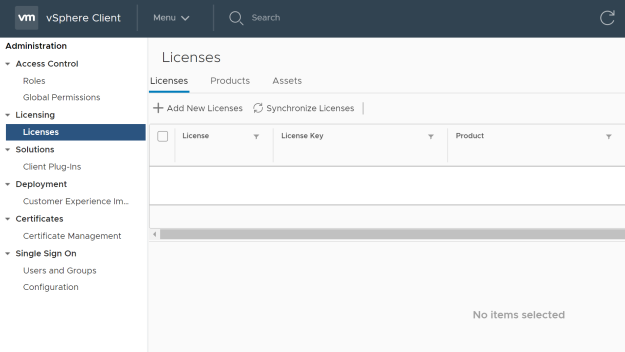
## Connect to the vCenter post install using the IP or FQDN of the vCenter. Access vSphere by clicking either ****Launch vSphere Client (HTML5)**** or ****Launch vSphere Web Client (FLEX)****. As the web client will be depreciated in future versions, and the HTML5 client is now nearly at full feature parity, we will use the HTML5 vSphere client.



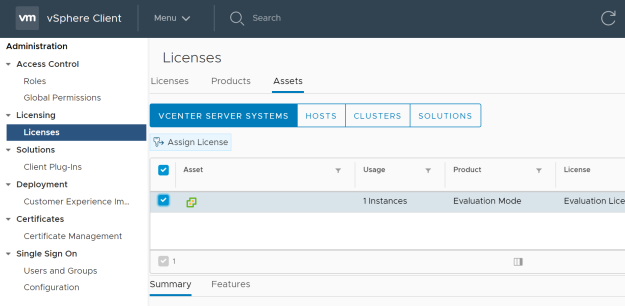
You must apply a new vCenter license key within 60 days. If you have purchased vCenter Server then log into your licensing portal [here](https://my.vmware.com/web/vmware/login?contextType=external&username=string&OverrideRetryLimit=1&action=%2F&password=sercure_string&challenge_url=https%3A%2F%2Fmy.vmware.com%2Fweb%2Fvmware%2Flogin&creds=username+password&request_id=122602230496865432&authn_try_count=0&locale=en_GB&resource_url=https%253A%252F%252Fmy.vmware.com%252Fgroup%252Fvmware%252Fhome). If the license key does not appear then check with your VMware account manager. Log in to the vSphere Web Client using the SSO administrator login.  From the **Menu** drop-down click **Administration**,



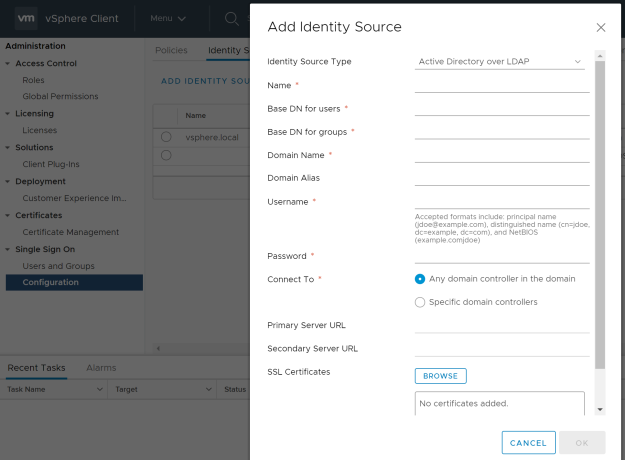
Under Licensing select **Licenses**. First we need to add a new license key, click **Add New Licenses**. Enter the new license key for vCenter Server, click **Next**. If applicable assign a name to the licence, click **Next**. Click **Finish** to add the license key.



Switch to **Assets**, the vCenter Server is listed in evaluation mode. Highlight the vCenter and click **Assign License**. Select the license key and click **Ok**.



If you have an Active Directory domain then vCenter can use this as an identity source. First ensure the vCenter is joined to the domain; from the **Menu** drop-down click **Administration**. Under Single Sign On click **Configuration**. Select the **Active Directory Domain** tab and verify the vCenter is domain joined. Change to the **Identity Sources** tab and click **Add Identity Source**. Fill in the Active Directory details for your domain and click **Ok**.



You can now add permissions to vCenter objects such as datacenters, clusters, folders, individual virtual machines, etc. for Active Directory users and groups. To learn more about vSphere permissions click [here](https://docs.vmware.com/en/VMware-vSphere/6.7/com.vmware.vsphere.security.doc/GUID-ED56F3C4-77D0-49E3-88B6-B99B8B437B62.html).

To start adding ESXi hosts to vCenter click the **Menu** drop-down and select **Hosts and Clusters**. Right click the vCenter and select **New Datacenter**, give the datacenter a name and click **Ok**. Right click the datacenter and select **Add Host**. Follow the onscreen wizard to add a host. Creating clusters and configuring vCenter is beyond the scope of this post, for assistance follow the documentation links at the top of the page.

