6.4 CloudShell Windows Virtual Appliance

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Contents

Overview

You can use the images provided in the CloudShell Windows Virtual Appliance to create virtual machines (VMs) that contain CloudShell in a Windows operating system.

This document describes how to download the CloudShell appliance and create VMs from the images that it provides.

The CloudShell components that are provided in the VMs that are created are:

- Quali server
- CloudShell portal
- TestShell Execution server
- CloudShell authoring
- CloudShell Resources management client
- CloudShell License server
- Database server (based on SQL express server 2012)

Hypervisor Requirements

- VMware vSphere (For Windows users)
- KVM (For Linux users)

Prerequisites

- Windows Server 2012 R2 license
- CloudShell floating license (with a license for the Quali Server component plus licenses for any other required CloudShell component)

Download the Windows Virtual Appliance images

The installation files for the CloudShell Windows Virtual Appliance are available from QualiSystems' Download Center. To locate the installation files, open the header **CloudShell Version 6.4**. The installation files are available under **Virtual Appliances**.

Download the files into a temporary location on your local machine.

Each folder contains an **.md5** file with a list of files in that folder and their md5 checksum.

Note: Registration to the QualiSystems Support Portal is required. If you have not registered, click this link to register New registration.

Installation procedure

To install and configure CloudShell Windows Virtual Appliance:

1. Use the installation option that is suitable for your operating system:
    - For VMware vSphere users: Creating a VM using the OVF template (Vsphere).
    - For Linux KVM users: Creating a VM using the qcow2 image file (KVM).
2. Perform the post installation steps described here: Post installation.

Note: CloudShell Windows Virtual Appliance Execution Server does not support the running of tests.

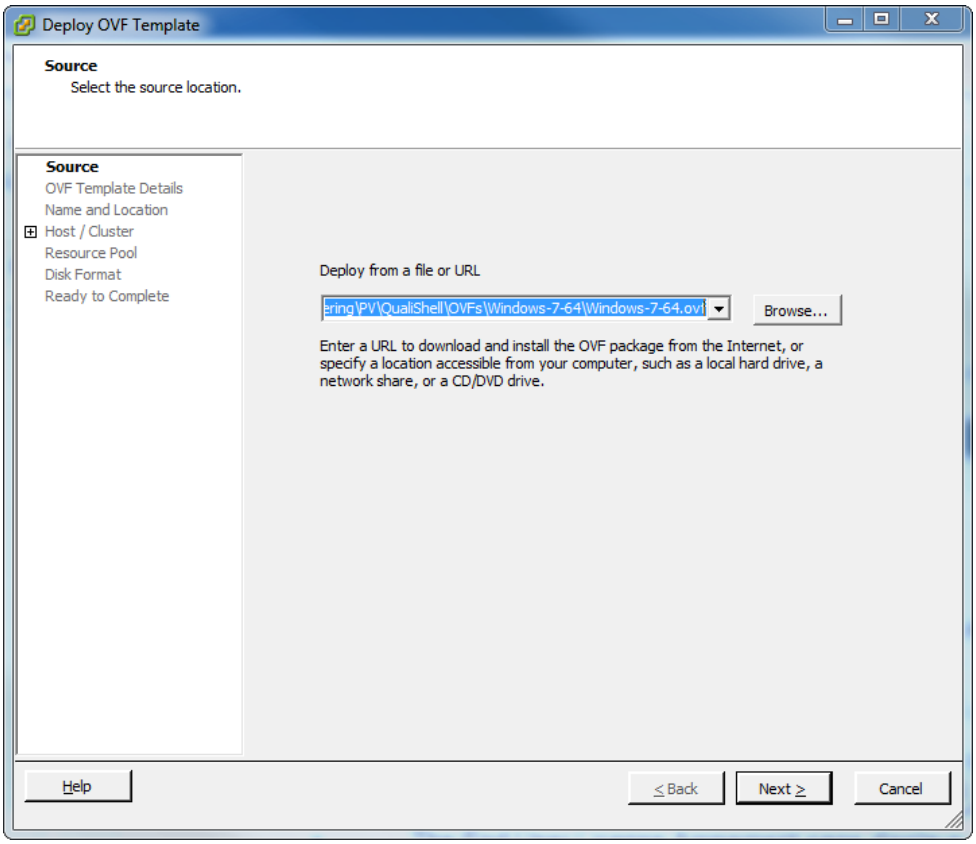
Creating a VM using the OVF template (vSphere)

Use the following steps to use vSphere to deploy the OVF template and create a VM.

To create a VM by deploying the OVF template:

1. In your local machine, log in to vSphere with administrator credentials.

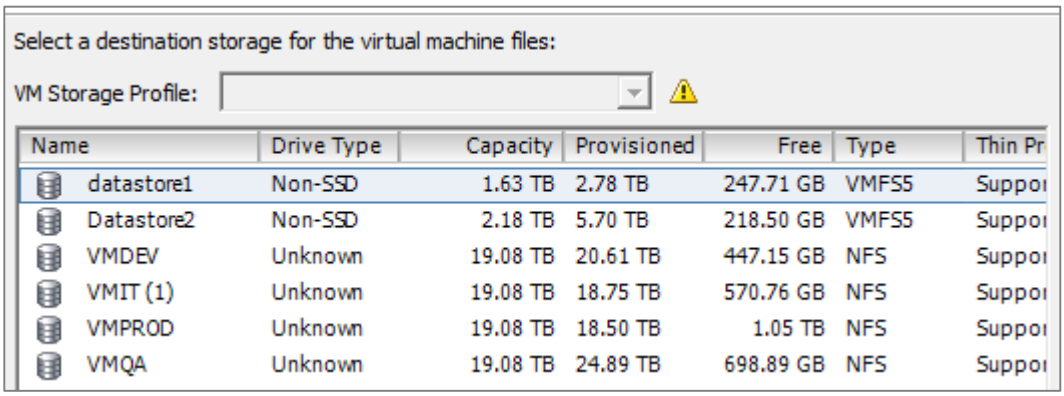
2. Click **File > Deploy OVF Template**.



3. In the **Deploy OVF Template** window, click **Browse**. Navigate to the directory where the installation files are located.
4. In the **Deploy from a file or URL** field, select the required OVF file.
5. Click **Next**. Review the summary of the OVF template. If the details are correct, click **Next**.

   The End User License Agreement page displays with the details of license agreements that are associated with the software that is installed in the OVF template.
6. You must accept the license agreements to deploy the OVF template. If no license agreements are associated with the installed software, this screen does not appear. Click **Next**.
7. Enter the name for the deployed OVF template.

8. Select the folder location within the inventory for the virtual appliance. Click **Next**.
9. Select the host or cluster on which to run the template. Click **Next**.
10. Select a resource pool within which to deploy the template. Virtual machines share the resources of their parent pool.



11. Specify the destination storage for the virtual appliance.
12. In the Disk Format screen specify the provision type. Specify Thin Provision and click **Next**.
13. When the deployment has completed, click **Power On**.

    At any time after completing the wizard, you can modify your specifications of the size of the disk and add additional disks by using the **Virtual Machine Properties** dialog box.
14. Right-click the VM and select **Open Console**.
15. In the VM console window, check the **Settings Screen** to be sure that it uploaded without errors.

Creating a VM using the qcow2 image file (KVM)

Use the following steps to create a VM on your Centos 7 machine.

Note: Your CPU must have hardware virtualization support (Intel VT-x or AMD-V) to be able to use KVM.

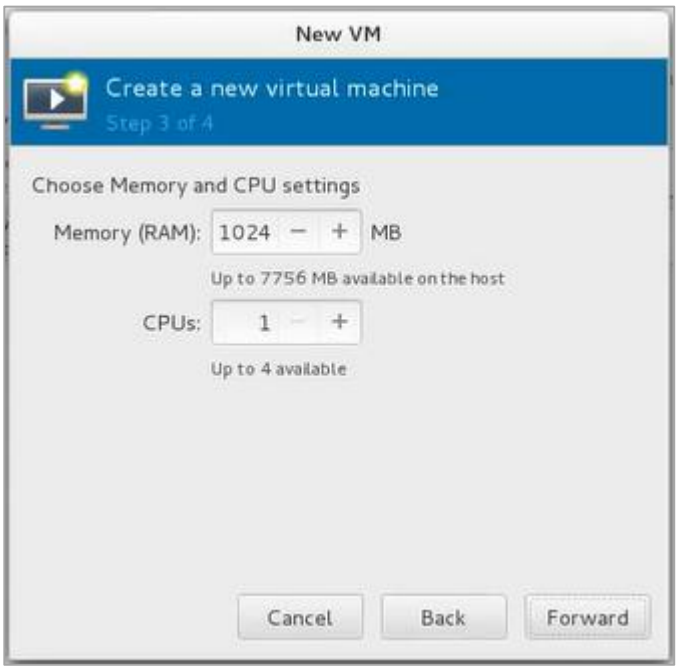
To create a VM by deploying the OVF template:

1. Log in to your machine as root user.
2. Navigate to the directory where the installation files were downloaded. Create a backup copy of the qcow2 image file.
3. Move the qcow2 image file to the directory where you want to place the VM and storage.
4. In the Linux desktop, to open the Virtual Machine Manager, click Virt-manager 

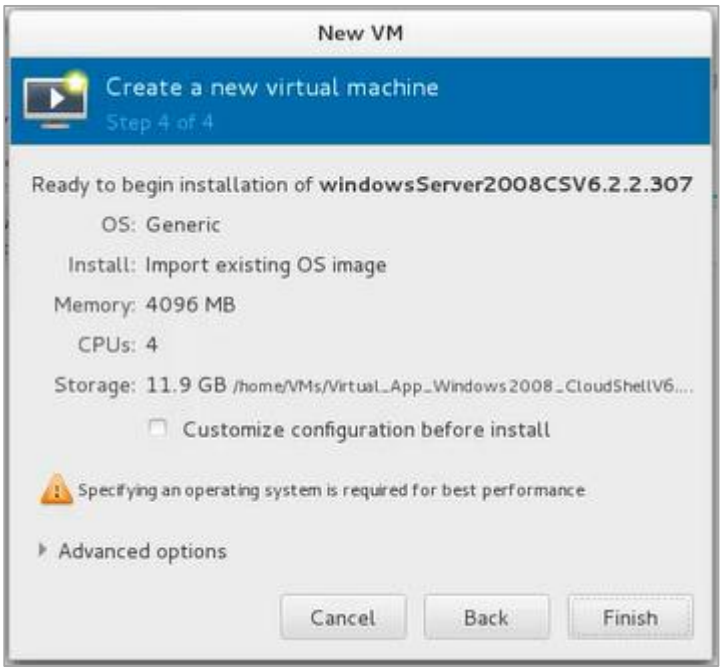
and click **Create a new virtual machine**  .

5. In the **New VM** window, in the **Name** field, enter a name for the VM.
6. Select **Import existing disk image** and click **Forward**.

7. Click **Browse** and navigate to the path of the qcow2 image file. Select the image file and click **Open.**

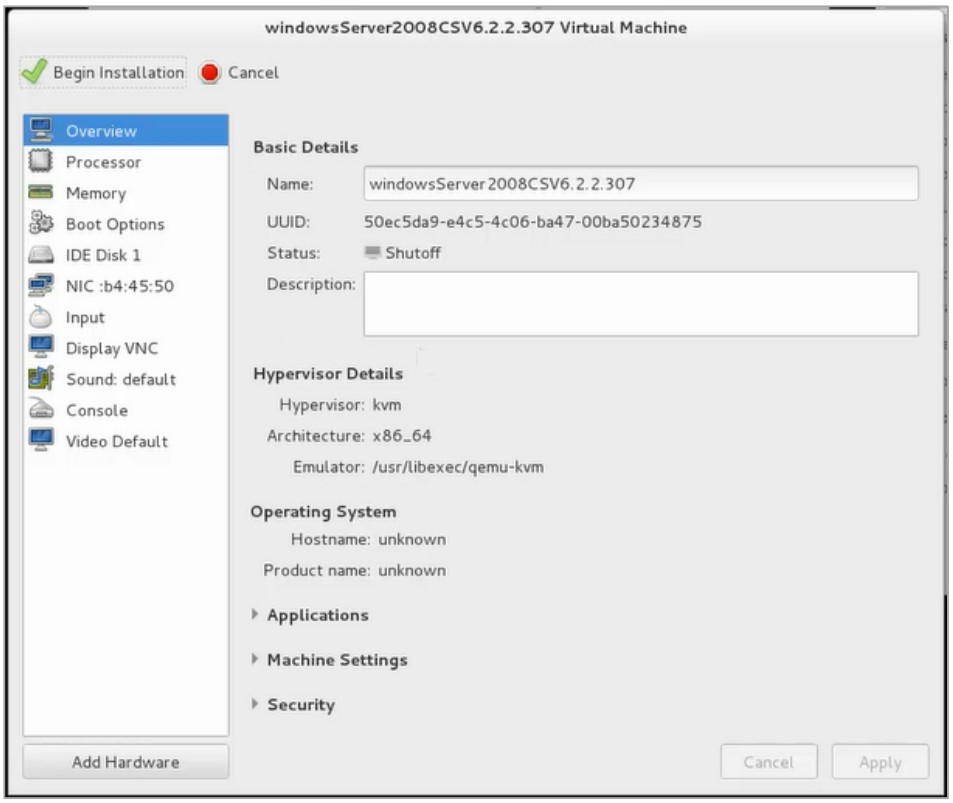


8. Click **Forward**.
9. For the memory and CPU settings, specify values that match your system. For the purposes of this procedure, the values 4 GB RAM (4096 MB) and 4 CPUs are specified. Click **Forward**.

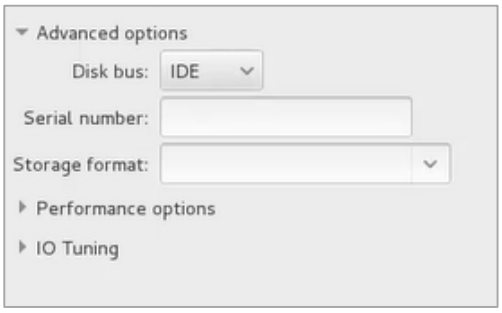


10. Select **Customize configuration before install**. Click **Finish**.

    The details of the VM to be created are displayed.



11. Select **IDE Disk 1**. Click **Advanced** options.



12. Ensure IDE is selected in the **Disk bus** field.
13. In the **Storage format** field, select qcow2. Click **Apply**.
14. Click Begin Installation.

    The VM is created.

Post installation steps

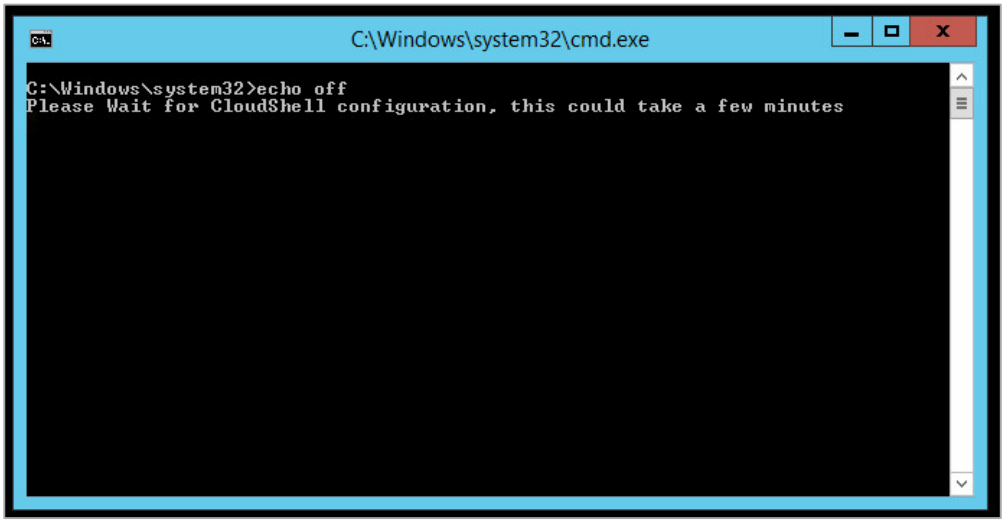
After installing the VM, perform the post installation steps in the order described in this section.

These steps are performed once only, at the time when first starting the VM and when first logging into CloudShell portal.

Setting up the new VM

To set up the new VM:

1. Open the hypervisor (KVM or Vsphere) that you used to deploy the VM.
2. Power on the new VM.
3. Open the VM console. In the console, the Windows operating system starts to load.
4. Respond to the operating system setup prompts.
5. Create a username and password as administrator.
6. After logging in as administrator, at the time of the first login, the initial CloudShell configuration runs in the background.



Continue the set-up configuration by logging into CloudShell portal remotely and applying the CloudShell license as described in the section Applying the CloudShell license.

Applying the CloudShell license

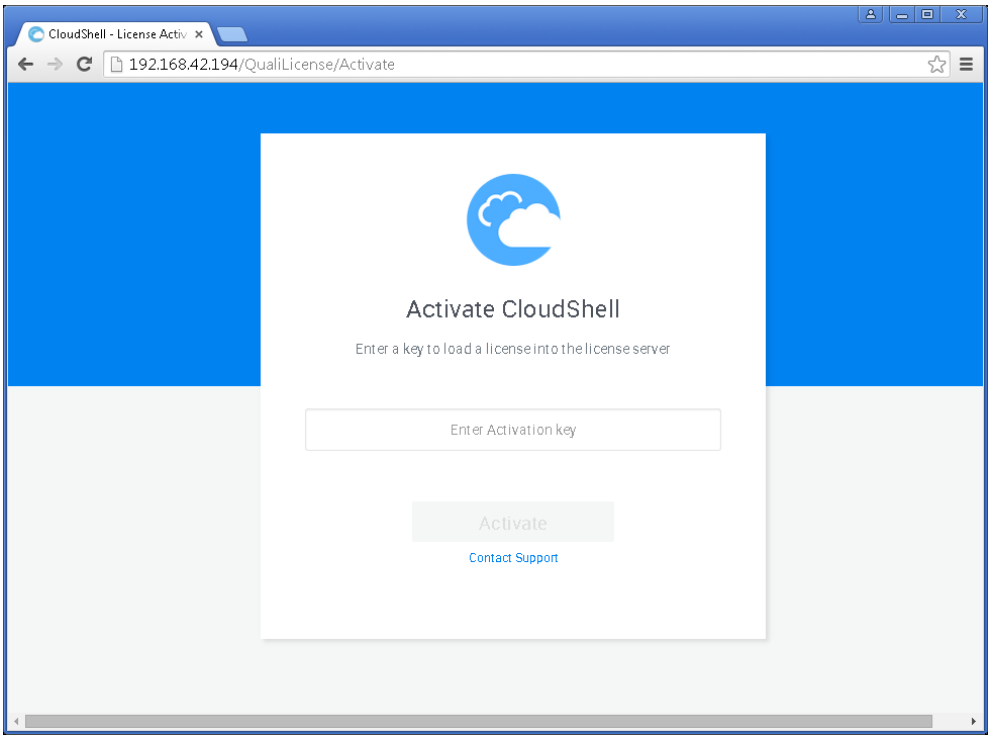
Continuing from the procedure to set up the VM, this procedure describes how to remotely access CloudShell portal and applying the license.

To remotely access CloudShell portal and apply the CloudShell license:

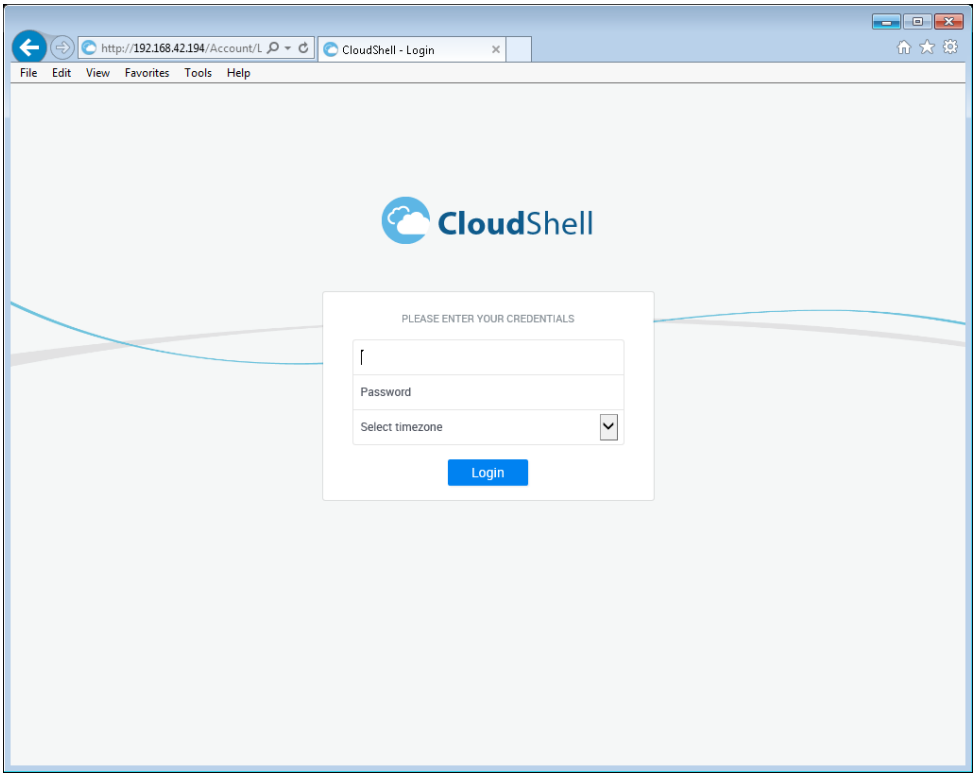
1. Open a browser on a networked machine and specify the URL based on the IP of the configured newly created VM.

   The VM does not have a CloudShell license and therefore a new CloudShell activation page opens.

   (The IP in the URL in the following image is for illustration purposes only.)



2. Enter the CloudShell license in the Enter Activation Key field.
3. If you do not have a CloudShell license, click Contact Support and obtain a license. When you have a license, enter it in the Enter Activation Key field.
4. Click Activate.
5. Follow the prompts to complete the CloudShell configuration.



6. In the Login screen, enter your username, password and select the time zone.
7. Click **Login**.

   At the conclusion of this procedure, CloudShell is set to run in a standalone configuration.

Using the Virtual Appliance to work with CloudShell

After performing the post installation steps, the Virtual Appliance is available to you for use with the CloudShell products, such as CloudShell portal, authoring and Resource Management.

Launching CloudShell portal

To work with CloudShell portal:

- If you are working in the VM, double-click the CloudShell Portal icon on the desktop, or open a browser and specify `localhost` in the URL address field and press **Return**. The browser automatically populates the balance of the URL.
- If you are working on a machine outside the VM, ensure that the VM is on, open a browser and specify the IP of the VM in the URL address field and press **Return**. The browser automatically populates the balance of the URL. By default port 80 is used.

Working with CloudShell portal and other CloudShell components

When the virtual appliance is installed and configured and if you need to access the VM to reconfigure or using the CloudShell client products, such as, Authoring and Resource Management Client, you can access the VM by using Remote Desktop Protocol (RDP) or from the hypervisor console (using vSphere or KVM).

General information

Note: When prompted to specify the database parameters under the configuration wizard of Quali Server, perform the following steps:

1. Clear the Windows authentication checkbox so that this option is not used.
2. The CloudShell configuration runs using the following SQL authentication:
   User: SA
   Password: Qwer$321
   Role: Sysadmin