



# Cisco TelePresence Content Server Release 6.2 Virtual Machine Installation Guide

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**June 1, 2015**

This document provides instructions for installing Cisco TelePresence Content Server Release 6.2 as a virtualized application on a VMware vSphere Hypervisor (ESXi) system.

See these sections:

- [Recommended Platform, page 2](#)
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- [Installation Notes, page 4](#)
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## Recommended Platform

These are the minimum requirements for third-generation Content Server (Cisco UCS C220 M3) server hardware:

vCPU <sup>1</sup>	8
RAM	8 GB
Disk space <sup>2</sup>	550 GB

1. Hyper threading is enabled.
2. 550 GB disk space is allocated only for VM.

These are the minimum requirements for second-generation Content Server hardware:

vCPU	8
RAM	4 GB
Disk space	450 GB

Content Server Release 6.2 is not supported on first-generation Content Server hardware.

These are the minimum requirement for BE6K Content Server hardware.

vCPU	2
RAM	4 GB
Disk space	C (50GB) + E (250 GB) = 300 GB



### Note

Any other UCS models conforming to the Tested Reference Configuration (TRC) or a better TRC should be supported the tested configuration.

## About Data Migration

After you complete the VM Content Server Release 6.2 installation, you can run the optional Migration Assistant wizard to transfer configuration and data files from your existing first-, second-, or third-generation Content Server hardware.

You can order the Migration Assistant software (R-VMTCS-MIG-K9=) from [Cisco.com](http://Cisco.com). For more information about using the Migration Assistant, see [Cisco TelePresence Content Server Release 6.1 Migration Assistant Tool](#).

## Limitations and Restrictions

- You cannot install VM Content Server Release 6.1 and Release 6.2 on first-generation Content Server hardware.
- [Table 1](#) describes the Content Server hardware and VMware vSphere Hypervisor (ESXi) software version compatibility.

**Table 1** Content Server Hardware and VMware ESXi Software Compatibility

ESXi Software Version	Content Server Second-Generation Hardware	Content Server Third-Generation Hardware
ESXi 5.0	Yes, with VMware standard image.	Yes, with VMware Cisco custom ISO image <sup>1</sup> available here: <a href="https://my.vmware.com/web/vmware/info/slug/datacenter_cloud_infrastructure/vmware_vsphere/5_0#custom_iso">https://my.vmware.com/web/vmware/info/slug/datacenter_cloud_infrastructure/vmware_vsphere/5_0#custom_iso</a> ESXi to download: Cisco Custom Image for ESXi 5.0.0 U3 GA Install CD
ESXi 5.1	Yes, with VMware standard image.	Yes, with VMware Cisco custom ISO image <sup>1</sup> available here: <a href="https://my.vmware.com/web/vmware/info/slug/datacenter_cloud_infrastructure/vmware_vsphere/5_1#custom_iso">https://my.vmware.com/web/vmware/info/slug/datacenter_cloud_infrastructure/vmware_vsphere/5_1#custom_iso</a> ESXi to download: Cisco Custom Image for ESXi 5.1.0 GA Install CD
ESXi 5.5	Yes, with VMware standard image.	Yes, with VMware Cisco custom ISO image <sup>1</sup> available here: <a href="https://my.vmware.com/web/vmware/info/slug/datacenter_cloud_infrastructure/vmware_vsphere/5_5#custom_iso">https://my.vmware.com/web/vmware/info/slug/datacenter_cloud_infrastructure/vmware_vsphere/5_5#custom_iso</a> ESXi to Download: Cisco Custom Image for VMware ESXi 5.5.0 GA Install CD

1. For more information about the VMware Cisco custom ISO image, see the [Release Notes for the VMware ESXi Installable Cisco Custom ISO Image](#) on Cisco.com.

## Installation Prerequisites Checklist

1. Download the VM Content Server Release 6.2 software by using the external download location link that is provided in the E-delivery notification email:

- a. Content Server software image
  - b. OVA template that is specific for the host hardware
  - c. System configuration scripts
2. Confirm that you have this system software available for installation:
    - a. Windows Server 2008 Standard R2 Service Pack 1
    - b. VMware vSphere Hypervisor (ESXi) software version that is specific for the Content Server second- or third-generation hardware (see [Table 1](#)).
  3. Before installing VMware ESXi vSphere on the host server confirm that:
    - a. Virtualization Technology (VT) is enabled in the BIOS
    - b. “Virtual Machine Startup/Shutdown” is configured to “Allow Virtual machines to start and stop automatically with the system” and the VM Content Server has been moved to the Automatic startup section
    - c. Valid NTP server is configured that is the same NTP server that will be specified in the Content Server

## Installation Notes

To install VM Content Server Release 6.2 on new hardware, you will need the software base Product Authorization Key (PAK) and option PAK. This information is part of the claim certificate that you received after ordering the VM Content Server. See the [Install VM Content Server](#) section for more information.

To install VM Content Server Release 6.2 on existing second- or third-generation hardware, you will need to:

- Obtain the license and option keys from the Content Server registry and create a license text file to restore the keys on the VM Content Server. See the [Installing VM Content Server on Existing Hardware](#) section for more information.
- Use the Cisco TelePresence Content Server Migration Assistant Tool (Migration Assistant) to migrate the data and configuration settings from the existing hardware.

For more information about the Migration Assistant, see [Using the Cisco TelePresence Content Server Migration Assistant Tool for Release 6.1](#).

## Installing VM Content Server on New Hardware

Complete these tasks to install VM Content Server Release 6.2 on new hardware:

1. [Install VMware vSphere ESXi, page 5](#)
2. [Deploy OVA to Host, page 5](#)
3. [Install Windows Server 2008 Standard R2 Service Pack 1, page 8](#)
4. [Install Internet Information Services, page 10](#)
5. [Install Window Media Services, page 11](#)
6. [Install Windows Server Features, page 12](#)
7. [Install VM Content Server, page 14](#)

To install VM Content Server on existing hardware, see the “[Installing VM Content Server on Existing Hardware](#)” section on page 16.

## Install VMware vSphere ESXi

- 
- Step 1** Install VMware vSphere ESXi on the host Content Server. (See [Table 1](#) for the ESXi version.)
- For ESXi Release 5.0, see the VMware release notes here:  
<https://www.vmware.com/support/vsphere5/doc/vsphere-esx-vcenter-server-50-release-notes.html>
- For ESXi Release 5.1, see the VMware release notes here:  
<https://www.vmware.com/support/vsphere5/doc/vsphere-esx-vcenter-server-51-release-notes.html>
- For ESXi Release 5.5, see the VMware release notes here:  
<https://www.vmware.com/support/vsphere5/doc/vsphere-esx-vcenter-server-55-release-notes.html>
- 

## Deploy OVA to Host

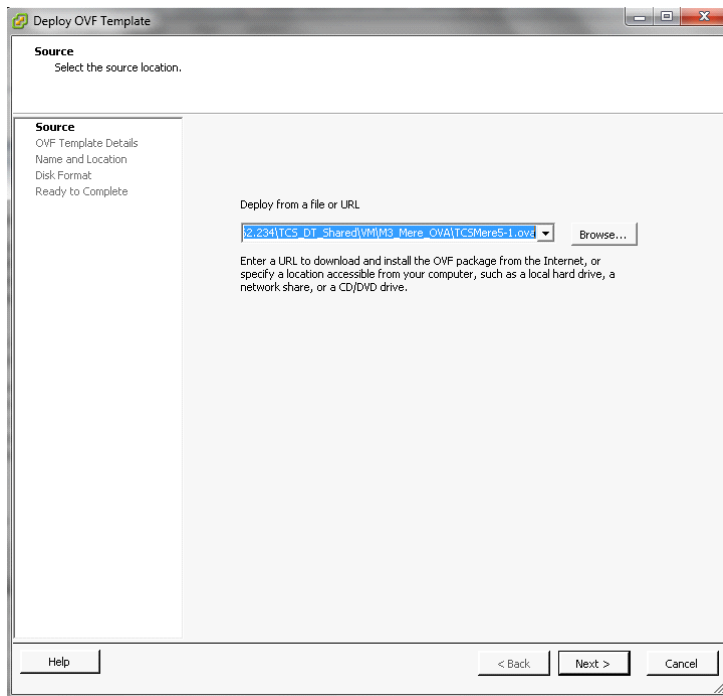
These instructions represent a typical installation. The Deploy OVF Template wizard dynamically changes to reflect the host configuration.

- 
- Step 1** Log in to the vSphere client to access the ESXi Host.
- Step 2** Select **File > Deploy OVF Template**.
- Step 3** On the Source page, **Browse** to the location of the .ova file that is specific to the host appliance. Click **Next**.

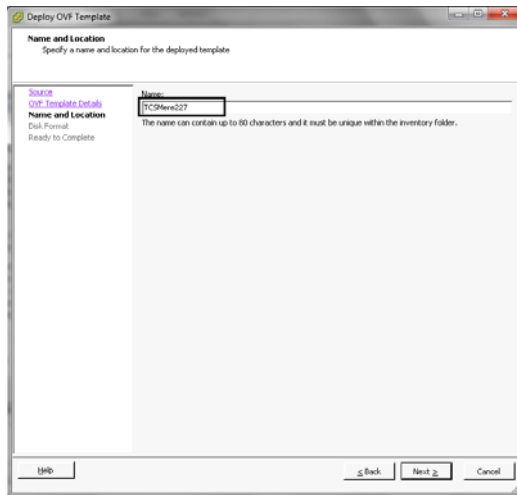


**Note** For TCS 6.2, OVA file is **S\_6\_2\_TCSVM\_Bundle.zip** and for BE6K, OVA file is **S\_6\_2\_TCSBE6K\_Bundle.zip**.

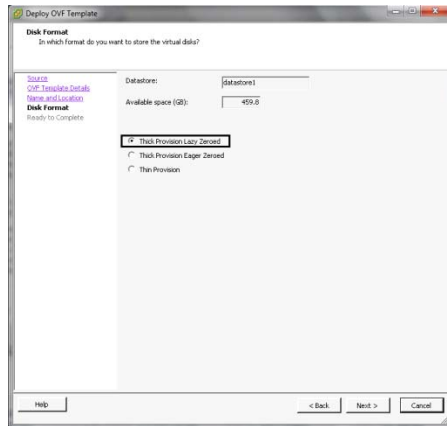
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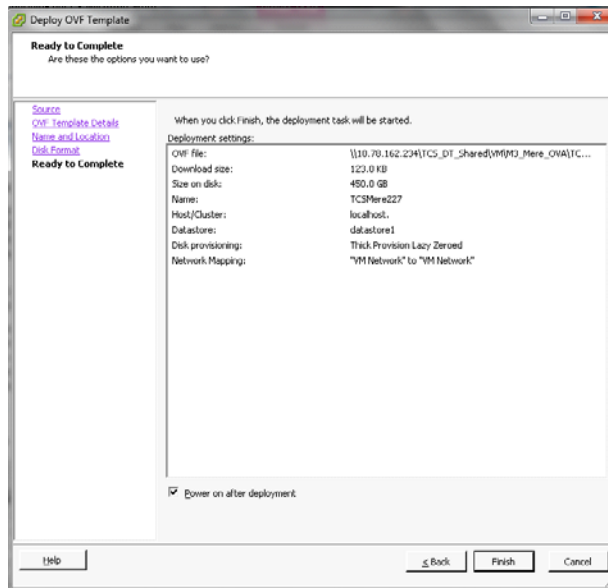
**Step 4** On the Name and Location page, enter the **Name** for the VM Content Server guest, for example “Virtual\_TCS”. Click **Next**.



**Step 5** On the Disk Format page, confirm that the **Thick Provision Lazy Zeroed** default disk format is selected. Click **Next**.



- Step 6** On the Ready to Complete page:
- Confirm the deployment settings.
  - Select the **Power on after deployment** check box.
  - Click **Finish**.



- Step 7** The installation process begins and a progress bar is displayed. The Content Server OVA is now deployed as a guest on the VM host.

## Install Windows Server 2008 Standard R2 Service Pack 1

These instructions represent a typical installation.

- 
- Step 1** Obtain the Windows Server 2008 Standard R2 Service Pack 1 software to begin installation process.
- Step 2** Power on the VM.
- Step 3** Depending on your Windows Server media type, perform one of these steps:
- Insert the Windows 2008 DVD in DVD drive. In ESXi, connect the DVD drive letter by using the ESXi option **Connect/Disconnect the CD/DVD devices of Virtual Machine > Connect to <DVD drive letter>**.
  - or
  - Mount the Windows 2008 ISO image file in ESXi by using the option **Connect/Disconnect the CD/DVD devices of Virtual Machine > Connect to ISO Image on local disk** and browse the Windows Server ISO image file.
- Step 4** Press **CTRL + ALT + Insert** to boot from the DVD or the mounted ISO image.
- Step 5** If prompted, choose **Windows Server 2008 R2 Standard (Full Installation) x64**.
- Step 6** In the Install Windows Server screen, choose **Custom** (Advanced).
- Step 7** Create two partitions on the host while installing Windows:
- C: for program files with a minimum of 100 GB space
  - E: for media files with the remainder of available space (450 GB for M3 hardware)

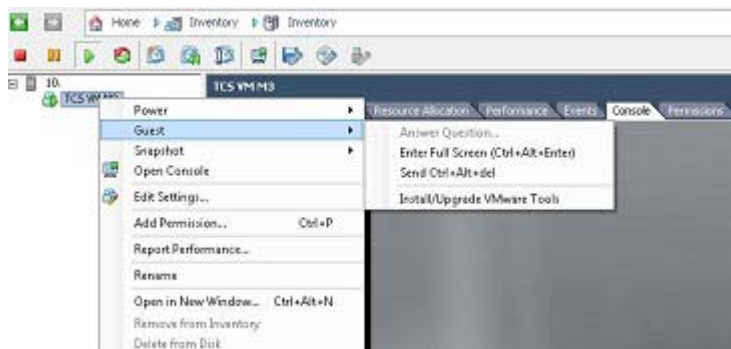



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**Note** The drive letter might differ in your OS. Go to **Disk Management** to change the drive to E:.

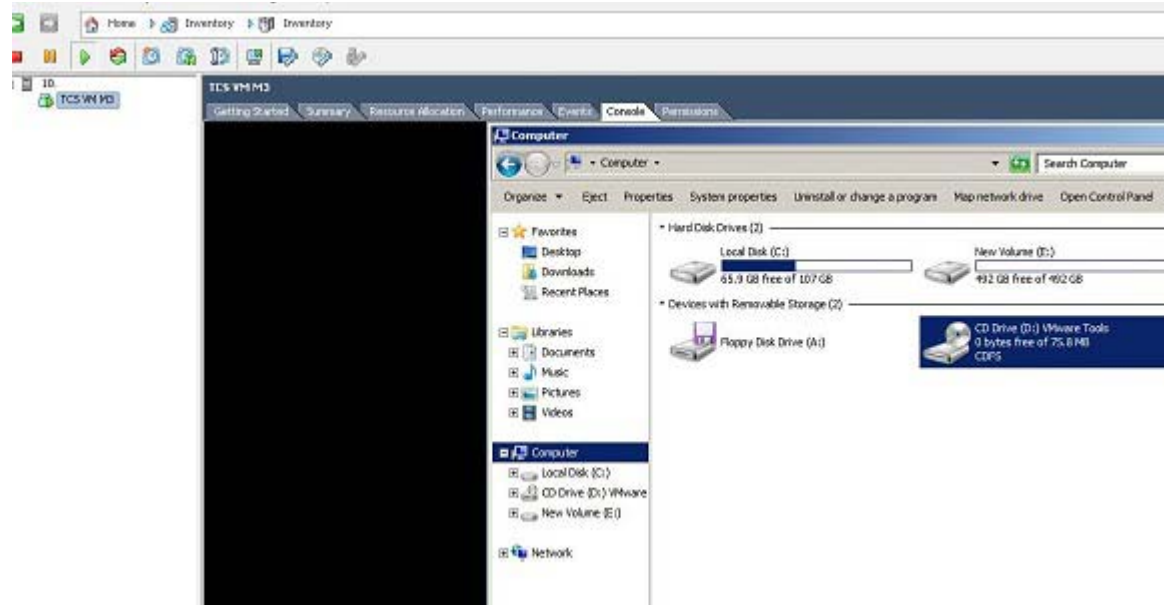
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- Step 8** Follow the prompts to complete the Windows Server installation.
- Step 9** Install VMware Tools:
- Right click the Content Server VM node. Select **Guest > Install/Upgrade VMware Tools**.

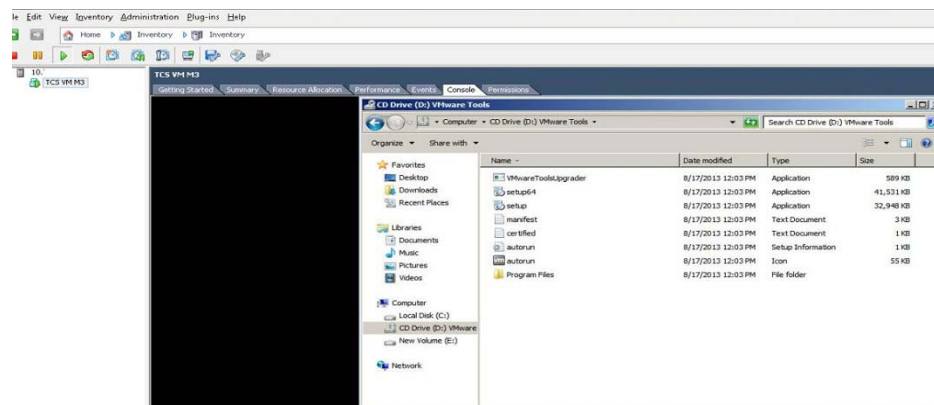




- b. Click the Console tab. In the Console window double click the mounted drive (VMware Tools).



- c. Double click **setup64.exe** to launch the Setup wizard. Choose **Typical** to complete the installation.



- d. When installation is complete, click **Finish**. Click **Restart** to restart the system.

**Step 10** Go to the console to configure the Content Server networking parameters. Assign the IP address, the netmask, the default gateway, and the DNS server address. For more information, see the [Cisco TelePresence Quick Start Guide](#) on Cisco.com.

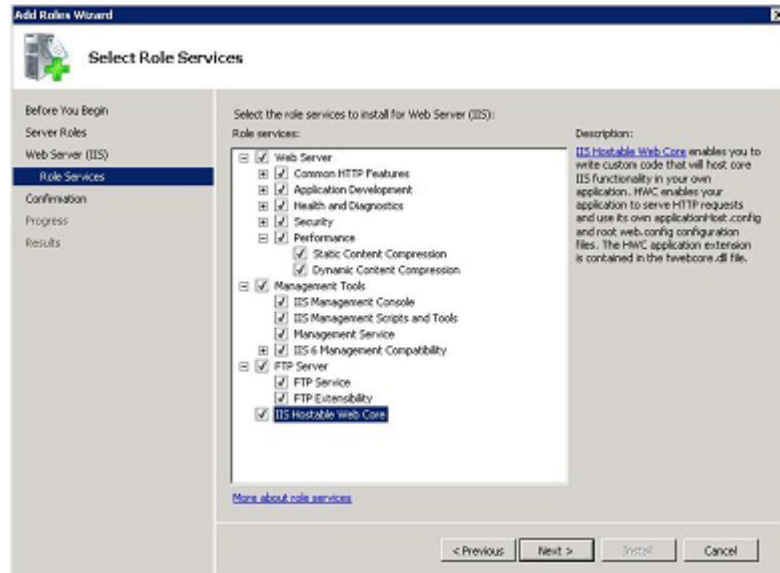
**Step 11** Go to **My Computer > Properties** and enable Remote Desktop services.

## Install Internet Information Services

- Step 1** Install Internet Information Services (IIS) for Windows Server. On the VM host, navigate to **Server Manager > Roles > Add Roles**. Click the **Web Server (IIS)** check box and click **Next**.



**Step 2** In the Select Role Services window, select all the roles services. Click **Next**.

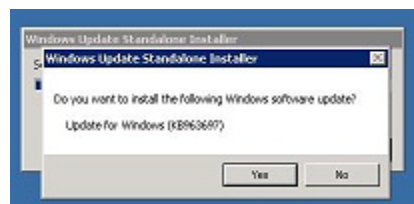


**Step 3** Click **Install** to complete the IIS installation.

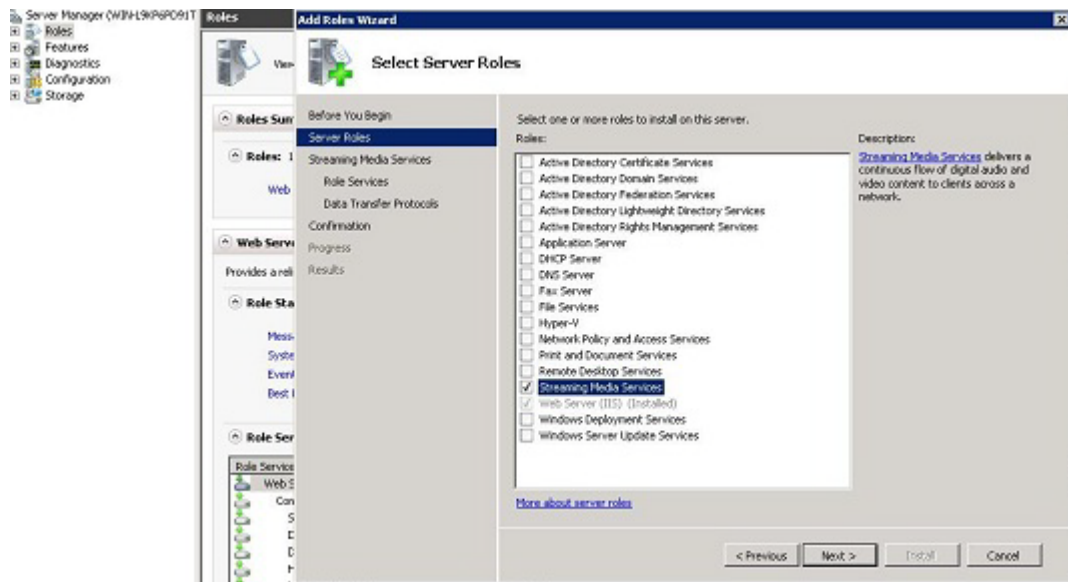
## Install Window Media Services

**Step 1** Download Windows Media Services (WMS) from:  
<http://www.microsoft.com/en-in/download/details.aspx?id=20424>

**Step 2** Install the update.



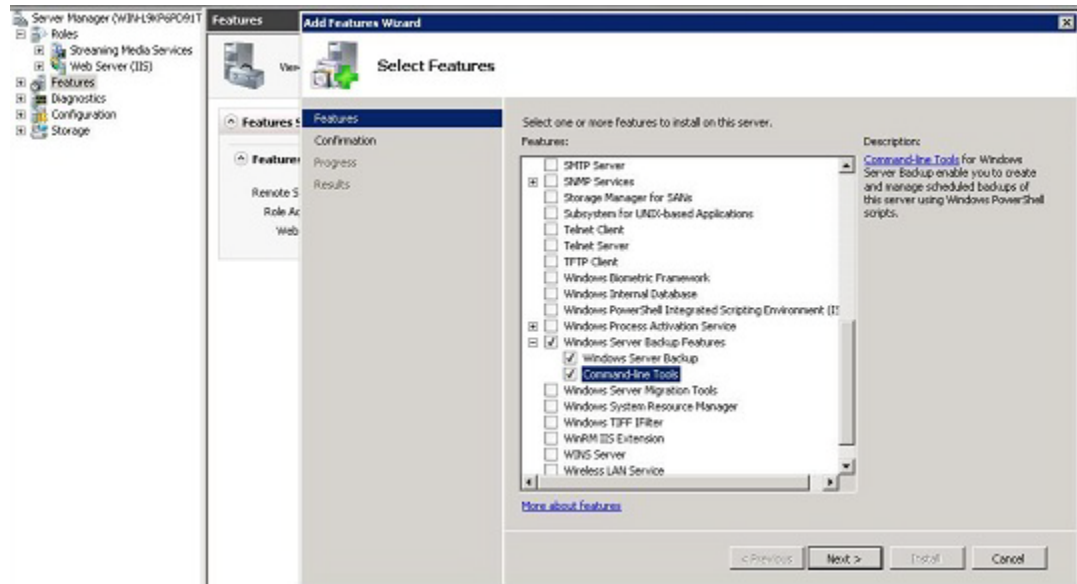
- Step 3** Navigate to **Server Manager > Roles > Add Roles**. Select the **Streaming Media Services** check box and click **Next**.



- Step 4** In the Select Role Services window, select the three **Role Services** check boxes and click **Next**.  
A pop-up window appears for installing the dependent services. Click **OK** to install the dependent services.
- Step 5** In the Data Transfer Protocols window, select the **Real Time Streaming Protocol (RTSP)** check box and click **Next**.
- Step 6** Click **Install** to complete the WMS installation.

## Install Windows Server Features

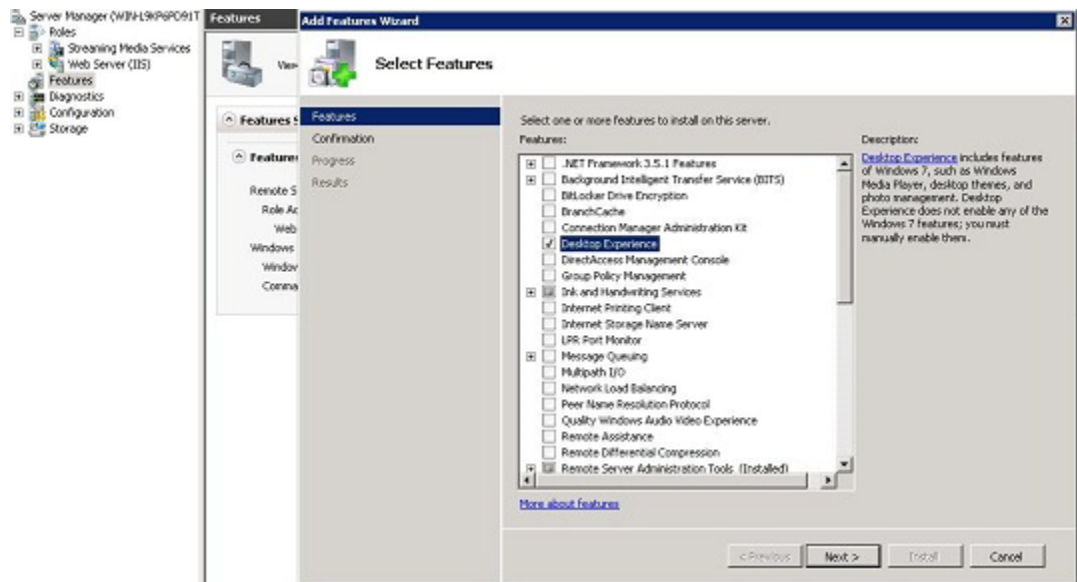
- Step 1** Navigate to **Server Manager > Features > Add Features**.
- Step 2** In the Select Features window, select the **Windows Server Backup Features**, **Windows Server Back**, and **Command-line Tools** check boxes and click **Next**.



**Step 3** Click Install to install the Backup Features.

**Step 4** Navigate to **Server Manager > Features > Add Features**.

**Step 5** In the Select Features window, click the **Desktop Experience** check box and click **Next**.



**Step 6** Click Install to install the Desktop Experience.

**Step 7** A pop-up appears for installing the dependent services. Click **Okay** to install the dependent services.

**Step 8** Click **Restart** to restart the system.

## Install VM Content Server

To install the VM Content Server and the license and option keys, you will need the software base Product Authorization Key (PAK) and option PAK. This information is part of the claim certificate that you received after ordering the VM Content Server.


**Note**

You must be logged in as an administrator to install, uninstall, or manage the VM Content Server.

**Step 1**

Copy the **S\_6\_2\_TCSVM\_Bundle.zip** or **S\_6\_2\_TCSBE6K\_Bundle.zip** file to a folder on your system and extract the files. Launch the command prompt and change the directory to the folder location.


**Note**

For TCS 6.2, file name is **S\_6\_2\_TCSVM\_Bundle.zip** and for BE6K, file name is **S\_6\_2\_TCSBE6K\_Bundle.zip**.

**Step 2**

Run **dotNetFx40\_Full\_x86\_x64.exe** package to install .NET.

**Step 3**

Run **GetTCSVirtualSN.exe** to generate the virtual serial number (vSN) for your Content Server VM. Copy the virtual serial number.


**Note**

To get the virtual serial number, use the command prompt and run as an administrator. Go to the location, where the **S\_6\_2\_TCSVM\_Bundle.zip** is extracted. Run **GetTCSVirtualSN.exe** from the command prompt.

**Step 4**

Go to the [Cisco Product License Registration](#) website (Cisco login required).

Enter this information:

- a. In the Get New Licenses From a PAK or Token field, enter the Software Base PAK from the VM Content Server claim certificate. Click **Fulfill single PAK/Token**.
- b. In the Virtual Serial Number field, enter the vSN from [Step 3](#) and click **Next**.
- c. Enter the End User email credentials and click the License Agreement check box. Click **Get License**. The License Request popup window displays the progress. When the process is complete, click **Close**.
- d. The License Key is generated and sent to the user specified in the previous step.

**Step 5**

- a. In the **S\_6\_2\_TCSVM\_Bundle.zip** extracted directory, create a *TCSLic.txt* file by using the licensing information in this format:

```
<<Virtual Serial No>>
<<Release Key>>
<<Recording 5 Key>>
<<Live 2 Key>>
```

**Note**

For TCS 6.2, extracted directory is **S\_6\_2\_TCSVM\_Bundle.zip**. In the license text file, make sure that there are no extra spaces before or after the license keys.

```
TCSLic - Notepad
File Edit Format View Help
49A30107
0772262265091631
115361R5-1-84E863EF
115361L2-1-D6734B87
```

- b. In the **S\_6\_2\_TCSBE6K\_Bundle.zip** extracted directory, create a *TCSLic.txt* file by using the licensing information in this format:

```
<<Virtual Serial No>>
<<Release Key>>
<<Recording 1 Key>>
<<Live 1 Key>>
```

**Note**

For BE6K, extracted directory is **S\_6\_2\_TCSBE6K\_Bundle.zip**. In the license text file, make sure that there are no extra spaces before or after the license keys.

```
TCSLic - Notepad
File Edit Format View Help
407CF792
4167764374879179
115361R1-1-A51EF59E
115361L1-1-FCC11F76
```

- Step 6** In the command prompt, run the **PreInstaller.cmd** from the extracted **S\_6\_2\_TCSVM\_Bundle.zip** or **S\_6\_2\_TCSBE6K\_Bundle.zip** directory to configure the Content Server Pre-Installer.

- Step 7** Run **S6\_2\_VM.exe** to install the VM Content Server software on the appliance.

Follow the prompts to complete the TCS installation.

- Step 8** Run the **PostInstaller.cmd** from the VM Scripts folder in the command prompt to configure the Post-Installer. This will reboot the system.

# Installing VM Content Server on Existing Hardware

To install VM Content Server on existing second- or third-generation hardware, you will need to:

- Obtain the license and option keys from the Content Server registry and create a license text file to restore the keys on the VM Content Server.
- Use the Cisco TelePresence Content Server Migration Assistant Tool (Migration Assistant) to migrate the data and configuration settings from the existing hardware.

When you run the Migration Assistant on the existing Content Server, it copies relevant data from the Content Server to a network shared location. After you install VM Content Server on a new appliance and have performed the initial configuration, you can run the Migration Assistant to restore the data from the network shared location to the VM Content Server appliance.

For more information about the Migration Assistant, see [Using the Cisco TelePresence Content Server Migration Assistant Tool for Release 6.1](#).

**Note**

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You must be logged in as an administrator to install, uninstall, or manage the VM Content Server.

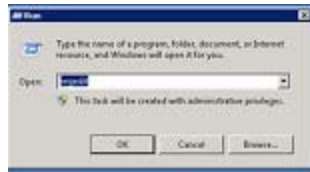
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Follow these steps to install VM Content Server Release 6.2 on an existing appliance:

- 
- Step 1** Copy the license and option keys from the Content Server registry. Follow these steps:
- a. Log in to the Content Server by using Windows Remote Desktop.
  - b. Press Windows + R to launch the Run application.



- c. In the Open field, enter **regedit** and click **OK**.



- d. In Registry Editor navigate to the following path:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\TANDBERG\TCS

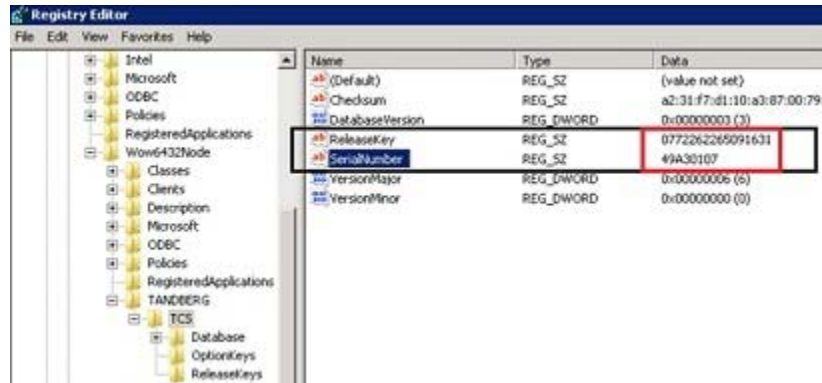
For Content Server Release 5.x, navigate to the following path:

HKEY\_LOCAL\_MACHINE\SOFTWARE\TANDBERG\TCS

- e. Locate the SerialNumber and ReleaseKey in the Data column. Copy and save the serial number and release key in a text file. For example:

0772262265091631

49A30107



- f. In Registry Editor navigate to the following path:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\TANDBERG\TCS\OptionKeys

For Content Server Release 5.x, navigate to the following path:

HKEY\_LOCAL\_MACHINE\SOFTWARE\TANDBERG\TCS\OptionKeys

- g. Locate the option keys in the Name column. Copy and save the option keys in a text file. For example:

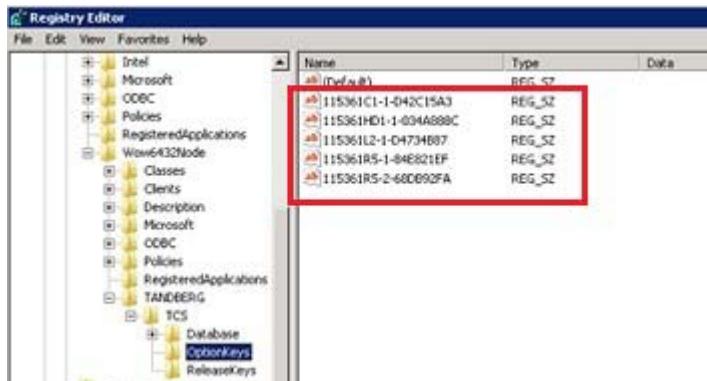
115361R5-1-84E863EF

115361L2-1-D6734B87

115361R5-2-68DB53FA

115361C1-1-D42D15A3

115361HD1-1-034A588C



**Step 2** Run the Migration Assistant on the existing source Content Server to copy the media and configuration settings to a shared network location. (See *Using the Cisco TelePresence Content Server Migration Assistant Tool for Release 6.1.*)

**Step 3** Complete these tasks:

- a. [Install VMware vSphere ESXi](#)
- b. [Deploy OVA to Host](#)
- c. [Install Windows Server 2008 Standard R2 Service Pack 1](#)
- d. [Install Internet Information Services](#)
- e. [Install Window Media Services](#)
- f. [Install Windows Server Features](#)

**Step 4** Copy the **S\_6\_2\_TCSVM\_Bundle.zip** or **S\_6\_2\_TCSBE6K\_Bundle.zip** file to a folder on your system and extract the files. Launch the command prompt and change the directory to the folder location.



**Note** For TCS 6.2, file name is **S\_6\_2\_TCSVM\_Bundle.zip** and for BE6K, file name is **S\_6\_2\_TCSBE6K\_Bundle.zip**.

**Step 5** Run **dotNetFx40\_Full\_x86\_x64.exe** package to install NET.

**Step 6**

- a. In the **S\_6\_2\_TCSVM\_Bundle.zip** extracted directory, create a *TCSLic.txt* file by using the licensing information in this format:

```
<<Virtual Serial No>>
<<Release Key>>
<<Recording 5 Key>>
<<Live 2 Key>>
```

**Note**

For TCS 6.2, extracted directory is **S\_6\_2\_TCSVM\_Bundle.zip**. In the license text file, make sure that there are no extra spaces before or after the license keys.

```
TCSLic - Notepad
File Edit Format View Help
49A30107
0772262265091631
115361R5-1-84E863EF
115361L2-1-D6734B87]
```

- b. In the **S\_6\_2\_TCSBE6K\_Bundle.zip** extracted directory, create a *TCSLic.txt* file by using the licensing information in this format:

```
<<Virtual Serial No>>
<<Release Key>>
<<Recording 1 Key>>
<<Live 1 Key>>
```

**Note**

For BE6K, extracted directory is **S\_6\_2\_TCSBE6K\_Bundle.zip**. In the license text file, make sure that there are no extra spaces before or after the license keys.

```
TCSLic - Notepad
File Edit Format View Help
407CF792
4167764374879179
115361R1-1-A51EF59E
115361L1-1-FCC11F76
```

- Step 7** In the command prompt, run the **PreInstaller.cmd** from the **S\_6\_2\_TCSVM\_Bundle.zip** or **S\_6\_2\_TCSBE6K\_Bundle.zip** folder to configure the Content Server Pre-Installer.

**Note**

For TCS 6.2 configuration, run **S\_6\_2\_TCSVM\_Bundle.zip** and for BE6K configuration, run **S\_6\_2\_TCSBE6K\_Bundle.zip**

- Step 8** Run **S6\_2\_VM.exe** to install the VM Content Server software on the appliance.

- Step 9** Run the **PostInstaller.cmd** from the VMScripts folder in the command prompt to configure the Post-Installer. This will reboot the system.
- Step 10** Run the Migration Assistant on the VM Content Server to restore the media and configuration settings from the shared network location.

## Related Documentation

- Cisco TelePresence Content Server Documentation  
[http://www.cisco.com/en/US/products/ps11347/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps11347/tsd_products_support_series_home.html)
- Cisco UCS C220 Documentation  
[http://www.cisco.com/en/US/products/ps10493/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps10493/tsd_products_support_series_home.html)
- Cisco Capture Transform Share Documentation  
[http://www.cisco.com/en/US/products/ps12130/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps12130/products_installation_and_configuration_guides_list.html)

### Information About Accessibility and Cisco Products

For information about the accessibility of this product, contact the Cisco accessibility team at [accessibility@cisco.com](mailto:accessibility@cisco.com).

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: <http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

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