



StadiumVision



Cisco StadiumVision Director Remote Software Installation and Upgrade Guide

Release 4.1

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Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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Cisco StadiumVision Director Remote Software Installation and Upgrade Guide
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Preface

This document describes the requirements and tasks to install and upgrade the software for Cisco StadiumVision Director Remote Release 4.1. It also includes documentation for hardware installation and configuration on the Cisco UCS C22 server, if using that hardware for your Cisco StadiumVision Director Remote server platform.

The content is intended for Cisco StadiumVision system administrators and technical field engineers who are responsible for designing and deploying Cisco StadiumVision solutions. It is expected that readers of this document are familiar with basic IP networking, Linux, and VMware virtualization.

Document Revision History

[Table 1](#) lists the technical changes made to this document since it was first published.

Table 1 Document Revision History

Date	Change Summary
May, 2016	First release of this document for Cisco StadiumVision Director Remote Release 4.1.0-10.

Document Organization

Chapter	Description
“Getting Started Installing or Upgrading a Cisco StadiumVision Director Remote Server”	Provides information that you should read before you perform an initial installation or upgrade of the Cisco StadiumVision Director Remote software.
“Installing Cisco StadiumVision Director Remote Software on a Server for the First Time”	Describes how to install the Cisco StadiumVision Director Remote software from Cisco.com. The process applies to a brand new server that has never been installed with any version of Cisco StadiumVision Director Remote software.
“Using the Software Manager to Upgrade Cisco StadiumVision Director Remote Software”	Describes how to use the Cisco StadiumVision Director Remote Software Manager to upgrade Cisco StadiumVision Director Remote servers.

Chapter	Description
“Appendix A: Cisco UCS C22 Hardware Installation Guidelines”	Provides the prerequisites and installation guidelines when installing the Cisco UCS C22 Server as your platform for the Cisco StadiumVision Director Remote software.
“Appendix B: Using the TUI Upgrade Utility to Upgrade Cisco StadiumVision Director Remote Software”	Describes how to upgrade an existing server already running Cisco StadiumVision Director Remote software using the Text Utility Interface (TUI).

Related Documentation and Resources

See the [Cisco StadiumVision Director Server Administration Guide, Release 4.1](#) for information about setting up and managing your Cisco StadiumVision Director servers.

For more information about other Cisco StadiumVision hardware and software installation, configuration, and operation, see the Cisco StadiumVision documentation available on Cisco.com at: www.cisco.com/go/stadiumvisiondocs

For more details, see the “Related Documentation and Resources” topic in the [Cisco StadiumVision Release Notes for Release 4.1](#).



Getting Started Installing or Upgrading a Cisco StadiumVision Director Remote Server

First Published: May, 2016

Read this module before you perform an initial installation or upgrade of the Cisco StadiumVision Director Remote Release 4.1 software. It includes the following topics:

- [Before You Begin, page 1](#)
- [Hardware Prerequisites, page 2](#)
- [Overview of the Installation and Upgrade Process, page 3](#)

Before You Begin

Be sure that you understand and have met the following prerequisites before you begin to install or upgrade the Cisco StadiumVision Director Remote software:



Note

Cisco StadiumVision Director Remote supports only Cisco DMP 4310G media players.

- Refer to the [Release Notes for Cisco StadiumVision Director Release 4.1](#) for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release.
- Be sure that your server hardware is installed and meets the minimum hardware requirements for a Cisco StadiumVision Director Remote server running VMware. See the “[Hardware Prerequisites](#)” section on page 2.

For more information about installing your Cisco UCS C22 hardware, see the “[Appendix A: Cisco UCS C22 Hardware Installation Guidelines](#)” module on page 21.

- If you are using a server other than the Cisco UCS C22 server:
 - Be sure that the server meets the minimum system requirements described in the “[Getting Started Installing or Upgrading a Cisco StadiumVision Director Remote Server](#)” module on page 1.
 - The server is configured with VMware vSphere host version 5.1 or 5.5.
- Verify that the Cisco StadiumVision Director Remote server has power and is connected to the network using the Ethernet port eth0 on the rear panel.

- A monitor and keyboard are connected to the server.
- Be sure to have the network information required to configure the Ethernet connection on the Cisco StadiumVision Director Remote server, such as:
 - IP address (IPv4 only) and network mask
 - Default gateway address
 - DNS server address
 - Hostname
- You have internet access from a computer running Microsoft Windows to download the following software:
 - Cisco StadiumVision Director Remote software from Cisco.com.
 - VMware vSphere software (as required)
 - VMware vSphere client software (requires Microsoft Windows) (as required).

Hardware Prerequisites

You can use your own server or install a Cisco UCS C22 server to run the Cisco StadiumVision Director Remote software. Be sure that your configuration meets the minimum system requirements in [Table 1](#) and supports a VMware virtual machine environment.



Note

Cisco StadiumVision Director Remote servers are meant to be physically located close to the DMPs that they operate with, such as at the remote venue edge, and communicating to the players over a LAN. For information about installation-related licensing compliance, see the “Installation Requirements for Licensing Compliance” section of the [Release Notes for Cisco StadiumVision Director Release 4.1](#).

Table 1 Minimum System Requirements for the Cisco StadiumVision Director Remote Server

System Component	Minimum Requirement
Hard Drive Capacity	300 GB Note The hard drives must be configured as a single logical volume. A RAID volume is strongly recommended.
Processor	Single processor equivalent to an Intel Xeon Processor E5-2420 (15 MB cache, 1.90 GHz clock, 7.20 GT/s Intel® QPI)
Virtual RAM (VRAM)	16 GB



Note

To get started with installing and configuring a Cisco UCS C22 server, see the “[Appendix A: Cisco UCS C22 Hardware Installation Guidelines](#)” module on page 21.

Overview of the Installation and Upgrade Process

There are different tasks required to install or upgrade your Cisco StadiumVision Director Remote server for software Release 4.1 depending on your current server environment:

- [Installing Cisco StadiumVision Director Remote on a Cisco UCS C22 Server for the First Time, page 3](#)
- [Installing Cisco StadiumVision Director Remote on Your Own Server Hardware, page 3](#)
- [Upgrading an Existing Cisco StadiumVision Director Remote Server Using the TUI, page 4](#)
- [Upgrading an Existing Cisco StadiumVision Director Remote Server Using the Software Manager, page 4](#)

Installing Cisco StadiumVision Director Remote on a Cisco UCS C22 Server for the First Time

The installation process for a new Cisco UCS C22 server running Cisco StadiumVision Director Remote Release 4.1 for the first time involves the following tasks:

- Installation of the Cisco UCS C22 hardware.
- Installation of VMware vSphere host software on the Cisco UCS C22 server.
- Installation of VMware vSphere client software on a laptop computer used to access the vSphere host on the Cisco UCS C22 server.
- Deployment of the Cisco StadiumVision Director Remote Open Virtualization Format (OVF) template.

For detailed information, see the [“Installing Cisco StadiumVision Director Remote Software on a Server for the First Time” module on page 5](#).

Installing Cisco StadiumVision Director Remote on Your Own Server Hardware

You can use your own server hardware that meets the minimum system requirements to install Cisco StadiumVision Director Remote. The installation process for a new server running Cisco StadiumVision Director Remote Release 4.1 involves the following tasks:

**Note**

If the server hardware already has the required VMware vSphere host version installed and you also have the VMware vSphere Client software installed, then you only need to deploy the Cisco StadiumVision Director Remote OVF template.

- Installation of VMware vSphere host software on the server (as needed).
- Installation of VMware vSphere client software on a laptop computer used to access the vSphere host on the server (as needed).
- Deployment of the Cisco StadiumVision Director Remote OVF template.

For detailed information, see the [“Installing Cisco StadiumVision Director Remote Software on a Server for the First Time” module on page 5](#).

Upgrading an Existing Cisco StadiumVision Director Remote Server Using the TUI

The software upgrade process for an existing Cisco StadiumVision Director Remote server running Release 3.1 software is performed as an ISO upgrade using the Text Utility Interface (TUI) similar to the process for Cisco StadiumVision Director.

**Note**

Beginning in Release 3.2, the TUI method of upgrade is replaced by the Software Manager to perform ISO upgrades.

The upgrade process using the TUI involves the following tasks:

- Downloading the ISO upgrade file from Cisco.com.
- Uploading the ISO file from your laptop to the Cisco StadiumVision Director Remote server using the upload utility through your browser.
- Installing the ISO image using the upgrade utility in the TUI.

For detailed information, see the [“Appendix B: Using the TUI Upgrade Utility to Upgrade Cisco StadiumVision Director Remote Software”](#) module on page 25.

Upgrading an Existing Cisco StadiumVision Director Remote Server Using the Software Manager

The software upgrade process for an existing Cisco StadiumVision Director Remote server already running Release 4.1 can be performed as an ISO upgrade using the Software Manager.

The upgrade process for Cisco StadiumVision Director Remote Release 4.1 and later involves the following tasks:

- Downloading the ISO upgrade file from Cisco.com.
- Uploading the ISO file from your laptop using the upload function in the Software Manager.
- Installing the ISO image using the install function in the Software Manager.

For detailed information, see the [“Using the Software Manager to Upgrade Cisco StadiumVision Director Remote Software”](#) module on page 15.



Installing Cisco StadiumVision Director Remote Software on a Server for the First Time

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This module describes how to install the Cisco StadiumVision Director Remote Release 4.1 software from an Open Virtual Appliance (OVF) template that is downloaded from Cisco.com. The process applies to a brand new server that has *never* been installed with any version of Cisco StadiumVision Director Remote software.

This module includes the following topics:

- [Prerequisites, page 5](#)
- [Installation Tasks, page 5](#)
- [Performing the Full ISO Installation, page 13](#)
- [What To Do Next, page 14](#)

Prerequisites

Be sure that the following requirements are met before you install the Cisco StadiumVision Director Remote software:

- Be sure that your system meets the requirements documented in the [“Getting Started Installing or Upgrading a Cisco StadiumVision Director Remote Server”](#) module on page 1.
- If you are installing on the Cisco UCS C22 server, you have a copy of or access to the [Cisco UCS C-Series Servers VMware Installation Guide](#) on Cisco.com.
- You have purchased the appropriate licensing and have contacted Cisco Technical Support for access to download the Cisco StadiumVision Director Remote OVF file.

Installation Tasks

To install the Cisco StadiumVision Director Remote software, complete the following tasks:

- [Downloading the Software, page 6](#) (required)
- [Installing the VMware vSphere Software, page 7](#) (required)
- [Configuring the vSphere Host, page 7](#) (required)

- [Deploying the Cisco StadiumVision Director Remote OVF Template on the VMware vSphere Host, page 9](#) (required)
- [Performing the Full ISO Installation, page 13](#) (required)

Downloading the Software

Be sure to download the files to a location, such as a laptop computer, where you can access them for installation onto the Cisco StadiumVision Director Remote server:

- [Downloading the Cisco StadiumVision Director Remote OVF File, page 6](#) (required)
- [Downloading the VMware vSphere Software, page 6](#) (required)
- [Downloading the VMware vSphere Client, page 6](#) (required)

Downloading the Cisco StadiumVision Director Remote OVF File

You are eligible to obtain information about how to access the Cisco StadiumVision Director Remote OVF file after you have purchased the proper licensing. Contact Cisco Technical Support for information about how to download the OVF file ([Table 1](#)).

Table 1 OVF Template Filename Conventions

OVF .ZIP Filename

SV-REMOTE_FULL_TEMPLATE_4.1.0-XXX-Y.x86_64.zip¹

1. “XXX” represents the build number and “Y” is the version of the OVF for that build.

Downloading the VMware vSphere Software



Note

Cisco StadiumVision Director Remote supports VMware vSphere version 5.1 and 5.5. If your server already has this VMware vSphere software version installed, you can skip this task.

To download the VMware vSphere software, complete the following steps:

-
- Step 1** Go to the VMware software download site at:
<http://www.vmware.com/download/>
- Step 2** Locate the VMware vSphere software link and follow the instructions on the VMware site.
-

Downloading the VMware vSphere Client



Note

The VMware vSphere Client software requires the Microsoft Windows operating system. If the computer that you will use to deploy the Cisco StadiumVision Director Remote OVF already has VMware vSphere Client software installed, skip this task.

The VMware vSphere Client software is required to install the Cisco StadiumVision Director OVF file.

To download the VMware vSphere client, complete the following steps:

-
- Step 1** Go to the VMware software download site at:
<http://www.vmware.com/download/>
- Step 2** Locate the VMware vSphere client software link and follow the instructions on the VMware site to download and install the software on the computer that you will use to access the VMware vSphere host.
-



Tip

Alternatively, you can download the VMware vSphere Client software when you access the VMware vSphere host. For more information, see the “[Deploying the Cisco StadiumVision Director Remote OVF Template on the VMware vSphere Host](#)” section on page 9.

Installing the VMware vSphere Software



Note

If VMware vSphere version 5.1 or 5.5 is already installed and configured on your server, skip this task.

To install and configure the VMware vSphere software, complete one of the following steps:

- If installing on your own equipment, follow the VMware vSphere installation instructions for your hardware.
- If installing on the Cisco UCS C22 server, follow the instructions to install the VMware ESX software using the “VMware vSphere ESX Installation” module in the *Cisco UCS C-Series Servers VMware Installation Guide*.

Configuring the vSphere Host

After you have installed the VMware vSphere software, you need to configure the settings for your network environment. For more information about customizing the VMware vSphere configuration, see the *VMware vSphere Installation and Setup Guide* for your release under the Datacenter Product Documentation area of the VMware Documentation site at:

<http://www.vmware.com/support/pubs/>

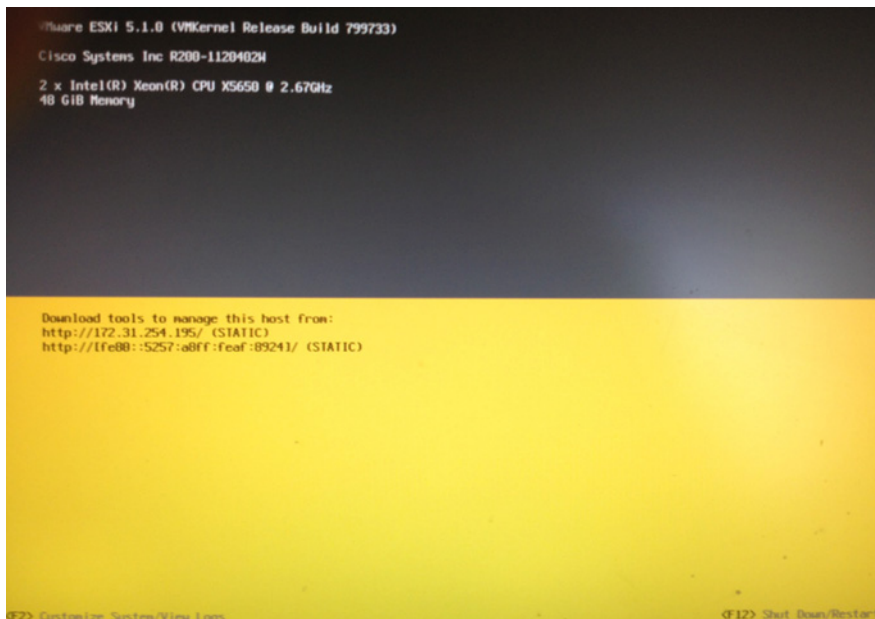


Tip

If you are configuring the vSphere host on a Cisco UCS C22 server, you also can access the vSphere host from the KVM console if a connection has been mapped to the vSphere management interface.

To configure the vSphere host, complete the following steps:

-
- Step 1** To customize the VMware vSphere configuration, press **F2** at the ESX initialization screen. [Figure 1](#) shows an example of an ESX initialization screen.

Figure 1 Sample VMware ESX Initialization Screen

Step 2 At the System Customization screen, select the **Configure Password** option to specify a password for the administrator account.

The administrative user name for the ESX host is **root**. By default, the administrative password is not set.

Step 3 Specify the new password and repeat the entry for confirmation and then press **Enter**.

**Tip**

You will use the root account and password to log into the VMware ESX host to install the Cisco StadiumVision Director Remote OVF template.

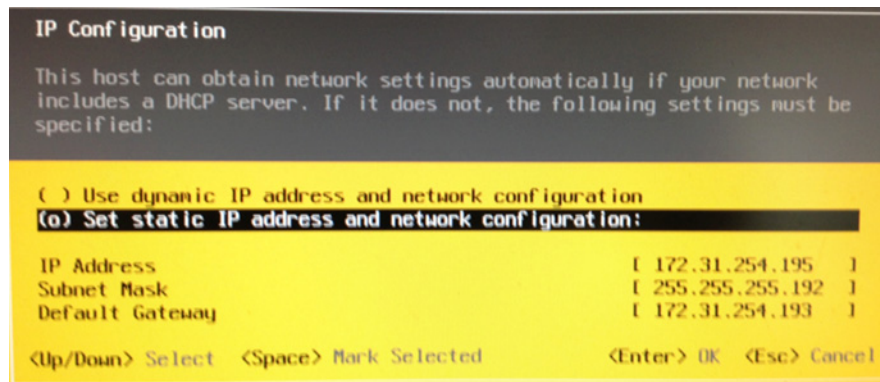
Step 4 From the System Customization screen, select the **Configure Management Network** option as shown in the example in [Figure 2](#) and press **Enter**.

Figure 2 Sample VMware System Customization Screen

a. Select the **IP Configuration** option and press **Enter**.

Figure 3 shows an example of the IP Configuration screen.

Figure 3 Sample IP Configuration Screen



- b. Modify the IP address configuration according to your network environment and press **Enter**.



Note The Cisco StadiumVision Director Remote server should be configured with a static IP address or a non-expiring DHCP lease.



Tip You will use this IP address to access the VMware ESX host from your computer's web browser.

- c. (Optional) To change the ESX hostname and domain, choose the DNS configuration option and press **Enter**. The default hostname is localhost. When your updates are complete, press **Enter**.

Step 5 Restart the management network.

Verify that the IP address information on this screen correctly shows the changes that you made.

Deploying the Cisco StadiumVision Director Remote OVF Template on the VMware vSphere Host

Prerequisites

Before you install the Cisco StadiumVision Director Remote OVF template, be sure that the following requirements are met:

- The VMware vSphere Client is required to install the Cisco StadiumVision Director Remote OVF template.

If you have not already downloaded and installed the VMware vSphere Client on the computer that you will use to access the VMware vSphere host, then a link to download and install the software is provided when you log into the VMware vSphere host.

- Download and unzip SV-REMOTE_FULL_TEMPLATE_4.1.0-XXX-Y.x86_64.zip to extract the OVF file. SV-REMOTE_FULL_TEMPLATE_4.1.0-XXX-Y.x86_64.zip contains:

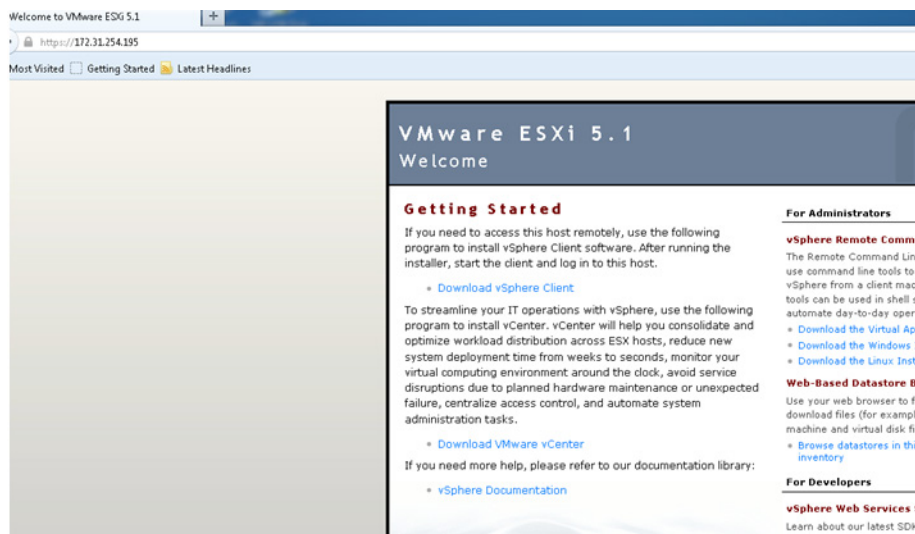
- SV-REMOTE_FULL_TEMPLATE_4.1.0-XXX-Y.ovf (XML VM descriptor file - text)
- SV-REMOTE_FULL_TEMPLATE_4.1.0-XXX-Y.vdmk (VM disk file - binary)
- SV-REMOTE_FULL_TEMPLATE_4.1.0-XXX-Y.mf (Checksum file - text)
- SV-REMOTE_FULL_TEMPLATE_4.1.0-XXX-Y.iso (SVD full installation ISO file - binary)

You can access a link to download the VMware vSphere Client after you have installed the ESX host by completing the following steps:

Step 1 From a web browser, type the IP address of the VMware vSphere host.

The VMWare ESX Welcome Screen is displayed as shown in the example in [Figure 4](#).

Figure 4 Sample VMware Welcome Screen



Step 2 Click the **Download vSphere Client** link as shown on the Welcome screen ([Figure 4](#)).

Follow the VMware instructions to download and install the software.

- The computer from which you will run the VMware vSphere Client has access to the network where the ESX host is installed.
- You have a copy of or access to the *vSphere Virtual Machine Administration Guide* from the VMware Documentation site for information about how to deploy the OVF template.

Procedure

To install the Cisco StadiumVision Director Remote OVF template on the VMware vSphere host, complete the following steps:

Step 1 Start the VMware vSphere Client.

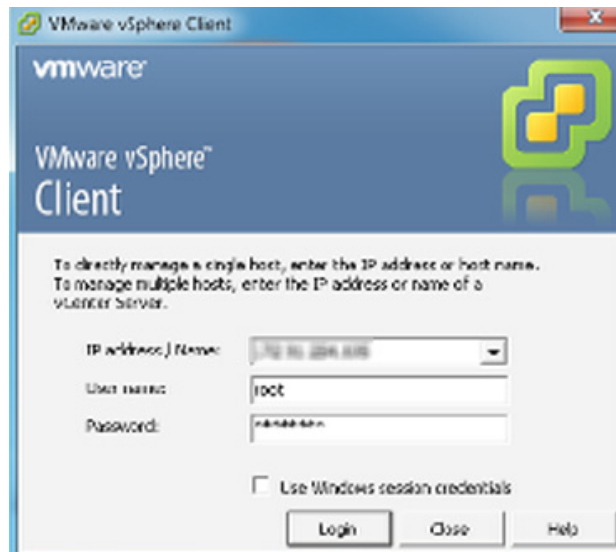
Step 2 In the VMware vSphere Client window, type the following information:

- IP address / Name: IP address of the vSphere host (or name of host if using DNS)
- User name for the administrator account: **root**
- Password for the administrator account.



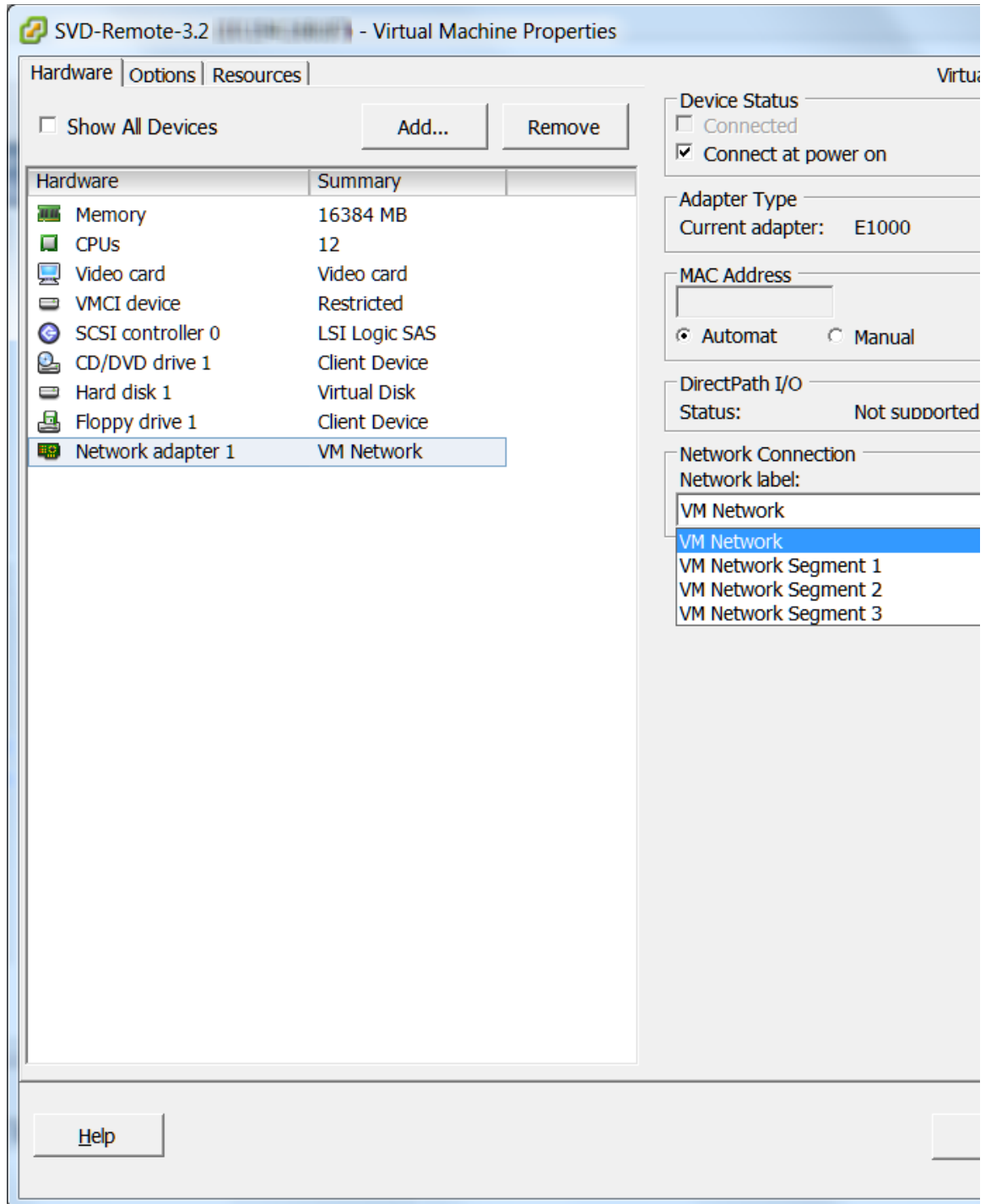
Tip This information is configured in the vSphere host. For more information, see the [“Installing the VMware vSphere Software”](#) section on page 7.

Figure 5 Sample VMware vSphere Client



- Step 3** From the File menu, click **Deploy OVF Template**.
- Step 4** To select the source location for the template, click **Browse** and locate the OVF template for the Cisco StadiumVision Director Remote software that you downloaded and unzipped to your computer.
- Step 5** Once the import completes, right click on the VM and edit the network settings pertinent to your configuration.

Figure 6 Sample VMware vSphere Virtual Machine Properties



Step 6 Click **Next** to step through the installation wizard screens to read and accept the license and set the installation options:

- Specify a Name and data store location.
- Select thin provisioning disk format.

- Step 7** Review your configuration and click **Finish**.

Performing the Full ISO Installation

To install the full ISO, power on the Cisco StadiumVision Director Remote server from VMware by completing the following steps:

- Step 1** Start the VMware vSphere Client and log in as root user.
- Step 2** From the inventory list, right-click on the name of the Cisco StadiumVision Director Remote server machine.
- Step 3** Select **Power > Power On**.
- Step 4** From the management console for Cisco StadiumVision Director Remote, click the **Console** tab as shown in [Figure 7](#).

The Cisco StadiumVision Director Remote installation begins. You will be asked to configure your deployment with the IP address, hostname and other settings. If you do not configure these during installation, you will need to configure them later after the Cisco StadiumVision Director Remote install has been completed.

Figure 7 Sample Console Output During Cisco StadiumVision Director Remote Power On

```

SVDRemote_full_template
Getting Started Summary Resource Allocation Performance Events Console Permissions

Setting clock (localtime): Tue Nov 27 08:14:28 PST 2012 [ OK ]
Starting udev: [ OK ]
Loading default keymap (us): [ OK ]
Setting hostname default: [ OK ]
Setting up Logical Volume Management: 2 logical volume(s) in volume group "volGroup00" now active [ OK ]
Checking filesystems
/dev/volGroup00/rootVol000: clean, 27545/55377920 files, 1992232/55361536 blocks [ OK ]
/boot: clean, 35/26104 files, 15843/104388 blocks [ OK ]
Remounting root filesystem in read-write mode: [ OK ]
Mounting local filesystems: [ OK ]
Enabling /etc/fstab swaps: [ OK ]
INIT: Entering runlevel: 3
Entering non-interactive startup
Starting monitoring for UG volGroup00: /dev/hdc: open failed: Read-only file system
2 logical volume(s) in volume group "volGroup00" monitored [ OK ]
Starting sysstat: Calling the system activity data collector (sadc): [ OK ]
Checking for hardware changes [ OK ]
Bringing up loopback interface: [ OK ]
Bringing up interface eth0: _

```

- Step 5** Observe the output on the console to confirm that the filesystems, drives, and interfaces successfully come up (indicated by “OK” beside the system area).

What To Do Next

After you have installed the Cisco StadiumVision Director Remote software, go to the “[Configuring Cisco StadiumVision Director Remote Servers](#)” module of the *Cisco StadiumVision Director Server Administration Guide, Release 4.1* to set up the remote server for network communication and connectivity to the Cisco StadiumVision Director server.

Be sure to note the IP address that you configured for the VMware vSphere host because it will be needed to complete the Cisco StadiumVision Director Remote configuration.



Using the Software Manager to Upgrade Cisco StadiumVision Director Remote Software

First Published: May, 2016

This module describes using the Cisco StadiumVision Director Remote Software Manager to upgrade an existing server already running Cisco StadiumVision Director Remote 4.0 to a later release of Cisco StadiumVision Director Remote software.

This module includes the following topics:

- [Best Practices, page 15](#)
- [Prerequisites, page 16](#)
- [Information About Using the Software Manager to Update Existing Cisco StadiumVision Director Remote Software, page 16](#)
- [Upgrade Tasks, page 18](#)

Best Practices

Before you begin upgrading an existing Cisco StadiumVision Director Remote server, consider the following best practices:

- Choose an appropriate down time to perform the upgrade on the Cisco StadiumVision Director Remote server when there is adequate time to complete and verify the upgrade before any scheduled events and to allow time to resolve any unexpected issues that might occur.
- Refer to the [Release Notes for Cisco StadiumVision Director Release 4.1](#) for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release.
- Pay particular attention to the required hardware and software versions for other devices supporting your Cisco StadiumVision solution and be sure that you upgrade those devices as needed. For example, generally only certain firmware versions are supported for the DMP hardware, or a new firmware version is needed to provide additional functionality supported by the Cisco StadiumVision Director Remote software.
- Shut down the Cisco StadiumVision Director Remote server and take a snapshot of the VMware system. Restart the Cisco StadiumVision Director Remote server to prepare for upgrade.

Prerequisites

Be sure that the following requirements are met before you upgrade your server:

- Your server is running a minimum of Cisco StadiumVision Director Remote Release 4.0.0-66 or higher.
- You have a supported browser version for Cisco StadiumVision Director Remote. For more information about the latest supported browsers, see the [Release Notes for Cisco StadiumVision Director Release 4.1](#).
- You have configured the admin user password in the Text Utility Interface (TUI). For more information, see the “[System Accounts on the Cisco StadiumVision Director Servers](#)” module in the [Cisco StadiumVision Director Server Administration Guide, Release 4.1](#).

Information About Using the Software Manager to Update Existing Cisco StadiumVision Director Remote Software

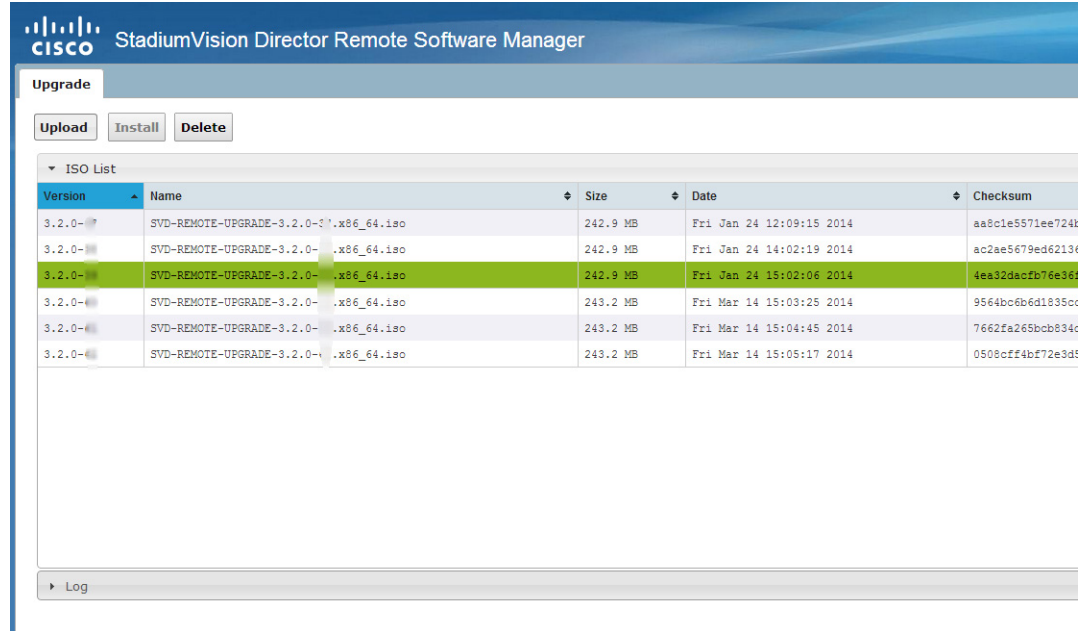
After upgrading to Cisco StadiumVision Director Remote Release 4.1, you can use the Software Manager to upgrade to later versions of Cisco StadiumVision Director. The ISO upgrade procedure for Cisco StadiumVision Director includes the following tasks:

1. Downloading an ISO upgrade file from the software download site on Cisco.com.
2. Uploading the ISO file from your laptop using the upload function in the Software Manager.
3. Installing the ISO image using the install function in the Software Manager.

ISO Upgrade Files

You can store multiple ISO upgrade files on a Cisco StadiumVision Director Remote server. The files will be displayed with a sequence number and the ISO filename in the Software Manager. You select which file to install in the Software Manager as shown in [Figure 1](#).

Figure 1 Cisco StadiumVision Director Remote Software Manager



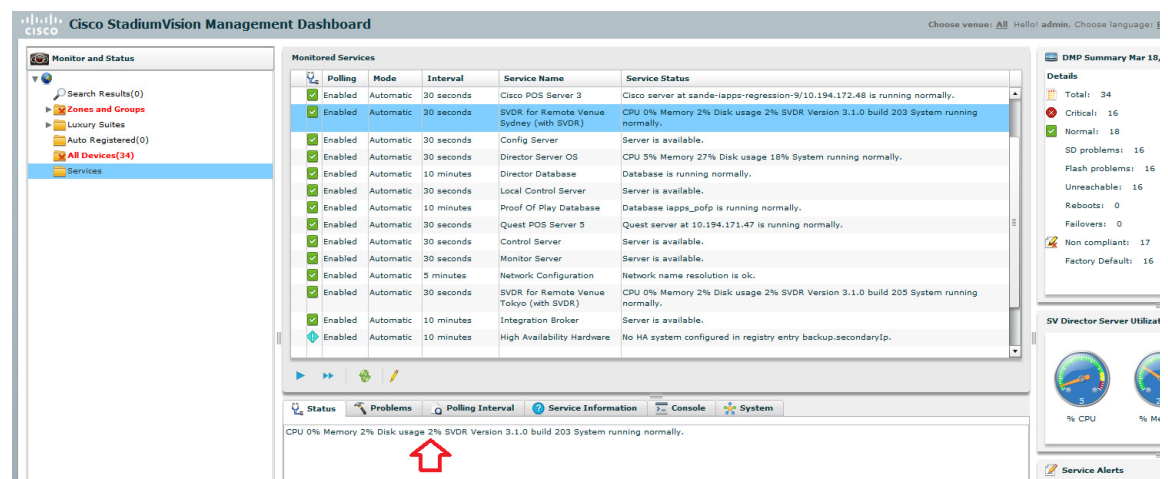
Disk Maintenance

There is no automatic aging of ISO upgrade files, but ISO upgrade files can be deleted in the Software Manager (see Figure 1).

You can see disk utilization for remote servers from the Management Dashboard on the centralized Cisco StadiumVision Director server, or you can use the TUI to get file system usage.

Figure 2 shows an example of disk utilization reporting available for a Cisco StadiumVision Director Remote server from the Management Dashboard.

Figure 2 Disk Utilization for Remote Server in Cisco StadiumVision Director Management Dashboard



Upgrade Tasks

To upgrade your Cisco StadiumVision Director Remote server, complete the following tasks:

- [Downloading ISO Upgrade Files from Cisco.com, page 18](#) (required)
- [Uploading an ISO Upgrade File to the Cisco StadiumVision Director Remote Server, page 19](#) (required)
- [Installing the he ISO Upgrade Image on the Cisco StadiumVision Director Remote Server, page 20](#) (required)
- [Verifying the Upgrade, page 20](#) (required)

Downloading ISO Upgrade Files from Cisco.com

Be sure to download the upgrade files to a location, such as a laptop computer, where you can access them for installation onto the Cisco StadiumVision Director Remote server.

To download an ISO upgrade file, complete the following steps:

Step 1 Go to the Cisco StadiumVision Director software download site.



Note This site page is available from the [Cisco StadiumVision Director product support page](#) by clicking **Download Software > Cisco StadiumVision Director**.

Step 2 Select the ISO upgrade, and optionally the companion MD5 checksum file, and download them.

[Table 1](#) shows the filename conventions used for ISO upgrades.



Note Be sure that you choose the ISO for SVD-REMOTE and *not* for SV-DIRECTOR.

Table 1 *ISO Filename Conventions for Cisco StadiumVision Director Remote*

OVA Filename

SVD-REMOTE-UPGRADE-4.1.0-*nnn*.x86_64.iso¹

SVD-REMOTE-UPGRADE-4.1.0-*nnn*.x86_64.iso.md5sum

1. “*nnn*” represents the build number.

You can download the files using one of the following methods:

- Download both files at one time—Select each file and click **Add to Cart**. Then at the top of the download page, click the “Download Cart (2 items)” link.
- Download each file independently—Click the **Download Now** button in the file selection box for each file.

- Step 3** (Optional) To verify the integrity of your upgrade file from the download, you can use a command-line or GUI utility on your laptop to calculate the checksum on the .iso file. Open the .md5sum file to compare the value that you calculated with the expected value provided in the .md5sum file.

The values should match. If they do not, retry the download.

Uploading an ISO Upgrade File to the Cisco StadiumVision Director Remote Server

After you have downloaded the ISO upgrade file from Cisco.com, you will use the Software Manager to both upload the file to the Cisco StadiumVision Director Remote server, and to install the upgrade image.

Prerequisites

Be sure that you know the IP address of the Cisco StadiumVision Director Remote server where you want to upload the file, and you have a supported browser version for Cisco StadiumVision Director Remote.

To upload an ISO upgrade file to the Cisco StadiumVision Director Remote server, complete the following steps:

- Step 1** Log into Cisco StadiumVision Director Remote as an administrator.
- Step 2** From your browser, go to the following URL, where *x.x.x.x* is replaced by the IP address of the server where you want to upload the upgrade software.
- Step 3** Click **Manage Software**.
- Step 4** From the **Upgrade** tab, click **Upload**.
- Step 5** Navigate to the location of the ISO upgrade file that you downloaded from Cisco.com. Select the file that you want to upload and click **Open**. The file is sent to the server.

When the ISO upload is complete, one of the following occurs:

- When the image is validated and uploaded successfully, a message is displayed stating that the ISO image has been uploaded.
- The image upload failed for some reason and you will need to retry the upload again.



Caution

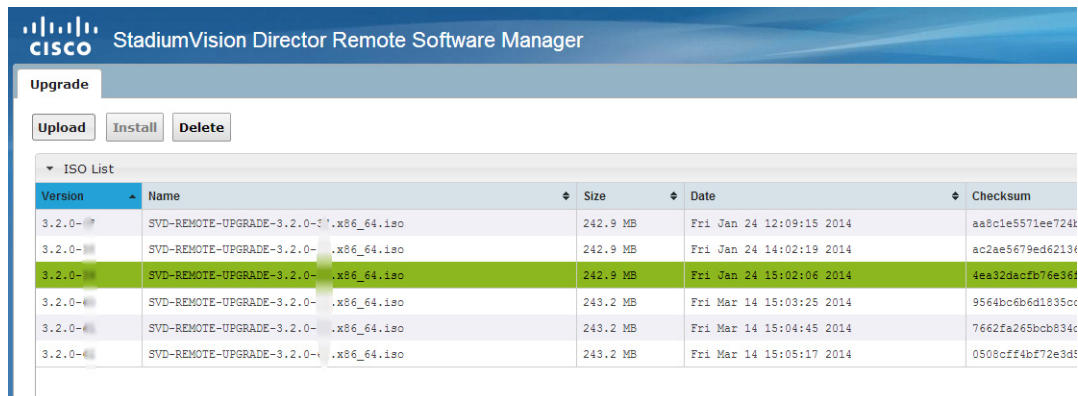
The upload might take several minutes. Do *not* refresh or reload the Software Manager page while the upload process is running. Any interruption will corrupt the ISO image being uploaded.

Installing the ISO Upgrade Image on the Cisco StadiumVision Director Remote Server

To install the ISO upgrade image on the Cisco StadiumVision Director Remote server, complete the following steps:

- Step 1** From the Software Manager screen, select the ISO file that you want to install.
- Step 2** Click **Install** (Figure 3).

Figure 3 ISO File Selection and Upload



- Step 3** The installation process begins, and status messages are displayed.
- Step 4** After the installation is complete, Cisco StadiumVision services are restarted.

Verifying the Upgrade

To verify the upgrade, completing the following steps:

- Step 1** Log into the TUI as installer on the Cisco StadiumVision Director Remote server.
- Step 2** Go to **Services Control > StadiumVision Remote Services > All**.
- Step 3** Select **Show Status** and confirm that the distribution service is reported as running normally (Figure 4):

Figure 4 Verifying Distribution Service Status

```
Calling sv-remote. Please wait for status below to ensure status.
*** StadiumVision Remote Overall Status ***
StadiumVision Remote distribution Running
Command completed successfully.
Press any key to return to the menu.
```

- Step 4** Press any key to return to the All menu.
- Step 5** Continue to return to the Main Menu and exit the TUI.



Appendix A: Cisco UCS C22 Hardware Installation Guidelines

First Published: May, 2016

If you are using the Cisco UCS C22 Server for your Cisco StadiumVision Director Remote server platform, be sure to follow the hardware setup guidelines found in this module before installing the virtualization environment and Cisco StadiumVision Director Remote software.

This section includes the following topics:

- [Prerequisites, page 21](#)
- [Installation Guidelines, page 22](#)
- [Installation Summary, page 22](#)

Prerequisites

Be sure that the following requirements are met before you install the Cisco UCS C22 hardware:

- You have a monitor and keyboard that you can connect to the server.
- You have the following information for configuring the internal Cisco Integrated Management Controller (CIMC) interface:
 - If not using DHCP to provide addressing, you have an additional IP address for static configuration.



Tip

You also will need an IP address when you configure the eth0 network interface during the Cisco StadiumVision Director Remote software installation.

- You have the VLAN ID if the server will be installed on a network VLAN.
- You are prepared to change the default CIMC login password.
- You have a copy of or access to the [Cisco UCS C22 Server Installation and Service Guide](#) on Cisco.com.

**Note**

Familiarize yourself with the safety guidelines and warnings, overview of the server, and the installation instructions provided in the [Cisco UCS C22 Server Installation and Service Guide](#). Use the information in this appendix only as a guide to the tasks that you need to perform from that installation and service guide to set up the Cisco UCS C22 server for use as a Cisco StadiumVision Director Remote server in a virtualized environment.

Installation Guidelines

To support the Cisco StadiumVision Director Remote server virtualized environment, the Cisco UCS C22 hardware must be installed according to the following guidelines:

- The server is configured for a single-CPU architecture.
- PCIe slot 1 is used for the LSI MegaRAID 9220-4i PCIe card.

**Caution**

VMware ESX/ESXi or any other virtualized environments are not supported for use with the embedded MegaRAID controller. In addition, dual controllers or mixed controller types are not supported. Therefore, the embedded MegaRAID controller must not be connected or used.

- You will only use one UCSC-CABLE-A5 cable to connect the LSI add-on card.

**Tip**

You will not need the two UCSC-CABLE-AE mini-SAS cables that are shipped with the hardware (these cables have a 90-degree angle). These are intended for the embedded megaRAID controller which should not be used for this configuration.




Installation Summary

This section provides an overview of the basic tasks to be completed when installing the Cisco UCS C22 server hardware for the Cisco StadiumVision Director Remote server environment.

**Caution**

Refer to the instructions for performing these steps in the [Cisco UCS C22 Server Installation and Service Guide](#) on Cisco.com. To ensure the proper cable routing for a RAID controller in a single-CPU configuration, be sure to refer to the “RAID Controller Cabling” topic in the “[RAID Controller Considerations](#)” module of that guide.

After you unpack and inspect the server and prepare for installation, be sure to complete the following tasks:

	Description
Step 1	<p>Install the hard drives.</p> <p> Caution Be sure that the drives are installed in the appropriate bays for control by the LSI MegaRAID 9220-4i card that will be installed in PCIe slot 1.</p>
Step 2	Install the DIMMs.
Step 3	Install the LSI MegaRAID 9220-4i PCIe card.
Step 4	<p>Connect the RAID controller card cable for a 1-CPU configuration.</p> <p> Note The LSI MegaRAID 9220-4i PCIe card uses one UCSC-CABLE-A5 mini-SAS cable for the 1-CPU configuration.</p>
Step 5	Disable the embedded RAID controller in BIOS.
Step 6	<p>Create one logical drive using the wizard in the LSI MegaRAID configuration utility.</p> <p>Tip To access the LSI MegaRAID configuration utility, press Ctrl-H when the RAID POST message appears after exiting the BIOS and rebooting in Step 7.</p>
Step 7	<p>Configure the CIMC interface with the following settings:</p> <ul style="list-style-type: none"> • NIC mode—Dedicated • DHCP—Dependent on client network. If you disable DHCP, be prepared to configure a static IP address. • VLAN—Dependent on client network. • NIC Redundancy—None <p> Tip The instructions for configuring the CIMC interface are found in the “Initial Server Setup” topic of the “Installing the Server” module in the <i>Cisco UCS C22 Server Installation and Service Guide</i>.</p>



Appendix B: Using the TUI Upgrade Utility to Upgrade Cisco StadiumVision Director Remote Software

First Published: May, 2016

This module describes how to upgrade an existing server already running Cisco StadiumVision Director Remote software. This procedure is also referred to generally as an *ISO upgrade* and is similar to the ISO upgrade on Cisco StadiumVision Director using the Text Utility Interface (TUI).

This module includes the following topics:

- [Best Practices, page 25](#)
- [Prerequisites, page 26](#)
- [Information About Updating an Existing Cisco StadiumVision Director Remote Server Using the TUI, page 26](#)
- [Upgrade Tasks, page 27](#)
- [Verifying the Upgrade, page 31](#)

Best Practices

Before you begin upgrading an existing Cisco StadiumVision Director Remote server, consider the following best practices:

- Choose an appropriate down time to perform the upgrade on the Cisco StadiumVision Director Remote server when there is adequate time to complete and verify the upgrade before any scheduled events and to allow time to resolve any unexpected issues that might occur.
- Refer to the [Release Notes for Cisco StadiumVision Director Release 4.1](#) for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release.
- Pay particular attention to the required hardware and software versions for other devices supporting your Cisco StadiumVision solution and be sure that you upgrade those devices as needed. For example, generally only certain firmware versions are supported for the DMP hardware, or a new firmware version is needed to provide additional functionality supported by the Cisco StadiumVision Director software.

- Shut down the Cisco StadiumVision Director Remote server and take a snapshot of the VMware system. Restart the Cisco StadiumVision Director Remote server to prepare for upgrade.

Prerequisites

Be sure that the following requirements are met before you upgrade your server:

- Your server is running a minimum of Cisco StadiumVision Director Remote Release 4.0.0-66 or higher.
- You have the IP address for the Cisco StadiumVision Director Remote server where you want to upload the ISO upgrade image. You will need to use this information as part of the URL to access the ISO upload utility.



Note The Cisco StadiumVision Director Remote server should be configured with a static IP address or a non-expiring DHCP lease.

- You have an installer account on the Cisco StadiumVision Director server.
- You have a laptop computer connected to the same network as the Cisco StadiumVision Director Remote server with an SSH client (such as PuTTY) to upgrade an existing server.



Note You also can use a monitor and keyboard that are directly connected to the Cisco StadiumVision Director Remote UCS C22 server to log into the TUI.

Information About Updating an Existing Cisco StadiumVision Director Remote Server Using the TUI

The ISO upgrade procedure for Cisco StadiumVision Director Remote software using the TUI includes the following tasks:

1. Downloading an ISO upgrade file from the software download site on Cisco.com.
2. Uploading the ISO file from your laptop to the Cisco StadiumVision Director Remote server using the upload utility through your browser.
3. Installing the ISO image using the upgrade utility in the TUI.

ISO Upgrade Files

You can store multiple ISO upgrade files on a Cisco StadiumVision Director server. The files will be displayed with a sequence number and the ISO filename in the TUI upgrade utility for you to select which file to install.

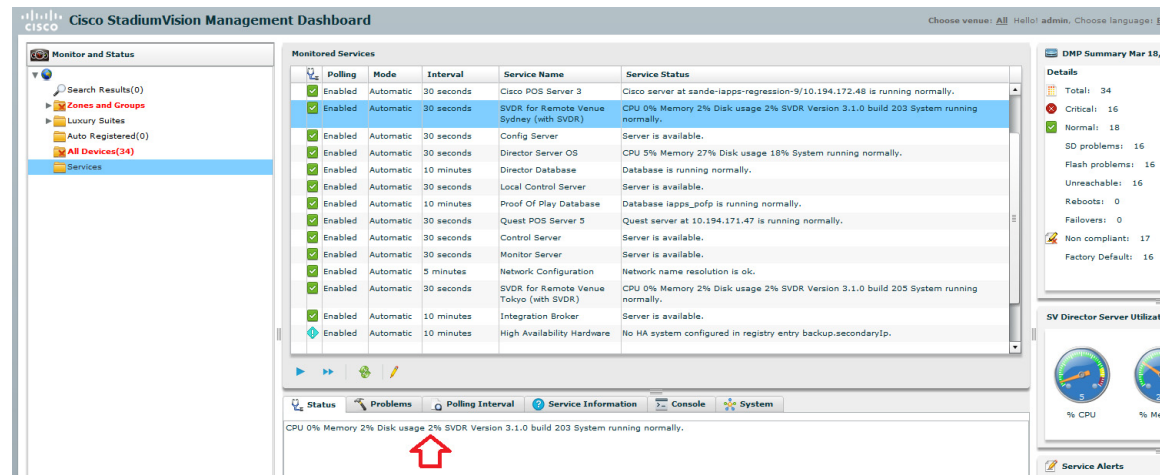
Disk Maintenance

There is no automatic aging of ISO upgrade files, but there is a utility to delete ISO upgrade files in the TUI.

You can see disk utilization for remote servers from the Management Dashboard on the centralized Cisco StadiumVision Director server, or you can use the TUI to get file system usage.

Figure 1 shows an example of disk utilization reporting available for a Cisco StadiumVision Director Remote server from the Management Dashboard.

Figure 1 *Disk Utilization for Remote Server in Cisco StadiumVision Director Management Dashboard*



Upgrade Tasks

To upgrade your Cisco StadiumVision Director server, complete the following tasks:

- [Downloading ISO Upgrade Files from Cisco.com, page 28](#) (required)
- [Uploading an ISO Upgrade File to the Cisco StadiumVision Director Remote Server, page 28](#) (required)
- [Installing the ISO Upgrade Image on the Cisco StadiumVision Director Remote Server, page 30](#) (required)

Downloading ISO Upgrade Files from Cisco.com

Be sure to download the upgrade files to a location, such as a laptop computer, where you can access them for installation onto the Cisco StadiumVision Director Remote server.

To download an ISO upgrade file, complete the following steps:

Step 1 Go to the Cisco StadiumVision Director software download site.



Note This site page is also available from the [Cisco StadiumVision Director product support page](#) by clicking **Download Software > Cisco StadiumVision Director**.

Step 2 Select the ISO upgrade, and optionally the companion MD5 checksum file, and download them.

[Table 1](#) shows the filename conventions used for ISO upgrades.



Note Be sure that you choose the ISO for SVD-REMOTE and *not* for SV-DIRECTOR.

Table 1 *ISO Filename Conventions for Cisco StadiumVision Director Remote*

OVA Filename

SVD-REMOTE-UPGRADE-4.1.0-*nnn*.x86_64.iso¹

SVD-REMOTE-UPGRADE-4.1.0-*nnn*.x86_64.iso.md5sum

1. “*nnn*” represents the build number.

You can download the files using one of the following methods:

- Download both files at one time—Select each file and click **Add to Cart**. Then at the top of the download page, click the “Download Cart (2 items)” link.
- Download each file independently—Click the **Download Now** button in the file selection box for each file.

Step 3 (Optional) To verify the integrity of your upgrade file from the download, you can use a command-line or GUI utility on your laptop to calculate the checksum on the .iso file. Open the .md5sum file to compare the value that you calculated with the expected value provided in the .md5sum file.

The values should match. If they do not, retry the download.

Uploading an ISO Upgrade File to the Cisco StadiumVision Director Remote Server

After you have downloaded the ISO upgrade file from Cisco.com, you need to upload the file to the Cisco StadiumVision Director Remote server using a URL from a browser to access the ISO uploader utility. Once you have uploaded the software to the server, then you will use the TUI to install the upgrade image.

Prerequisites

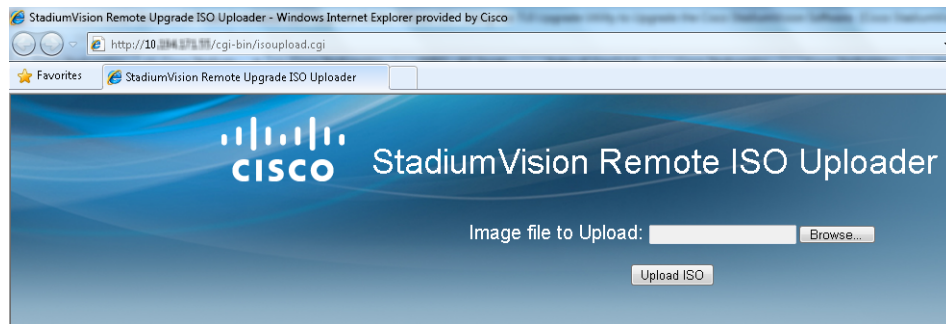
Be sure that you know the IP address of the Cisco StadiumVision Director Remote server where you want to upload the file, and you have a supported browser version for Cisco StadiumVision Director.

To upload an ISO upgrade file to the Cisco StadiumVision Director Remote server, complete the following steps:

- Step 1** Open your browser, and go to the following URL, where *x.x.x.x* is replaced by the IP address of the server where you want to upload the upgrade software (Figure 2):

http://x.x.x.x/cgi-bin/isoupload.cgi

Figure 2 ISO Updater Utility



- Step 2** Click **Browse** (Figure 2).
- Step 3** From the File Upload dialog box, navigate to the location of the ISO upgrade file that you downloaded from Cisco.com. Select the file that you want to upload and click **Open**.
- Step 4** Click **Upload ISO**. The file is sent to the server.



Caution

The upload might take several minutes. Do *not* refresh or reload the ISO Updater page while the upload process is running. Any interruption will corrupt the ISO image being uploaded.

When the ISO upload is complete, one of the following occurs:

- When the image is validated and uploaded successfully, a message is displayed stating that the ISO image has been uploaded.
- The image upload failed for some reason and you will need to retry the upload again.

Installing the ISO Upgrade Image on the Cisco StadiumVision Director Remote Server

To install the ISO upgrade image on the Cisco StadiumVision Director server, complete the following steps:

- Step 1** From a laptop computer that is connected to the Cisco StadiumVision Server Remote network, use an SSH client to run a secure login to the Cisco StadiumVision Director Remote server using the IP address for your server.
- Step 2** When the login prompt appears, enter the **installer** userid followed by the installer password at the password prompt.
- Step 3** From the TUI Main Menu, go to the StadiumVision Remote Server Administration menu. Select the Upgrade Server option (type **b** and press **Enter**) (Figure 3):

Figure 3 TUI StadiumVision Remote Server Administration Menu Option for Server Upgrade

```

Main Menu > StadiumVision Remote Server Administration

Please choose one of the following menu options:

a) Display Software Version
b) Upgrade Server
c) Restart StadiumVision Remote software
d) Shutdown StadiumVision Remote software
e) Reboot
f) Power Off
R or < or ,) Return to prior menu
  
```

- Step 4** All of the ISO upgrade files that you have uploaded are displayed with a sequence number and the image name (Figure 4). Type the sequence number that corresponds to the image that you want to install, and press **Enter**.

Figure 4 ISO Upgrade Image File List

```

0. - [Cancel]
1. - SVD-REMOTE-UPGRADE-3.1.0-205.x86_64.iso
2. - SVD-REMOTE-UPGRADE-3.1.0-209.x86_64.iso

Please select a number from above and press enter: █
  
```

- Step 5** When the upgrade configuration confirmation prompt appears, type **c** to continue (Figure 5):

Figure 5 TUI Upgrade Configuration Confirmation

```

Are you sure you wish to upgrade? Push R to return to main menu
or C to continue.
c
  
```

The upgrade process begins (Figure 6).

Figure 6 Start of Upgrade Process

```
Beginning upgrade process...
mount: /var/sv/rpms/: not mounted
Loaded plugins: security
Cleaning up Everything
Loaded plugins: security
Cisco
Cisco/filelists | 951 B 00:00
Cisco/other | 18 kB 00:00
Cisco/primary | 8.2 kB 00:00
Cisco/primary | 23 kB 00:00
svd-update | 951 B 00:00
svd-update/filelists | 219 kB 00:00
svd-update/other | 1.4 MB 00:00
svd-update/primary | 141 kB 00:00
Cisco | 26/26
```



Caution

Wait until the upgrade process completes, which should only take a few minutes. *Do not* close the terminal while the upgrade is in progress. You will get notification once the installation is complete.

Step 6 When the “Upgrade complete” message appears, press any key. (Figure 7):

Figure 7 End of ISO Upgrade Process

```
Restarting SV-Remote services. Please wait...
Stopping StadiumVision Remote distribution
Using CATALINA_BASE: /opt/sv/servers/distribution
Using CATALINA_HOME: /opt/sv/servers/common
Using CATALINA_TMPDIR: /opt/sv/servers/distribution/temp
Using JRE_HOME: /usr/java/latest
Using CLASSPATH: /opt/sv/servers/common/bin/bootstrap.jar
Force stopping svd-distribution...
Stopping httpd: [ OK ]
Starting httpd
Starting httpd: [ OK ]
Starting SV-Remote
Starting StadiumVision Remote distribution
Upgrade complete.
Press any key to return to the menu.
```

Verifying the Upgrade

To verify the upgrade, completing the following steps:

- Step 1** Log into the TUI as installer on the Cisco StadiumVision Director Remote server.
- Step 2** Go to **Services Control > StadiumVision Remote Services > All**.
- Step 3** Select **Show Status** and confirm that the distribution service is reported as running normally (Figure 8):

Figure 8 Verifying Distribution Service Status

```
Calling sv-remote. Please wait for status below to ensure status.
*** StadiumVision Remote Overall Status ***
StadiumVision Remote distribution Running
Command completed successfully.
Press any key to return to the menu.
```

■ Verifying the Upgrade

- Step 4** Press any key to return to the All menu.
- Step 5** Continue to return to the Main Menu and exit the TUI.
-