



StadiumVision



Cisco StadiumVision Director Software Installation and Upgrade Guide

Release 4.1

October 31, 2016

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Preface

This document describes the requirements and tasks to install and upgrade the software for Cisco StadiumVision Director Release 4.1.

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.

This section includes the following topics:

- [Document Revision History, page ix](#)
- [Document Organization, page x](#)
- [Related Documentation and Resources, page x](#)

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
October 31, 2016	<ul style="list-style-type: none"> • Added Upgrading the DMP Firmware, page 60 and Rebooting the DMPs, page 60 tasks to the “Verifying the Upgrade” module on page 53. • Added step to verify the SV-4K and DMP-2K runtime status in Verifying Media Players, Groups, and Zones in the Management Dashboard, page 60. • Added a new step to verify that SV-4K and DMP-2K devices have been rebooted and are running the latest system runtime version in “Appendix A: Post-Upgrade Checklist” module on page 75.
June 9, 2016	Added Tip about removal of language files prior to upgrade of the system to conserve disk space in the “ Disk Maintenance ” section on page 43.
May 16, 2016	First release of this document for Cisco StadiumVision Director Release 4.1.0-419.

Document Organization

Chapter	Description
“Getting Started Installing or Upgrading Cisco StadiumVision Director”	Provides information that you should read before you perform an initial installation or upgrade of the Cisco StadiumVision Director Release 4.1 software.
“Migrating From Platform 2 Servers to a Virtual Environment”	Describes how to migrate your existing physical Platform 2 servers (Cisco UCS C200s) running Release 4.0 to a virtual environment so that you can upgrade to Release 4.1. The information in this module also can be applied to Platform 3 servers. However, Platform 3 servers are supported in Release 4.1 and do not have a strict requirement to be migrated to a virtual environment before being upgraded to Release 4.1.
“Installing Cisco StadiumVision Director for the First Time”	Describes how to install the Cisco StadiumVision Director Release 4.1 software on your newly-purchased Platform 3 server hardware from a full ISO image.
“Using the Software Manager to Upgrade Cisco StadiumVision Director Software, Language Packs, and Fonts”	Describes how to upgrade a Cisco StadiumVision Director server already running Cisco StadiumVision Director 4.1 to a later release of Cisco StadiumVision Director software, as well as how to install language packs and fonts.
“Verifying the Upgrade”	Describes how to verify that the upgrade process was successful.
“Upgrading the Cisco DMP 4310G Firmware”	Describes how to upgrade the DMP firmware on the Cisco DMP 4310G.
“Upgrading the SV-4K and DMP-2K Firmware”	Describes how to obtain and upload firmware for the SV-4K and DMP-2K, and how to configure the auto-registration settings.
“Appendix A: Post-Upgrade Checklist”	Provides a checklist that is useful after you upgrade your software on a Cisco StadiumVision Director server.
“Appendix B: Port Reference”	Identifies the ports used by Cisco StadiumVision Director.
“Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server”	Provides guidelines for configuring the Cisco Integrated Management Controller (CIMC) interface and performing the initial configuration, and upgrading the CIMC/BIOS firmware on the Cisco UCS C220 servers for Cisco StadiumVision Director (SV-DIR-DIRECTOR-K9, SV-PLATFORM3=).
“Appendix D: Using the TUI Upgrade Utility to Upgrade the Cisco StadiumVision Software”	Describes how to upgrade an existing Cisco StadiumVision Director server to a later version, including installation of service packs. This procedure is also referred to generally as an ISO upgrade to refer to both the service pack and upgrade ISO process.

Related Documentation and Resources

- [Release Notes for Cisco StadiumVision Director Release 4.1](#)
- [Cisco StadiumVision Director Server Administration Guide, Release 4.1](#)

- For the listing page of all Cisco StadiumVision documentation, go to:
<http://www.cisco.com/c/en/us/support/video/stadiumvision/tsd-products-support-series-home.html>

Cisco StadiumVision Documentation Go URL

For more information about Cisco StadiumVision hardware and software installation, configuration, and operation, see the Cisco StadiumVision documentation available on Cisco.com at:

www.cisco.com/go/stadiumvisiondocs

Release-Specific Documents

- *Release Notes for Cisco StadiumVision Director Release 4.1*
- *Cisco StadiumVision Director Server Administration Guide, Release 4.1*
- For the listing page of all Cisco StadiumVision documentation, go to:
<http://www.cisco.com/c/en/us/support/video/stadiumvision/tsd-products-support-series-home.html>

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Getting Started Installing or Upgrading Cisco StadiumVision Director

First Published: May 16, 2016

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

- [Before You Begin, page 1](#)
- [Overview of the Installation and Upgrade Process, page 4](#)

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 software:

- 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.
- Determine if you have compatible media player models and firmware versions installed.
The media player firmware images are not bundled with the Cisco StadiumVision Director software. You must download the firmware image separately. For more information about supported firmware versions, see the [Release Notes for Cisco StadiumVision Director Release 4.1](#).
- Be sure that you have a supported browser installed for access to Cisco StadiumVision Director as documented in the Release Notes.
- Verify that the Cisco StadiumVision Director server is connected to the network using the Ethernet port eth0 on the rear panel.
- To access the Cisco Integrated Management Controller (CIMC) for the software installation on a Platform 3 server, the following requirements are met:
 - Your computer meets the minimum browser and Flash player requirements for Cisco StadiumVision Director, and also has Java 1.6 or later installed.
 - You have a laptop connection with access to the Cisco StadiumVision Director server network.
 - You have the IP address of the CIMC interface on the Cisco StadiumVision Director server.
 - You have the CIMC interface login credential. The default credential is **admin** and **password**.



Note Due to the difficulty in recovering from an interrupted installation process if the Linux shell is accidentally closed or the network drops, it is highly recommended that you use a server console connection method that does not pose a risk to the success of upgrade completion if the session breaks during upgrade. You also can use a monitor and keyboard that are directly connected to the Cisco StadiumVision Director server to log into the TUI.

To learn more about the KVM console and the CIMC interface, see the Cisco UCS C-Series Integrated Management Controller Configuration guide that corresponds to your server release at: <http://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-c-series-integrated-management-controller/products-installation-and-configuration-guides-list.html>

- Assess your installation environment and see the “[Overview of the Installation and Upgrade Process](#)” section on page 4 for more information and to find out what modules in this guide you should follow.

Hardware Prerequisites

You can install Release 4.1 on a Platform 3 server, or use your own server to run the Cisco StadiumVision Director software. Follow the requirements in this section to be sure that your virtual environment meets the minimum and tested specifications.

This section includes the following topics:

- [Minimum Virtual Machine System Requirements for Cisco StadiumVision Director, page 2](#)
- [VMware vSphere Tested Versions for Cisco StadiumVision Director, page 3](#)
- [Restrictions for Virtual Server Support, page 4](#)

Minimum Virtual Machine System Requirements for Cisco StadiumVision Director

Be sure that your configuration meets the minimum system requirements in [Table 1](#) and supports a VMware virtual machine environment with a compatible vSphere version (See “[VMware vSphere Tested Versions for Cisco StadiumVision Director](#)” section on page 3.).



Note Cisco StadiumVision Director 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 a Virtualized Environment running Cisco StadiumVision Director

System Component	Minimum Requirement
Forward Write (fwrite) in operations per second (ops)	10,000
Hard Drive Capacity	900 GB Note The hard drives must be configured as a single logical volume. A RAID volume is strongly recommended.
Processor	Dual processor equivalent to an Intel Xeon Processor E5-2460 (15 MB cache, 2.50 GHz clock, 7.20 GT/s Intel® QPI)
Virtual RAM (VRAM)	32 GB
Virtual CPUs	24

[Table 2](#) provides additional information about the tested VM hardware and OS specifications that you should use when configuring a virtual machine to support Cisco StadiumVision Director.

Table 2 Virtual Machine Hardware and OS Specifications Tested for Cisco StadiumVision Director Server

System Component	Specification
VM Hardware	Version 8
Guest Operating System	RedHat Enterprise Linux 5 (64-bit)
Network Adapter	E1000
SCSI Controller	LSI Logic Parallel or LSI Logic SAS
Disk Provisioning	Thick

VMware vSphere Tested Versions for Cisco StadiumVision Director

Cisco StadiumVision Director has been tested with VMware vSphere version 5.1 and 5.5. Other VMware vSphere versions cannot be guaranteed to work with Cisco StadiumVision Director Release 4.1.



Note

Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in [Table 1](#) is not supported.

Restrictions for Virtual Server Support

Be sure that you consider the following restrictions before you configure a virtual server environment for Cisco StadiumVision Director:

- Migrating to a virtualized environment on your existing Platform 3 servers is not supported. For more information, see the “Important Migration and Upgrade Notes” section of the [Release Notes](#).
- When using a virtual server environment, Cisco Technical Support only provides support for the Cisco StadiumVision software. No support is provided for third-party hardware or the virtual OS environment installed by the customer.
- The recommended configuration is for a dual virtual server environment to support a primary and backup server using the standard Cisco StadiumVision Director backup/restore and failover tools.
- Cisco has not tested and does not provide support for any VMware tools in a Cisco StadiumVision system. If your site chooses to use backup, recovery or other tools outside of the Cisco StadiumVision Director software to manage your virtual servers, then you accept the risks and responsibility associated with securing your data.

Overview of the Installation and Upgrade Process

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

- [Migrating From Platform 2 Servers to a Virtual Environment, page 4](#)
- [Installing on a Virtual Server for the First Time, page 5](#)
- [Installing a Platform 3 Server for the First Time, page 5](#)
- [Upgrading an Existing Cisco StadiumVision Director Server Already Running Cisco StadiumVision Director, page 5](#)

Migrating From Platform 2 Servers to a Virtual Environment

**Note**

The Platform 2 server is not supported in Cisco StadiumVision Director Release 4.1.

Migration of an existing Cisco StadiumVision Director environment on a Platform 2 server to a virtual server so that you can run Release 4.1 involves the following phases:

- Preparation of the production server environment.
- Preparation of a virtual machine, which includes loading of a Cisco StadiumVision Director full ISO image.
- Migration from the physical server to a virtual server.
- Promotion of the virtual server.
- Creation of another virtual server instance.

For detailed requirements and tasks, see the “[Migrating From Platform 2 Servers to a Virtual Environment](#)” on page 7.

Installing on a Virtual Server for the First Time

The installation process for a virtual server running Cisco StadiumVision Director software for the first time involves the following tasks:

- Verifying that your virtual server meets the requirements listed in [Table 1](#).
- Configuring the virtual machine specifications according to the tested specifications with Cisco StadiumVision Director provided in [Table 2](#).
- Install VMWare client software.

**Note**

Cisco StadiumVision Director has been tested with VMware vSphere version 5.1 and 5.5. Other VMware vSphere versions cannot be guaranteed to work with Cisco StadiumVision Director Release 4.1.

Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in [Table 1](#) is not supported.

- Load the Cisco StadiumVision Director Release full ISO.
- Run the installation.
- Upgrade all media player firmware.

Installing a Platform 3 Server for the First Time

The installation process for a new Platform 3 server running Cisco StadiumVision Director for the first time involves the following tasks:

- Confirmation of CIMC/BIOS version and upgrade as required.
- Installation from CIMC of a full ISO image file that runs an installation program with configuration prompts for your network information.
- Disabling DMP failover for all Cisco DMP 4310Gs. (Disabled is the default)
- Upgrading the media player firmware.

For detailed information, see the [“Installing Cisco StadiumVision Director for the First Time”](#) on [page 29](#).

Upgrading an Existing Cisco StadiumVision Director Server Already Running Cisco StadiumVision Director

You can upgrade an existing server already running Cisco StadiumVision Director software using an upgrade ISO image file available from Cisco.com and using the upgrade option from the Software Manager in the Cisco StadiumVision Director web browser interface.

**Caution**

If your Release 4.0 system is configured for retention of a single backup file only (the default), then you will no longer have access to any 4.0 data after the first 4.1 backup is completed. If for some reason you must revert to Release 4.0, contact Cisco Technical Support and provide them with your SSR file to help you restore it.

To help avoid any need to fall back to Release 4.0, be sure to follow carefully all recommended best practices and post-upgrade tasks as documented in this guide, including thoroughly testing your system to your site requirements before failing over and upgrading your backup server to Release 4.1.

The upgrade process for an existing Cisco StadiumVision Director server involves the following tasks:

- Upgrading the Cisco StadiumVision Director software.
- Upgrading the media player firmware.

For detailed information, see the [“Using the Software Manager to Upgrade Cisco StadiumVision Director Software, Language Packs, and Fonts”](#) on page 41.



Migrating From Platform 2 Servers to a Virtual Environment

First Published: May 16, 2016



Note

Due to memory and performance requirements, the Cisco StadiumVision Platform 2 servers (Cisco UCS C200) are not supported in Cisco StadiumVision Director Release 4.1.

In this document, the following terminology is used:

- **Migration**—Migration means moving an *existing* Cisco StadiumVision Director platform to a new hardware platform in a virtual environment.
- **Upgrade**—Means changing your software version to a newer release on your existing platform.

This module describes how to migrate your existing physical Platform 2 servers (Cisco UCS C200s) running Release 4.0 to a virtual environment so that you can upgrade to Release 4.1.

The information in this module also can be applied to Platform 3 servers. However, Platform 3 servers are supported in Release 4.1 and do not have a strict requirement to be migrated to a virtual environment before being upgraded to Release 4.1.

This module includes the following topics:

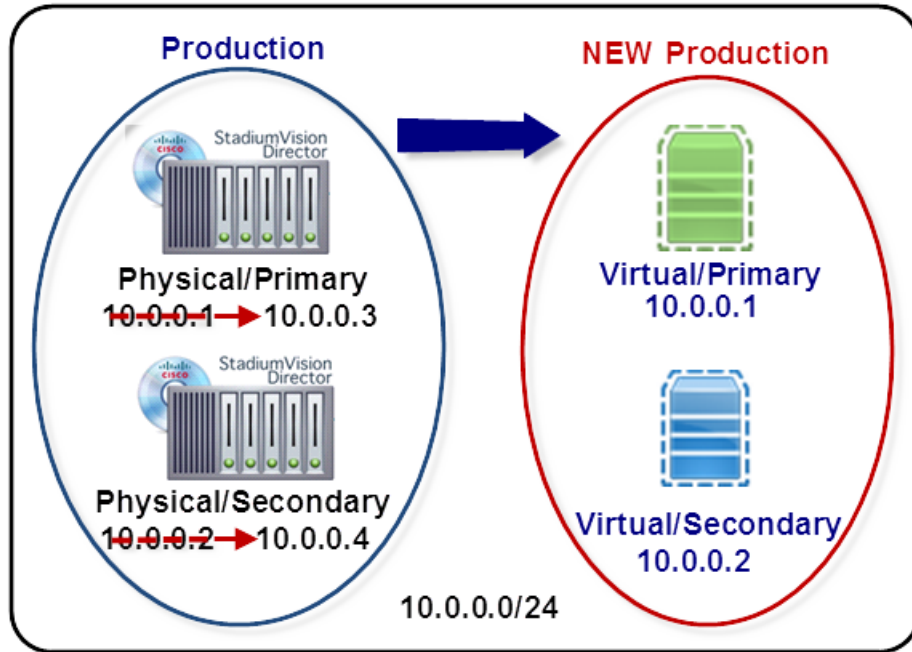
- [Objectives, page 7](#)
- [Workflow Summary, page 8](#)
- [Migration Phases, page 10](#)
- [What To Do Next, page 28](#)

Objectives

The objectives of this module in preparing for an upgrade to Cisco StadiumVision Director Release 4.1 are:

- Moving two physical, Cisco StadiumVision Director Platform 2 servers (Cisco UCS C200s) currently in production running Release 4.0.0-732 (SP3) to two virtual servers running Release 4.0.0-732 (SP3) ([Figure 1](#)).
- Retaining the ability to power up retired physical servers as needed without an IP addressing conflict.

Figure 1 Migration Objectives From Cisco StadiumVision Director Physical Servers to Virtual Servers



Workflow Summary

Table 1 provides a high-level summary of the tasks required to migrate from physical to virtual servers running Cisco StadiumVision Director. It includes links to topics within this module that provide more detailed information, along with other related documentation references.

Table 1 Virtual Migration Workflow Summary


Phase	Task Summary	References
Before You Begin	<ol style="list-style-type: none"> 1. Read the Release Notes. 2. Obtain two new IP addresses from your network administrator. 3. Obtain the full ISO and all upgrade ISOs for Cisco StadiumVision Director <i>Release 4.0</i>. 	<ul style="list-style-type: none"> • Release Notes for Cisco StadiumVision Director Release 4.1. • Software Download Center <p>Note Contact your Cisco representative or Technical Support to obtain the full ISO image for Release 4.0.</p>
Phase 1: Preparation of the Production Server Environment	<ol style="list-style-type: none"> 1. Upgrade Cisco StadiumVision Director as required to Release 4.0.0-732 (SP3). 2. Document the network configuration of your primary server, including but not limited to IP address, DNS, NTP, and timezone information. 3. Stop any active scripts. 4. Process any PoP reports. 5. Run a manual backup on the platform primary server. 6. Obtain an SSR. 7. Change IP addresses on production servers. <p> Caution Before you change the IP addresses on your production servers, be sure that you have assessed your virtual server hardware requirements and are prepared to complete the entire migration process due to impact on further production operation.</p>	<ul style="list-style-type: none"> • Cisco StadiumVision Director Software Installation and Upgrade Guide, Release 4.0. • Cisco StadiumVision Director Server Administration Guide, Release 4.0.
Phase 2: Preparation of a Virtual Machine	<ol style="list-style-type: none"> 1. Be sure your virtual server environment meets the minimum system requirements and tested OS specifications for Cisco StadiumVision Director. 2. Install VMware client software and configure the IP address of the production primary server. 3. Load the full ISO for Cisco StadiumVision Director Release 4.0.0-525. 4. Test IP connectivity between the virtual server and the primary production server using the ping command. 5. Configure the server system settings with the network setup information that you documented from the production primary server. 6. Perform upgrades to move to 4.0.0-732 (SP3). 	<ul style="list-style-type: none"> • “Hardware Prerequisites” section on page 2 in the “Getting Started Installing or Upgrading Cisco StadiumVision Director” module on page 1. • “Installing on a Virtual Server for the First Time” section on page 5. • “Configuring the Cisco StadiumVision Director Server System Settings” module in the Cisco StadiumVision Director Server Administration Guide, Release 4.0. • Cisco StadiumVision Director Software Installation and Upgrade Guide, Release 4.0.

Table 1 Virtual Migration Workflow Summary

Phase	Task Summary	References
Phase 3: Migration From Physical to Virtual Server	<ol style="list-style-type: none"> 1. Configure the virtual server as the secondary server in Cisco StadiumVision Director. 2. Re-establish backup between the primary production server and virtual server. 	<ul style="list-style-type: none"> • “Cisco StadiumVision Director Text Utility Interface” module in the <i>Cisco StadiumVision Director Server Administration Guide, Release 4.0</i>. • “Backing Up and Restoring Cisco StadiumVision Director Servers” module in the <i>Cisco StadiumVision Director Server Administration Guide, Release 4.0</i>.
Phase 4: Promotion of the Virtual Server	<ol style="list-style-type: none"> 1. Promote the virtual/secondary server to active. 2. Restore data from backup. 3. Stop services, auto-restart, and shut down the physical/primary server. Both physical servers should now be stopped/shut down. 	<ul style="list-style-type: none"> • “Cisco StadiumVision Director Text Utility Interface” module in the <i>Cisco StadiumVision Director Server Administration Guide, Release 4.0</i>. • “Backing Up and Restoring Cisco StadiumVision Director Servers” module in the <i>Cisco StadiumVision Director Server Administration Guide, Release 4.0</i>.
Phase 5: Creation of Another Virtual Server Instance	<ol style="list-style-type: none"> 1. Create another virtual server and configure it as the secondary server in Cisco StadiumVision Director. 2. Reconfigure the automatic backup environment between the virtual servers and run a manual backup. 3. Shut down the Cisco StadiumVision Director software on the virtual/secondary server. 4. Verify Cisco StadiumVision Director operation. 	<ul style="list-style-type: none"> • “Cisco StadiumVision Director Text Utility Interface” module in the <i>Cisco StadiumVision Director Server Administration Guide, Release 4.0</i>. • “Backing Up and Restoring Cisco StadiumVision Director Servers” module in the <i>Cisco StadiumVision Director Server Administration Guide, Release 4.0</i>.

Migration Phases

This section provides detailed information about the tasks to migrate to a virtual environment. It includes the following topics:

- [Before You Begin, page 11](#)
- [Phase 1: Preparation of the Production Server Environment, page 11](#)
- [Phase 2: Preparation of a Virtual Machine, page 15](#)
- [Phase 3: Migration From Physical to Virtual Server, page 17](#)
- [Phase 4: Promotion of the Virtual Server, page 22](#)

- [Phase 5: Creation of Another Virtual Server Instance, page 24](#)

Before You Begin

Before you migrate your servers in preparation for an upgrade to Release 4.1, complete the following tasks:

- Read the [Release Notes for Cisco StadiumVision Director Release 4.1](#).
- Obtain two new IP addresses on the same VLAN as your current Cisco StadiumVision Director production servers.

**Tip**

The best practice is to use unique IP addresses on all servers. This avoids IP address conflicts in the case of a need to turn on retired production servers for information or any potential requirement to fall back to Release 4.0 on those servers.

- Obtain the following full and upgrade ISO images for Cisco StadiumVision Director Release 4.0:

**Tip**

Upgrade ISO images are available from the [Software Download Center](#). To obtain the Release 4.0.0-525 full ISO image, contact your Cisco representative or Cisco Technical Support.

- Full ISO for Release 4.0.0-525.
- Upgrade ISO for Release 4.0.0-601 (SP1)
- Upgrade ISO for Release 4.0.0-707 (SP2)
- Upgrade ISO for Release 4.0.0-732 (SP3)

Phase 1: Preparation of the Production Server Environment

This phase includes the tasks required to prepare your production servers for migration:

- [Upgrading the Production Servers, page 12](#) (as required)
- [Documenting the Primary Production Server Configuration, page 12](#) (required)
- [Preparing the Primary Server for Migration, page 13](#) (required)
- [Changing the IP Addresses on the Production Servers, page 13](#) (required)

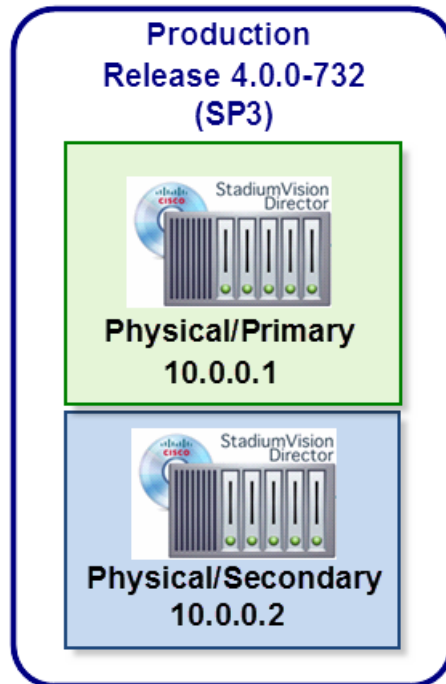
**Note**

Upgrading and documenting the production server network configuration can be done ahead of migration. The remainder of the tasks in this section should be scheduled when there is a sufficient period of time to perform the migration and test the outcome when no events are scheduled.

Upgrading the Production Servers

Figure 2 shows the target Cisco StadiumVision Director software version that should be installed on your Cisco UCS C200 production servers before migration to a virtual environment.

Figure 2 Target Software Version for Cisco StadiumVision Director Production Servers



Upgrade Paths

Depending on the version of Cisco StadiumVision Director currently running on your Platform 2 servers, you might have several upgrades to perform.

The upgrade paths to Release 4.0.0-732 (SP3) follow a linear progression as shown below:

- **Release 3.2 Upgrade Sequence**

Release 3.2.0-520 (SP2) > Release 4.0.0-601 (SP1) > Release 4.0.0-707 (SP2) > Release 4.0.0-732 (SP3)

- **Release 4.0 Upgrade Sequence**

Release 4.0.0-525 > Release 4.0.0-601 (SP1) > Release 4.0.0-707 (SP2) > Release 4.0.0-732 (SP3)

For information about how to upgrade to Release 4.0, see the [Cisco StadiumVision Director Software Installation and Upgrade Guide, Release 4.0](#).

Documenting the Primary Production Server Configuration

At a minimum, be sure to document the network configuration (IP address, DNS server, NTP server, and timezone information) for your primary production server prior to migration.

To verify this information, you can go to the TUI **Main Menu** > **System Settings** > **Network Settings**.

Preparing the Primary Server for Migration

To prepare the primary production server for migration, complete the following steps:

-
- Step 1** Stop all active scripts:
- Go to **Control Panel > Control**.
 - Select a running script.
 - Click **Stop**.
- Step 2** Process all ungenerated Proof of Play (PoP) reports:
- Go to **Control Panel > Setup > Proof of Play**.
 - Select an event script with a green status icon.
 - Click **Generate Report**.
- Step 3** Run a manual backup:
- Go to **Management Dashboard > Tools > Advanced > Run a Task**.
 - In the Tasks to Run box, select **BackupTask**.
 - Click **Apply**.
- Step 4** Obtain a System State Report (SSR):
- Go to **System State Report**.
 - Select Report Destination and Level options.
 - Click **Get System Status**.
-

Changing the IP Addresses on the Production Servers



Note

The best practice is to use unique IP addresses on all servers. Be sure to configure the *retiring* production servers with the *new* IP addresses.

Reusing the production IP addresses on the new virtual servers and changing to new IP addresses on the retiring production servers has the following benefits:

- Avoids IP address conflicts in the case of a need to turn on retired production servers for information or any potential requirement to fall back to Release 4.0 on those servers.
- Preserves DHCP strings required for SV-4K and DMP-2K Option 43 deployment that are already used in production. These strings include the IP address of the Cisco StadiumVision Director server in the converted URL.



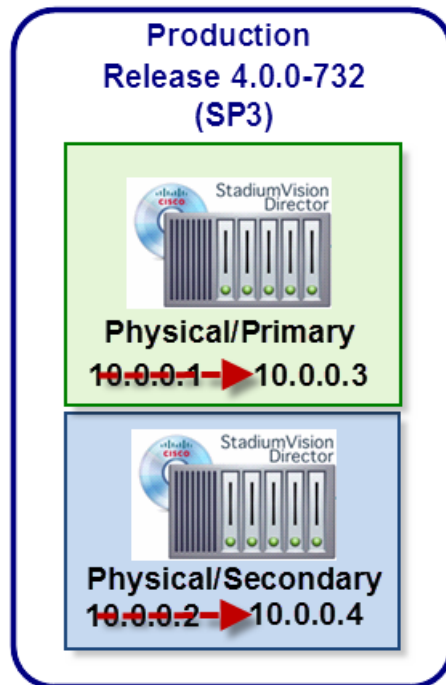
Caution

Once you change your production server IP addresses, automatic backup operation and DHCP option 43 configuration for DMPs to obtain IP addresses will no longer work on the production server. You should plan to complete all phases of the virtual migration from this point.

Prerequisites

Before you begin this task, be sure that you have obtained two new IP addresses on the same VLAN as your production servers. These new IP addresses will be configured on the production servers (Figure 3).

Figure 3 New IP Address Configuration on Production Servers



Procedure

To change the IP address on the production servers, complete the following steps:

-
- Step 1** From the TUI Main Menu on the primary server, go to the **System Settings** menu.
 - Step 2** Select the **Network Settings** option.
The Network Settings sub-menu is displayed.
 - Step 3** Select the **Setup Network Information** option.
 - Step 4** At the Configure Network confirmation screen, press any key to continue.
The Select Action screen is displayed with the “Edit Devices” option highlighted.
 - Step 5** Press **Enter** to select.
The Select a Device screen is displayed with the “eth0” network interface highlighted.
 - Step 6** Press **Enter** to select.
The Ethernet Configuration screen is displayed.



Note The Linux screen is misspelled “Devernet Configuration.”

- Step 7** Press the tab key until the cursor is positioned on the Static IP address line.
- Step 8** Press the backspace key to go to the beginning of the line and type in the *new* IP address of the primary server.
- In our example from [Figure 3](#), this would be 10.0.0.3.
- Step 9** Press the tab key until the **Ok** button is highlighted and press **Enter**.
- You return to the Select a Device screen.
- Step 10** Press the tab key until the **Save** button is highlighted and press **Enter**.
- You return to the Select Action screen.
- Step 11** Press the tab key until the **Save&Quit** button is highlighted and press **Enter**.
- You return to the TUI Configure Network screen.
- Step 12** Press any key to return to the Network Settings sub-menu.
- Step 13** Select the **Edit hosts file** option.
- Press any key to enter edit mode.
 - Replace the server's original IP address (in our example, 10.0.0.1) with the new IP address of the primary server (ex. 10.0.0.3).
- Step 14** Save the configuration and exit vi using the following command:
- ```
:wq
```
- Step 15** Restart the network service:
- From the TUI Main Menu, go to the **Services Control** sub-menu.
  - Select the **Networking** option.
- The Networking sub-menu is displayed.
- Select the **Restart networking** option.
- The network daemon is restarted and the IP address change is put into effect on the primary server.
- Step 16** Repeat this procedure on the secondary production server using the other new IP address (in our example, 10.0.0.4) in [Step 8](#) and [Step 13](#).
- 

## Phase 2: Preparation of a Virtual Machine



### Note

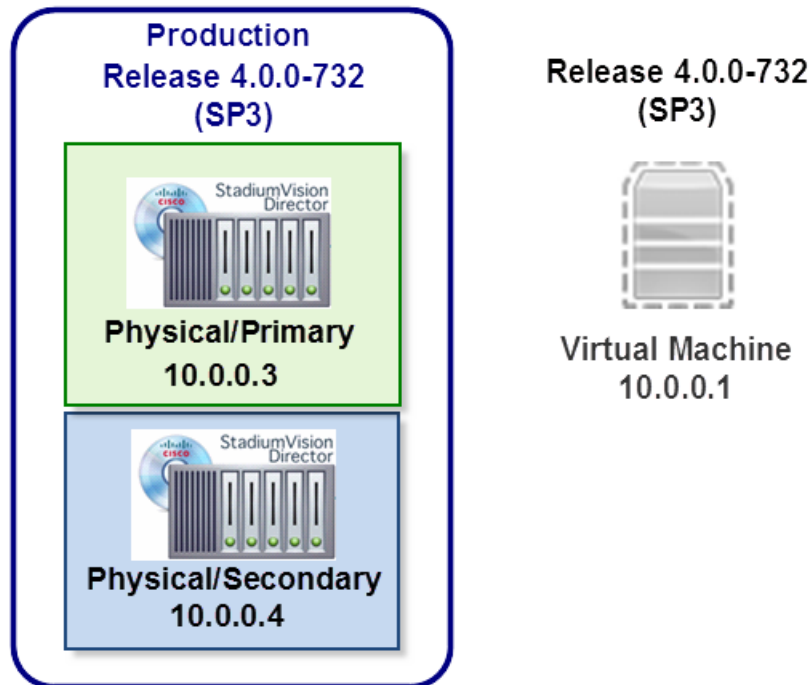
This section only provides a high-level summary of the tasks to perform to prepare your virtual machine to run Cisco StadiumVision Director. It does not intend to provide specific details about how to install and configure VMware software.

---

After you have prepared your production servers running Release 4.0.0-732 (SP3) and changed their IP addresses, you are ready to install and configure the primary virtual server.

Figure 4 shows the objective of this section to install a virtual machine running Cisco StadiumVision Director Release 4.0.0-732 (SP3), with the original IP address of the primary production server (which is 10.0.0.1 in our example).

Figure 4 Install a Virtual Machine with Release 4.0 SP3 and Primary Server Original IP Address



## Prerequisites

Before you install a virtual machine for Cisco StadiumVision Director, be sure that the following requirements are met:

1. You have changed the IP addresses on the production servers.
2. You have verified that your virtual server meets the requirements listed in [Table 1 on page 3](#).

## Procedure

To install the virtual machine, complete the following steps:

- 
- Step 1** Configure the virtual machine operating system specifications according to the tested specifications provided in [Table 2](#).

Table 2 Virtual Machine Hardware and OS Specifications Tested for Cisco StadiumVision Director Server

| System Component       | Specification                      |
|------------------------|------------------------------------|
| VM Hardware            | Version 8                          |
| Guest Operating System | RedHat Enterprise Linux 5 (64-bit) |
| Network Adapter        | E1000                              |

**Table 2** *Virtual Machine Hardware and OS Specifications Tested for Cisco StadiumVision Director Server*

| System Component  | Specification                       |
|-------------------|-------------------------------------|
| SCSI Controller   | LSI Logic Parallel or LSI Logic SAS |
| Disk Provisioning | Thick                               |

- Step 2** Install VMware client software and configure the original IP address of the primary production Cisco StadiumVision Director server.
- Step 3** Load the full ISO for Cisco StadiumVision Director Release 4.0.0-525 on the virtual machine.
- Step 4** Test IP connectivity between the virtual server and the primary production server using the **ping** command.
- Step 5** Configure the server system settings with the network setup information that you documented from the production primary server.  
For more information, see the “[Configuring the Cisco StadiumVision Director Server System Settings](#)” module in the *Cisco StadiumVision Director Server Administration Guide, Release 4.0*.
- Step 6** Perform upgrades to move to 4.0.0-732 (SP3):  
**Release 4.0 Upgrade Sequence**  
Release 4.0.0-525 > Release 4.0.0-601 (SP1) > Release 4.0.0-707 (SP2) > Release 4.0.0-732 (SP3)  
For more information, see the “[Using the Software Manager to Upgrade Cisco StadiumVision Director Software, Language Packs, and Fonts](#)” module in the *Cisco StadiumVision Director Software Installation and Upgrade Guide, Release 4.0*.

## Phase 3: Migration From Physical to Virtual Server

This phase includes the tasks to establish the virtual server as backup to the primary production server to begin the virtual migration process:

- [Configuring the Virtual Server as the Cisco StadiumVision Director Secondary Server, page 17](#) (required)
- [Configuring the Backup Environment Between the Primary Production Server and Virtual/Secondary Server, page 18](#) (required)
- [Starting a Backup Manually on the Primary Server for Immediate Execution, page 21](#) (required)

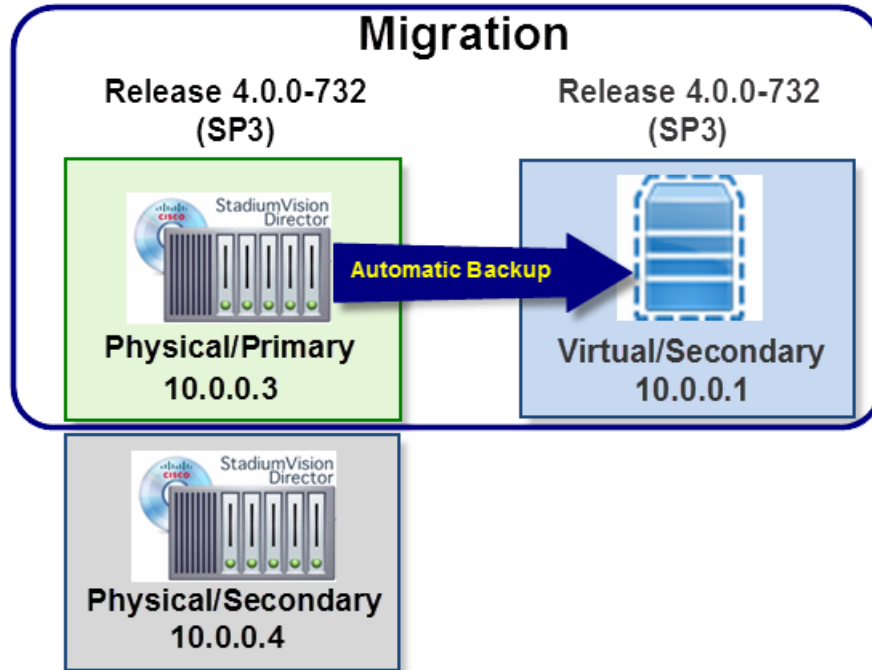
### Configuring the Virtual Server as the Cisco StadiumVision Director Secondary Server

To configure the virtual server as secondary/inactive in Cisco StadiumVision Director, complete the following steps:

- Step 1** Log into the TUI as installer on the *virtual* server using a directly-connected console or SSH client. The TUI Main Menu is displayed.
- Step 2** Go to the **StadiumVision Server Administration > Failover** sub-menu.
- Step 3** Select the **Configure as Secondary/Inactive** option.



Figure 6 Automatic Backup from Primary Production Server to Virtual/Secondary Server



To set up the primary server for automatic backup and restore, complete the following steps:

- 
- Step 1** On the primary server, log into the TUI by doing the following:
- a. Use a directly connected console, or use an SSH client from a laptop computer that is connected to the Cisco StadiumVision Server network to run a secure login to the primary Cisco StadiumVision Director server using the IP address for your server.
  - b. When the login prompt appears, enter the **installer** userid followed by the installer password at the password prompt.
- Step 2** From the Main Menu, go to **StadiumVision Server Administration > Setup automatic backup and restore**.

Figure 7 Setup Automatic Backup and Restore Menu Option

```

Hostname: svd
IP address: 10.194.172.34
Software version: 3.1.0 build 494

Main Menu > StadiumVision Server Administration

Please choose one of the following menu options:

 a) Display Software Version
 b) Upgrade Server
 c) Restart StadiumVision Director software
 d) Shutdown StadiumVision Director software
 e) Setup automatic backup and restore
 f) Re-Run StadiumVision initial configuration
 g) Content migration
 h) Failover
 i) Reboot
 j) Power Off
 R or < or ,) Return to prior menu

```

Step 3 At the prompt type the IP address or hostname of your secondary server as shown in the example in Figure 8:

Figure 8 Secondary Server IP Address Configuration

```

 | |
 | |
 | |
 | |
 | |
 | |
 .|.. |.. .|..
 .:|.| | |:..:|.| | |:..
 C i s c o S y s t e m s
 StadiumVision Director Configuration Menu

Hostname: svd
IP address: 10.194.171.34
Software version: 3.1.0 build 454

Please enter the IP address of the currently inactive SVD server
Enter hostname (or press <ENTER> to cancel): 10.194.171.62

```



- Step 4** At the prompt, type the password for the installer account on the secondary backup server.
- Step 5** When accepted, the system generates the RSA keys and the public key is copied to the secondary server. Confirm that the keys are created without errors as shown in (Figure 9):

**Figure 9** Generation of RSA Keys

```

Please enter the IP address of the currently inactive SVD server
Enter hostname (or press <ENTER> to cancel): 10.194.171.62
Please enter the password for installer @ 10.194.171.62:
Generating public/private rsa key pair.
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
31:79:b0:1f:e4:c3:34:67:9a:38:3a:69:2e:65:98:0b root@gatemp34
The key's randomart image is:
+--[RSA 2048]-----+
| . + . |
| O.o |
| . = o * |
| o o = o |
| o o . S . |
| E o B |
| * . |
| o |
| + |
+-----+
Press any key to return to the menu.

```

- Step 6** Wait until the “Press any key” message appears (there can be a short delay before it is displayed).
- Step 7** Then, press any key to return to the StadiumVision Server Administration menu.
- Step 8** Continue to return to the Main Menu and exit the TUI.

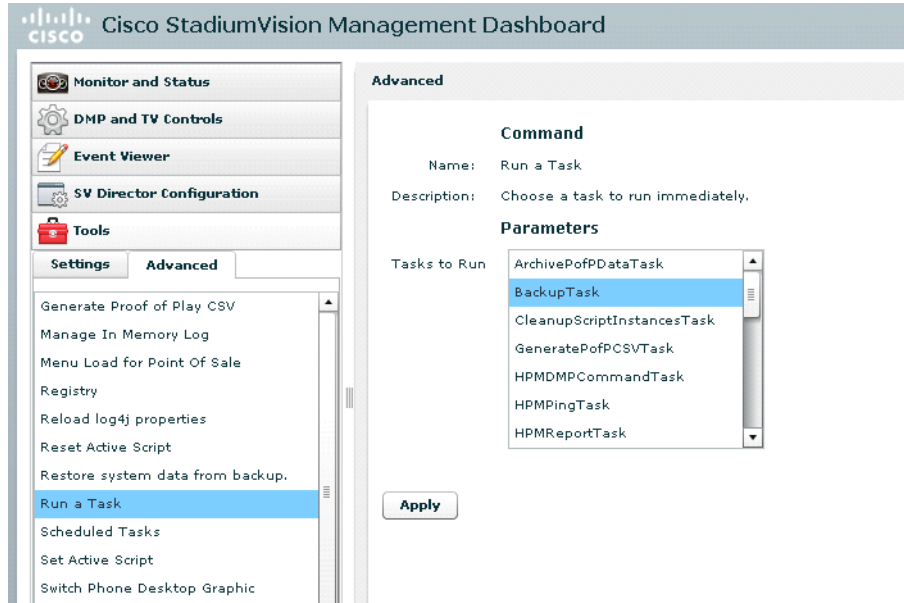
## Starting a Backup Manually on the Primary Server for Immediate Execution

You need to start a backup on the primary server so that the backup data is made available for a restore on the secondary/virtual server.

**To start a backup manually on the primary server for immediate execution, complete the following steps:**

- Step 1** On the primary server, log into Cisco StadiumVision Director as an administrator.
- Step 2** From the Cisco StadiumVision Director main menu, click **Management Dashboard**.  
The Cisco StadiumVision Management Dashboard is opened in a new window.
- Step 3** Select **Tools > Advanced > Run a Task**.
- Step 4** In the Tasks to Run box, select the **BackupTask** (Figure 10).

Figure 10 Running a Scheduled Backup Task Manually

**Step 5** Click **Apply**.

The backup begins immediately. When completed, the CMS is automatically restarted.

**Note**

The “success” message that appears means that the backup task has started. It does not mean that the backup has completed.

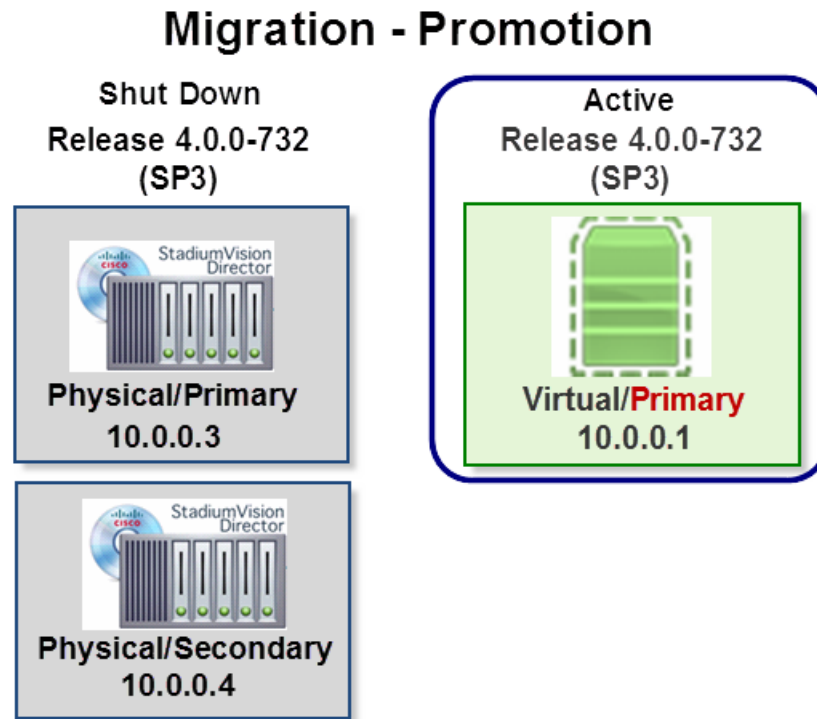
## Phase 4: Promotion of the Virtual Server

In this phase of the migration, the virtual server becomes the new primary/active server with restored data from backup and the production server is shut down:

- [Promoting the Virtual Server, page 23](#) (required)
- [Restoring the Virtual Server with System Data From a Backup File, page 23](#) (required)
- [Stopping Services and Shutting Down the Primary Production Server, page 24](#) (required)

In this phase, the virtual server is the only active server as shown in [Figure 11](#).

*Figure 11 Virtual Server is the New Primary Cisco StadiumVision Director Server*



## Promoting the Virtual Server

To promote the virtual server, complete the following steps:

- 
- Step 1** Log into the TUI as installer on the *secondary* virtual server using a directly-connected console or SSH client.  
The TUI Main Menu is displayed.
  - Step 2** Go to the **StadiumVision Server Administration > Failover** sub-menu.
  - Step 3** Select the **Promote as Primary/Active** option.  
The Cisco StadiumVision Director services are started and also configured to start automatically when a reboot occurs.
- 

## Restoring the Virtual Server with System Data From a Backup File

To restore the virtual server with system data from a backup file, complete the following steps:

- 
- Step 1** Log into Cisco StadiumVision Director on the *virtual* server using an administrator account.
  - Step 2** From the Cisco StadiumVision Director main menu, click **Management Dashboard**.

- Step 3** From the Dashboard Drawers, select **Tools > Advanced > Restore system data from backup**.
- Step 4** Select the components that you want to restore, and select the date of the backup file to use for the restore.
- Step 5** Click **Apply**.  
The restore begins. A dialog box appears notifying you when the restore process has successfully completed.
- Step 6** When the restore is complete, look around the system to verify that everything looks as expected.
- 

## Stopping Services and Shutting Down the Primary Production Server

To stop services, auto-restart, and shut down the primary production server, complete the following steps:

---

- Step 1** Log into the TUI as installer on the *primary production* server using a directly-connected console or SSH client.  
The TUI Main Menu is displayed.
- Step 2** Go to the **StadiumVision Server Administration > Failover** sub-menu.
- Step 3** Select the **Configure as Secondary/Inactive** option.
- Step 4** Press any key to return to the Failover sub-menu.
- Step 5** Return to the **StadiumVision Server Administration** menu by typing **R** and pressing **Enter**.
- Step 6** Select the **Power Off** option.  
The primary server is shut down.
- 

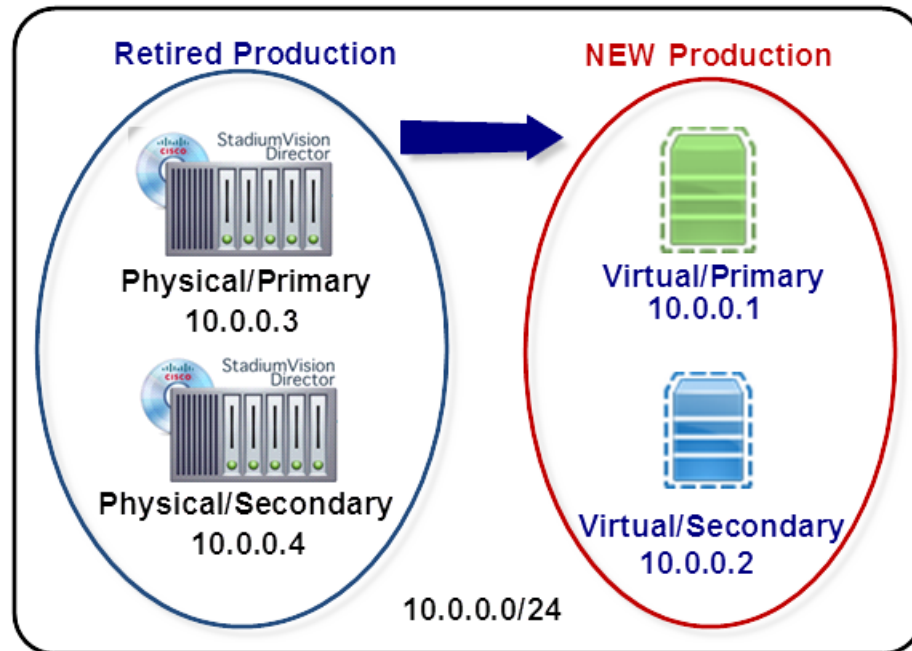
## Phase 5: Creation of Another Virtual Server Instance

This phase includes the tasks to create another virtual machine to be configured as the secondary/inactive Cisco StadiumVision Director server:

- [Cloning a Virtual Machine in VMware, page 25](#) (suggested)
- [Configuring the New Virtual Machine as the Cisco StadiumVision Director Secondary Server, page 26](#) (required)
- [Configuring the Backup Environment Between the Virtual Servers, page 27](#) (required)
- [Shut Down Cisco StadiumVision Director on the Virtual/Secondary Server, page 27](#) (required)

Figure 12 shows the status of the retired physical and new virtual production servers when migration is complete at the end of this phase.

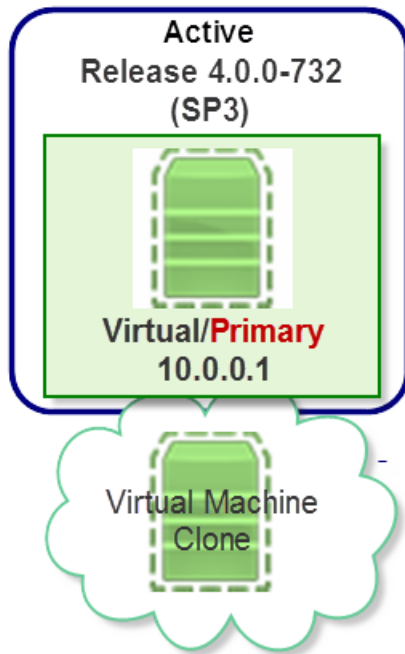
Figure 12 Production Server Status After Migration Completion



## Cloning a Virtual Machine in VMware

You can use VMware software to clone the virtual/primary machine as shown in Figure 13. Otherwise, you need to implement another virtual machine instance as described in “Phase 2: Preparation of a Virtual Machine” section on page 15.

Figure 13 Cloning a Virtual Machine in VMware



## Configuring the New Virtual Machine as the Cisco StadiumVision Director Secondary Server

Follow the steps in the “[Configuring the Virtual Server as the Cisco StadiumVision Director Secondary Server](#)” section on page 17.



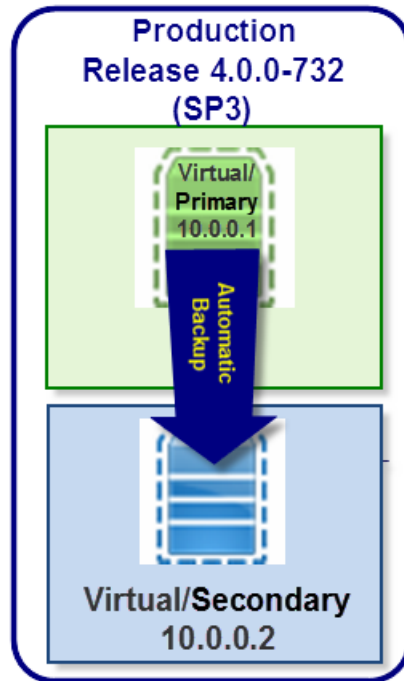
**Note**

Be sure to give the new or cloned virtual machine the IP address of the original, secondary production server. In our example, 10.0.0.2.

## Configuring the Backup Environment Between the Virtual Servers

Establish the automatic backup on the virtual/primary server to the virtual/secondary server as shown in [Figure 14](#) by following the same steps described in the “[Configuring the Backup Environment Between the Primary Production Server and Virtual/Secondary Server](#)” section on page 18.

*Figure 14*      *Configuring Automatic Backup Between the Virtual Servers*



## Starting a Backup Manually on the Virtual/Primary Server for Immediate Execution

Run a backup on the virtual/primary server by following the steps in the “[Starting a Backup Manually on the Virtual/Primary Server for Immediate Execution](#)” section on page 27.

## Shut Down Cisco StadiumVision Director on the Virtual/Secondary Server

To shut down the Cisco StadiumVision Director software on the virtual/secondary server, complete the following steps:

- 
- Step 1** Log into the TUI as installer on the *virtual/secondary* server using a directly-connected console or SSH client.  
The TUI Main Menu is displayed.
  - Step 2** Go to the **StadiumVision Server Administration** menu.
  - Step 3** Select the **Shutdown StadiumVision Director Software** option.
-

## What To Do Next

After you have migrated Cisco StadiumVision Director to a virtual server environment and confirmed successful Cisco StadiumVision operation, you can upgrade your servers to Release 4.1.

For more information, see the [Cisco StadiumVision Director Software Installation and Upgrade Guide, Release 4.1](#).





# Installing Cisco StadiumVision Director for the First Time

---

**First Published:** May 16, 2016

This module describes how to install the Cisco StadiumVision Director Release software on your newly-purchased Platform 3 server hardware from a full ISO image, as well as the requirements for installing Cisco StadiumVision Director on a VM (virtual machine).



**Caution**

---

New Platform 3 servers come preinstalled with a preliminary image of Cisco StadiumVision Director that is not intended for production operation. You must install the Cisco StadiumVision Director Release software from a *full ISO* image (not an upgrade) that you downloaded from Cisco.com to be sure that you are running the released production version of Cisco StadiumVision Director.

---

This module includes the following topics:

- [Prerequisites, page 29](#)
- [Installation Tasks, page 31](#)
- [What To Do Next, page 39](#)

## Prerequisites



**Caution**

---

Do not alter the RAID configuration prior to installation.

---

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 the following requirements are met before you upgrade your server:

### Platform 3 Servers

- Your new server is installed in its production location. For more information about installing your Platform 3 hardware, see the [Cisco UCS C220 Server Installation and Service Guide](#).
- You have completed the initial server setup and configured the Cisco UCS C-Series Integrated Management Controller (CIMC) interface.

To configure the CIMC, you will need an additional IP address for the server and should be prepared to change the default login and password. Be sure that the server is configured for standalone mode with the following settings:

- DHCP—Disabled
- NIC redundancy—None
- Boot order—Virtual CD/DVD, HDD

For more information, see the [“Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server”](#) module on page 87.

- You have the network information required to configure the Ethernet connection on the Cisco StadiumVision Director server, such as:
  - IP address (IPv4 only) and network mask




---

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

---

- Default gateway address
- DNS server address
- Hostname
- The Cisco StadiumVision Director server is connected to the network and has power.
- Power on the server and verify the boot order in the BIOS (by pressing **F2** while booting) prior to installation.
- To access the Cisco Integrated Management Controller (CIMC) for the software installation, the following requirements are met:
  - Your computer meets the minimum browser and Flash player requirements for Cisco StadiumVision Director, and also has Java 1.6 or later installed.
  - You have a laptop connection with access to the Cisco StadiumVision Director server network.
  - You have the IP address of the CIMC interface on the Cisco StadiumVision Director server.
  - You have the CIMC interface login credential. The default credential is **admin** and **password**.

### Virtualized Server Environment

Installing Cisco StadiumVision Director in a virtualized server environment includes setting up your server environment, running the full ISO for Cisco StadiumVision Director, and configuring the network. For more information see the [“Hardware Prerequisites”](#) section on page 2 and [“Installing on a Virtual Server for the First Time”](#) section on page 5 in the [“Getting Started Installing or Upgrading Cisco StadiumVision Director”](#) module on page 1.

# Installation Tasks



Note

This section includes the tasks to install Cisco StadiumVision Director for the first time on a Platform 3 server.

To install Cisco StadiumVision Director for the first time on a Platform 3 server, complete the following tasks:

- [Downloading the ISO Files from Cisco.com, page 31](#) (required)
- [Logging Into the CIMC Interface, page 32](#) (required)
- [Verifying the Minimum CIMC Firmware Version for Cisco StadiumVision Director, page 33](#) (required)
- [Launching the KVM Console, page 34](#) (required)
- [Mapping the Cisco StadiumVision Director ISO Image, page 35](#) (required)
- [Installing the Cisco StadiumVision Director ISO Image, page 36](#) (required)
- [Configuring the Network Setup, page 36](#) (required)

## Downloading the ISO Files from Cisco.com

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



Note

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

[Table 1](#) shows the filename conventions used for full ISO images for the Cisco StadiumVision Director server.

**Table 1** *ISO Filename Conventions*

| Hardware Product ID | Filename Convention <sup>1</sup>                                                                                                                                |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SV-PLATFORM3=       | <ul style="list-style-type: none"> <li>• SV-DIRECTOR-FULL-4.1.0-<i>nnn</i>.x86_64.iso</li> <li>• SV-DIRECTOR-FULL-4.1.0-<i>nnn</i>.x86_64.iso.md5sum</li> </ul> |

1.“*nnn*” represents the build number of the image in the file.

Be sure to download the ISO files to a location where you can access them once logged into the CIMC interface.

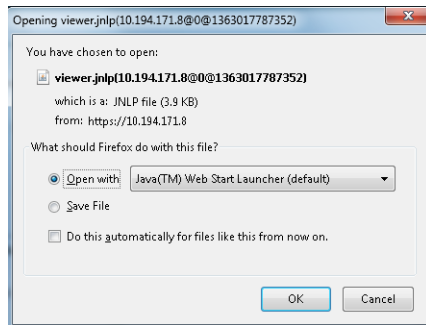
To verify the integrity of your upgrade file from the download, you can use a command-line or GUI utility on your laptop to calculate the checksum on the .iso file. Open the .md5sum file to compare the value that you calculated with the expected value provided in the .md5sum file. The values should match. If they do not, retry the download.

## Logging Into the CIMC Interface

To log into the CIMC interface, complete the following steps:

- Step 1** From a laptop connection with access to the Cisco StadiumVision Director server network, open a browser window and type the IP address of the CIMC interface as shown in the following example:  
`https://ip-address`
- Step 2** If prompted, click **OK** to open the Java viewer.jnlp as shown in [Figure 1](#):

**Figure 1** Opening viewer.jnlp File



- Step 3** If a security dialog box displays, do the following:
- (Optional) Select the checkbox to accept all content from Cisco.
  - Click **Yes** to accept the certificate and continue.
  - Confirm any additional security certificate exceptions.
- Step 4** At the CIMC login screen, note the firmware version displayed ([Figure 2](#)).



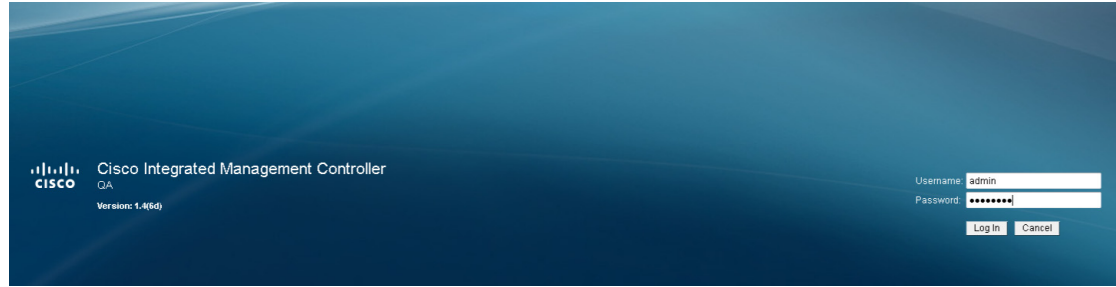
**Tip** The firmware version is also displayed in the Cisco Integrated Management Controller (CIMC) Information box on the CIMC console after you log in.

- Step 5** From the CIMC login screen, type the username and password for the CIMC interface.



**Tip** The default credential is **admin** and **password**. If changed during server setup, use the password that you configured.

Figure 2 CIMC Login Screen



Step 6 Click **Log In**.

## Verifying the Minimum CIMC Firmware Version for Cisco StadiumVision Director

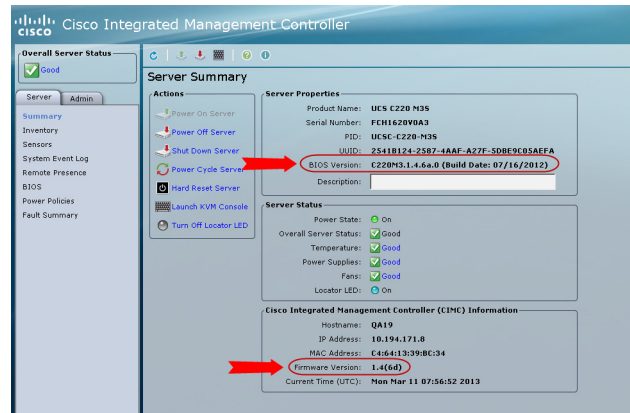
Before you begin, see the “Cisco StadiumVision Director Server Support” section of the [Release Notes for Cisco StadiumVision Director Release 4.1](#) to find the CIMC/BIOS versions tested for the Platform 3 server.

To verify the minimum CIMC firmware version for Cisco StadiumVision Director, complete the following steps:

Step 1 Be sure that the CIMC firmware version found on the CIMC login screen or in the CIMC console is at the minimum tested version (or later) for the Cisco StadiumVision Director release.

Figure 3 shows where the firmware version is displayed on the CIMC console for both the BIOS and CIMC firmware.

Figure 3 Firmware Version Verification From the CIMC Console



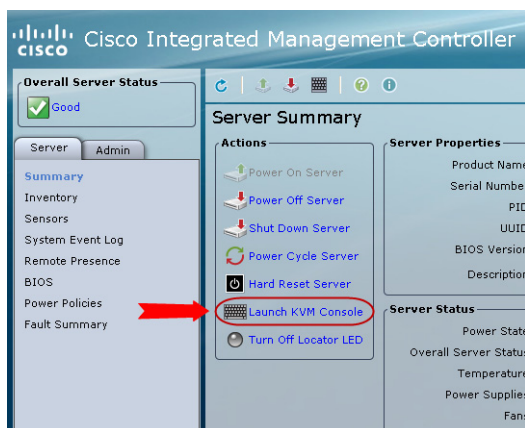
Step 2 If necessary to upgrade the CIMC/BIOS firmware on the Platform 3 server, refer to “[Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server](#)” module on page 87.

## Launching the KVM Console

To launch the KVM console, complete the following steps:

- Step 1** From the CIMC console Actions box, click **Launch KVM Console**.

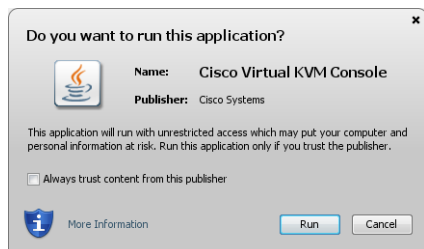
**Figure 4** Launch KVM Console



**Tip** You can also click the keyboard in the icon bar at the top of the console to launch the KVM console.

- Step 2** If a security dialog box displays, do the following:
- (Optional) Select the checkbox to accept all content from Cisco.
  - Click **Yes** to accept the certificate and continue.
- Step 3** At the Cisco KVM Virtual Console confirmation box (Figure 5), do the following:
- (Optional) Select the checkbox to accept all content from Cisco.
  - Click **Run**.

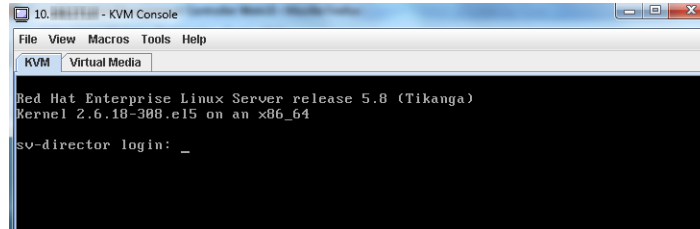
**Figure 5** Cisco Virtual KVM Console Confirmation



- Confirm any additional security certificate exceptions.

- Step 4** The KVM Console window is displayed with a login prompt. Do not log in (Figure 6).

**Figure 6** Cisco KVM Virtual Console Login Screen



## Mapping the Cisco StadiumVision Director ISO Image



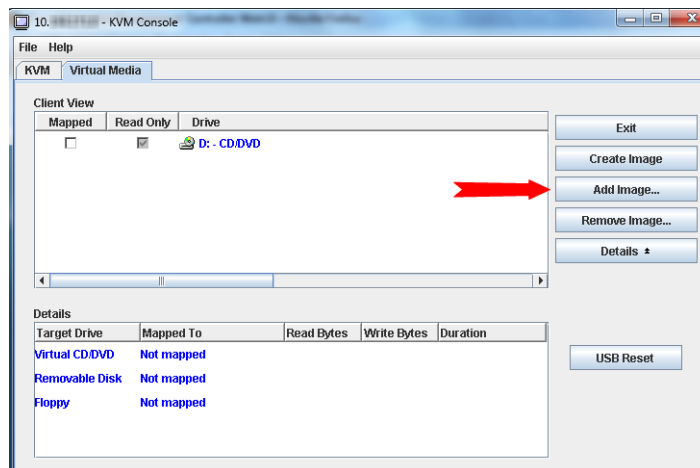
**Note**

This step requires that you have downloaded the Cisco StadiumVision Director full ISO image file for the Platform 3 server from Cisco.com and it is accessible from the computer that you are using to log into the CIMC interface.

To map the Cisco StadiumVision Director ISO image, complete the following steps:

- Step 1** From the KVM console window, click the **Virtual Media** tab.
- Step 2** From the Virtual Media screen, click **Add Image** (Figure 7).

**Figure 7** Virtual Media Screen



- Step 3** Navigate to the location of the ISO file that you downloaded and click **Open**.



**Note**

CIMC can experience slow performance. If slow performance occurs, clear the browser cache.

- Step 4** In the Client View box, mark the checkbox under the Mapped column to select the ISO source.
- Step 5** Confirm that the Virtual CD/DVD has been added under the Virtual Media tab, Virtual CD/DVD.

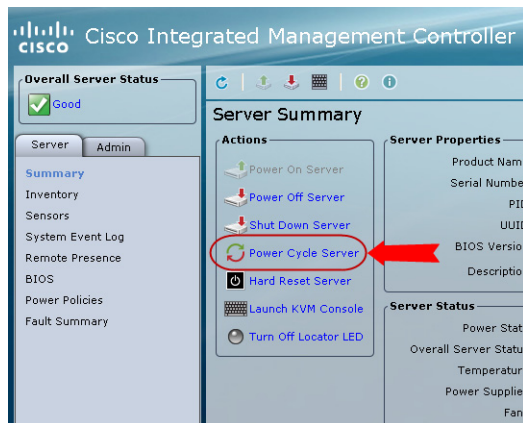
- Step 6** In the Details box, double-click on Virtual CD/DVD, and observe the read bytes counter increasing (refreshes read bytes).
- Step 7** Click the KVM tab and minimize the window but do not exit.

## Installing the Cisco StadiumVision Director ISO Image

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

- Step 1** In the Actions box on the CIMC console, click Power Cycle Server (Figure 8).

*Figure 8 Power Cycle Server From the CIMC Console*



- Step 2** At the confirmation prompt, click **OK**.
- Step 3** From the KVM console, observe the start of the installation process.

## Configuring the Network Setup

To configure the network setup, complete the following steps:

- Step 1** When the Linux Setup Agent window appears in the KVM console, select **Network Configuration** and press **Enter**.



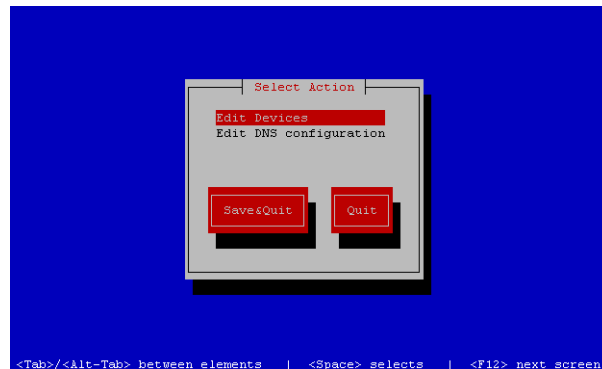
**Tip**

The Linux Setup Agent window will be available for 60 minutes before closing. If you miss responding to the network setup as part of the ISO installation, you can go to the TUI **Main Menu > System Settings > Network Settings** to complete the same network configuration. However, you will also need to manually edit the hosts file, selected from the Network Settings submenu.



**Step 2** In the Select Action screen (Figure 9), select **Edit Devices** and press **Enter**.

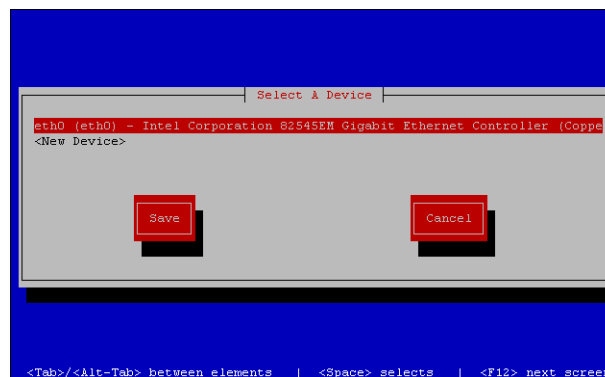
*Figure 9 Select Action Screen*



**Tip** If you notice what appears to be stray characters in the Linux interface, verify that your SSH client is using the UTF-8 character set translation.

**Step 3** In the Select a Device screen (Figure 10), select **eth0** and press **Enter**.

*Figure 10 Select a Device Screen*



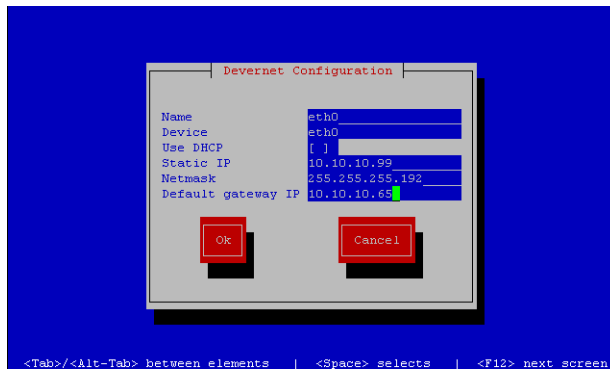
The Ethernet Configuration screen is displayed.



**Note** The Linux screen is mislabeled “Devernet Configuration.”

**Step 4** In the Ethernet Configuration screen (Figure 11), do the following:

**Figure 11** Ethernet Configuration Screen



- a. Press the Tab key until the cursor is positioned on the Static IP address line.
- b. Press the backspace key to go to the beginning of the line and type in the IPv4 address of the Cisco StadiumVision Director Server.



**Note** This should be a different IP address than what you configured for the CIMC interface.

- c. Press the tab key to go to the Netmask line. Type the network mask for the IPv4 address.
- d. (Optional) In the Default gateway IP line, type the address of the default gateway of your network.

**Step 5** When configuration of all options is complete, press the Tab key until the **Ok** button is selected and press **Enter**.

You return to the Select a Device screen.

**Step 6** Press the Tab key until the **Save** button is highlighted and press **Enter**.

You return to the Select Action screen.

**Step 7** Press the down arrow key to select the **Edit DNS configuration** option and press **Enter**.

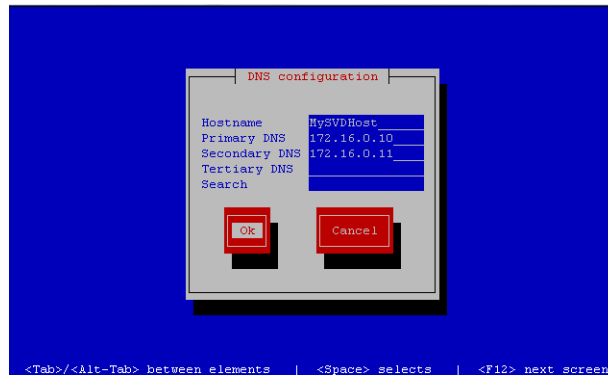
The DNS configuration screen is displayed.

**Step 8** In the DNS configuration screen (Figure 12), select and configure the Hostname and one or more DNS Server IP addresses.



**Note** Do not use hostnames that contain periods “.” within the name.

Figure 12 DNS Configuration Screen



**Step 9** Press the Tab key until the **Ok** button is selected and press **Enter**.

You return to the Select Action screen.

**Step 10** In the Select Action screen, press the Tab key until the **Save&Quit** button is selected and press **Enter**.

## What To Do Next

After you have installed the Cisco StadiumVision Director software, do the following:



**Note**

For initial deployments of the SV-4K media player, be sure to follow the instructions in the [Cisco StadiumVision SV-4K Media Player Deployment Guide](#).

- Upgrade the Cisco DMP 4310G firmware (as required).  
See “[Upgrading the Cisco DMP 4310G Firmware](#)” module on page 65.
- Upgrade the SV-4K firmware (required).  
See “[Upgrading the SV-4K and DMP-2K Firmware](#)” module on page 69.
- Go to the “[Configuring Cisco StadiumVision Director Server System Settings](#)” module of the [Cisco StadiumVision Director Server Administration Guide](#) to complete initial setup of the server, and do the following:
  - Configure NTP on Cisco StadiumVision Servers and DMPs.
  - Configure NTP and PTP for the SV-4K and DMP-2K media players.



**Note**

By default, all media players use the Cisco StadiumVision Director server as the NTP source. When using PTP on the SV-4K and DMP-2K, only the PTP master device references an NTP source. If you want to change the NTP source used by the SV-4K and DMP-2K, then you need to change the SV-4K global settings.

- Configure multicast ports for Cisco StadiumVision Director.





# Using the Software Manager to Upgrade Cisco StadiumVision Director Software, Language Packs, and Fonts

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**First Published:** May 16, 2016

**Revised:** June 9, 2016

This module describes using the Cisco StadiumVision Director Software Manager to:

- Upgrade an existing server already running Cisco StadiumVision Director (Release 4.1 or later) to a later release in the supported upgrade path for Cisco StadiumVision Director software.
- Install language packs and fonts.

This module includes the following topics:

- [Best Practices, page 41](#)
- [Prerequisites, page 43](#)
- [Information About Using the Software Manager to Update Existing Cisco StadiumVision Director Software, page 43](#)
- [Upgrade Tasks, page 44](#)
- [Installing Language Packs, page 48](#)
- [Installing Fonts, page 49](#)
- [What to Do Next, page 51](#)

## Best Practices



### Caution

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Do not alter the RAID configuration prior to upgrade.

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

- Choose an appropriate down time to perform the upgrade on the Cisco StadiumVision Director 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.
- Perform a backup and restore of the primary and secondary servers:
  - Perform a backup of the currently active primary server.
  - Restore the backup data onto the standby secondary server.



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**Note** The config service must be running on the secondary server to do the restore.

---

For more information about performing a backup and restore on a Cisco StadiumVision Director Server, see the “Backing Up and Restoring Cisco StadiumVision Director Servers” module of the [Cisco StadiumVision Director Server Administration Guide, Release 4.1](#).

- Promote the secondary server to primary.

For more information about promoting a secondary server to primary, see the “Configuring Failover Between Redundant Cisco StadiumVision Director Servers” module of the [Cisco StadiumVision Director Server Administration Guide, Release 4.1](#).
- Access the promoted secondary server to perform the upgrade.
- Verify the boot order in the BIOS (by pressing **F2** while booting) prior to upgrading; the virtual DVD should be the primary boot device for the Platform 3 server.
- Due to the difficulty in recovering from an interrupted installation process if the Linux shell is accidentally closed or the network drops, it is highly recommended that you use a server console connection method that does not pose a risk to the success of upgrade completion if the session breaks during upgrade.

This can be done using a monitor and keyboard that are directly connected to the Cisco StadiumVision Director server to log into the web browser interface.

## Prerequisites

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

- Your server is running a minimum of Cisco StadiumVision Director Release 4.0.0-732 (SP3) or higher.
- Run a basic System State Report (SSR), download the SSR, and store it externally from Cisco StadiumVision Director.



### Caution

If your Release 4.0 system is configured for retention of a single backup file only (the default), then you will no longer have access to any 4.0 data after the first 4.1 backup is completed. If for some reason you must revert to Release 4.0, contact Cisco Technical Support and provide them with your SSR file to help you restore it.

To help avoid any need to fall back to Release 4.0, be sure to follow carefully all recommended best practices and post-upgrade tasks as documented in this guide, including thoroughly testing your system to your site requirements before failing over and upgrading your backup server to Release 4.1.

- You have the IP address for the Cisco StadiumVision Director 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.
- You have a supported browser version for Cisco StadiumVision Director. For more information about the latest supported browsers, see the [Cisco StadiumVision Release Notes for Release 4.1](#).

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

The ISO upgrade procedure for Cisco StadiumVision Director includes the following tasks:

1. Downloading an ISO service pack or upgrade file from the software download site on Cisco.com.
2. Uploading the ISO file from your laptop to the Cisco StadiumVision Director server using 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 server. The files will be displayed with a version number and the ISO filename in the Software Manager web browser interface for you to select which file to install.

## Disk Maintenance

There is no automatic aging of ISO upgrade files, but you can delete files directly in the Software Manager. ISO files can also be deleted via the TUI: **Troubleshooting > Disk Monitoring > Delete Files > Clean upgrade ISO files**.

The Management Dashboard has a gauge for % Disk Utilization, or you can use the TUI to get file system usage.



**Tip**

To conserve disk space if you have installed language packs in your current Release 4.0 system, use the Software Manager prior to upgrade to remove the Release 4.0 language files. There is no harm to the system if you do not remove them. However, the language files will not appear in the Software Manager for removal after you upgrade, and they will remain in storage.

## Upgrade Tasks

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

- [Downloading ISO Upgrade Files from Cisco.com, page 44](#) (required)
- [Uploading and Installing an ISO Upgrade File on the Cisco StadiumVision Director Server, page 45](#) (required)
- [Rebooting the Cisco StadiumVision Director Server, page 46](#) (required)
- [Installing Language Packs, page 48](#) (as required)
- [Reactivating Custom Fonts, page 47](#) (as required)
- [Staging the Flash Template for Cisco DMP 4310G Devices, page 47](#) (required)
- [Deploying Global DMP Settings for the Cisco DMP 4310G, page 47](#) (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 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 or service pack file (as available), 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 SV-DIRECTOR and *not* for SVD-REMOTE.



**Table 1** ISO Upgrade Filename Conventions

| Hardware Product ID | Filename Convention <sup>1</sup>                                                                                                                                  |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SV-PLATFORM3=       | <ul style="list-style-type: none"> <li>SV-DIRECTOR-UPGRADE-4.1.0-<i>nnn</i>.x86_64.iso</li> <li>SV-DIRECTOR-UPGRADE-4.1.0-<i>nnn</i>.x86_64.iso.md5sum</li> </ul> |

1.“*nnn*” represents the build number of the image in the file.

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 the Software Manager UI to verify the checksum on the .iso file.

The md5 checksum is calculated by the system, and is shown on the Software Manager UI. Compare what is shown on the UI and the downloaded md5 checksum.

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

## Uploading and Installing an ISO Upgrade File on the Cisco StadiumVision Director 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 server, and to install the upgrade image.

### Prerequisites

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

### Task

**To upload and install an ISO upgrade file on the Cisco StadiumVision Director server, complete the following steps:**

- 
- Step 1** Log into Cisco StadiumVision Director 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.

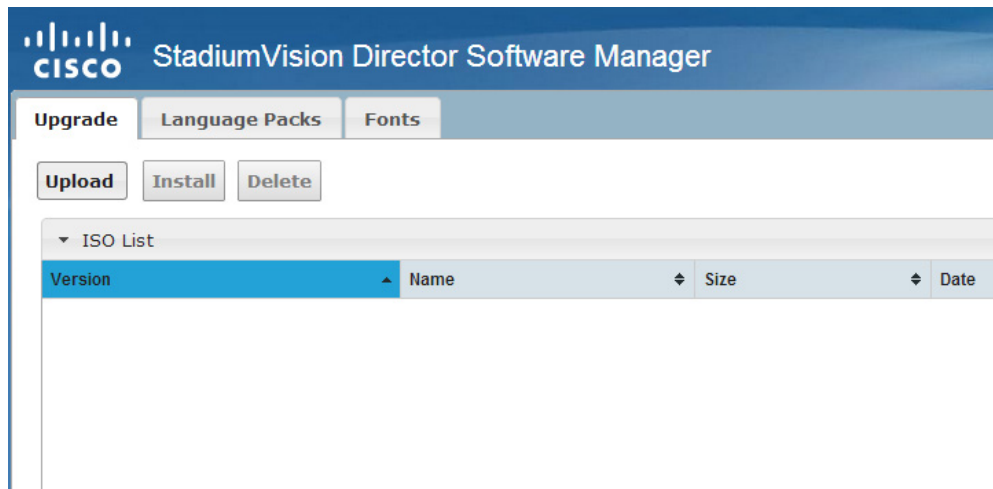


**Caution**

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.

**Step 6** Click the **Install** button (Figure 1).

*Figure 1 ISO File Selection and Upload*



**Step 7** The installation process begins, and status messages are displayed.

**Step 8** After the installation is complete, Cisco StadiumVision services are restarted.

## Rebooting the Cisco StadiumVision Director Server

To reboot the Cisco StadiumVision Director server, complete the following steps:

- Step 1** Log into the TUI as installer.  
The TUI Main Menu is displayed.
- Step 2** Go to the **StadiumVision Server Administration** menu.
- Step 3** Select **Reboot**.
- Step 4** At the confirmation prompt, press **Y** to start the reboot process.

## Reactivating Custom Fonts

If you have already installed custom fonts for use in the Widgets tool prior to upgrade, then you will need to reactivate those fonts from the Software Manager after you upgrade.

To reactivate custom fonts, complete the following steps:

- 
- Step 1** From the Cisco StadiumVision Director main menu, click **Manage Software**.
  - Step 2** From the Software Manager screen, click **Fonts**.
  - Step 3** Select the fonts to be activated.
  - Step 4** Click **Activate Selected**.
  - Step 5** (Cisco DMP 4310G only) Stage the Flash Template.  
See “[Staging the Flash Template for Cisco DMP 4310G Devices](#)” section on page 47.
- 

## Staging the Flash Template for Cisco DMP 4310G Devices



Note

This task must be completed after upgrades, installing custom fonts, and installing language packs for Cisco DMP 4310G devices.

To be sure that any changes that might have been made to the Cisco StadiumVision Director Flash Template (.swf file) are deployed to the Cisco DMP 4310G, complete the following steps:

- 
- Step 1** Go to the Management Dashboard.
  - Step 2** From the DMP and TV Controls dashboard drawer, navigate to the following command path:  
**DMP and TV Controls > DMP Install > Stage Template**.
  - Step 3** Select all of the Cisco DMP 4310G devices where the command should be applied.



Tip

If you have a mixed deployment of different media player device types, then you can use the Search filter to filter by Model and select only DMP 4310 devices.

- 
- Step 4** Click the play button to run the command on the selected devices.
- 

## Deploying Global DMP Settings for the Cisco DMP 4310G

To apply the global MIB variable settings to all Cisco DMP 4310G devices, complete the following steps:

- 
- Step 1** Go to the Management Dashboard.
  - Step 2** From the DMP and TV Controls dashboard drawer, navigate to the following command path:  
**DMP and TV Controls > Global > Global DMP Settings**.

- Step 3** Select all of the DMP devices where the command should be applied.
- Step 4** Click the play button to run the command on the selected Cisco DMP 4310G devices.

## Installing Language Packs



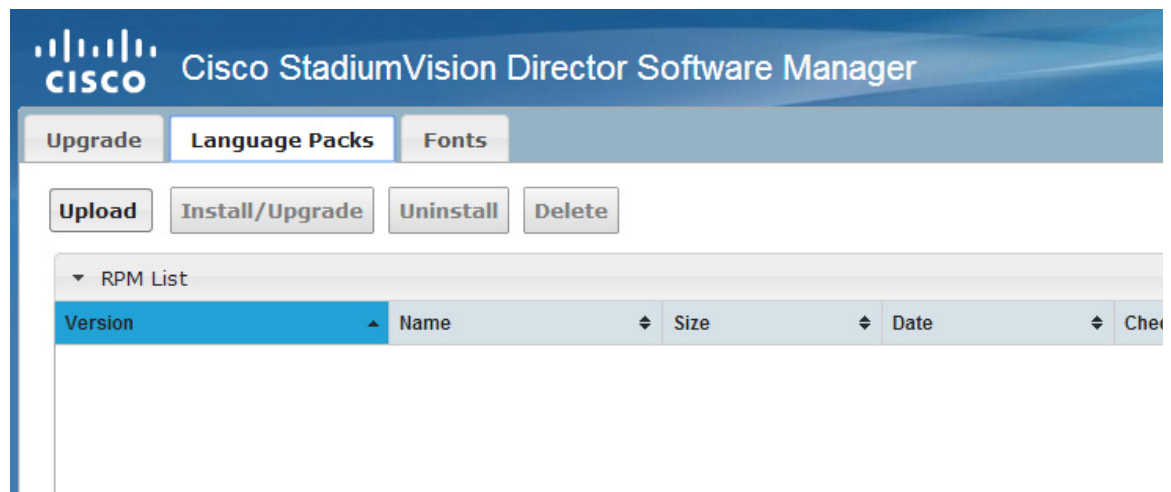
**Note** Language packs are release-specific. You can install language packs for Release 4.1 when they become available, after you have installed or upgraded to the required 4.1 release.

You have increased flexibility to upload and install only the specific language(s) that you want to support through the independent installation of Language Packs as they become available for the release. The upload and installation of the language packs is performed using the new Software Manager from the Cisco StadiumVision Director main menu.

**To install language packs, complete the following steps:**

- Step 1** Download the desired language pack from Cisco.com.
- Step 2** Log into Cisco StadiumVision Director as an administrator.
- Step 3** From the main menu, click **Manage Software**.
- Step 4** From the Software Manager screen, click **Language Packs** (Figure 2).

*Figure 2 Language Packs Tab*



- Step 5** Click **Upload**.
- Step 6** In the File Upload dialog box, navigate to the downloaded Language Pack RPM file, and click **Open**.  
The language pack is sent to the server.
- Step 7** Click **Install/Upgrade** to install the language pack.

**Note**

If using a secondary Cisco StadiumVision Director server, the language pack should be installed on both the primary and secondary servers.

- Step 8** (Cisco DMP 4310G only) Stage the Flash Template.  
See “[Staging the Flash Template for Cisco DMP 4310G Devices](#)” section on page 47.
- Step 9** (SV-4K and DMP-2K only) To transfer the locales to the SV-4K and DMP-2K media players, do the following:
- From the Management Dashboard, go to:  
**DMP and TV Controls > DMP Install > Restore Default Settings**
  - In the Select Devices panel, select the SV-4K and DMP-2K media player devices.
  - To execute the command, click the play (>) button located at bottom left of the panel.
- Step 10** (SV-4K and DMP-2K only) Stage content to the media players.  
For more information, see the “Staging Content to the Media Player” topic in the *Cisco StadiumVision Director Operations Guide*.

## Installing Fonts

**Note**

Follow these guidelines to install new fonts on your system for use in the Widgets tool—these fonts are not used for external HTML pages.

If you have already installed custom fonts prior to upgrade, then you only need to reactivate them. See the “[Installing Language Packs](#)” section on page 48.

This section includes the following topics:

- [Guidelines for Installing Fonts, page 49](#)
- [Procedure, page 50](#)

## Guidelines for Installing Fonts

**Note**

Beginning in Cisco StadiumVision Director Release 4.1, the unifont.ttf font is embedded in the SV-4K and DMP-2K media player firmware. This means that the font is available as a fallback font to external HTML pages that might not explicitly reference fonts in their CSS.

Consider the following guidelines before installing fonts:

- To save system memory on the media player, install fonts that have the minimal set of required characters.
- Cisco StadiumVision Director can support approximately 30,000 installed glyphs.
- Asian languages like Chinese (which contain more glyphs) require more memory.

- The fallback font is Arial; it will be used as the default font in cases where the widget is referencing a font that is not available.
- Only True Type (.ttf) and OpenType (.otf) fonts are supported.
- Activating selected fonts compiles the font for use in the widgets SWF and on the Cisco DMP 4310G. For the SV-4K and DMP-2K, these fonts are uploaded to the media player when content is staged.

## Procedure

To install fonts, complete the following steps:

**Step 1** Obtain the desired fonts.



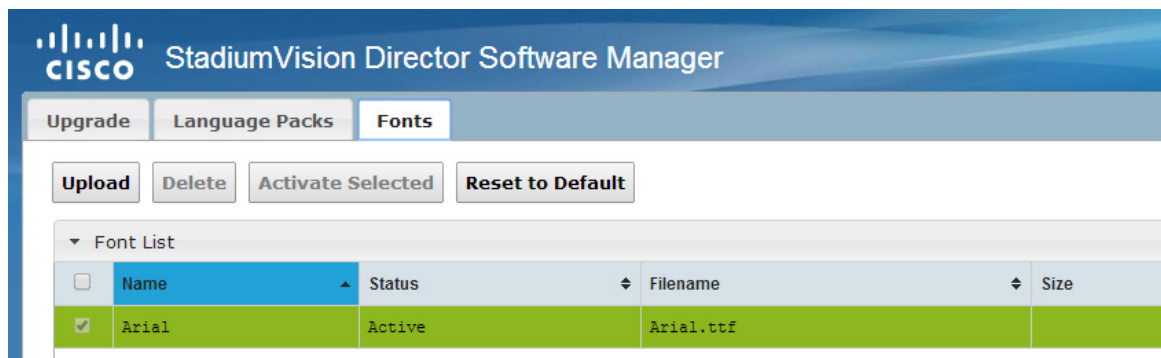
**Note** Fonts must be TrueType (.ttf) or OpenType (.otf).

**Step 2** Log into Cisco StadiumVision Director as an administrator.

**Step 3** From the main menu, click **Manage Software**.

**Step 4** From the Software Manager screen, click **Fonts** (Figure 3).

*Figure 3*      *Fonts Tab*



**Step 5** Click **Upload**.

**Step 6** In the Font Upload dialog box, do the following:

- Click **Browse**.
- Navigate to the location of your font file and click **Open**.
- Click **Upload**.

**Step 7** Click the checkbox of the font to be activated.

**Step 8** Click **Activate Selected** to make the font available in Cisco StadiumVision Director.

The fonts are compiled for use in the Widgets tool and on the Cisco DMP 4310G.

**Step 9** (SV-4K and DMP-2K only) Stage content to the media player.

For more information, see the “Staging Content to the Media Player” topic in the *Cisco StadiumVision Director Operations Guide*.

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## What to Do Next

- Follow the steps in the “[Verifying the Upgrade](#)” module to verify that the upgrade process was successful.
- Use the “[Appendix A: Post-Upgrade Checklist](#)” module on page 75 to be sure that you have completed the required verification steps.







## Verifying the Upgrade

---

**First Published:** May 16, 2016

**Revised:** October 31, 2016

This module describes how to verify that the upgrade process was successful.

To verify the upgrade, complete the following tasks:

- [Clearing the Browser Cache, page 53](#) (mandatory)
- [Clearing Expired Flash SWZ Files From Browser, page 54](#) (required)
- [Importing the Security Certificate, page 56](#) (required)
- [Logging Into Cisco StadiumVision Director, page 56](#) (required)
- [Verifying the Control Panel and Other Menus, page 57](#) (required)
- [Verifying that Services are Running, page 57](#) (required)
- [Configuring the Media Player for VLAN Compliance Checking, page 58](#) (required)
- [Upgrading the DMP Firmware, page 60](#) (required)
- [Rebooting the DMPs, page 60](#) (required)
- [Verifying Media Players, Groups, and Zones in the Management Dashboard, page 60](#) (required)
- [Verifying the Multicast Configuration, page 61](#) (required)
- [Setting Up the Quest Venue Manager to Send Updates to Cisco StadiumVision Director Server, page 62](#) (required if using Quest for commerce integration)
- [Completing the Post-Upgrade Checklist and Testing, page 64](#) (required)

## Clearing the Browser Cache



### Caution

It is critical that *all* Cisco StadiumVision Director users clear their browser cache to prevent permanent database corruption and to be sure that you are running the latest version of Cisco StadiumVision Director. Be sure to notify all users of the Cisco StadiumVision Director system to clear their browser cache before using the system after an upgrade.

To clear the browser cache in Mozilla FireFox, complete the following steps:

---

**Step 1** From the menu bar, go to **Tools > Clear Recent History**.

The Clear Recent History dialog box appears.



**Tip** You can also press Ctrl + Shift + Delete to open the Clear Recent History dialog box.

---

**Step 2** In the “Time range to clear:” box, select **Everything**.

**Step 3** Open the Details drop-down list and select the **Cache** checkbox if it does not have a checkmark.

**Step 4** Click **Clear Now**.

---

## Clearing Expired Flash SWZ Files From Browser

This section includes the following tasks:

- [Clearing the Flash Player Cache, page 54](#)
- [Deleting Other Cached Files From Flash, page 55](#)

## Clearing the Flash Player Cache

To clear the Flash player cache, complete the following steps:

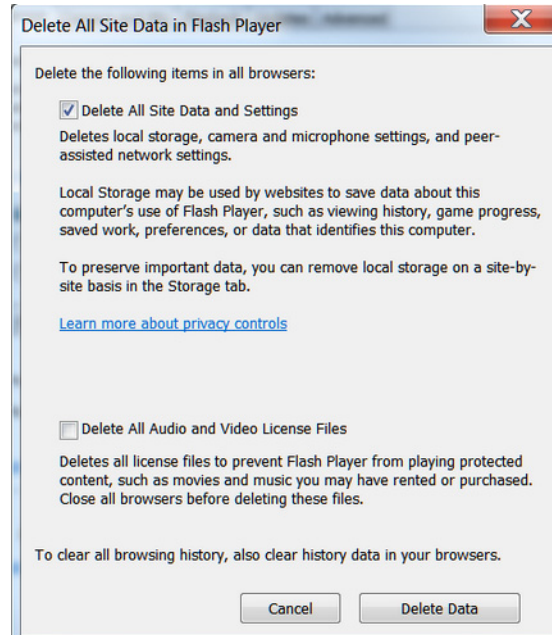
---

**Step 1** Go to **Control Panel > Flash Player**.

**Step 2** In the Flash Player Manager Settings dialog box (Storage tab), click **Delete All**.

**Step 3** Select Delete All Site Data and Settings ([Figure 1](#)).

**Figure 1** Delete All Site Data in Flash Player Dialog Box—Windows Client Example



**Step 4** Click **Delete Data**.

## Deleting Other Cached Files From Flash

To delete other cached files from Flash, complete the following steps:

**Step 1** Close the browser window.

**Step 2** Delete cached files in the following paths for your browser application, and depending on your laptop client:

- From a Windows client:

- For Chrome

```
C:\Users\username\AppData\Local\Google\Chrome\User Data\Default\Pepper
Data\Shockwave Flash\CacheWritableAdobeRoot\AssetCache
```

- For Mozilla Firefox

```
C:\Users\username\AppData\Local\Mozilla\Firefox\Profiles
```



**Tip**

The AppData folder is a hidden folder in Microsoft Windows. If you cannot view it, go to **Control Panel > Folder Options** and verify the option is set to display hidden files and folders.

- From an Apple Mac OS X client:

- For Chrome

```
/Users/username/Library/Application Support/Google/Chrome/Default/Pepper
Data/Shockwave Flash/CacheWritableAdobeRoot/AssetCache/
```

- For Mozilla Firefox

`/Users/username/Library/Application Support/Firefox/Profiles/`

---

## Importing the Security Certificate

When you access a Cisco StadiumVision Director server for the first time using Mozilla Firefox, a security certificate warning will appear. Some Cisco StadiumVision Director functionality requires that the certificate is imported.

### Adding a Security Exception for Mozilla Firefox

To add the security exception for Mozilla Firefox, complete the following steps:

- 
- Step 1** When you see the warning page with the title “This Connection is Untrusted,” click the “**I Understand the Risks**” option.
  - Step 2** Click **Add Exception...**
  - Step 3** In the Add Security Exception dialog box, click **Confirm Security Exception**.
  - Step 4** Close all Mozilla Firefox windows.

You should now be able to access the Cisco StadiumVision Director server using Mozilla Firefox without any security certificate warnings.

---

## Logging Into Cisco StadiumVision Director

To verify that the upgrade was successful, and that Cisco StadiumVision Director is up and operating, complete the following steps:

- 
- Step 1** Open a browser window and type the URL for the Cisco StadiumVision Director server, in the following sample format, where *x.x.x.x* is the IPv4 address of the Cisco StadiumVision Director server:

`https://x.x.x.x/StadiumVision/login.jsp`

or alternatively,

`http://x.x.x.x`

The Cisco StadiumVision Director login screen appears .

- Step 2** Verify that the correct version is displayed.



**Tip** If your window is not displaying the correct version, be sure that you have cleared the browser cache as describe in the “[Clearing the Browser Cache](#)” section on page 53.

---

- Step 3** Type your Cisco StadiumVision Director administrator login credentials and click **Log In**.



**Note** When you first log into Cisco StadiumVision Director, the default administrator username and password is *admin*.

The Cisco StadiumVision Director Main Menu screen appears.

## Verifying the Control Panel and Other Menus

To verify the control panel, complete the following steps:

- Step 1** From the Cisco StadiumVision Director Main Menu, click **Control Panel**.  
After a few moments of loading resources, the Cisco StadiumVision Control Panel Setup screen will open in a new window.
- Step 2** Confirm the version and build number of your Cisco StadiumVision Director software in the lower right corner of the Control Panel window.



**Tip** If your window is not displaying the appropriate version and build that you loaded, be sure that you have cleared the browser cache as describe in the [“Clearing the Browser Cache”](#) section on page 53.

- Step 3** Verify that you can open the other Cisco StadiumVision Director screens and menus.

## Verifying that Services are Running

After you upgrade, go to the Management Dashboard to verify that all of the primary Cisco StadiumVision Director services are running.

To verify that services are running, complete the following steps:

- Step 1** From the Management Dashboard, expand the Service Alerts pane.
- Step 2** Verify that all of the primary services—in particular the Content Management CMS Server—are in “Normal” (green) state without any service alerts.

**Figure 2** Verifying Normal Service States

| Service Name                  | Status   |
|-------------------------------|----------|
| Log Monitor                   | Normal   |
| Cisco POS Server 3            | Normal   |
| Config Server                 | Normal   |
| Director Server OS            | Normal   |
| Director Database             | Normal   |
| Local Control Server          | Normal   |
| Proof Of Play Database        | Normal   |
| Control Server                | Normal   |
| Monitor Server                | Normal   |
| Network Configuration         | Normal   |
| High Availability Hardware    | Normal   |
| Integration Broker            | Normal   |
| CUCM Server                   | Normal   |
| Content Management CMS Server | Abnormal |

- Step 3** If the CMS server or another service in the above list is not in Normal state but should be, use the TUI services menu to restart it.

## Configuring the Media Player for VLAN Compliance Checking

After you upgrade, you need to go to the Management Dashboard and change the Assigned VLAN property according to your VLAN configuration for the media players if you want to perform VLAN compliance checking.



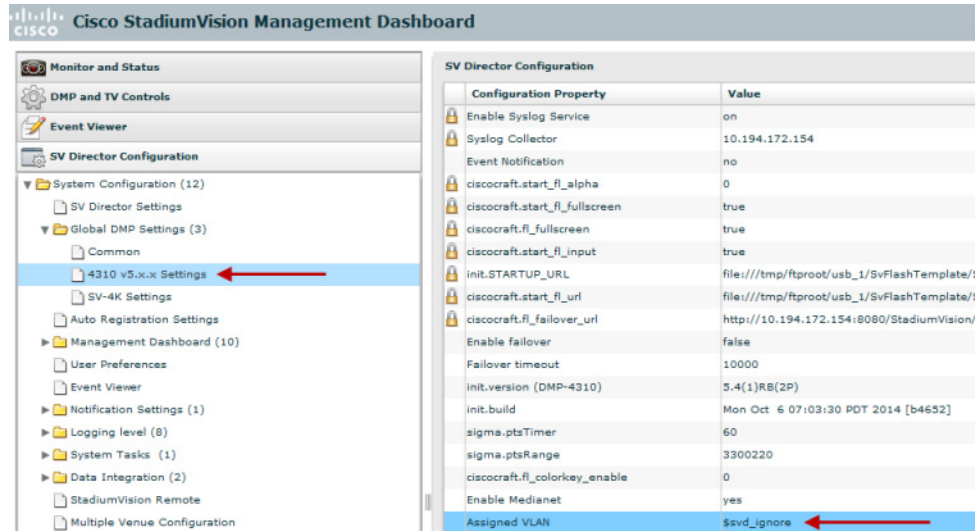
**Note**

Setting the assigned VLAN property for the media players is only recommended if all devices are located on the same VLAN. When a value is set, it is checked against what is being sent by the media player. Otherwise, you should configure `$svd_ignore`, which is the default.

**To configure the Assigned VLAN property, complete the following steps:**

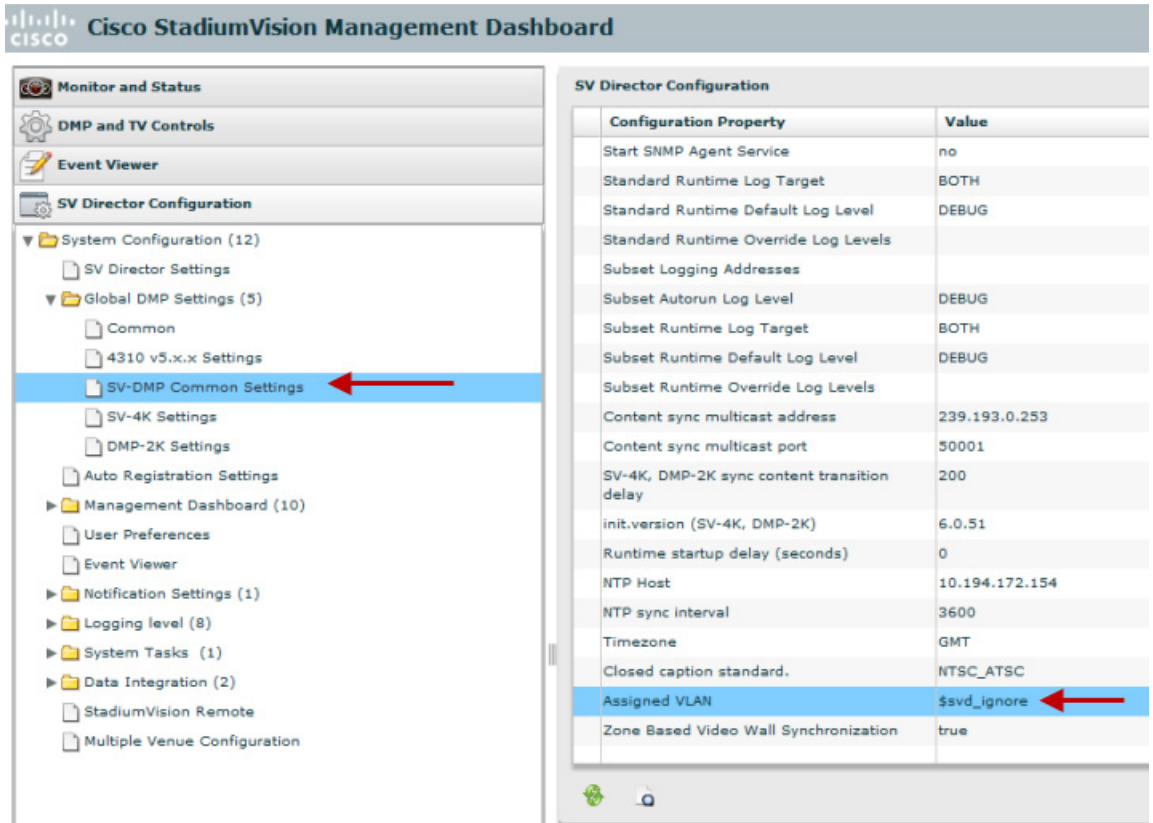
- Step 1** From the Management Dashboard, go to **SV Director Configuration > System Configuration > Global DMP Settings**.
- Step 2** Do the following depending on your media player model:
- For the DMP 4310G—Go to **4310 v5.x.x Settings** (Figure 3).

Figure 3 Assigned VLAN Property Configuration for the Cisco DMP 4310G



- For the SV-4K and DMP-2K—Go to **SV-DMP Common Settings** (Figure 4).

Figure 4 Assigned VLAN Property Configuration for the SV-4K and DMP-2K



- Step 3** Find the Assigned VLAN property, and do the following:
- If all of your DMPs are located on the same VLAN (recommended)—Type the number of the VLAN.
  - If all of your DMPs are not located on the same VLAN, or you want to bypass any VLAN compliance checking—Type “\$svd\_ignore.”



**Caution** Cisco DMP 4310 auto-registration support requires that the VLAN value is correctly set or “\$svd\_ignore” is used.

- Step 4** Click the Save icon.

## Upgrading the DMP Firmware

Verify whether your DMPs require a firmware upgrade and follow the steps in the corresponding modules of this guide to upload and install the required version(s) for your Cisco StadiumVision Director release.



**Note**

If this is the initial upgrade of your system to Cisco StadiumVision Director Release 4.1 software, a new firmware upgrade and configuration for the SV-4K and DMP-2K firmware is required. Follow the steps in the [“Upgrading the SV-4K and DMP-2K Firmware” module on page 69](#).

## Rebooting the DMPs

After an upgrade of the Cisco StadiumVision Director software, the SV-4K and DMP-2K must be restarted to get the latest version of the runtime software.

- If this is the initial upgrade of your system to Release 4.1 and you have just performed a DMP firmware upgrade, then the DMPs have already rebooted and this step is not needed.
- If this an upgrade from Release 4.1 to another version of Release 4.1 without a DMP firmware upgrade, then you must reboot the SV-4K and DMP-2K to also update the DMP’s runtime software.

To verify the system runtime on the DMP, see [Verifying Media Players, Groups, and Zones in the Management Dashboard, page 60](#).

## Verifying Media Players, Groups, and Zones in the Management Dashboard



**Note**

Before you verify media player status, be sure that you have set the Assigned VLAN property so that the VLAN compliance check can be performed. For more information, see the [“Configuring the Media Player for VLAN Compliance Checking” section on page 58](#).



To check media players, groups, and zones after you upgrade your software, complete the following steps:

- Step 1** Go to the Management Dashboard and verify that all of your groups, zones and media players are present and in the green state.
- Step 2** From the DMP and TV Controls dashboard drawer, run the Get Status command on all devices to update Cisco StadiumVision Director’s record of MAC addresses:

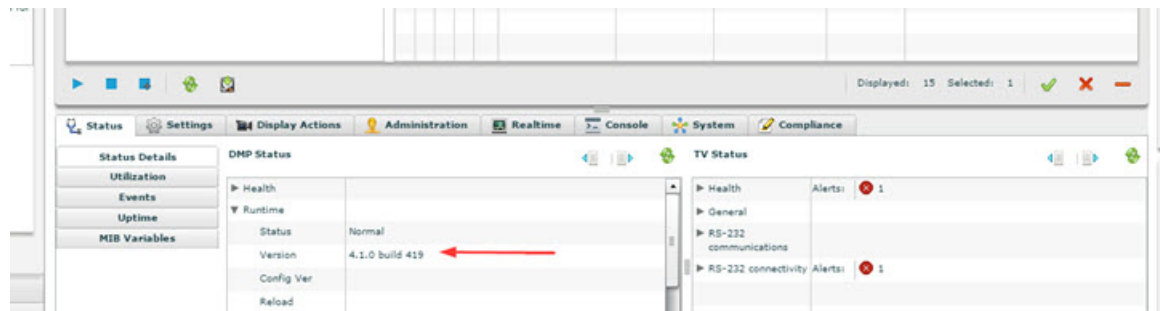
**DMP and TV Controls > Monitoring > Get Status.**

- Step 3** Run Get Status to confirm that all devices have successfully rebooted and are in good health.



**Note** This will also update the MAC address for the media players.

- Step 4** Verify that the correct Cisco StadiumVision Director runtime version is loaded on the DMP:
- Select the DMP(s) that you want to verify.
  - Go to **Status > Status Details**.
  - In the DMP Status panel, expand the Runtime status and verify the Version reported.



- Step 5** (Optional) Change the DMP State of healthy DMPs to “Production” using the following dashboard command path:  
**DMP and TV Controls > Auto Registration > Change DMP State.**
- Step 6** Run Get Status to check the device state after the change.
- Step 7** Investigate any devices that are not in “Normal” state.

## Verifying the Multicast Configuration

Cisco StadiumVision Director uses both unicast and multicast communications for DMP control-plane operation. The Cisco Connected Stadium design requires that Cisco StadiumVision Director uses the 239.193.0.0 multicast group address range.

The multicast group address for Cisco StadiumVision Director is configured in the “MulticastHostPort” registry.

For more information about multicast configuration, see the “Configuring Multicast Ports for Cisco StadiumVision Director” topic in the “Configuring the Cisco StadiumVision Director Server System Settings” module of the *Cisco StadiumVision Director Server Administration Guide, Release 4.1*.

To verify or configure the multicast addressing for Cisco StadiumVision Director, complete the following steps:

- 
- Step 1** From the Management Dashboard, select **Tools > Advanced > Registry**.
  - Step 2** Scroll to the “MulticastHostPort” registry key in the Parameters list and confirm the entry for the registry.
  - Step 3** To change the value, click on the value field and specify a multicast address in the range 239.193.0.0/24.




---

**Note** Be sure to use the value that is configured in your Cisco Connected Stadium network and include the *:port*. The recommended default is **:50001**.

---

- Step 4** Click **Apply**.
- 

## Setting Up the Quest Venue Manager to Send Updates to Cisco StadiumVision Director Server




---

**Note** This task is only required if you are using the Quest Point of Sale system.

---

The steps described in this section assume that Quest has the notification service installed and enabled.

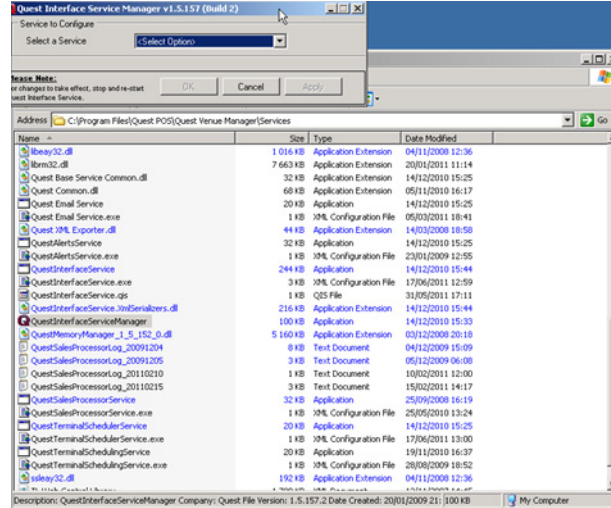
---

After you upgrade, you need to set up the Quest Venue Manager to support sending updates to the Cisco StadiumVision server when menu items change.

To set up the Quest Venue Manager to send updates to the Cisco StadiumVision Director server, complete the following steps:

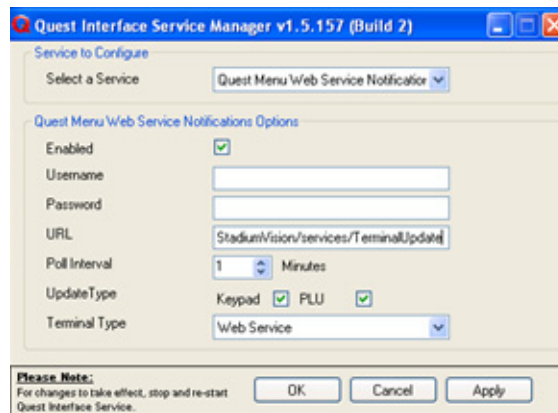
- 
- Step 1** Access the Quest server.
  - Step 2** Go to the C:\Program Files\Quest POS\Quest Venue Manager\Services directory.
  - Step 3** Start the executable application program named “QuestInterfaceServiceManager” (Figure 5).

**Figure 5** *QuestInterfaceServiceManager Application*



- Step 4** When the Quest Interface Service Manager application window opens, specify the following options (Figure 6):
- In the Select a Service box, choose the **Quest Menu Web Service Notification**.
  - Select the **Enabled** checkbox so a checkmark appears.
  - In the URL box, enter “**http://svd:8080/StadiumVision/services/TerminalUpdate**”.
  - In the Poll Interval box, select **1** minute.
  - Select the **Keypad** and **PLU** update checkboxes so a checkmark appears.
  - In the Terminal Type box, select **Web Service**.

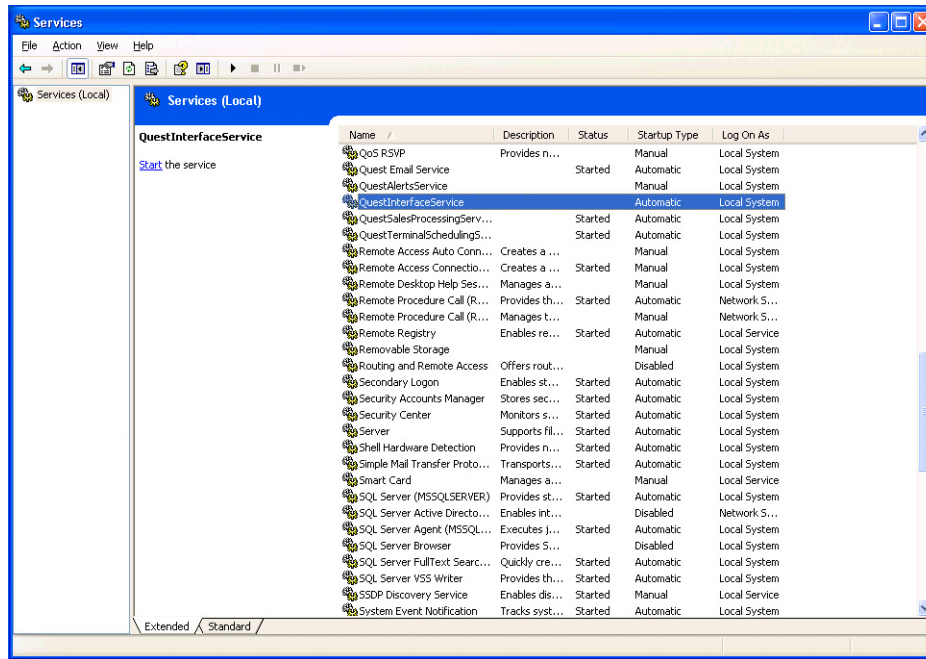
**Figure 6** *Select a Service to Configure*



- Step 5** Click **OK**.
- Step 6** Restart the windows service to implement the configuration by completing the following steps:
- From the Quest Server, click **Start > Run...**
  - When the Run dialog box opens, type “**services.msc**”.

- c. Find the Quest Interface Service and restart it (Figure 7).

**Figure 7** Restart the Quest Interface Service



## Completing the Post-Upgrade Checklist and Testing

Use the “[Appendix A: Post-Upgrade Checklist](#)” module on page 75 to be sure that you have completed the required verification steps.



# Upgrading the Cisco DMP 4310G Firmware

---

**First Published: May 16, 2016**

This module describes how to download and upgrade the Cisco DMP 4310G firmware using the Cisco StadiumVision Director Management Dashboard.

## Contents

- [Prerequisites, page 65](#)
- [Upgrade Tasks, page 65](#)

## Prerequisites

Before you upgrade the DMP firmware, be sure that the following requirements are met:

- Be sure that you have compatible Cisco Digital Media Player (DMP) models and firmware versions installed.

For more information about DMP hardware and software requirements, see the [Release Notes for Cisco StadiumVision Director Release 4.1](#).

## Upgrade Tasks

To upgrade the DMP firmware, complete the following tasks:

- [Downloading the DMP Firmware, page 65](#) (required)
- [Upgrading the DMP Firmware From the Management Dashboard, page 66](#) (required)
- [Disabling Failover on all DMPs, page 68](#) (recommended)

## Downloading the DMP Firmware

The DMP firmware image is not bundled with the Cisco StadiumVision Director software. You must download the firmware image separately at the software download center site.

**Note**


---

DMP-4310G Version 5.4.1 RB2P is required for the GNU Bash fix.

---

## DMP-4310G Version 5.4.1 RB2P

To download the DMP-4310G Version 5.4.1RB2P firmware, go to the Cisco Digital Media Players product page for the Cisco DMP 4310G:

<http://www.cisco.com/c/en/us/support/video/digital-media-player-4310g/model.html>

1. Click the **Downloads** tab and then **Digital Media Player (DMP) System Upgrades**.
2. Go to **All Releases > 5 > 5.4.1\_RB\_2P**.
3. Click **Download** to get the 5.4.1\_RB2\_2P\_FCS\_4310.fwimg file.

## Upgrading the DMP Firmware From the Management Dashboard

This section provides a summary of the steps to perform to upgrade your DMP firmware. For more detailed information, see the related documentation.

To upgrade your DMP firmware, complete the following steps on each DMP as needed:

- 
- Step 1** Go to the **Management Dashboard > DMP and TV Controls > DMP Install > Firmware Upgrade**.
- Step 2** Upload the firmware file to the server and upgrade the firmware for the DMP 4310Gs.  
For more information, see the “Upgrading the Firmware Image” section of the *Cisco StadiumVision Management Dashboard Device Configuration Commands* guide.
- Step 3** Go to the **Management Dashboard > SV Director Configuration > System Configuration > Auto Registration Settings**. Confirm or set the following values as required:
- Enable\_Auto\_Registration = true
  - Enable\_Auto\_Provisioning = true
  - Firmware image to use = 5.4(1)RB(2P) (select from the dropdown box)
  - Manually type the firmware init.version and init.build values according to your firmware version as follows:

**Note**


---

The init.version and init.build strings must match exactly with the characters and spacing shown.

---

- For firmware version 5.4.1 RB2P:  
init.version = 5.4(1)RB(2P)  
init.build = Mon Oct 6 07:03:30 PDT 2014 [b4652]

**Note**

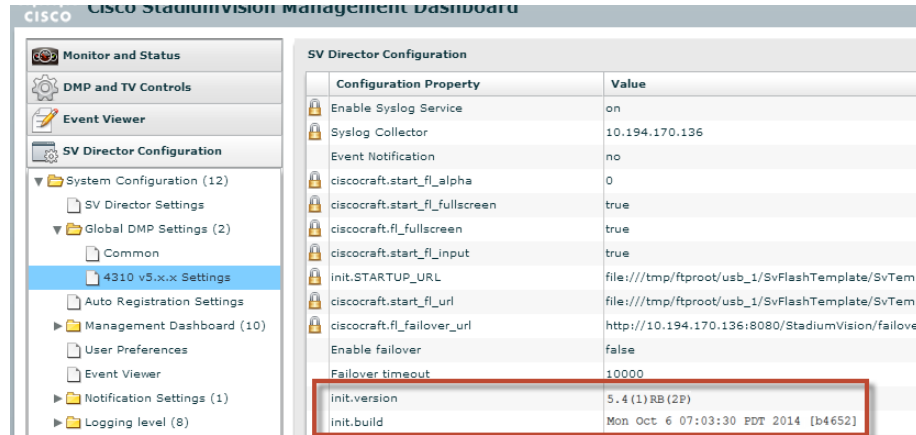

---

In the "init.build" string there are 2 spaces between "Oct" and "6".

---

- Step 4** Go to the **Management Dashboard > SV Director Configuration > Global DMP Settings** and confirm the firmware version and build date in the 4310 v5.x.x Settings as shown in [Figure 1](#).

**Figure 1** Global DMP Settings in Management Dashboard



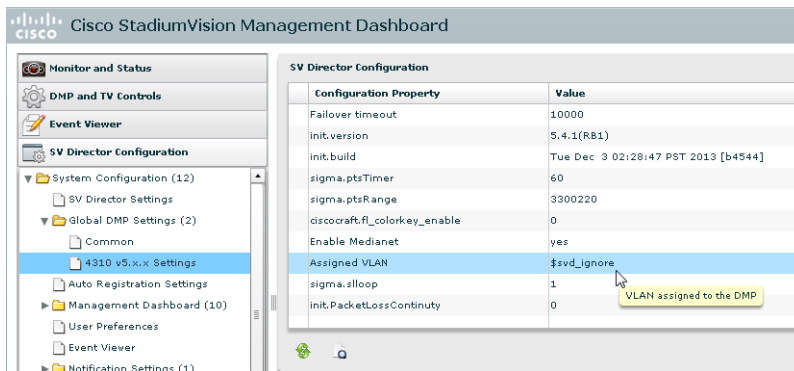
- Step 5** Configure the Assigned VLAN property under the 4310 v5.x.x as \$svd\_ignore or the actual VLAN number on which your DMPs reside. Do *not* leave blank.



**Note** DMP auto-registration support requires that the VLAN value is correctly set or “\$svd\_ignore” is used.

You will need to set the Assigned VLAN property value for the 4310 v5.x.x Settings ([Figure 2](#)):

**Figure 2** Assigned VLAN Property Configuration for DMPs



- Step 6** Go to **Management Dashboard > DMP and TV Controls > DMP Install > Firmware Upgrade**. Select **All Devices** and click the Play (>) icon to run the command.
- Step 7** Go to **Management Dashboard > DMP and TV Controls > Global Settings > Global DMP Settings**. Select **All Devices** and click the Play (>) icon to run the command.
- Step 8** Go to **Management Dashboard > DMP and TV Controls > Monitoring > Get Status**. Select **All Devices** and click the Play (>) icon to run the command.

## Disabling Failover on all DMPs



**Note** DMP failover is disabled by default beginning in Cisco StadiumVision Director Release 3.1.0-787 (SP1).

Sometimes when a DMP is in failover mode during an event and should be displaying content, but the video content is not staged, the TV screen is black. Therefore in Cisco StadiumVision Director Release 3.0 and later releases, Cisco Systems recommends that failover for DMPs is disabled.

**To disable failover on all DMPs, complete the following steps:**

- 
- Step 1** Log into Cisco StadiumVision Director as an administrator.
  - Step 2** Click **Management Dashboard**.
  - Step 3** Go to **DMP and TV Controls > DMP Commands**.
  - Step 4** Select **Update MIB**.
  - Step 5** Click **4310 Parameters** tab.
  - Step 6** In the name cell, type **failover.on**.
  - Step 7** In the value cell, type **false**.
  - Step 8** In the Select Devices box, select all DMPs.
  - Step 9** Press the Play button to execute on selected devices.
  - Step 10** Turn off failover in the global MIB settings by completing the following steps:
    - a. From the Management Dashboard, go to **SV Director Configuration > System Configuration > Global DMP Settings > 4310 v5.x.x Settings**.
    - b. Find the **Enable failover** property.
    - c. Set the value to **false**.
    - d. Click **Save changes**.
-





# Upgrading the SV-4K and DMP-2K Firmware

First Published: May 16, 2016



## Note

This module describes how to upgrade the firmware for Cisco StadiumVision Director Release 4.1. If you are deploying an SV-4K or DMP-2K media player for the first time, see also the [Cisco StadiumVision SV-4K Media Player Deployment Guide](#).



## Caution

Immediately after installing Cisco StadiumVision Director Release 4.1, you must configure the new auto-registration settings in the Management Dashboard. Failure to perform this configuration can cause the media player to repeatedly boot.

The SV-4K and DMP-2K firmware is not provisioned the same way as the Cisco DMP 4310G. The primary difference is that the SV-4K and DMP-2K firmware upgrade is not initiated from the Management Dashboard, but is done automatically when the device starts up or reboots.

Each time the SV-4K or DMP-2K device is powered on or reboots, a compliance check is done against the firmware that is loaded on the device against the Cisco StadiumVision Director auto-registration settings. If the firmware versions do not match, the device initiates a firmware upgrade automatically.

In Cisco StadiumVision Director Release 4.1, the SV-4K and DMP-2K media players require that a minimum—or *base*—firmware version is provisioned before they can be upgraded to the *production* firmware version supported in Cisco StadiumVision Director Release 4.1.

A new auto-registration configuration requirement and feature is introduced to ensure that this required firmware upgrade sequence is automatically preserved for affected media players in the system.

With proper configuration, the system upgrades existing media player firmware to the pre-requisite or base firmware versions automatically before provisioning the production firmware version supported in Release 4.1.

## Contents

- [Prerequisites, page 70](#)
- [Provisioning Tasks, page 70](#)

## Prerequisites

Before you upgrade the DMP firmware, be sure that the following requirements are met:



### Caution

For initial deployment of a new DMP-2K, be sure that:

- No other accessories are attached to the DMP-2K.
- You are using standard Category 5e or 6 cabling up to 100 m in length.

- You have read the [Cisco StadiumVision Release Notes for Release 4.1](#) to obtain the latest information and to verify the supported SV-4K firmware upgrade paths.
- The Connected Stadium switch is configured, including the required LLDP for proper POE+ operation.
- A DHCP server has been configured with required Option 60 and Option 43 properties.

For more information, see the *Cisco Connected Stadium Design Guide* available to qualified Cisco StadiumVision partners.

## Provisioning Tasks

To provision the SV-4K firmware, complete the following tasks:

- [Downloading the SV-4K and DMP-2K Firmware, page 70](#) (required)
- [Uploading the SV-4K and DMP-2K Firmware to Cisco StadiumVision Director, page 71](#) (required)
- [Configuring the SV-4K and DMP-2K for Auto-Registration, page 72](#) (required)

## Downloading the SV-4K and DMP-2K Firmware

The SV-4K and DMP-2K media player firmware image is not bundled with the Cisco StadiumVision Director software.



### Tip

Be sure to download the firmware to a device that you also can use to access the Cisco StadiumVision Director software.

### Downloading the SV-4K and DMP-2K Production Firmware

To download the SV-4K and DMP-2K production firmware, go to:

<https://www.brightsign.biz/downloads/dmp-firmware-download-6083-0516>

### Downloading the SV-4K and DMP-2K Base Firmware

If you do not already have one of the required base firmware versions uploaded to Cisco StadiumVision Director, you must download the firmware image separately from a password-protected site and then upload it to Cisco StadiumVision Director.

Contact your Cisco Systems representative for the “How to Download SV-4K Firmware” document, available to qualified Cisco StadiumVision partners.

# Uploading the SV-4K and DMP-2K Firmware to Cisco StadiumVision Director

After you have obtained the SV-4K firmware image from the external vendor, you must upload the image to Cisco StadiumVision Director.

**Caution**

Beginning in Cisco StadiumVision Director Release 4.1, you must be sure that the following two firmware versions are uploaded to the Cisco StadiumVision Director server:

**Base firmware version**—Any of the following 5.1-based firmware: 5.1.52, 5.1.65, or 5.1.68.1

**Production firmware version**—6.0.83

**Note**

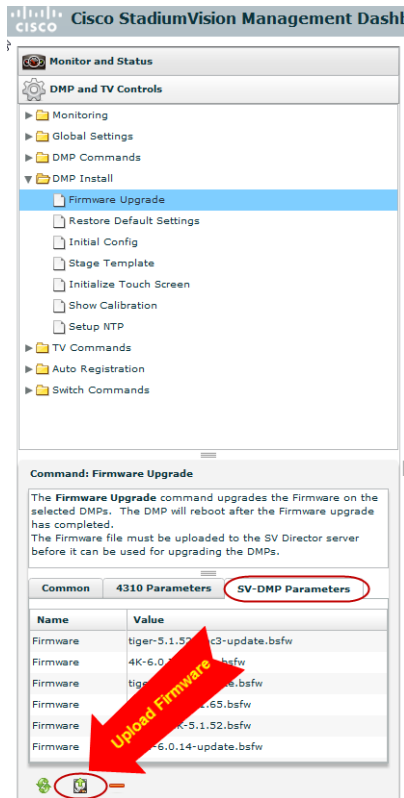
You only go to the Firmware Upgrade page in the Management Dashboard to upload the firmware. You *do not* run the command to provision the software on the SV-4K or DMP-2K (like you do for the Cisco DMP 4310G). Each time the device powers on or reboots, a compliance check is done against the firmware that is loaded on the device against the Cisco StadiumVision Director auto-registration settings. If the firmware versions do not match, the SV-4K or DMP-2K initiates a firmware upgrade automatically.

**To upload the SV-4K and DMP-2K firmware, complete the following steps:**

- Step 1** From the device where you downloaded the firmware, log into Cisco StadiumVision Director as an administrator.
- Step 2** Go to the **Management Dashboard > DMP and TV Controls > DMP Install > Firmware Upgrade**.

**Step 3** Select the **SV-DMP Parameters** tab and click the upload icon.

**Figure 1** SV-4K and DMP-2K Firmware Upload



**Step 4** Navigate to the firmware image file and click **OK**.

An upload status string appears at the bottom of the screen that indicates when the firmware upload is complete.

## Configuring the SV-4K and DMP-2K for Auto-Registration

Before the firmware can be provisioned to the SV-4K or DMP-2K media player, it must be uploaded to Cisco StadiumVision Director, and then configured in the auto-registration settings.

To configure the SV-4K for auto-registration, complete the following steps:

**Step 1** From the Management Dashboard, go to:

**SV Director Configuration > System Configuration > Auto Registration Settings.**

**Step 2** In the Configuration Property panel, find and configure the following properties shown in [Figure 2](#) and according to [Table 1](#).



**Note** Be sure that you configure both the “Firmware image to use” and “init.version” properties *and* the “Base firmware image to use” and “base.version” properties that are labeled for the SV-4K and DMP-2K.

- Firmware image to use (SV-4K, DMP-2K)—Select from dropdown box.
- init.version (SV-4K, DMP-2K)—Type the version.
- Base firmware image to use (SV-4K, DMP-2K)—Select from dropdown box.
- Base.version (SV-4K, DMP-2K)—Type the version.



**Tip** If you have just uploaded the firmware image, you need to click the Refresh icon next to the drop-down box for the new file to appear.

**Figure 2** *Firmware Image and Version Properties Required to Provision the SV-4K and DMP-2K*

| SV Director Configuration                        |                                 |
|--------------------------------------------------|---------------------------------|
| Configuration Property                           | Value                           |
| Enable Auto Registration                         | true                            |
| Enable Auto Provisioning                         | true                            |
| Automatically map DMP to location                | yes                             |
| Override manually mapped location                | no                              |
| Attempt to map to location during Health Polling | no                              |
| Attempt to map to location during GetStatus      | no                              |
| Maximum Provisioning attempts per DMP            | 3                               |
| Firmware image to use (SV-4K, DMP-2K)            | DMP-SV4K-6.0.83.bsfw            |
| init.version (SV-4K, DMP-2K)                     | 6.0.83                          |
| Base firmware image to use (SV-4K, DMP-2K)       | DMP-SV4K-5.1.68.1.bsfw          |
| base.version (SV-4K, DMP-2K)                     | 5.1.68.1                        |
| Firmware image to use (DMP-4310)                 | DMP4310-5.4(1)RB(20150923).bsfw |
| init.version (DMP-4310)                          | 5.4(1)RB(20150923)              |
| init.build                                       | Mon Oct 6 11:00:00 PDT 2015     |

*Production firmware fields* (points to the top two rows of the table)

*Prerequisite firmware fields* (points to the bottom two rows of the table)

**Table 1** *Required Firmware Properties for the SV-4K and DMP-2K*

| Firmware Property                          | Value for Release 4.1                                                                                                                                                                                                  |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Firmware image to use (SV-4K, DMP-2K)      | DMP-SV4K-6.0.83.bsfw                                                                                                                                                                                                   |
| init.version (SV-4K, DMP-2K)               | 6.0.83                                                                                                                                                                                                                 |
| Base firmware image to use (SV-4K, DMP-2K) | If a prerequisite firmware is not already installed, upload and select the 5.1.68.1 firmware file.<br><b>Note</b> Contact your Cisco Systems representative for information about how to obtain the 5.1.68.1 firmware. |
| base.version (SV-4K, DMP-2K)               | 5.1.68.1                                                                                                                                                                                                               |

**Tip**

---

For upgrades from devices with firmware version 5.1.52, 5.1.65, or 5.1.68.1, you can simply select that existing firmware as your “Base firmware image to use” since that firmware version is already uploaded to Cisco StadiumVision Director and is a valid prerequisite firmware version. Then, type the corresponding firmware version number in the “base.version” field.

---

**Step 3** Save the changes.

**Step 4** Power on or reboot the SV-4K or DMP-2K.

Verify the startup sequence. For more information on the startup sequence, see the [Cisco StadiumVision SV-4K and DMP-2K Media Player Deployment Guide](#).


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## Appendix A: Post-Upgrade Checklist


**First Published: May 16, 2016**  
**Revised: October 31, 2016**

The following checklist is useful after you upgrade your software on a Cisco StadiumVision Director server.

| List Item                                                                                                                                                                                                                                                                                                                            | Checkoff                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 1. Complete any specific verification steps documented for your particular upgrade.                                                                                                                                                                                                                                                  | <input type="checkbox"/> |
| 2. Do the following in your browser. <ul style="list-style-type: none"> <li>a. Clear the browser cache.</li> <li>b. Close all browser windows and wait for 10 seconds before restarting.</li> </ul>                                                                                                                                  | <input type="checkbox"/> |
|  <b>Caution</b> Notify <i>all</i> Cisco StadiumVision Director users about the mandatory requirement to clear their browser cache and to shutdown/restart the browser software before accessing the latest Cisco StadiumVision Director software. |                          |
| 3. Verify that the Control Panel shows the Cisco StadiumVision Director version and build number that you installed.                                                                                                                                                                                                                 | <input type="checkbox"/> |
| 4. If you are using phone control, verify that the phones work.                                                                                                                                                                                                                                                                      | <input type="checkbox"/> |
| 5. If using IP phones for local TV control, verify that channels can be successfully changed.                                                                                                                                                                                                                                        | <input type="checkbox"/> |
| 6. Verify that channel names and favorites are properly set.                                                                                                                                                                                                                                                                         | <input type="checkbox"/> |
| 7. If using suite commerce integration, verify that an order can be successfully placed using the IP phone.                                                                                                                                                                                                                          | <input type="checkbox"/> |
| 8. Verify that all devices are properly in the nonevent_group.                                                                                                                                                                                                                                                                       | <input type="checkbox"/> |

| List Item                                                                                                                                                                                                                                                                                                                  | Checkoff                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <p>9. Go to the Services Alert window in the Management Dashboard and make sure that all relevant services are green.</p> <p><b>Tip</b> You might need to click the refresh button to be sure that all services are re-pollled for status. If needed, you can Disable services that are not part of your installation.</p> | <input type="checkbox"/> |
| <p>10. Verify that SV-4K and DMP-2K devices have been rebooted and are running the latest system runtime version.</p> <p><b>Note</b> A manual reboot is required if a DMP firmware upgrade was not required for your release.</p>                                                                                          | <input type="checkbox"/> |
| <p>11. Verify that all DMPs and TVs in the Management Dashboard are green.</p>                                                                                                                                                                                                                                             | <input type="checkbox"/> |
| <p>12. Start an existing event script and validate that screens display the expected content.</p>                                                                                                                                                                                                                          | <input type="checkbox"/> |
| <p>13. Stop the event script and validate that screens are powered off.</p>                                                                                                                                                                                                                                                | <input type="checkbox"/> |
| <p>14. Make a minor edit to the event script and make sure it can be saved.</p>                                                                                                                                                                                                                                            | <input type="checkbox"/> |
| <p>15. Verify that you can push a new video file in the Content Management System (CMS) to the DMPs.</p>                                                                                                                                                                                                                   | <input type="checkbox"/> |
| <p>16. If using dynamic menu boards, make a change to a menu item and verify that the change is reflected on the menu board.</p>                                                                                                                                                                                           | <input type="checkbox"/> |
| <p>17. If using external content integration, be sure to re-enable your data sources in the Control Panel and restart the External Content Integration application from the Management Dashboard.</p>                                                                                                                      | <input type="checkbox"/> |
| <p>18. <b>(As needed for sites that schedule the CMSRestartTask)</b><br/>Delete the CMSRestartTask from the Scheduled Tasks area of the Management Dashboard.</p> <p><b>Note</b> In Cisco StadiumVision Director Release 4.1, the CMS is automatically restarted after a backup is run.</p>                                | <input type="checkbox"/> |
| <p>19. Perform a server backup for the upgrade configuration.</p>                                                                                                                                                                                                                                                          | <input type="checkbox"/> |



| List Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Checkoff                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <p>20. After satisfying your site’s testing and event requirements, fail back to the primary server and upgrade it to the same version of software that you validated on your secondary server.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> |
| <p> <b>Caution</b> If your Release 4.0 system is configured for retention of a single backup file only (the default), then you will no longer have access to any 4.0 data after the first 4.1 backup is completed. If for some reason you must revert to Release 4.0, contact Cisco Technical Support and provide them with your SSR file to help you restore it.</p> <p>To help avoid any need to fall back to Release 4.0, be sure to follow carefully all recommended best practices and post-upgrade tasks as documented in this guide, including thoroughly testing your system to your site requirements before failing over and upgrading your backup server to Release 4.1.</p> <p>For more information, see the <a href="#">“Configuring Failover Between Redundant Cisco StadiumVision Director Servers”</a> module in the <i>Cisco StadiumVision Director Server Administration Guide</i>.</p> |                          |
| <p>21. After you perform failback, be sure that you reconfigure your backup and restore environment using the Text Utility Interface (TUI).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> |





## Appendix B: Port Reference

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First Published: May 16, 2016

The following tables identify the default ports used by Cisco StadiumVision Director:

- [Cisco StadiumVision Director Ports, page 79](#)
- [Cisco StadiumVision Director Remote Ports, page 81](#)
- [Media Player Ports, page 82](#)

### Cisco StadiumVision Director Ports

The Cisco StadiumVision Director ports are divided into tables for input and output ports.

#### Cisco StadiumVision Director Input Ports

[Table 1](#) lists the input ports used by all Cisco StadiumVision Director servers.

**Table 1** Cisco StadiumVision Director Input Ports

| Originator   | Protocol | Port | Target Application | Usage                                            |
|--------------|----------|------|--------------------|--------------------------------------------------|
| Laptop       | TCP      | 22   | SSH                | Remote login.                                    |
| Laptop / DMP | TCP      | 80   | Apache             | Redirect to port 8080.                           |
| DMP          | TCP      | 8080 | Tomcat / Apache    | Fetch config/data.                               |
| Laptop       | TCP      | 8080 | Tomcat / Apache    | Main web UI.                                     |
| Laptop       | TCP      | 9090 | Tomcat for Liferay | Liferay web UI (Dynamic Menu Board application). |

Table 2 lists the additional input ports used by Cisco StadiumVision Director server instances only during troubleshooting access from a PC.

**Table 2** Cisco StadiumVision Director Input Ports

| Originator          | Protocol | Port | Target Application | Usage                                                        |
|---------------------|----------|------|--------------------|--------------------------------------------------------------|
| Laptop              | TCP      | 7041 | Java               | JMX management interface for control server instance.        |
| Laptop              | TCP      | 7042 | Java               | JMX management interface for config server instance.         |
| Laptop              | TCP      | 7043 | Java               | JMX management interface for monitor server instance.        |
| Laptop              | TCP      | 7045 | Java               | JMX management interface for CMS server instance.            |
| Laptop              | TCP      | 7050 | Java               | JMX management interface for local control.                  |
| External NTP server | UDP      | 123  | NTP                | Time synchronization (StadiumVision Director as NTP client). |
| DMP                 | UDP      | 514  | Syslog             | Proof of play, Alerts.                                       |

## Cisco StadiumVision Director Output Ports

**Table 3** Cisco StadiumVision Director Output Ports

| Originator             | Protocol | Port     | Target Application | Usage                                                               |
|------------------------|----------|----------|--------------------|---------------------------------------------------------------------|
| StadiumVision Director | FTP      | 21       | FTP server         | Fetching integration broker data over FTP.<br>Playlist integration. |
| StadiumVision Director | TCP      | 22       | ssh                | DMP troubleshooting.                                                |
| StadiumVision Director | TCP      | 80       | httpd              | Redirect to 443.                                                    |
| StadiumVision Director | UDP      | 123      | NTP server         | As request to NTP server, and as response to DMPs.                  |
| StadiumVision Director | TCP      | 443      | httpd              | 4310 web UI.                                                        |
| StadiumVision Director | TCP      | 80 / 443 |                    | Fetching integration broker data.<br>Fetching legacy ticker data.   |
| StadiumVision Director | TCP      | 8000     | autorun.brs        | SV-4K control port (http)                                           |
| StadiumVision Director | TCP      | 8089     | tomcat             | Configuration update for multicast rebroadcaster.                   |

**Table 3** Cisco StadiumVision Director Output Ports (continued)

| Originator             | Protocol | Port                         | Target Application | Usage                                                    |
|------------------------|----------|------------------------------|--------------------|----------------------------------------------------------|
| StadiumVision Director | UDP      | varies (default:50001)       | DMP flash template | Multicast commands (default is 239.192.0.254:50001).     |
| StadiumVision Director | UDP      | varies (default:50080-50099) | DMP flash template | Multicast commands when per-script multicast is enabled. |

## Cisco StadiumVision Director Remote Ports

The Cisco StadiumVision Director Remote ports are divided into tables for input and output ports.

### Cisco StadiumVision Director Remote Input Ports

[Table 1](#) lists the input ports used by all Cisco StadiumVision Director Remote servers.

**Table 4** Cisco StadiumVision Director Remote Input Ports

| Originator             | Protocol | Port           | Target Application      | Usage                                                                                                                                |
|------------------------|----------|----------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Laptop                 | TCP      | 22             | sshd                    | SSH for TUI.                                                                                                                         |
| Laptop                 | TCP      | 7140           | java                    | JMX management interface for Cisco StadiumVision Director Remote.                                                                    |
| External NTP server    | UDP      | 123            | NTP                     | Time synchronization response.                                                                                                       |
| StadiumVision Director | TCP      | 8080           | httpd                   | Multicast rebroadcaster configuration, content distribution.                                                                         |
| StadiumVision Director | TCP      | 8089           | tomcat                  | Configuration update for multicast rebroadcaster.                                                                                    |
| StadiumVision Director | UDP      | Default: 7777  | Multicast rebroadcaster | Unicast commands for the individual Cisco StadiumVision Director Remote server from the central Cisco StadiumVision Director server. |
| StadiumVision Director | UDP      | Default: 50001 | Multicast rebroadcaster | Multicast commands (Default is 239.192.0.254:50001)                                                                                  |

## Cisco StadiumVision Director Remote Output Ports

Table 5 lists the output ports used by all Cisco StadiumVision Director Remote servers.

Table 5 Cisco StadiumVision Director Remote Output Ports

| Originator                    | Protocol | Port             | Target Application | Usage                                                                      |
|-------------------------------|----------|------------------|--------------------|----------------------------------------------------------------------------|
| StadiumVision Director Remote | TCP      | 8080             | httpd              | Get multicast rebroadcaster from Cisco StadiumVision Director server.      |
| StadiumVision Director        | UDP      | 123              | NTP                | NTP requests initiated by StadiumVision Director Remote to its NTP server. |
| StadiumVision Director Remote | UDP      | Default:<br>7778 | DMP flash template | Multicast commands (Default is 239.193.1.1:7778)                           |

## Media Player Ports

The DMP ports are divided into tables for input and output ports:

- [Common Media Player Input Ports, page 82](#)
- [Input Ports—DMP 4310G Only, page 83](#)
- [Input Ports—SV-4K and DMP-2K Only, page 83](#)
- [Common Media Player Output Ports, page 84](#)
- [Output Ports—SV-4K and DMP-2K Only, page 84](#)

## Common Media Player Input Ports

Table 7 lists the input ports used by all media player models.

Table 6 Common Media Player Input Ports

| Originator             | Protocol | Port                          | Target Application | Usage                                                    |
|------------------------|----------|-------------------------------|--------------------|----------------------------------------------------------|
| StadiumVision Director | UDP      | varies (default: 50001)       | DMP flash template | Multicast commands (default is 239.192.0.254:50001)      |
| StadiumVision Director | UDP      | varies (default: 50080-50099) | DMP flash template | Multicast commands when per-script multicast is enabled. |
| Headend                | UDP      | varies                        | Sigma chipset      | Multicast video                                          |
| NTP server             | UDP      | 123                           | NTP                | Time sync response.                                      |

## Input Ports—DMP 4310G Only

In addition to the common media player output ports (Table 6), Table 7 lists the input ports only used by the Cisco DMP 4310G.

**Table 7** DMP Input Ports

| Originator             | Protocol | Port                         | Target Application | Usage                                                            |
|------------------------|----------|------------------------------|--------------------|------------------------------------------------------------------|
| StadiumVision Director | TCP      | 22                           | SSH/Rsync          | Rsync for content staging.                                       |
| Laptop                 | TCP      | 22                           | SSH                | SSH diagnostic port                                              |
| Laptop                 | TCP      | 443                          | httpd              | 4310 web UI, unicast messaging from Cisco StadiumVision Director |
| StadiumVision Director | UDP      | varies                       | DMP flash template | Multicast commands (default is 239.192.0.254:50001)              |
| StadiumVision Director | UDP      | varies (default:50080-50099) | DMP flash template | Multicast commands when per-script multicast is enabled.         |
| Headend                | UDP      | varies                       | Sigma chipset      | Multicast video                                                  |
| NTP server             | UDP      | 123                          | NTP                | Time sync response.                                              |

## Input Ports—SV-4K and DMP-2K Only

In addition to the common media player output ports (Table 6), Table 8 lists the input ports only used by the SV-4K and DMP-2K media player.

**Table 8** SV-4K and DMP-2K Input Ports

| Originator             | Protocol | Port | Target Application                         | Usage                |
|------------------------|----------|------|--------------------------------------------|----------------------|
| Laptop                 | TCP      | 22   | SSH                                        | SSH diagnostic port. |
| Laptop                 | TCP      | 80   | SV-4K diagnostic web server (dws)          | —                    |
| Laptop                 | TCP      | 2099 | SV-4K javascript inspector (for debugging) | —                    |
| StadiumVision Director | TCP      | 8000 | SV-4K control and debugging web server     | —                    |

**Table 8** *SV-4K and DMP-2K Input Ports*

| Originator | Protocol | Port         | Target Application      | Usage                                                                                                                                                   |
|------------|----------|--------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Laptop     | UDP      | 161          | SNMP service            | Listening agent for SNMP management information.<br><b>Note</b> This port is only open when the SNMP service is enabled in Cisco StadiumVision Director |
| SV-4K      | UDP      | 319, 320     | PTP                     | Event and general messages for time sync (SV-4K).                                                                                                       |
| SV-4K      | UDP      | 50001, 50002 | SV-4K sync manager port | —                                                                                                                                                       |

## Common Media Player Output Ports

[Table 9](#) lists the output ports used by all media player models.

**Table 9** *Common Media Player Output Ports*

| Originator             | Protocol | Port  | Target Application | Usage                                                          |
|------------------------|----------|-------|--------------------|----------------------------------------------------------------|
| StadiumVision Director | TCP      | 8080  | httpd              | Fetching of DMP config, autoprovisioning, and related.         |
| DMP 4310G / SV-4K      | TCP      | 80    | httpd              | External content URL.                                          |
| DMP 4310G / SV-4K      | TCP      | 8888  | java (Mule)        | Fetching preview (data pull requests) from Integration Broker. |
| DMP 4310G / SV-4K      | TCP      | 9090  | Tomcat for Liferay | Dynamic Menu Board application interface.                      |
| DMP 4310G / SV-4K      | TCP      | 33333 | java (Mule)        | Fetching data integration images from Integration Broker.      |
| StadiumVision Director | UDP      | 123   | NTP                | Time sync request.                                             |
| DMP 4310G / SV-4K      | UDP      | 514   | syslog             | Proof of play. Alerts.                                         |

## Output Ports—SV-4K and DMP-2K Only

In addition to the common media player output ports (shown in [Table 9](#)), [Table 10](#) lists the output ports used only by the SV-4K and DMP-2K media player.



**Table 10** *SV-4K and DMP-2K Output Ports*

| <b>Originator</b> | <b>Protocol</b> | <b>Port</b>  | <b>Target Application</b> | <b>Usage</b>                                                                                        |
|-------------------|-----------------|--------------|---------------------------|-----------------------------------------------------------------------------------------------------|
| Laptop            | UDP             | 161          | SNMP service              | <b>Note</b> This port is only open when the SNMP service is enabled in Cisco StadiumVision Director |
| SV-4K             | UDP             | 319, 320     | PTP                       | Event and general messages for time sync.                                                           |
| SV-4K             | UDP             | 50001, 50002 | SV-4K sync manager port   | For sync master.                                                                                    |





## Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server

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First Published: May 16, 2016

This document provides guidelines for configuring the Cisco Integrated Management Controller (CIMC) interface and performing the initial configuration, and upgrading the CIMC/BIOS firmware on the Cisco UCS C220 servers for Cisco StadiumVision Director (SV-DIR-DIRECTOR-K9, SV-PLATFORM3=).



Note

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Use the information in this appendix only as a guide to the tasks that you need to perform for CIMC configuration or upgrade, but follow the procedures in the referenced Cisco UCS documents.

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This section includes the following topics:

- [CIMC Initial Configuration, page 87](#) (required)
- [CIMC Firmware Upgrade Guidelines, page 89](#) (as required)

## CIMC Initial Configuration

This section includes the following topics:

- [Prerequisites, page 87](#)
- [CIMC Initial Configuration Summary, page 88](#)

## Prerequisites

Be sure that the following requirements are met before you do the CIMC initial configuration:

- You have a monitor, keyboard, and mouse that you can connect to the server.
- You have the following information for configuring the internal Cisco Integrated Management Controller (CIMC) interface:
  - You have an additional IP address for static configuration.

**Tip**

This is a different IP address than the IP address that you configure for the eth0 network interface on the Cisco StadiumVision server.

- 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 laptop with access to the Cisco StadiumVision network.
- Your computer meets the minimum browser and Flash player requirements for the Cisco StadiumVision server, and also has Java 1.6 or later installed.

See the release notes for your Cisco StadiumVision product and release at:

<http://www.cisco.com/c/en/us/support/video/stadiumvision/products-release-notes-list.html>

- You have a copy of or access to the following documents on Cisco.com:
  - *Cisco UCS C220 Server Installation and Service Guide*  
Familiarize yourself with the “Initial Server Setup” topic of the “Installing the Server” chapter.
  - *Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.4*  
(or the version that corresponds to your firmware release found at:  
[http://www.cisco.com/en/US/products/ps10739/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps10739/products_installation_and_configuration_guides_list.html).)  
Familiarize yourself with the “Overview” chapter, and the “Managing the Server Boot Order” section of the “Managing the Server” chapter.

## CIMC Initial Configuration Summary

This section provides an overview of the basic tasks to be completed when performing the initial CIMC configuration in standalone mode for a Cisco StadiumVision server after you have unpacked and inspected it and prepared it for installation.

**To perform the CIMC initial configuration, complete the following tasks:**

|               | Description                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | <b>Configuring the CIMC Interface</b><br><b>Note</b> The instructions for configuring the CIMC interface are found in the “Initial Server Setup” topic of the “Installing the Server” chapter in the <i>Cisco UCS C220 Server Installation and Service Guide</i> .                                                                                                                                                            |
| <b>Step 1</b> | During bootup, press <b>F8</b> when prompted to open the BIOS CIMC Configuration Utility.                                                                                                                                                                                                                                                                                                                                     |
| <b>Step 2</b> | Configure the CIMC interface with the following settings: <ul style="list-style-type: none"> <li>• DHCP—Disabled. You must change this option to enter a static IP address.</li> <li>• CIMC IP—IPv4 address for your CIMC interface, with corresponding subnet mask.</li> <li>• VLAN—Dependent on client network.</li> <li>• Change the CIMC password. The default credential is <b>admin</b> and <b>password</b>.</li> </ul> |
| <b>Step 3</b> | Press <b>F10</b> to save your configuration and reboot the server.                                                                                                                                                                                                                                                                                                                                                            |

|               | Description                                                                                                                                                                                                                                                                                                                             |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | <p><b>Configuring the NIC Properties</b></p> <p><b>Note</b> Information about configuring the NIC properties are found in the “Initial Server Setup” topic of the “Installing the Server” chapter in the <i>Cisco UCS C220 Server Installation and Service Guide</i>.</p>                                                               |
| <b>Step 4</b> | From a laptop with access to the Cisco StadiumVision network, use a browser and type the IP address that you configured for the CIMC interface to connect to the CIMC console.                                                                                                                                                          |
| <b>Step 5</b> | Log into the CIMC console with username <b>admin</b> and the password that you configured in <a href="#">Step 2</a> .                                                                                                                                                                                                                   |
| <b>Step 6</b> | <p>From the <b>Admin</b> tab, click <b>Network</b>, and go to the <b>Network Settings</b> page.</p> <p>In the NIC Properties box configure the following settings and save your changes:</p> <ul style="list-style-type: none"> <li>• NIC mode—Dedicated</li> <li>• NIC Redundancy—None</li> </ul>                                      |
|               | <p><b>Configuring the Server Boot Order</b></p> <p><b>Note</b> The instructions for configuring the server boot order are found in the “Managing the Server Boot Order” section of the “Managing the Server” chapter of the <i>Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.4</i></p> |
| <b>Step 7</b> | From the <b>Server</b> tab, click <b>BIOS</b> .                                                                                                                                                                                                                                                                                         |
| <b>Step 8</b> | <p>Configure the following boot order and save your changes:</p> <ul style="list-style-type: none"> <li>• Virtual CD/DVD</li> <li>• HDD</li> </ul>                                                                                                                                                                                      |

## CIMC Firmware Upgrade Guidelines

This section includes the following topics:

- [Before You Begin, page 89](#)
- [Prerequisites, page 90](#)
- [CIMC/BIOS Firmware Upgrade Summary, page 90](#)

### Before You Begin

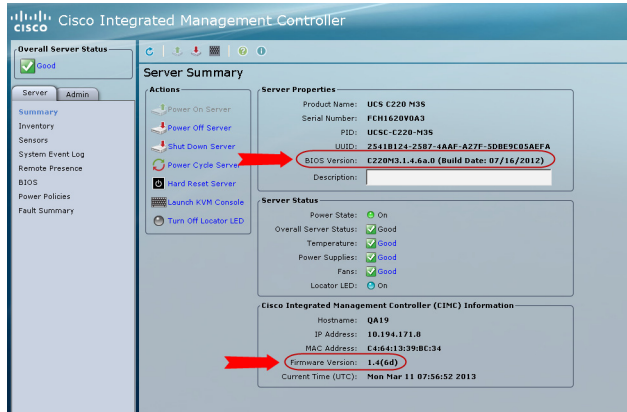
See the release notes for your Cisco StadiumVision product and release at:

[http://www.cisco.com/en/US/products/ps11274/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps11274/prod_release_notes_list.html)

- Find the minimum CIMC/BIOS versions tested for your Cisco StadiumVision Director (SV-DIR-DIRECTOR-K9, SV-PLATFORM3=) platform.

- From your Cisco StadiumVision platform, verify the CIMC and BIOS firmware versions in the CIMC console (Figure 1).

Figure 1 Firmware Verification From the CIMC Console



#### Note

Unless there is another reason why an upgrade has been found to be needed, no upgrade should be needed if your server firmware is at the minimum tested version (or later) for the Cisco StadiumVision release that you are running.

## Prerequisites

Be sure that the following requirements are met before you perform a CIMC/BIOS firmware upgrade:

- You have a copy of or access to the following documents on Cisco.com:
  - Release Notes for Cisco UCS C-Series Software, Release 1.4(6)*  
(or the version that corresponds to your firmware release found at: [http://www.cisco.com/en/US/products/ps10739/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps10739/prod_release_notes_list.html))
  - Cisco Host Upgrade Utility Release 1.4(6) Quick Start Guide*  
(or the version that corresponds to your firmware release found at: <http://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-c-series-rack-servers/products-user-guide-list.html>)

Familiarize yourself with all of the requirements in these documents to perform your CIMC/BIOS firmware upgrade.
- You have access to Cisco.com to download the firmware ISO file.

## CIMC/BIOS Firmware Upgrade Summary



#### Caution

Be sure to follow the requirements in the release notes and the Host Upgrade Utility (HUU) guide for your firmware, including making sure that you upgrade both the CIMC and BIOS at the same time and from the HUU ISO file.

To perform the CIMC/BIOS firmware upgrade, complete the following tasks:

|               | Description                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Step 1</b> | Using the release notes for the firmware version that you need to install, find the name of the ISO file that applies to the Cisco UCS C220 server for that firmware.<br><b>Note</b> The release 1.4(x) firmware HUU ISO files are platform-specific.                                                                                                                            |
| <b>Step 2</b> | Follow the instructions in the Host Upgrade Utility guide:<br><b>Note</b> The Cisco UCS C220 server does not have a CD/DVD drive. <ul style="list-style-type: none"><li>• Go to Cisco.com and download the HUU ISO file.</li><li>• Follow the instructions to load the ISO that you downloaded and be sure that both the CIMC and BIOS firmware are upgraded together.</li></ul> |







StadiumVision

## Appendix D: Using the TUI Upgrade Utility to Upgrade the Cisco StadiumVision Software

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**First Published:** May 16, 2016

This module describes an alternate method to upgrade an existing server already running Cisco StadiumVision Director, including installation of service packs. This procedure is also referred to generally as an *ISO upgrade* to refer to both the service pack and upgrade ISO process.

This module includes the following topics:

- [Best Practices, page 93](#)
- [Prerequisites, page 94](#)
- [Information About Using the TUI Upgrade Utility to Update an Existing Cisco StadiumVision Director Server, page 95](#)
- [Upgrade Tasks, page 95](#)
- [What to Do Next, page 103](#)

### Best Practices



**Caution**

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Do not alter the RAID configuration prior to upgrade.

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

- Choose an appropriate down time to perform the upgrade on the Cisco StadiumVision Director 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.

- Perform a backup and restore of the primary and secondary servers:
  - Perform a backup of the currently active primary server.
  - Restore the backup data onto the standby secondary server.




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**Note** The config service must be running on the secondary server to do the restore.

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For more information about performing a backup and restore on a Cisco StadiumVision Director Server, see the “[Backing Up and Restoring Cisco StadiumVision Director Servers](#)” module of the *Cisco StadiumVision Director Server Administration Guide, Release 4.0*.

- Promote the secondary server to primary.
 

For more information about promoting a secondary server to primary in Release 4.0, see the “[Configuring Failover Between Redundant Cisco StadiumVision Director Servers](#)” module of the *Cisco StadiumVision Director Server Administration Guide, Release 4.0*.
- Access the promoted secondary server to perform the upgrade.
- Verify the boot order in the BIOS (by pressing **F2** while booting) prior to upgrading; the virtual DVD should be the primary boot device for the Platform 3 server.
- Due to the difficulty in recovering from an interrupted installation process if the Linux shell is accidentally closed or the network drops, it is highly recommended that you use a server console connection method that does not pose a risk to the success of upgrade completion if the session breaks during upgrade.

This can be done using a monitor and keyboard that are directly connected to the Cisco StadiumVision Director server to log into the TUI, or through a remote connection with access to the Cisco StadiumVision Director network and using the CIMC interface to log into the TUI.

## Prerequisites

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

- Your server is running a minimum of Cisco StadiumVision Director Release 4.0.0-732 (SP3) or higher.
- You have the IP address for the Cisco StadiumVision Director 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.
- You have a supported browser version for Cisco StadiumVision Director. For more information about the latest supported browsers, see the *Cisco StadiumVision Release Notes for Release 4.1*.
- You have an installer account on the Cisco StadiumVision Director server.
- To access the Cisco Integrated Management Controller (CIMC) for the TUI software upgrade, the following requirements are met:
  - Your computer meets the minimum browser and Flash player requirements for Cisco StadiumVision Director, and also has Java 1.6 or later installed.
  - You have a laptop connection with access to the Cisco StadiumVision Director server network.
  - You have the IP address of the CIMC interface on the Cisco StadiumVision Director server.
  - You have the CIMC interface login credential. The default is admin/password.

**Note**

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

## Information About Using the TUI Upgrade Utility to Update an Existing Cisco StadiumVision Director Server

The ISO upgrade procedure for Cisco StadiumVision Director includes the following tasks:

1. Downloading an ISO service pack or upgrade file from the software download site on Cisco.com.
2. Uploading the ISO file from your laptop to the Cisco StadiumVision Director server using the upload utility through your browser.
3. Installing the ISO image using the upgrade utility in the Text Utility Interface (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.

The Management Dashboard has a gauge for % Disk Utilization, or you can use the TUI to get file system usage.

### Upgrade Tasks

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

- [Downloading ISO Upgrade Files from Cisco.com, page 96](#) (required)
- [Uploading an ISO Upgrade File to the Cisco StadiumVision Director Server, page 97](#) (required)
- [Installing the ISO Upgrade Image on the Cisco StadiumVision Director Server, page 101](#) (required)
- [Staging the Flash Template for the DMP 4310G, page 103](#) (required)
- [Deploying Global DMP Settings for the Cisco DMP 4310G, page 103](#) (required)
- [What to Do Next, page 103](#) (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 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 or service pack file (as available), 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 SV-DIRECTOR and *not* for SVD-REMOTE. The TUI will verify the filenameing to be sure that the ISO that you are uploading is for SV-DIRECTOR.

**Table 1** *ISO Upgrade Filename Conventions*

| Hardware Product ID                    | Filename Convention <sup>1</sup>                                                                                                                                  |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SV-DIR-DIRECTOR-K9 or<br>SV-PLATFORM3= | <ul style="list-style-type: none"> <li>SV-DIRECTOR-UPGRADE-4.1.0-<i>nnn</i>.x86_64.iso</li> <li>SV-DIRECTOR-UPGRADE-4.1.0-<i>nnn</i>.x86_64.iso.md5sum</li> </ul> |

1. “*nnn*” represents the build number of the image in the file.

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 Server

After you have downloaded the ISO upgrade file from Cisco.com, you need to upload the file to the Cisco StadiumVision Director 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.

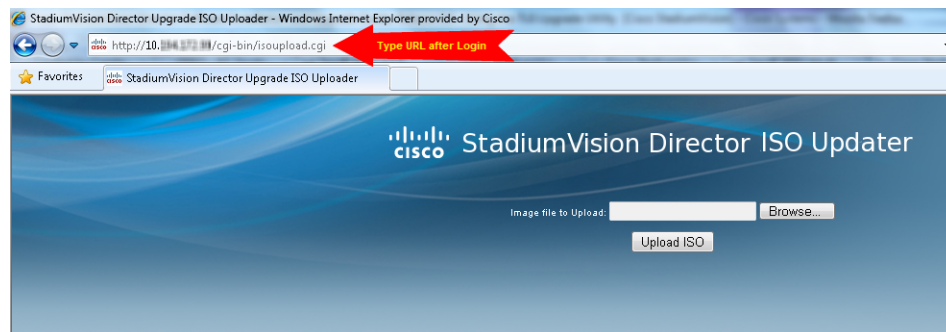
### Prerequisites

Be sure that you know the IP address of the Cisco StadiumVision Director 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 server, complete the following steps:

- 
- Step 1** Log into Cisco StadiumVision Director 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 (Figure 1):
- ```
http://x.x.x.x/cgi-bin/isoupload.cgi
```

Figure 1 ISO Updater Utility



- Step 3** Click **Browse** (Figure 1).
- Step 4** 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 5** Click the **Upload ISO** button (Figure 2). 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.

Figure 2 ISO File Selection and Upload

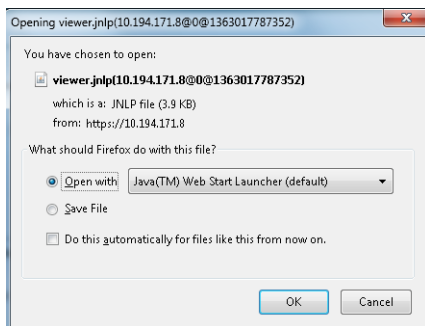
When the ISO upload is complete, one of the following occurs:

- 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.

Logging Into the CIMC Interface

To log into the CIMC interface, complete the following steps:

- Step 1** From a laptop connection with access to the Cisco StadiumVision Director server network, open a browser window and type the IP address of the CIMC interface as shown in the following example:
- `https://ip-address`
- Step 2** If prompted, click **OK** to open the Java viewer.jnlp as shown in [Figure 3](#):

Figure 3 Opening viewer.jnlp File

- Step 3** If a security dialog box displays, do the following:
- (Optional) Select the checkbox to accept all content from Cisco.
 - Click **Yes** to accept the certificate and continue.
 - Confirm any additional security certificate exceptions.
- Step 4** At the CIMC login screen, note the firmware version displayed ([Figure 4](#)).

**Tip**

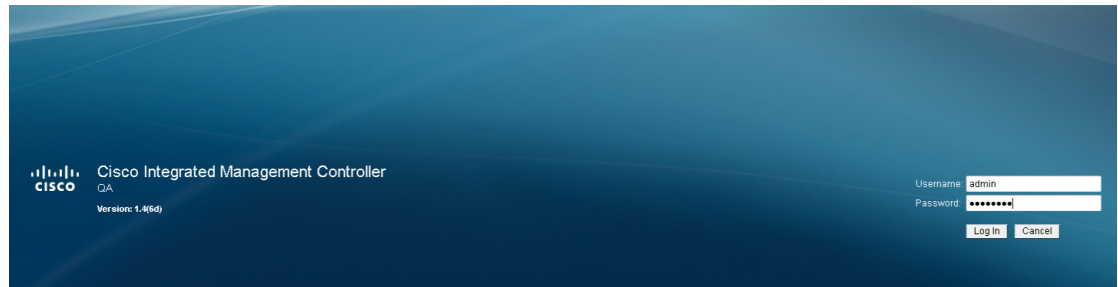
The firmware version is also displayed in the Cisco Integrated Management Controller (CIMC) Information box on the CIMC console after you log in.

Step 5 From the CIMC login screen, type the username and password for the CIMC interface.

**Tip**

The default credential is **admin** and **password**. If changed during server setup, use the password that you configured.

Figure 4 CIMC Login Screen



Step 6 Click **Log In**.

Verifying the Minimum CIMC Firmware Version for Cisco StadiumVision Director

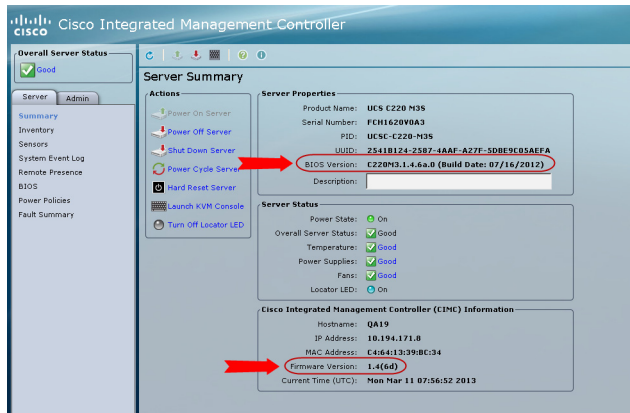
Before you begin, see the “Cisco StadiumVision Director Server Support” section of the [Release Notes for Cisco StadiumVision Director Release 4.1](#) to find the CIMC/BIOS versions tested for your platform.

To verify the minimum CIMC firmware version for Cisco StadiumVision Director, complete the following steps:

Step 1 Be sure that the CIMC firmware version found on the CIMC login screen or in the CIMC console is at the minimum tested version (or later) for the Cisco StadiumVision Director release.

[Figure 5](#) shows where the firmware version is displayed on the CIMC console for both the BIOS and CIMC firmware.

Figure 5 *Firmware Version Verification From the CIMC Console for a Platform 3 Server*



Note

Unless there is another reason why an upgrade has been found to be needed, no upgrade should be needed if your server firmware is at the minimum tested version (or later) for the Cisco StadiumVision release that you are running.

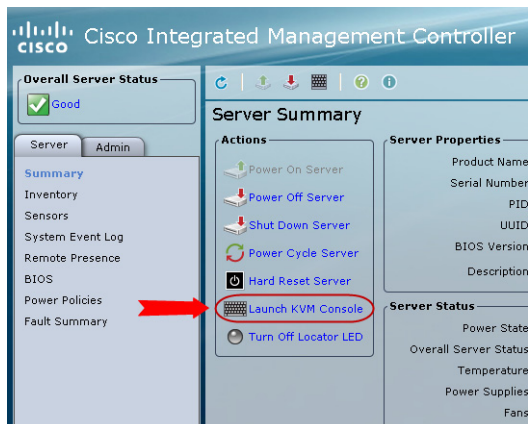
- Step 2** If necessary to upgrade the CIMC/BIOS firmware on the Platform 3 server, refer to the [“Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server”](#) module.

Launching the KVM Console

To launch the KVM console, complete the following steps:

- Step 1** From the CIMC console Actions box, click **Launch KVM Console**.

Figure 6 *Launch KVM Console*





Tip You can also click the keyboard in the icon bar at the top of the console to launch the KVM console.

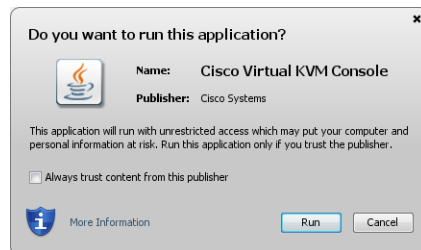
Step 2 If a security dialog box displays, do the following:

- a. (Optional) Select the checkbox to accept all content from Cisco.
- b. Click **Yes** to accept the certificate and continue.

Step 3 At the Cisco Virtual KVM Console confirmation box (Figure 7), do the following:

- a. (Optional) Select the checkbox to accept all content from Cisco.
- b. Click **Run**.

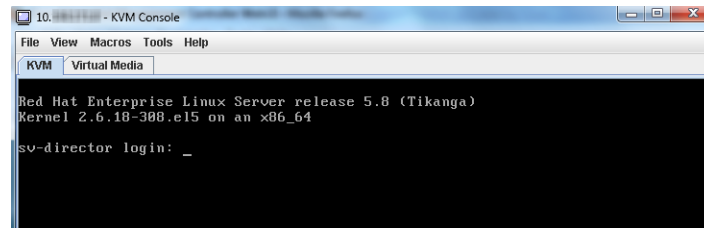
Figure 7 Cisco Virtual KVM Console Confirmation



- c. Confirm any additional security certificate exceptions.

Step 4 The KVM Console window is displayed with a login prompt (Figure 8).

Figure 8 Cisco KVM Virtual Console Login Screen



Installing the ISO Upgrade Image on the Cisco StadiumVision Director Server

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

Step 1 Do one of the following to run a secure login to the Cisco StadiumVision Director server:

- Using a directly-connected computer and KVM cable, access the console of the Cisco StadiumVision Director server.

or

- Log into the CIMC and launch the virtual KVM console.
- Step 2** When the login prompt appears, enter the **installer** userid followed by the installer password at the password prompt.
- Step 3** From the Main Menu, do the following:
- From the TUI Main Menu, go to the StadiumVision Server Administration menu. Select the Upgrade Server option (type **b** and press **Enter**) (Figure 9):

Figure 9 TUI StadiumVision Server Administration Menu Option for Server Upgrade

```

Main Menu > StadiumVision Server Administration

Please choose one of the following menu options:

a) Display Software Version
b) Upgrade Server
c) Restart StadiumVision Director software
d) Shutdown StadiumVision Director software
e) Setup automatic backup and restore
f) Re-Run StadiumVision initial configuration
g) Content migration
h) Hard Drive Expansion
i) Backup/restore Retention Policy
j) Failover
k) Reboot
l) Power Off
R or < or ,) Return to prior menu
  
```

- Step 4** When the upgrade configuration confirmation prompt appears, type **c** to continue (Figure 10):

Figure 10 TUI Upgrade Configuration Confirmation

```

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

- Step 5** All of the ISO upgrade files that you have uploaded are displayed with a sequence number and the image name. Type the sequence number that corresponds to the image that you want to install, and press **Enter**. Figure 11 shows an example of selection of the first upgrade file for installation.

Figure 11 ISO Upgrade Image File List

```

Are you sure you wish to upgrade? Push R to return to main menu
or C to continue.
1. - SV-DIRECTOR-UPGRADE-3.1.0-510.x86_64.iso
Please select a file number and press enter: 1
  
```

The upgrade process begins.



Caution

Wait until the upgrade process completes. *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.
- Step 7** From the StadiumVision Server Administration menu, select Reboot.

Staging the Flash Template for the DMP 4310G

To be sure that any changes that might have been made to the Cisco StadiumVision Director Flash Template (.swf file) are deployed to the Cisco DMP 4310Gs, complete the following steps:

-
- Step 1** Go to the Management Dashboard.
 - Step 2** From the DMP and TV Controls dashboard drawer, navigate to the following command path: **DMP and TV Controls > DMP Install > Stage Template.**
 - Step 3** Select all of the DMP devices where the command should be applied.
 - Step 4** Click the play button to run the command on the selected devices.
-

Deploying Global DMP Settings for the Cisco DMP 4310G

To apply the global MIB variable settings to all DMPs, complete the following steps:

-
- Step 1** Go to the Management Dashboard.
 - Step 2** From the DMP and TV Controls dashboard drawer, navigate to the following command path: **DMP and TV Controls > Global > Global DMP Settings.**
 - Step 3** Select all of the DMP devices where the command should be applied.
 - Step 4** Click the play button to run the command on the selected devices.
-

What to Do Next

- Follow the steps in the [“Verifying the Upgrade”](#) module to verify that the upgrade process was successful.
- Use the [“Appendix A: Post-Upgrade Checklist”](#) module on page 75 to be sure that you have completed the required verification steps.

■ What to Do Next