



Cisco Vision Software Installation and Upgrade Guide

Dynamic Signage Director (StadiumVision Director)

Release 5.0

First Published: 2016-10-10

Last Updated: 2017-05-16

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About This Guide

This document describes the requirements and tasks to install and upgrade the software for Cisco Vision Dynamic Signage Director Release 5.0.

The content is intended for Cisco Vision system administrators and technical field engineers who are responsible for designing and deploying Cisco Vision 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 7](#)
- [Document Organization, page 8](#)
- [Related Documentation and Resources, page 9](#)

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
2017-05-16	<p>The following updates were made for Release 5.0.0-526 (SP2):</p> <ul style="list-style-type: none">■ Added caution about required maintenance patch for backup of channel icon logos in 4.1 systems and any systems prior to release 5.0 SP2 before upgrading to the 5.0 SP2 release in Best Practices, page 29.■ Updated SV-4K/DMP-2K production firmware version 6.1.105 applies to 5.0.0-421 (SP1) and later releases in Upgrading the SV-4K and DMP-2K Firmware, page 51.
2017-02-24	<ul style="list-style-type: none">■ Updated footnotes in Table 1 on page 12 to match the Release Notes documentation for minimum system requirements for virtual servers.■ Added new SV-4K/DMP-2K production firmware version required for Release 5.0.0-421 SP1 in Upgrading the SV-4K and DMP-2K Firmware, page 51.
2016-11-30	<ul style="list-style-type: none">■ Added Upgrading the DMP Firmware, page 45 and Rebooting the DMPs, page 45 tasks to Verifying the Upgrade, page 39.■ Added step to verify the SV-4K and DMP-2K runtime status in Verifying Media Players, Groups, and Zones in the Management Dashboard, page 45.■ 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, page 57.
2016-10-10	<p>First release of this document for Cisco Vision Dynamic Signage Director Release 5.0.0-235.</p>

Document Organization

This guide includes the following modules:

Chapter	Description
Getting Started Installing or Upgrading Cisco Vision Dynamic Signage Director, page 11	Provides information that you should read before you perform an initial installation or upgrade of the Cisco Vision Dynamic Signage Director Release 5.0 software.
Installing Cisco Vision Dynamic Signage Director for the First Time, page 17	Describes how to install the Cisco Vision Dynamic Signage Director Release 5.0 software on your newly-purchased Platform 3 server hardware from a full ISO image.
Using the Software Manager to Upgrade Cisco Vision Dynamic Signage Director Software, Language Packs, and Fonts, page 29	Describes how to upgrade a Cisco Vision Dynamic Signage Director server already running Cisco Vision Dynamic Signage Director software, as well as how to install language packs and fonts.
Verifying the Upgrade, page 39	Describes how to verify that the upgrade process was successful.
Upgrading the SV-4K and DMP-2K Firmware, page 51	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, page 57	Provides a checklist that is useful after you upgrade your software on a Cisco Vision Dynamic Signage Director server.
Appendix B: Port Reference, page 59	Identifies the ports used by Cisco Vision Dynamic Signage Director.
Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server, page 67	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 Vision Dynamic Signage Director.

Related Documentation and Resources

Cisco Vision Documentation Go URL

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

www.cisco.com/go/stadiumvisiondocs

Release-Specific Documents

- [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#)
- For the listing page of all Cisco Vision 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 Vision Dynamic Signage Director

First Published: 2016-10-10

Last Updated: 2017-02-24

Read this module before you perform an initial installation or upgrade of the Cisco Vision Dynamic Signage Director software. It includes the following topics:

- [Before You Begin, page 11](#)
- [Overview of the Installation and Upgrade Process, page 13](#)

Before You Begin

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

- Refer to the [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#) 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 Vision Dynamic Signage Director software. You must download the firmware image separately. For more information about supported firmware versions, see the [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#).

- Be sure that you have a supported browser installed for access to Cisco Vision Dynamic Signage Director as documented in the Release Notes.
- Verify that the Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director, and also has Java 1.6 or later installed.
 - You have a laptop connection with access to the Cisco Vision Dynamic Signage Director server network.
 - You have the IP address of the CIMC interface on the Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director server to log into the TUI.

Hardware Prerequisites

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 [Overview of the Installation and Upgrade Process, page 13](#) for more information and to find out what modules in this guide you should follow.

Hardware Prerequisites

You can install Release 5.0 on a Platform 3 server, or use your own server to run the Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director, page 12](#)
- [VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director, page 13](#)
- [Restrictions for Virtual Server Support, page 13](#)

Minimum Virtual Machine System Requirements for Cisco Vision Dynamic Signage Director

Be sure that your configuration meets the minimum system requirements in [Table 1 on page 12](#) and supports a VMware virtual machine environment with a compatible vSphere version (See [VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director, page 13](#)).

Note: Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director Release 5.0](#).

Table 1 Minimum System Requirements for a Virtualized Environment Running Cisco Vision Dynamic Signage Director

System Component	Minimum Requirement
Processor	Two processors each equivalent to an Intel Xeon Processor E5-2640 (15 MB cache, 2.50 GHz clock, 7.20 GT/s Intel® QPI)
Forward write (fwrite) operations per second	10,000
Virtual CPUs ¹	24
Virtual Disk Space	900 GB
Virtual RAM (VRAM)	32 GB ²

1. Hyperthreading can be used. Be sure that the BIOS is properly configured to enable it.
2. 32 GB is the minimum VRAM that should be reserved for installation and operation of the Cisco Vision Dynamic Signage Director system. Additional storage should be allowed for the ESXi OS.

[Table 2 on page 13](#) provides additional information about the tested VM hardware and OS specifications that you should use when configuring a virtual machine to support Cisco Vision Dynamic Signage Director.

Table 2 Virtual Machine Hardware and OS Specifications Tested for Cisco Vision Dynamic Signage Director

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 Vision Dynamic Signage Director

Cisco Vision Dynamic Signage Director has been tested with VMware vSphere version 5.5. Other versions should work, but they have not been tested.

Note: Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in [Table 1 on page 12](#) 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 Vision Dynamic Signage 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 Vision Dynamic Signage Director 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 Vision Dynamic Signage Director backup/restore and failover tools.
- Cisco has not tested and does not provide support for any VMware tools in a Cisco Vision system. If your site chooses to use backup, recovery or other tools outside of the Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director server for software Release 5.0 depending on your current server environment:

- [Migrating From Platform 2 Servers to a Virtual Environment, page 14](#)
- [Installing on a Virtual Server for the First Time, page 14](#)
- [Installing a Platform 3 Server for the First Time, page 14](#)
- [Upgrading an Existing Server Already Running Cisco StadiumVision Director or Cisco Vision Dynamic Signage Director, page 15](#)

Migrating From Platform 2 Servers to a Virtual Environment

Note: The Platform 2 server is no longer supported beginning in Release 4.1 and later releases.

If you have an existing Cisco StadiumVision environment using a Platform 2 server, then you must both upgrade your software release and migrate your existing Cisco StadiumVision Director servers to a virtual environment.

Upgrades from earlier Cisco StadiumVision Director releases must be performed in sequential progression according to the supported upgrade paths documented in the corresponding release notes and installation and upgrade guides for that release.

For detailed requirements and tasks for Platform 2 server migration, see [“Migrating From Platform 2 Servers to a Virtual Environment”](#) in the [Cisco StadiumVision Director Software Installation and Upgrade Guide, Release 4.1](#).

Installing on a Virtual Server for the First Time

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

- Verifying that your virtual server meets the requirements listed in [Table 1 on page 12](#).
- Configuring the virtual machine specifications according to the tested specifications with Cisco Vision Dynamic Signage Director provided in [Table 2 on page 13](#).
- Installing VMware client software.

Note: Cisco Vision Dynamic Signage Director has been tested with VMware vSphere version 5.5. Other versions should work, but they have not been tested.

Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in [Table 1 on page 12](#) is not supported.

- Loading the Cisco Vision Dynamic Signage Director software full ISO.
- Running the installation.
- Upgrading all media player firmware.

Installing a Platform 3 Server for the First Time

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

- Confirming the CIMC/BIOS version and upgrading as required.
- Installing 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 [Installing Cisco Vision Dynamic Signage Director for the First Time, page 17](#).

Upgrading an Existing Server Already Running Cisco StadiumVision Director or Cisco Vision Dynamic Signage Director

You can upgrade an existing server already running Cisco StadiumVision Director Release 4.1 or Cisco Vision Dynamic Signage Director software using an upgrade ISO image file available from Cisco.com and using the upgrade option from the Software Manager in the web browser interface.

The upgrade process for an existing Cisco Vision Dynamic Signage Director server involves the following tasks:

- Upgrading the Cisco Vision Dynamic Signage Director software.
- Upgrading the media player firmware.

For detailed information, see [Using the Software Manager to Upgrade Cisco Vision Dynamic Signage Director Software, Language Packs, and Fonts, page 29](#).



Installing Cisco Vision Dynamic Signage Director for the First Time

First Published: 2016-10-10

This module describes how to install the Cisco Vision Dynamic Signage Director Release software on your newly-purchased Platform 3 server hardware from a full ISO image, as well as the requirements for installing Cisco Vision Dynamic Signage 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 Vision Dynamic Signage 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 Vision Dynamic Signage Director.

This module includes the following topics:

- [Prerequisites, page 17](#)
- [Installation Tasks, page 18](#)
- [What To Do Next, page 28](#)

Prerequisites

Refer to the [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#) 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

Caution: Do not alter the RAID configuration prior to installation.

- 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 [Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server, page 67](#).

Installation Tasks

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

Note: The Cisco Vision Dynamic Signage 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 Vision Dynamic Signage 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 Vision Dynamic Signage Director, and also has Java 1.6 or later installed.
 - You have a laptop connection with access to the Cisco Vision Dynamic Signage Director network.
 - You have the IP address of the CIMC interface on the Cisco Vision Dynamic Signage Director server.
 - You have the CIMC interface login credential. The default credential is **admin** and **password**.

Virtualized Server Environment

Installing Cisco Vision Dynamic Signage Director in a virtualized server environment includes setting up your server environment, running the full ISO for Cisco Vision Dynamic Signage Director, and configuring the network. For more information see [Hardware Prerequisites, page 12](#) and [Installing on a Virtual Server for the First Time, page 14](#) in [Getting Started Installing or Upgrading Cisco Vision Dynamic Signage Director, page 11](#).

Installation Tasks

Note: This section includes the tasks to install Cisco Vision Dynamic Signage Director for the first time on a Platform 3 server.

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

- [Downloading the ISO Files from Cisco.com, page 19](#) (required)
- [Logging Into the CIMC Interface, page 19](#) (required)
- [Verifying the Minimum CIMC Firmware Version for Cisco Vision Dynamic Signage Director, page 21](#) (required)
- [Launching the KVM Console, page 22](#) (required)
- [Mapping the Cisco Vision Dynamic Signage Director ISO Image, page 23](#) (required)
- [Installing the Cisco Vision Dynamic Signage Director ISO Image, page 25](#) (required)
- [Configuring the Network Setup, page 25](#) (required)

Downloading the ISO Files from Cisco.com

You are eligible to obtain information about how to access the Cisco Vision Dynamic Signage 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 on page 19](#)).

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

[Table 1 on page 19](#) shows the filename conventions used for full ISO images for the Cisco Vision Dynamic Signage Director server.

Table 1 ISO Filename Conventions

Hardware Product ID	Filename Convention ¹
SV-PLATFORM3=	<ul style="list-style-type: none"> ■ SV-DIRECTOR-FULL-5.0.0-<i>nnn</i>.x86_64.iso ■ SV-DIRECTOR-FULL-5.0.0-<i>nnn</i>.x86_64.iso.md5sum

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.

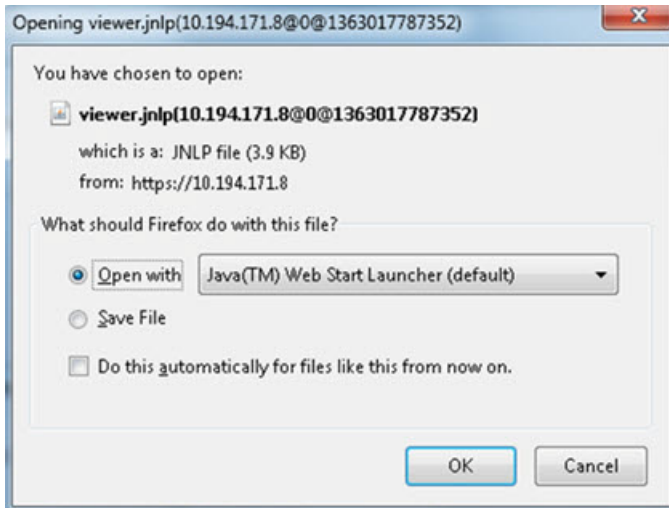
Logging Into the CIMC Interface

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

1. From a laptop connection with access to the Cisco Vision Dynamic Signage 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`

2. If prompted, click **OK** to open the Java viewer.jnlp as shown in [Figure 1 on page 20](#):

Figure 1 Opening viewer.jnlp File

3. If a security dialog box displays, do the following:

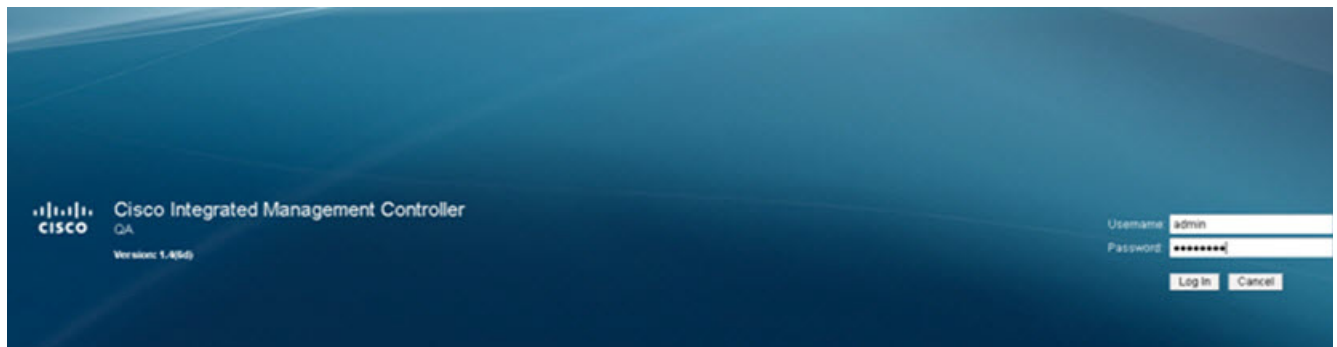
- a. (Optional) Select the checkbox to accept all content from Cisco.
- b. Click **Yes** to accept the certificate and continue.
- c. Confirm any additional security certificate exceptions.

4. At the CIMC login screen, note the firmware version displayed ([Figure 2 on page 20](#)).

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

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

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

Figure 2 CIMC Login Screen

6. Click **Log In**.

Verifying the Minimum CIMC Firmware Version for Cisco Vision Dynamic Signage Director

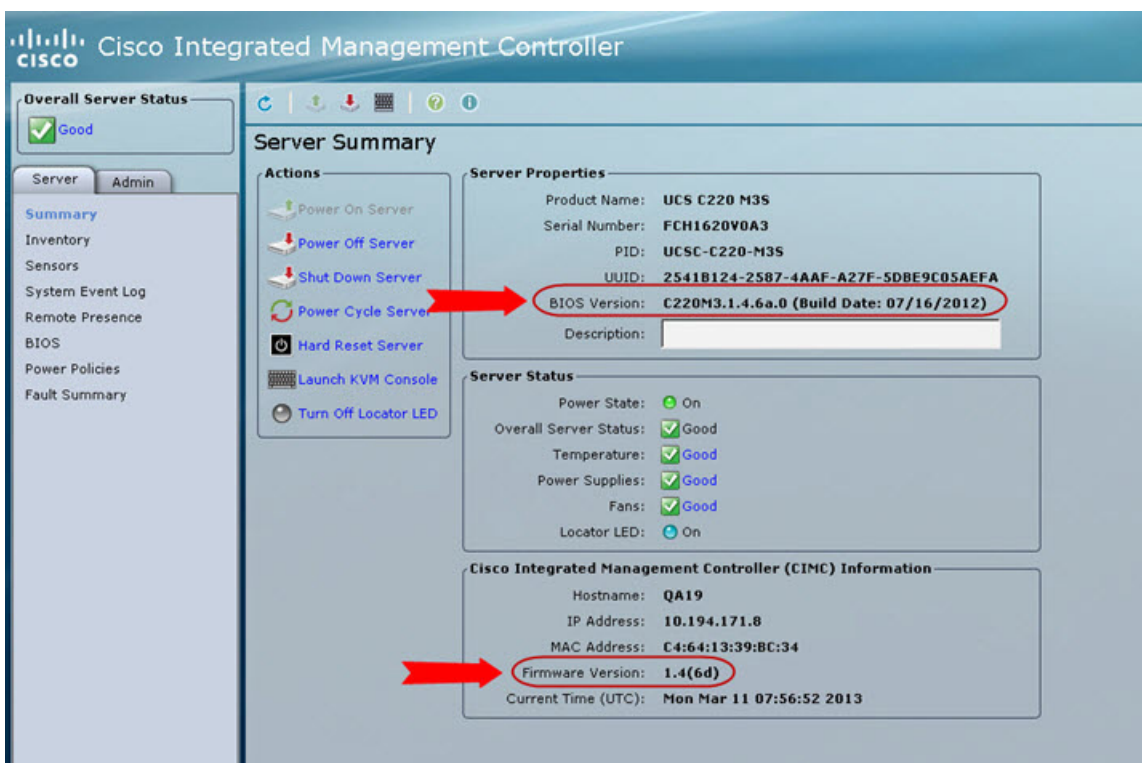
Before you begin, see the “Cisco Vision Dynamic Signage Director Server Support” section of the [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#) to find the CIMC/BIOS versions tested for the Platform 3 server.

To verify the minimum CIMC firmware version for Cisco Vision Dynamic Signage Director, complete the following steps:

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 Vision Dynamic Signage Director release.

Figure 3 on page 21 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



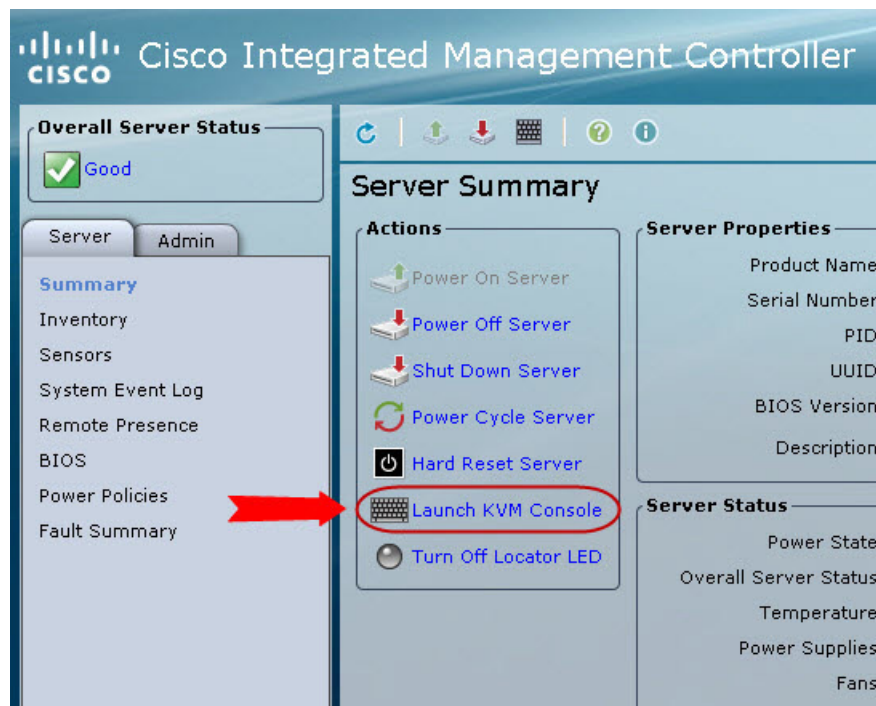
2. If necessary to upgrade the CIMC/BIOS firmware on the Platform 3 server, refer to [Appendix C: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server](#), page 67.

Launching the KVM Console

To launch the KVM console, complete the following steps:

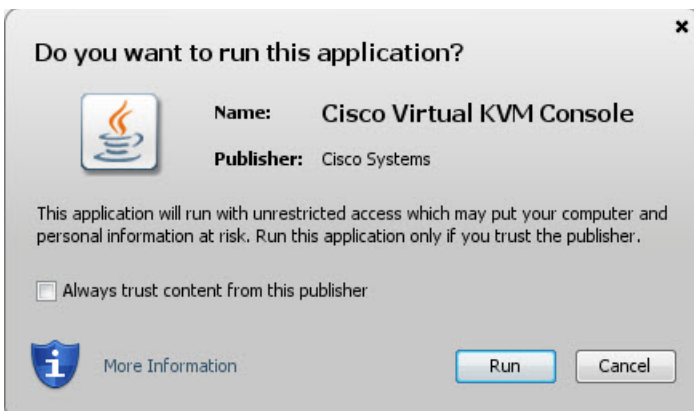
1. From the CIMC console Actions box, click **Launch KVM Console**.

Figure 4 Launch KVM Console

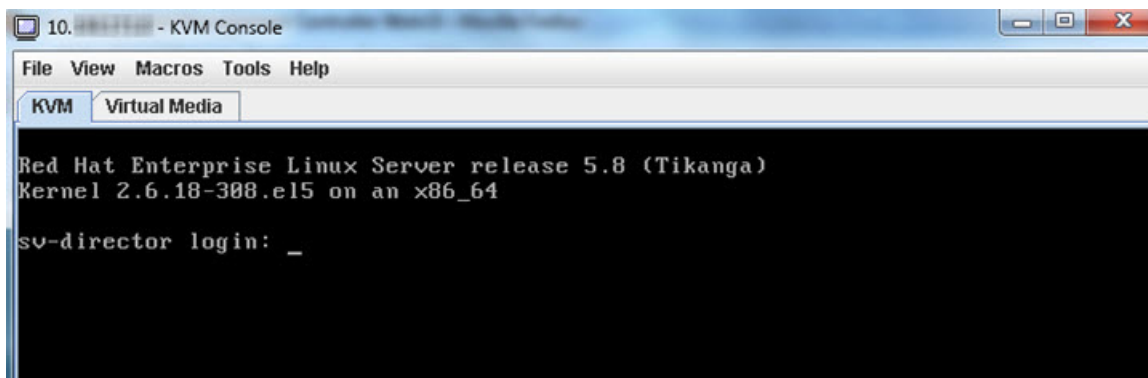


Note: You can also click the keyboard in the icon bar at the top of the console to launch the KVM console.

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.
3. At the Cisco KVM Virtual Console confirmation box (Figure 5 on page 23), do the following:
 - a. (Optional) Select the checkbox to accept all content from Cisco.
 - b. Click **Run**.

Figure 5 Cisco Virtual KVM Console Confirmation

- c. Confirm any additional security certificate exceptions.
4. The KVM Console window is displayed with a login prompt. Do not log in ([Figure 6 on page 23](#)).

Figure 6 Cisco KVM Virtual Console Login Screen

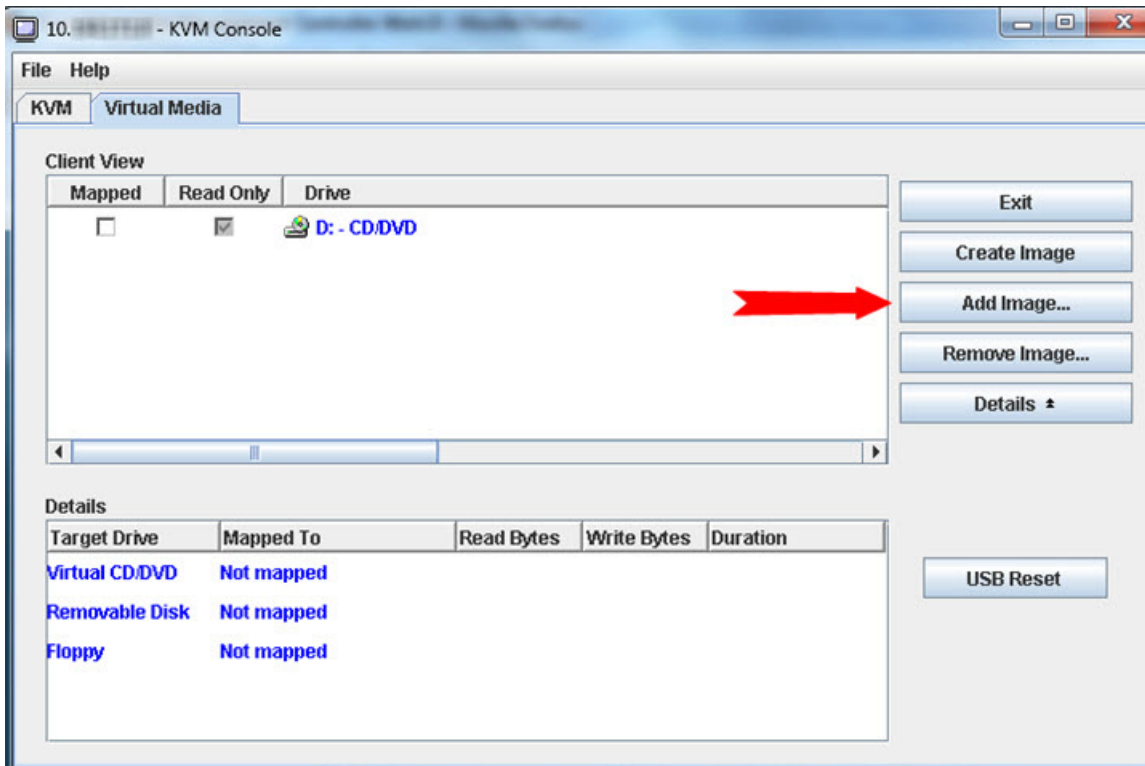
Mapping the Cisco Vision Dynamic Signage Director ISO Image

Note: This step requires that you have downloaded the Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director ISO image, complete the following steps:

1. From the KVM console window, click the **Virtual Media** tab.
2. From the Virtual Media screen, click **Add Image** ([Figure 7 on page 24](#)).

Figure 7 Virtual Media Screen



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.

4. In the Client View box, mark the checkbox under the Mapped column to select the ISO source.

5. Confirm that the Virtual CD/DVD has been added under the Virtual Media tab, Virtual CD/DVD.

6. In the Details box, double-click on Virtual CD/DVD, and observe the read bytes counter increasing (refreshes read bytes).

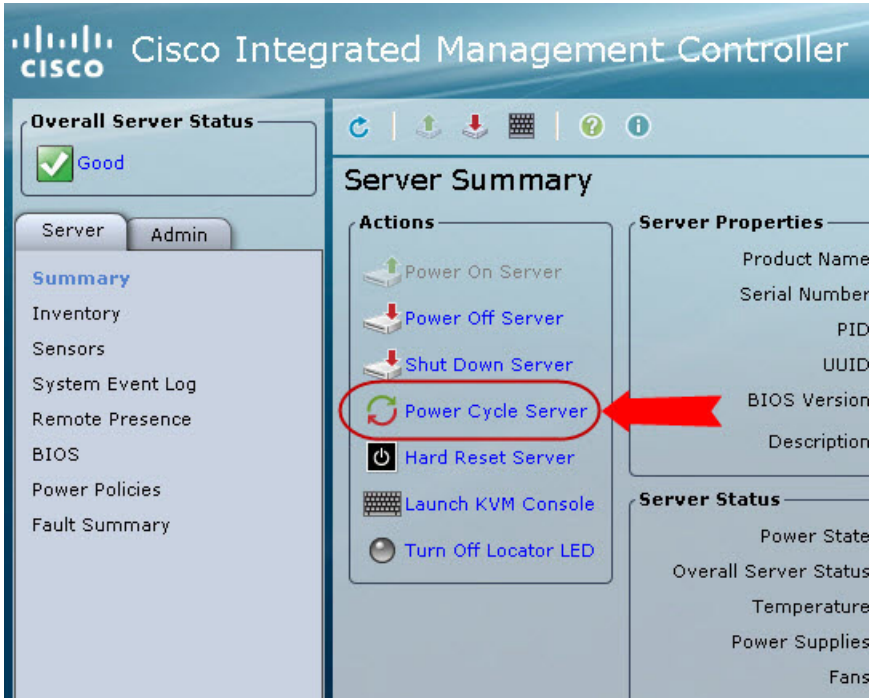
7. Click the KVM tab and minimize the window but do not exit.

Installing the Cisco Vision Dynamic Signage Director ISO Image

To install the Cisco Vision Dynamic Signage Director ISO image, complete the following steps:

1. In the Actions box on the CIMC console, click **Power Cycle Server** (Figure 8 on page 25).

Figure 8 Power Cycle Server From the CIMC Console



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

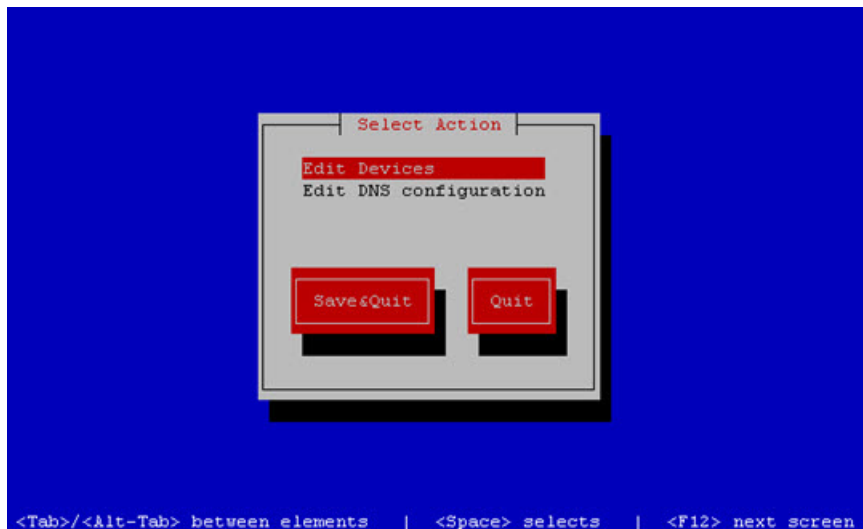
Configuring the Network Setup

To configure the network setup, complete the following steps:

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

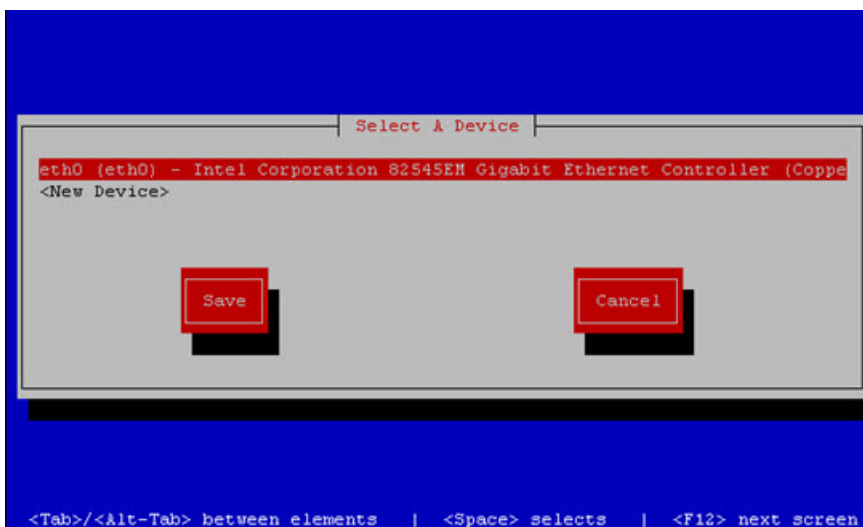
Note: The Linux Setup Agent window will be available for 60 minutes before closing. If you miss responding to the network setup as part of the ISO installation, you can go to the TUI **Main Menu** > **System Settings** > **Network Settings** to complete the same network configuration. However, you will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

2. In the Select Action screen (Figure 9 on page 26), select **Edit Devices** and press **Enter**.

Figure 9 Select Action Screen

Note: 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.

3. In the Select a Device screen (Figure 10 on page 26), select **eth0** and press **Enter**.

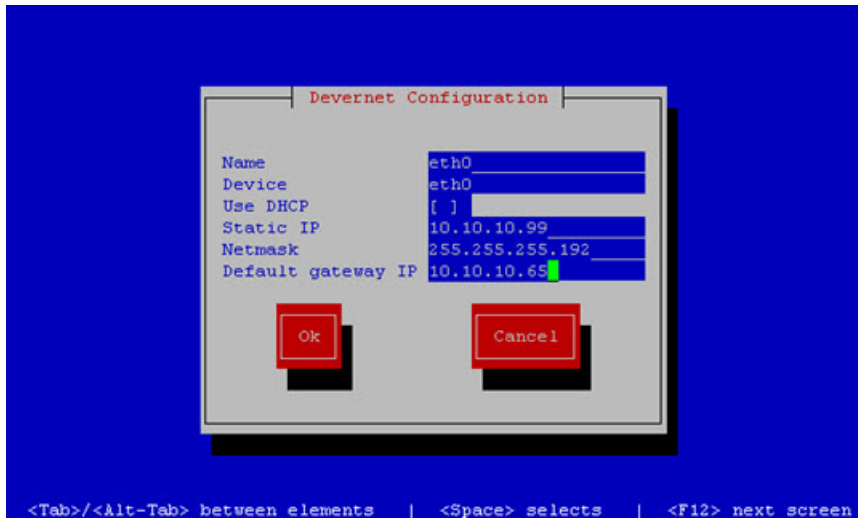
Figure 10 Select a Device Screen

The Ethernet Configuration screen is displayed.

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

4. In the Ethernet Configuration screen (Figure 11 on page 27), do the following:

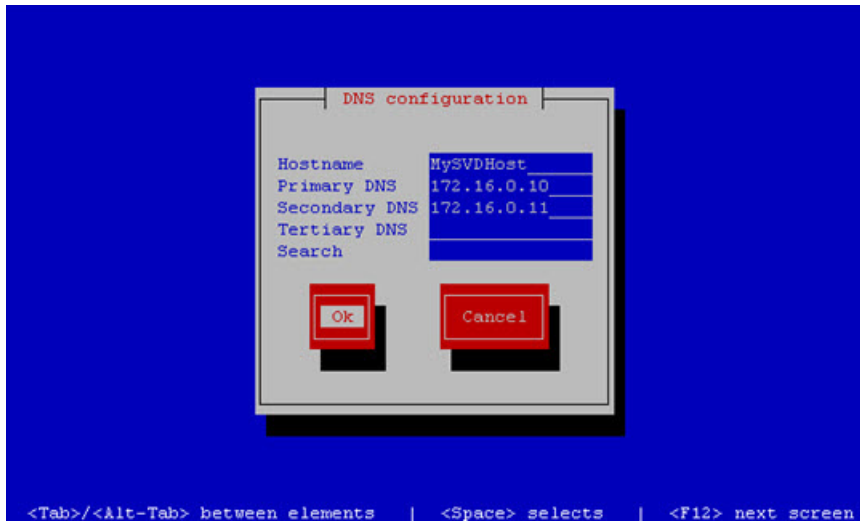
Figure 11 Devernet Configuration Screen



- 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 Vision Dynamic Signage Director Server.
 - c. This should be a different IP address than what you configured for the CIMC interface.
 - d. Press the tab key to go to the Netmask line. Type the network mask for the IPv4 address.
 - e. (Optional) In the Default gateway IP line, type the address of the default gateway of your network.
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.
 6. Press the Tab key until the **Save** button is highlighted and press **Enter**.
You return to the Select Action screen.
 7. Press the down arrow key to select the **Edit DNS configuration** option and press **Enter**.
The DNS configuration screen is displayed.
 8. In the DNS configuration screen ([Figure 12 on page 28](#)), 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



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

You return to the Select Action screen.

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 Vision Dynamic Signage Director software, do the following:

Note: For initial deployments of the SV-4K and DMP-2K media players, be sure to follow the instructions in the [Cisco Vision Deployment Guide for SV-4K and DMP-2K Media Players: Dynamic Signage Director](#).

- Upgrade the SV-4K firmware (required).

See [Upgrading the SV-4K and DMP-2K Firmware](#), page 51.

- Go to the “[Configuring Cisco StadiumVision Director Server System Settings](#)” module of the [Cisco Vision Administration Guide: Dynamic Signage Director](#) to complete initial setup of the server, and do the following:

- Configure NTP on Cisco Vision Dynamic Signage Director 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 Vision Dynamic Signage 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 Vision Dynamic Signage Director.



Using the Software Manager to Upgrade Cisco Vision Dynamic Signage Director Software, Language Packs, and Fonts

First Published: 2016-10-10

Revised: 2017-05-16

This module describes using the Cisco Vision Dynamic Signage 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.
- Install language packs and fonts.

This module includes the following topics:

- [Best Practices, page 29](#)
- [Prerequisites, page 30](#)
- [Information About Using the Software Manager to Update Existing Cisco Vision Dynamic Signage Director Software, page 30](#)
- [Upgrade Tasks, page 31](#)
- [Installing Language Packs, page 34](#)
- [Installing Fonts, page 35](#)
- [What to Do Next, page 37](#)

Best Practices

Caution: Do not alter the RAID configuration prior to upgrade.

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

- Choose an appropriate down time to perform the upgrade on the 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.
- See [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#) 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 Vision 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 Vision Dynamic Signage Director software.

Prerequisites

Caution: For any release 4.1 systems or releases prior to 5.0 SP2, imported logos as channel icons are not backed up (the channel icons will disappear during the upgrade procedure of backing up the primary and restoring to secondary if the icons are not already on the secondary server). A maintenance patch (SV-DIRECTOR-HOTFIX-CSCvd35309) is needed on both the primary and secondary servers before you run any backup and restore operations as part of an upgrade from any 4.1 release, or to Release 5.0 SP2. Otherwise, you will need to re-import the logos after upgrading to Release 5.0 SP2.

- 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.

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 Vision Dynamic Signage Director Server, see the “[Backing Up and Restoring Cisco Vision Dynamic Signage Director Servers](#)” module of the [Cisco Vision Administration Guide: Dynamic Signage Director](#).

- Promote the secondary server to primary.

For more information about promoting a secondary server to primary, see the “[Configuring Failover Between Redundant Cisco Vision Dynamic Signage Director Servers](#)” module of the [Cisco Vision Administration Guide: Dynamic Signage Director](#).

- 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 Vision Dynamic Signage 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 4.1.0-508 (SP1) or higher.
- You have the IP address for the 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 Vision Dynamic Signage Director. For more information about the latest supported browsers, see [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#).

Information About Using the Software Manager to Update Existing Cisco Vision Dynamic Signage Director Software

The ISO upgrade procedure for Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director server using the Software Manager.

Upgrade Tasks

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 Vision Dynamic Signage 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.

Note: To conserve disk space if you have installed language packs in your current Release 4.1 system, use the Software Manager prior to upgrade to remove the Release 4.1 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 Vision Dynamic Signage Director server, complete the following tasks:

- [Downloading ISO Upgrade Files from Cisco.com, page 31](#) (required)
- [Uploading and Installing an ISO Upgrade File on the Cisco Vision Dynamic Signage Director Server, page 32](#) (required)
- [Rebooting the Cisco Vision Dynamic Signage Director Server, page 33](#) (required)
- [Installing Language Packs, page 34](#) (as required)
- [Reactivating Custom Fonts, page 33](#) (as required)
- [Staging the Flash Template for Cisco DMP 4310G Devices, page 34](#) (required)
- [Deploying Global DMP Settings for the Cisco DMP 4310G, page 34](#) (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 Vision Dynamic Signage Director server.

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

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.**

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.

Upgrade Tasks

Table 1 ISO Upgrade Filename Conventions

Hardware Product ID	Filename Convention ¹
SV-PLATFORM3=	<ul style="list-style-type: none"> ■ SV-DIRECTOR-UPGRADE-5.0.0-<i>nnn</i>.x86_64.iso ■ SV-DIRECTOR-UPGRADE-5.0.0-<i>nnn</i>.x86_64.iso.md5sum

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.
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 Vision Dynamic Signage 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 Vision Dynamic Signage Director server. and to install the upgrade image.

Prerequisites

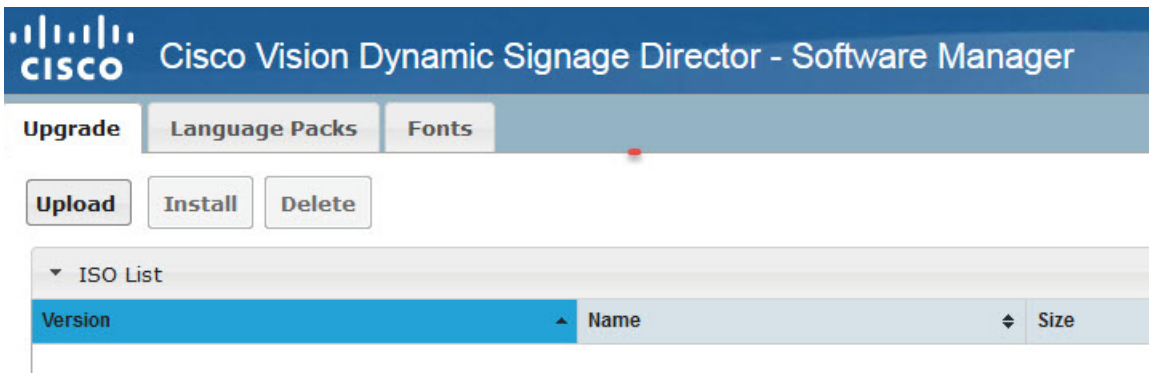
Be sure that you know the IP address of the server where you want to upload the file, and you have a supported browser version for Cisco Vision Dynamic Signage Director.

Task

To upload and install an ISO upgrade file on the Cisco Vision Dynamic Signage Director server, complete the following steps:

1. Log into Cisco Vision Dynamic Signage Director as an administrator.
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.
3. Click **Manage Software**.
4. From the **Upgrade** tab, click **Upload** (Figure 1 on page 33).

Figure 1 ISO File Selection and Upload



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.

6. Click **Install**.
7. The installation process begins, and status messages are displayed.
8. After the installation is complete, Cisco Vision Dynamic Signage Director services are restarted.

Rebooting the Cisco Vision Dynamic Signage Director Server

To reboot the Cisco Vision Dynamic Signage Director server, complete the following steps:

1. Log into the TUI as installer.
The TUI Main Menu is displayed.
2. Go to the **Cisco Vision Server Administration** menu.
3. Select **Reboot**.
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:

1. From the Cisco Vision Dynamic Signage Director main menu, click **Manage Software**.
2. From the Software Manager screen, click **Fonts**.

Installing Language Packs

3. Select the fonts to be activated.
4. Click **Activate Selected**.
5. (Cisco DMP 4310G only) Stage the Flash Template.

See [Staging the Flash Template for Cisco DMP 4310G Devices](#), page 34.

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 Vision Dynamic Signage Director Flash Template (.swf file) are deployed to the Cisco DMP 4310G, complete the following steps:

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

Note: 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.

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:

1. Go to the Management Dashboard.
2. From the DMP and TV Controls dashboard drawer, navigate to the following command path:
DMP and TV Controls > Global > Global DMP Settings.
3. Select all of the DMP devices where the command should be applied.
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 5.0 when they become available, after you have installed or upgraded to the required 5.0 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 Vision Dynamic Signage Director main menu.

To install language packs, complete the following steps:

1. Download the desired language pack from Cisco.com.
2. Log into Cisco Vision Dynamic Signage Director as an administrator.
3. From the main menu, click **Manage Software**.
4. From the Software Manager screen, click **Language Packs** ([Figure 2 on page 35](#)).

Installing Fonts

Figure 2 Language Packs Tab

Version	Filename	Size	Date	Hash	Status
4.0.0_4-1	sv-locale-gr_38-4.0.0_4-1.noarch.rpm	485.9 KB	Mon Jun 29 15:24:40 2015	0b028195077471c128734e446b75ca74	Never Version Installed
4.0.0_4-1	sv-locale-es_ES-4.0.0_4-1.noarch.rpm	487.8 KB	Mon Jun 29 15:24:34 2015	e56f5322e8290b04cdc9dea6f6f02af	Never Version Installed
4.0.0_3-1	sv-locale-es_ES-4.0.0_3-1.noarch.rpm	2.5 KB	Mon Jun 29 15:25:00 2015	09e00d0ff6520ac27ee258a439773e0	Never Version Installed
4.0.0_3-1	sv-locale-es_ES-4.0.0_3-1.noarch.rpm	489.7 KB	Mon Jun 29 15:24:31 2015	48e4d3817f8be6c78247c7427b7789d	Never Version Installed
4.0.0_4-1	sv-locale-es_ES-4.0.0_4-1.noarch.rpm	484.6 KB	Mon Jun 29 15:24:52 2015	4c3a5edf75a5f50aee325184aac33cb0	Never Version Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	6.4 KB	Sat Apr 9 10:00:59 2016	94446a52909c71d82013afa912bca7a3	Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	2.5 KB	Sat Apr 9 10:00:30 2016	40631a9f4f9a95914b0f5705970a29e14	Installed
4.1.0_2-1	sv-locale-tr_TR-4.1.0_2-1.noarch.rpm	629.5 KB	Sat Apr 9 10:00:10 2016	b44241c68f9482c41549068164b4e9af	Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	484.1 KB	Sat Apr 9 09:59:52 2016	c838d2f1e15a591517a03b4a32e0252e	Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	545.2 KB	Sat Apr 9 09:59:30 2016	4ad5205c0f134f4c023e13437089f455	Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	490.0 KB	Sat Apr 9 09:59:15 2016	d61e7555e05c992b3c990a18a99d	Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	487.8 KB	Sat Apr 9 09:58:57 2016	264a0d420464b30187b2070e34ee1db	Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	490.5 KB	Sat Apr 9 09:58:44 2016	e1a97e9e5e3277274e823b7a7450c79	Installed
4.1.0_2-1	sv-locale-es_ES-4.1.0_2-1.noarch.rpm	490.3 KB	Sat Apr 9 09:58:29 2016	0e47eb2c29d1a31b173658f533145c5	Installed

5. Click **Upload**.

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.

7. Click **Install/Upgrade** to install the language pack.

Note: If using a secondary Cisco Vision Dynamic Signage Director server, the language pack should be installed on both the primary and secondary servers.

8. (Cisco DMP 4310G only) Stage the Flash Template.

See [Staging the Flash Template for Cisco DMP 4310G Devices](#), page 34.

9. (SV-4K and DMP-2K only) To transfer the locales to the SV-4K and DMP-2K media players, do the following:

a. From the Management Dashboard, go to:

DMP and TV Controls > DMP Install > Restore Default Settings

b. In the Select Devices panel, select the SV-4K and DMP-2K media player devices.

c. To execute the command, click the play (>) button located at bottom left of the panel.

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 [Installing Language Packs](#), page 34.

Installing Fonts

This section includes the following topics:

- [Guidelines for Installing Fonts, page 36](#)
- [Procedure, page 36](#)

Guidelines for Installing Fonts

Note: In Cisco StadiumVision Director Release 4.1 and later releases, 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 Vision Dynamic Signage 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.
- Fonts with style, or weight, or both are currently not supported in the Widgets tool.

If you need to use a font with these characteristics, in most cases you can use a font editor tool (such as FontForge) to alter the OS/2 fsSelection field (called “style map” in FontForge) in the font. Changing this to REGULAR in the bitfield (from BOLD + ITALIC, for example), is usually enough to get things working. After regenerating the font, re-upload and activate the font in Cisco Vision Dynamic Signage Director.

Procedure

To install fonts, complete the following steps:

1. Obtain the desired fonts.

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

2. Log into Cisco Vision Dynamic Signage Director as an administrator.
3. From the main menu, click **Manage Software**.
4. From the Software Manager screen, click **Fonts** ([Figure 3 on page 36](#)).

Figure 3 Fonts Tab

Name	Status	Filename	Size	Upload Date
Arial	Active	Arial.ttf		
OS2ICL	Active	OS2ICL.ttf	42.3 KB	Tue Jun 16 12:46:48 2015

5. Click **Upload**.

What to Do Next

6. In the Font Upload dialog box, do the following:
 - a. Click **Browse**.
 - b. Navigate to the location of your font file and click **Open**.
 - c. Click **Upload**.
7. Click the checkbox of the font to be activated.
8. Click **Activate Selected** to make the font available in Cisco Vision Dynamic Signage Director.

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

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](#).

What to Do Next

- Follow the steps in [Verifying the Upgrade, page 39](#) to verify that the upgrade process was successful.
- Use [Appendix A: Post-Upgrade Checklist, page 57](#) to be sure that you have completed the required verification steps.

What to Do Next



Verifying the Upgrade

First Published: 2016-10-10

Last Updated: 2016-11-30

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 39](#) (mandatory)
- [Clearing Expired Flash SWZ Files From Browser, page 40](#) (required)
- [Importing the Security Certificate, page 41](#) (required)
- [Logging Into Cisco Vision Dynamic Signage Director, page 42](#) (required)
- [Verifying the Control Panel and Other Menus, page 42](#) (required)
- [Verifying that Services are Running, page 42](#) (required)
- [Configuring the Media Player for VLAN Compliance Checking, page 43](#) (required)
- [Upgrading the DMP Firmware, page 45](#) (required)
- [Rebooting the DMPs, page 45](#) (required)
- [Verifying Media Players, Groups, and Zones in the Management Dashboard, page 45](#) (required)
- [Verifying the Multicast Configuration, page 46](#) (required)
- [Setting Up the Quest Venue Manager to Send Updates to Cisco Vision Dynamic Signage Director Server, page 46](#) (required if using Quest for commerce integration)
- [Completing the Post-Upgrade Checklist and Testing, page 49](#) (required)

Clearing the Browser Cache

Caution: It is critical that *all* Cisco Vision Dynamic Signage Director users clear their browser cache to prevent permanent database corruption and to be sure that you are running the latest version of Cisco Vision Dynamic Signage Director. Be sure to notify all users of the Cisco Vision Dynamic Signage 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:

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

The Clear Recent History dialog box appears.

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

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

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

Clearing Expired Flash SWZ Files From Browser

This section includes the following tasks:

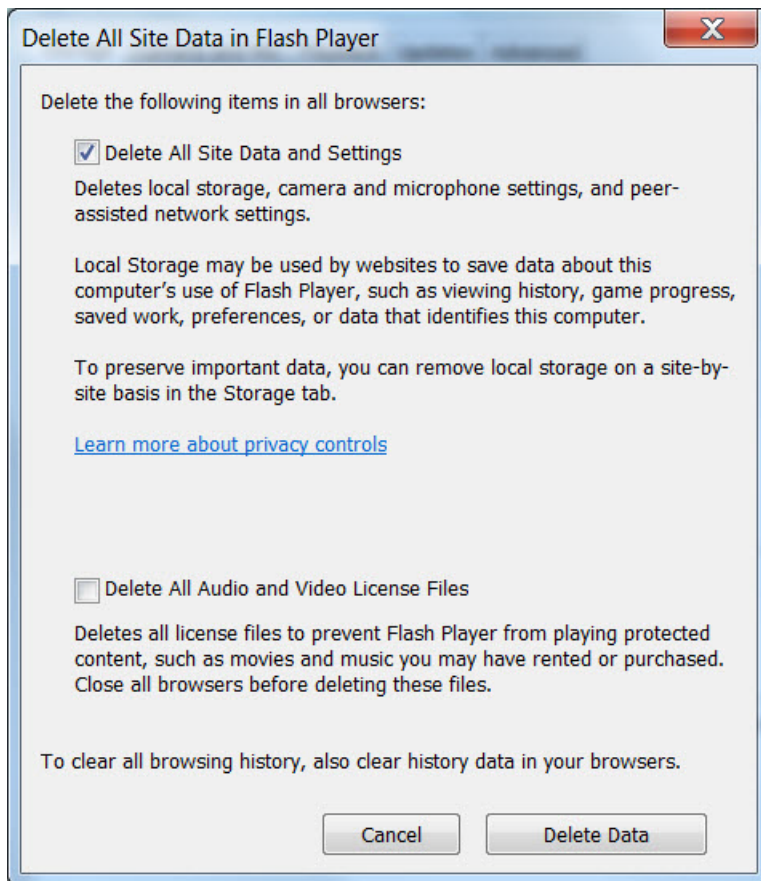
- [Clearing the Flash Player Cache, page 40](#)
- [Deleting Other Cached Files From Flash, page 41](#)

Clearing the Flash Player Cache

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

1. Go to **Control Panel > Flash Player**.
2. In the Flash Player Manager Settings dialog box (Storage tab), click **Delete All**.
3. Select Delete All Site Data and Settings ([Figure 1 on page 40](#)).

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



4. Click **Delete Data**.

Deleting Other Cached Files From Flash

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

1. Close the browser window.
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
```

Note: 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 Vision Dynamic Signage Director server for the first time using Mozilla Firefox, a security certificate warning will appear. Some Cisco Vision Dynamic Signage 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:

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

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

Logging Into Cisco Vision Dynamic Signage Director

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

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

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

or alternatively,

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

The Cisco Vision Dynamic Signage Director login screen appears.

2. Verify that the correct version is displayed.

Note: If your window is not displaying the correct version, be sure that you have cleared the browser cache as described in [Clearing the Browser Cache, page 39](#).

3. Type your Cisco Vision Dynamic Signage Director administrator login credentials and click **Log In**.

Note: When you first log into Cisco Vision Dynamic Signage Director, the default administrator username and password is *admin*.

The Cisco Vision Dynamic Signage Director Main Menu screen appears.

Verifying the Control Panel and Other Menus

To verify the control panel, complete the following steps:

1. From the Cisco Vision Dynamic Signage Director Main Menu, click **Control Panel**.

After a few moments of loading resources, the Cisco Vision Dynamic Signage Director Control Panel Setup screen will open in a new window.

2. Confirm the version and build number of your Cisco Vision Dynamic Signage Director software in the lower right corner of the Control Panel window.

Note: 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 [Clearing the Browser Cache, page 39](#).

3. Verify that you can open the other Cisco Vision Dynamic Signage Director screens and menus.

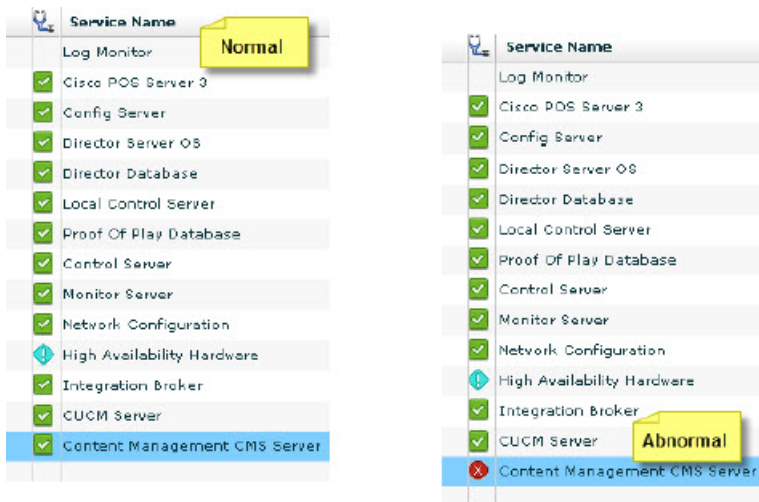
Verifying that Services are Running

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

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

1. From the Management Dashboard, expand the Service Alerts pane.
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



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:

1. From the Management Dashboard, go to **Dynamic Signage Director Configuration > System Configuration > Global DMP Settings**.
2. Do the following depending on your media player model:
 - For the DMP 4310G—Go to **4310 v5.x.x Settings** (Figure 3 on page 44).

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

The screenshot shows the Cisco Vision Dynamic Signage Director Management Dashboard. On the left, the navigation pane is expanded to 'Global DMP Settings (5)', with '4310 v5.x.x Settings' selected. The main panel displays the 'Dynamic Signage Director Configuration' table. A red arrow points to the 'Assigned VLAN' row, which has the value '\$svd_ignore'.

Configuration Property	Value
Enable Syslog Service	on
Syslog Collector	10.194.170.142
Event Notification	no
ciscocraft.start_fl_alpha	0
ciscocraft.start_fl_fullscreen	true
ciscocraft.fl_fullscreen	true
ciscocraft.start_fl_input	true
init.STARTUP_URL	file:///tmp/ftproot/usb_1/SvFlashTempla
ciscocraft.start_fl_url	file:///tmp/ftproot/usb_1/SvFlashTempla
ciscocraft.fl_failover_url	http://10.194.170.142:8080/StadiumVisi
Enable failover	false
Failover timeout	10000
init.version (DMP-4310)	5.4(1)RB(2P)
init.build	Mon Oct 6 07:03:30 PDT 2014 [b4652]
sigma.ptsTimer	60
sigma.ptsRange	1800120
ciscocraft.fl_colorkey_enable	0
Enable Medianet	yes
Assigned VLAN	\$svd_ignore

- For the SV-4K and DMP-2K—Go to **SV-DMP Common Settings** (Figure 4 on page 44).

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

The screenshot shows the Cisco Vision Dynamic Signage Director Management Dashboard. On the left, the navigation pane is expanded to 'Global DMP Settings (5)', with 'SV-DMP Common Settings' selected. The main panel displays the 'Dynamic Signage Director Configuration' table. A red arrow points to the 'Assigned VLAN' row, which has the value '\$svd_ignore'.

Configuration Property	Value
Standard Runtime Override Log Levels	
Subset Logging Addresses	
Subset Autorun Log Level	INFO
Subset Runtime Log Target	CONSOLE
Subset Runtime Default Log Level	INFO
Subset Runtime Override Log Levels	
Content sync multicast address	239.193.0.253
Content sync multicast port	50001
SV-4K, DMP-2K sync content transition delay	200
init.version (SV-4K, DMP-2K)	6.1.96
Runtime startup delay (seconds)	0
NTP Host	1.ntp.esl.cisco.com
NTP sync interval	3600
Timezone	PST
Closed caption standard.	NTSC_ATSC
Assigned VLAN	\$svd_ignore
Zone Based Video Wall Synchronization	true
Replay idle timeout	300000

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.
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 Vision Dynamic Signage Director release.

Note: If this is the initial upgrade of your system to Cisco Vision Dynamic Signage Director Release 5.0 software, a new firmware upgrade and configuration for the SV-4K and DMP-2K firmware is required. Follow the steps in [Upgrading the SV-4K and DMP-2K Firmware, page 51](#).

Rebooting the DMPs

After an upgrade of the Cisco Vision Dynamic Signage 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 5.0 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 5.0 to another version of Release 5.0 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 45](#).

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 [Configuring the Media Player for VLAN Compliance Checking, page 43](#).

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

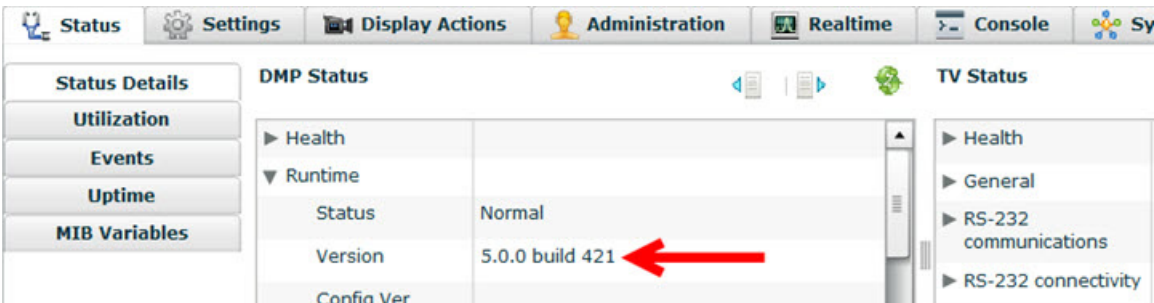
1. Go to the Management Dashboard and verify that all of your groups, zones and media players are present and in the green state.
2. From the DMP and TV Controls dashboard drawer, run the Get Status command on all devices to update Cisco Vision Dynamic Signage Director’s record of MAC addresses:

DMP and TV Controls > Monitoring > Get Status.

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.

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



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**.
6. Run Get Status to check the device state after the change.
7. Investigate any devices that are not in “Normal” state.

Verifying the Multicast Configuration

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

The multicast group address for Cisco Vision Dynamic Signage 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 Vision Server Administration Guide: Dynamic Signage Director](#).

To verify or configure the multicast addressing for Cisco Vision Dynamic Signage Director, complete the following steps:

1. From the Management Dashboard, select **Tools > Advanced > Registry**.
2. Scroll to the “MulticastHostPort” registry key in the Parameters list and confirm the entry for the registry.
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`.

4. Click **Apply**.

Setting Up the Quest Venue Manager to Send Updates to Cisco Vision Dynamic Signage Director Server

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

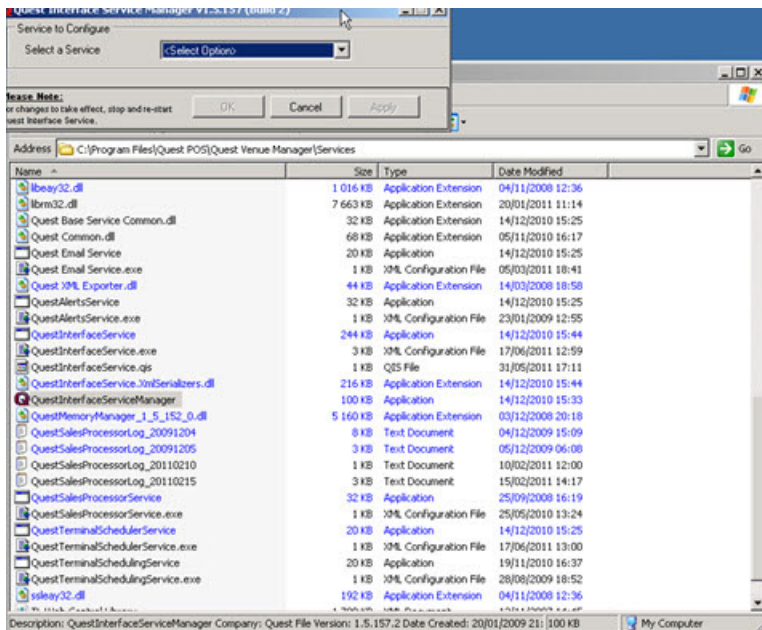
The steps described in this section assume that Quest has the notification service installed and enabled.

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

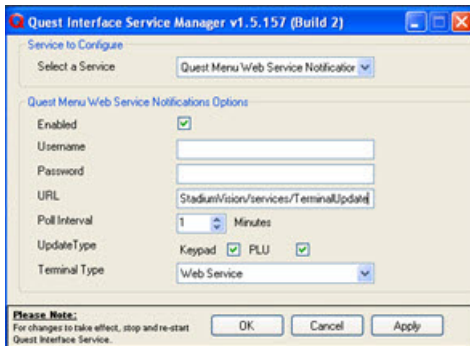
To set up the Quest Venue Manager to send updates to the Cisco Vision Dynamic Signage Director server, complete the following steps:

1. Access the Quest server.
2. Go to the C:\Program Files\Quest POS\Quest Venue Manager\Services directory.
3. Start the executable application program named “QuestInterfaceServiceManager” (Figure 5 on page 47).

Figure 5 QuestInterfaceServiceManager Application



4. When the Quest Interface Service Manager application window opens, specify the following options (Figure 6 on page 48):
 - a. In the Select a Service box, choose the **Quest Menu Web Service Notification**.
 - b. Select the **Enabled** checkbox so a checkmark appears.
 - c. In the URL box, enter “**http://svd:8080/StadiumVision/services/TerminalUpdate**”.
 - d. In the Poll Interval box, select **1** minute.
 - e. Select the **Keypad** and **PLU** update checkboxes so a checkmark appears.
 - f. In the Terminal Type box, select **Web Service**.

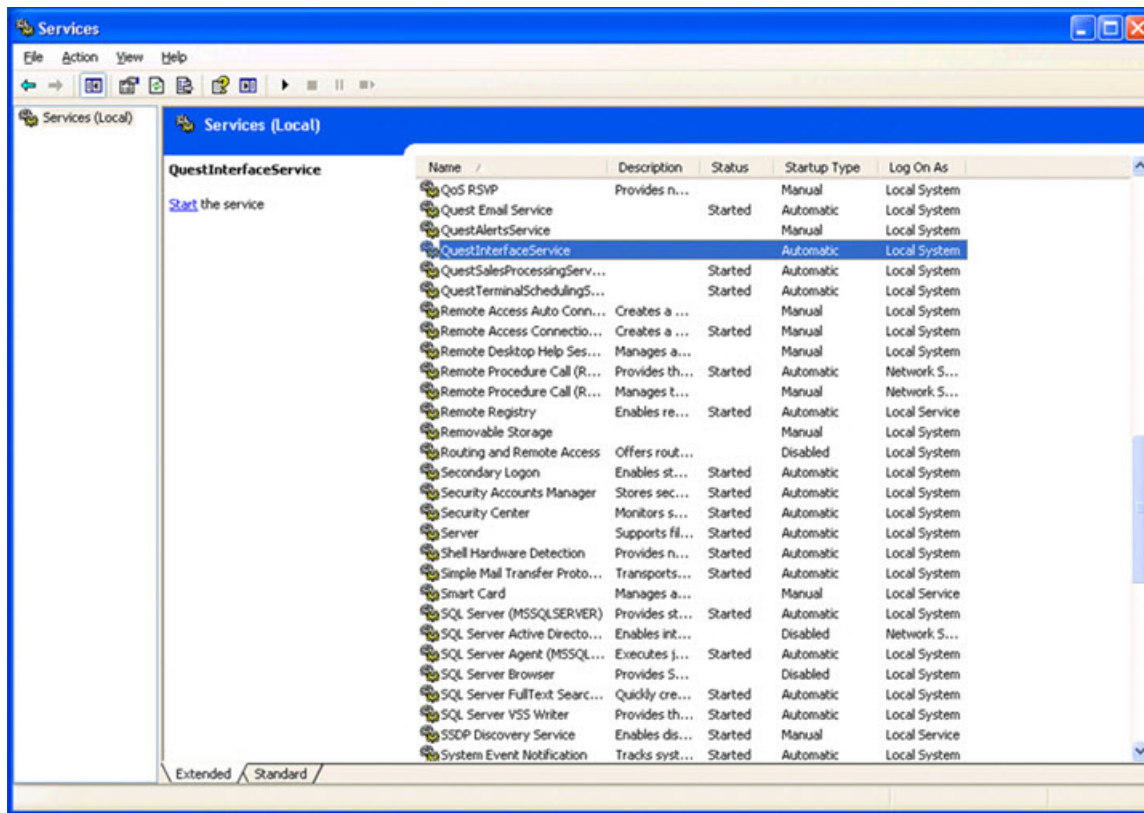
Figure 6 Select a Service to Configure

5. Click **OK**.

6. Restart the windows service to implement the configuration by completing the following steps:

- a. From the Quest Server, click **Start > Run...**
- b. When the Run dialog box opens, type **“services.msc”**.
- c. Find the Quest Interface Service and restart it ([Figure 7 on page 49](#)).

Figure 7 Restart the Quest Interface Service



Completing the Post-Upgrade Checklist and Testing

Use the [Appendix A: Post-Upgrade Checklist, page 57](#) to be sure that you have completed the required verification steps.



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

First Published: 2016-10-10

Revised: 2017-05-16

Note: This module describes how to upgrade the firmware for Cisco Vision Dynamic Signage Director Release 5.0. If you are deploying an SV-4K or DMP-2K media player for the first time, see also [Cisco Vision Deployment Guide for SV-4K and DMP-2K Media Players: Dynamic Signage Director](#).

Caution: Immediately after installing Cisco Vision Dynamic Signage Director Release 5.0, 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 Vision Dynamic Signage 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 and later releases, 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 Vision Dynamic Signage Director Release 5.0.

An auto-registration configuration requirement ensures 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 5.0.

Contents

- [Prerequisites, page 51](#)
- [Provisioning Tasks, page 52](#)

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.

Provisioning Tasks

- You have read the [Release Notes for Cisco Vision Dynamic Signage Director Release 5.0](#) to obtain the latest information and to verify the supported SV-4K and DMP-2K 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 52](#) (required)
- [Uploading the SV-4K and DMP-2K Firmware to Cisco Vision Dynamic Signage Director, page 52](#) (required)
- [Configuring the SV-4K and DMP-2K for Auto-Registration, page 54](#) (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 Vision Dynamic Signage Director software.

Note: Be sure to download the firmware to a device that you also can use to access the Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director, you must download the firmware image separately from a password-protected site and then upload it to Cisco Vision Dynamic Signage 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 Vision Dynamic Signage Director

After you have obtained the SV-4K/DMP-2K firmware image from the external vendor, you must upload the image to Cisco Vision Dynamic Signage Director.

Caution: You must be sure that the following two firmware versions are uploaded to the Cisco Vision Dynamic Signage Director server:

Base firmware version—5.1.68.1

Production firmware version—6.1.105 (Release 5.0.0-421 SP1 and later) or 6.1.96 (Release 5.0.0-320 and earlier)

Provisioning Tasks

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 Vision Dynamic Signage Director auto-registration settings. If the firmware versions do not match, the SV-4K or DMP-2K initiates a firmware upgrade automatically.

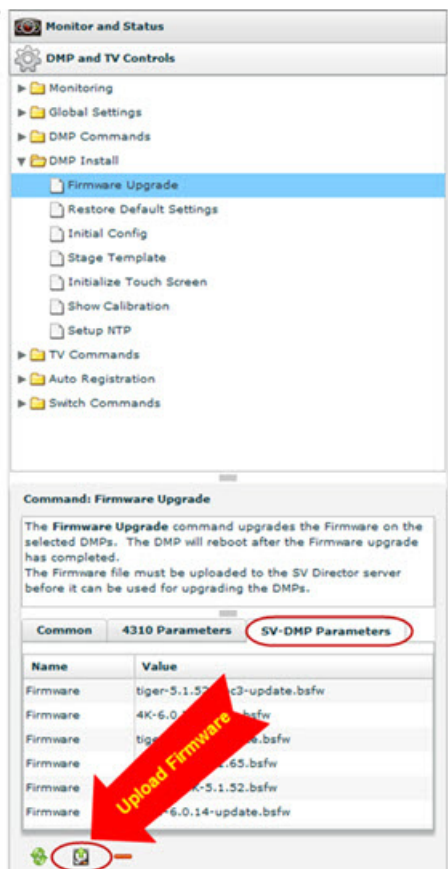
To upload the SV-4K and DMP-2K firmware, complete the following steps:

1. From the device where you downloaded the firmware, log into Cisco Vision Dynamic Signage Director as an administrator.
2. From the Management Dashboard, go to:

DMP and TV Controls > DMP Install > Firmware Upgrade

3. Select the **SV-DMP Parameters** tab and click the upload icon (Figure 1 on page 53).

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



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 Vision Dynamic Signage Director, and then configured in the auto-registration settings.

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

1. From the Management Dashboard, go to:

SV Director Configuration > System Configuration > Auto Registration Settings.

2. In the Configuration Property panel, find and configure the following properties shown in and according to [Table 1 on page 55](#).

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.

Note: 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

Dynamic Signage Director Configuration	
Configuration Property	Value
Enable Auto Registration	false
Enable Auto Provisioning	false
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-6.1.96.bsfw
init.version (SV-4K, DMP-2K)	6.1.96
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)	
init.version (DMP-4310)	5.4(1)RB(2P
init.build	Mon Oct 6 0
Ignore mibevt MIB variables	yes

Provisioning Tasks

Table 1 Required Firmware Properties for the SV-4K and DMP-2K in Release 5.0

Release Number	Firmware Property	Value for Release
5.0.0-421 (SP1) and later	Firmware image to use (SV-4K, DMP-2K)	DMP-SV4K-6.1.105.bsfw
	init.version (SV-4K, DMP-2K)	6.1.105
5.0.0-320 (and earlier)	Firmware image to use (SV-4K, DMP-2K)	DMP-SV4K-6.1.96.bsfw
	init.version (SV-4K, DMP-2K)	6.1.96
All 5.0 Releases	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. Note: Contact your Cisco Systems representative for information about how to obtain the 5.1.68.1 firmware.
All 5.0 Releases	base.version (SV-4K, DMP-2K)	5.1.68.1

3. Save the changes.

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 Vision Deployment Guide for SV-4K and DMP-2K Media Players: Dynamic Signage Director](#).



Appendix A: Post-Upgrade Checklist

First Published: 2016-10-10

Last Updated: 2016-11-30

The following checklist is useful to properly verify operation of the system after you upgrade your software on a Cisco Vision Dynamic Signage 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"> a. Clear the browser cache. b. Close all browser windows and wait for 10 seconds before restarting. Caution: Notify all Cisco Vision Dynamic Signage Director users about the mandatory requirement to clear their browser cache and to shutdown/restart the browser software before accessing the latest Cisco Vision Dynamic Signage Director software.	<input type="checkbox"/>
3. Verify that the Control Panel shows the Cisco Vision Dynamic Signage 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"/>
9. Go to the Services Alert window in the Management Dashboard and make sure that all relevant services are green. Note: 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.	<input type="checkbox"/>
10. Verify that SV-4K and DMP-2K devices have been rebooted and are running the latest system runtime version. Note: A manual reboot is required if a DMP firmware upgrade was not required for your release.	<input type="checkbox"/>
11. Verify that all DMPs and TVs in the Management Dashboard are green.	<input type="checkbox"/>

List Item	Checkoff
12. Start an existing event script and validate that screens display the expected content.	<input type="checkbox"/>
13. Stop the event script and validate that screens are powered off.	<input type="checkbox"/>
14. Make a minor edit to the event script and make sure it can be saved.	<input type="checkbox"/>
15. Verify that you can push a new video file in the Content Management System (CMS) to the DMPs.	<input type="checkbox"/>
16. If using dynamic menu boards, make a change to a menu item and verify that the change is reflected on the menu board.	<input type="checkbox"/>
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.	<input type="checkbox"/>
18. (As needed for sites that schedule the CMSRestartTask) Delete the CMSRestartTask from the Scheduled Tasks area of the Management Dashboard. Note: In Cisco StadiumVision Director Release 4.1 and later releases, the CMS is automatically restarted after a backup is run.	<input type="checkbox"/>
19. Perform a server backup for the upgrade configuration.	<input type="checkbox"/>
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. For more information, see "Configuring Failover Between Redundant Cisco Vision Dynamic Signage Director Servers" module in Cisco Vision Administration Guide: Dynamic Signage Director .	<input type="checkbox"/>
21. After you perform failback, be sure that you reconfigure your backup and restore environment using the Text Utility Interface (TUI).	<input type="checkbox"/>



Appendix B: Port Reference

First Published: 2016-10-10

The following tables identify the default ports used by Cisco Vision Dynamic Signage Director:

- [Cisco Vision Dynamic Signage Director Ports, page 59](#)
- [Cisco Vision Dynamic Signage Director Remote Ports, page 61](#)
- [Media Player Ports, page 62](#)

Cisco Vision Dynamic Signage Director Ports

The Cisco Vision Dynamic Signage Director ports are divided into tables for input and output ports.

Cisco Vision Dynamic Signage Director Input Ports

[Table 1 on page 59](#) lists the input ports used by all Cisco Vision Dynamic Signage Director servers.

Table 1 Cisco Vision Dynamic Signage 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).

Cisco Vision Dynamic Signage Director Ports

Table 2 on page 60 lists the additional input ports used by Cisco Vision Dynamic Signage Director server instances only during troubleshooting access from a PC.

Table 2 Cisco Vision Dynamic Signage 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 (Dynamic Signage Director as NTP client).
DMP	UDP	514	Syslog	Proof of play, Alerts.

Cisco Vision Dynamic Signage Director Output Ports

Table 3 Cisco Vision Dynamic Signage Director Output Ports

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage Director	FTP	21	FTP server	Fetching integration broker data over FTP. Playlist integration.
Dynamic Signage Director	TCP	22	ssh	DMP troubleshooting.
Dynamic Signage Director	TCP	80	httpd	Redirect to 443.
Dynamic Signage Director	UDP	123	NTP server	As request to NTP server, and as response to DMPs.
Dynamic Signage Director	TCP	443	httpd	4310 web UI.
Dynamic Signage Director	TCP	80 / 443		Fetching integration broker data. Fetching legacy ticker data.
Dynamic Signage Director	TCP	8000	autorun.brs	SV-4K control port (http)

Table 3 Cisco Vision Dynamic Signage Director Output Ports (continued)

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage Director	TCP	8089	tomcat	Configuration update for multicast rebroadcaster.
Dynamic Signage Director	UDP	varies (default:50001)	DMP flash template	Multicast commands (default is 239.192.0.254:50001).
Dynamic Signage Director	UDP	varies (default:50080-50099)	DMP flash template	Multicast commands when per-script multicast is enabled.

Cisco Vision Dynamic Signage Director Remote Ports

The Cisco Vision Dynamic Signage Director Remote ports are divided into tables for input and output ports.

Cisco Vision Dynamic Signage Director Remote Input Ports

[Table 4 on page 61](#) lists the input ports used by all Cisco Vision Dynamic Signage Director Remote servers.

Table 4 Cisco Vision Dynamic Signage 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 Dynamic Signage Director Remote.
External NTP server	UDP	123	NTP	Time synchronization response.
Dynamic Signage Director	TCP	8080	httpd	Multicast rebroadcaster configuration, content distribution.
Dynamic Signage Director	TCP	8089	tomcat	Configuration update for multicast rebroadcaster.
Dynamic Signage Director	UDP	Default: 7777	Multicast rebroadcaster	Unicast commands for the individual Dynamic Signage Director Remote server from the central Cisco Vision Dynamic Signage Director server.
Dynamic Signage Director	UDP	Default: 50001	Multicast rebroadcaster	Multicast commands (Default is 239.192.0.254:50001)

Cisco Vision Dynamic Signage Director Remote Output Ports

Table 5 on page 62 lists the output ports used by all Cisco Vision Dynamic Signage Director Remote servers.

Table 5 Cisco Vision Dynamic Signage Director Remote Output Ports

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage Director Remote	TCP	8080	httpd	Get multicast rebroadcaster from Dynamic Signage Director server.
Dynamic Signage Director	UDP	123	NTP	NTP requests initiated by Dynamic Signage Director Remote to its NTP server.
Dynamic Signage Director Remote	UDP	Default: 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 62](#)
- [Input Ports—DMP 4310G Only, page 63](#)
- [Input Ports—SV-4K and DMP-2K Only, page 63](#)
- [Common Media Player Output Ports, page 64](#)
- [Output Ports—SV-4K and DMP-2K Only, page 65](#)

Common Media Player Input Ports

Table 6 on page 62 lists the input ports used by all media player models.

Table 6 Common Media Player Input Ports

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage Director	UDP	varies (default: 50001)	DMP flash template	Multicast commands (default is 239.192.0.254:50001)
Dynamic Signage 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 on page 62), Table 7 on page 63 lists the input ports only used by the Cisco DMP 4310G.

Table 7 DMP Input Ports

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage 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 Dynamic Signage Director.
Dynamic Signage Director	UDP	varies	DMP flash template	Multicast commands (default is 239.192.0.254:50001)
Dynamic Signage 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 on page 62), Table 8 on page 63 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)	—
Dynamic Signage Director	TCP	8000	SV-4K control and debugging web server	—

Media Player Ports

Table 8 SV-4K and DMP-2K Input Ports (continued)

Originator	Protocol	Port	Target Application	Usage
Laptop	UDP	161	SNMP service	Listening agent for SNMP management information. This port is only open when the SNMP service is enabled in Cisco Vision Dynamic Signage 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 on page 64 lists the output ports used by all media player models.

Table 9 Common Media Player Output Ports

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage 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.
Dynamic Signage 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 on page 64](#)), [Table 10 on page 65](#) lists the output ports used only by the SV-4K and DMP-2K media player.

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

Originator	Protocol	Port	Target Application	Usage
Laptop	UDP	161	SNMP service	This port is only open when the SNMP service is enabled in Cisco Vision Dynamic Signage 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.

Media Player Ports



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

First Published: 2016-10-10

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 Vision Dynamic Signage Director.

Note: 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.

This section includes the following topics:

- [CIMC Initial Configuration, page 67](#) (required)
- [CIMC Firmware Upgrade Guidelines, page 69](#) (as required)

CIMC Initial Configuration

This section includes the following topics:

- [Prerequisites, page 67](#)
- [CIMC Initial Configuration Summary, page 68](#)

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.

Note: This is a different IP address than the IP address that you configure for the eth0 network interface on the Cisco Vision Dynamic Signage Director 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.

CIMC Initial Configuration

- You have a laptop with access to the Cisco Vision network.
- Your computer meets the minimum browser and Flash player requirements for the Cisco Vision Dynamic Signage Director server, and also has Java 1.6 or later installed.

See the release notes for your Cisco Vision Dynamic Signage Director 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.)

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 Vision Dynamic Signage Director server after you have unpacked and inspected it and prepared it for installation.

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

	Description
	<p>Configuring the CIMC Interface</p> <p>Note: The instructions for configuring the CIMC interface are found in the “Initial Server Setup” topic of the “Installing the Server” chapter in the Cisco UCS C220 Server Installation and Service Guide.</p>
1.	During bootup, press F8 when prompted to open the BIOS CIMC Configuration Utility.
2.	Configure the CIMC interface with the following settings: <ul style="list-style-type: none"> ■ DHCP—Disabled. You must change this option to enter a static IP address. ■ CIMC IP—IPv4 address for your CIMC interface, with corresponding subnet mask. ■ VLAN—Dependent on client network. ■ Change the CIMC password. The default credential is admin and password.
3.	Press F10 to save your configuration and reboot the server.
	<p>Configuring the NIC Properties</p> <p>Note: Information about configuring the NIC properties are found in the “Initial Server Setup” topic of the “Installing the Server” chapter in the Cisco UCS C220 Server Installation and Service Guide.</p>
4.	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.
5.	Log into the CIMC console with username admin and the password that you configured in Step 2 .
6.	From the Admin tab, click Network , and go to the Network Settings page. <p>In the NIC Properties box configure the following settings and save your changes:</p> <ul style="list-style-type: none"> ■ NIC mode—Dedicated ■ NIC Redundancy—None
	<p>Configuring the Server Boot Order</p> <p>Note: 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 Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.4</p>
7.	From the Server tab, click BIOS .
8.	Configure the following boot order and save your changes: <ul style="list-style-type: none"> ■ Virtual CD/DVD ■ HDD

CIMC Firmware Upgrade Guidelines

This section includes the following topics:

- [Before You Begin, page 70](#)
- [Prerequisites, page 70](#)
- [CIMC/BIOS Firmware Upgrade Summary, page 71](#)

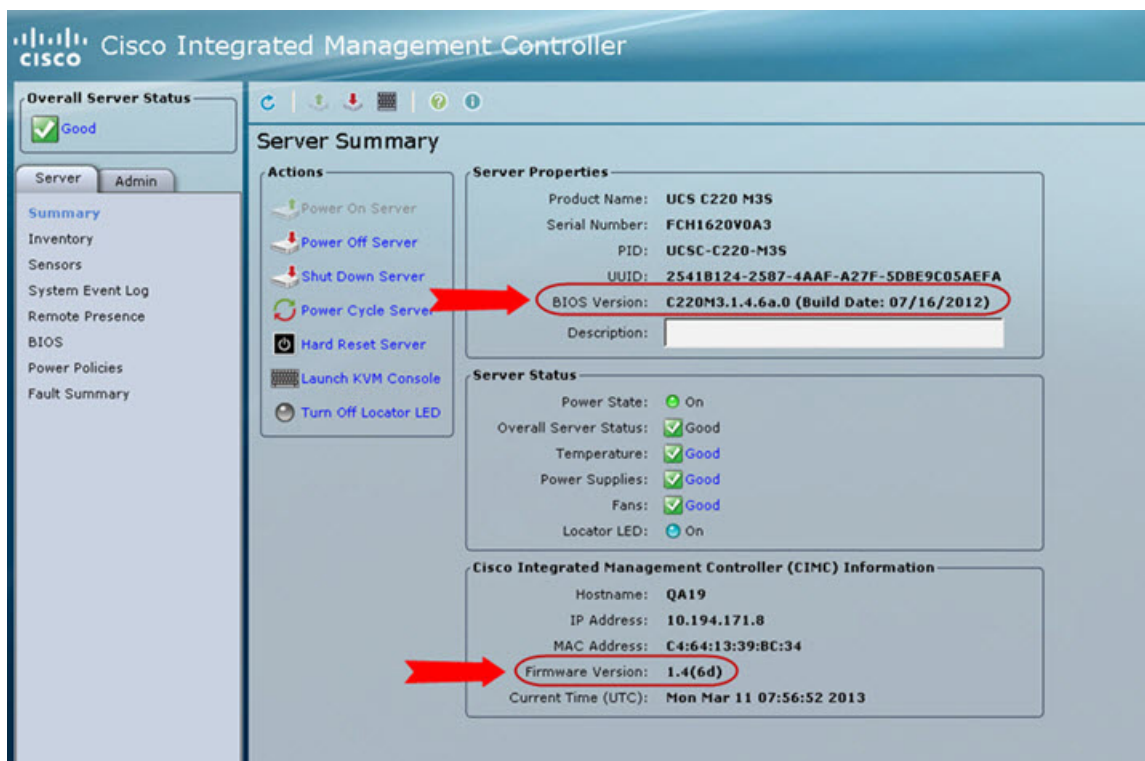
Before You Begin

See the release notes for your Cisco Vision Dynamic Signage Director product and release at:

http://www.cisco.com/en/US/products/ps11274/prod_release_notes_list.html

- Find the minimum CIMC/BIOS versions tested for your Cisco Vision Dynamic Signage Director platform server.
- From your Cisco Vision Dynamic Signage Director platform server, verify the CIMC and BIOS firmware versions in the CIMC console (Figure 1 on page 70).

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 Vision Dynamic Signage Director 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)
 - [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>)

CIMC Firmware Upgrade Guidelines

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
1.	<p>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.</p> <p>The release 1.4(x) firmware HUU ISO files are platform-specific.</p>
2.	<p>Follow the instructions in the Host Upgrade Utility guide:</p> <p>The Cisco UCS C220 server does not have a CD/DVD drive.</p> <ul style="list-style-type: none"> ■ Go to Cisco.com and download the HUU ISO file. ■ Follow the instructions to load the ISO that you downloaded and be sure that both the CIMC and BIOS firmware are upgraded together.

CIMC Firmware Upgrade Guidelines