



Cisco Vision Software Installation and Upgrade Guide

Dynamic Signage Director

Release 6.2

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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 6.2.

The content is intended for Cisco Vision Director system administrators and technical field engineers who are responsible for designing and deploying Cisco Vision solutions. Be familiar with basic IP networking, Linux, and VMware virtualization.

This section includes the following topics:

- [Document Revision History, page 7](#)
- [Document Organization, page 7](#)
- [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
2019-07-26	First release of this document for Cisco Vision Dynamic Signage Director Release 6.2.0-579

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 6.2 software.
Installing Cisco Vision Dynamic Signage Director for the First Time, page 17	Describes how to install the Cisco Vision Dynamic Signage Director Release 6.2 software on your server from a full ISO image.
Upgrading Cisco Vision Director Software, Language Packs, and Fonts, page 27	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 35	Describes how to verify a successful upgrade process.
Upgrading the DMP Firmware, page 43	Describes how to obtain and upload firmware for the DMPs and how to configure the auto-registration settings.

Chapter	Description
Appendix A: Post-Upgrade Checklist, page 49	Provides a checklist that is useful after you upgrade your software on a Cisco Vision Dynamic Signage Director server.
Appendix B: Port Reference, page 51	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 55	Provides guidelines for configuring the Cisco Integrated Management Controller (CIMC) interface and performing the initial configuration. Provides guidelines to 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 Director 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 6.2](#)
- 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

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](#)
- [Hardware Prerequisites, page 12](#)
- [Overview of the Installation and Upgrade Process, page 14](#)

Before You Begin

IMPORTANT: Read all reference content and prepare. **ONLY** use the procedure documented in [Mandatory: Migrate Data from Release 6.1 to Release 6.2, page 18](#), or your installation will not work properly.

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 6.2](#) 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 available.

The media player firmware images are not bundled with the Cisco Vision Dynamic Signage Director software. Download the firmware image separately. For more information about supported firmware versions, see the [Release Notes for Cisco Vision Dynamic Signage Director, Release 6.2](#).
- Be sure that you have a supported browser installed for access to Cisco Vision Dynamic Signage Director as documented in the [Cisco Vision Software Installation and Upgrade Guide: Release 6.2](#). See [Rendered Versions and Support, page 69](#).
- Verify that the Cisco Vision Dynamic Signage Director server is connected to the network using the Ethernet port eth0.
- To access the Cisco Integrated Management Controller (CIMC) for the software installation on a Cisco Integrated Management Controller (CIMC) server, be sure 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. The minimum Flash version is 22.0.0.209 (applies to both Mac OS and Windows).
 - 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**.

Hardware Prerequisites

Note: It is difficult to recover from an interrupted installation process if the installation shell is accidentally closed or the network drops. We **strongly 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.

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 14](#) for more information and to find out what modules in this guide you should follow.

Hardware Prerequisites

You can install Release 6.2 on 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 14](#)

Minimum Virtual Machine System Requirements for Cisco Vision Dynamic Signage Director

Be sure that your configuration meets the minimum system requirements. Smaller-scale Cisco Vision Director deployment requirements are show in [Table 1 on page 12](#).

Table 1 Minimum System Requirements for a Virtualized Environment Running Smaller-Scale 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	2,500
Virtual CPUs ¹	4-6, depending on capacity
Virtual Disk Space	225 GB
Virtual RAM (VRAM)	8 GB ²

1. Hyperthreading can be used. Be sure that the BIOS is properly configured to enable it.
2. Reserve a minimum of 8 GB VRAM to install and operate the Smaller-Scale Cisco Vision Dynamic Signage Director system. Allow additional storage for the ESXi OS.

Be sure that your configuration meets the minimum system requirements in [Table 2 on page 13](#) 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: Install Cisco Vision Dynamic Signage Director servers close to the DMPs that they operate with, such as at the remote venue edge. Cisco Vision Dynamic Signage Director communicates to the players over a LAN.

Hardware Prerequisites

To maintain software licensing compliance, Cisco Vision Dynamic Signage Director servers must be installed in the following manner:

- The Cisco Vision Dynamic Signage Director server is installed in a data center or in an enterprise data closet, or the Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment.
- The Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment, or the remote server hardware is installed in a data center or in an enterprise data closet..

Table 2 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. Reserve a minimum of 32 GB VRAM to install and operate the Cisco Vision Dynamic Signage Director system. Allow additional storage for the ESXi OS.

[Table 3 on page 13](#) provides additional information about the tested VM hardware and OS specifications to use when configuring a virtual machine to support Cisco Vision Dynamic Signage Director.

Table 3 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 7 (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 2 on page 13](#) 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 existing StadiumVision hardware platforms is not supported. For more information, see [Important Migration and Upgrade Notes, page 39](#) of the [Release Notes for Cisco Vision Dynamic Signage Director, Release 6.0](#).
- 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.
- We recommend 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 Director 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, 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 6.2 depending on your current server environment:

- [Installing on a Virtual Server for the First Time, page 14](#)
- [Upgrading an Existing Server Already Running Cisco Vision Director, page 15](#)

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 2 on page 13](#) or [Table 2 on page 13](#).
- Configuring the virtual machine specifications according to the tested specifications with Cisco Vision Dynamic Signage Director provided in [Table 3 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 2 on page 13](#) is not supported.

- Loading the Cisco Vision Dynamic Signage Director software full ISO.
- Running the installation.
- 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 Vision Director

Note: Always check the current Release Notes for the release from which you are updating. The upgrade paths and Service Pack information is always there and may be more current than a manual.

Upgrading From Cisco Vision Dynamic Signage Director Release 6.1

The upgrade process from an existing Cisco Vision Dynamic Signage Director Release 6.1 system involves the following tasks:

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

See [Upgrading Cisco Vision Director Software, Language Packs, and Fonts, page 27](#) and [Upgrading the DMP Firmware, page 43](#).

Upgrading From Cisco Vision Dynamic Signage Director Release 5.0

Note: Always check the current Release Notes for the release from which you are updating. The upgrade paths and Service Pack information is always there and may be more current than a manual.

You can upgrade an existing server already running Cisco Vision Dynamic Signage Director software in the following sequences:

- 5.0.0-526 (Service Pack 2) > 5.0.0-605 (Service Pack 3) > 5.0.0-709 (Service Pack 4) to > 5.0.0-820 (Service Pack 5) > 5.0.0-909 (Service Pack 6) > 6.0.0-740
- 5.0.0-820 (Service Pack 5) > 6.0.0-740
- 5.0.0-909 (Service Pack 6) > 6.0.0-740
- 5.0.0-1022 (Service Pack 7) > 6.0.0-740
- 5.0.0-1110 (Service Pack 8) > 6.0.0-740
- 5.0.0-1212 (Service Pack 9) > 6.0.0-740

Now proceed through all the upgrading steps from Release 6.0 to Release 6.1 SP3. You have to install the software incrementally. You cannot skip to the latest revision. See the latest [Release Notes for 6.1](#) to step through the entire process.

Use an upgrade ISO image file available from Cisco.com and using the upgrade option from the Software Manager in the web browser interface.

Note: The upgrade process has specific prerequisite tasks that must be followed to support a successful upgrade. Release Cisco Vision Dynamic Signage Director 6.2 does not support Cisco DMP 4310G devices, Flash files, or GAR files. The Cisco DMP 4310G devices and any Flash content must be removed from your system prior to upgrade, or the upgrade ISO to Release 6.0 *will not proceed*. Flash content includes legacy ticker files, and any Flash from external content or generic data sources.

Any legacy GAR files remaining in the system will not cause an upgrade to Release 6.0 to abort. However, the GAR files will no longer be accessible in the system so it is highly recommended that any GAR files also be removed.

The upgrade process from an existing Cisco Vision Dynamic Signage Director Release 5.0 system involves the following tasks:

- Preparing your Release 5.0 system for upgrade to Release 6.0.

Overview of the Installation and Upgrade Process

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

Repeat these processes until you have installed Release 6.1 SP3 and are preparing to install Release 6.2. See [Upgrading Cisco Vision Director Software, Language Packs, and Fonts, page 27](#) and [Upgrading the DMP Firmware, page 43](#).



Installing Cisco Vision Dynamic Signage Director for the First Time

This module describes the requirements for installing Cisco Vision Dynamic Signage Director on a VM (virtual machine).

Caution: You must install the Cisco Vision Dynamic Signage Director Release software from a full ISO image (not an upgrade) that you download 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](#)
- [Mandatory: Migrate Data from Release 6.1 to Release 6.2, page 18](#)
- [Installation Tasks, page 25](#)
- [What To Do Next, page 25](#)

Prerequisites

Refer to the [Release Notes for Cisco Vision Dynamic Signage Director 6.2](#) 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:

- 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.

Mandatory: Migrate Data from Release 6.1 to Release 6.2

- 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](#).

Mandatory: Migrate Data from Release 6.1 to Release 6.2

Note: The installation (full ISO) image of 6.2 is not posted on cisco.com. To obtain the Release 6.2 installation image, please send an email to cvupgrades@cisco.com and include your cisco.com userID and the site being upgraded.

For existing customers with data, this installation is a migration of data from older DSD versions to the newest release. Unless you follow these steps, your previous data will be lost when installing Release 6.2. This is a different procedure from an automated incremental upgrade. Release 6.2 contains a new operating system which forces a completely new installation and data migration.

IMPORTANT: Release 6.2 will support a full ISO installation ONLY. There is no upgrade to this release.

Cisco Vision Director is installed within a virtual machine (VM) environment. With our 6.2 release, the VM environment will be used to migrate your data from Release 6.1. Release 6.2 includes a new operating system which requires complete installation. This means you create and configure a second instance of Cisco Vision Dynamic Signage Director to be a secondary, with a complete backup of the primary Cisco Vision Director software.

Overview

- The recommended procedure involves using a primary and secondary server redundancy configuration.
- Release 6.1 will backup the configuration to the Release 6.2 system using the regular primary/secondary backup copy mechanism.
- Setup the new Release 6.2 system as the secondary server, if not already present.
- Ensure the new primary Cisco Vision Director is performing as expected.
- Migrate the secondary Cisco Vision Director to Release 6.2.

To preserve your data from a single or primary server running Release 6.1 SP n to a new or secondary server containing a fresh ISO installation of Release 6.2. The following prerequisite conditions apply:

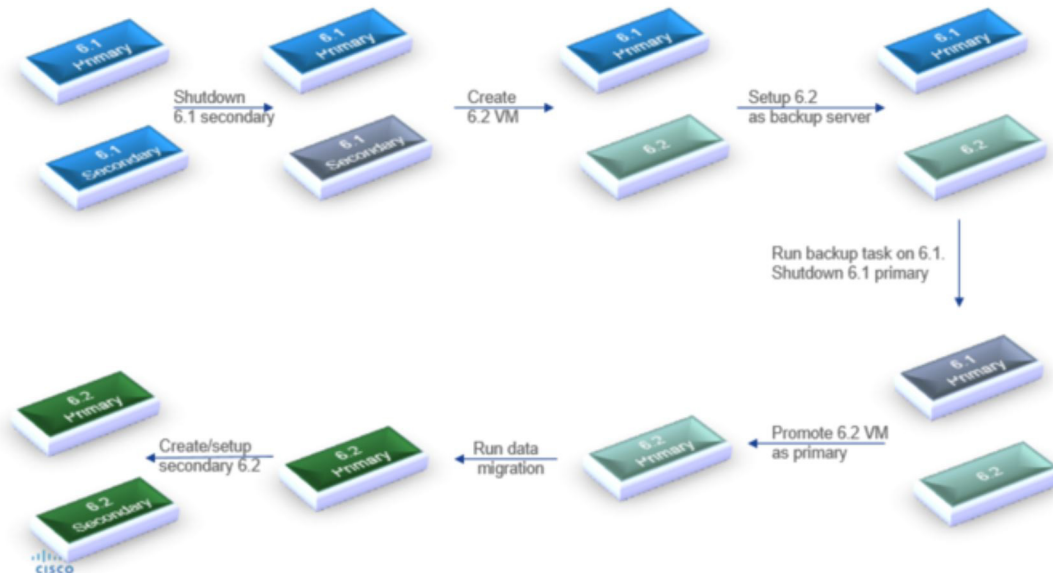
- Two virtual machines matching Cisco Vision Director requirements, the second VM will have Release 6.2
- Both machines have the ability to reach each other over the network
- One of the machines is an established Cisco Vision Director server running Release 6.1 SP n
- You have a 6.2 FULL ISO file (see the first note on how to obtain)

[Figure 1 on page 19](#) shows the installation flow. This procedure assumes the following:

- Release 6.1 Primary, Secondary (P1, S1) VM Server

- Release 6.2 Primary, Secondary (P2, S2) VM Server

Figure 1 Release 6.2 installation Using Two Virtual Machines



IMPORTANT: Before you begin, generate and download any proof of play reports.

Note: Configure NTP and Timezone after the full installation completes. See [Release 6.2: Cisco Vision Dynamic Signage Director Administration Guide](#). Reboot Dynamic Signage Director.

To generate Proof of Play reports:

1. Login to Dynamic Signage Director Release 6.1.
2. Go to: **Tools > Control Panel > Setup > Proof of Play**.

Perform a Full Install of Dynamic Signage Director Release 6.2

3. Configure it with the same memory profile as Release 6.1 (standard or small configuration).

Enable Remote Access on Dynamic Signage Director Release 6.2

4. Login to the DSD TUI. Go to: **Main Menu > System Accounts > Change installer password** ([Figure 2 on page 20](#)).

Figure 2 Change Installer Password in TUI

```
-----
Main Menu > System Accounts

Please choose one of the following menu options:

a) Enable/Disable TAC user
b) Enable/Disable privileged accounts via remote access (ssh)
c) Enable/Disable all users created by the TAC user
d) Change installer password
e) Enable/Disable Backup user
f) Change MySQL password
g) Change admgr password
h) Change admin password
i) Change JMX password
R or < or ,) Return to prior menu
```

5. Choose a password and save it. Note this password safely, as Cisco TAC personnel cannot retrieve it.
6. From **System Accounts** menu, choose **e) Enable/Disable Backup user**. Follow screen prompts and set up the backup user key from the primary system to use it.
7. From **System Accounts** menu, choose **b) Enable/Disable privileged accounts via remote access (ssh)** (Figure 3 on page 20).

Figure 3 Enable/Disable Privileged Accounts Over Remote (SSH)

```
-----
Main Menu > System Accounts > Enable/Disable privileged accounts via remote access (ssh)

Please choose one of the following menu options:

a) Enable privileged accounts over remote (ssh)
b) Disable privileged accounts over remote (ssh)
R or < or ,) Return to prior menu
```

Note: After completing the data migration, return here and disable remote access for added security.

Set Dynamic Signage Director Release 6.2 as Secondary Server

For simplicity, stop the services in Dynamic Signage Director Release 6.2.

8. Go to the TUI Main Menu. Choose **c) Services Control > i) Dynamic Signage Director Services > a) All (.)**.

Figure 4 Stop Service on Dynamic Signage Director

```
-----
Main Menu > Services Control > Dynamic Signage Director Services > All

Please choose one of the following menu options:

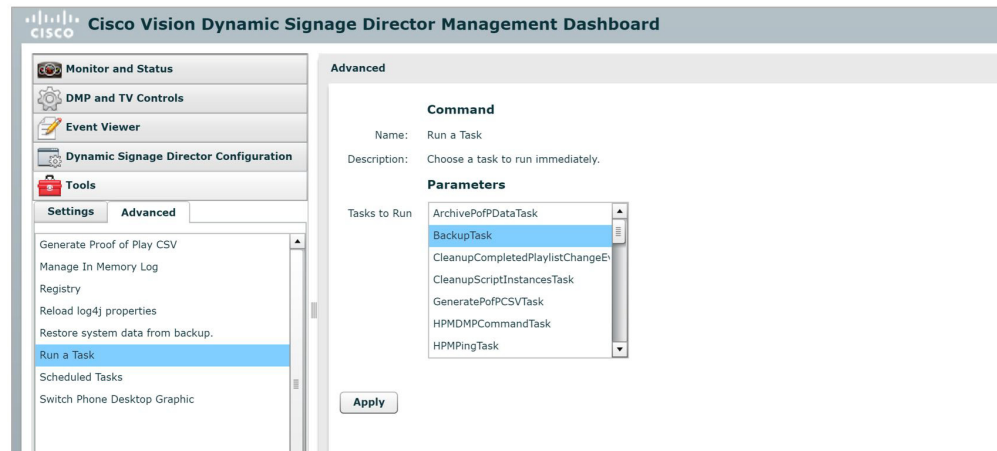
a) Show Status
b) Start Service
c) Stop Service
R or < or ,) Return to prior menu
```

9. Choose **c) Stop Service**.

Mandatory: Migrate Data from Release 6.1 to Release 6.2

15. Go to **Tools > Management Dashboard > Tool drawer > Advanced tab > Run a Task**.
16. In the right panel Parameters field, click **Backup Task** (Figure 7 on page 22).
17. Click **Apply**. The backup may take some time to complete. Click **Apply** only once.

Figure 7 Run Backup Task

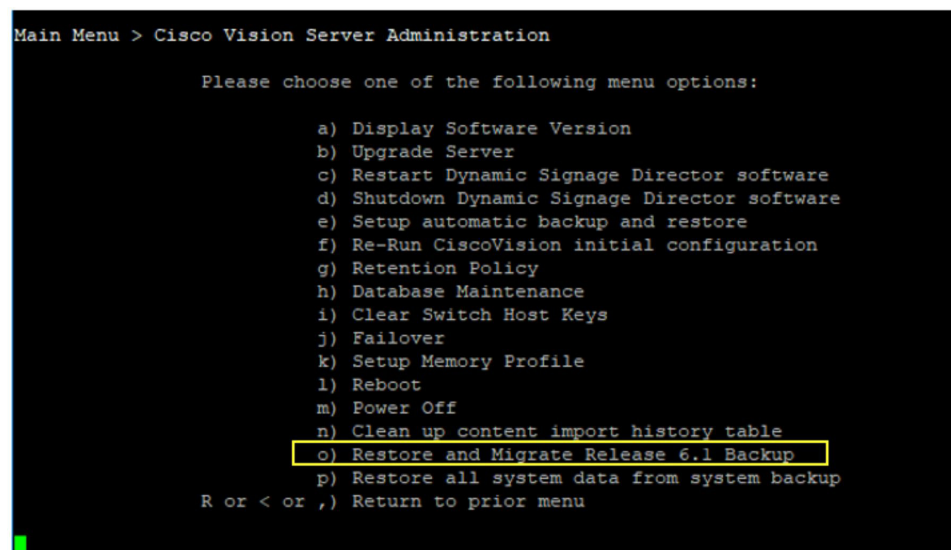


Note: Backup task may take a while to finish, particularly if there is a lot of content.

Restore and Migrate the DSD Release 6.1 Backup Server on DSD Release 6.2 Server

18. Login to Cisco Vision Director TUI.
19. Type **d** for **Cisco Vision Server Administration**.
20. Type **o** for **Restore and Migrate Release 6.1 Backup** (Figure 8 on page 22).

Figure 8 Restore and Migrate Release 6.1 Backup



Note: Once migration starts, DO NOT press any keys on your keyboard until migration is done.

Mandatory: Migrate Data from Release 6.1 to Release 6.2

Note: The restore operation can only be performed once.

IMPORTANT: If the only option you see is **0**, the backup may not be complete.

21. If the backup and transfer to DSD Release 6.2 completes, you will see an **option 1**. Select 1) option ([Figure 9 on page 23](#)).

Figure 9 Option 1: Restore Backup

```
Restore a backup from version 6.1 and migrate to 6.2.
Restore and migration will wipe out any changes you have made in this system.
0) [Cancel]
1) Restore backup from Fri Jul 12 01:48:19 PDT

Please select a menu from above and press enter:
```

22. Press **Y** to start the data restore and migration ([Figure 10 on page 23](#)).

Figure 10 Start Restore and Backup Data from Release 6.1 and Migrate to Release 6.1 Process

```
Restore a backup from version 6.1 and migrate to 6.2.
Restore and migration will wipe out any changes you have made in this system.
0) [Cancel]
1) Restore backup from Fri Jul 12 01:48:19 PDT

Please select a menu from above and press enter: 1

Restore and migrate a 6.1 backup (sv-6.1.0.600-20190712014019-0700.tar).
Do you want to continue?
PRESS Y TO CONTINUE, PRESS N TO CANCEL
```

23. Wait until process completes. You will see a screen similar to [Figure 11 on page 23](#).

Figure 11 Restore and Backup Complete

```
Restore a backup from version 6.1 and migrate to 6.2.
Restore and migration will wipe out any changes you have made in this system.
0) [Cancel]
1) Restore backup from Fri Jul 12 01:48:19 PDT

Please select a menu from above and press enter: 1

Restore and migrate a 6.1 backup (sv-6.1.0.600-20190712014019-0700.tar).
Do you want to continue?
PRESS Y TO CONTINUE, PRESS N TO CANCEL
Y

Restoring from backup sv-6.1.0.600-20190712014019-0700.tar

This could take some time. Please wait.../bin/rm: cannot remove '/var/log/menuupdate.log': No such
file or directory

Please reboot this DSD server for all changes to take effect.Press any key to return._
```

24. Reboot DSD server for changes to save.

Mandatory: Migrate Data from Release 6.1 to Release 6.2

Shut Down DSD Release 6.1 Server

25. Go to DSD Release 6.1 TUI **Main Menu > d) Cisco Vision Server Administration**.
26. Select **m) Power Off**.

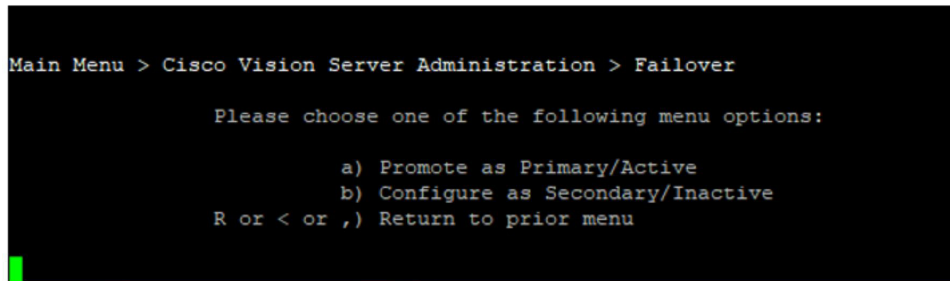
Prepare to Setup DSD Release 6.2 as the Primary Server

27. Go to Cisco Vision Director TUI **Main Menu > a) System Settings > a) Network Settings**.
28. Select **a) Setup Network Information**.
29. Change the IP address of DSD Release 6.2 to the IP address of DSD Release 6.1.
30. Select **d) Generate certificate file**.

Note: Since you previously set DSD Release 6.2 as secondary/inactive in [Set Dynamic Signage Director Release 6.2 as Secondary Server, page 20](#), promote DSD Release 6.2 to the primary/active server.

31. Go to **Main Menu > d) Cisco Vision Server Administration > j) Failover > a) Promote as Primary/Active** (Figure 12 on page 24).

Figure 12 Promote DSD Release 6.2 Server to Primary



32. Navigate up to **Main Menu > d) Cisco Vision Server Administration > l) Reboot**.
33. Perform all system verifications.

Setup the DSD Release 6.2 Secondary Server

Note: Skip this step if your deployment does not have a secondary server.

34. Perform a full installation of DSD Release 6.2 on a new VM. Use the same IP address as the DSD Release 6.1 secondary server. See “Changing the IP Address on the Secondary Server” in [Cisco Vision Administration Guide, Release 6.2](#).
35. Use the TUI to configure the DSD Release 6.2 server as the secondary server. See “Starting and Configuring the Services on the Secondary Server” in [Cisco Vision Administration Guide, Release 6.2](#).
36. Use the TUI on the Release 6.2 primary server to configure automatic backup and restore to point to DSD Release 6.2 secondary server. See “Setting up the Primary Server for Automatic Backup and Restore” in [Cisco Vision Administration Guide, Release 6.2](#).

Access DSD Release 6.2 Server from Browser

37. Clear your browser cache.
38. Enter the IP address of DSD Release 6.2 on your browser address bar.
39. Press **Return (Enter)**.

Installation Tasks

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

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

- [Downloading the ISO Files from Cisco.com, page 25](#) (required)
- [What To Do Next, page 25](#) (required)

Downloading the ISO Files from Cisco.com

You are eligible to access the Cisco Vision Dynamic Signage Director full ISO file after you purchased the proper licensing. Contact Cisco Technical Support for information about how to download the ISO file ([Table 1 on page 25](#)).

Note: Choose the ISO for SV-DIRECTOR.

[Table 1 on page 25](#) shows the filename conventions used for full ISO images for the Cisco Vision Dynamic Signage Director server.

Table 1 ISO Filename Conventions

Filename Convention ¹
■ SV-DIRECTOR-FULL-6.2.0-579.x86_64.iso
■ SV-DIRECTOR-FULL-6.2.0-579.x86_64.iso.md5sum
■ SV-DIRECTOR-FULL-6.2.0-579x86_64.iso.sha512sum

1. “579” 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 .sha512sum file to compare the value that you calculated with the expected value provided in the .sha512sum file. The values should match. If they do not, retry the download.

Logging Into the CIMC Interface

Note: To log into the CIMC interface, check the previous version of this document on [Cisco.com](#). All the requirements and steps are available to read.

What To Do Next

After you have installed the Cisco Vision Dynamic Signage Director software, do the following:

Note: For initial deployments of the DMPs, follow the instructions in the [Cisco Vision Deployment Guide for Digital Media Players: Dynamic Signage Director, Release 6.2](#).

- Upgrade the DMP firmware (required).
See [Upgrading the DMP Firmware, page 43](#).
- Go to the “[Configuring Cisco Vision Director Server System Settings](#)” module of the [Release 6.2: Cisco Vision Administration Guide: Dynamic Signage Director](#) to complete initial setup of the server and do the following:

What To Do Next

- Generate the SSL certificate (*required* for Release 6.2).
- Configure NTP on Cisco Vision Dynamic Signage Director Servers and DMPs.
- Configure NTP and PTP for the DMPs.

Note: By default, all media players use the Cisco Vision Dynamic Signage Director server as the NTP source. When using PTP on the DMPs, only the PTP master device references an NTP source. To change the NTP source used by the DMPs, change the DMP global settings.

- Configure multicast ports for Cisco Vision Dynamic Signage Director.



Upgrading Cisco Vision Director Software, Language Packs, and Fonts

This module describes using the Cisco Vision Dynamic Signage Director Software Manager to:

- Upgrade an existing server already running Cisco Vision Director (Release 5.0 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 27](#)
- [Prerequisites, page 28](#)
- [Using the Software Manager to Update Existing Software, page 28](#)
- [Upgrade Tasks, page 29](#)
- [Installing Language Packs, page 32](#)
- [Installing Fonts, page 33](#)
- [What to Do Next, page 34](#)

Best Practices

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

Before you begin upgrading an existing 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.
- See Release Notes for [Cisco Vision Dynamic Signage Director Release 6.2](#) for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release.
- Know the required hardware and software versions for other devices supporting your Cisco Vision Director solution. 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.
- 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.

Prerequisites

Note: To do the restore, run the config service on the secondary server.

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.
- It is difficult to recover from an interrupted installation process if the Linux shell is accidentally closed or the network drops. We **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 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 Vision Dynamic Signage Director Release 6.1.0-608 (SP3).
- Your system is ready for an upgrade from Release 6.1. See [Preparing a Release 6.1 System for Upgrade to Release 6.2, page 28](#).
- You have the IP address for the server where you want to upload the ISO upgrade image. 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 [Rendered Versions and Support](#) in the [Cisco Vision Content Planning and Specifications Guide, Release 6.2](#).

Preparing a Release 6.1 System for Upgrade to Release 6.2

Note: See the previous release of this manual ([Cisco Vision Software and Installation Upgrade Guide: Dynamic Signage Director, Release 6.1](#)) for these upgrading steps.

What To Do Next

- Upgrade your system to Cisco Vision Dynamic Signage Director Release 6.2.
- Using the BAT, associate the replacement DMPs to the original DMP 4310G Locations.

Using the Software Manager to Update Existing 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**.
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**. Delete ISO files 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 system, use the **Software Manager** prior to upgrade to remove the 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; they will remain in storage.

Upgrade Tasks

IMPORTANT: The installation (full ISO) image of 6.2 is not posted on cisco.com. To obtain the Release 6.2 installation image, please send an email to cvupgrades@cisco.com and include your cisco.com userID and the site being upgraded.

IMPORTANT: Stop and go to [Mandatory: Migrate Data from Release 6.1 to Release 6.2, page 18](#) for complete instructions on how to proceed. That process supersedes the below processes for installation and upgrading for the Cisco Vision Director Release 6.2 software.

IMPORTANT: For the 6.2 release, after completing the mandatory migration steps listed, proceed to [Rebooting the Cisco Vision Dynamic Signage Director Server, page 32](#).

To upgrade your Cisco Vision Dynamic Signage Director server, complete the following tasks:

- [Downloading ISO Upgrade Files from Cisco.com, page 29](#) (required)
- [Uploading and Installing an ISO Upgrade File on Cisco Vision Director Server, page 31](#) (required)
- [Rebooting the Cisco Vision Dynamic Signage Director Server, page 32](#) (required)
- [Installing Language Packs, page 32](#) (as required)
- [Installing Fonts, page 33](#) (as required)

Downloading ISO Upgrade Files from Cisco.com

IMPORTANT: For Release 6.2, there is no upgrade. You must perform a full ISO installation. Return to [Mandatory: Migrate Data from Release 6.1 to Release 6.2, page 18](#) for the installation process.

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:

1. Go to the Cisco Vision 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**.

Upgrade Tasks

2. Select the ISO upgrade or service pack file (as available), and optionally the companion sha512checksum file, and download them.

Table 1 shows the filename conventions used for ISO upgrades.

Note: Choose the ISO for SV-DIRECTOR.

IMPORTANT: For Release 6.2.0-579, there are no ISO upgrade files available here

Table 1 ISO Upgrade Filename Conventions

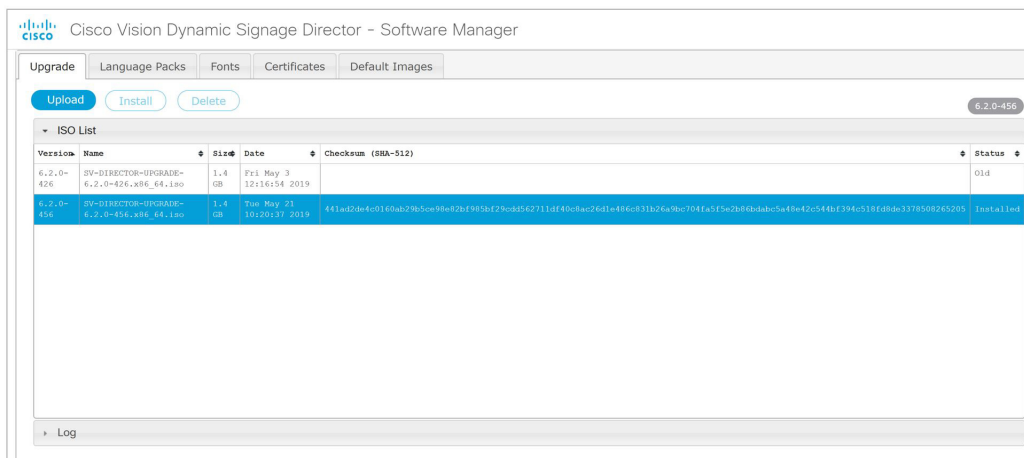
Filename Convention ¹
■ SV-DIRECTOR-UPGRADE-6.2.0-579.x86_64.iso
■ SV-DIRECTOR-UPGRADE-6.2.0-579.x86_64.iso.filenameesum
■ SV-DIRECTOR-UPGRADE-6.2.0-579.x86_64.iso.filenameeSHASum

1. “579” represents the build number of the image in the file.

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, use the **Software Manager** UI to verify the checksum on the .iso file.

The SHA512 checksum is calculated by the system and is shown on the **Software Manager** UI. Compare what is shown on the UI and the downloaded SHA512 checksum. The values should match. If they do not, retry the download.



Uploading and Installing an ISO Upgrade File on Cisco Vision Director Server

After you download the ISO upgrade file from Cisco.com, use the **Software Manager** to upload the file to the Cisco Vision Dynamic Signage Director server and to install the upgrade image.

Prerequisites

Know the IP address of the server where you want to upload the file. Use 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:

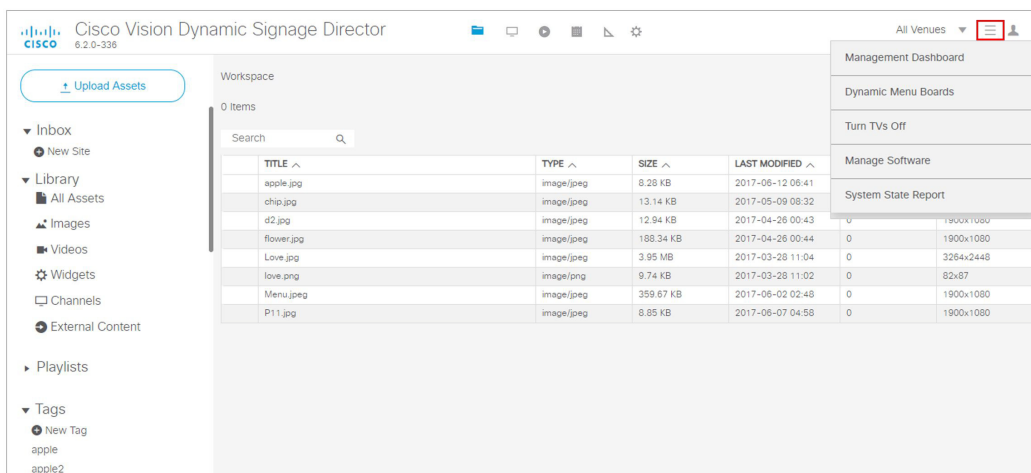
1. Log into Cisco Vision Dynamic Signage Director as an Administrator.

2. From your browser, go to the following URL:

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

where x.x.x.x is replaced by the IP address of the server where you want to upload the upgrade software.

3. Click **More > Manage Software**.



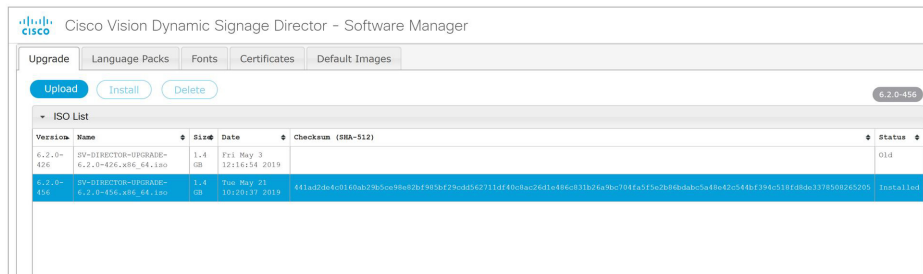
The screenshot shows the Cisco Vision Dynamic Signage Director interface. The top navigation bar includes the Cisco logo, version 6.2.0-339, and a user profile icon. The main workspace displays a table of assets with columns for Title, Type, Size, and Last Modified. A search bar is located above the table. On the right side, a sidebar menu is visible, with the 'Manage Software' option highlighted in red.

TITLE ^	TYPE ^	SIZE ^	LAST MODIFIED ^
apple.jpg	image/jpeg	8.28 KB	2017-06-12 06:41
chip.jpg	image/jpeg	13.14 KB	2017-05-09 08:32
d2.jpg	image/jpeg	12.94 KB	2017-04-26 00:43
flower.jpg	image/jpeg	188.34 KB	2017-04-26 00:44
love.jpg	image/jpeg	3.95 MB	2017-03-28 11:04
love.png	image/png	9.74 KB	2017-03-28 11:02
Menu.jpeg	image/jpeg	359.67 KB	2017-06-02 02:48
P11.jpg	image/jpeg	8.85 KB	2017-06-07 04:58

4. From the **Upgrade** tab, click **Upload** (Figure 1 on page 32).

Installing Language Packs

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 completes, one of the following occurs:

- When the image is validated and uploaded successfully, a message displays stating that the ISO image has been uploaded.
- The image upload failed. Retry the upload.

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**.

Note: Upon successful upload, you will see an entry with the newly uploaded upgraded ISO file. Verify that the displayed checksum matches the checksum from the Cisco download site.

7. The installation process begins and status messages display.
8. After the installation completes, Cisco Vision Dynamic Signage Director services restart.

Rebooting the Cisco Vision Dynamic Signage Director Server

To reboot the Cisco Vision Dynamic Signage Director server:

1. Log into the TUI as **installer**. The TUI Main Menu displays.
2. Go to the **Cisco Vision Server Administration** menu.
3. Select **Reboot**.
4. At the confirmation prompt, press **Y** to start the reboot process.

Installing Language Packs

Note: Language packs are release-specific. When the language packs for 6.2 become available, upload the relevant language pack and install it. Install language packs for Release 6.2, **after** you install or upgrade to the required 6.2 release.

Upload and install only the specific language(s) that you want to support through the independent installation of Language Packs. Perform the upload and installation of the language packs using Cisco Vision Dynamic Signage Director.

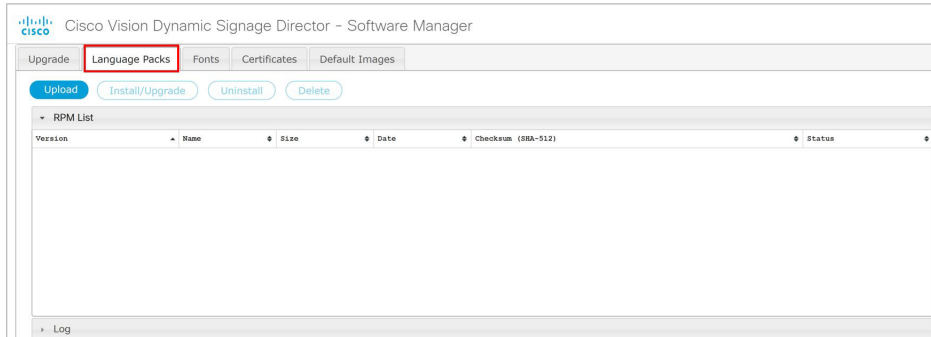
To install language packs:

1. Download the desired language pack from Cisco.com.
2. Log into Cisco Vision Dynamic Signage Director as an Administrator.

Installing Fonts

3. Go to **More > Manage Software**.
4. From the **Software Manager** screen, click **Language Packs** (Figure 2 on page 33).

Figure 2 Language Packs Tab



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 you are using a secondary Cisco Vision Dynamic Signage Director server, install the language pack on both the primary and secondary servers.
8. To transfer the locales to the digital media players, do the following:
 - a. From **More > Management Dashboard > DMP and TV Controls > DMP Install > Restore Default Settings**
 - b. In the Select Devices panel, select the digital media player.
 - c. To execute the command, click the **play (>)** button located at bottom left of the panel.
9. Stage content to the digital media players.

For more information, see the “Staging Content to the Media Player” topic in the [Cisco Vision 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. This section includes the following topics:

- [Guidelines for Installing Fonts, page 33](#)
- [Procedure, page 34](#)

Guidelines for Installing Fonts

Note: In Cisco StadiumVision Director Release 4.1 and later releases, the unifont.ttf font is embedded in the 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:

What to Do Next

- To save system memory on the media player, install fonts that have the minimal set of required characters.
- Asian languages like Chinese (which contain more glyphs) require more memory.
- The fallback font is Arial; it is the default font in cases where the widget is referencing a font that is not available.
- Only True Type fonts (.ttf) and OpenType fonts (.otf) are supported.

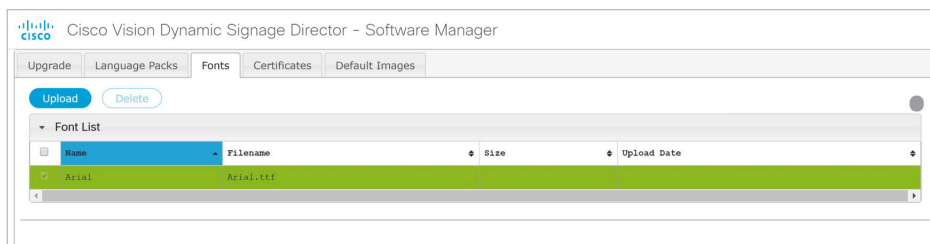
Procedure

To install fonts:

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. Go to **More > Manage Software**.
4. From the **Software Manager** screen, click **Fonts** (Figure 3 on page 34).

Figure 3 Fonts Tab



5. Click **Upload**.
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. Stage content to the media player.

For more information, see the “Staging Content to the Media Player” topic in the [Cisco Vision Director Operations Guide](#).

What to Do Next

- Follow the steps in [Verifying the Upgrade, page 35](#) to verify that the upgrade process was successful.
- Use [Appendix A: Post-Upgrade Checklist, page 49](#) to complete the required verification steps.
- Import DMP Certificates. See Importing Certificates on the DMP in the [Cisco Vision Administration Guide: Release 6.2](#) or the [Release Notes for Cisco Vision Dynamic Signage Director, Release 6.2](#).



Verifying the Upgrade

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 35](#) (mandatory)
- [Clearing Expired Flash SWZ Files From Browser, page 36](#) (required)
- [Importing the Security Certificate, page 37](#) (required)
- [Logging Into Cisco Vision Dynamic Signage Director, page 38](#) (required)
- [Verifying the Menus, page 38](#) (required)
- [Verifying that Services are Running, page 39](#) (required)
- [Configuring the Media Player for VLAN Compliance Checking, page 39](#) (required)
- [Upgrading the DMP Firmware, page 40](#) (required)
- [Rebooting the DMPs, page 40](#) (required)
- [Verifying Media Players, Groups, and Zones in the Management Dashboard, page 40](#) (required)
- [Verifying the Multicast Configuration, page 41](#) (required)
- [Completing the Post-Upgrade Checklist and Testing, page 42](#) (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. 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:

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

The Clear Recent History dialog box appears.

Note: Or 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:

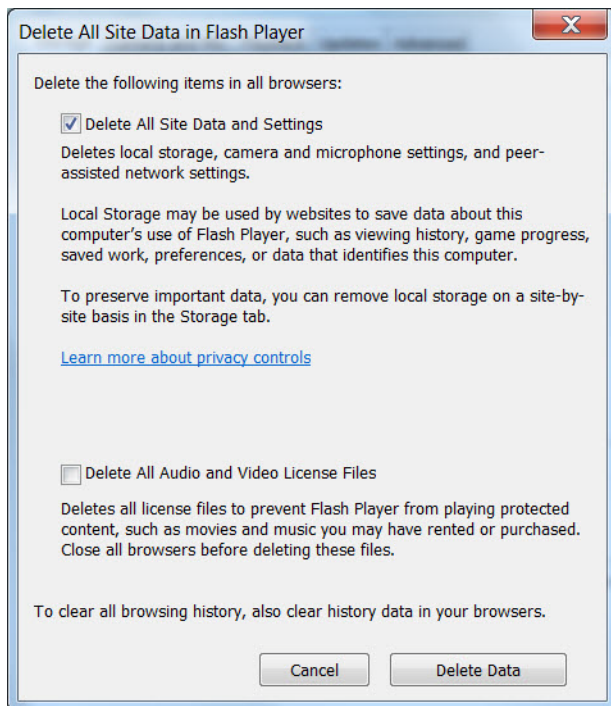
- [Clearing the Flash Player Cache, page 36](#)
- [Deleting Other Cached Files From Flash Player, page 36](#)

Clearing the Flash Player Cache

To clear the Flash player cache:

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 36](#)).

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



4. Click **Delete Data**.

Deleting Other Cached Files From Flash Player

To delete other cached files from Flash Player:

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

Importing the Security Certificate

`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 appears. 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:

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.

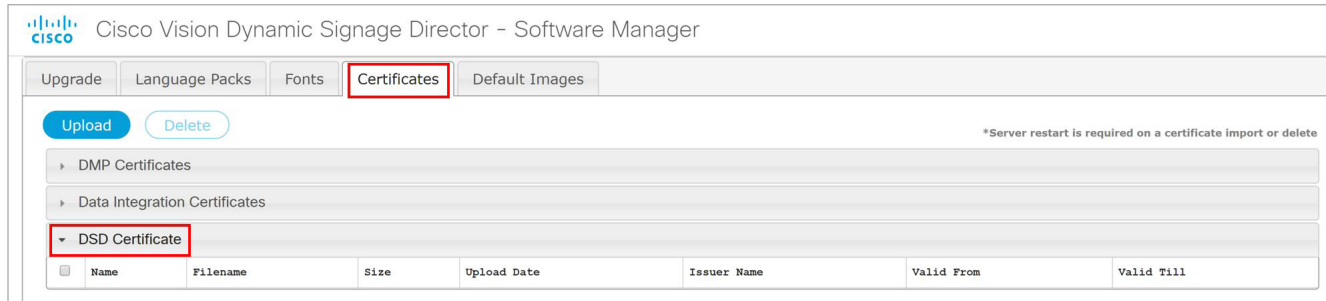
You should now be able to access the Cisco Vision Dynamic Signage Director server using Mozilla Firefox without any security certificate warnings.

DSD Certificate Import

New to Release 6.2 is a web-based UI that allows you to manage certificates for Cisco Vision Dynamic Signage Director (DSD). It eliminates untrusted browser warnings from popping up. This features allows you to import your own DSD certificate so that the annoying security warning goes away. These certificates types .cer, .crt and .pem are supported.

To import DSD certificates:

1. Go to **More > Manage Software > DSD Certificate** (Figure 2 on page 38).

Figure 2 Import DSD Certificate

If successful, a success message displays. For details on using this new feature, refer to [Release 6.2: Cisco Vision Dynamic Signage Director System Administration Guide](#).

Note: After uploading the certificate, restart the DSD web server for the new certificate to take effect. Use a TUI.

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:

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/CiscoVision/login.html
```

or alternatively,

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

The Cisco Vision Dynamic Signage Director login screen appears.

2. 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 is *admin* and password is *C-V1\$!0n*.

The Cisco Vision Dynamic Signage Director Asset Library screen appears.

3. Verify that the correct version displays in the upper left of the screen.

Note: If your window does not display the correct version, clear the browser cache as described in [Clearing the Browser Cache, page 35](#).

Verifying the Menus

To verify menus:

1. From the Cisco Vision Dynamic Signage Director **Main Menu**, click the new icon for **System Configuration**. After a few moments of loading resources, the Cisco Vision Dynamic Signage Director screen opens in a new window.
2. Confirm the version and build number of your Cisco Vision Dynamic Signage Director software in the upper left of the **Library** (Main Menu) screen.

Note: If your window does not display the appropriate version and build that you loaded, clear the browser cache as describe in [Clearing the Browser Cache, page 35](#).

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

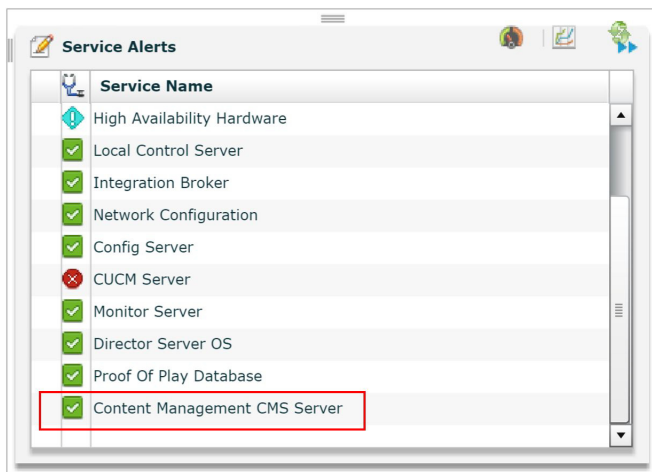
Verifying that Services are Running

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

To verify that services are running:

1. Go to **More > Management Dashboard > Monitor and Status** drawer > **Services** folder.
2. Expand the **Service Alerts** pane.
3. Verify that all of the primary services—in particular the Content Management CMS Server—are in “Normal” (green) state without any service alerts.

Figure 3 Verifying Normal Service States



4. 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. Go to **Main Menu > Services Control > Content Management System (cms)**.

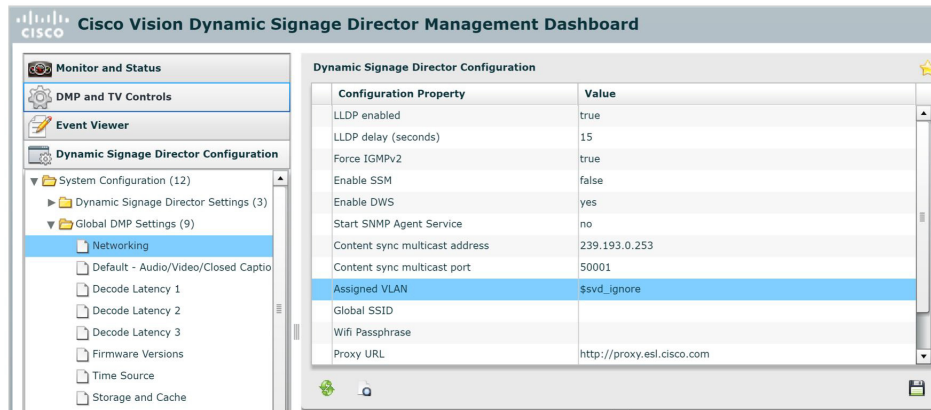
Configuring the Media Player for VLAN Compliance Checking

After you upgrade, 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: We recommend setting the assigned VLAN property for the media players 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, configure `$svd_ignore`, which is the default.

To configure the Assigned VLAN property

1. Go to **More > Management Dashboard > Dynamic Signage Director Configuration > System Configuration > Global DMP Settings > Networking**.

Figure 4 Assigned VLAN Property Configuration for the DMPs

2. 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.”

3. Click the **Save** icon.

Upgrading the DMP Firmware

IMPORTANT: All DMPs require a firmware upgrade for Release 6.2.

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 6.2 software, a new firmware upgrade and configuration for the firmware is required. Follow the steps in [Upgrading the DMP Firmware, page 43](#).

Rebooting the DMPs

After an upgrade of the Cisco Vision Dynamic Signage Director software, restart the DMPs to get the latest version of the runtime software.

- If this is the initial upgrade of your system to Release 6.2 and you performed a DMP firmware upgrade, then the DMPs already rebooted. Do not reboot the DMPs.
- If this is an upgrade from Release 6.1 to Release 6.2, then reboot the DMP to 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 40](#).

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

Note: Before you verify media player status, 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 39](#).

To check media players, groups, and zones after you upgrade your software:

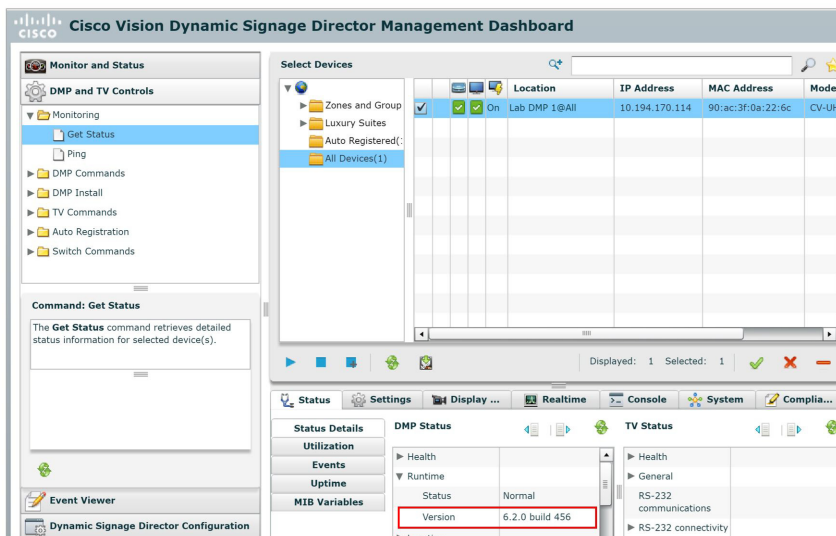
1. Go to **More > Management Dashboard** and verify that all of your groups, zones and media players are present and in the green state.
2. From the **DMP and TV Controls** drawer, run the **Get Status** command on all devices to update Cisco Vision Dynamic Signage Director's record of MAC addresses:

DMP and TV Controls > Monitoring > Get Status.

3. Run **Get Status** to confirm that all devices successfully reboot 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. Click the **Play** icon.
 - 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.

Completing the Post-Upgrade Checklist and Testing

For more information about multicast configuration, see the “Configuring Multicast Ports for Cisco Vision Director” topic in the “Configuring the Cisco Vision 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:

1. Go to **More > Management Dashboard > Tools** drawer > **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**.

Completing the Post-Upgrade Checklist and Testing

Use [Appendix A: Post-Upgrade Checklist, page 49](#) to verify you completed the required steps.



Upgrading the DMP Firmware

Note: This module describes how to upgrade the firmware for Cisco Vision Dynamic Signage Director Release 6.2. If you are deploying a digital media player for the first time, see [Cisco Vision Deployment Guide for Digital Media Players: Dynamic Signage Director](#).

Caution: Immediately after installing Cisco Vision Dynamic Signage Director Release 6.2, configure the new auto-registration settings in the Management Dashboard. Failure to perform this configuration can cause the media player to repeatedly boot.

The DMP firmware upgrade is not initiated from the **Management Dashboard**. It is done automatically when the device starts up or reboots.

Each time a 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 DMPs 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 6.2.

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 digital media player firmware to the prerequisite or base firmware versions automatically, before provisioning the production firmware version supported in Release 6.2.

Contents

- [Prerequisites, page 43](#)
- [Provisioning Tasks, page 44](#)

Prerequisites

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

Caution: For initial deployment of a new DMP, verify:

- No other accessories are attached to the DMP.
- 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 6.2](#) to obtain the latest information and to verify the supported DMP 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 Vision Dynamic Signage Solution Operation and Network Requirements](#) available to qualified Cisco Vision partners.

Provisioning Tasks

To provision the firmware, complete the following tasks:

- [Downloading the Firmware for All Media Players, page 44](#) (required)
- [Uploading the DMP Firmware to Cisco Vision Dynamic Signage Director, page 44](#) (required)
- [Configuring the DMPs for Auto-Registration, page 45](#) (required)

Downloading the Firmware for All Media Players

The media player firmware image is not bundled with the Cisco Vision Dynamic Signage Director software.

Note: Download the firmware to a device that you also can use to access the Cisco Vision Dynamic Signage Director software.

Downloading the DMP Production Firmware

To download the DMP production firmware, go to:

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

Downloading the DMP Base Firmware

If you do not already have one of the required base firmware versions uploaded to Cisco Vision Dynamic Signage Director, 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 DMP Firmware” document, available to qualified Cisco Vision (StadiumVision) partners.

Uploading the DMP Firmware to Cisco Vision Dynamic Signage Director

After you obtain the DMP firmware image from the external vendor, upload the image to Cisco Vision Dynamic Signage Director.

Caution: For the DMPs, upload the firmware version to the Cisco Vision Dynamic Signage Director server:

Base firmware version—8.0.72

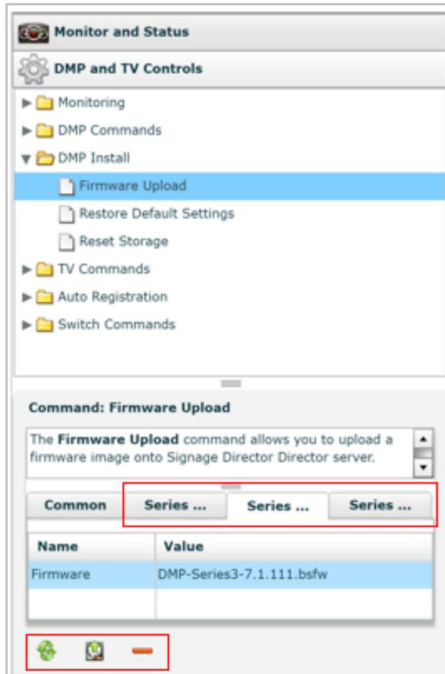
Production firmware version—8.0.72

Note: Use **Management Dashboard**, the Firmware Upgrade page, to upload the firmware. Do **not** run the command to provision the software on the device from there. 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 DMP initiates a firmware upgrade **automatically**.

To upload the DMP firmware:

1. From the device where you downloaded the firmware, log into Cisco Vision Dynamic Signage Director as an Administrator.
2. Go to **More > Management Dashboard > DMP and TV Controls > DMP Install > Firmware Upload**
3. Select the **Series 2 Parameters**, the **Series 3 Parameters**, or the **Series 4 Parameters** tab according to the DMP model that you are provisioning and click the upload icon (Figure 1 on page 45).

Figure 1 DMP 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 completes.

Configuring the DMPs for Auto-Registration

Before you provision the firmware to the media player, upload it to Cisco Vision Dynamic Signage Director and then configure the auto-registration settings.

To configure the DMPs for auto-registration:

1. Go to **More > Management Dashboard > Dynamic Signage Director Configuration > System Configuration > Auto Registration Settings > Provision DMP**.
2. Do one of the following:
 - To provision an SV-4K or DMP-2K, click **Series 2 DMP**.
 - To provision a CV-HD or CV-UHD, click **Series 3 DMP**.
 - To provision a CV-HD2 or CV-UHD2, click **Series 4 DMP**.
3. In the Configuration Property panel, find and configure the firmware properties.

Provisioning Tasks

- Figure 2 on page 46 shows the auto-registration configuration and Table 1 on page 46 identifies the required firmware properties for the CV-UHD2 and CV-HD2 in Release 6.2.
- Figure 3 on page 47 shows the auto-registration configuration and Table 2 on page 47 identifies the required firmware properties for the CV-UHD and CV-HD in Release 6.2.
- Figure 4 on page 47 shows the auto-registration configuration and Table 3 on page 47 identifies the required firmware properties for the SV-4K and DMP-2K in Release 6.2.

Note: The CV-HD and CV-UHD media players require a different *base* firmware than the SV-4K and DMP-2K media players.

- Firmware image to use—Select from dropdown box.
- init.version—Type the version.
- Base firmware image to use—Select from dropdown box.
- Base.version—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 CV-UHD2 and CV-HD2

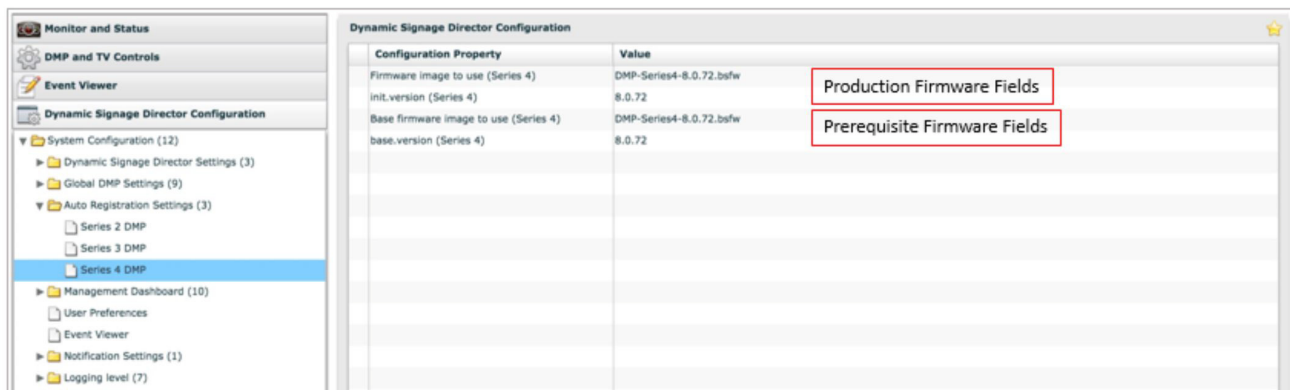


Table 1 Required Firmware Properties for the CV-UHD and CV-HD in Release 6.2

Release Number	Firmware Property	Value for Release
6.2.0-579	Firmware image to use (CV-UHD2, CV-HD2)	DMP-Series4-8.0.72.bsfw
	init.version (CV-UHD2, CV-HD2)	8.0.72
6.2.0-579	Base firmware image to use (CV-UHD2, CV-HD2)	DMP-Series4-8.0.72.bsfw
	base.version (CV-UHD2, CV-HD2)	8.0.72

Figure 3 Firmware Image and Version Properties Required to Provision the CV-UHD and CV-HD



Table 2 Required Firmware Properties for the CV-UHD and CV-HD in Release 6.2

Release Number	Firmware Property	Value for Release
6.2.0-579	Firmware image to use (CV-UHD, CV-HD)	DMP-Series3-8.0.72.bsfw
	init.version (CV-UHD, CV-HD)	8.0.72
6.2.0-579	Base firmware image to use (CV-UHD, CV-HD)	DMP-Series3-8.0.72.bsfw
	base.version (CV-UHD, CV-HD)	8.0.72

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

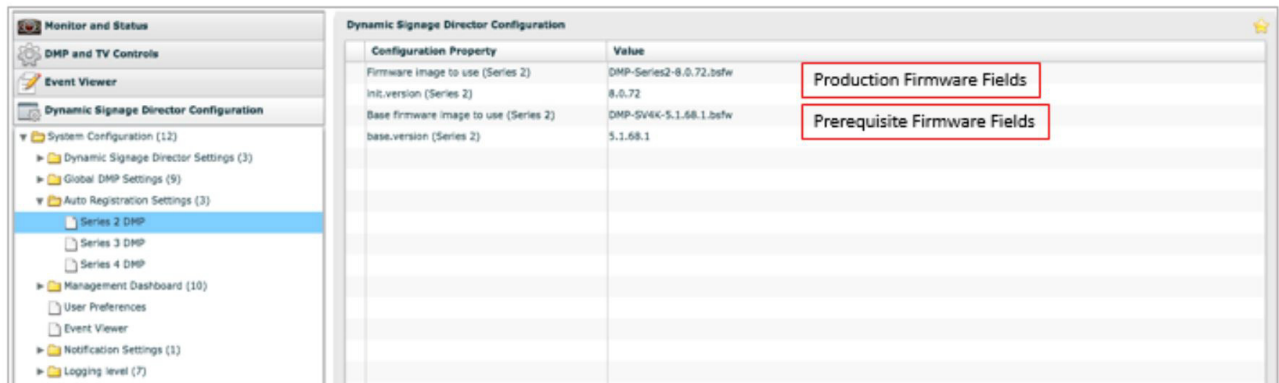


Table 3 Required Firmware Properties for the SV-4K and DMP-2K in Release 6.2

Release Number	Firmware Property	Value for Release
6.2.0-579	Firmware image to use (SV-4K, DMP-2K)	DMP-Series 2-8.0.72.bsfw
	init.version (SV-4K, DMP-2K)	8.0.72
6.2.0-579	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.
	base.version (SV-4K, DMP-2K)	5.1.68.1

4. Save the changes.
5. Power on or reboot the DMP.
6. Verify the startup sequence. For more information on the startup sequence, see the [Cisco Vision Deployment Guide for Digital Media Players: Dynamic Signage Director](#).



Appendix A: Post-Upgrade Checklist

Use the following checklist to 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 UI 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 you can successfully change channels.	<input type="checkbox"/>
6. Verify that channel names and favorites are properly set.	<input type="checkbox"/>
7. If using suite commerce integration, use the IP phone to verify you can successfully place an order.	<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. <p>Note: If necessary, click the refresh button to re-poll all services for status. If needed, disable services that are not part of your installation.</p>	<input type="checkbox"/>
10. Verify that the devices have been rebooted and are running the latest system runtime version. <p>Note: A manual reboot is required if a DMP firmware upgrade was not required for your release.</p>	<input type="checkbox"/>
11. Verify that all DMPs and TVs in the Management Dashboard are green.	<input type="checkbox"/>
12. Start an existing event script and validate that screens display the expected content.	<input type="checkbox"/>

List Item	Checkoff
13. Stop the event script and validate that screens power off.	<input type="checkbox"/>
14. Make a minor edit to the event script and make sure it saves.	<input type="checkbox"/>
15. Verify that you can push a new video file in the Library -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 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: The CMS is automatically restarted after a backup runs.	<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, reconfigure your backup and restore environment using the Text-based Utility Interface (TUI).	<input type="checkbox"/>



Appendix B: Port Reference

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

- [Cisco Vision Dynamic Signage Director Ports, page 51](#)
- [Digital Media Player Ports, page 52](#)

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 51](#) 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	For Web UI Access
External system	TCP	22	SFTP	Media Planner API
Laptop	TCP	22	SSH ¹	Remote login
Laptop / DMP	TCP	80	HTTP	Redirect to port 443
DMP	TCP	8080	Tomcat / Apache	Fetch config/data
Laptop	TCP	443	HTTPS	Main web UI
NTP Server	UDP	123	NTP (time protocol)	Sync time

1. When remote login is enabled.

[Table 2 on page 52](#) lists the additional input ports used by Cisco Vision Dynamic Signage Director server instances only during troubleshooting access from a PC.

Digital Media Player Ports

Table 2 Cisco Vision Dynamic Signage Director Input Ports

Originator	Protocol	Port	Target Application	Usage
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	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	80 / 443	HTTP Server	Fetching integration broker data Fetching legacy ticker data
Dynamic Signage Director	TCP	8000	DMP runtime	DMP control port (http)
Dynamic Signage Director	UDP	varies (default:50001)	DMP runtime	Multicast commands (default is 239.192.0.254:50001)
Dynamic Signage Director	UDP	varies (default:50080-50099)	DMP runtime	Multicast commands when per-script multicast is enabled

Digital Media Player Ports

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

- [Common Media Player Input Ports, page 53](#)
- [Network Input Ports, page 53](#)
- [Common Digital Media Player Output Ports, page 53](#)
- [Output Ports, page 54](#)

Common Media Player Input Ports

Table 4 on page 53 lists the input ports used by all media player models.

Table 4 Common Media Player Input Ports

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage Director	UDP	varies (default: 50001)	DMP runtime	Multicast commands (default is 239.192.0.254:50001)
Dynamic Signage Director	UDP	varies (default: 50080-50099)	DMP runtime	Multicast commands when per-script multicast is enabled
Headend	UDP	varies	DMP firmware	Multicast video
NTP server	UDP	123	NTP	Time sync response

Network Input Ports

Table 5 on page 53 lists the input ports only used by the digital media player.

Table 5 Input Ports

Originator	Protocol	Port	Target Application	Usage
Laptop	TCP	80	DMP diagnostic web server (dws)	Diagnostic Web Server, when enabled
Dynamic Signage Director	TCP	8000	DMP control and debugging web server	For commands and queries by Cisco Vision Director server
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
DMP	UDP	319, 320	PTP	Event and general messages for time sync (DMP)
DMP	UDP	50001, 50002	DMP runtime	For content synchronization, such as in video walls
Laptop	TCP	2099	Javascript inspector for DMP browser	To run Javascript Inspector when enabled to debug/troubleshoot by Cisco support
NTP Server	UDP	123	Network Time Protocol (NTP)	Sync the time on the DMP

Common Digital Media Player Output Ports

Table 6 on page 54 lists the output ports used by all digital media player models.

Digital Media Player Ports

Table 6 Common Digital Media Player Output Ports

Originator	Protocol	Port	Target Application	Usage
Dynamic Signage Director	TCP	8080	httpd	Fetching of DMP config, autoprovisioning, and related
DMP	TCP	80	httpd	External content URL.
DMP	TCP	8888	java (Mule)	Fetching preview (data pull requests) from Integration Broker
DMP	TCP	33333	java (Mule)	Fetching data integration images from Integration Broker
Dynamic Signage Director	UDP	123	NTP	Time sync request
DMP 43	UDP	514	syslog	Proof of Play, Alerts

Output Ports

[Table 7 on page 54](#) lists the output ports used by the Series 2 media players.

Table 7 DMP 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
DMP	UDP	319, 320	PTP	Event and general messages for time sync
DMP	UDP	50001, 50002	DMP sync manager port	For sync master



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

This document provides guidelines for upgrading the 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 configuration or upgrade. Follow the procedures in the referenced Cisco UCS documents.

BIOS Firmware Upgrade Guidelines

This section includes the following topics:

- [Before You Begin, page 55](#)
- [Prerequisites, page 55](#)
- [BIOS Firmware Upgrade Summary, page 56](#)

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 BIOS versions tested for your Cisco Vision Dynamic Signage Director server.
- From your Cisco Vision Dynamic Signage Director server, verify the BIOS firmware versions.

Note: 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 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 4.0\(4\)](#)
(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 2.0 Quick Start Guide](#)

BIOS Firmware Upgrade Guidelines

(or the version that corresponds to your firmware release found at:
<http://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-c-series-rack-servers/products-user-guide-list.html>)

Familiarize yourself with all of the requirements in these documents to perform your BIOS firmware upgrade.

- You have access to Cisco.com to download the firmware ISO file.

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 upgrading the BIOS at the same time and from the HUU ISO file.

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

	Description
1.	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. The release 4.0(x) firmware HUU ISO files are platform-specific.
2.	Follow the instructions in the Host Upgrade Utility guide: The Cisco UCS C220 server does not have a CD/DVD drive. <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 upgrade the BIOS firmware.