



Upgrade Guide for Cisco Digital Media Suite 5.4

Revised: January 29, 2014



Warning

Before you upgrade your Cisco Digital Media Suite (Cisco DMS) environment, read this document carefully. It contains important information that can help you to avoid potentially serious problems during the upgrade process.

This guide explains how to upgrade Cisco Digital Media Suite from version 5.3.x to 5.4.

- See the “[Hardware Compatibility](#)” section on [page 2](#) for information about which server and endpoint hardware models this release supports.
- See [Release Notes for Cisco Digital Media Suite 5.4.x](#) on Cisco.com for information about new features in this release.
- If you use any release that predates Cisco DMS 5.3, you must upgrade to 5.3 first, and then upgrade to Cisco DMS 5.4.
- You must have a valid Cisco DMS license to use this upgrade.

Table of Contents

- [Prerequisites](#)
- [Important Upgrade Notes](#) [page 2](#)
- [Hardware Compatibility](#), [page 2](#)
- [Before You Begin](#), [page 2](#)
- [Upgrade Cisco DMS](#), [page 3](#)
- [Learn More About...](#), [page 16](#)



Prerequisites

Your Cisco DMS 5.3.x hardware and software components must all be running correctly before you start to upgrade them.

Important Upgrade Notes

- **Cisco Show and Share is no longer part of Cisco DMS. DO NOT USE THIS UPGRADE IF YOU HAVE CISCO SHOW AND SHARE.**
- When you use federated authentication (single sign-on) mode in Cisco DMS 5.3.x, you must reimport service provider (SP) metadata into your identity provider (IDP) server after you upgrade to 5.4. For information about how to export the SP metadata, see the Authentication chapter's "Configure SSO Services" section in *User Guide for Cisco Digital Media Manager 5.4.x* at http://cisco.com/en/US/docs/video/digital_media_systems/5_x/5_4/dmm/user/guide/admin/auth.html

Hardware Compatibility

Cisco DMS 5.4 is supported on the following hardware platforms:

- DMM-SVR-C210-K9
- MCS-7835-H3

Table 1 shows supported upgrade paths to Cisco DMS 5.4.0 by hardware platform.

Table 1 Upgrade Path by Server Type.

Hardware Platform	Supported Upgrade Path
DMM-SVR-C210-K9	5.2.2 > 5.2.3 > 5.3 > 5.4
MCS-7835-H3	5.2 > 5.2.1 > 5.2.2 > 5.2.3 > 5.3 > 5.4

Before You Begin

Before you upgrade your Cisco DMS appliances, do the following:

1. [Back Up Your Appliance, page 2](#)
2. [Obtain the Update Media, page 3](#)
3. [Connect a Terminal to Your Appliance, page 3](#)

Back Up Your Appliance

We recommend backing up your appliances before performing the upgrade. To learn how to back up your appliance, see *Administration Guide for Cisco Digital Media Suite 5.4.x Appliances* on Cisco.com at http://www.cisco.com/en/US/partner/docs/video/digital_media_systems/5_x/5_4/dms/aai/administration/guide/dms_appliance_admin.html

Obtain the Update Media

To obtain the update media, do one of the following:

- When you have a valid service contract for Cisco DMS, visit <http://tools.cisco.com/gct/Upgrade/jsp/productUpgrade.jsp> and enter your contract number to obtain access to the upgrade.
- When you do not have a valid service contract for Cisco DMS, you must purchase the upgrade. See the data sheet for ordering information: http://www.cisco.com/en/US/products/ps6682/products_data_sheets_list.html

After you obtain the upgrade images, you can either burn the upgrade images to DVD or stage them on an FTP server for remote access. We recommend that you stage them.

Connect a Terminal to Your Appliance

- You must attach a monitor and keyboard to each Cisco DMM appliance that you upgrade.
- Do not attempt to upgrade over a remote SSH session—your upgrade will fail. The upgrade process reboots the appliance several times, causing remote sessions to drop. Your input is required after each reboot, but you cannot reestablish a remote session until the entire upgrade process is completed.

Upgrade Cisco DMS

Perform the following tasks to upgrade your installation. You must upgrade your Cisco Digital Media Player (DMP) software before your Cisco DMM software.

—	Task	Reference
Step 1	Upgrade your Cisco Digital Media Players, if any.	Upgrade Your DMPs, page 3
Step 2	Upgrade your Cisco DMM appliance software.	Upgrade Cisco Digital Media Manager, page 11
Step 3	Verify the upgrade.	Upgrade a Failover Configuration, page 13

Upgrade Your DMPs

To upgrade your DMPs, complete these steps in exactly this order:

1. [Force DMPs From Their 'Initial' State, As Needed, page 3](#)
2. [Stop All Applications on DMPs, page 6.](#)
3. [Upgrade the Firmware and Root File System on DMP Endpoints, page 7.](#)

Force DMPs From Their 'Initial' State, As Needed



Timesaver

Complete this procedure if you have reapplied our factory-default settings to one or more of your DMPs. Otherwise, if you have not restored DMP factory defaults, you can skip this procedure.

**Caution**

If this procedure applies to you and you do not complete it now, you will have to complete a more difficult and time-consuming procedure instead, after you finish all other tasks to upgrade Cisco DMS.

Before the Cisco Digital Signs software on your DMM appliance can manage these DMPs centrally, you must complete either this simple procedure now or the more complex procedure later.

A DMP returns to its “initial” state when you reset it to use factory-default settings. In its initial state, a DMP lacks an internal database file that supports centralized management. This procedure shows you how to force it from this initial state.

**Tip**

If you collect these DMPs together in a DMP group, you can target them all simultaneously.

Procedure

Step 1 Click **Network and Endpoints** on the Home page.



Step 2 Choose **Digital Media Players > Advanced Tasks**.

Step 3 Create the advanced task.

- a. Click **System Tasks** in the Application Types list.



- b. Click **Add New Application** above the Applications table.



Step 4 Define and save the new system task.

Create New System Task

Name

Description

Request Type

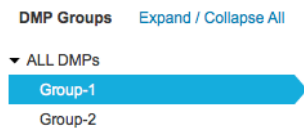
Request

- a. Enter a unique name in the Name field. For example, *Clear DMP Initial State*.
- b. Enter a short description in the Description field. For example, *Generate file to support centralized management*.

- c. Choose **Set** from the Request Type list.
- d. Enter **mib.save=1** in the Request field.
- e. Click **Submit**.

Step 5 Send the task to DMPs that are in their initial state.

- a. Choose **Digital Media Players > DMP Manager**.
- b. Click the group (in the DMP Groups list) that should receive this deployment.



- c. Check the check box in the Name column heading to select all DMPs in this DMP group.



OR

Use other check boxes in the Name column to select individual DMPs.

- d. Click **Run Task**.



The Run Task dialog box opens.

- e. Click the **System Tasks** drawer in the Select Task area.



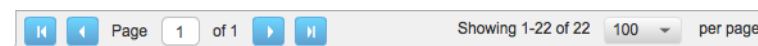
DMM populates a table with all of its saved system tasks.

- f. Click your system task to highlight it.



Tip

Is your system task missing in the Run Task dialog box? It might only be hidden. You can change how many table rows the dialog box shows at one time. The default is 10 rows but you can show as many as 100. Another way that you can use the pagination controls is to navigate among hidden results when the table has more entries than visible rows.



- g. Click **OK**.

Step 6 Stop. You have completed this procedure.

Stop All Applications on DMPs

Before you upgrade DMPs, you must stop all applications.

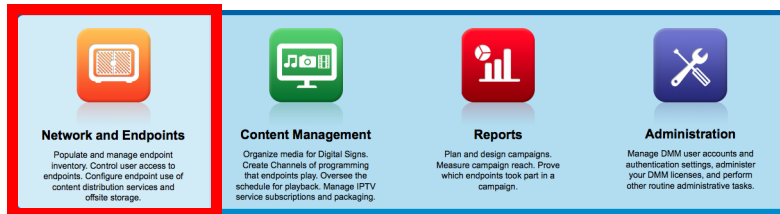


Note

Use the **DMP Startup URL** advanced task to clear the DMP startup URL and restart the DMP. Do not use the **Stop All Applications** system task.

Procedure

Step 1 Click **Network and Endpoints** on the Home page.



Step 2 Choose **Digital Media Players > Advanced Tasks**.

Step 3 Create the advanced task.

a. Click **DMP Startup URL**.



b. Click **Add New Application** above the Applications table.



Step 4 Define and save the new advanced task.

Add New Startup URL Application

Name

Description

Video URL

Browser URL

Reboot Necessary?

a. Enter **Startup URL Empty & Reboot** in the Name and Description fields.

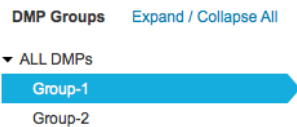
b. Leave empty the Video URL and Browser URL fields.

c. Check the **Reboot Necessary** check box.

d. Click **Submit**.

Step 5 Schedule an event to send the task to the DMP.

- a. Choose **Digital Media Players > DMP Manager**.
- b. Click the group (in the DMP Groups list) that should receive this deployment.



- c. Check the check box in the Name column heading to select all DMPs in this DMP group.



OR

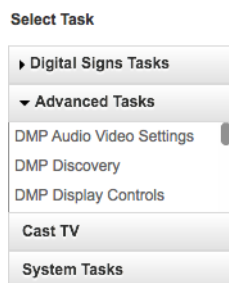
Use other check boxes in the Name column to select individual DMPs.

- d. Click **Run Task**.



The Run Task dialog box opens.

- e. Open the **Advanced Tasks** drawer in the Select Task area.



Scroll to, and then click, the **DMP Startup URL** entry in the Advanced Tasks drawer.

DMM populates a table with all of your saved DMP Startup URL tasks.

- f. Click your advanced task to highlight it.



- g. Click **OK**.

Step 6 Stop. You have completed this procedure.




Upgrade the Firmware and Root File System on DMP Endpoints



Note

It takes approximately 30 minutes to upgrade the firmware and root file system on a DMP. However, while the upgrade is in progress on a DMP 4400G, its behavior might be confusing. It:

1. Shows these three messages in this order:

-  Burn: NN%
-  Verify: NN%
-  Internal Upgrade Completed.

(Where NN is a percentage value that climbs from 1 to 99.)

2. Restarts after approximately 1 minute.
3. Shows the same three messages as before, in exactly the same sequence.
4. Restarts a second time after approximately 29 minutes.

This occurs because the 4400G must install a small amount of data and restart before it can accept its new firmware and file system.

Before You Begin

- When you use Cisco ECDS or Cisco ACNS, we recommend that you send DMP firmware files to it and deploy the upgrades as a future event—not an immediate event.
- If you deploy the upgrade directly to your DMPs, we recommend that you upgrade just one DMP initially or upgrade just a small group of DMPs and test the result before you send the firmware to multiple DMPs.
- We recommend that you never upgrade more than five DMPs at a time and that all upgrades occur outside normal business hours for your organization.

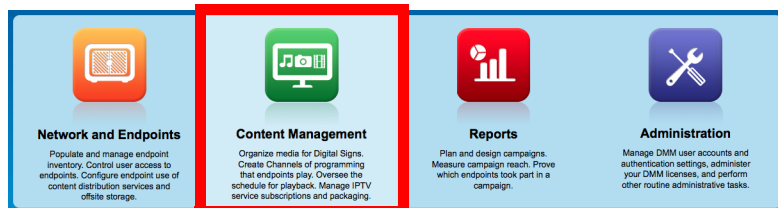


Warning

Make sure that the DMPs do not lose power while they are burning their firmware during an upgrade. If they lose power during this critical period, they will be severely damaged.

Procedure

Step 1 Click **Content Management** on the Home page.



Step 2 Add the DMP firmware image to your media library as an asset.

- a. Choose **Media Library**, and then click **Add Media Asset**.



The Add Asset dialog box opens.

- b. For the source, click **Local File**.

The screenshot shows a form titled "Add Asset". At the top, there are two tabs: "Single" and "Batch", with "Batch" being the active tab. Below the tabs, there is a section labeled "Source*" with two radio button options: "URL(recommended)" and "Local File". The "Local File" option is selected, indicated by a blue dot.

- c. Click **Browse**.
- d. Choose the firmware image where you saved it. Then, click **Open**.
- e. Enter a meaningful description in the Title field.
- f. Verify that the file type is **Firmware**. Then, click **Save**.

Do not click any button or move away from this page in your browser until the upload is finished. After it is finished, the page refreshes automatically. You should see that a description of the firmware file has been added in the table that the page shows.



Note You must download the firmware to your DMM appliance. Do not merely link to a remote firmware URL.

Step 3 (**Optional**) To verify that the upload succeeded, compare its file size in the Size column to the size of the source file.

Step 4 Choose **Digital Media Players > Advanced Tasks**.

Step 5 Create the advanced task.

- a. Click **DMP Firmware Upgrade**.

A blue button with white text that reads "DMP Firmware Upgrade".

- b. Click **Add New Application** above the Applications table.

A blue button with a plus icon and white text that reads "Add New Application".

Step 6 Define and save the new advanced task.

- a. Enter **DMP_Firmware_Upgrade** in the Name field.
- b. Choose from the Media Categories tree the category that contains the firmware.
- c. Click the firmware file to highlight it in the Available Content table. Then, click **Submit**.
- d. Click **Go**.

Step 7 Do one of the following.

- *Would you like to upgrade DMPs immediately?*

When you will upgrade your DMPs now

- a. Click **Network and Endpoints** on the Home page.
- b. Click **DMP Manager**.
- c. Click the group (in the DMP Groups list) that should receive the upgrade.
- d. Click **Run Task**.
The Run Task dialog box opens.
- e. Toggle open the **Advanced Tasks** drawer in the Select Task area. Then, scroll to—and click—its **DMP Firmware Upgrade** application type.
- f. Click the corresponding job in the untitled table.

Title	Description
Example	

- g. Click **OK**.

- *Would you like to upgrade DMPs in the future?*

When you will upgrade your DMPs later

- Click **Content Management** on the Home page.
- Click **Channels**. Then, click a channel in the Name column.
Choose carefully which channel you click. Its subscribers will receive the upgrade.
- Click **Time-specific Scheduling**.
- Click your preferred time slot on the channel calendar.
The Add Event dialog box opens.
- Toggle open the **Advanced Tasks** drawer in the Select Task area. Then, scroll to—and click—its **DMP Firmware Upgrade** application type.
- Click the corresponding job in the untitled table.

Title	Description
Example	

- Click **Next**.
- Set the start time. Then, choose **Do not repeat** from the Repeat options list.
- Click **Add to Calendar**.



Tip To check the status of an upgrade, deploy the system task called **Upgrade Status**.

Step 8 Stop. You have completed this procedure.

What to Do Next

- After updating your DMPs, proceed to [Upgrade Cisco Digital Media Manager, page 11](#).

Upgrade Cisco Digital Media Manager

The upgrade for Cisco Digital Media Manager can take an hour or more to complete. Make sure that you have ample time in your maintenance window to complete the upgrade. During an upgrade, users cannot access the Cisco DMM web interface.

Before You Begin



Note You must be on-site with the server. Otherwise, you cannot complete this procedure.

Procedure

- Step 1** Insert the upgrade disc into your DMM appliance disc drive or stage the image on an FTP, SFTP or HTTP server.
- Step 2** Log in as **admin** to the Appliance Administration Interface (AAI).
- Step 3** Choose **APPLIANCE_CONTROL** and press **Enter**.
- Step 4** Choose **SOFTWARE_UPDATE** and press **Enter**.
- Step 5** Do one of the following.

- *Do you want to upgrade from a disc?*

When you will upgrade from a disc

- a. Choose **CD_UPDATE** and press **Enter**.
- b. Verify that you have inserted the upgrade disc and press **Enter**.

- *Do you want to upgrade from an .ISO?*

When you will upgrade from a remote disc image (.ISO file)

- a. Choose **REMOTE_UPDATE** and press **Enter**.
- b. Enter the following information:
 - For an FTP/SFTP server, enter the FQDN or IP address and a user account. Then, press **Enter**. You will be prompted for a password. Enter the password. Then, press **Enter**.
 - For an HTTP server, enter the URL and press **Enter**.

Note Although we call this AAI command “**REMOTE_UPDATE**,” you must be on site with your server to use it. Only the **.ISO** is remote.

The appliance reboots. A dialog asks you to confirm that you want to upgrade the appliance.

- Step 6** Choose **Yes** to confirm that you want to upgrade the system.

The upgrade process begins. The appliance reboots and again asks you if you want to upgrade.

- Step 7** Choose **Yes**.

The system installs the 5.4.0 update. If you are prompted to type “yes” to bypass a pause, you can type yes or ignore it; the upgrade will continue automatically after the designated time. After the update is completed, the system reboots and runs post-installation tasks

The upgrade is done when an AAI login prompt appears.

- Step 8** To verify the update, log in to AAI again as **admin**.

The Main Menu shows your installed DMM version.

- Step 9** Stop. You have completed this procedure.
-

Upgrade a Failover Configuration

To upgrade a failover configuration for you DMS installation, perform the following procedures in the order presented:

Table 1-2 Workflow for Upgrading a Failover Configuration

—	Task	Reference
Step 1	Revert the configuration to Standalone mode on the Active server.	Revert the active appliances to Standalone mode: <ol style="list-style-type: none"> 1. Log in to AAI. 2. Choose FAIL_OVER > REVERT.
Step 2	Change the host name and IP address of the Primary server to actual FQDN and IP address.	—
Step 3	Upgrade the Primary DMM appliance to release 5.4.	—
Step 4	Reimage the secondary DMM appliance with release 5.3 when it is reverted to Standalone mode, and then upgrade to release 5.4.	—
Step 5	Configure failover on the Secondary server.	<ol style="list-style-type: none"> 1. Configure host name and IP address in the same subnet on the Secondary server. 2. Configure NTP. 3. Configure the failover setting. 4. Enter the Primary server FQDN in the Master FQDN field. 5. Click Save and exit from the Secondary server interface.
Step 6	Configure failover on the Primary server.	<ol style="list-style-type: none"> 1. Configure the failover setting on the Primary server. 2. Select Set as Master in the DMS cluster settings. 3. In the Primary FQDN field, replace the FQDN shown with the alternate Primary FQDN. 4. Enter the Secondary server FQDN into the secondary FQDN field.
Step 7	Configure the DMM replication interface with either of the two options:	<ol style="list-style-type: none"> 1. If using a crossover cable between the devices, verify that crossover is selected. 2. If using a switch between the devices, select Switched and enter the following information. <ul style="list-style-type: none"> – Primary IP—The IP address of the replication interface (GigabitEthernet 2) of the primary DMM. – Secondary IP—The IP address of the replication interface (GigabitEthernet 2) of the secondary DMM. – Subnet Mask—The subnet mask of the addresses.
Step 8	Click Save .	—
Step 9	Activate the cluster.	—

Verify the System Upgrade

Use this procedure to log into Cisco DMM for the first time after you upgrade.

Procedure

-
- Step 1** Point your browser to the Cisco DMM appliance. For example, <http://dmm.example.com:8080>.
- Step 2** Log in as **superuser**.
- Step 3** When the splash screen appears, confirm that it refers to Digital Media Manager 5.4.
- Step 4** Stop. You have completed this procedure.
-

Convert Schedules (DMM 5.3) to Channels (DMM 5.4)

Previous Cisco DMS releases used an event scheduling paradigm that this release replaces. The new paradigm is to use “channels,” which are conceptually similar to TV channels. This change brings greater simplicity and improved flexibility. However, significant architectural differences between the old and new systems mean that you must rely on a special utility to convert data from your old schedule into a set of channels that should replace it.



Note

Alternatively, you can create all of your channels manually. If you prefer to create channels by hand, you can skip this procedure. It does not apply to you.

Event Creation Rules

DMM 5.4 channels can support event recurrence only within a 1-year window. So, when a DMM 5.3 schedule extends any recurring event beyond 1 year, we apply the following migration rules.

- For a DAILY recurrence, we shift the event start date to today.
- For a WEEKLY recurrence, we shift the event start date to the current week.
- For a MONTHLY recurrence, we shift the event start date to the current month.
- For an ANNUAL recurrence, we create a discrete event for the next recurrence only

Before You Begin

- **Back up your DMM server.** In the unlikely event of a catastrophic failure, you can restore your DMM server from this backup.

Procedure

-
- Step 1** Log in to DMM as its administrator.
- Step 2** Go to https://<DMM_FQDN>:8443/xTAS-core/migrate.htm.



Note If you logged in as an administrator, the channel data conversion tool opens. Its ultimate behavior will depend on whether you used Cisco Enterprise Content Delivery System (ECDS) with Cisco DMS 5.3.x.

- Did your DMM 5.3 deployment use ECDS? If so, this utility will generate a DMM 5.4 channel for each ECDS channel that still had at least one unexpired event pending in its schedule.
- Did your DMM 5.3 deployment exclude ECDS? If so, this utility will generate a DMM 5.4 channel for each DMP group that still had at least one unexpired event pending in its schedule.

Step 3 Click the **Migrate schedules (DMM 5.3) to channels (DMM 5.4)** option. Then, click **Submit**.
In a typical deployment, the utility finishes running within 5 minutes.

Step 4 Review the generated channels.
Are their events well formed? Do they meet your requirements?



Note We do not subscribe your DMP groups to any migrated channel automatically.

This discretion prevents the automatic playback of incorrect content on your digital signs. Instead, review each migrated channel individually in DMM.

Make sure that its events meet your requirements. You can manually subscribe your DMP groups to a migrated channel after you know that the channel is well formed.

Step 5 Do one of the following.

- *Are the generated channels apparently correct?* **When the generated channels appear to be correct**
 - Subscribe one DMP apiece to each channel.
 - Observe the actual behavior.
 - Subscribe your remaining DMPs to your channels after you validate that their generation was successful.

- *Are the generated channels obviously wrong?* **When the channels are wrong or malformed**
 - Click the **Clean up migrated schedules** option. Then, click **Submit**.
We retain all data from your DMM 5.3.x schedule but delete the channels you generated for DMM 5.4.x.

Tip You can try again later to generate channels automatically or you can create new channels manually.

Step 6 **(Optional)** *Are you curious why some events migrated from your old schedule but others did not?* If so, check the log dump in the Cleanup/Import Log area to see exactly which factors we considered during the conversion.

The conversion log shows entries like these, which describe our conversion logic per DMP group and per event:

```
created channel [id=1, name=Monday - Sunday] for DMP group Monday - Sunday
migrating schedule [id=53104] on channel Monday - Sunday
cannot migrate schedule [id=53104] on channel Monday - Sunday, reason Schedule expired
No schedules found or all schedules expired. Deleting channel [id=1, name=Monday - Sunday]
```

Step 7 Stop. You have completed this procedure.

Learn More About...

To Learn About	Go To
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Cisco DMS products and technologies	http://cisco.com/go/dms
Cisco DMS technical documentation	http://cisco.com/go/dms/docroadmap
Cisco DMS APIs and SDK	http://developer.cisco.com/web/dms
Cisco DMS SNMP MIB	http://cisco.com/go/dms/mib
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