



User Guide for Cisco Digital Media Manager 4.0

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Preface

Cisco Digital Media System is the collective name for a product family that consists of Cisco Digital Media Manager (DMM) appliances, Cisco Video Portal appliances, Cisco Digital Media Player (DMP) endpoints, Cisco Digital Media Encoder (DME) devices, and all associated software components.

This guide tells you how to use the modules that you licensed for your Cisco Digital Media Manager 4.0 software and how to use the Cisco Video Portal Reports 4.0 software that is preinstalled on a Video Portal appliance. Depending on the module licenses that you purchase, DMM helps you to create and manage an online video portal, create and manage a digital signage network, or create and manage both.

The intended audience for this guide is DMM users who create, publish, or manage media for a video portal or a digital signage network. This guide is not meant for systems or network administrators who install, configure, or troubleshoot DMS products. See Cisco.com for related DMS and DMM user documentation

Document Conventions

This guide uses these text formatting conventions:

Item	Convention
Commands and keywords	boldface font
Variables for which you supply values	<i>italic</i> font
Displayed session and system information	<code>screen</code> font
Information you enter	boldface screen font
Variables you enter	<i>italic screen</i> font
Menu items and button names	boldface font
Selecting a menu item in paragraphs	Option > Network Preferences
Selecting a menu item in tables	Option > Network Preferences



Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

**Tip**

Means *the following information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information, similar to a Timesaver.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New* in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>



CHAPTER 1

Overview

This overview contains the following sections:

- [Basic DMS Concepts and Vocabulary, page 1-1](#)
- [Client System Requirements, page 1-4](#)
- [Understanding DMM Modules and Features, page 1-4](#)

Basic DMS Concepts and Vocabulary

DMS helps organizations of any size to create, manage, organize, and deliver video content (whether live or on-demand) and digital signage content over an IP network to any general or targeted audience. With DMS, you can:

- Communicate with targeted customers, investors, press, and analysts.
- Deliver live and on-demand events to audiences in any location.
- Deliver critical information and training to employees, suppliers, and partners.
- Deliver educational content to students.

[Table 1-1](#) lists and defines some of the most commonly used DMS terms, abbreviations, and initialisms.

Table 1-1 *Concepts and Vocabulary*

Term	Definition
AAI	<i>Appliance Administration Interface</i> . Text user interface and command shell on every DMS appliance . System administrators use AAI when they set up, configure, or maintain a DMS appliance. (Text user interfaces use ANSI-style escape sequences to control the presentation of text and other shapes on a screen; they differ from command-line interfaces and graphical user interfaces.)
ACNS	<i>Cisco Application and Content Networking System</i> . ACNS software runs on the WAE platform for content distribution and interoperates with DMM to greatly reduce redundant digital media traffic over satellite and terrestrial networks. The streaming media features of ACNS deliver high-quality and long-playing digital videos live and simultaneously to thousands of users and DMPs , or on demand at a later time.
appliance	In the DMS family of products, an appliance is an MCS on which either DMM or Video Portal software is preinstalled. To administer the appliance chassis and configure its low-level behaviors, you use AAI .
application	In DMM-DS , an application is a named tool that you can use to perform an administrative task, such as sending a particular command (or a particular sequence of commands) to one DMP or to all the DMPs in a DMP group.

Table 1-1 Concepts and Vocabulary

Term	Definition
bpp	<i>bits per pixel</i> , also known as color depth. Indicates both the number of bits that are required to represent the color of one pixel on a display and the total number of distinct colors that the display is configured to represent. When you use DMPDM, every pixel on the DMP display is 32 bpp and the display can represent a total of 16.7 million distinct colors.
codec	<i>encoder-decoder</i> . Any specific, named method to encode, decode, or transcode digital video files or digital audio files. The quality of an encoded file is determined in part by whether its codec is <i>lossy</i> or <i>lossless</i> , meaning whether it deletes potentially important data to reduce filesize.
container	The <i>container</i> for a video content offering is the “wrapper” that combines metadata, synchronization data, and video data to which a codec has been applied.
digital signage	<i>Digital signage</i> consists of any combination of messages or other kinds of information that people can see or hear, and that a DMP delivers to people. The content might pertain to commerce, popular entertainment, staff training, emergency awareness, combinations of these things, or nearly anything. The people who manage a DMP (or who manage multiple DMPs in a digital signage network) decide what to show or say, and when, and to whom.
DMM	<i>Cisco Digital Media Manager</i> is the collective name to describe the Web-based graphical user interfaces that are preinstalled on DMM appliances : <ul style="list-style-type: none"> • DMM-Admin—<i>Digital Media Manager – Administration Module</i>. Any DMS operator can use DMM-Admin to install or upgrade the software licenses to activate DMM-DSM or DMM-VPM. • DMM-DSM—<i>Digital Media Manager – Digital Signage Module</i>. Digital signage content managers use DMM-DS to centrally manage a network of DMP devices, organize and bind together the elements for signage, and deliver content to any number of DMP displays. • DMM-VPM—<i>Digital Media Manager – Desktop Video Module</i>. Video content authors use DMM-DV to add, organize, manage, publish, and archive content on Video Portal appliances or other end devices; assign metadata and keywords; schedule immediate and future deployments to Video Portal appliances or other end devices; preview content; manage approval workflow and configure interoperation with ACNS; create and manage playlists, tickers, messages, and interstitials; and customize the Video Portal “look and feel.”
DMP	<i>Cisco Digital Media Player 4300G</i> . Compact “set-top box” device hardware that delivers digital signage content to the one DMP display that is directly attached. DMPDM is preinstalled on every DMP.
DMP display	Any television screen or other kind of monitor that is attached directly to a DMP and that shows digital signage content to an audience.
DMP group	In DMM-DSM, a DMP group is an organizational and administrative convenience that helps you to manage any number of DMP devices as quickly and easily as you would manage one DMP. No physical, logical, or topological relationship among the DMPs in a group is assumed unless you organize your DMPs consistently. By registering your DMPs in DMM-DSM and organizing them into groups (by location, display type, or on any other basis), you can act quickly to activate new settings for, or deliver updated content to, multiple devices simultaneously.
DMPDM	<i>Digital Media Player Device Manager</i> . Web-based graphical user interface, served from a DMP , that you use to configure the DMP device during its initial setup or to manage the DMP device in isolation, as an alternative to using the centralized management features in DMM-DSM .
DMS	<i>Cisco Digital Media System</i> is the name of the product family that consists of DMM appliances , Video Portal appliances , DMPs , and all of their associated software components.
encoder	<i>Cisco Digital Media Encoder 1000 or 2000</i> .
MCS	<i>Cisco Media Convergence Server 7825-H2 or 7835-H1</i> chassis on which DMS software is preinstalled.

Table 1-1 Concepts and Vocabulary

Term	Definition
metadata	<i>Metadata</i> is a formalized, hierarchical, and logical grammar to describe particular attributes of information, such as its context or purpose. In DMS , you can enter metadata attributes for the video and digital signage content offerings that you create. For example, you might use metadata to track when and where you recorded a particular video stream, who speaks in the video, and to what topics it pertains. When you use metadata, your information becomes searchable and retrievable in new ways.
planes	When you use DMPDM , the attached DMP display represents video content and HTML content on two separate, virtual <i>planes</i> , each of which has a potential on-screen size of up to 4096 x 4096 pixels. The video content plane is always opaque and behind the HTML content plane, for which you can change amount of transparency. The two planes can overlap and you will see the video content plane <i>through</i> the HTML content pane if both of the following are true: <ul style="list-style-type: none"> You show video content and HTML content simultaneously. The HTML content plane touches any of the same <i>x</i>-axis and <i>y</i>-axis coordinates that the video content plane touches.
playlist	In DMM-DSM , a playlist is an ordered sequence of files that you deliver to all the DMPs in a DMP group or that you show throughout your digital signage network. The workflow that you follow varies according to your requirements. <ol style="list-style-type: none"> To create a playlist: <ol style="list-style-type: none"> Under the Content Manager tab, add files as content items, then associate them with content categories in your media library. Under the Applications tab, use the Playlists feature to select which content items to include, how long each item should play, and the sequence for playback. To deploy a playlist, click the Publisher tab and choose whether you prefer an immediate or a scheduled deployment. Based on your preference, do one of the following: <ul style="list-style-type: none"> Click Immediate, select a DMP group, select particular DMPs in that group, select the playlist to deploy, then click Go. Click Scheduler, select the playlist to deploy, select a DMP group, specify the interval between repeated showings, select the date and time to start and stop the playback, click Save, then click Publish.
program	In DMM-VPM , a <i>program</i> is a virtual container for one or more videos . For example, a program that you name “Sales Commissions” might contain videos that you name “Know Your Customers” and “Know Your Products.”
screen zone	<i>See zone.</i>
video	<ul style="list-style-type: none"> In DMM-VPM, a <i>video</i> is a virtual container for one or more video parts and is one component in a program. For example, a video might contain parts One, Two, and Three, and be contained in a program that you named “Annual Shareholders Meeting.” In a generic sense, a <i>video</i> is any DMS content offering that includes video content, audio content, or both.
video part	In DMM-VPM , a <i>video part</i> is one component file in a video .

Table 1-1 Concepts and Vocabulary

Term	Definition
Video Portal	<p><i>Cisco Video Portal</i>—Web-based graphical user interface that audiences use to browse, search, and view video content, whether live or on-demand. Video Portal fits easily into your existing IT infrastructure and supports established video formats including Windows Media, Real Player, and Flash. Video Portal features include:</p> <ul style="list-style-type: none"> • Program guide and keyword search—Find content by category, title, or keyword. • Customizable playlists—Create or make selections from dynamic list of videos programmed by content publishers or bookmarked by individual users. • Supplemental content—View supplemental information with each video, such as tickers, further reading, related videos, Web sites, and downloadable materials. • Advanced player controls and full screen—Optimize the viewing experience with enhanced control of video playback. • Simultaneous playback and thumbnail preview—Preview other videos during main video playback.
Video Portal Reports	<p><i>Cisco Video Portal Reports</i>—Web-based graphical user interface that video content developers use to capture, view, and export Video Portal activity reports.</p>
Video Portal template	<p>A Video Portal template uses a particular codec (such as <i>Sorenson</i>) to encode a video stream, then saves the output in a particular kind of container file (such as a Real Player file). There are three Video Portal templates:</p> <ul style="list-style-type: none"> • Flash Only—Uses the Sorenson codec to encode video for audiences who have the Flash browser plugin. • Flash/Windows Media—Uses the Windows Media codec to encode video content for audiences who have browser plugins for <i>both</i> Flash and Windows Media. • Flash/Real—Uses the Real Player codec to encode video for audiences who have browser plugins for <i>both</i> Flash and Real Player. • Flash/QuickTime—Uses the MPEG4 codec to encode video for audiences who have browser plugins for both Flash and QuickTime.
WAE	<p><i>Cisco Wide Area Application Engine</i>. The hardware platform from which ACNS software provides application and content services.</p>
zone	<p>A zone in digital signage is a rectangular area on a DMP display where you show any kind of content. For example, a ticker, a banner, an advertisement, and a video might simultaneously occupy four zones on one DMP display. You configure zones in DMM-DSM; DMPDM does not have any features for zone management.</p>
zone template	<p>A zone template is a “skin” that your organization creates and designs to control how different zones look on a DMP display. Cisco provides two zone templates in DMM-DSM, but you can create as many other zone templates as you want.</p>

Client System Requirements

To understand the client system requirements to use DMS products, see *Release Notes for Cisco Digital Media System 4.0* on Cisco.com.

Understanding DMM Modules and Features

DMM features are organized into modules; you purchase separately the licenses to use the modules. Depending on what you purchase, you can use DMM to:

- Manage a digital video network and deliver video content to any audience.
- Manage a digital signage network and deliver many kinds of content throughout your network.
- Manage both a digital video network and a digital signage network.

DMM includes an administrative module at no additional cost that helps you to install licenses to use the other modules. To understand the modules and learn about their features, see:

- [Chapter 2, “Using DMM-Admin to Install Licenses.”](#)
- [Chapter 3, “Using DMM-DSM for Digital Signage.”](#)
- [Chapter 4, “Using DMM-VPM for Desktop Video.”](#)



CHAPTER 2

Using DMM-Admin to Install Licenses

Revised Feb. 26, 2007

To obtain a DMM software license key and use it to activate the modules that you purchased, do the following:

-
- Step 1** Confirm that you know the serial number and IP address for your DMM appliance. If you do not know the serial number or IP address, do the following:
- At the login prompt on your DMM appliance, use the **admin** username and its associated password to log in to **AAI**. In the displayed menu, the **SHOW_INFO** option is highlighted by default.
 - Press **Enter**, then write down these values that AAI shows to you:
 - The IP address for for your DMM appliance.
 - The serial number for your DMM appliance.
- Step 2** Compose an email message that includes or identifies *all* of the following:
- The Cisco sales order number for your DMM purchase.
 - The DMM appliance serial number.
 - Your email address.
 - The name of your organization.
 - The department name within your organization.
 - The DMM module (or modules) that you purchased.
 - If you purchased the DMM module for digital signage, include the number of Cisco Digital Media Player (DMP) devices that you will manage centrally. Permitted increments for the number of DMP devices are multiples of 10.
- Step 3** Send the email message to dms-softwarekeys@cisco.com.
- Step 4** After you receive the license key file from Cisco, save a local copy of it.
- Step 5** To load DMM in a web browser, use the DMM appliance IP address that you saw in AAI (http://<DMM_IP_address>:8080/). Alternatively, if you already loaded DMM in your browser for any reason, select **Administrator Module** from the untitled list at the top far-right of any page.
- Step 6** Click **Install/Upgrade License**.

Step 7 Click **Browse**, find and select the license file where you saved it, then click **Open**.

Step 8 Click **Install License**.

The DMM software features and modules that you purchased are now enabled.



Tip

If you receive multiple license files, repeat the procedure until all of your licenses are installed.



CHAPTER 3

Using DMM-DSM for Digital Signage

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Tip

Features in DMM-DSM are available to you if you purchased and installed the required license. For information about licensing, see [Chapter 2, “Using DMM-Admin to Install Licenses.”](#)

The simple, flexible, and centralized management and publishing features in DMM-DSM help you to deliver compelling digital media to your networked, on-premise DMP displays for many possible purposes, including:

- Marketing—Describe products and services directly to your in-store customers.
- Customer experience—Deliver entertainment and information to reduce perceived wait times.
- Messaging—Broadcast executive and internal communications in real time.
- Training—Deliver cost-effective, flexible training.
- Information—Deliver real-time schedules, news, and way-faring information where people need it.
- Advertising—Sell advertising time and space to third parties.
- Branding—Communicate about your brand consistently.

This chapter describes DMM-DSM features and options in these sections:

- [Managing and Grouping DMPs, page 3-1](#)
- [Creating and Categorizing Digital Signage Content, page 3-6](#)
- [Using Digital Signage Applications, page 3-10](#)
- [Delivering Saved Commands and Content Files to Your DMPs, page 3-30](#)
- [Using Administrative Options, page 3-36](#)
- [Common Scenarios for Using DMM-DSM, page 3-45](#)
- [Understanding and Using DMP Status Report Charts, page 3-46](#)

Managing and Grouping DMPs

You can organize your DMPs in groups and manage them collectively instead of managing only one DMP at a time. We recommend that you create DMP groups to organize your DMPs according to characteristics that they have in common, such as where or how you will use them, but you can group

your DMPs according to whatever logic works best for you. For example, the logical basis for your DMP groups might be geographic (by state, province, or metropolitan area) or corporate (by product team, sales region, time zone, primary spoken language, or type of facility), as in this illustration:

**Timesaver**

DMM-DSM includes a feature to autoregister your DMPs, so that you do not have to register each DMP manually. Autoregistration finds every DMP in the subnets that you specify, configures those DMPs to know and trust the IP address for your DMM appliance, restarts the DMPs, and registers them in DMM-DSM for centralized management. To learn how to use autoregistration, see the “{Add New | Edit} DMP Group” row in [Table 3-1 on page 3-3](#).

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Site Manager > DMP Manager**.
- Step 3** Select the options or enter the values that meet your requirements.
- When you make selections anywhere on the DMP Manager page, it is updated automatically to show the options and features that are relevant to your selection. If you do not understand your options, see [Table 3-1 on page 3-3](#).
- Step 4 (Optional)** To configure a DMP to recognize the authority of your DMM appliance if it does not already recognize that authority, do the following:
- a. Open another browser but *do not* close the browser that you have been using to work in DMM-DSM.
 - b. To log in to DMPDM on the DMP, point your new browser to the DMP IP address and enter its administrator username and password at the login prompt.
 - c. In the Settings area, click **DMM**, then enter the required values:
 - **DMM Host**—The IP address of your DMM appliance.
 - **Timeout (Seconds)**—The maximum number of seconds that your DMP should wait for a response from your DMM appliance.
 - d. To confirm your DMPDM entries and to implement them until you change them or until you restart the DMP, click **Apply**.
 - e. To make your configuration changes permanent even after you reboot your DMP, click **Save Configuration**, then (after you see the Save Configuration page) click **Save**.
 - f. Close the browser that you used to work in DMPDM and return to the browser where you have been working in DMM-DSM.
- Step 5** Click **Reboot DMP**, then (after you see the Reboot DMM page) click **Reboot**.
-

**Note**

Important considerations apply to your digital signage network if any of your DMPs uses an HTTP proxy server. It is unusual and not scalable to manage many DMPs that share one HTTP proxy server. We recommend that you *do not* use proxies.

- We recommend that you use Web Cache Communication Protocol (WCCP) to reroute HTTP requests transparently, instead of using a proxy server. To learn how to use WCCP if you do not already know how, see Cisco.com.
- To configure one DMP to use one proxy server, use DMPDM, not DMM-DSM. See the “Adjusting Basic Network Settings” topic in *User Guide for Cisco Digital Media Player Device Manager 1.0* on Cisco.com.
- To configure many DMPs to share one proxy server, even though we recommend that you do not, Click **System Tasks** in the list of all applications under the Applications tab, then click (“Add New Application”). Enter a name and description, then select **Set** from the Request Type list and use this syntax in the Request text box: `init.BROWSER_PROXY=<on|off>&init.BROWSER_PROXY_IP=<proxy_server_IP_address>&init.BROWSER_PROXY_PORT=<proxy_server_logical_port>`.

For example, if the proxy server uses 192.168.12.12 as its IP address and delivers proxy services through port 5678, the Request string would look like this: `init.BROWSER_PROXY=on&init.BROWSER_PROXY_IP=192.168.12.12&init.BROWSER_PROXY_PORT=5678&mib.save=1&mng.reboot=1`.

To remove that example proxy, you would select **Set** from the Request type list, then enter this Request string: `init.BROWSER_PROXY_IP=&init.BROWSER_PROXY_PORT=&init.BROWSER_PROXY=off&mib.save=1&mng.reboot=1`.

Table 3-1 Elements for Managing DMPs

Element	Description
DMP Groups	<p>A hierarchical tree (an <i>object selector</i>) of DMP groups, subgroups, and DMPs. From the object selector, you can add or remove group assignments for registered DMPs, create new groups, edit existing groups, and make selections for which DMPs the DMP List pane should describe.</p> <p>One group can contain another and the choices that you make for centralized management propagate from parent (DMP group), to child (DMP subgroup <i>or</i> DMP), to grandchild (DMP). There is no maximum number of levels that you can add to the hierarchy, but a simpler organization is more scalable than an unreasonably complex one would be. We recommend that you do not assign any DMP to the root level in the hierarchy, due to the complexity of management, but you can if you choose to.</p> <ul style="list-style-type: none"> • (“Add New DMP Group”)—Shows the Add New DMP Group pane, where you enter a name and description for the group and where you have the option to define one or more ranges of IP addresses that DMM-DSM should use to autoregister DMPs. • (“Edit DMP Group”)—Shows the Edit DMP Group pane. • (“Delete DMP Group”)—Deletes the group that you highlighted. • (“Opened Group”)—Shows the list of group members until you click to hide them. • (“Closed Group”)—Hides the list of group members until you click to show them. • (“DMP”)—A DMP that you assigned to the relevant parent group.

Table 3-1 Elements for Managing DMPs (continued)

Element	Description
DMP List	<p>A list of all DMPs contained in (or under) the level that you clicked in the DMP Groups object selector. To see a list of every registered DMP, click the group that represents the root level of your digital signage network.</p> <p>Tip The interval between polling cycles is 2 minutes, so any newly added DMP might report temporarily that it is unavailable; if this happens to you, wait a few minutes, then check again.</p> <ul style="list-style-type: none"> • Actions—List from which you can select an action or task for DMM-DSM to perform on one or more DMPs that you selected. After you select the DMPs and the action, click Go. The specified action starts immediately. •  (“Add New DMP”)—Shows the Add New DMP pane, where you enter a name, IP address, MAC address, and description for the DMP. •  (“Edit DMP”)—Shows the Edit DMP pane. A registered DMP might become unavailable if it receives a new dynamic IP address from the DHCP server at its deployment site. In this case, you should edit the IP address record that DMM-DSM maintains for the DMP. •  (“Delete DMP”)—Deletes the DMP that you highlighted. •  (“Assign DMP to Group”)—Creates an association between at least one DMP and at least one group. Do the following: <ol style="list-style-type: none"> 1. Click . 2. In the DMP List pane, click one or more DMPs to select them. 3. In the object selector, click one or more DMP groups that the selected DMPs should join. 4. Click  again. •  (“Remove DMP from Group”)—Deletes the association between at least one DMP and at least one group. Do the following: <ol style="list-style-type: none"> 1. Click . 2. In the DMP List pane, click one or more DMPs to select them. 3. In the object selector, click one or more DMP groups from which to disassociate the selected DMPs. 4. Click  again. • The untitled table sorts DMP information into these columns: <ul style="list-style-type: none"> – Status—Says whether a DMP is reachable. A green icon (✓) tells you that the DMP is connected to a power source, uses a known IP address, and is reachable. A red icon (✗) tells you that the DMP is unreachable. – Name—A unique and human-readable name that you entered or that DMM-DSM chose; If DMM-DSM chose the name, it is either the DMP IP address or MAC address. – IP—The public IP address that receives instructions and data from DMM-DSM. – Version—The release number for the installed firmware version. – Description—The description that you entered.

Table 3-1 Elements for Managing DMPs (continued)

Element	Description
{Add New Edit} DMP Group	<p>You can create or edit a DMP group. You must specify the group name and description. In addition, you can populate the group automatically with all the DMPs in any CIDR address range that you specify.¹</p> <hr/> <p> Caution When you autodiscover a DMP, it restarts immediately even if it is already centrally managed by a different DMM appliance than the one that you are using, and even if it is showing digital signage content on a DMP display. Therefore, we recommend that you be careful to autodiscover only those DMPs that you are not already managing from any DMM appliance. Otherwise, you might temporarily disrupt content delivery in your digital signage network.</p> <hr/> <p>Options are as follows:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the group. • Description—A brief description of the group and its purpose. •  (“Add New Range”)—One or more ranges of IP addresses that DMM-DSM should use to autoregister DMPs. •  (“Delete a Range”)—Deletes the range that you highlighted. • Automatic Grouping Ranges—Shows a list of all the defined CIDR address ranges. Click a range to edit it. • Range (CIDR)—The text box where you edit one CIDR address range at a time. <p>Note For DMP autodiscovery to succeed, the routers, switches, and firewalls that pass packets between your DMM appliance and the specified CIDR address range must allow TCP ports 6666 and 7777 to send and receive packets.</p> <p>Autodiscovery operations follow this sequence:</p> <ol style="list-style-type: none"> 1. DMM-DSM scans every device in the specified CIDR address range, looking for devices where TCP ports 6666 and 7777 are both open. 2. After finding a device with those ports open, DMM-DSM learns the IP address for the device and compares that IP address to a list of registered DMPs. <p>Note A registered DMP might receive a new dynamic IP address from the DHCP server at its deployment site and the new IP address might be within the CIDR range that you specified for autodiscovery. In this case, DMM-DSM will not centrally manage the DMP until you edit the IP address record that DMM-DSM maintains for the DMP.</p> <ol style="list-style-type: none"> 3. When one of these IP addresses does not match any DMP that DMM-DSM has registered (even if it is registered with a different dynamic IP address or centrally managed by a different DMM appliance than the one that you are using), DMM-DSM assumes that the associated device is an unregistered DMP and transmits DMP-specific instructions to the device, including an instruction to restart. 4. If the device is a DMP, it restarts. 5. If the DMP is not centrally managed already by a different DMM appliance, it transmits information to DMM-DSM to enable centralized management of the DMP as an endpoint in your digital signage network.

Table 3-1 Elements for Managing DMPs (continued)

Element	Description
{ Add New Edit } DMP	<p>Note We recommend that you never use manual registration for any medium- or large-scale deployment. To understand autoregistration, see the “{ Add New Edit } DMP Group” row, elsewhere in this table.</p> <p>Make selections and enter required values to add one DMP manually:</p> <ul style="list-style-type: none"> • DMP Name—A unique and human-readable name for the DMP. • DMP IP—The public IP address that receives instructions and data from DMM-DSM. • DMP MAC—The MAC address that the DMP NIC uses. • DMP Description—Optional, brief description of the DMP, its deployment site, or anything that is relevant or meaningful to you.

1. You can schedule multiple DMP discovery operations to run simultaneously if they all search the same one subnet. If the DMP discovery operations that you configure do not all search the same one subnet, you should not schedule them to run simultaneously. If you do, only the first such operation will run and DMM-DSM will not show any error message to explain why the other discovery operations failed to find any DMPs. If you must run DMP discovery tasks that search different subnets, schedule a 35-minute interval between the start time for one discovery and the start time for the next discovery. (In a very large network that contains thousands of DMPs, the required interval might be longer than 35 minutes.)

(Optional) To configure your DMPs to recognize the authority of your DMM appliance, do the following for each centrally managed DMP in your digital signage network:

- a. To log in to the embedded device management software, point your browser to the DMP IP address.
- b. At the login prompt, enter the username and the password that you configured for the DMP.
- c. In the Settings area, click **DMM**, then enter the required values:
 - **DMM Host**—The IP address of your DMM server appliance.
 - **Timeout (Seconds)**—The maximum number of seconds that your DMP should wait for a response from your DMM appliance.
- d. To confirm your entries and to implement them until you change them or until you restart the DMP, click **Apply**.
- e. To make your configuration changes permanent even after you reboot your DMP, click **Save Configuration**, then (after you see the Save Configuration page) click **Save**.

Click **Reboot DMP**, then (after you see the Reboot DMM page) click **Reboot**.

Creating and Categorizing Digital Signage Content

You can organize your content offerings in categories for simplified management. We recommend that you create categories for sets of characteristics that your media files have in common—such as their filetype, intended audience, or genre.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
 - Step 2** Select **Content Manager > Media Library**.
-

Table 3-2 Elements for Managing Content Files

Element	Description
Content Categories	<p>An unsorted, nonhierarchical list (an object selector) of all the content categories in your digital signage network media library. From the object selector, you can create new content categories, edit existing categories, delete categories, or click the one category that the Content List pane should describe. You can add almost any number of categories to your media library, but you cannot make any category subordinate to any other category.</p> <p>Note You can add content items at the root level of your media library, but we recommend that you do not. If you do, you must manage those content items one at a time, instead of managing them as a group.</p> <p>A content category contains content items.</p> <ul style="list-style-type: none"> •  (“Add New Content Category”)—Shows the Add New Content Category pane, where you enter a name and description for the category. •  (“Edit Content Category”)—Shows the Edit Content Category pane. •  (“Delete Content Category”)—Deletes the category that you highlighted. •  (“Opened Media Library”)—Shows all the content categories in your media library. •  (“Closed Media Library”)—Hides the list of content categories until you click to show them. •  (“Content Category”)—A content category that you created.

Table 3-2 Elements for Managing Content Files (continued)

Element	Description
Content List	<p>Note You cannot assign any content item to more than one category, and you cannot move any content item directly from one category to another. To move content between two categories, you must delete the content item entry in the first category, then create an equivalent entry in the second category.</p> <p>A list of all files contained in the category that you clicked in the Content Categories object selector.</p> <ul style="list-style-type: none"> •  (“Add New Content Item”)—Shows the Add New Content Item pane, where you enter the local pathname or HTTP URL that points to the file, specify the content type, enter a meaningful name (which can differ from the filename), enter a description, and specify who added the content item to the relevant content category. <p>Note Depending on the filesize and on network performance, a large file might take several minutes to import. If you navigate to any other page while DMM-DSM is importing a file, import fails.</p> <ul style="list-style-type: none"> •  (“Edit Content Item”)—Shows the Edit Content Item pane. •  (“Delete Content Item”)—Deletes the file that you highlighted. •  (“Batch Content Download”)—Shows the Batch Content Download pane, where you can enter a base HTTP URL for any directory a server, specify what filename pattern identifies the files to download, select the content type, and select how many levels to search <i>under</i> the specified base URL for files whose filenames match the specified pattern. • The untitled table sorts content item information into these columns: <ul style="list-style-type: none"> – Name—A unique and human-readable name that you entered. – Type—Says whether the content item is a file (F) or an HTTP URL (U). – Size—The filesize in bytes. – Path—The full pathname that points to the content file on the DMP. – Description—The description that you entered. – Upload Started—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when you started to upload the file. – Upload Finished—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when the file was completely uploaded. – Status—Says whether a DMP is reachable. A green icon (✓) tells you that the DMP is connected to a power source, uses a known IP address, and is reachable. A red icon (✗) tells you that the DMP is unreachable.
{Add New Edit} Content Category	<p>Make selections and enter required values.</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the content category. • Description—A brief description of the category and its purpose.

Table 3-2 Elements for Managing Content Files (continued)

Element	Description
{Add New Edit} Content	<p>Make selections and enter required values to add one content item, then click Submit.</p> <p>Note In this release, we do not support any use of JPEG files.</p> <ul style="list-style-type: none"> • Source—The full local pathname or remote HTTP URL of the content item. Do one of the following: <ul style="list-style-type: none"> – Click File, then click Browse or enter the full local pathname. – Click URL, enter the URL, then select or deselect the Download URL check box to choose whether to download a local copy of the file or use the version of it that is stored remotely. • Content Type—Select the content type that best applies to the content item: <ul style="list-style-type: none"> – DMP Firmware Image—A firmware image for the DMP. – Flash—An Adobe (Macromedia) Flash 6 content file. The filename extension must be SWF. – MPEG-1/2—A content file in either MPEG-1 or MPEG-2 format. – MPEG-4—A content file in MPEG-4 format. <p>Before you add any MPEG file, confirm that its filesize is not more than 1.9 GB, which is the maximum size for any file that you include in a zoning application.</p> <p>For purposes of stage-one failover, the combined size of all files cannot exceed 900 MB. To understand failover, see the “Understanding Content Substitution (Failover)” topic in <i>User Guide for Cisco Digital Media Player Device Manager 1.0</i> on Cisco.com.</p> <p>Note Our support for MPEG-4 requires that you use the MPEG-4 Part 2 codec and that you multiplex audio and video in an MPEG-2 transport stream.</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the content item. • Description—Optional, brief description of the DMP, its deployment site, or anything that is relevant or meaningful to you. • Creator—Your name or the name of the person who added the content item. <p>Note After you start to import a content item, do not click any browser button or navigate away from this page until the import is finished. If you do, the import will not finish successfully.</p>

Table 3-2 Elements for Managing Content Files (continued)

Element	Description
Batch Content Download	<p>Make selections and enter required values to add multiple content items, then click Submit. The amount of time that the batch download operation requires depends on the speed of your connection, the number of directory levels that you search for downloadable files, and the total combined filesize of all files that you transfer.</p> <p>Note In this release, we do not support the use of JPEG files.</p> <ul style="list-style-type: none"> • Base URL—An HTTP URL that points to a directory on a server. The directory that you point to serves as the root-level URL for the batch download operation; every file that you download is retrieved from this directory or from one of its children at a lower level. • Pattern—The filename pattern that identifies which files to download. For example, to download every file that uses the three-letter MPG filename extension, the pattern is *.MPG. <p>Note Do not enter the filename pattern to use any unsupported filetype. For example, we do not support any use of JPEG files in this release.</p> <ul style="list-style-type: none"> • Content Type—Select the content type that best applies to files in the batch download: <ul style="list-style-type: none"> – DMP FS Image—Firmware image files for DMPs. – Flash—Adobe (Macromedia) Flash 6 content files. The filename extension must be SWF. – MPEG-1/2—Content files in either MPEG-1 or MPEG-2 format. – MPEG-4—Content files in MPEG-4 format. • Levels—The number of levels below the specified base URL to search for (and download) files with filenames that match the specified pattern.

Using Digital Signage Applications

Topics in this section tell you how to use features under the Applications tab:

- [Creating and Organizing Digital Signage Playlists, page 3-11](#)
- [Working with Flash Applications, page 3-14](#)
- [Working with Screen Zones, page 3-16](#)
- [Using Other DMM-DSM Applications, page 3-19](#)
- [Supported Fonts, page 3-28](#)

Creating and Organizing Digital Signage Playlists

You can create and organize playlists to deliver MPEG files to your DMPs (as one part of a zoning application) and you can edit a playlist after you create it. A playlist contains MPEG files from one or more content categories and shows the MPEG files in sequence on your DMP displays.

**Tip**

Your screen resolution settings might obscure part of the DMM-DSM user interface for managing playlists and you might notice that horizontal and vertical scrolling are required even when your browser is maximized. We recommend in this case that you use the settings for a higher screen resolution. If you prefer not to change your screen resolution settings, you can press F11 in your browser at any time to use your browser in full-screen mode. To exit full-screen mode, press F11 again.

Before You Begin

- You must add MPEG files to your media library before you can organize them in a playlist and deliver that playlist to your DMPs as part of a zoning application. See the “[{Add New | Edit} Content](#)” row in [Table 3-2 on page 3-7](#).
- You must add a DMP to DMM-DSM before you can deploy any playlists to it, and you must organize your DMPs into groups before you can deploy any playlist to multiple DMPs simultaneously. The DMP Groups list does not show any DMPs until you add at least one. See [Managing and Grouping DMPs, page 3-1](#).
- You must add an external publishing server to DMM-DSM before you can deploy any playlists to it. The DMP Groups list does not show any external publishing servers until you add at least one. See [Configuring DMM-DSM to Use External Publishing Servers, page 3-43](#).

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- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Applications > Full Applications List > Playlists**, then do one of the following:
- To create a new playlist, click .
 - To edit a playlist that you created previously, click its name to highlight it in the table, then click .
- The right pane is refreshed. Depending on the icon that you clicked, the pane is named either “Create New Playlist” or “Change Playlist.”
- Step 3** Enter the values or select the options that meet your requirements and add, remove, or rearrange MPEG files in the playlist. If you do not understand the options, see [Table 3-3 on page 3-13](#).
- Step 4** To save the playlist that you configured, click **Submit**.

- Step 5 (Optional)** Deploy the playlist to one or more DMPs or to one or more external publishing servers:
- Create a zoning application and assign this playlist to the video zone. See [Working with Screen Zones, page 3-16](#).
 - Click the **Publisher** tab.
 - Decide whether to deploy the playlist immediately or at a later time, then do one of the following. (Alternatively, see the detailed procedures in [Delivering Commands or Content Files Immediately, page 3-30](#), and [Scheduling Future Deliveries of Commands or Content Files, page 3-31](#).)

To Deploy the Playlist at Any Future Time:		To Deploy the Playlist Immediately:
Step 1	Click Scheduler .	Click Immediate .
Step 2	From the Applications list, select a zoning application that contains the playlist.	In the DMP Groups object selector, click the name of a DMP group to see its member DMPs in the DMP List table. Note We do not support immediate publishing to external publishing servers. You must schedule all publishing jobs that use external servers. See the column to the right of this column.
Step 3	From the DMP Groups list, select the DMP group that should show the playlist. Alternatively, you can select an external publishing server from the DMP Groups list. Note If you select an external publishing server and if you select a playlist that contains MPEG files to retrieve from an HTTP URL, the displayed value for that URL does not change in the Selected Content table, even though you might think that it should change. See the “ Selected Content ” row in Table 3-3 on page 3-13 .	In the DMP List table, select the check box for each DMP that should show MPEG files from the playlist.
Step 4	From the How Often list, select an option to control the interval between showings.	From the Actions list, select the name of the zoning application that contains the playlist.
Step 5	Click Select Target Date , then select the calendar date for the first showing.	Click Go .
Step 6	In the From area, click  , then select the hour and minute to start showing content items in the playlist.	
Step 7	In the To area, click  , then select the calendar date, hour, and minute to stop showing content items in the playlist.	
Step 8	Click Save , then click Publish .	

Table 3-3 Elements for Managing MPEG Playlists

Element	Description
Name	A unique and human-readable name for the MPEG playlist. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM.
Description	A brief description of the MPEG playlist and its purpose.
Play	Select whether the MPEG playlist should play repeatedly from start to finish: <ul style="list-style-type: none"> • In Loop—The playlist does not stop until you stop it. After it completes a cycle, it starts again automatically. • Once—The playlist stops after one cycle that shows every content item once.
Content Categories	An object selector that lists all the content categories in your media library. From the object selector, click the one category that the Available Content table should describe. To learn more about content categories, see Creating and Categorizing Digital Signage Content, page 3-6 . <ul style="list-style-type: none"> •  (“<i>Opened Media Library</i>”)—Shows all the content categories in your media library. •  (“<i>Closed Media Library</i>”)—Hides the list of content categories until you click to show them. •  (“<i>Content Category</i>”)—A content category that you created.
Available Content	Describes every available MPEG file in the content category that you clicked. Click any other content category to see different MPEG files in the Available Content table. <p>One table row describes one MPEG file. An MPEG file is considered available if it is not already included in the playlist that you are creating or editing. You can move files from the Available Content table to the Selected Content table. To select a file, click it.</p> <p>The elements and options are:</p> <ul style="list-style-type: none"> •  (“<i>Add Selected Items</i>”) Moves the selected MPEG file to the Selected Content table, so that it will be part of the playlist. • Name—A unique and human-readable name that you entered. • Type—Says whether the MPEG file (F) is stored locally or should be retrieved from an HTTP URL (U). • Type—The file format. • Size—The filesize in bytes. • Path—Says which content category contains the described file. • Description—The description that you entered. • Upload Started—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when you started to upload the file. • Upload Finished—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when the file was completely uploaded. • Status—Tells you the current status of the file.

Table 3-3 Elements for Managing MPEG Playlists (continued)

Element	Description
Selected Content	<p>Tip If the screen resolution is low on your PC, you might notice that the Selected Content area is so small in the DMM-DSM user interface that it is difficult to use. To work around this problem temporarily, even if you are unable to use the settings for a higher resolution, press F11.</p> <p>Describes every MPEG file in the playlist that you are creating or editing. The elements and options are:</p> <ul style="list-style-type: none"> •  (“Move Selected Item Up”)—Reorders the list so that the highlighted MPEG file moves up one row, exchanging places with the file that was above it. •  (“Move Selected Item Down”)—Reorders the list so that the highlighted MPEG file moves down one row, exchanging places with the file that was below it. •  (“Edit Duration for Selected Item”)—Makes the Pic Show Time value editable, so that you can change the number of seconds that your DMP displays show the highlighted MPEG file. •  (“Delete Selected Item”)—Moves the highlighted MPEG file from the playlist to the Available Content table. •  (“Zoom In”)—Shows only the playlist, hiding the Available Content table. •  (“Zoom Out”)—Shows the playlist and the Available Content table simultaneously. • Name—The name that you entered for the MPEG file. • Pic Show Time—The number of seconds that the MPEG file will be visible when you show it on a DMP display. To enter or change the number of seconds, click . If you do not specify a duration for playback, the file plays to completion. • Type—Says whether the MPEG file is stored locally or should be retrieved from an HTTP URL. • Path—Says which content category contains the described MPEG file or shows the HTTP URL. <p>Note If you publish the playlist to an external server, nothing changes about the value that the Path column shows for an MPEG file, even though you might expect it to change so that it shows the path on the external server. The value is unchanged because you might publish the playlist more than once or to more than one server and because the original file is not deleted.</p> <p>If the value in the Path column is an HTTP URL that contains one or more named subdirectories, and you publish the playlist to an external (FTP) server, DMM-DSM automatically creates subdirectories with exactly those same names on that external server. It is not necessary for you to recreate the subdirectories manually.</p>

Working with Flash Applications

You can show a full-screen Adobe (Macromedia) Flash 6 content file on the DMP displays in a DMP group that you specify or throughout your entire digital signage network. Alternatively, you can show a Flash 6 file at full-screen on just one DMP display. The filename extension must be SWF.

Before You Begin

You must add the Flash content file to your media library before you can deliver it to your DMPs. See the “{Add New | Edit} Content” row in [Table 3-2 on page 3-7](#).

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- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Applications > Flash**, then do one of the following in the left pane:
- To create a new Flash application, click .
 - To edit a Flash application that you created previously, click its name.
 - To delete a Flash application, click its name, click , then click **Submit** to confirm the deletion.
- The right pane is refreshed. Depending on the icon that you clicked, the pane is named either “Add New Full Screen Flash Application” or “Change Full Screen Flash Application.”
- Step 3** Enter a name and a description for the application.
- Step 4** Select a content category in the object selector.
- Step 5** To select or change the SWF (Flash 6) file that this Flash application uses, click anywhere in the corresponding row to select one SWF file.
- Step 6** Click **Submit**.
-

Table 3-4 Elements for Working with a Flash Application

Element	Description
Name	A unique and human-readable name for the Flash application. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM.
Description	A brief description of the Flash application and its purpose.
Content Categories	<p>An object selector that lists all the content categories in your media library. From the object selector, click the one category that the Available Content table should describe. To learn more about content categories, see Creating and Categorizing Digital Signage Content, page 3-6.</p> <ul style="list-style-type: none"> •  (“<i>Opened Media Library</i>”)—Shows all the content categories in your media library. •  (“<i>Closed Media Library</i>”)—Hides the list of content categories until you click to show them. •  (“<i>Content Category</i>”)—A content category that you created.
Available Content	<p>Describes every available content item in the content category that you clicked. Click any other content category to see different content items in the Available Content table.</p> <p>One table row describes one file. To select a file, click anywhere in the corresponding row.</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name that you entered. • Source—Says whether the content item is a file (F) or an HTTP URL (U). • Type—The content type, which should be Flash. • Size—The filesize in bytes. • Path—Says which content category contains the described content item. • Description—The description that you entered. • Upload Started—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when you started to upload the file. • Upload Finished—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when the file was completely uploaded. • Status—Tells you the current status of the content element.

Working with Screen Zones

You can show several types of content simultaneously on a DMP display after you divide its screen virtually into distinct areas called *screen zones*. The predesigned zoning template that you select in a zoning application determines whether there are two, three, or four zones, and you can also select the actual media files and messages to show in each zone.

After you create or edit a screen zone application, you can publish it to your DMPs, each of which restarts automatically.

Before You Begin

- You must already have created and saved the content files that you will show. See [Creating and Categorizing Digital Signage Content](#), page 3-6.
- You must already have created at least one playlist, so that you can make a selection for the video zone. See [Creating and Organizing Digital Signage Playlists](#), page 3-11.
- Confirm that none of the individual content files that you will show has a filesize any larger than 1.9 GB. If any file has a larger filesize, the screen zone that should show the file shows nothing and your DMP device logs describe many errors.
- You must already have created the DMP group whose member DMPs should show the content. See [Managing and Grouping DMPs](#), page 3-1.



Caution

Before you publish a new or updated zoning application, you must run the “Stop All Applications” system task on each affected DMP. To do so, click the **Publisher** tab, select the DMP group that will use the zoning application, select **Stop All Applications** from the Actions list, then click **Go**. See the “System Tasks” row in [Table 3-6 on page 3-20](#).

Step 1 Select **Digital Signage Module** from the untitled list at the top far-right of any page.

Step 2 Select **Applications > Zoning**, then select the options that meet your requirements. If you do not understand your options, see [Table 3-5](#).

Because content files from a zoning application serve as the basis for stage-one failover on DMPs—see the “Understanding Content Substitution (Failover)” topic in *User Guide for Cisco Digital Media Player Device Manager 1.0* on Cisco.com—we recommend that the combined size of all content files should not exceed 900 MB for a zoning application. If the combined filesize is more than 900 MB, only stage-two failover is available.

Step 3 Click **Submit**.

Step 4 (Optional) Publish the zoning application. See [Delivering Saved Commands and Content Files to Your DMPs](#), page 3-30.



Note

- After you publish a zoning application, DMM-DSM automatically creates a Go to URL application. The name by default for the Go to URL application is **failover**—`<name_of_zoning_application>`. If your DMPs should use content files from the zoning application as their files to show during stage-one failover, you must publish the corresponding Go to URL application.
- After you delete a zoning application, you must also delete its corresponding Go to URL application.

Table 3-5 Elements for Managing Screen Zones

Element	Description
Name	A unique and human-readable name for this zoning application. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM.
Description	A brief description of this zoning application and its purpose. The description is optional.
Background Color	The hexadecimal number (<i>hex triplet</i>) that describes the background color. Enter a number manually or click Pick to open a color picker. In the color picker, you can select a color for which DMM-DSM automatically enters the correct hexadecimal number.
Text Color	The hexadecimal number (<i>hex triplet</i>) that describes the text color. Enter a number manually or click Pick to open a color picker. In the color picker, you can select a color for which DMM-DSM automatically enters the correct hexadecimal number. The color that you use should be one that results in clear and legible text against the background color that you specified; if there is not enough difference between the two colors, your audience might not see information clearly when you use this zoning application to show text on a DMP display.
Template Type	<p>Defines virtual subdivisions (<i>zones</i>) of the screen on a DMP display. Each zone shows one content item at a time. DMPs show zones simultaneously and the actual number of zones is determined by the template that you select. The templates are:</p> <div style="display: flex; align-items: flex-start; margin-bottom: 10px;"> <div style="border: 1px solid black; width: 100px; height: 50px; margin-right: 10px;"> <div style="border: 1px solid red; width: 100%; height: 10px; margin-bottom: 5px;"></div> </div> <div> <p>Logo-Video Subdivides the screen into two zones.</p> </div> </div> <div style="display: flex; align-items: flex-start; margin-bottom: 10px;"> <div style="border: 1px solid black; width: 100px; height: 50px; margin-right: 10px;"> <div style="border: 1px solid red; width: 100%; height: 10px; margin-bottom: 5px;"></div> <div style="border-left: 1px solid black; width: 50%; height: 40px;"></div> </div> <div> <p>Logo-Video-Flash Subdivides the screen into three zones.</p> </div> </div> <div style="display: flex; align-items: flex-start;"> <div style="border: 1px solid black; width: 100px; height: 50px; margin-right: 10px;"> <div style="border: 1px solid red; width: 100%; height: 10px; margin-bottom: 5px;"></div> <div style="border-left: 1px solid black; width: 50%; height: 40px;"></div> <div style="border: 1px solid black; width: 100%; height: 10px; margin-top: 5px;"></div> </div> <div> <p>Logo-Video-Flash-Ticker Subdivides the screen into four zones.</p> </div> </div> <p>Click a zone in the zoning map to see options for the type of zone that you clicked. If you click:</p> <ul style="list-style-type: none"> • The <i>Logo</i> zone—The page is refreshed and shows both the Content Categories object selector and the Available Content table. Select a category from the object selector to see descriptions of its content items in the table. Click a content item in the table to select that item as the one to show in the Logo zone. The supported filetype is SWF (Flash 6). • The <i>Video</i> zone—The page is refreshed and lists all of the playlists that you have created. Click a playlist to select it as the one to show in the Video zone. • The <i>Flash</i> zone—The page is refreshed and lists all of the Flash Applications that you have created. Click a Flash Application to select it as the one to show in the Flash zone. Flash 6 content files must use the filename extension SWF. • The <i>Ticker</i> zone—The page is refreshed and shows a large text box where you can enter the text to show in the ticker.

Table 3-5 Elements for Managing Screen Zones (continued)

Element	Description
Content Categories	<p>Tip If the screen resolution is low on your PC, you might notice that the Content Categories area is so small in the DMM-DSM user interface that it is difficult to use. To work around this problem temporarily, even if you are unable to use the settings for a higher resolution, press F11.</p> <p>An object selector that lists all the content categories in your media library. From the object selector, click the one category that the Available Content table should describe.</p> <ul style="list-style-type: none"> •  (“<i>Opened Media Library</i>”)—Shows all the content categories in your media library. •  (“<i>Closed Media Library</i>”)—Hides the list of content categories until you click to show them. •  (“<i>Content Category</i>”)—A content category that you created. <p>Tip To learn more about content categories, see Creating and Categorizing Digital Signage Content, page 3-6.</p>
Available Content	<p>A table in which you can click any row to select one content item in the specified content category. The table sorts content item information into these columns:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name that you entered. • Type—Says whether the content item is a file (F) or an HTTP URL (U). • Size—The filesize in bytes. • Path—The full pathname that points to the content file on the DMP. <p>Before you add any MPEG file, confirm that its filesize is not more than 1.9 GB, which is the maximum size for any file that you include in a zoning application. For purposes of stage-one failover, the combined size of all files cannot exceed 900 MB. To understand failover, see the “Understanding Content Substitution (Failover)” topic in <i>User Guide for Cisco Digital Media Player Device Manager 1.0</i> on Cisco.com.</p> <ul style="list-style-type: none"> • Description—A brief description. The description is optional. • Upload Started—Time stamp (in the format <code>YYYY-MM-DD hh:mm:ss:ms</code>) that says when you started to upload the file. • Upload Finished—Time stamp (in the format <code>YYYY-MM-DD hh:mm:ss:ms</code>) that says when the file was completely uploaded. • Status—Says whether a DMP is reachable. A green icon (✓) tells you that the DMP is connected to a power source, uses a known IP address, and is reachable. A red icon (✗) tells you that the DMP is unreachable.

Using Other DMM-DSM Applications

Many applications and options are available to you in DMM-DSM. Your expectations and goals for your digital signage network determine which applications and options are relevant to you at any particular time or for any particular purpose.

Step 1 Select **Digital Signage Module** from the untitled list at the top far-right of any page.

Step 2 Select **Applications > Full Applications List**, then click an application name in the **Application Types** list, as follows:

Application Type	Purpose
DMP Discovery	Discover the DMPs in a network range that you specify and add those DMPs to DMM-DSM for centralized management.
DMP Video/Audio Settings	Adjust the audio and video signals that DMPs send to their attached DMP displays.
Go to URL	Load content from a web server into the embedded DMP browser.
Flash	Load content from a SWF (Flash 6) file into the embedded DMP browser.
Multicasts	Receive and show a multicast video stream.
Playlists	Create lists of content to show in a particular sequence.
Publishing	Deliver to particular DMPs or to external (FTP) publishing servers the commands and settings from applications that you select or configure under the Applications tab.
Startup URL	Configure DMPs to load a particular HTTP URL when you start or restart them.
System Tasks:	Select an administrative command for delivery to DMPs:
• <i>Default</i>	Restore factory default settings to DMPs.
• <i>FTP {Off On}</i>	Enable or disable the FTP service on DMPs.
• <i>Reboot</i>	Restart DMPs.
• <i>Save Settings</i>	Save the settings that are active on DMPs.
• <i>Save Settings and Reboot</i>	Save the settings that are active on DMPs, then restart them.
• <i>Show {Browser Video}</i>	Show one DMP content plane and hide the other.
• <i>Status</i>	See the DMP status message in real time.
• <i>Stop All Applications</i>	Stop every application that DMPs are running.
• <i>Transparency 50%</i>	Set the browser plane to be partially transparent and show the video plane through it.
• <i>Upgrade Status</i>	See the DMP upgrade status message in real time.
• <i>Version</i>	See the installed DMP firmware version number.
Upgrade DMP	Select the firmware upgrades and patches to deliver to DMPs.
Zoning	Configure screen zones to show content from particular files and playlists.

If you do not understand the options for an application, see [Table 3-6 on page 3-20](#).

- Step 3** (Optional) If you previously defined or configured options for the relevant application and you saved your selections, click any row in the Applications table to select one of the operations that you defined; the row that you click should be one that you want to edit, deliver to DMPs, or delete.
- Step 4** Do one of the following:
- To define or configure options for a new operation, click  (“Add New Application”).
 - To edit the options that you previously defined or configured for the operation that you selected in Step 3, click  (“Edit Application”).
 - To delete the operation that you selected in Step 3, click  (“Delete Application”).
- Step 5** If you clicked  (“Add New Application”) or  (“Edit Application”), the page is refreshed and you can select options or enter values that define or redefine the behavior for this operation.
- Step 6** To save your selections, click **Submit**. Otherwise, click **Cancel** to discard your selections.
- Step 7** To deliver to your DMPs the commands that you saved in Step 6, see [Delivering Saved Commands and Content Files to Your DMPs, page 3-30](#).

Table 3-6 Understanding and Using Applications

Application Name	Description and Options
DMP Discovery	<p>Discover the DMPs in a network range that you specify and add those DMPs to DMM-DSM for centralized management. The elements and options are:</p> <ul style="list-style-type: none"> Name—A unique and human-readable name for the autodiscovery IP address range. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. Description—A brief description. The description is optional. Discovery IP Range—The CIDR syntax to describe one or multiple ranges of IP addresses. <p>To learn about other autodiscovery options for the DMPs in your digital signage network, see the “{Add New Edit} DMP” row in Table 3-1 on page 3-3.</p> <p>Note You can schedule multiple DMP Discovery operations to run simultaneously if they all search the same one subnet. If the DMP Discovery operations that you configure do not all search the same one subnet, you should not schedule them to run simultaneously. If you do, only the first such operation will run and DMM-DSM will not show any error message to explain why the other discovery operations failed to find any DMPs. If you must run DMP Discovery tasks that search different subnets, schedule a 35-minute interval between the start time for one discovery and the start time for the next discovery.</p>

Table 3-6 Understanding and Using Applications (continued)

Application Name	Description and Options
DMP Video/Audio Settings	<p>Adjust the audio and video signals that DMPs send to their attached DMP displays. The elements and options are:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the settings that you configure. For example, you might adjust the brightness setting to accommodate a locale where the lighting is dim, then enter a name that identifies that kind of locale. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. • Description—A brief description. The description is optional. • Brightness—The setting that compensates for any deficiencies in the on-screen brightness of your DMP displays. Brightness compensation values can range from –128 to 127. • Contrast—The setting that compensates for any deficiencies in the on-screen contrast of your DMP displays. Contrast compensation values can range from 0 to 255. The default is 128. • Saturation—The setting that compensates for any deficiencies in the on-screen color saturation of your DMP displays. Saturation compensation values can range from 0 to 255. The default is 128. • Left Audio Channel Volume—The setting to control how loudly or softly your DMP display speakers play sound in the left audio channel. Volume can range from 0 to 100, where 0 is silent. The default is 50. • Right Audio Channel Volume—The setting to control how loudly or softly your DMP display speakers play sound in the right audio channel. Volume can range from 0 to 100, where 0 is silent. The default is 50.
Go to URL	<p>Load content from a web server into the embedded DMP browser. The elements and options are:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the website that you will show. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. • Description—A brief description. The description is optional. • URL—The full and correct HTTP URL that points to a page or file on a webserver. The URL that you enter should point to a page that is dynamic and does not require any human interaction (such as clicking or scrolling) to be useful or interesting. You must enter a URL.

Table 3-6 Understanding and Using Applications (continued)

Application Name	Description and Options
Flash	<p>Load a SWF (Flash 6) file into the embedded DMP browser and change the DMP startup URL so that the Flash application loads quickly after a DMP restarts or recovers from problems with its network connection. The elements and options are:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the SWF (Flash 6) content file, which you can show full-screen on your DMP displays. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. • Description—A brief description. The description is optional. • Content Categories—An object selector that lists all the content categories in your media library. From the object selector, click the one category that the Available Content table should describe. To learn more about content categories, see Creating and Categorizing Digital Signage Content, page 3-6. <ul style="list-style-type: none"> -  (“<i>Opened Media Library</i>”)—Shows all the content categories in your media library. -  (“<i>Closed Media Library</i>”)—Hides the list of content categories until you click to show them. -  (“<i>Content Category</i>”)—A content category that you created. • Available Content—A table in which you can click any row to select one content item in the specified content category. The table sorts content item information into these columns: <ul style="list-style-type: none"> - Name—A unique and human-readable name that you entered. - Type—Says whether the content item is a file (F) or an HTTP URL (U). - Size—The filesize in bytes. - Path—The full pathname that points to the content file on the DMP. - Description—A brief description. The description is optional. - Upload Started—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when you started to upload the file. - Upload Finished—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when the file was completely uploaded. - Status—Says whether a DMP is reachable. A green icon (✓) tells you that the DMP is connected to a power source, uses a known IP address, and is reachable. A red icon (✗) tells you that the DMP is unreachable.

Table 3-6 Understanding and Using Applications (continued)

Application Name	Description and Options
Multicasts	<p>Causes DMPs to receive and show the multicast video stream from a server that you specify and changes the DMP startup URL so that the multicast application loads quickly after a DMP restarts or recovers from problems with its network connection. The elements and options are:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the multicast stream or its server. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. • Description—A brief description. The description is optional. • Stream Type—Shows the type of stream. The supported stream type is UDP. <p>Note DMM-DSM cannot show MPEG-1 files in a UDP multicast stream.</p> <ul style="list-style-type: none"> • IP—The IP address of the multicast server. You must enter an IP address. • Port—The logical port number through which the multicast server transmits the stream. You must enter the port number.
Playlists	<p>Describes the sequence of MPEG files that a zoning application should play in its video zone and changes the DMP startup URL so that the playlist application loads quickly after a DMP restarts or recovers from problems with its network connection. See Creating and Organizing Digital Signage Playlists, page 3-11.</p>

Table 3-6 Understanding and Using Applications (continued)

Application Name	Description and Options
Publishing	<div data-bbox="402 317 448 359"></div> <p data-bbox="370 363 1489 493">Caution Before you use a Publishing application to deploy a new or updated zoning template to any of your DMPs, you <i>must first</i> run the “Stop All Applications” system task on each affected DMP. To do so, click the Publisher tab, select the DMP group that will use the zoning template, select Stop All Applications from the Actions list, then click Go.</p> <hr/> <p data-bbox="370 527 1489 619">Deliver to particular DMPs the commands and settings from applications that you select or configure under the Applications tab. See Delivering Saved Commands and Content Files to Your DMPs, page 3-30. The elements and options are:</p> <ul data-bbox="381 636 1489 1094" style="list-style-type: none"> • Name—A unique and human-readable name for this publishing job. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. • Description—A brief description. The description is optional. • Application Types—The list of application categories. Click a category to see the applications in it. • Available Applications—Applications in the category that you clicked. Click anywhere in a row to select the corresponding application. <ul data-bbox="430 940 1489 1094" style="list-style-type: none"> -  (“<i>Select Applications</i>”)—Moves from the Available Applications table to the Selected Applications table the applications that you selected. - Name—The unique and human-readable name that identifies a particular application. - Description—A brief description. The description is optional. <p data-bbox="370 1108 1489 1171">Tip Although it is technically possible, it is not useful to publish a system task application, a go to URL application, or a startup URL application.</p> <ul data-bbox="381 1199 1489 1675" style="list-style-type: none"> • Selected Applications—Applications that you selected from the Available Applications table, to include them in the Publishing operation that you are configuring. Click an application to select it, so that you can use <ul data-bbox="430 1304 1489 1675" style="list-style-type: none"> -  (“<i>Move Selected Item Up</i>”)—Reorders the list so that the highlighted item moves up one row, exchanging places with the item that was above it. -  (“<i>Move Selected Item Down</i>”)—Reorders the list so that the highlighted item moves down one row, exchanging places with the item that was below it. -  (“<i>Delete Selected Item</i>”)—Moves from the Selected Applications table to the Available Applications table the applications that you selected. -  (“<i>Zoom In</i>”)—Shows only the Selected Applications table, hiding the Available Applications table. -  (“<i>Zoom Out</i>”)—Shows the Selected Applications table and the Available Applications table simultaneously.

Table 3-6 Understanding and Using Applications (continued)

Application Name	Description and Options
Startup URL	<p>Causes DMPs to load and show content that you specify, immediately after every restart. The elements and options are:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the content at the specified URL. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. • Description—A brief description. The description is optional. • Video URL—The HTTP URL (or local path on the DMP) that points to an encoded digital video file—or playlist—that a DMP should load automatically and show immediately after every restart. If your entry points to a playlist, the “playlist” is an ASCII text file as defined in Table 1-1 on page 1-1; it is <i>not</i> a “playlist” as described in the “Creating and Organizing Digital Signage Playlists” section on page 3-11. The supported transport protocols and URL types are: <ul style="list-style-type: none"> – http://<ip_address>/<path_and_filename> – udp:<ip_address_of_multicast_server>/<port_number> – playlist=http://<ip_address>/<path_and_filename> – playlist=file:///<path_and_filename> <p>Note If you enter a Video URL that points to an audio file instead of a video file, a DMP that receives this instruction will play the audio but show only a black screen on its DMP display.</p> <ul style="list-style-type: none"> • Browser URL—The HTTP URL of any document that the embedded browser on a DMP should load automatically and show immediately after each restart. We recommend that you do not point to any document or site that requires human interaction to be useful, interesting, or entertaining, because there is no keyboard or mouse that you can use to interact with what you show on a DMP display. • Reboot—Select the check box if a DMP should restart immediately when it receives this instruction. Deselect the check box if no immediate restart is required.

Table 3-6 Understanding and Using Applications (continued)

Application Name	Description and Options
System Tasks	<p>Predefined system commands that you can send to a DMP. When you create or edit a system task, these are the elements:</p> <ul style="list-style-type: none"> • Name—A unique and human-readable name for the system task. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. • Description—A brief description. The description is optional. • Request Type—A list in which the options are <i>Get</i> and <i>Set</i>, in the sense that you can set new values on a DMP or instruct DMM-DSM to get information from a DMP. • Request—The command string. <p>These system tasks tell you about a DMP:</p> <ul style="list-style-type: none"> • Status—See the current operational status message in real time. • Version—See the installed firmware version number. • Upgrade Status—See whether an upgrade is in progress or see information about the most recent upgrade. <p>These system tasks show or hide content on a DMP display:</p> <ul style="list-style-type: none"> • Show Browser—Show only the HTML content plane. • Show Video—Show only the video plane. • Transparency 50%—Set the HTML plane to be partially transparent and show the video content plane through it. <p>These system tasks help you to limit administrative access to a DMP:</p> <ul style="list-style-type: none"> • FTP Off—Stop the FTP service. • FTP On—Start the FTP service. <p>These system tasks help you to administer a DMP:</p> <hr/> <p> Caution If you restore factory-default settings on a DMP, you must set it up again, exactly as you would set up a brand-new DMP. (To learn how to set up a DMP, see <i>Quick Start Guide for Cisco Digital Media Player 4300G</i> on Cisco.com.) If you restart a DMP, you will disrupt whatever it is doing at that time. If you save any configuration settings mistakenly, you must reenter the correct settings manually.</p> <hr/> <ul style="list-style-type: none"> • Default—Restore factory-default settings. • Reboot—Restart now. • Save Settings—Save the current definitions for all configuration settings. • Save Settings and Reboot—Save the current definitions for all configuration settings, then restart. • Stop All Applications—Stop any applications that the DMP is running.

Table 3-6 Understanding and Using Applications (continued)

Application Name	Description and Options
Upgrade DMP	<div data-bbox="444 317 483 359"></div> <p data-bbox="412 365 1511 457">Caution Before you install an upgrade, you must run the “Stop All Applications” system task on all the affected DMPs. To do so, click the Publisher tab, select the DMP group that you will upgrade, select Stop All Applications from the Actions list, then click Go.</p> <hr/> <p data-bbox="412 495 1511 554">Send a content item (of the “DMP FS Image” content type) from your media library to a DMP and send commands to install the new firmware image. The elements and options are:</p> <ul data-bbox="412 573 1511 1579" style="list-style-type: none"> <li data-bbox="412 573 1511 665">• Name—A unique and human-readable name for the upgrade application. You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM. <li data-bbox="412 680 1159 709">• Description—A brief description. The description is optional. <li data-bbox="412 724 1511 848">• Content Categories—An object selector that lists all the content categories in your media library. From the object selector, click the one category that the Available Content table should describe. To learn more about content categories, see Creating and Categorizing Digital Signage Content, page 3-6. <ul data-bbox="467 867 1511 1016" style="list-style-type: none"> <li data-bbox="467 867 1511 896">–  (“<i>Opened Media Library</i>”)—Shows all the content categories in your media library. <li data-bbox="467 911 1511 970">–  (“<i>Closed Media Library</i>”)—Hides the list of content categories until you click to show them. <li data-bbox="467 984 1208 1014">–  (“<i>Content Category</i>”)—A content category that you created. <li data-bbox="412 1031 1511 1579">• Available Content—A table in which you can click any row to select one content item in the specified content category. The table sorts content item information into these columns: <ul data-bbox="467 1108 1511 1579" style="list-style-type: none"> <li data-bbox="467 1108 1203 1138">– Name—A unique and human-readable name that you entered. <li data-bbox="467 1152 1317 1182">– Type—Says whether the content item is a file (F) or an HTTP URL (U). <li data-bbox="467 1197 818 1226">– Size—The filesize in bytes. <li data-bbox="467 1241 1273 1270">– Path—The full pathname that points to the content file on the DMP. <li data-bbox="467 1285 1208 1314">– Description—A brief description. The description is optional. <li data-bbox="467 1329 1511 1388">– Upload Started—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when you started to upload the file. <li data-bbox="467 1402 1511 1461">– Upload Finished—Time stamp (in the format YYYY-MM-DD hh:mm:ss:ms) that says when the file was completely uploaded. <li data-bbox="467 1476 1511 1579">– Status—Says whether a DMP is reachable. A green icon (✓) tells you that the DMP is connected to a power source, uses a known IP address, and is reachable. A red icon (✗) tells you that the DMP is unreachable.
Zoning	Divide a DMP display virtually into areas called screen zones, play particular content types simultaneously in each of those zones, change the DMP startup URL so that the zoning application loads quickly after a DMP restarts or recovers from problems with its network connection, and restart each targeted DMP automatically. See Working with Screen Zones , page 3-16.

Supported Fonts

The browser that is preinstalled on DMPs supports some bitmap fonts and some TrueType fonts. The browser will substitute an installed font for any unsupported font.


Note

Other typographic representations that you might show on a DMP display, such as the opening titles for a theatrical film, do not require that any font be installed. Similarly, when a font is embedded within a Flash file that you show, the Flash file will load correctly even if the corresponding font is not installed on your DMP.

Supported X11 Bitmap Fonts

These X11 bitmap fonts are preinstalled as part of this release:

Foundry	Family Name	Weight Name	Slant	Setwidth Name	Add Style Name	Pixel Size	Point Size	Resolution X	Resolution Y	Spacing	Average Width	Charset Registry	Charset Encoding
adobe-	helvetica-	bold-	r-	normal-	-	0-	0-	75-	75-	p-	0-	iso8859-	1
adobe-	helvetica-	bold-	r-	normal-	-	12-	120-	75-	75-	p-	70-	iso8859-	1
adobe-	helvetica-	bold-	r-	normal-	-	14-	140-	75-	75-	p-	82-	iso8859-	1
adobe-	helvetica-	bold-	r-	normal-	-	18-	180-	75-	75-	p-	103-	iso8859-	1
adobe-	helvetica-	bold-	r-	normal-	-	24-	240-	75-	75-	p-	138-	iso8859-	1
b&h-	lucida-	bold-	l-	normal-	sans-	0-	0-	75-	75-	p-	0-	iso8859-	1
b&h-	lucida-	bold-	l-	normal-	sans-	12-	120-	75-	75-	p-	79-	iso8859-	1
b&h-	lucida-	bold-	l-	normal-	sans-	14-	140-	75-	75-	p-	92-	iso8859-	1
b&h-	lucida-	bold-	l-	normal-	sans-	18-	180-	75-	75-	p-	120-	iso8859-	1
b&h-	lucida-	bold-	l-	normal-	sans-	24-	240-	75-	75-	p-	152-	iso8859-	1
misc-	fixed-	medium-	r-	normal-	-	7-	50-	100-	100-	c-	50-	iso8859-	1
misc-	fixed-	medium-	r-	normal-	-	7-	70-	75-	75-	c-	50-	iso8859-	1
misc-	fixed-	medium-	r-	normal-	-	8-	60-	100-	100-	c-	50-	iso8859-	1
misc-	fixed-	medium-	r-	normal-	-	8-	80-	75-	75-	c-	50-	iso646.1991-	irv
misc-	fixed-	medium-	r-	normal-	-	8-	80-	75-	75-	c-	50-	iso8859-	1

- 5x7
- 5x8
- 6x13
- cursor
- fixed

Supported TrueType Fonts

These TrueType fonts are preinstalled as part of this release:

Name	Filename	Typographic Sample
Vera Sans	Vera.ttf	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890!@#\$%^&
Vera Sans Bold	VeraBd.ttf	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890
Vera Sans Bold Oblique	VeraBI.ttf	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890</i>
Vera Sans Oblique	VeraIt.ttf	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890!@#\$%^&</i>
Vera Sans Mono	VeraMono.ttf	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890!@#\$%^&* ()
Vera Sans Mono Bold	VeraMoBd.ttf	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890!@#\$%^&* ()
Vera Sans Mono Bold Oblique	VeraMoBI.ttf	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890!@#\$%^&* ()</i>
Vera Sans Mono Oblique	VeraMoIt.ttf	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890!@#\$%^&* ()</i>
Vera Serif	VeraSe.ttf	ABCDEFGHIJKLMNOPQRSTUVWXYZabcd efghijklmnopqrstuvwxyz1234567890!@#\$
Vera Serif Bold	VeraSeBd.ttf	ABCDEFGHIJKLMNOPQRSTUVWXYZabcd efghijklmnopqrstuvwxyz1234567890

Delivering Saved Commands and Content Files to Your DMPs



Tip

Network congestion or other performance problems at a DMP deployment site might cause the content that you deliver to pause, stop, or play at unacceptably low speeds. To work around this problem, troubleshoot network performance at the deployment site and consider upgrading its network or applying policies to shape and prioritize its traffic.

Topics in this section tell you how to publish (deliver to your DMPs) the content files and commands that you saved elsewhere in DMM-DSM.

- [Delivering Commands or Content Files Immediately](#), page 3-30
- [Scheduling Future Deliveries of Commands or Content Files](#), page 3-31
- [Preempting a Recurring Delivery for a One-time Event](#), page 3-35

Delivering Commands or Content Files Immediately

You can deliver commands or content files immediately to one DMP or to multiple DMPs that all use the same one DMP group as their parent.



Note

- In this release, we do not support immediate publishing to external (FTP) servers.
- We recommend that you avoid using immediate publishing with ACNS, due to the amount of time required to distribute content throughout your network and to its edge. If you do so despite this recommendation, DMM-DSM always uses the default ACNS channel. You cannot select any other channel.

Before You Begin

- You must already have created and saved the commands or the content files that you will deliver. See [Creating and Categorizing Digital Signage Content](#), page 3-6.
- You must already have created the DMP group whose member DMPs should receive the delivery. See [Managing and Grouping DMPs](#), page 3-1.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Publisher > Immediate**.
- Step 3** In the **DMP Groups** object selector, click the name of a DMP group to see its member DMPs in the DMP List table.
- Step 4** In the DMP List table, select the check box for each DMP that should receive the delivery.
- Step 5** Select from the **Actions** list the name of the saved application that you want to deliver.

Options in the Actions list are sorted into categories, based on their purpose. For example, the Playlists category contains every playlist that you have defined, while the Zoning category contains every zoning application that you have created. The Actions list contains a particular category only if you have created what the category should describe; for example, if you have not defined any playlists, the Actions list does not show the Playlists category.

Step 6 Click **Go**.

Scheduling Future Deliveries of Commands or Content Files

You can schedule future one-time or repeated delivery of commands or content files to:

- One registered DMP.
- Multiple registered DMPs that all use the same one DMP group as their parent.
- All of your registered external (FTP) publishing servers; DMM-DSM treats all of your registered external servers identically.

In addition, you can view two types of summary for any scheduled delivery. See:

- [Understanding Tooltips in the Scheduler Timeline, page 3-33](#)
- [Understanding Popup Windows in the Scheduler Timeline, page 3-34](#)

When you publish to DMPs, the only supported application type is zoning applications, which you can publish only one at a time. If you want a particular zoning application to play during stage-one failover on a DMP, the combined filesize of all its files must not be any more than 900 MB.



Caution

Do not delete the scheduled publishing job for a playlist to stop the playlist from playing content on your DMPs. If you delete the publishing job, your DMPs will continue to use the playlist as if you did nothing. This happens because each publishing job includes an instruction to stop, but you delete that instruction when you delete the publishing job that contains it. To stop your DMPs from using a playlist in this case, create a new publishing job that delivers the instruction to *stop all applications*. See the “[System Tasks](#)” row in [Table 3-6 on page 3-20](#).



Note

It is important that you understand all of the possible limitations and effects of publishing to an FTP server, as well as the exact circumstances that lead to these effects. Files are sometimes unplayable or deleted automatically, subdirectories are sometimes created automatically, and values that you enter in DMM-DSM are sometimes changed automatically. Also, DMM-DSM can publish only some application types to FTP servers.

- Video files do not play at all if you publish a playlist (or publish a zoning application that uses a playlist) to an FTP server when the playlist uses MPEG files that are:
 - Served from Microsoft Internet Information Server (IIS). On Windows, we support only Apache.
 - Requested through Microsoft Proxy Server.
 - Requested through Microsoft Internet Security and Acceleration Server.
- When your media library in DMM is the source for a file that you publish as part of a playlist, and when you select an FTP server as the target to receive that file, DMM-DSM transfers copies of the relevant file to *all* of the FTP servers that you have registered. After the transfer is completed,

DMM-DSM *deletes* the original file from its media library, then changes the relevant playlist application so that it uses a URL instead of a local path. The URL that DMM-DSM enters automatically is specific to whichever FTP server you registered first.

- When an HTTP URL is the source for a published file, and when the pathname on the source server contains subdirectories that do not exist on the target FTP server, DMM-DSM automatically creates the required subdirectories on the FTP server.
- When you publish to an FTP server, the supported application types are these only:
 - **Playlists**—See [Creating and Organizing Digital Signage Playlists](#), page 3-11.
 - **Flash**—See [Working with Flash Applications](#), page 3-14.
 - **Zoning**—See [Working with Screen Zones](#), page 3-16.
 - **Multicast**—See the “Multicasts” row in [Table 3-6 on page 3-20](#).

You can schedule a delivery to occur at any time and recur any number of times, and you can schedule any number of deliveries. DMM-DSM can make multiple deliveries simultaneously and—assuming that a DMP has a fast network connection and you send deliveries to it that are not mutually exclusive—a DMP can receive multiple deliveries simultaneously.

Before You Begin

- You must already have created and saved the commands or the content files that you will deliver. See [Creating and Categorizing Digital Signage Content](#), page 3-6.
- You must already have created the DMP group that should receive a delivery. See [Managing and Grouping DMPs](#), page 3-1.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Publisher > Scheduler**.
- Step 3** Click **Select Target Date**, then click the calendar date for the first delivery.
- Step 4** Do one of the following:
- If you are scheduling a new delivery, select from the **DMP Groups** list the DMPs or the external (FTP) publishing servers that should receive the delivery.
 - If you are editing a scheduled delivery, find that task in the timeline row that names the recipient DMP group. You might have to scroll horizontally through the timeline to see earlier or later times. When you find the task, click it to select it.
- Step 5** Set or edit the timing for delivery:
- a. From the **How Often** list, select the interval between deliveries.
 - b. In the **From** area, click , then select the hour and minute to start the delivery.
 - c. In the **To** area, click , then select the calendar date, hour, and minute to stop the delivery.

The times that you configure for deliveries are relative to the time zone where you deployed your DMM appliance, not to the time zone where you deployed any DMP. You set the time zone value when you used AAI to set up your DMM appliance and you can change the time zone value if it is wrong. To learn how to set or reset the time zone, see the “Administering a DMM Appliance” chapter in *Appliance Administration Guide for Cisco Digital Media System 4.0* on Cisco.com.

- Step 6** Select the **Applications** list option that names what you want to deliver.

Options in the Applications list are sorted into categories, based on their purpose. For example, the Playlists category contains every playlist that you have defined, while the Zoning category contains every zoning application that you have created. The Applications list contains a particular category only if you have created what the category should describe; for example, if you have not defined any playlists, the Applications list does not show the Playlists category.

Step 7 Do one of the following:

- If you are scheduling a new delivery, click **Add Task**.
- If you are editing a scheduled delivery, click **Update Task**.
- If you are deleting a scheduled delivery, click **Remove Task**.

Step 8 To save your selections, click **Save**.

If you do not save your selections for a delivery that you add or update, DMM-DSM discards your selections immediately after you refresh your browser or load any other page in it.

Step 9 (Optional) To make copies of a delivery, so that it recurs as many times as you want and at any interval that you specify, click **Multiply Task**.

- a. At the first prompt, enter the hours and minutes between copied instances of the delivery. Use the format for military time (24 hours that increment from 0100 to 2400) and the format **HH:MM**.
- b. At the second prompt, enter the number of copies to make.

Step 10 (Optional) To transmit the delivery according to the schedule that you defined—and synchronize it if you use ACNS—click **Publish**.

Understanding Tooltips in the Scheduler Timeline

Whenever your pointer hovers over a scheduled delivery in the timeline, DMM-DSM displays a tooltip. Information in the tooltip describes the current status of the corresponding delivery and summarizes its most important attributes. Information in the tooltip is organized as follows:

- **Status**—One of the following:
 - **New**—You made selections to define a new delivery. However, because you have not yet clicked Save, DMM-DSM will discard your selections if you refresh your browser or load any other page in it.
 - **Saved**—You made selections to define a new delivery and you clicked Save. DMM-DSM created a permanent record for the delivery, but has not scheduled it yet to run.
 - **Published**—You made selections to define a delivery, you saved your selections, and DMM-DSM has scheduled the delivery to run at the times that you specified.
 - **Scheduled**—The delivery is occurring now.
 - **Finished**—The delivery occurred at the scheduled time and is now stopped.
- **App**—The selection that you made from the Applications list.
- **Group**—The selection that you made from the DMP Groups list.
- **From**—The date and time when the delivery is (or was) scheduled to start.
- **To**—The date and time when the delivery is (or was) scheduled to stop.
- **How Often**—The number of times that the delivery is scheduled to recur.

- **Start Cmd Result** (Total/OK/Failed)—*N/N/N*, where:
 - The first *N* is a color-coded (black) numeral that counts the total number of times that DMM-DSM tried to deliver the command to start the designated application.
 - The second *N* is a color-coded (green) numeral that counts the number of times that DMM-DSM succeeded in delivering the command to start the designated application.
 - The third *N* is a color-coded (red) numeral that counts the number of times that DMM-DSM failed to deliver the command to start the designated application.
- **Stop Cmd Result** (Total/OK/Failed)—*N/N/N*, where:
 - The first *N* is a color-coded (black) numeral that counts the total number of times that DMM-DSM tried to deliver the command to stop the designated application.
 - The second *N* is a color-coded (green) numeral that counts the number of times that DMM-DSM succeeded in delivering the command to stop the designated application.
 - The third *N* is a color-coded (red) numeral that counts the number of times that DMM-DSM failed to deliver the command to stop the designated application.

Understanding Popup Windows in the Scheduler Timeline

Whenever you double-click a scheduled delivery in the timeline, DMM-DSM opens a popup window. Information in the popup describes the current status of the corresponding delivery and summarizes its most important attributes. Information in the popup is organized as follows:

- **Application Name**—The selection that you made from the Applications list.
- **Application Type**—One of the following (see [Using Other DMM-DSM Applications, page 3-19](#)):
 - **DMP Discovery**
 - **DMP Video/Audio Settings**
 - **Go to URL**
 - **Flash**
 - **Multicasts**
 - **Playlists**
 - **Publishing**
 - **Startup URL**
 - **System Tasks**
 - **Upgrade DMP**
 - **Zoning**
- **From**—The date and time when the delivery is (or was) scheduled to start.
- **To**—The date and time when the delivery is (or was) scheduled to stop.
- **How Often**—The number of times that the delivery is scheduled to recur.
- **Status**—One of the following:
 - **New**—You made selections to define a new delivery. However, because you have not yet clicked Save, DMM-DSM will discard your selections if you refresh your browser or load any other page in it.
 - **Saved**—You made selections to define a new delivery and you clicked Save. DMM-DSM created a permanent record for the delivery, but has not scheduled it yet to run.

- **Published**—You made selections to define a delivery, you saved your selections, and DMM-DSM has scheduled the delivery to run at the times that you specified.
- **Scheduled**—The delivery is occurring now.
- **Finished**—The delivery occurred at the scheduled time and is now stopped.
- **Group**—The selection that you made from the DMP Groups list.
- **Start Command Summary (Total/OK/Failed)**—*N/N/N*, where:
 - The first *N* is a color-coded (white) numeral that counts the total number of times that DMM-DSM tried to deliver the command to start the designated application.
 - The second *N* is a color-coded (green) numeral that counts the number of times that DMM-DSM succeeded in delivering the command to start the designated application.
 - The third *N* is a color-coded (red) numeral that counts the number of times that DMM-DSM failed to deliver the command to start the designated application.
- **Stop Command Summary (Total/OK/Failed)**—*N/N/N*, where:
 - The first *N* is a color-coded (white) numeral that counts the total number of times that DMM-DSM tried to deliver the command to stop the designated application.
 - The second *N* is a color-coded (green) numeral that counts the number of times that DMM-DSM succeeded in delivering the command to stop the designated application.
 - The third *N* is a color-coded (red) numeral that counts the number of times that DMM-DSM failed to deliver the command to stop the designated application.

In addition, a status bar at the bottom of the popup window counts the number of errors associated with the described delivery.

Preempting a Recurring Delivery for a One-time Event

In some cases, you might want to show a playlist or a zoning application one time, or for a limited time, that overlaps with a recurring delivery. For example, you might schedule a playlist to run from 9:00 a.m. to 6:00 p.m. every weekday in the month of March, but want to show a different playlist on the second Tuesday in March. The problem in this scenario is that your DMP cannot prioritize contradictory events that are scheduled to start simultaneously. However, there are three possible ways that you might schedule a preemption. In this scenario, you can do any of the following:

- Schedule a recurring event for the first uninterrupted span of dates, schedule the one-time event, then schedule a copy of the first recurring event for the second uninterrupted span of dates.
- Create two DMP groups. In this scenario, call them Group_A and Group_B. For Group_A, schedule an event that recurs throughout the entire span of dates. For Group_B, schedule the one-time event. When the one-time event should begin, move your DMPs from Group_A to Group_B. When the one-time event should end, move your DMPs back to Group A.
- Schedule the recurring event to run every weekday, as you would expect, from 9:00 a.m. to 6:00 p.m. Schedule the one-time event to start at 9:05 a.m, so that it interrupts the recurring event instead of conflicting with its start time, and schedule it to stop at 6:00 p.m. The recurring task will begin again, as expected, the next day.

Using Administrative Options

This section contains these topics:

- [Configuring DMM-DSM User Accounts](#), page 3-36
- [Limiting User Permissions](#), page 3-38
- [Configuring DMM-DSM to Use a Servlet Server](#), page 3-41
- [Configuring DMM-DSM to Send Notification Settings](#), page 3-41
- [Configuring DMM-DSM to Use ACNS](#), page 3-42
- [Configuring DMM-DSM to Use External Publishing Servers](#), page 3-43
- [Viewing the DMM-DSM ‘About Box’](#), page 3-44
- [Working with Downloads](#), page 3-44

Configuring DMM-DSM User Accounts

You can configure user accounts for DMM-DSM.

Before You Begin

To see and use the Settings tab, you must be logged in an administrator.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Settings > User Accounts**, then select the options that meet your requirements. If you do not understand your options, see [Table 3-7](#).
- Step 3** Click **Submit**.
-

Table 3-7 Elements for Configuring DMM-DSM User Accounts

Element	Description
Users List	<p>Add, select, edit, or delete user accounts.</p> <ul style="list-style-type: none"> • Click a username to highlight it, so that you can edit or delete it. DMM-DSM automatically shows the Change User pane for the corresponding account, where you can edit its settings. •  (“Add New User”)—Shows the Add New User pane, where you can define the settings for a new user account. •  (“Delete User”)—Deletes the user account that you highlighted.

Table 3-7 Elements for Configuring DMM-DSM User Accounts (continued)

Element	Description
{ Add New Change } User	<p>You can add or edit a user account. Elements and options are as follows:</p> <ul style="list-style-type: none"> • Name—A unique username. The name is unique in the sense that you have not used it as the name for any other user account that you created in DMM-DSM. You must enter the username. • Description—Optional, brief description of the user account and its purpose. • Password Repeat—The password for the user account. You must enter a password, then reenter it. • Administrator—The check box to select if this account belongs to an administrator. Otherwise, deselect the check box. When a user account belongs to an administrator, the corresponding user is granted full permissions to create, read, write, and delete every object type without limitation. If you deselect the check box, you must manually change the permissions for each user role and each object type that pertain to this user account. Because we recommend that you follow a best practice in which you create only a few users, the check box is selected by default each time that you add a user account. • Role—The list of user role types. Each type of role is associated with some of the features in DMM-DSM. Select a role to see or change the corresponding permissions for the user whose account you are adding or editing. After you select a role, you can set the permissions to create, read, write, and delete objects that are relevant to whichever role you selected. Depending on the user role that you select, an object might be a registered DMP, a registered FTP server, a content category in your digital media library, an application that you configured, or the target device (DMP or FTP server) to receive a scheduled delivery. <ul style="list-style-type: none"> – DMP Manager—A user with permissions to manage every DMP in your digital signage network, only the DMPs within particular DMP groups that you specify, or no DMPs whatsoever. – Content Manager—A user with permissions to manage every content category in your digital signage media library, only the particular content categories that you specify, or none of the content categories. – Application Manager—A user with permissions to work with every application type, only the particular application types that you specify, or no applications of any kind. – Publisher Manager—A user with permissions to schedule content deliveries to all of your registered DMPs and external (FTP) publishing servers, only the particular DMPs and FTP servers that you specify, or none of the registered DMPs or FTP servers. <p>The untitled table sorts user account permissions information into these rows:</p> <ul style="list-style-type: none"> • Objects—Contains the Create, Read, Write, and Delete buttons. To see or edit any one of these types of permissions as it applies to the specified user, you must first click the corresponding button. If you deselect both the All check box and the Selected check box in the column under a button, DMM-DSM automatically shows the words “No permissions” in red, to signify that the user does not have any permissions of that type in relation to the objects that are relevant to the role that you selected from the Role list. • All—Contains the check box that you select to assign global permissions to the user, so that he or she can always {create see edit delete} objects that pertain to whichever user role you selected from the Role list. Click the relevant button, then select the corresponding check box in the All row. • Selected—Contains the check box that you select to assign limited permissions to the user, so that he or she can {create see edit delete} only a subset of the objects that pertain to the user role that you selected from the Role list. Click the relevant button, select the corresponding check box in the Selected row, then select the subset where the user permissions should apply. (Depending on the object type, you might choose the subset by clicking its name in an object selector or clicking its name in a table; DMM-DSM automatically displays either an object selector or the a from which to select the subset.)

Limiting User Permissions

You can restrict the permissions that you grant to particular user accounts in DMM-DSM. For example, you might grant a user the permission to use only the applications that you choose or to deliver content to only the DMPs that you choose.

Before You Begin

To see and use the Settings tab, you must be logged in as an administrator.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Settings > User Accounts**.
- Step 3** In the Users list, click a username to highlight it. DMM-DSM automatically shows the Change User pane for the corresponding user account, where you can edit the permissions that apply to the user.
- Step 4** Make selections to limit any or all of the permissions that you will grant to the user. If you do not understand your options, see [Table 3-7 on page 3-36](#).

By limiting permissions in specific ways, you can assign highly specialized combinations of access to any DMM-DSM user. This table describes some of the types of limited permissions that you might want to assign and tells you how to assign them:

Scenario	What You Must Do
Allow a user to create content but not to publish it.	<ul style="list-style-type: none"> • From the Role list, select DMP Manager, then deselect every check box in the Create, Read, Write, and Delete columns. • From the Role list, select Content Manager, then select the All check box in the Create, Read, Write, and Delete columns. • From the Role list, select Application Manager, then select the Selected check box in the Create, Read, Write, and Delete columns. Next, do all of the following: <ul style="list-style-type: none"> – Click Create, then—in the table that associates permissions with applications—select only these check boxes: Flash, Go to URL, Multicasts, Playlists, and Zoning. – Click Read, then—in the table that associates permissions with applications—select only these check boxes: Flash, Go to URL, Multicasts, Playlists, and Zoning. – Click Write, then—in the table that associates permissions with applications—select only these check boxes: Flash, Go to URL, Multicasts, Playlists, and Zoning. – Click Delete, then—in the table that associates permissions with applications—select only these check boxes: Flash, Go to URL, Multicasts, Playlists, and Zoning. • From the Role list, select Publisher Manager, then deselect every check box in the Create, Read, Write, and Delete columns.

Scenario	What You Must Do
<p>Allow a user to administer one DMP (or all of the DMPs in one DMP group), but have no content-related permissions.</p>	<ul style="list-style-type: none"> • From the Role list, select DMP Manager, then select the Selected check box in the Create, Read, Write, and Delete columns. Next, do all of the following: <ul style="list-style-type: none"> – Click Create. Then, in the object selector, click a DMP or a DMP group to highlight it. – Click Read. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. – Click Write. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. – Click Delete. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. • From the Role list, select Content Manager, then deselect every check box in the Create, Read, Write, and Delete columns. • From the Role list, select Application Manager, then—in the table that associates permissions with applications—select only these check boxes: DMP Discovery, DMP Video/Audio Settings, System Tasks, Upgrade DMP. • From the Role list, select Publisher Manager, then select the Selected check box in the Create, Read, Write, and Delete columns. Next, do all of the following: <ul style="list-style-type: none"> – Click Create. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role. – Click Read. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role. – Click Write. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role. – Click Delete. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role.

Scenario	What You Must Do
<p>Allow a user to administer one DMP (or all of the DMPs in one DMP group), manage content for it, and publish content to it.</p>	<ul style="list-style-type: none"> • From the Role list, select DMP Manager, then select the Selected check box in the Create, Read, Write, and Delete columns. Next, do all of the following: <ul style="list-style-type: none"> – Click Create. Then, in the object selector, click a DMP or a DMP group to highlight it. – Click Read. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. – Click Write. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. – Click Delete. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. • From the Role list, select Content Manager, then select the All check box in the Create, Read, Write, and Delete columns. • From the Role list, select Application Manager, then—in the table that associates permissions with applications—select every check box. • From the Role list, select Publisher Manager, then select the Selected check box in the Create, Read, Write, and Delete columns. Next, do all of the following: <ul style="list-style-type: none"> – Click Create. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role. – Click Read. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role. – Click Write. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role. – Click Delete. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for the DMP Manager role.
<p>Allow a user to publish content to one DMP (or all of the DMPs in one DMP group), without any other permissions.</p>	<ul style="list-style-type: none"> • From the Role list, select DMP Manager, then deselect every check box in the Create, Read, Write, and Delete columns. • From the Role list, select Content Manager, then deselect every check box in the Create, Read, Write, and Delete columns. • From the Role list, select Application Manager, then deselect every check box in the Create, Read, Write, and Delete columns. • From the Role list, select Publisher Manager, then select the Selected check box in the Create, Read, Write, and Delete columns. Next, do all of the following: <ul style="list-style-type: none"> – Click Create. Then, in the object selector, click a DMP or a DMP group to highlight it. – Click Read. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. – Click Write. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions. – Click Delete. Then, in the object selector, click and highlight the same DMP or DMP group that you highlighted for Create permissions.

Step 5 Click **Submit**.

Configuring DMM-DSM to Use a Servlet Server

You can configure DMM-DSM to use a servlet server.

Before You Begin

To see and use the Settings tab, you must be logged in an administrator.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
 - Step 2** Select **Settings > Network Settings**.
 - Step 3** In the Servlet Server Address field, enter the routable IP address or resolvable DNS hostname.
 - Step 4** Click **Save**.
-

Configuring DMM-DSM to Send Notification Settings

You can configure DMM-DSM to notify you or other interested parties automatically whenever important events affect your digital signage network.

Before You Begin

To see and use the Settings tab, you must be logged in an administrator.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
 - Step 2** Select **Settings > E-Mail Notification Settings**, then select the options that meet your requirements. If you do not understand your options, see [Table 3-8](#).
-

Table 3-8 Elements for Configuring Notification Settings

Element	Description
SMTP Mail Server Configuration	Enter the required values for DMM-DSM to use an SMTP server. You must enter these values or you cannot send notification messages. <ul style="list-style-type: none"> • Host—Enter the routable IP address or resolvable DNS hostname for the SMTP server. • User—Enter the username for an email account on the SMTP server. • Password—Enter the password for the email user account on the SMTP server.
Administrator	E-mail Address —Enter the administrator email address.

Table 3-8 Elements for Configuring Notification Settings (continued)

Element	Description
Notification Events	<p>Make selections and enter required values to configure notification settings, then click Save.</p> <ul style="list-style-type: none"> • Notification Events—Select the event type. <ul style="list-style-type: none"> – DMP Registered—Select before you will enter the sender and recipient addresses for messages that list all newly registered DMPs. – DMP Up—Select before you will enter the sender and recipient addresses for messages that list all registered DMPs that restarted recently. – DMP Down—Select before you will enter the sender and recipient addresses for messages that list all registered but inaccessible DMPs. – DMP IP taken—Select before you will enter the sender and recipient addresses for messages that list all registered DMPs with IP address conflicts. An address conflict occurs when a DHCP server assigns to one registered DMP the exact dynamic IP address that some other registered DMP used previously. If the DMP that previously used the address is no longer in active use, you should delete the record of it in DMM-DSM; see Managing and Grouping DMPs, page 3-1. If the DMP that previously used the address is one that should still be active, confirm that it is still running and still connected to the network, then restart it and confirm that its DHCP server does not assign IP addresses with expiration dates. • From Addresses—Enter the email address from which to send notification messages. You can enter a unique sender address for each of the notification event types. • To Address—Enter the email address that should receive notification messages. You can enter a unique recipient address for each of the notification event types. • From Address—The human-readable “name” that notification messages should associate with the From address that you entered. You can enter a distinct name for each of the different notification categories to assist you in filtering or recognizing important messages when you receive them. • Text before List of the DMPs—Enter the text that notification messages should place before the list of DMPs. • Text after List of the DMPs—Enter the text that notification messages should place after the list of DMPs.

Configuring DMM-DSM to Use ACNS

You can configure DMM-DSM to use ACNS.

Before You Begin

To see and use the Settings tab, you must be logged in an administrator.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
 - Step 2** Select **Settings > ACNS Settings**, then select the options that meet your requirements. If you do not understand your options, see [Table 3-9](#).
 - Step 3** Click **Save**.
-

Table 3-9 Elements for Using ACNS

Element	Description
CDM Address	The routable IP address or resolvable DNS hostname of the appliance or services module (“blade”) that runs ACNS and Content Distribution Manager software.
Port	The TCP port for login access to CDM. The port number by default is 8443.
User	The username for login access to CDM.
Password	The password that corresponds to the CDM username that you entered.

Configuring DMM-DSM to Use External Publishing Servers

You can configure DMM-DSM to use external publishing servers. The only supported server type is FTP in this release.

Before You Begin

To see and use the Settings tab, you must be logged in an administrator.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
 - Step 2** Select **Settings > External Publishing Servers**, then select the options that meet your requirements. If you do not understand your options, see [Table 3-10](#).
 - Step 3** Click **Save**.
-

Table 3-10 Elements for Using External Publishing Servers

Element	Description
External Server Publishing List	<p>Add, select, edit, or delete external publishing (FTP) servers.</p> <ul style="list-style-type: none"> • Click a server to highlight it, so that you can edit or delete it. DMM-DSM automatically shows the Change External Publishing Server pane for the corresponding server, where you can edit its settings. •  (“Add New External Publishing Server”)—Shows the Add New External Publishing Server pane, where you can define the settings to use a new server. •  (“Delete External Publishing Server”)—Deletes the server that you highlighted.

Table 3-10 Elements for Using External Publishing Servers (continued)

Element	Description
{Add New Change} External Publishing Server	<p>You can add or edit an FTP server. Elements and options are as follows:</p> <ul style="list-style-type: none"> • Host—The routable IP address or resolvable DNS hostname of the external publishing (FTP) server. You must enter this value. • Port—The port number to use. You can use any port number, but the default is 21. • Server Type—FTP. • Remote Directory—Enter the directory to use on the external publishing server. You can use a forward slash (/) as the first character, but we do not require it. • HTTP Port—Enter the port number to use on the external publishing server. You can use any port number. If you do not enter a port number, the default is to use port 80. • User Name—Enter the FTP username. It is acceptable to use the name <i>anonymous</i>. • Password Confirm Password—You must enter the FTP password, then reenter it.

Viewing the DMM-DSM ‘About Box’

To view version information about DMM-DSM, select **Digital Signage Module** from the untitled list at the top far-right of any page, then select **Help > About**.

Working with Downloads

You can use the Downloads page.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Help > Downloads**, then click a button to download the software that the corresponding row describes (or run a test that tells you if you must download software).
-

Common Scenarios for Using DMM-DSM

This section describes common scenarios for using DMM-DSM.

Uploading Files to a DMP for Local Storage and Immediate Deployment

You can create a zoning application that shows video files from a playlist, then publish the playlist and its media files to the local Secure Digital (SD) flash memory card in a DMP for playback on its attached DMP display.



Note

- The total amount of available file space for local storage is 1 GB.
- A zoning application cannot play *any* file with a filesize greater than 1.9 GB.
- For purposes of stage-one failover, the combined size of *all* files cannot exceed 900 MB. To understand failover, see the “Understanding Content Substitution (Failover)” topic in *User Guide for Cisco Digital Media Player Device Manager 1.0* on Cisco.com.

Step 1 Select **Digital Signage Module** from the untitled list at the top far-right of any page.

Step 2 To create a playlist of videos that you can show in the video zone of a zoning application, select **Applications > Playlist**, then do the following:

- Click **Add New Playlist** (📄), then enter a unique name for the new playlist in the Name field; for example, you might enter the name *LocalPlaylist*.
You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM.
- From the Content Categories object selector, select the category for video files that meet your requirements.
- In the Available Content table, click a row to highlight a video, then click **Select Applications** (➕📄) to move the highlighted video to the Selected Content table, so that it will be part of the playlist. To add videos to the playlist, repeat this step as many times as necessary.
- (Optional)** Highlight a video in the playlist, then do either or both of the following:
 - To reposition the video in the playlist, click **Move Selected Item Up** (⬆️) or **Move Selected Item Down** (⬇️).
 - To move the video from the Selected Applications table to the Available Applications table, click **Delete Selected Item** (✖️).
- To save the playlist, click **Submit**.

Step 3 To create a zoning application that contains the playlist, select **Applications > Zoning**, then do the following:

- Click **Add Zoning Application** (📄), then enter a name for the new zoning application in the Name field; for example, you might enter the name *LocalZones*.
You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM.
- From the Template Type list, select the zoning template to use.
Each zone type (logo, video, Flash, and ticker) supports particular types of content files and your selection determines whether you must populate two, three, or four zones. To understand the zoning templates, see the “Template Type” row in [Table 3-5 on page 3-17](#).

- c. In the thumbnail representation of the zoning template that you selected, click a zone to highlight it, so that you can make selections for what to show in that zone.
- d. Select appropriate content for the highlighted zone. To understand the requirements, see the “Template Type” row in [Table 3-5 on page 3-17](#).
- e. To save the zoning application, click **Submit**.

- Step 4** To create a publishing application that can deliver the zoning application anywhere in your digital signage network, select **Applications > Full Applications List > Publishing**, then do the following:
- a. Click **Add New Application** (📄), then enter a name for the new publishing application in the Name field; for example, you might enter the name *LocalPublishing*.
You must enter a name. The name is unique in the sense that you have not used it as the name for any other application that you created in DMM-DSM.
 - b. In the Applications list, click **Zoning**.
 - c. In the Available Content table, click a row to highlight the zoning application, then click **Select Applications** (➕📄) to move the highlighted zoning application to the Selected Content table, so that it will be part of the publishing application.
 - d. To save the publishing application, click **Submit**.

- Step 5** To deploy the publishing application to a DMP or DMP group, select **Publisher > Immediate**, then do the following:
- a. From the DMP Groups object selector, select the DMP or DMP group that should receive the deployment.
 - b. From the Actions list, select the name of the publishing application that you created, then click **Go**.

DMM-DSM deploys the files and commands immediately to the DMPs that you selected, and the targeted DMPs restart automatically. After they restart, your DMPs show the newly received content on their attached DMP displays.

Understanding and Using DMP Status Report Charts

This section contains these topics:

- [Viewing the DMP Access Status Summary, page 3-46](#)
- [Viewing Available and Used Disk Space, page 3-47](#)

Viewing the DMP Access Status Summary

You can view a color-coded chart that illustrates in real time how many of the DMPs you registered in DMM-DSM are reachable for centralized management.

- The color green represents registered DMPs that are reachable.
- The color red represents registered DMPs that are unreachable.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Site Manager > Site Report**.
-

**Tip**

The interval between polling cycles is 2 minutes, so any newly added DMP might report temporarily that it is unavailable; if this happens to you, wait a few minutes, then check again.

If you notice that any of your DMPs are unreachable, see *Troubleshooting Guide for Cisco Digital Media Player 4300G*.

Viewing Available and Used Disk Space

You can view a color-coded chart that illustrates the percentages of free disk space and used disk space.

- The color green represents available space in gigabytes.
- The color blue represents used space in gigabytes.

-
- Step 1** Select **Digital Signage Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Content Manager > Disk Space**.
-



CHAPTER 4

Using DMM-VPM for Desktop Video

Revised June 19, 2007



Tip

Features in DMM-VPM are available to you if you purchased and installed the required license. For information about licensing, see [Chapter 2, “Using DMM-Admin to Install Licenses.”](#)

DMM-VPM features are organized under four tabs. The tab that you select determines what you see:

- [Using Features Under the Setup Tab, page 4-1](#)
- [Using Features Under the Users Tab, page 4-5](#)
- [Using Features Under the Video Portal Tab, page 4-8](#)
- [Using Features Under the Encoders Tab, page 4-31](#)

Using Features Under the Setup Tab



Tip

To understand what you should do if you are setting up DMM-VPM on a brand-new DMM appliance, see *Quick Start Guide for Cisco Digital Media System 4.0* on Cisco.com.

Administrators, content authors, and designers use options under the Setup tab to enter or edit the configuration and deployment settings for DMM-VPM on a DMM appliance that is already in use. This section contains these topics:

- [Configuring the Settings for Global Variables, page 4-1](#)
- [Configuring the Settings to Use a Video Portal, page 4-3](#)
- [Configuring the Location Settings for Deployments, page 4-4](#)

Configuring the Settings for Global Variables

You can configure low-level administrative and network settings for DMM-DS.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Setup > Global Variables**.

- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-1 on page 4-2](#).
- Step 4** To save and commit your entries, click **Save Configuration Parameters**.

Table 4-1 Elements for Configuring Global Variables

Element	Description
Application Administrator Contact Email	The email address that receives help requests from users.
Deployment Email Reply To	The email address that receives any user replies to the deployment and notification messages that DMM sends.
Deployment CC Email Recipient	The email address that receives a copy of every deployment and notification message that DMM sends to any user.
Password Retrieval Email	The email address that receives user requests to retrieve and restore lost passwords.
Metadata Checkout Duration	The duration (in minutes) that a user can lock metadata for editing.
Scheduled Deployment Interval	The interval (in minutes) between automated cycles when DMM checks whether there are any scheduled deployments that it should process. This setting pertains only to scheduled deployments; immediate deployments start immediately.
Default Content Provider	The content provider name to assign, by default, to any new program upon its creation. For example, you might enter the name of your organization.
E-mail Server	The routable DNS name or IP address of the SMTP server through which DMM sends deployment and approval email messages automatically.
Application Server Base	The lowest-level HTTP URL (including the TCP port number) that points to your DMM appliance. For example: <code>http://dmm.yourdomain.com:8080</code> .
Upload URL	The HTTP URL (including the TCP port number) that points to the subdirectory where you keep uploaded binary files temporarily on your DMM appliance. For example: <code>http://dmm.yourdomain.com:8080/DMM/temp/video_portal/asset</code> .
Upload Path on Local File System	<p> Caution You must not change the <i>Upload Path on Local File System</i> value from its default, even though the field is editable. Deployments fail if you change it.</p> <p>The complete file system pathname (starting from the root directory) that points to the subdirectory where you keep uploaded binary files temporarily on your DMM appliance. For example: <code>/dm2/apache-tomcat/webapps/DMM/temp/video_portal/asset</code>.</p>
Preview URL	The HTTP URL (including the TCP port number) that points to the private staging area on your DMM appliance.
Preview Path on Local File System	<p> Caution You must not change the <i>Preview Path on Local File System</i> value from its default, even though the field is editable. Previews fail if you change it.</p> <p>The complete file system pathname (starting from the root directory) that points to the staging area subdirectory on your DMM appliance. For example: <code>/dm2/apache-tomcat/webapps/DMM/temp/video_portal</code>.</p>

Configuring the Settings to Use a Video Portal

You can configure settings to use DMM-DS with a Video Portal.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Setup > Video Portal**.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-2 on page 4-3](#).
- Step 4** To save and commit your entries, click **Save Portal Parameters**.
-

Table 4-2 Elements for Configuring DMM-VPM to Use a Video Portal

Element	Description
Video Portal Web Server Base	The top-level HTTP URL of the server on which your audience can find your Video Portal.
The URL to the live video portal	The HTTP URL that points directly to your public Video Portal. If you click Check , you see one of these messages: <ul style="list-style-type: none"> “URL is blank.”—You have not entered any URL. “Server was not found.”—You entered an invalid URL. “URL exists.”—The URL that you entered points correctly to a Video Portal.
Default Audio Only Image	The SWF or non-progressive JPEG image to show as the thumbnail for every audio file. You must specify a file that is 100 pixels wide and 75 pixels high (or uses any proportional multiple of those dimensions). The file must be in the same directory that you specified as the Upload Path on Local File System when you completed the “ Configuring the Settings for Global Variables ” section on page 4-1 . Note This option applies to you <i>only if</i> —when you or an administrator used AAI to set up your Video Portal appliance—you selected FLV as the only supported filetype and Flash/Sorenson as the only supported format for encoding. For more information, see Task 10 in the “Setting Up and Configuring a Video Portal Appliance” chapter in <i>Appliance Administration Guide for Cisco Digital Media System 4.0</i> on Cisco.com.
Default Preview Image	The SWF or non-progressive JPEG image to show as a placeholder thumbnail image when no other preview image is available for a video file. You must specify a file that is 100 pixels wide and 75 pixels high (or uses any proportional multiple of those dimensions).
Supported Media Formats	 <p>Caution You must select exactly the same options that you selected in AAI when you set up your Video Portal appliance. If your selections now differ from those earlier selections, your Video Portal might not work correctly. For more information, see Task 10 in the “Setting Up and Configuring a Video Portal Appliance” chapter in <i>Appliance Administration Guide for Cisco Digital Media System 4.0</i> on Cisco.com.</p> <hr/> <p>The formats to support. Select any combination of Flash Video, Windows Media, Real, and MPEG4/H.264.</p>

Configuring the Location Settings for Deployments

You can configure the location settings for video deployments. You must deploy files to at least one remote location, because you cannot present them to audiences directly from your DMM appliance.



Caution

You must enter a deployment location for each filetype that you use. You can enter a unique location for each of the different filetypes or you can use one location that applies equally to every filetype. Any invalid entries will cause deployments to fail.



Tip

If you make a mistake when you edit the deployment locations, the blue or gray background images might no longer be visible on your Video Portal. This happens when the path is wrong that should point to your background images, or when the path points to progressive JPG files instead of nonprogressive JPG files, which are required. To correct this problem, select **Video Portal > User Interfaces**, then confirm that the default values are still correct:

- **blue**—00000000000000000000000000000005_onBusinessBlueBG.jpg
- **gray**—00000000000000000000000000000005_onBusinessGrayBG.jpg

Alternatively, if you uploaded your own image file to use as the background image, confirm that the file is a nonprogressive JPG and that the path to it does not contain any errors.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Setup > Deployment Locations**.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-3 on page 4-5](#). The filetypes are:
- **Flash Video**—Flash (FLV) files to deploy as the Flash Video version of a video offering or to show as a video preview.
 - **Windows Media Video**—Windows Media (WMV) files to deploy as the Windows Media version of a video offering.
 - **Real Video**—Real Player (RM) files to deploy as the Real Player version of a video offering.
 - **Quicktime Video**—Quicktime (MOV) files to deploy as the Quicktime version of a video offering.
 - **Video Portal Metadata (XML)**—XML files that DMM-VPM creates and that your Video Portal reads. You cannot edit the deployment location values for these XML files.
 - **Support**—Any non-video binary files to deploy as supporting images, such as SWF files or non-progressive JPG files.
- Step 4** To save and commit your entries, click **Save Deployment Locations**.
- Step 5** (Optional) To run a deployment now:
- Select **Video Portal > Deployments**, then click  **Schedule New Deployment**.
 - Select the **Video Part 1** check box (in the “Video Part Selection” area).
 - To deploy the pre-loaded content and metadata immediately, select the **Schedule Immediately** check box (in the “Deployment Time” area.)

- d. Click **Create Deployment**.
- e. To ensure that the content and metadata deployed appropriately, use another computer on your network to access the Video Portal that you installed.

Table 4-3 Elements for Configuring Deployment Locations

Element	Description
Connection type	The protocol or method for file transfer (the options are FTP, SFTP, and SCP). No matter which protocol you use, the connection timeout is 10 seconds on this page and 30 seconds during an actual deployment.
Host address	The DNS-routable hostname or IP address of the remote server where you will deploy files of the relevant filetype.
Login name	A user account name that has the required privileges to access the remote server.
Login password	The assigned password for the login name that you specified. If you select the SFTP option for deployments to your Video Portal appliance, the password that you enter must be exactly the same as your Video Portal admin password.
Root file directory	The absolute directory path to files that you will deploy. If you click Check , you see one of these messages: <ul style="list-style-type: none"> • “Field is blank”— You have not entered any path. • “File Path Does Not Exist”— You entered an invalid path. • “File Path exists”— The path that you entered points correctly to a valid file.
Root URL Path	The absolute URL, where the Video Portal will host and reference your files. If you click Check , you see one of these messages: <ul style="list-style-type: none"> • “URL is blank”— You have not entered any URL. • “Server was not found”— You entered an invalid URL. • “URL exists”— The URL that you entered points correctly to a valid file.

Using Features Under the Users Tab

You can assign differing levels of access and permissions to DMM-VPM users, depending on their roles and responsibilities. Features under the Users tab help you to create and administer user accounts, permissions, and profiles.

Any user can edit his or her own user account information at any time. In addition, if you are a DMM-VPM administrator, you can create, edit, disable, and delete accounts for other users.



Tip

If you want to edit the settings for your own DMM-VPM user account, click **My Profile** at any time. The My Profile page shows you all of the same options that you see when you edit any other user account, except that the options apply specifically and exclusively to you.

Step 1 Select **Video Portal Module** from the untitled list at the top far-right of any page.

Step 2 Select **Users > User Accounts**.

On the User Accounts page, you can toggle between two tables that are mostly very similar and that both show a list of DMM-VPM user accounts. You can move user accounts from one table to the other.

Step 3 Do one of the following:

- Click **Active** to see in the Active table a list of all the user accounts that are available to their owners. These accounts are active in the sense that you have not disabled them.
- Click **Archive** to see in the Archive table a list of all the user accounts that you have disabled temporarily. These accounts are disabled in the sense that they are not available for use by their owners. You might choose eventually to restore them or delete them.

Step 4 Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-4 on page 4-6](#).

Table 4-4 Elements for Configuring User Accounts

Element	Description
Add New User	 — Shows the Add New User page, where you can create new user accounts for access to DMM-VPM.
Delete Selected	 — Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete a user account that you disabled.
Archive Selected	 — Moves from the Active table to the Archive table a user account that you selected.
Activate Selected	 — Moves from the Archive table to the Active table a user account that you selected.
Select A User Type	Lists the categories of administrative access that you can assign to a user account. Select an access category type to filter the list of users and show only the users whose accounts you authorized for that type of access. You can associate any user account with more than one type of access. The categories for administrative access are: <ul style="list-style-type: none"> • Administrator— Sufficient to manage users, passwords, and permissions. • Category Manager— Sufficient to create, edit, or disable categories. • Author— Sufficient to create, edit, or disable programs, videos, video parts, and lineups. • Designer— Sufficient to edit aspects of the Video Portal graphical user interface for audiences, including its templates, logos, background images, and links. • Approver— Sufficient to approve content items. • Configuration Manager— Sufficient to use DMM-VPM options under the Setup tab.

Table 4-4 Elements for Configuring User Accounts (continued)

Element	Description
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box—One of the following: <ul style="list-style-type: none"> – Marks a user account that you will disable, if selected in the Active table. – Marks a user account that you disabled and that you will restore or delete, if selected in the Archive table. • User—Shows the username for the account that one row describes and shows the Properties () button. Values in the User Name column are the basis by default for how DMM-VPM sorts the rows, but you can click the heading in any other column to re-sort the rows by the values in that column. If you click the Properties button, DMM-VPM loads the user profile page where you can edit the user account that one row describes. • Email—Shows the email address for the user whose account one row describes. DMM-VPM uses this address to send approval requests and notifications. • First Name—Shows the given name of the user whose account one row describes. DMM-VPM greets the user by this name when the user logs in. DMM-VPM also includes this name when it sends approval requests and email notifications. • Last Name—Shows the surname of the user whose account one row describes. DMM-VPM includes this name when it sends approval requests and email notifications. • Last Login—Shows the most recent date and time when someone used the account that one row describes and logged in to DMM-VPM.

Table 4-4 Elements for Configuring User Accounts (continued)

Element	Description
{ Add New User Edit User Profile My Profile }	<p>Note Only a DMM-VPM administrator can enter or edit user account information for another user.</p> <p>A user account profile contains three types of information:</p> <ul style="list-style-type: none"> • Personal Contact Items—Enter the required values. <ul style="list-style-type: none"> – First Name—The given name of the user. DMM-VPM greets the user by this name after login. DMM-VPM includes this name when it sends approval requests and email notifications. – Last Name—The surname of the user. DMM-VPM includes this name when it sends approval requests and email notifications. – Company—The company name. Optional. – Department—The department name. Optional. – Email Address—The email address for this user. – Phone Number—The telephone number for this user. Optional. • Account Login—Enter the required values. <ul style="list-style-type: none"> – Login User Name—Enter a unique username (from 4 to 50 characters long). – { Password Password Again }—Enter a password (from 8 to 30 characters long, containing at least one numeral and combining uppercase and lowercase letters). – User Status—Select an option from the list. If you select Active, the user account is available for use. If you select Inactive, the account is disabled and its owner cannot use it. • Module Access Type—Select one or more categories of administrative access in DMM-VPM that this account should have. The Module Access Type area might be hidden from you if your access privileges are not sufficient to use it. <ul style="list-style-type: none"> – Administrator—Sufficient to manage users, passwords, and permissions. – Category Manager—Sufficient to create, edit, or disable categories. – Author—Sufficient to create, edit, or disable programs, videos, video parts, and lineups. – Designer—Sufficient to edit aspects of the Video Portal graphical user interface for audiences, including its templates, logos, background images, and links. – Approver—Sufficient to approve content items. – Configuration Manager—Sufficient to use DMM-VPM options under the Setup tab. <p>Note Not even an administrator can change his or her own access privileges; only another administrator can change your access privileges if you are an administrator.</p>

Using Features Under the Video Portal Tab

This section contains these topics:

- [Working with Programs, Videos and Video Parts, page 4-9](#)
- [Creating and Working with Playlists, page 4-14](#)
- [Creating and Working with Content Categories, page 4-17](#)
- [Creating and Working with Tickers, page 4-22](#)

- [Creating and Working with Interstitials](#), page 4-19
- [Creating and Working with Interstitial Sequences](#), page 4-20
- [Customizing Your Video Portal](#), page 4-23
- [Configuring the Settings to Manage Deployments](#), page 4-26

Working with Programs, Videos and Video Parts



Note

- Programs, videos, and video parts are all *content objects*. You can create, edit, disable, and delete content objects at any time, according to your requirements.
- Although a program can contain multiple videos, you cannot add any video to more than one program.
- Each program that you create must contain at least one video before you can show it to any audience.
- Each video that you create must contain at least one video part before you can show it to any audience.

You can create programs and populate them with videos and video parts, then deliver the programs to your audiences live or on demand.

You can also configure DMM-VPM to track approvals for video parts. The approval process workflow does not help you to enforce any security policy; instead, it helps your organization to formalize communication. Content developers can request approval for video parts, then a designated approver can approve or deny the requests. A designated approver is someone whose DMM-VPM user type (which you configured under the Users tab) is Approver. Not even a designated approver can approve his or her own requests. Approval and denial have *no effect* on whether a video part can be deployed.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > Programs**.
- On the Programs page, you can toggle between two tables that are mostly very similar and that both show a list of DMM-VPM programs. You can move programs from one table to the other.
- Step 2** Do one of the following:
- Click **Active** to see in the Active table a list of all the programs that are available to show to your audience. These programs are active in the sense that you have not disabled them. If you have not created any programs or if you archived every program, the table is empty.
 - Click **Archive** to see in the Archive table a list of all the programs that you have disabled temporarily. These programs are disabled in the sense that they are not available for your audience to find or see and you cannot add them to playlists. You might choose eventually to restore or delete these programs.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-5 on page 4-10](#).
- Step 4** Click **Save**.
-

Table 4-5 Elements for Configuring Content Objects

Element	Description
Add New {Program Video Video Part}	 —Shows the Add New {Program Video Video Part} page.
Delete Selected	<p> Caution If you delete a program, the actual effect of the deletion differs if the program is part of a playlist or is not. If you delete a program that is part of an active and deployed playlist, your audiences can still find, see, and use the program, its videos, and its video parts on your Video Portal. However, if you <i>have not</i> included the program in any playlist, DMM-VPM immediately deletes the program, its videos, and its video parts; they are not available for any purpose in DMM-VPM or on your Video Portal and you cannot undo the deletion.</p> <p> —Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete the disabled or archived content objects that you selected.</p>
Archive Selected	<p> —Moves from the Active table to the Archive table the content objects that you selected.</p> <p>Note If you archive a program, the videos and video parts within it remain active. You can deploy them in a playlist and your audiences can use a keyword search to find them on your Video Portal.</p>
Activate Selected	 —Moves from the Archive table to the Active table the content objects that you selected.
Select a Program Provider	Lists the program providers. Select a provider name to filter the list of programs and show only the programs the are associated with that provider.

Table 4-5 Elements for Configuring Content Objects (continued)

Element	Description
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box—One of the following: <ul style="list-style-type: none"> – Marks a content object that you will disable, if selected in the Active table. – Marks a content object that you disabled and that you will restore or delete, if selected in the Archive table. • Name—Shows the name or title for the content object that the corresponding row describes, shows the Properties () button, and sometimes shows the Preview () button. Values in the name column are the basis by default for how DMM-VPM sorts the rows, but you can click the heading in any other column to re-sort the rows by the values in that column. If you click the Properties button, DMM-VPM loads a page where you can edit content object metadata, such as the title and description for a program. • Provider—<i>Programs only</i>. Shows the provider who produced the program that one row describes, as specified in the program metadata. • Last Modified—Shows the date on which the content object was last edited. • Active Videos—<i>Programs only</i>. Shows the Active Videos () button and the Add New Video () button. If you click the Active Videos button, DMM-VPM loads a page where you can add videos to the program that the corresponding row describes or mark videos to remove from that program. If you click Add New Video, DMM-VPM loads the page where you can enter metadata for a new video. • Active Categories—<i>Programs only</i>. Shows the Active Categories page for the program that the corresponding row describes. From the Active Categories page, you can select and add categories to associate with the program or you can select and delete category associations from the program. • Active Video Parts—<i>Videos only</i>. Shows the Active Video Parts () button and the Add New Video Part () button. If you click the Active Video Parts button, DMM-VPM loads a page where you can add video parts to the video that the corresponding row describes or mark video parts to remove from the video. • Release Date—<i>Video Parts only</i>. Shows the release date. • Length—<i>Video Parts only</i>. Shows the playback duration of the video part in minutes and seconds. • Active Related Items—<i>Video Parts only</i>. Shows the Active Related Items page for the video part that the corresponding row describes. From the Active Related Items page, you can select and add related items to the video part or you can select and archive related items. Related items can be links to web sites, links to video parts in other programs on your Video Portal, or links to files for your audience to download and use. Your audience sees the related items for a video part on your Video Portal if they click More Info during playback. If you link to a web site, you can choose to show it in an ordinary browser window or in a browser that you customize in DMM-VPM. • Approval Status—<i>Video Parts only</i>. To request an approval for the video part that the corresponding row describes, click Request Approval, select an approver from the list in the popup window, then click Request Approval and Close.

Table 4-5 Elements for Configuring Content Objects (continued)

Element	Description
{ Add New Program Modify Program }	<p>The metadata attributes that define the program. Enter or select the metadata after you click Add New Program or after you click the Properties button for a program.</p> <ul style="list-style-type: none"> • Program Name—The title for this program, which your audiences should see on your Video Portal when they click the Program Guide tab. • Program Description—The description that your audiences should see on the Program Guide tab, next to the corresponding program name. In addition, this description is visible in the Video Portal “More Info” text for any video that this program contains. • Program Status—If you select Active, the program is visible to your audiences after you populate, save, and deploy it. If you select Archive, the program is not visible to your audiences. • Program Provider—The name of your company, organization, or department. You use this information to manage and administer content; your audiences do not see it. The default provider name is whichever one you chose under the Setup tab. • Program Categories—Your audiences can use the program guide or search feature on your Video Portal to find this program in the categories that you select. You can add or remove category associations at any time. To understand categories, see Creating and Working with Content Categories, page 4-17.
{ Add New Video Modify Video }	<p>The metadata attributes that define the video. Enter or select the metadata after you click Add New Video or after you click the Properties button for a video.</p> <ul style="list-style-type: none"> • Video Title—The title for this video, which your audiences should see on your Video Portal when they use its playlist, program guide, or search features. • Video Status—If you select Active, you can add the video to a program that you create. If you select Inactive, you cannot add the video to any program unless you reactivate it. • Video Description—A description for your reference. Your audiences do not see it.

Table 4-5 Elements for Configuring Content Objects (continued)

Element	Description
{ Add New Video Part Modify Video Part }	<p>Physical and logical attributes of the file that you use as a video part. Enter or select the attributes after you click Add New Video Part or after you click the Properties button for a video part.</p> <ul style="list-style-type: none"> • Show Direct Portal Link—Shows the Video Portal URL for this video part. • Video Part Description—The description that your audiences see on your Video Portal in its preview pane and in the “More Info” text under its Overview tab. Do not enter more than 72 lines of text or more than 48 characters per line. • Type of Video—If VoD, the source for the video part is a file; if Live Event, the source for the video part is an encoder. • {Flash Windows Media Real QuickTime} Video (video or audio)—Shows a filename that you enter or that DMM-VPM enters automatically after you click the link to upload a new VoD file. If you enter the filename manually for a VoD, special requirements apply^{1, 2, 3, 4} to each supported filetype. DMM-VPM saves any uploaded VoD files to the deployment location that you specified under the Setup tab. The file formats that you see are exactly the ones that you selected to support when you set up your Video Portal. You must enter or upload one file apiece for <i>each</i> format that your Video Portal supports. We recommend that you encode all files to be 400 pixels wide and 300 pixels high. <p>If you selected the Live Event option⁵ as your Type of Video, you see these options:</p> <ul style="list-style-type: none"> – Encoder—Lists all of the encoders that you configured DMM-VPM to use. Select the encoder that is the source of the live stream. – Use Default Streaming Settings—Use the DMM-VPM settings exactly as they are. – Advanced Settings—Configure this stream to use settings that differ from the default. Select the encoding or transcoding format⁶, the encoder input channel ( A or  B), the publishing method (push <i>or</i> pull), the input methods and standard for audio and video, and whether to save a copy of the live stream as a file. <ul style="list-style-type: none"> • Play Order in Video—Shows when the video will play this video part, relative to the playback sequence of all the video parts in the video. • {Release End of Life} Date/Time—Click  to pick the date, select options for the hour and minute, then select AM or PM. Options to configure the End of Life⁷ date and time values are visible only if you are setting up a live event. The default release date is 7 days from today. • Duration—Describes the playback duration of the video part in hours, minutes and seconds. Use the format HH:MM:SS. If you enter only seconds, DMM-VPM corrects your entry. You can use the scheduled length of a live event as the duration of its corresponding stream. The duration that you enter does not stop your Video Portal from delivering the whole stream if the actual event runs past its scheduled time to stop; the stream continues to play in your Video Portal until you stop it or it is no longer available. • Preview Content File URL—The location of a SWF file or <i>nonprogressive</i> JPEG⁸ file that is 100 pixels wide and 75 pixels high (or any proportionate multiple of those dimensions) and that your Video Portal should show as the preview image for this video part. To select a local file and upload it for this purpose, click Upload new preview video file. If you use a SWF file, we recommended that you program it to pause after 10 seconds and not loop. • Preview Description—A text description that your Video Portal shows to your audiences but truncates after 160 characters. If you do not enter a preview description, your Video Portal shows the first 160 characters from the video part description instead. • Keywords—Descriptive words to make this video part searchable on your Video Portal⁹.

1. You must use HTTP to point to any remote Flash file that you will upload. Flash files must use {FLV | SWF} for their filename extension. You cannot select Flash as the media format for a live event.
2. You must use {MMS | RTSP} to point to any remote Windows Media file that you will upload. Windows Media files must use {WMV | WMA | ASF} for their filename extension.
3. You must use RTSP to point to any remote RealPlayer file that you will upload. RealPlayer files must use RM for their filename extension.
4. You must use {HTTP | RTSP} to point to any remote QuickTime file that you will upload. QuickTime files must use {MOV | MP4 | M4V} for their filename extension.
5. When you point to a live stream, a filename is not necessary. In most cases, you point instead to a directory on the streaming server (or servers). If you are unsure about the configuration that your organization uses, see your systems administrator for details.
6. Encoding format options are 1.5M, 350K, 50K, and 768K. Transcoding format options are 1.5M, 2M, 350K, 50K, and 768K.
7. If you are setting up a live event, you must explicitly enter the End of Life Date/Time value. (DMS does not parse it automatically from the Release Date/Time value.) If you do not enter a End of Life Date/Time value, your live event will not occur.
8. Your Video Portal cannot display progressive JPEG images.
9. There is no reason to enter commas, semicolons, or other word separators; your Video Portal ignores them if you do.

Approving or Denying the Request to Approve a Video Part

After anyone submits a video part approval request, DMM-VPM sends email to the designated approver. The email message contains a link to preview and approve or deny the video part. If you receive the message, do the following:

-
- Step 1** Click the email link to preview the video part and, when your browser loads the Approval Request page, click **Preview Now**.
- Step 2** Watch the video part, enter comments if you have any, then use the controls at the bottom of the window to approve or deny the request.
- DMM-VPM is updated immediately and notifies the requestor through email that you approved or denied the request.
- Step 3** To return to DMM-VPM, click **Close and Return**.
-

Creating and Working with Playlists



Note

Each playlist that you create must contain at least one video part before you can show it to any audience.

DMM-VPM can help you to emphasize particular content offerings by showing key videos on your Video Portal under its Featured Playlist tab.

You can also configure DMM-VPM to track approvals for playlists. The approval process workflow does not help you to enforce any security policy; instead, it helps your organization to formalize communication. Content developers can request approval for playlists, then a designated approver can approve or deny the requests. A designated approver is someone whose DMM-VPM user type (which you configured under the Users tab) is Approver. Not even a designated approver can approve his or her own requests. Approval and denial have *no effect* on whether a playlist can be deployed.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > Playlists**.
- On the Playlists page, you can toggle between two tables that are mostly very similar and that both show a list of DMM-VPM playlists. You can move playlists from one table to the other.
- Step 2** Do one of the following:
- Click **Active** to see in the Active table a list of all the playlists that are available to show to your audience. These playlists are active in the sense that you have not disabled them. If you have not created any playlists or if you archived every playlist, the table is empty.
 - Click **Archive** to see in the Archive table a list of all the playlists that you have disabled temporarily. These playlists are disabled in the sense that they are not available for your audience to find or see. You might choose eventually to restore or delete these playlists.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-6 on page 4-15](#).
- Step 4** Click **Save**.
-

Table 4-6 *Elements for Configuring Playlists*

Element	Description
Add New Playlist	 — Shows the Add New Playlist page.
Delete Selected	 — Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete the archived playlist that you selected.
Archive Selected	 — Moves from the Active table to the Archive table the playlists that you selected.
Activate Selected	 — Moves from the Archive table to the Active table the playlists that you selected.

Table 4-6 Elements for Configuring Playlists (continued)

Element	Description
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box—One of the following: <ul style="list-style-type: none"> – Marks a playlist that you will disable, if selected in the Active table. – Marks a playlist that you disabled and that you will restore or delete, if selected in the Archive table. • Name—The title of the playlist that the corresponding row describes, the Properties () button, and the Preview () button. Values in the name column are the basis by default for how DMM-VPM sorts the rows, but you can click the heading in any other column to re-sort the rows by the values in that column. If you click the Properties button, DMM-VPM loads a page where you can edit metadata, such as the title and description, for the playlist that the corresponding row describes. If you click the Preview button, your Video Portal shows to you the playlist that the corresponding row describes. • Publish Dates—The range of dates when which the playlist is valid, between the release date and the end of life date. • Last Modified—The date on which the content object was last edited. • Active Video Parts—Shows the Active Video Parts () button and the Add New Video Part () button. If you click the Active Video Parts button, DMM-VPM loads a page where you can add video parts to the playlist that the corresponding row describes or mark video parts to remove from the playlist. • Current Status—Describes the approval status and helps you to request playlist approval from a DMM-VPM user with approver permissions. To request approval for the playlist that the corresponding row describes, click Request Approval, select an approver from the list in the popup window, then click Request Approval and Close. • Deployment Choice—Says whether the playlist that the corresponding row describes is the default playlist for deployments.
{ Add New Playlist Modify Playlist }	<p>Metadata attributes that define the playlist. Enter or select the metadata after you click Add New Playlist or after you click the Properties button for a playlist.</p> <ul style="list-style-type: none"> • Name—The title for this playlist. • Status—Active or Inactive. If you select Active, the playlist is visible to your audiences after you populate, save, and deploy it. If you select Inactive, the playlist is not visible to your audiences. The default is Active. • Description—Enter a description that is meaningful to you. The description is optional and is only for your reference. • Make this lineup default choice for deployments?—Yes or No. To use this playlist by default in every deployment, select Yes. Otherwise, select No. • Release Date—This date is optional and is only for your reference. • End of Life Date—This date is optional and is only for your reference.

Table 4-6 Elements for Configuring Playlists (continued)

Element	Description
{ Add New Video Part Modify Video Part }	<p>Select a video part to add in the playlist that the corresponding row describes.</p> <ul style="list-style-type: none"> • Video Part Link—The title of the video part that you selected. DMM-VPM enters the title automatically after you select the video part. • Select Video Part—Opens a popup window where you can select a video part to add to the playlist. Select a program from the Program list, then select a video part from the Video list. If you select the wrong video part, try again. • Play Order Position—Select a playlist position for the video part, relative to the position of other video parts in the playlist. • Status—Active or Inactive. The default is Active.

Approving or Denying the Request to Approve a Playlist

After anyone submits a playlist approval request, DMM-VPM sends email to the designated approver. The email message contains a link to preview and approve or deny the playlist. If you receive the message, do the following:

-
- Step 1** Click the email link to preview the playlist and, when your browser loads the Approval Request page, click **Preview Now**.
- Step 2** Watch the playlist, enter comments if you have any, then use the controls at the bottom of the window to approve or deny the request.
- DMM-VPM is updated immediately and notifies the requestor through email that you approved or denied the request.
- Step 3** To return to DMM-VPM, click **Close and Return**.
-

Creating and Working with Content Categories

You can categorize programs according to characteristics that they have in common, such as their topic, subject matter, target audience, featured executive, or business function. Your audiences use corresponding categories on your Video Portal to find or browse content. The videos and video parts in a program inherit its category associations automatically.

The program guide on your Video Portal describes only the programs that you have categorized. If you deploy a program but do not associate it with any categories, it is not visible in the program guide. In this case, your audiences must either perform a keyword search or know and use the absolute URL to find and see a video that the program contains. Therefore, to improve the user experience for your audiences, we recommend that you associate each program with at least one category.

To create and manage categories and to associate programs with them, use the Categories page.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > Categories**.

On the Categories page, you can toggle between two tables that are mostly very similar and that both show a list of DMM-VPM content categories. You can move categories from one table to the other.

- Step 2** Do one of the following:
- Click **Active** to see in the Active table a list of all the categories that are available to associate with content objects and show to your audience. These categories are active in the sense that you have not disabled them. If you have not created any categories or if you archived every category, the table is empty.
 - Click **Archive** to see in the Archive table a list of all the categories that you have disabled temporarily. These categories are disabled in the sense that they are not available for your audience to find or see and you cannot associate them with any content objects. You might choose eventually to restore or delete these categories.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-7 on page 4-18](#).

Table 4-7 Elements for Configuring Categories

Element	Description
Add New Category	 — Shows the Add New Category page.
Delete Selected	 — Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete the archived category that you selected.
Archive Selected	 — Moves from the Active table to the Archive table the categories that you selected.
Activate Selected	 — Moves from the Archive table to the Active table the categories that you selected.
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box— One of the following: <ul style="list-style-type: none"> – Marks a category that you will disable, if selected in the Active table. – Marks a category that you disabled and that you will restore or delete, if selected in the Archive table. • Name— The name of the category that the corresponding row describes and the Properties () button. Values in the Name column are the basis by default for how DMM-VPM sorts the rows, but you can click the heading in any other column to re-sort the rows by the values in that column. If you click the Properties button, DMM-VPM loads a page where you can edit metadata, such as the name and description, for the category that the corresponding row describes. • Last Modified— The date and time when the category was last edited. • Date Added— The date and time when the category was created. • # of Programs— Shows the Active Associated Programs () button. If you click the button, DMM-VPM loads a page where you can associate programs with the category that the corresponding row describes or mark programs to disassociate from the category.

Table 4-7 Elements for Configuring Categories (continued)

Element	Description
{ Add New Category Modify Category }	<p>Metadata attributes that define the category. Enter or select the metadata after you click Add New Category or after you click the Properties button for a category.</p> <ul style="list-style-type: none"> • Category Name—The name for this category. Your audiences see this category name on your Video Portal when they use its the Program Guide tab to browser by category. • Category Status—Active or Inactive. If you select Active, the category is visible to your audiences and you can associate programs with it. If you select Inactive, the category is not visible to your audiences and you cannot associate programs with it. The default is Active. • Associated Programs—Lists all programs, so that you can select any of them to associate with the category or deselect any of them to disassociate from the category. You must associate each category with at least one program, but there is no upper limit to the number of programs that you can associate with any category. You can add or remove category associations at any time. • Category Description—Enter a description that is meaningful to you. The description is optional and is only for your reference.

Creating and Working with Interstitials

In DMM-VPM, an interstitial is a short segment that your Video Portal shows when you have not scheduled anything else to show. To create a new interstitial, follow these steps:

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > Interstitials**.
- On the Interstitials page, you can toggle between two tables that are mostly very similar and that both show a list of DMM-VPM interstitials. You can move interstitials from one table to the other.
- Step 2** Do one of the following:
- Click **Active** to see in the Active table a list of all the interstitials that are available. These interstitials are active in the sense that you have not disabled them. If you have not created any interstitials or if you archived every interstitial, the table is empty.
 - Click **Archive** to see in the Archive table a list of all the interstitials that you have disabled temporarily. These interstitials are disabled in the sense that your audience will not see them. You might choose eventually to restore or delete these interstitials.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-8 on page 4-19](#).
- Step 4** Click **Save**.
-

Table 4-8 Elements for Configuring Interstitials

Element	Description
Add New Interstitial	 — Shows the Add New Interstitial page.
Delete Selected	 — Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete the archived interstitial that you selected.

Table 4-8 Elements for Configuring Interstitials (continued)

Element	Description
Archive Selected	 — Moves from the Active table to the Archive table the interstitials that you selected.
Activate Selected	 — Moves from the Archive table to the Active table the interstitials that you selected.
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box— One of the following: <ul style="list-style-type: none"> – Marks an interstitial that you will disable, if selected in the Active table. – Marks an interstitial that you disabled and that you will restore or delete, if selected in the Archive table. • Name— The Properties () button, the name of the interstitial that the corresponding row describes, and the name of the video part that the interstitial contains. The interstitial name in this column is the basis by default for how DMM-VPM sorts the rows, but you can click the heading in the Length column to re-sort the rows by duration. If you click the Properties button, DMM-VPM loads a page where you can edit metadata, such as the name and description, for the interstitial that the corresponding row describes. • Length— The number of seconds that the video part will play until it stops.
{ Add New Interstitial Modify Interstitial }	<p>Physical and logical attributes of the interstitial. Enter or select the attributes after you click Add New Interstitial or after you click the Properties button for an interstitial.</p> <ul style="list-style-type: none"> • Name— The name for this interstitial. Enter a maximum of 50 characters. • File URL— Before deployment, the filename. After deployment, the URL. • Upload new Interstitial graphical media file— Uploads a SWF or nonprogressive JPEG file that is 400 pixels wide and 120 pixels high. This file acts like a button; when your audiences click it, your Video Portal shows to them the click-through segment that you specify. • Click Through Segment— Select the video part that your Video Portal should show to someone who clicks the interstitial. • Play Duration— The number of seconds that the video part should play until it stops. • Description— Enter a description that is meaningful to you. The description is optional and is only for your reference. • Status— Active or Inactive. If you select Active, your audiences see the interstitial. If you select Inactive, the category is not visible to your audiences and you cannot associate programs with it. The default is Active.

Creating and Working with Interstitial Sequences

In DMM-VPM, an interstitial sequence is an ordered list of interstitials that your Video Portal should play in order when you have not scheduled it to show anything else. To create a new interstitial sequence:

- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > Interstitial Sequences**.

On the Interstitial Sequences page, you can toggle between two tables that are mostly very similar and that both show a list of sequences. You can move sequences from one table to the other.

- Step 2** Do one of the following:
- Click **Active** to see in the Active table a list of all the sequences that are available. These sequences are active in the sense that you have not disabled them. If you have not created any sequences or if you archived every sequence, the table is empty.
 - Click **Archive** to see in the Archive table a list of all the sequences that you have disabled temporarily. These sequences are disabled in the sense that your audience will not see them. You might choose eventually to restore or delete these sequences.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-9 on page 4-21](#).
- Step 4** Click **Save**.

Table 4-9 Elements for Configuring Interstitial Sequences

Element	Description
Add New Interstitial Sequence	 — Shows the Add New Interstitial Sequence page.
Delete Selected	 — Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete the archived sequence that you selected.
Archive Selected	 — Moves from the Active table to the Archive table the sequences that you selected.
Activate Selected	 — Moves from the Archive table to the Active table the sequences that you selected.
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box—One of the following: <ul style="list-style-type: none"> – Marks a sequence that you will disable, if selected in the Active table. – Marks a sequence that you disabled and that you will restore or delete, if selected in the Archive table. • Name—The Properties () button and the name of the sequence that the corresponding row describes. Values in the name column are the basis by default for how DMM-VPM sorts the rows, but you can click the heading in any other column to re-sort the rows by the values in that column. If you click the Properties button, DMM-VPM loads a page where you can edit metadata, such as the name and description, for the sequence that the corresponding row describes. • Date Added—The date and time when the sequence was created. • Last Modified—The date and time when the sequence was last edited. • Active Interstitials—Shows the Active Interstitials () button and the Add New Interstitial () button. If you click the Active Interstitials button, DMM-VPM loads a page where you can add interstitials to the playlist that the corresponding row describes or mark interstitials to remove from the playlist. • Deployment Choice—Says whether the sequence that the corresponding row describes is the default sequence for deployments.

Table 4-9 Elements for Configuring Interstitial Sequences (continued)

Element	Description
{ Add New Interstitial Sequence Modify Interstitial Sequence }	<p>Metadata attributes that define the sequence. Enter or select the metadata after you click Add New Interstitial Sequence or after you click the Properties button for a sequence.</p> <ul style="list-style-type: none"> • Name—The name for this sequence. Enter a maximum of 50 characters. • Description—Enter a description that is meaningful to you. You must enter the description. Enter a maximum of 2,000 characters. • Status—Active or Inactive. If you select Active, your audiences see the sequence. If you select Inactive, the sequence is not visible to your audiences. The default is Active. • Make this sequence default choice for deployments?—Yes or No. To use this sequence by default when your Video Portal is not showing anything else, select Yes. Otherwise, select No.

Creating and Working with Tickers

In DMM-VPM, a ticker is scrolling text that your Video Portal shows to your audiences. To create a new ticker:

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > Tickers**.
- On the Tickers page, you can toggle between two tables that are mostly very similar and that both show a list of tickers. You can move tickers from one table to the other.
- Step 2** Do one of the following:
- Click **Active** to see in the Active table a list of all the tickers that are available. These tickers are active in the sense that you have not disabled them. If you have not created any tickers or if you archived every ticker, the table is empty.
 - Click **Archive** to see in the Archive table a list of all the tickers that you have disabled temporarily. These tickers are disabled in the sense that your audience will not see them. You might choose eventually to restore or delete these tickers.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-10 on page 4-22](#).
- Step 4** Click **Save**.
-

Table 4-10 Elements for Configuring Tickers

Element	Description
Clear Defaults	Stops your Video Portal from playing any ticker.
Add New Ticker	 — Shows the Add New Ticker page.
Delete Selected	 — Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete the archived ticker that you selected.
Archive Selected	 — Moves from the Active table to the Archive table the tickers that you selected.
Activate Selected	 — Moves from the Archive table to the Active table the tickers that you selected.

Table 4-10 Elements for Configuring Tickers (continued)

Element	Description
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box—One of the following: <ul style="list-style-type: none"> – Marks a sequence that you will disable, if selected in the Active table. – Marks a sequence that you disabled and that you will restore or delete, if selected in the Archive table. • Name—The Properties (🔧) button and the name of the ticker that the corresponding row describes. Values in the name column are the basis by default for how DMM-VPM sorts the rows, but you can click the heading in any other column to re-sort the rows by the values in that column. If you click the Properties button, DMM-VPM loads a page where you can edit the ticker that the corresponding row describes. • Launch Date—The date and time when the ticker should start. • Expiration Date—The date and time when the ticker should stop and should no longer be visible in your Video Portal. • Deployment Choice—Says whether the ticker that the corresponding row describes is the default ticker for deployments.
{ Add New Ticker Modify Ticker }	<p>Physical and logical attributes of the ticker. Enter or select the attributes after you click Add New Ticker or after you click the Properties button for a ticker.</p> <ul style="list-style-type: none"> • Ticker Name—The name for this ticker. Enter a maximum of 50 characters. • Ticker Description—Enter a description that is meaningful to you. You must enter the description. Enter a maximum of 2,000 characters. • Ticker Text—Enter the text that the ticker should show on your Video Portal. Enter a maximum of 2,000 characters. The text that you enter will scroll across the bottom of your Video Portal. • Ticker Status—Active or Inactive. If you select Active, your audiences see the ticker. If you select Inactive, the ticker is not visible to your audiences. The default is Active. • Launch Date—Select the month, day, and year when your Video Portal should start the ticker. • Make this ticker default choice for deployments?—Yes or No. To show this ticker by default on your Video Portal, select Yes. Otherwise, select No. • End of Life Date—Select the month, day, and year when your Video Portal should stop the ticker.

Customizing Your Video Portal

DMM-VPM helps you to control and customize the user interface that your audiences see when they use your Video Portal. You can customize the appearance of backgrounds, logos, ticker messages, interstitials, and controls.

Step 1 Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > User Interfaces**.

On the User Interfaces page, you can toggle between two tables that are mostly very similar and that both show named sets of user interface customizations. You can move sets from one table to the other.

- Step 2** Do one of the following:
- Click **Active** to see in the Active table a list of all the customization sets that are available. These customizations are active in the sense that you have not disabled them. If you have not created any customization sets or if you archived every set, the table is empty.
 - Click **Archive** to see in the Archive table a list of all the customization sets that you have disabled temporarily. These customizations are disabled in the sense that your audience will not see them. You might choose eventually to restore or delete these customization sets.
- Step 3** Select the options or enter the values that meet your requirements. If you do not understand your options, see [Table 4-11 on page 4-24](#).
- Step 4** Click **Save**.

Table 4-11 Elements for Customizing Your Video Portal

Element	Description
Add New Interface	 — Shows the Add New Interface page.
Delete Selected	 — Shows the Delete Confirmation page. See the instructions on that page that tell you how to delete the archived customization sets that you selected.
Archive Selected	 — Moves from the Active table to the Archive table the customization sets that you selected.
Activate Selected	 — Moves from the Archive table to the Active table the customization sets that you selected.
columns	<p>The table contains these columns:</p> <ul style="list-style-type: none"> • untitled check box— One of the following: <ul style="list-style-type: none"> – Marks a customization set that you will disable, if selected in the Active table. – Marks a customization set that you disabled and that you will restore or delete, if selected in the Archive table. • Name— The Properties () button, the Preview () button, and the name of the customization set that the corresponding row describes. Values in the name column are the basis by default for how DMM-VPM sorts the rows, but you can click the heading in any other column to re-sort the rows by the values in that column. If you click the Properties button, DMM-VPM loads a page where you can edit the customization set that the corresponding row describes. If you click the Preview button, your Video Portal shows to you the customization set that the corresponding row describes, so that you can confirm that the customizations work as you expect them to, before you deploy them to your Video Portal. • Date Added— The date and time when the customization set was created. • Last Modified— The date and time when the customization set was last edited. • Deployment Choice— Says whether the customization set that the corresponding row describes is the default Video Portal user interface for deployments.

Table 4-11 Elements for Customizing Your Video Portal (continued)

Element	Description
{ Add New Interface Modify Interface }	<p>Physical and logical attributes of the user interface customization set. Enter or select the attributes after you click Add New Interface or after you click the Properties button for a named set of user interface customizations.</p> <ul style="list-style-type: none"> • Name—The name for this set of customizations. Enter a maximum of 50 characters. • Background Image—The nonprogressive JPEG file that serves as the background image. The file that you select should be 720 pixels wide by 520 pixels high, and should not distract or detract from the content that you want to emphasize. • Base Template Interface—Select whether blue or gray should be the predominant color. • Interface Idle Duration—In seconds, the idle time that you allow after any one of your scheduled shows has stopped, before your Video Portal starts to show (and loop) interstitials. • Make this template default choice for deployments?—Yes or No. To show this user interface customization set by default on your Video Portal, select Yes. Otherwise, select No. • Status—Active or Inactive. If you select Active, you can select the customization set as one for your audiences to see. If you select Inactive, the customization set is not selectable as one that your audiences might see. The default is Active. • Description—Enter a description that is meaningful to you. You must enter the description. Enter a maximum of 2,000 characters. • Header Logo—The nonprogressive JPEG file that serves as the logo for your Video Portal. The file that you select should be 470 pixels wide by 60 pixels high. The tabbed area on your Video Portal will cover and hide the lower right quarter of the image, so we recommend that quadrant not contain anything important. It is optional to use a logo. Do one of the following: <ul style="list-style-type: none"> – To upload a logo file that you have never uploaded, click Upload new Header Logo file. – To reuse a logo file that you uploaded previously for use in another customization set, click Existing Images. <p>If you click Check to confirm your selection to use the logo, you see one of these messages:</p> <ul style="list-style-type: none"> – “Field is blank”—You have not entered any path. – “File Path Does Not Exist”—You entered an invalid path. – “File Path exists”—The path that you entered points correctly to a valid file. • Interface Links—As many as three web links that your Video Portal should show: <ul style="list-style-type: none"> – Link Text—The clickable text to show. Enter a maximum of 17 characters. – URL—The HTTP URL for the clickable text. <p>If you click Check to confirm that a URL is valid, you see one of these messages:</p> <ul style="list-style-type: none"> – “URL is blank”—You have not entered any URL. – “Server was not found”—You entered an invalid URL. – “URL exists”—The URL that you entered points correctly to a valid file.

Configuring the Settings to Manage Deployments

You must deploy all additions, updates, and other changes in your content and data. You can deploy immediately or schedule deployments in advance for any time and date. You can cancel any deployment that you schedule.

After you schedule a deployment, the Currently Scheduled Deployments table is refreshed and shows the new deployment that you scheduled, in its chronological sequence relative to any other scheduled deployments. DMM-VPM then deploys the job to the deployment location that you specified under the Setup tab (see [Configuring the Location Settings for Deployments, page 4-4](#)). After a deployment is finished, the Currently Scheduled Deployments table is refreshed again, so that it no longer includes any description of the deployment.



Tip

There is no need for you to navigate through your Video Portal to find a video part after you deploy it successfully, because DMM-VPM links directly to it as a convenience to you. The link is not specific to any particular media format, because your Video Portal determines automatically which format to deliver to each audience member according to his or her system configuration.

1. Select **Video Portal > Programs**, find the row that describes the relevant program, then click **Active Videos** (📺) in that row.
2. Find the row that describes the relevant video, then click **Active Video Parts** (📺) in that row.
3. Find the row that describes the relevant video part, then do one of the following:
 - To play the video part, click **Preview** (📺) in that row.
 - To learn the actual URL for the video part, click **Properties** (📺) in that row, then click **Show Direct Portal Link**.

Live event offerings differ from on-demand offerings:

Live events	<p>Live events are scheduled to start and stop at a fixed date and time. After a live event starts, audience members who connect late see the event in progress and cannot see what came before. Each audience member sees the same thing at the same time as other audience members. Audience members cannot see a live stream before the event starts, go backward, or skip ahead. When a live event stops, it is no longer available to anyone. You can record a live event as it occurs, then edit and upload the recording for on-demand access shortly thereafter. Live events are either <i>pushed</i> or <i>pulled</i>:</p> <ul style="list-style-type: none"> • push—The encoder pushes the live stream to a streaming server. • pull—The streaming server pulls the live stream from an encoder.
On-demand events	<p>You schedule on-demand events to become available at any date and time that you specify, and remain available for any span of hours or dates that you specify, depending on the freshness or relevance of the content. Any audience member can start at the beginning of an event, no matter when they see it. Likewise, any audience member can rewind, skip ahead, or jump to different parts of an event at any time, assuming that your Video Portal makes these video navigation controls available. As long as an on-demand offering is available, audience members can see it at any time. You can archive an on-demand event at any time; after you archive an event, no one in your audience can see it.</p>

**Tip**

- Using the Video Part page, you can upload a pre-event image and post-event image. These will appear in the video frame before and after the live event.
- Your encoder can simultaneously stream a live event and save it to a file. See [Capturing a Live Stream and Publishing the Output File as Video On-Demand](#), page 4-33.

This section contains these topics:

- [Scheduling a New Deployment](#), page 4-27
- [Scheduling a Pre-Event Listing](#), page 4-29
- [Scheduling a Live Event](#), page 4-29
- [Scheduling a Post-Event Listing](#), page 4-30
- [Scheduling an On-Demand Deployment](#), page 4-30

Scheduling a New Deployment

To schedule a new deployment, follow these steps:

- Step 1** If you configured your browser to block popup windows, reenable popup windows now. You cannot complete this procedure successfully if your browser blocks popup windows.
- Step 2** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Video Portal > Deployments**.

The Currently Scheduled Deployments page lists all of the scheduled and queued deployments. To understand the list, see [Table 4-12 on page 4-27](#).

Table 4-12 Elements for Deployment Scheduling

Element	Description
Schedule New Deployments	Schedule a new deployment.
columns	<ul style="list-style-type: none"> • Scheduled Deployment—The date and time for which existing deployments are scheduled, listed in chronological order starting with the earliest deployment. • Date Added—The date and time when existing deployments were added to DMM-VPM. • Cancel—Cancel a deployment.

- Step 3** Click **Schedule New Deployment**.

The ▼ Active ▼ Inactive ▼ Removed legend at the top of the page shows the real-time color-coding that DMM-VPM applies to entities in the list, based on their change status:

- **Active**—Entities whose status has been changed to Active. All entities classified as Active are visible in the Video Portal after deployment.
- **Inactive**—Entities whose status has been changed to Inactive. All entities classified as inactive or removed disappear from the Video Portal after deployment.
- **Removed**—Entities that have been permanently deleted from DMM-VPM.

- Step 4** In the “Video Part Selection” area (1), click a check box to select the corresponding video part. DMM-VPM automatically lists for selection all new and modified video parts whose status is set to Active. Each video part is displayed with its corresponding videos and programs. All uploaded files, file references, and metadata associated to each Active video part are deployed with your selection. These files are deployed to the deployment location that you specified under the Setup tab.
- Step 5** In the “Additional Items Included in Deployment” area (2), review any metadata changes that will be published with your deployment; the following entities are identified in the Metadata Changes:
- Categories—All categories whose status has changed or that were deleted.
 - Programs—All programs whose status has changed or that were deleted.
 - Videos—All videos whose status has changed or that were deleted.
- Step 6** In the “Global Options” area (3), make selections from these lists:
- **Featured Playlist**—Select the playlist to publish on your Video Portal. The list displays all Active Featured Playlists in alphabetical order by Featured Playlist Name, with the Default Featured Playlist selected by default. There must always and can only be one Featured Playlist visible in the Video Portal at any given time. See [Creating and Working with Playlists, page 4-14](#).
 - **User Interface**—Select the customization set to use on your Video Portal. The alphabetical list contains all Active user interfaces customization sets, with the default customization set selected by default. There must always and can only be one user interface visible in your Video Portal at any given time. See [Customizing Your Video Portal, page 4-23](#).
 - **Ticker**—Select the ticker to publish on your Video Portal. The list displays all Active tickers in alphabetical order by name, with the default ticker selected by default. (To hide the ticker, click **Don’t Show a Ticker**.) You can use no more than one ticker at a time on your Video Portal. See [Creating and Working with Tickers, page 4-22](#).
 - **Interstitial Sequence**—Select the sequence to publish on your Video Portal. The list displays all Active Interstitial Sequences in alphabetical order by Interstitial Sequence Name, with the Default Interstitial Sequence selected by default. There must always and can only be one Interstitial Sequence visible in the Video Portal at any given time. See [Creating and Working with Interstitial Sequences, page 4-20](#).
- Step 7** In the “Deployment Time” area (4), select the deployment date and time or select the **Schedule Immediately** check box. If you select a scheduled deployment, the default date is 7 days from today.

**Note**

- The relevant time zone is the one that you specified when you set up your DMM appliance. If an administrator set up your DMM appliance and you cannot guess what time zone is in effect at its deployment location, contact its system administrator.
- To conduct a live online event successfully, you must complete exactly these four deployments in exactly this sequence:
 1. Pre-event listing: Intended to notify Video Portal end users of the upcoming live event. See [Scheduling a Pre-Event Listing, page 4-29](#).
 2. Live event: Actual live offering. See [Scheduling a Live Event, page 4-29](#)
 3. Post-event listing: Intended to notify Video Portal end users who missed the live event that it has concluded and is no longer available. See [Scheduling a Post-Event Listing, page 4-30](#).
 4. On-demand offering: Recorded version of the live-event for Video Portal end users who were not able to attend the live version. See [Scheduling an On-Demand Deployment, page 4-30](#).

Step 8 To schedule the Deployment, click **Create Deployment**.

Scheduling a Pre-Event Listing

You can schedule a pre-event listing. We recommend that you use targeted email messages or a web site to preannounce your live events. The notifications that you prepare can describe, for example, the event date and time, its subject matter, the speaker, and the moderator. A notification can also link directly to the pre-event listing on your Video Portal.

Before You Begin

Ensure that your video part metadata is set appropriately for a pre-event listing.

- Step 1** If you configured your browser to block popup windows, reenable popup windows now. You cannot complete this procedure successfully if your browser blocks popup windows.
- Step 2** Complete Steps 1–6 in the “[Scheduling a New Deployment](#)” procedure.
- Step 3** In the “Deployment Time” area (🕒), select the deployment date and time when your pre-event listing should become available on your Video Portal. The default date is 7 days from today.



Note The relevant time zone is the one that you specified when you set up your DMM appliance. If an administrator set up your DMM appliance and you cannot guess what time zone is in effect at its deployment location, contact its system administrator.

Step 4 To schedule the deployment, click **Create Deployment**.

Scheduling a Live Event

You can schedule a live event.

Before You Begin

Ensure that your video part metadata is set appropriately for a pre-event listing.

- Step 1** If you configured your browser to block popup windows, reenable popup windows now. You cannot complete this procedure successfully if your browser blocks popup windows.
- Step 2** Complete Steps 1–6 in the “[Scheduling a New Deployment](#)” procedure.
- Step 3** In the “Deployment Time” area (🕒), select the deployment date and time when your live event should become available on your Video Portal. The default date is 7 days from today.



Note The relevant time zone is the one that you specified when you set up your DMM appliance. If an administrator set up your DMM appliance and you cannot guess what time zone is in effect at its deployment location, contact its system administrator.

We recommend that your Video Portal show a countdown to the live event for 10-15 minutes, then replace the countdown with the audio-video stream when the live event actually starts.

Step 4 To schedule the deployment, click **Create Deployment**.

Scheduling a Post-Event Listing

You can schedule a post-event listing.

Before You Begin

Ensure that your video part metadata is set appropriately for a post-event listing.

-
- Step 1** If you configured your browser to block popup windows, reenable popup windows now. You cannot complete this procedure successfully if your browser blocks popup windows.
- Step 2** Complete Steps 1–6 in the [“Scheduling a New Deployment”](#) procedure.
- Step 3** In the “Deployment Time” area (🕒), select the deployment date and time when the post-event listing should become available on your Video Portal. The default date is 7 days from today.



Note The relevant time zone is the one that you specified when you set up your DMM appliance. If an administrator set up your DMM appliance and you cannot guess what time zone is in effect at its deployment location, contact its system administrator.

Step 4 To schedule the deployment, click **Create Deployment**.

Scheduling an On-Demand Deployment

You can schedule an on-demand deployment.

Before You Begin

Ensure that your video part metadata is set appropriately for an on-demand deployment.

-
- Step 1** If you configured your browser to block popup windows, reenable popup windows now. You cannot complete this procedure successfully if your browser blocks popup windows.
- Step 2** Complete Steps 1–6 in the [“Scheduling a New Deployment”](#) procedure.
- Step 3** In the “Deployment Time” area (🕒), select the deployment date and time when the on-demand deployment should become available on your Video Portal. The default date is 7 days from today.



Note The relevant time zone is the one that you specified when you set up your DMM appliance. If an administrator set up your DMM appliance and you cannot guess what time zone is in effect at its deployment location, contact its system administrator.

Step 4 To schedule the deployment, click **Create Deployment**.

Using Features Under the Encoders Tab

Topics in this section tell you how to add and manage DME 1000 and DME 2000 encoders in DMM-VPM.

- [Adding an Encoder to DMM-VPM, page 4-32](#)
- [Testing the Ability to Publish Streams, page 4-33](#)
- [Capturing a Live Stream and Publishing the Output File as Video On-Demand, page 4-33](#)
- [Managing Push Configurations, page 4-34](#)
- [Creating and Working with Encoding Formats, page 4-35](#)
- [Managing Transcoding Jobs, page 4-35](#)

Adding an Encoder to DMM-VPM

You can add an encoder to DMM-VPM.

- Step 1** Set up and connect the encoder according to the procedures in its documentation.
- Step 2** Select **Video Portal Module** from the untitled list at the top far-right of any page, then do one of the following:

If the encoder will push streams to the streaming server:	If the streaming server will pull streams from the encoder:
<p>Note Push configurations apply only to Windows Media streams.</p> <ol style="list-style-type: none"> 1. Select Encoders > Push Configurations. 2. Enter the required values, including the streaming server URL and port number. 3. Click Save. 	<ol style="list-style-type: none"> 1. Select Encoders > Encoders and Pull Configurations. 2. If you do not know the encoder IP address or DNS-routable hostname, go to the encoder front panel, then select Menu > Setup System > Network > 100 Mbit (or 1,000 Mbit) > View Settings > IP Address(es). 3. Enter the encoder IP address or hostname in the Encoder IP Address/Hostname field and be sure to specify a port number (ideally, the port number that you use should be in the range from 6000 to 7000). 4. Click Discover Encoder. The button changes color and animates until the discovery process is finished. 5. Enter the encoder name and description in their respective fields. For example, you might identify or describe the owner, location, or purpose of the encoder, or enter exactly the serial number text from a sticker on the encoder chassis. 6. Select options in the “Default Encoder Input Settings” area to choose the video input, audio input, and video input standard settings that you will use most often. 7. Select Push or Pull as your most common method to publish live events, then do one of the following: <ul style="list-style-type: none"> • If you selected Push, select an option from the Default Push Configuration list to choose the default push configuration for this encoder. • If you selected Pull, click Add a Pull Configuration to add the streaming server pull configurations for this encoder. <p>Note Push configurations apply only to Windows Media streams. If you selected Pull, DMM-VPM automatically creates a pull configuration called “test only (encoder-direct, port 6990),” which you can use to test streams that originate directly from the encoder.</p> <ol style="list-style-type: none"> 8. To save your selections, click Save this Encoder. You should see a green box at the top of the page with the message “Successfully saved '{Encoder Name}'”.

Testing the Ability to Publish Streams

You can use DMM-VPM to test whether your encoder can publish a stream.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then click the **Encoders** tab to see the encoder dashboard.
- Step 2** Find the entry for the encoder that you want to test, then click **Encoder Setup** in the corresponding row.
- Step 3** From the **Video Format** list, select the bit rate to test, then select the **Publish as a Streaming Video** check box.
- Step 4** Select a Push publishing configuration or a Pull publishing configuration.



Tip To test a stream directly from the encoder, select the **test only (encoder-direct, port 6990)** pull configuration.

- Step 5** Confirm that a live video source is connected to your encoder, then select the options from these lists that match your video source:
- Video Input
 - Audio Input
 - Video Input Standard
- Step 6** Click **Start Encoder**.
- The button becomes animated and the animation continues until the encoder starts. A delay that ranges from 10 to 25 seconds is normal.
- Step 7** After the encoder starts, click **Close** in the Encoder Setup window.
- Step 8** Do either or both of the following to test the video stream:
- Click **View Live Video**. A popup window plays your current live stream.
 - To test the video stream as a static image that is updated periodically, click **Click to start preview**. Your encoder serves the static image directly, independent of your streaming server.
- Step 9** Click **Stop Encoder**.
-

Capturing a Live Stream and Publishing the Output File as Video On-Demand

Your encoder can capture and save a live stream as a file, which you can publish as video on-demand.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then click the **Encoders** tab to see the encoder dashboard.
- Step 2** Find the entry for the encoder that you want to test, then click **Encoder Setup** in the corresponding row.
- Step 3** Select the **Store as File** check box, then enter a filename for the saved file.

- Step 4** Confirm that a live video source is connected to your encoder, then select the options from these lists that match your video source:
- Video Input
 - Audio Input
 - Video Input Standard
- Step 5** Click **Start Encoder**.
- The button becomes animated and the animation continues until the encoder starts. A delay that ranges from 10 to 25 seconds is normal.
- Step 6** After the encoder starts, click **Close** in the Encoder Setup window.
- Step 7** When you are ready to stop adding video from the stream to the output file that you are creating, click **Stop Encoder**.
- Step 8** To retrieve the output file from your encoder, point your web browser to **ftp://<encoder_IP_address>/AVFiles/Out**, then right-click the filename in the directory listing and select the option to download the file.
- Step 9** (Optional) Use third-party software to edit the file.
- Step 10** Before you can deliver the downloaded output file to your Video Portal audiences as a video on-demand offering, you must deploy it as a VoD video part. See [Working with Programs, Videos and Video Parts, page 4-9](#), and [Scheduling an On-Demand Deployment, page 4-30](#).
-

Managing Push Configurations

You can manage push configurations, which apply only to Windows Media streams.

- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page, then select **Encoders > Push Configurations**.
- Step 2** Enter the push configuration name and description in their respective fields.
-  **Tip** The push configuration name that you enter now will be an option that you can select from a list before you start your encoder.
- Step 3** Enter the base URL and port number for your streaming server.
- Step 4** Enter the name of your Publishing Point.
- Step 5** Confirm that the URL under the “Full Stream URL” heading is the valid URL for your publishing point.
- Step 6** (Optional) Enter the username and password to push a stream to your streaming server, if it requires that you log in.
- Step 7** Click **Save**.
-

Creating and Working with Encoding Formats

An *encoding format* is a collection of settings to specify a particular combination of media type and video dimensions, and to limit video bandwidth consumption and video quality.

DMM-VPM is preconfigured with the recommended encoding formats for your Video Portal. You can recognize these predefined and preferred formats in the Encoding Formats list, because DMM-VPM appends the word “default” to their names. If you select other encoding formats as your defaults, the “default” label no longer signifies that any encoding format is one that Cisco defined.

You can select only one default encoding format apiece for each supported media type. For example, you might select one encoding format as the default for Windows Media and a different encoding format as the default for Flash Video.

You can add or edit an encoding format.

-
- Step 1** Select **Video Portal Module** from the untitled list at the top far-right of any page.
- Step 2** Select **Encoders > Encoding Formats**, then do one of the following:
- To create and define a new encoding format, click **Add a new Encoding Format**.
 - To edit an encoding format that you saved, click its name in the list.
- Step 3** Enter or select the required values to define the encoding format:
- **Encoding Format Name**—Enter a unique and meaningful name for this encoding format.
 - **Profile Description**—Enter a description.
 - **Format**—Click a radio button to select its corresponding media format as the one that this encoding format should use.
 - **Dimensions**—Select an option from the list or select **Custom** to use dimensions that the list does not contain.
 - **Pixel Proportion**—Standard (square pixel) is the correct choice for most applications.
 - **Audio Capture { On | Off }**—Enable or disable audio capture.
 - **Windows Media Capture Profiles**—Select an option to limit bandwidth usage.
- Step 4** Click **Save**.
-

Managing Transcoding Jobs

Transcoding is a process of deriving digital media files that use one codec from digital media files that use a different codec; the source file is not changed or destroyed. Because codecs are typically lossy, you might notice that the fidelity of the output file is not as high as the fidelity of the source file.

Your encoders can transcode AVI and MPEG2 files into Windows Media files. You can use DMM-VPM to manage your transcoding jobs. We recommend that you schedule your transcoding jobs so that they do not run at the same time as any other encoder tasks, such as streaming a live event or saving a live stream to a file. A transcoding job might take as long as, or possibly longer than, the duration of the source file, depending on multiple factors that include which codecs you use.

-
- Step 1** Copy the source file to your encoder.
- Plug a keyboard, mouse, and monitor into your encoder.
 - Add the file to a USB 2.0 hard drive or flash drive.
 - Use Windows Explorer to copy the source file from the USB drive to **D:\AVFiles\In**.
- Step 2** Log in to DMM-VPM, then select **Video Portal Module** from the untitled list at the top far-right of any page.
- Step 3** Select **Encoders > Transcoding**, then click **Add a New Transcoding Task**.
- Step 4** Enter or select the required values to define the transcoding job:
- Transcoding Task Name**—Enter a unique and meaningful name.
 - Encoder Name**—Select the encoder that will transcode the source file.
 - Start Date/Time**—Select the date and time when the transcoding job should start.
 - Input Video Format**—Select the media format that the source file uses (AVI or MPEG2).
 - Input Directory Path**—Select **Input - Local Encoder Drive**.
 - Input File Name**—Enter the source filename. Do not include a path.
 - Output Video Format**—Select a format that includes the word “transcode” in its title.
 - Output Directory Path**—Select **Output - Local Encoder Drive**.
 - Output File Name**—Enter the output filename. Do not include a path.
- Step 5** Click **Save**.

**Tip**

In the list, a color-coded icon next to the name of your transcoding job helps you to track its status. The icon is blue (scheduled *or* postponed); animated green (in progress); solid green (completed); or red (error). To learn more, mouse over the icon.

- Step 6** To copy the output file from your encoder, do one of the following:
- If you plugged a keyboard, mouse, and monitor into your encoder, use Windows Explorer to copy the output file from **D:\AVFiles\Out** to the USB drive.
 - Point your web browser to **ftp://<encoder_IP_address>/AVFiles/Out**, then right-click the filename in the directory listing and select the option to download the file.
-

Using Your DME 1000 or DME 2000 to Set Up a Live Event

You can use your DME 1000 or 2000 to set up live events. Use the checklist to track your progress while you complete the required tasks.

✓	Task
☐	<p>1. Add a live event to DMM and publish it. Do the following:</p> <ol style="list-style-type: none"> Select Video Portal Module from the untitled list at the top far-right of any page, then click the Video Portal tab. The Video Portal Programs page appears. Create or edit the program that should include the live event. See Working with Programs, Videos and Video Parts, page 4-9. In the Add New Video Part page, enter or select these required values: <ul style="list-style-type: none"> Type of Video—Select Live Event; a message tells you that you cannot use Flash. Encoder—From the list, select the encoder to use, then do <i>one</i> of the following: If you previously configured default streaming settings for the relevant encoder and those default settings are appropriate for this event, click Use Default Streaming Settings. If any of the default settings are <i>not</i> appropriate for this event or if you have not configured default settings for the relevant encoder, click Advanced Settings, then make selections and enter values to define the settings for this stream: <ul style="list-style-type: none"> <i>Encoding Format</i>—From the list, select the method to use for encoding or transcoding the live stream. <i>DME 2000 Input Channel</i>—Click  A or  B. <i>Publish via Push</i>—Select whether the encoder should push the live stream to a streaming server. <i>Publish via Pull</i>—Select whether the streaming server should pull the live stream from the encoder. <i>Video Input</i>—From the list, select either Composite or SVideo. <i>Store as a File</i>—Select the check box to enable automatic archiving or deselect the check box to disable automatic archiving. <i>Audio Input</i>—Select the option to use balanced or unbalanced audio in the live stream. <i>Video Input Standard</i>—From the list, select the standard that is relevant to your country and the equipment that you use. Play Order in Video—From the list, select where in the video to show this video part. Release Date/Time and End of Life Date/Time—Enter a date in the format shown or click  (“Show Calendar”) to select a date from a calendar. Then select the hour, the minute, and AM or PM. <p>Note You must explicitly enter the End of Life Date/Time value. (DMS does not parse it automatically from the Release Date/Time value.) If you do not enter a End of Life Date/Time value, your live event will not occur.</p> <ul style="list-style-type: none"> Duration—Indicates the duration of the live event, based on the start and stop times that you set. <ol style="list-style-type: none"> Click Save. When you want your Video Portal to show a program listing for this live event, see the deployment instructions in Scheduling a New Deployment, page 4-27.

✓	Task
☐	<p>2. Test the live stream and start the live event. Do the following:</p> <ol style="list-style-type: none"> Approximately 30 minutes before the live event, click the Encoders tab. The Encoder Dashboard page appears. In the encoder selection tree, find the encoder that you will use for this live event, then click  (“Expand Encoder”) to see the <i>ad-hoc streaming controls</i> for the encoder. Click Encoder Setup, enter the relevant values, then click Start Encoder and wait 10-to-20 seconds for it to start. After an encoder setup message confirms that the encoder started, click Close. To open a preview window that should show the live stream from your encoder, click View Live Video. If you see the live stream, your streaming server is successfully streaming output from the encoder. When you are ready for the live event to start, click Start Broadcast. Approximately 5-to-20 seconds later, the live stream should start for anyone who selected to see it. When you are ready to end the event, click Stop Broadcast, then click Stop Encoder. <p>Tip If you stop the broadcast accidentally or too soon, but the encoder is still running, click Start Broadcast to start showing the live stream again.</p>

Setting Up Live Events Using Third-Party Live Streams

You can use streams from a third party to set up live events. Use the checklist to track your progress while you complete the required tasks.

✓	Task
☐	<p>1. Create a pre-event listing to notify your audience about the upcoming event offering. See Scheduling a Pre-Event Listing, page 4-29.</p>
☐	<p>2. Show the actual live offering. See Scheduling a Live Event, page 4-29. You must deploy this video part at the start at the event. In the “Add New Video Part” page where you configure the metadata attributes for this video part, you must select VoD as the Type of Video. VoD is the correct option for third-party live events, because the Live Event option is reserved for use with the Cisco Digital Media Encoder 1000 and Digital Media Encoder 2000.</p> <p>The offering should include information for end users to use during the live event, such as an agenda or downloadable materials.</p> <p>Note We recommend that you schedule the live event to start 10 to 15 minutes before the published start date and time. It is customary to offer live “hold” music for end users who attend the event early, to signal them that the event will start soon.</p>
☐	<p>3. (Optional) Create a post-event listing to notify your audience that they missed the event and it is no longer available. See Scheduling a Post-Event Listing, page 4-30.</p>
☐	<p>4. (Optional) Publish a recorded copy of the event for delivery on demand to audience members who missed the live stream. See Scheduling an On-Demand Deployment, page 4-30.</p>



APPENDIX **A**

Using Video Portal Reports

Video Portal Reports software is preinstalled on your Video Portal appliance. It maintains a record for the number of page views, the number of video streams, the exact referrers, and the number of unique visitors per day.

- *Page view*—Any click in the Video Portal that causes the displayed information to change, but does not play a video stream or change a playlist.
- *Video stream*—Any click of the Play button in your Video Portal.
- *Unique visitor*—The total number of browser cookies in use on any particular day. Each browser that loads your Video Portal receives a browser cookie for tracking purposes. Any day when a browser connects to your Video Portal, it is a unique visitor on that day. Even if a browser reconnects multiple times in one day, your Video Portal counts it as only one unique visitor on that day.
- *Referrer*—The HTTP URL for whatever page was active in a browser immediately before the browser loaded your Video Portal.

Before You Begin

Video Portal Reports uses *scalable vector graphics* in its charting. The minimum browser requirement to support SVG differs for each supported client operating system:

- **Windows**—Either of these:
 - Firefox 1.5 or greater.
 - Internet Explorer 5.5 or greater and Adobe SVG plug-in 3.0 or greater.
- **Linux or Unix:** Firefox 1.5 or greater.
- **Mac OS X:** Firefox 1.5 or greater.

Step 1 To see a report, point your browser to **http://<video_portal_IP_address>:8080/CvpMetrics/**.

Step 2 Click the link that loads a particular type of report. In many cases, you can use the “Save As” feature to export a table to a spreadsheet and save it in a file. In many graphs, you can mouse over a graph point to see an exact count.

- **Page View**—A line graph and table that correlates dates with traffic levels.
- **Unique Visitors**—A line graph and table that correlates dates with the number of unique visitors.
- **Video Streams**—A line graph and table that correlates dates with the number of streams.
- **Referrals**—A list of all HTTP URLs for the pages that were active in browsers immediately before they loaded your Video Portal, sorted by the number of browsers that each page delivered to you. Click a URL to see the corresponding page in your browser.

- **User System Info**—A bar graph that shows how many visitors used particular browsers, particular operating systems, and particular plugins when they used your Video Portal.
- **Per-Video Traffic**—Measures the popularity of any video. Enter the video title or description in the Search By Title field to see data about a particular video. You can use the Per-Video traffic report to see information about a particular video stream.
- **More Info**—Shows how many Video Portal visitors clicked More Info. You can specify a particular video stream to filter the results.

Step 3 Enter or select the range of dates that the report should describe.

Step 4 Click **Go**.
