



Appliance Administration Guide for Cisco Digital Media System 4.0

March 29, 2007

Americas Headquarters

Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA

http://www.cisco.com Tel: 408 526-4000

800 553-NETS (6387)

Fax: 408 527-0883

Text Part Number: OL-12467-01

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

CCVP, the Cisco Logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, *Packet*, PIX, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0609R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

Appliance Administration Guide for Cisco Digital Media System 4.0 © 2006–2007 Cisco Systems, Inc. All rights reserved.



Preface iii

CONTENTS

	Document Conventions iii Obtaining Documentation, Obtaining Support, and Security Guidelines i	v
CHAPTER 1	Introduction 1-1	
	Basic DMS Concepts and Vocabulary 1-1	
	DMS 4.0 Requirements 1-5	
	Before You Begin to Set Up a DMS 4.0 Appliance 1-5	
CHAPTER 2	Setting Up and Configuring a Video Portal Appliance 2-1	
CHAPTER 3	Setting Up and Configuring a DMM Appliance 3-1	
CHAPTER 4	Administering a Video Portal Appliance 4-1	
	Starting and Using AAI 4-1	
	Performing Routine Administrative Tasks 4-1	
	Viewing Appliance System Information 4-2	
	Obtaining or Transferring a Copy of the System Log 4-2	
	Changing the Appliance Administrator Password 4-2	
	Patching or Updating Appliance Software 4-3 Restarting an Appliance 4-3	
	Restarting an Appliance 4-3 Shutting Down an Appliance 4-3	
	Selecting the Video Formats to Support 4-3	
	Naming or Renaming Your Video Portal 4-4	
	Changing the Network Settings for an Appliance 4-4	
	Changing the Date and Time Settings for an Appliance 4-5	

CHAPTER 5 Administering a DMM Appliance 5-1

Starting and Using AAI 5-1

Performing Routine Administrative Tasks 5-1

Viewing Appliance System Information **5-2**

Backing Up an Appliance **5-2**

Restoring from an Appliance Backup 5-2

Obtaining or Transferring a Copy of the System Log 5-2

Changing the Appliance Administrator Password **5-3**

Patching or Updating Appliance Software 5-3

Restarting an Appliance 5-3

Shutting Down an Appliance 5-4

Changing the Network Settings for an Appliance 5-4

Changing the Date and Time Settings for an Appliance 5-5



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 administration guide describes how to set up, configure, and administer your DMM appliances and your Video Portal appliances. It also tells you how to use the *Appliance Administration Interface* (AAI), a text user interface that helps you to administer a DMS appliance.

The intended audience for this guide is systems or network administrators who install, configure, or troubleshoot DMS appliance hardware. 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	italic font
Displayed session and system information	screen font
Information you enter	boldface screen font
Variables you enter	italic screen 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



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



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



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

Introduction

This document describes how to set up, back up and recover Cisco Digital Media System 4.0 (DMS) appliances. The following systems constitute a DMS appliance:

- Cisco Video Portal 4.0 and Video Portal Reports 4.0 software (preinstalled on a Cisco Media Convergence Server 7825-H2 chassis or a Media Convergence Server 7835-H1 chassis).
- Cisco Digital Media Manager 4.0 (DMM) software (preinstalled on a Media Convergence Server 7835-H1 chassis).

To learn more about DMS and the prerequisites to administer it, read these sections:

- Basic DMS Concepts and Vocabulary, page 1-1
- DMS 4.0 Requirements, page 1-5
- Before You Begin to Set Up a DMS 4.0 Appliance, page 1-5

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	Appliance Administration Interface. 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	Cisco Application and Content Networking System. 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-DSM, 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.
bpp	bits per pixel, 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	encoder-decoder. 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, syncronization data, and video data to which a codec has been applied.
digital signage	Digital signage 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	Cisco Digital Media Manager is the collective name to describe the Web-based graphical user interfaces that are preinstalled on DMM appliances:
	• DMM-Admin—Digital Media Manager – Administration Module. Any DMS operator can use DMM-Admin to install or upgrade the software licenses to activate DMM-DSM or DMM-VPM.
	• DMM-DSM—Digital Media Manager – Digital Signage Module. Digital signage content managers use DMM-DSM 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—Digital Media Manager – Desktop Video Module. Video content authors use DMM-VPM 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	Cisco Digital Media Player 4300G. 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.

Table 1-1 Concepts and Vocabulary

Term	Definition
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	Digital Media Player Device Manager. 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	Cisco Digital Media System is the name of the product family that consists of DMM appliances, Video Portal appliances, DMPs, and all of their associated software components.
encoder	Cisco Digital Media Encoder 1000 or 2000.
MCS	Cisco Media Convergence Server 7825-H2 or 7835-H1 chassis on which DMS software is preinstalled.
metadata	Metadata 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 represenents 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:
	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.
	1. To create a playlist:
	a. Under the Content Manager tab, add files as content items, then associate them with content categories in your media library.
	b. 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.
	2. 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:
	 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."

Table 1-1 Concepts and Vocabulary

Term	Definition
screen zone	See zone.
video	• 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 video part is one component file in a video.
Video Portal	Cisco Video Portal—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:
	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	Cisco Video Portal Reports—Web-based graphical user interface that video content developers use to capture, view, and export Video Portal activity reports.
Video Portal	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 four Video Portal templates:
template	• 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	Cisco Wide Area Application Engine. The hardware platform from which ACNS software provides application and content services.
zone	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.
zone template	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.

DMS 4.0 Requirements



- To understand the client system requirements to use DMS products, see *Release Notes for Cisco Digital Media System 4.0* on Cisco.com.
- To learn about known or fixed problems and late-breaking information, see *Release Notes for Cisco Digital Media System 4.0*.
- To identify other DMS documents that you might also want to read, see *Documentation Map for Cisco Digital Media System 4.0*.

Before You Begin to Set Up a DMS 4.0 Appliance

You must do the following before you can set up and configure an appliance:

- **Step 1** Decide which networked computer you will use when you administer the appliance remotely.
- **Step 2** On that computer, install and set up the necessary client software according to the client system requirements in *Release Notes for Cisco Digital Media System 4.0* on Cisco.com.
- **Step 3** Ensure that TCP port 22 is not blocked between your Video Portal appliance and your DMM appliance.
- **Step 4** Ensure that authorized users of your DMM appliance can send and receive packets through TCP port 8080.
- **Step 5** Ensure that authorized users of your Video Portal appliance can send and receive packets through TCP port 80 (Video Portal) and port 8080 (Video Portal Reports).

Before You Begin to Set Up a DMS 4.0 Appliance



CHAPTER 2

Setting Up and Configuring a Video Portal Appliance

This chapter describes in a checklist how to set up a a Video Portal a appliance and configure its software. Use the checklist to track your progress while you complete the required tasks.

Before You Begin

- Verify that at least one computer on your network is configured for access to other networked devices through TCP ports 80 and 8080.
- Enable popup windows in your browser if they are disabled. You can complete the checklist only if popup windows are enabled.
- Learn if your network uses dynamic (DHCP) or static IP addresses, and—if your network uses static IP addresses:
 - Learn what IP address to assign to the Video Portal appliance.
 - Learn what subnet mask (netmask) to use.
 - Learn what IP addresses are assigned to the default network gateway, the primary DNS server, and the secondary DNS server.

✓	Task
	1. Set up Video Portal appliance hardware.
	a. Unpack the equipment from its container and verify that all components are present.
	b. Plug in the redundant power cables on the back of the appliance.
	c. Connect a live Ethernet cable to Port 1 on the back of the appliance.
	d. Connect a monitor to the VGA output on the back of the appliance.
	e. Connect a standard PS2 keyboard to the purple PS2 port in the back of the appliance.
	f. Power on the appliance.
	2. After you can see and read the "Start of First Boot" message, press Enter.
	3. Specify the fully qualified hostname for the Video Portal appliance. You can enter either the DNS-routable hostname or the IP address, then select OK. For example: server.example.com

Task Caution We recommend that you do not use DHCP to obtain an IP address for your appliance, due to the sometimes unpredictable expiration of IP addresses in DHCP systems and the administrative overhead of reconfiguring other devices to reestablish disrupted connections (for depoloyments or any other purpose). We further recommend that you do not change the static IP address that you assign to the appliance. 4. Enter IP address and routing information. • If your appliance will obtain its IP address from a DHCP server, select Yes. If your appliance will use a static IP address, select No, so that you can enter the static network settings. If your appliance will use a static IP address, you must: a. Enter the IP address that your appliance should use. **b.** Enter the subnet mask. **c.** Enter the default gateway IP address or DNS-routable hostname. **d.** Enter the primary DNS server IP address or DNS-routable hostname. e. Enter the secondary DNS server IP address or DNS-routable hostname. f. Select OK. Confirm if you entered the correct network settings. If the settings are correct, select Yes. Alternatively, if they are wrong, select **No** to go back and correct them. Configure settings for the appliance network interface card (NIC). Do one of the following: • If the NIC for your appliance should autonegotiate the fastest possible transmission mode when it is connected to another device, select Yes. If the NIC should not autonegotiate, select No, select the NIC speed, select OK, select the duplex method, select **OK**, then select **Yes**. 7. Select the time zone settings. **a.** Use the Up/Down arrow keys to navigate through the Time Zone list. **b.** Stop when the correct time zone is displayed, then select **OK**. **c.** If the settings are correct, select **Yes**. Alternatively, if they are wrong, select **No** to go back and correct them. Select the current month, year, and day. a. Use the Tab key and the Up/Down arrow keys to navigate and change the selected values. **b.** When you are done, select **OK**. c. If the settings are correct, select Yes. Alternatively, if they are wrong, select No to go back and correct them. Select the current hour, minute, and second. Use the format for military time (24 hours that increment from 0100 to 2400). a. Use the Tab key and the Up/Down arrow keys to navigate and change the selected values. b. When you are done, select OK. **c.** If the settings are correct, select **Yes**. Alternatively, if they are wrong, select **No** to go back and correct them.

✓	Task
	10. Select the supported filetypes and formats for video encoding.
	a. Select the media formats that your Video Portal will support (any combination of the options WMV, FLV, QT, and RM), then select OK and:
	• If you selected two or more formats, specify the primary format, then select OK .
	• If you selected three or more formats, specify the secondary format, then select OK .
	• If you selected four or more formats, specify the tertiary format, then select OK .
	b. Confirm your selections, then select OK .
	\triangle
	Caution You must enter the instance name. If you do not, setup fails.
	11. Enter the Video Portal instance name, then select OK twice.
	12. Enter a password for the <i>admin</i> account. This is by default the account to use when you administer the appliance. The password that you enter must contain at <i>least</i> six characters. When you are done, select OK .
	We recommend that you use a strong password. A strong password has at least eight characters and contains numbers, letters (both uppercase and lowercase), and symbols.
	13. Enter a password for the <i>pwadmin</i> account. This is the account to use if you forget your password for the admin account. When you are done entering the password, select OK twice.
	After a moment, the appliance reboots and a login prompt is displayed.

Your Video Portal installation will be complete after you complete the required steps to obtain a license and activate the Video Portal features. See Chapter 3, "Setting Up and Configuring a DMM Appliance."



CHAPTER 3

Setting Up and Configuring a DMM Appliance

This chapter describes in a checklist how to set up a DMM appliance and configure its software. Use the checklist to track your progress while you complete the required tasks.

Before You Begin

- Complete the checklist in Chapter 2, "Setting Up and Configuring a Video Portal Appliance." You must know the IP address and instance name for your Video Portal appliance.
- Verify that at least one computer on your network is configured for access to other networked devices through TCP ports 80 and 8080.
- Enable popup windows in your browser if they are disabled. You can complete the checklist only if popup windows are enabled.
- Learn if your network uses dynamic (DHCP) or static IP addresses, and—if your network uses static IP addresses:
 - Learn what IP address to assign to the DMM appliance.
 - Learn what subnet mask (netmask) to use.
 - Learn what IP addresses are assigned to the default network gateway, the primary DNS server, and the secondary DNS server.

✓	Tas	sk
	1.	Set up DMM appliance hardware.
-		a. Unpack the equipment from its container and verify that all components are present.
		b. Plug in the redundant power cables on the back of the appliance.
		c. Connect a live Ethernet cable to Port 1 on the back of the appliance.
		d. Connect a monitor to the VGA output on the back of the appliance.
		e. Connect a standard PS2 keyboard to the purple PS2 port in the back of the appliance.
		f. Power on the appliance.
	2.	After you can see and read the "Start of First Boot" message, press Enter.
	3.	Specify the fully qualified, DNS-routable hostname for the DMM appliance. You can enter either the DNS-routable hostname or the IP address. Select Change, then select OK. For example: server.example.com

1	Tas	Task			
	\wedge				
_	Cau	<u>rtion</u>	We recommend that you do not use DHCP to obtain an IP address for your appliance, due to the sometimes unpredictable expiration of IP addresses in DHCP systems and the administrative overhead of reconfiguring other devices to reestablish disrupted connections (for depoloyments or any other purpose). We further recommend that you do not change the static IP address that you assign to the appliance.		
	4.	Yes	er IP address and routing information. If your appliance will obtain its IP address from a DHCP server, select to enable DHCP. Alternatively, if your appliance will use a static IP address, select No so that you can enter static network settings.		
		If yo	our appliance will use a static IP address, you must:		
		a.	Enter the IP address that your appliance should use.		
		b.	Enter the subnet mask.		
		C.	Enter the default gateway IP address or DNS-routable hostname.		
		d.	Enter the primary DNS server IP address or DNS-routable hostname.		
		e.	Enter the secondary DNS server IP address or DNS-routable hostname.		
		f.	Select OK.		
	5.		firm if you entered the correct network settings. If the settings are correct, select Yes . Alternatively, if they wrong, select No to go back and correct them.		
П	6.	Con	figure settings for the appliance network interface card (NIC).		
		Do	one of the following:		
			If the NIC for your appliance should autonegotiate the fastest possible transmission mode when it is connected to another device, select Yes .		
			If the NIC should not autonegotiate, select No , select the NIC speed, select OK , select the duplex method, select OK , then select Yes .		
	7.	Sele	ct the time zone settings.		
•		a.	Use the Up/Down arrow keys to navigate through the Time Zone list.		
		b.	Stop when the correct time zone is displayed, then select OK .		
		C.	If the settings are correct, select Yes . Alternatively, if they are wrong, select No to go back and correct them.		
	8.	Sele	ct the current month, year, and day.		
		a.	Use the Tab key and the Up/Down arrow keys to navigate and change the selected values.		
		b.	When you are done, select OK .		
		C.	If the settings are correct, select Yes . Alternatively, if they are wrong, select No to go back and correct them.		
	9.		ct the current hour, minute, and second. Use the format for military time (24 hours that increment from 0100 400).		
		a.	Use the Tab key and the Up/Down arrow keys to navigate and change the selected values.		
		b.	When you are done, select OK .		
		C.	If the settings are correct, select Yes . Alternatively, if they are wrong, select No to go back and correct them.		

✓	Tas	k
	10.	Enter a password for the <i>admin</i> account. This is by default the account to use when you administer the appliance. The password that you enter must contain at <i>least</i> six characters. When you are done, select OK .
	Tip	We recommend that you use a strong password. A strong password has at least eight characters and contains numbers, letters (both uppercase and lowercase), and symbols.
	11.	Enter a password for the <i>pwadmin</i> account. This is the account to use if you forget your password for the admin account. When you are done entering the password, select OK twice.
		After a moment, the appliance reboots and a login prompt is displayed.
	12.	Obtain a DMM software license key and use it to activate the DMM modules that you purchased.
		a. At the login prompt, use the admin username and the password that you specified in Task 10 to log in to the Appliance Administration Interface (AAI).
		In the displayed menu, the SHOW_INFO option is highlighted by default.
		b. Press Enter, then write down:
		• The IP address displayed for your DMM appliance.
		• The serial number displayed for your DMM appliance.
		c. Compose an email message that includes or identifies <i>all</i> 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.
		In addition, 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.
		d. Send the email message to dms-softwarekeys@cisco.com.
		e. After you receive the license key from Cisco, save a local copy of it.
		f. To load DMM in a web browser, use the DMM appliance IP address that you saw in AAI (http:// <dmm_ip_address>:8080/).</dmm_ip_address>
		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.
		g. Click Install/Upgrade License.
		h. Click Browse, find and select the license file where you saved it, then click Open.

i. Click Install License. The DMM software features and modules that you purchased are now enabled.

1	Tas	k
	13.	Enter configuration values for the Video Portal module. To load the Video Portal Module Installation Configuration page in your browser, go to http:// <dmm_ip_address>:8080/DMM/, then fill in the fields:</dmm_ip_address>
		• Superuser Email—The email address of the user who will act as the Video Portal "superuser."
		• Superuser Password —The password for the "superuser" account. The password must contain at least six characters, at least one numeral, and both uppercase and lowercase characters.
		• Server Base URL—The routable DNS name for your Video Portal appliance. DMM fills this field automatically, but you can change the URL if it is wrong.
		• IP or fully qualified domain name—The IP address that you wrote down in Task 12-b.
		• Installed Instance Name—The Video Portal appliance instance name that you specified in Task 11 in Chapter 2, "Setting Up and Configuring a Video Portal Appliance.".
	14.	Create Video Portal module database tables. Select Proceed with DMM Installation, then wait while the database tables are created.
		The next page says if the database creation succeeded and summarizes the results.
	15.	Verify that the Video Portal module configuration values are correct. Click Launching the Cisco Video Portal. The Video Portal plugin detector page appears briefly, then the Video Portal appears.

Task

- 6. Configure the values for system variables on your DMM appliance.
 - **a.** Log in with the superuser account password that you created.
 - **b.** Click the **Setup** tab, then enter all the following values:
 - 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 notication 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: http://dmm.yourdomain.com:8080.
 - **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: http://dmm.yourdomain.com:8080/DMM/temp/video_portal/asset.



You must not change the *Upload Path on Local File System* value from its default, even though the field is editable. Deployments fail if you change it.

- Upload Path on Local File System—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: /dm2/apache-tomcat/webapps/DMM/temp/video_portal/asset.
- **Preview URL**—The HTTP URL (including the TCP port number) that points to the private staging area on your DMM appliance.



You must not change the *Preview Path on Local File System* value from its default, even though the field is editable. Previews fail if you change it.

- **Preview Path on Local File System**—The complete file system pathname (starting from the root directory) that points to the staging area subdirectory on your DMM appliance. For example: \dm2/apache-tomcat/webapps/DMM/temp/video_portal.
- c. To save and commit your entries, click Save Configuration Parameters.

Task

- 17. Configure values for your Video Portal.
 - **a.** Enter all the following values:
 - 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.
 - **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 is any multiple of that size).
 - **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 is any multiple of that size).
 - **Supported Media Formats**—The formats to support. Select any combination of Flash Video, Windows Media, Real, and MPEG4/H.264.
 - b. To save and commit your entries, click Save Portal Parameters.
- **18.** Configure Video Portal deployment settings. You must deploy files to at least one remote location, because you cannot present them to audiences directly from your DMM appliance.

Note You cannot edit the values that pertain to Video Portal Metadata files.

- **a.** To specify the deployment locations—which can differ for the different supported filetypes—select **Setup** > **Deployment Locations**, then enter *all* of the following values for *every* supported filetype that you selected in Task 17. Any invalid entries will cause deployments to fail:
 - Connection type—The protocol or method for file transfer (the options are FTP, SFTP, and SCP).
 - **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.
 - Root URL Path—The absolute URL, where the Video Portal will host and reference your files.

Note If you upgrade from DMM 3.4, you must enter the remote location settings for MPEG4/H.264 files. This newer DMM version adds a location automatically for that filetype.

- **b.** To save your selections and let them take effect for every filetype, click **Save Deployment Locations**.
- c. Select Video Portal > Deployments, then click Schedule New Deployment.
- d. Select the Video Part 1 check box (in the "Video Part Selection" area).
- **e.** To deploy the pre-loaded content and metadata immediately, select the **Schedule Immediately** check box (in the "Deployment Time" area.)
- f. Click Create Deployment.
- **g.** To ensure that the content and metadata deployed appropriately, use another computer on your network to access the Video Portal that you installed.

✓	ask	
	9. Discover the DMPs in your network. If you purchased a DMM-DS license to centrally manage multiple Cisc Digital Media Player 4300G (DMP) devices, DMM can autodiscover your DMPs and organize them into group for simplified and remote management of your DMPs anywhere globally.	
	a. Select Digital Signage Module from the the untitled list at the top far-right of any page.	
	b. Select Applications > Full Applications List.	
	c. From the Application Types list, select DMP Discovery , then click (Add New Application).	
	d. Enter the required values:	
	 Name—A short and meaningful group name that applies equally well to every DMP in the specified range. For example, you might indicate that devices in this group are all located in Boston or Singapore 	re.
	• Description—(Optional) A longer description of the group, its purpose, its policies, or anything else.	
	• Discovery IP range—The range of IP addresses in which DMM should autodiscover DMPs.	
	e. To save and commit your entries, click Submit. Alternatively, to discard your entries, click Cancel.	
	D. Configure your DMP devices to recognize the authority of your DMM appliance. Do the following for each centrally managed DMP in your digital signage network:	h
	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 frogour DMM appliance. 	m
	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.	n,
	f. Click Reboot DMP , then (after you see the Reboot DMM page) click Reboot .	

Setup and software configuration are now complete.



CHAPTER 4

Administering a Video Portal Appliance

Revised: March 29, 2007

This chapter explains how you can use AAI to administer a Video Portal appliance. Topics are organized in these sections:

- Starting and Using AAI, page 4-1
- Performing Routine Administrative Tasks, page 4-1
- Selecting the Video Formats to Support, page 4-3
- Naming or Renaming Your Video Portal, page 4-4
- Changing the Network Settings for an Appliance, page 4-4

Starting and Using AAI

To start AAI from the appliance login prompt, enter the username **admin** and enter the password that you specified for the admin account when you completed the checklist of tasks in Chapter 2, "Setting Up and Configuring a Video Portal Appliance."

To see options or change selections in AAI, do any of the following:

- To highlight an option or to navigate through the list of options, press the Up/Down arrow keys.
- To select or deselect a highlighted option, press Spacebar.
- To save your changes to an option that you selected for editing and let your take effect, press Enter.

Performing Routine Administrative Tasks

Topics in this section tell you how to perform routine tasks:

- Viewing Appliance System Information, page 4-2
- Obtaining or Transferring a Copy of the System Log, page 4-2
- Changing the Appliance Administrator Password, page 4-2
- Patching or Updating Appliance Software, page 4-3
- Restarting an Appliance, page 4-3
- Shutting Down an Appliance, page 4-3

Viewing Appliance System Information

To see system information for the appliance, log in, select SHOW_INFO, then press Enter.

Obtaining or Transferring a Copy of the System Log

You can save a copy of the appliance log file to a USB drive that you attach directly to your appliance, or you can transfer a copy of the log to any SFTP-enabled server.

- Step 1 Log in, select APPLIANCE_CONTROL, then press Enter.
- **Step 2** Select **GET_SYSLOG**, press **Enter**, then do one of the following:
 - To transfer a copy of the log to an attached USB drive, select USB, then press Enter.
 - To transfer a copy of the log by SFTP to a reachable server:
 - a. Select SFTP, then press Enter.
 - **b.** Enter the SFTP server IP address or routable DNS name, then press **Enter**.
 - **c.** Enter the username that you use when you log in to the SFTP server, then press **Enter**.
 - d. Enter the password that you use when you log in to the SFTP server, then press Enter.

A system message in AAI tells you if the SFTP file transfer was successful.

Changing the Appliance Administrator Password

You can change the appliance administrator password. The password that you enter must contain at least 6 characters.

- **Step 1** Log in, select APPLIANCE_CONTROL, then press Enter.
- Step 2 Select RESET PASSWORD, then press Enter.
- **Step 3** Enter the new password, then press **Enter**.
- **Step 4** To confirm that you typed the password correctly, enter it again, then press **Enter**.



Note

You must also enter the new password in the Web-based graphical user interface for DMM.

- **Step 5** Log in as an administrator to DMM, then select **Video Portal Module** from the untitled list at the top far-right of the page.
- **Step 6** Select **Setup > Deployment Locations**, then scroll down to the bottom of the page.
- **Step 7** In the "Video Portal Metadata" area, enter the new password in the Login password text box.
- Step 8 Click Save Deployment Locations.

Patching or Updating Appliance Software

You can install a software patch or a software update.

- **Step 1** Log in, select APPLIANCE_CONTROL, then press Enter.
- **Step 2** Select **SOFTWARE_UPDATE**, then press **Enter**.
- **Step 3** Insert the CD-ROM, then press **Enter**.

Restarting an Appliance

You can restart an appliance.

- Step 1 Log in, select APPLIANCE_CONTROL, then press Enter.
- Step 2 Select REBOOT, then press Enter twice.

Shutting Down an Appliance

You can shut down an appliance.

- Step 1 Log in, select APPLIANCE_CONTROL, then press Enter.
- Step 2 Select SHUTDOWN, then press Enter twice.

Selecting the Video Formats to Support

Perform the following steps to configure Video Portal Control.

- Step 1 Log in, select VP_CONTROL, then press Enter.
- **Step 2** Select **SUPPORTED_MEDIA**, then press **Enter**.

Your video portal supports one or more video formats that you can choose or change. The Windows Media and Flash Video format options are enabled by default when Cisco manufactures the appliance, but you can select other options if you prefer.

Step 3 Select the formats that your portal should support, then save your work. See Starting and Using AAI, page 4-1.

You can select any number of, and any combination of, these formats:

- WMV—Windows Media
- FLV—Flash Video

- QT—QuickTime
- RM—Real Media

Step 4 If you selected:

- Two or more formats—AAI prompts you to specify the format to deliver by default to a client system that meets all requirements to use every format. Select the default format, then press **Enter**.
- Three or more formats—AAI prompts you to specify the alternative format to deliver to a client system that meets all requirements to use every format except the one format that you made the default. Select the alternative format, then press **Enter**.
- Four or more formats—AAI prompts you to specify the format to deliver to a client system that meets the requirements to use every format except the default and alternative formats. Select the tertiary format, then press **Enter**.
- **Step 5** When AAI shows you the order of precedence for the formats that it will deliver to client systems, press **Enter**.

Naming or Renaming Your Video Portal

You must specify a name for your video portal. You can change the name at any time.

- Step 1 Log in, select VP_CONTROL, then press Enter.
- Step 2 Select INSTANCE NAME, then press Enter.
- **Step 3** Enter the name.

The name that you enter will be visible in the public HTTP URL that points to your Video Portal.

Step 4 When AAI shows you the name that you entered, press **Enter**.

Changing the Network Settings for an Appliance



- We recommend that you never change the static IP address that you assign to your Video Portal appliance.
- We recommend that you do not use DHCP to obtain the IP address for your appliance, due to the
 sometimes unpredictable expiration of IP addresses in DHCP systems and the administrative
 overhead of reconfiguring other devices to reestablish disrupted connections (for deployments or
 any other purpose).
- If you use your Video Portal appliance as one of your deployment locations—even though we strongly recommend that you *never* do—and if you used IP addresses instead of hostnames when you specified your deployment locations (in DMM-VPM at Setup > Deployment Locations), any changes that you make now to the Video Portal appliance IP address will cause some of your entries in DMM-VPM to become invalid. You must reenter all such values manually, including the

IP addresses that you specified for deployment locations, video parts, videos, and programs. Until you correct the invalidated IP address in every location where you entered it, the corresponding deployments, video parts, videos, and programs will not run.

• If your network uses a DNS server, you must reassociate the resolvable DNS hostname for your Video Portal appliance each time that you change its IP address.

You can change network settings for an appliance.

- Step 1 Log in, select NETWORK SETTINGS, then press Enter.
- **Step 2** Select the type of network setting to change. The options are:
 - **HOST_NAME**—To change the appliance hostname, select this option.
 - TCP_IP—To change how the appliance obtains its IP address (DHCP or static), select this option. We recommend that you do not select DHCP.
 - DNS—To change the primary or secondary DNS server for the appliance, select this option.
 - **AUTO_NEGOTIATION**—To change NIC speed and duplex settings for the appliance, including whether the speed and duplex should be autonegotiated, select this option.
 - **NETWORK_TOOLS**—To troubleshoot the network, select this option.
- Step 3 Press Enter.
- **Step 4** Enter or select the new settings, then select the options to confirm each individual change.
- **Step 5** Confirm the combination of all the network settings that you changed:
 - If everything is correct, press **Enter**.
 - If anything is incorrect, select **No**, then press **Enter** to enter different settings.

Changing the Date and Time Settings for an Appliance

You can configure the date and time settings for an appliance.

- **Step 1** Log in, select **DATE_TIME_SETTINGS**, then press **Enter**.
- **Step 2** Select the type of setting to change. The options are:
 - **TIME_ZONE**—To change the appliance time zone, or to enable or disable the appliance system clock to use UTC, select this option.
 - **DATE**—To change the year, month, or date for the appliance, select this option.
 - TIME—To change the hour, minute, or second for the appliance, select this option.
 - NTP—To enable or disable the appliance to use an NTP server, or to change which NTP server the appliance uses, select this option.
 - **SHOW_TIME**—To see what time setting is in effect on this appliance, select this option.
- Step 3 Press Enter.
- **Step 4** Enter or select the new date and time settings, then select the options to confirm each individual change.
- **Step 5** Confirm the combination of all the date and time settings that you changed:

- If everything is correct, press **Enter**.
- If anything is incorrect, select **No**, then press **Enter** to enter different settings.



CHAPTER 5

Administering a DMM Appliance

Revised: March 29, 2007

This chapter explains how you can use AAI to administer a DMM appliance. Topics are organized in these sections:

- Starting and Using AAI, page 5-1
- Performing Routine Administrative Tasks, page 5-1
- Changing the Network Settings for an Appliance, page 5-4
- Changing the Date and Time Settings for an Appliance, page 5-5

Starting and Using AAI

To start AAI from the appliance login prompt, enter the username **admin** and enter the password that you specified for the admin account when you completed the checklist of tasks in Chapter 3, "Setting Up and Configuring a DMM Appliance."

To see options or change selections in AAI, do any of the following:

- To highlight an option or to navigate through the list of options, press the Up/Down arrow keys.
- To select or deselect a highlighted option, press **Spacebar**.
- To save your changes to an option that you selected for editing and let your take effect, press Enter.

Performing Routine Administrative Tasks

Topics in this section tell you how to perform routine tasks:

- Viewing Appliance System Information, page 5-2
- Backing Up an Appliance, page 5-2
- Restoring from an Appliance Backup, page 5-2
- Obtaining or Transferring a Copy of the System Log, page 5-2
- Changing the Appliance Administrator Password, page 5-3
- Patching or Updating Appliance Software, page 5-3
- Restarting an Appliance, page 5-3

• Shutting Down an Appliance, page 5-4

Viewing Appliance System Information

To see system information for an appliance, log in, select **SHOW_INFO**, then press **Enter**.

Backing Up an Appliance

You can back up an appliance.

- **Step 1** Log in, select **DMM_Control**, then press **Enter**.
- **Step 2** To back up DMM, select **BACKUP_DMM**, press **Enter**, then do one of the following:
 - To back up to a USB drive, select USB, then press Enter.
 - To back up to a video portal appliance, select VIDEO_PORTAL, then press Enter.

Restoring from an Appliance Backup

You can restore an appliance from a backup.

- Step 1 Log in, select DMM_Control, then press Enter.
- **Step 2** To restore DMM, select **RESTORE_DMM**, press **Enter**, then do one of the following:
 - To restore from a backup on a USB drive, select **USB**, then press **Enter**.
 - To restore from a backup on a video portal appliance, select VIDEO_PORTAL, then press Enter.

Obtaining or Transferring a Copy of the System Log

You can save a copy of the appliance log file to a USB drive that you attach directly to your appliance, or you can transfer a copy of the log to any SFTP-enabled server.

- Step 1 Log in, select APPLIANCE_CONTROL, then press Enter.
- **Step 2** Select **GET_SYSLOG**, press **Enter**, then do one of the following:
 - To transfer a copy of the log to an attached USB drive, select USB, then press Enter.
 - To transfer a copy of the log by SFTP to a reachable server:
 - a. Select SFTP, then press Enter.
 - **b.** Enter the SFTP server IP address or routable DNS name, then press **Enter**.

- c. Enter the username that you use when you log in to the SFTP server, then press Enter.
- d. Enter the password that you use when you log in to the SFTP server, then press Enter.

A system message in AAI tells you if the SFTP file transfer was successful.

Changing the Appliance Administrator Password

You can change the appliance administrator password. The password that you enter must contain at least 6 characters.

- **Step 1** Log in, select **APPLIANCE_CONTROL**, then press **Enter**.
- Step 2 Select RESET_PASSWORD, then press Enter.
- **Step 3** Enter the new password, then press **Enter** three times.

Patching or Updating Appliance Software

You can install a software patch or a software update.

- **Step 1** Log in, select **APPLIANCE_CONTROL**, then press **Enter**.
- Step 2 Select SOFTWARE_UPDATE, then press Enter.
- **Step 3** Insert the CD-ROM, then press **Enter**.

Restarting an Appliance

You can restart an appliance.

- Step 1 Log in, select APPLIANCE_CONTROL, then press Enter.
- **Step 2** Select **REBOOT**, then press **Enter**.
- Step 3 Select Yes, then press Enter.

Shutting Down an Appliance

You can shut down an appliance.

- Step 1 Log in, select APPLIANCE_CONTROL, then press Enter.
- **Step 2** Select **SHUTDOWN**, then press **Enter**.
- Step 3 Select Yes, then press Enter.

Changing the Network Settings for an Appliance



- We recommend that you never change the static IP address that you assign to your DMM appliance.
- We recommend that you do not use DHCP to obtain the IP address for your appliance, due to the
 sometimes unpredictable expiration of IP addresses in DHCP systems and the administrative
 overhead of reconfiguring other devices to reestablish disrupted connections (for deployments or
 any other purpose).
- If your network uses a DNS server, you must reassociate the resolvable DNS hostname for your DMM appliance each time that you change its IP address.

You can change network settings for an appliance.

- **Step 1** Log in, select **NETWORK_SETTINGS**, then press **Enter**.
- **Step 2** Select the type of network setting to change. The options are:
 - **HOST_NAME**—To change the appliance hostname, select this option.
 - TCP_IP—To change how the appliance obtains its IP address (DHCP or static), select this option. We recommend that you do not select DHCP.
 - DNS—To change the primary or secondary DNS server for the appliance, select this option.
 - **AUTO_NEGOTIATION**—To change NIC speed and duplex settings for the appliance, including whether the speed and duplex should be autonegotiated, select this option.
 - **NETWORK_TOOLS**—To troubleshoot the network, select this option.
- Step 3 Press Enter.
- **Step 4** Enter or select the new settings, then select the options to confirm each individual change.
- **Step 5** Confirm the combination of all the network settings that you changed:
 - If everything is correct, press **Enter**.
 - If anything is incorrect, select **No**, then press **Enter** to enter different settings.

Changing the Date and Time Settings for an Appliance

You can configure the date and time settings for an appliance.

- Step 1 Log in, select DATE_TIME_SETTINGS, then press Enter.
- **Step 2** Select the type of setting to change. The options are:
 - **TIME_ZONE**—To change the appliance time zone, or to enable or disable the appliance system clock to use UTC, select this option.
 - **DATE**—To change the year, month, or date for the appliance, select this option.
 - TIME—To change the hour, minute, or second for the appliance, select this option.
 - NTP—To enable or disable the appliance to use an NTP server, or to change which NTP server the appliance uses, select this option.
 - **SHOW_TIME**—To see what time setting is in effect on this appliance, select this option.
- Step 3 Press Enter.
- **Step 4** Enter or select the new date and time settings, then select the options to confirm each individual change.
- **Step 5** Confirm the combination of all the date and time settings that you changed:
 - If everything is correct, press **Enter**.
 - If anything is incorrect, select No, then press Enter to enter different settings.

Changing the Date and Time Settings for an Appliance