

Cisco Digital Media Suite: Cisco Digital Media Encoder 1100

The Cisco® Digital Media Suite (DMS) is a comprehensive offering of webcasting and video sharing, digital signage and business IPTV applications that can help transform how organizations learn, grow, communicate, and collaborate. Support from the broad Cisco partner ecosystem of deployment, solution-development, and content-creation partners help ensure a successful digital media implementation.

The Cisco Digital Media Encoder (DME) 1100 is an integrated component of Cisco DMS for the Cisco Show and Share Application.

Cisco Digital Media Encoder 1100

The Cisco DME 1100 (Figure 1) is a portable encoder that provides live and on-demand streaming digital media, including video and audio, across an IP network anywhere an event or meeting can occur.

Designed for both professionals and novices, the Cisco DME 1100 features push-button control access to predefined Microsoft Windows Media, Adobe Flash (on-demand), and MPEG-4/H.264 encoder profiles. An LCD display is also mounted on the front panel for access to configuration and operation information. With its rugged design and minimal weight, the Cisco DME 1100 can take video production out of the studio.

Figure 1. Cisco Digital Media Encoder 1100



The Cisco DME 1100 provides several different audio and digital media connections as well as both 1-GB and 10/100-Mb Ethernet connections.

You can use the Cisco DME 1100 as a standalone encoder or as an integrated component of the overall Cisco DMS (Figure 2). The Cisco Digital Media Manager (DMM) includes functions to set up and control multiple encoders, including the Cisco DME 1100; schedule live streaming events; and publish both on-demand and live streaming content to viewers anywhere on your IP network.

Figure 2. Cisco Digital Media Suite**Digital Media Encoding**

Video on Demand (VoD)
Video Files, Movies, etc.



Media Production Company

Live Video Events
Single-channel encoding



Live Video Feed

Multichannel Encoding
For campus TV distribution
NBC, CBS, CNN, ESPN, etc.



Video and Digital Signage
Files Ingested Into
DMM for Deployment.

VP Encode
Feed

VP Encode
Feed

Administration and Publishing

**Cisco Digital Media Manager
Appliance Server**



Deployed Content

Dynamic Video
Portal Updates

**Cisco Video Portal
Appliance Server**



Web and
Streaming Server



Portal Application
and Channel Listings

Content for Pre-Position

Active Directory Profiles

Authentication

Active Directory

Standalone WAE

Remote VP
Authentication

Cisco Video Portal Remote Users

For optimal network performance and end-user delivery of digital media, the Cisco DME 1100 integrates with a variety of streaming systems, including the Cisco Application and Content Networking System (ACNS). Cisco ACNS provides both live unicast and multicast streaming services and on-demand access in which video and audio files are cached locally for retrieval and viewed over the WAN at LAN speeds (Figure 3).

Figure 3. Cisco DME 1100 and Cisco ACNS**Digital Media Encoding**

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Cisco Digital Media Encoder

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Authentication

Content for Pre-Position

CDM

ACNS
Administration

Root WAE

Remote VP
Authentication

Active Directory

Root Cisco Wae
Receive Video Data and Distribute to Various
Edge Wae Servers that Serve Data to Users.

Content Distribution Manager
ACNS Central Management Tool

WAN

Cisco Video Portal Users

Edge Cisco Wae
Receive Video and Re-Publish Data
to Nearby Portal Clients.

Edge WAE

Remote Cisco Digital Media Player

Redirected VP Authentication

WCCP HTTP
Redirection

URL From
DSM Scheduler

DMP HTTP Request

DMP HTTP Response

HTTP Video Portal Request

Video Portal Authentication

Cisco Video Portal

Video Request

Video



More information about Cisco ACNS and Cisco Wide Area Application Engines (WAEs) is available at <http://www.cisco.com/go/acns>.

Main Features and Benefits

Table 1 lists the main features and benefits of the Cisco DME 1100.

Table 1. Features and Benefits of Cisco DME 1100

Feature	Benefit
Lightweight and portable	Live events can be streamed and recorded at any location that has an IP network connection.
Support for a variety of encoding formats	Flexible streaming formats help ensure that viewers are not limited.
Operational controls on front panel	No keyboard, mouse, or monitor is required to operate the encoder.
Integration with Cisco DMS	Live events from multiple encoders can be easily scheduled and managed from the web-based Cisco DMM.

Product Specifications

Table 2 lists the specifications of the Cisco DME 1100.

Table 2. Product Specifications

Product Parameter	Specification
Supported live-streaming formats	<ul style="list-style-type: none"> • Microsoft Windows Media • MPEG-4/H.264 • Product Parameter: Supported live-streaming formats for the DMM Live Event Manager (PC Only) • Specification: Microsoft Windows Media
Supported on-demand formats	<ul style="list-style-type: none"> • Adobe Flash (flv) • Microsoft Windows Media • MPEG-4/H.264
Video inputs	<ul style="list-style-type: none"> • Composite • S-video • Component
Video formats	<ul style="list-style-type: none"> • National Television System Committee (NTSC): M and M-J • Phase alternation line (PAL): B, D, H, and I
Audio inputs	<ul style="list-style-type: none"> • Unbalanced stereo (RCA) • Balanced stereo (XLR3)
Ethernet ports	<ul style="list-style-type: none"> • 1 GB • 10/100 Mb
Available hard disk space	100 GB
RAM	1 GB
Processor	Single, 2.119-GHz Intel Core 2 Duo CPU
Additional ports	Two USB 2.0 and VGA monitor
Operating system	Microsoft XP embedded
Physical dimensions	Size (H x W x D): 4.5 x 7.75 x 12 in. (11.43 x 19.67 x 30.48 cm) Weight: 7.5 lb (3.41 kg)
Standard form factor	Custom and portable
Operating temperature range	0 to 40°C (32 to 104°F)
Operating humidity range	Between 5 and 85% (noncondensing) at 40°C
Operating altitude range	0 to 10,000 ft (0 to 3084m)
Power	<ul style="list-style-type: none"> • 110 to 220 VAC • 50 to 60 Hz • 0.5 to 1A, load and input voltage dependent • 60W power supply • 204 BTU/hr
Mean time between failure (MTBF; estimated)	More than 140,000 hr

Usage Recommendations

The Cisco DME 1100 is intended for webcast broadcasts such as executive updates, company meetings, lectures, and product introductions of no more than 2 hours duration. A different encoder product should be considered for use cases that require non-stop encoding for greater than 2 hours. Table 3 lists several recommended upper limits for encoder format settings according to the intended use for the Cisco DME 1100. The recommended upper limits for window size and bit rate are based on a maximum CPU usage of 60 percent on the Cisco DME 1100. The Cisco DME 1100 is also compatible with the slide synchronization function of the Cisco DMM Live Event Module.

Table 3. Usage Recommendations

Application	Encoder Type	Maximum Window Size	Maximum Bit Rate	Number of Simultaneous Output Streams
General webcasting for live and on-demand content	Microsoft Windows Media	640 x 480	2 Mbps	1
General webcasting for live and on-demand content	MPEG-4/H.264	640 x 480	2 Mbps	1
Cisco DMM Live Event Module (for use with slide synchronization for live events)	Microsoft Windows Media	640 x 480	2 Mbps	1

Ordering Information

To place an order, visit the [Cisco Ordering Homepage](#) and refer to Table 4.

Table 4. Ordering Information

Product Name	Part Number
Cisco DME 1100	DMS-DME-1100

Service and Support

Cisco and its partners provide a broad portfolio of end-to-end services and support that can help you improve network total cost of ownership (TCO), business agility, and network availability to increase the business value of your network and your return on investment (ROI). This portfolio is based on the Cisco Lifecycle Services approach, which defines activities needed, by technology and by network complexity, throughout the six phases of the network lifecycle: prepare, plan, design, implement, operate, and optimize.

Cisco Services for Cisco DMS in the prepare, plan, design, and implement phases of the network lifecycle helps you successfully deploy a reliable, high-performance Cisco DMS. Specific activities include:

- User feature and function requirements validation
- Architecture validation
- Network and operations readiness assessment
- Detailed design and implementation schedule development
- System acceptance test plan development
- Staffing plan development
- Installation, configuration, and integration support

Cisco Services in the operate phase helps ensure that Cisco products operate efficiently and benefit from the most up-to-date system software. Cisco SMARTnet[®] and SMARTnet Onsite support provide registered access to Cisco.com for online technical assistance, access to the Cisco Technical Assistance Center (TAC), Cisco IOS[®] Software updates and upgrades, and advance replacement of failed hardware.

To learn more about Cisco Services for Cisco DMS, please contact your local Cisco account representative. For specific information about Cisco SMARTnet and SMARTnet Onsite support, visit http://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2978/serv_group_home.html.

For More Information

For more information about the Cisco DME 1100, visit <http://www.cisco.com/go/dms> or contact your local Cisco account representative.



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