

Cisco Digital Media System: Cisco Digital Media Encoder 2000

The Cisco® Digital Media System (DMS) enables organizations to create, manage, and access compelling digital media to easily connect customers, employees, partners, or students—anywhere, anytime. The Cisco Digital Media System is a flexible and comprehensive solution for publishing dynamic content to both on-premise digital signage displays and the desktop.

The Cisco Digital Media Encoder (DME) 2000 is an integrated component of the Cisco Digital Media System for Cisco Desktop Video.

Cisco Digital Media Encoder 2000

The Cisco Digital Media Encoder 2000 (Figure 1) is a multiprocessor, studio-quality audio and video encoding appliance that provides live and on-demand streaming digital media across an IP network.

The Cisco Digital Media Encoder 2000 is designed for sophisticated users who require multiple audio and video input options, a variety of encoding formats and functions, and high-bandwidth encoding. A color display and audio output monitors mounted on the front panel provide visual video and audio encoding monitoring. You can manage the encoder locally through the embedded LCD or remotely through the Cisco Digital Media Manager, another component of the Cisco Digital Media System. Its multiprocessor power and variety of input options make this encoder the choice for users, including corporate offices or data centers that need sophisticated creation of compelling digital media content.

Figure 1. Cisco Digital Media Encoder 2000

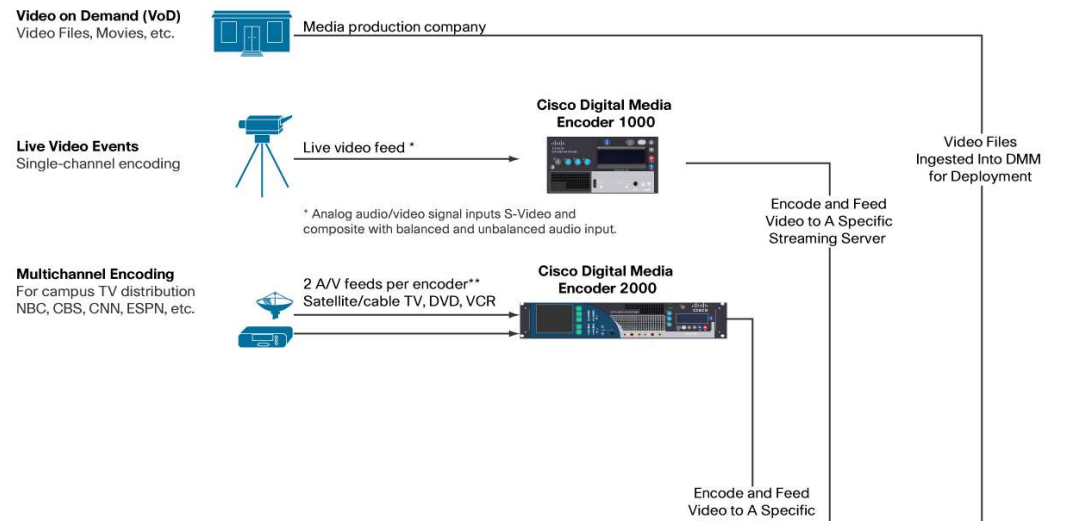


The Cisco Digital Media Encoder 2000 provides a variety of composite and digital audio and video connections as well as two 10-/100-/1000-Mb Ethernet connections. The power of the multiple processors and the variety of video and audio inputs make this encoder the choice for creating both live and on-demand streaming content as well as a platform for content conversion or transcoding.

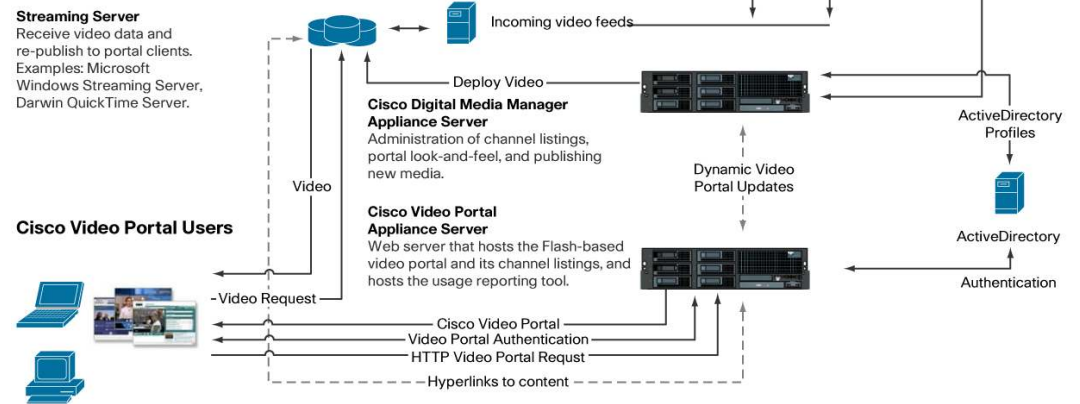
You can use the Cisco Digital Media Encoder 2000 as a standalone encoder or integrate it with the overall Cisco Digital Media System (Figure 2). The Cisco Digital Media Manager includes functions to set up and control Cisco Digital Media Encoders; schedule live streaming events; and publish both on-demand and live streaming content to viewers anywhere on your IP network.

Figure 2. Cisco Digital Media System

Digital Media Encoding



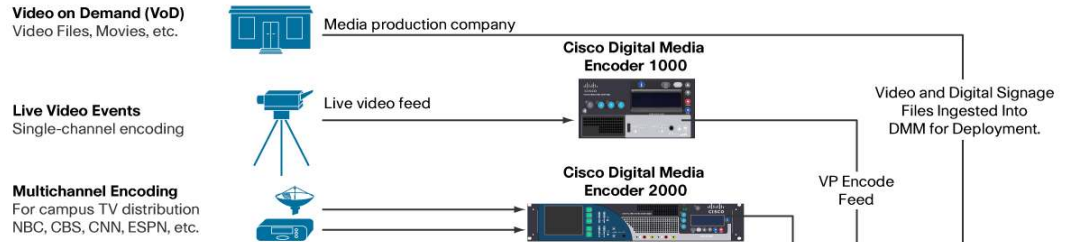
Administration and Publishing



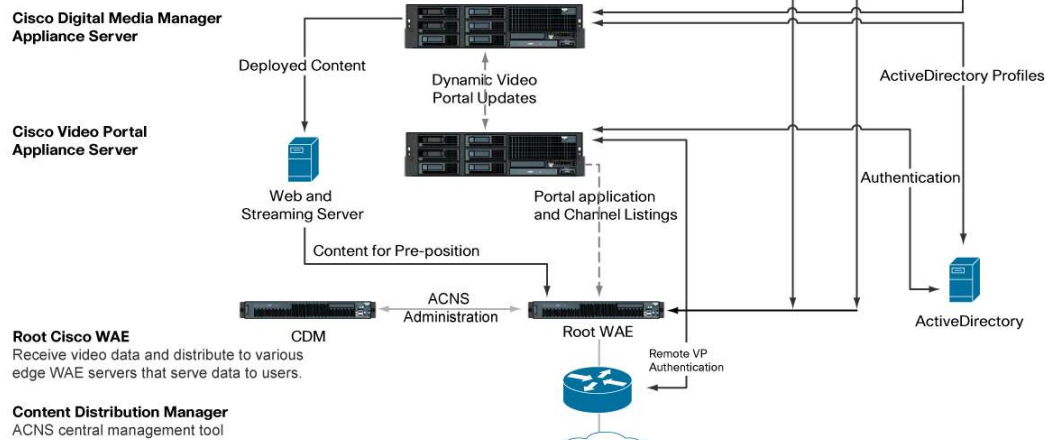
For optimal network performance and end-user delivery of digital media, you can connect the Cisco Digital Media Encoder 2000 to a variety of streaming systems, including the Cisco Application and Content Networking System (ACNS). Cisco ACNS provides both live unicast and multicast streaming services and on-demand access in which digital media files are cached locally for retrieval and viewed over the WAN at LAN speeds (Figure 3).

Figure 3. Cisco Digital Media Encoder 2000 and Cisco ACNS

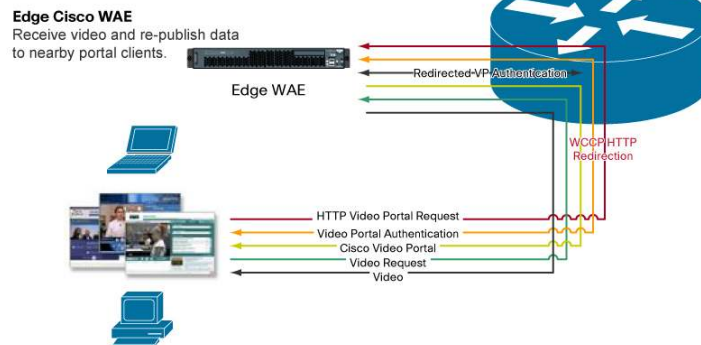
Digital Media Encoding



Administration and Publishing



Cisco Video Portal Users



More information about Cisco ACNS is available at: <http://www.cisco.com/go/acns>.

Key Features and Benefits

Table 1 gives features and benefits of the Cisco Digital Media Encoder 2000.

Table 1. Features and Benefits of Cisco Digital Media Encoder 2000

| Feature | Benefit |
|---|---|
| Multiple processors | Provide highest-quality streaming from multiple inputs. |
| Multiple video and audio inputs | Accept video and audio input from a large variety of cameras and other sources. |
| Video and audio monitors on the front panel | Visually monitor encoding functions. |
| Integration with the Cisco Digital Media System | Easily schedule and manage live events from multiple encoders from the web-based Cisco Digital Media Manager. |

Product Specifications

Table 2 gives specifications of the Cisco Digital Media Encoder 2000.

Table 2. Product Specifications

| Product Parameter | Specification |
|---|--|
| Supported live streaming formats | <ul style="list-style-type: none"> Windows Media MPEG-4/H.264 |
| Supported on-demand formats | <ul style="list-style-type: none"> Flash (.flv) Windows Media MPEG-4/H.264 |
| Video inputs | <ul style="list-style-type: none"> Two composite Two S-Video Two SDI (SMPTE-259M) video with embedded audio inputs (AES/EBU) |
| Video formats | <ul style="list-style-type: none"> National Television System Committee (NTSC): M, M-J Phase Alternation Line (PAL): B, D, H, I |
| Audio inputs | <ul style="list-style-type: none"> Two pair unbalanced stereo (RCA) Two pair balanced stereo (XLR) Two pair digital audio (AES/EBU) inputs through SDI inputs |
| Ethernet ports | Two 10/100/1000 Mbps |
| Available hard disk space | 85 GB |
| RAM | 1 Gb |
| Processor | Dual Core AMD Opteron, 1.81 GHz |
| Additional ports | Two USB 2.0 and VGA monitor |
| Physical dimensions | <ul style="list-style-type: none"> Size (H x W x D): 3.5 x 19 x 24 in. (8.89 x 48.26 x 60.96 cm) Weight: 42 lb (19.05 kg) |
| Standard form factor | 2 rack unit (RU) |
| 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 3,084m) |
| Power | <ul style="list-style-type: none"> 110 to 220 VAC 50 to 60 Hz 4 to 8A, load and input voltage dependent 510W power supply 1,740 BTU/hr |
| Mean time between failure (MTBF; estimated) | >100,000 hr |

Usage Recommendations

The Cisco Digital Media Encoder 2000 is intended for use in encoding typical standard-definition (SD) Webcast quality live and on-demand streams. Table 3 gives recommended upper limits regarding encoder format settings and intended use for the Cisco Digital Media Encoder 2000. The recommended upper limits for window size and bit rate are based on a maximum of 75-percent CPU usage on the Cisco Digital Media Encoder 2000. The Cisco Digital Media Encoder 2000 is also compatible with the slide synchronization function of the Cisco Digital Media Manager 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 | Windows Media | 640 x 480 | 2 Mbps | 2; variable for smaller window sizes and lower bit rates |
| General Webcasting for live and on-demand content | MPEG-4/H.264 | 640 x 480 | 2 Mbps | 2; variable for smaller window sizes and lower bit rates |
| Cisco Digital Media Manager Live Event Module (for use with slide synchronization for live events) | Windows Media | 640 x 480 | 2 Mbps | 2; variable for smaller window sizes and lower bit rates |

Ordering Information

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

Table 4. Ordering Information

| Product Name | Part Number |
|----------------------------------|--------------|
| Cisco Digital Media Encoder 2000 | DMS-DME-2000 |

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, business agility, and network availability to increase the business value of your network and your return on investment. 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 in the prepare, plan, design, and implement phases of the network lifecycle help you successfully deploy a reliable, high-performance Cisco Digital Media System. Specific activities include:

- User feature and functionality 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 help 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 the Cisco Digital Media System, 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 Digital Media Encoder 2000, visit:

<http://www.cisco.com/go/dms> or contact your local Cisco account representative.



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