Cisco Digital Media Systems – DMS

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Digital Media System

"Simply Compelling Communications"

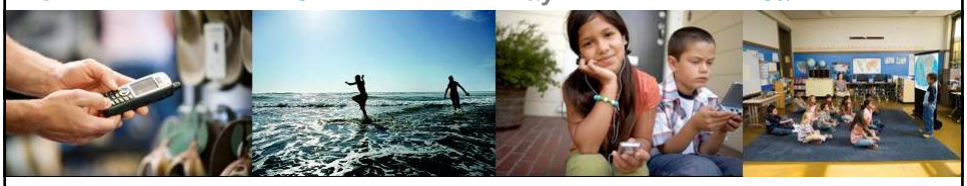
Agenda

- Cisco's Power of the Platform
- Digital Media Systems Overview
- Digital Signage
  - Applications
  - Components
- Displays
  LCD/Plasma
- Desktop Video
  - Applications
  - Components
- Q and A

The Cisco Vision…

Changing the Way We
Work, Live, Play, and Learn SM

Work Live Play Learn

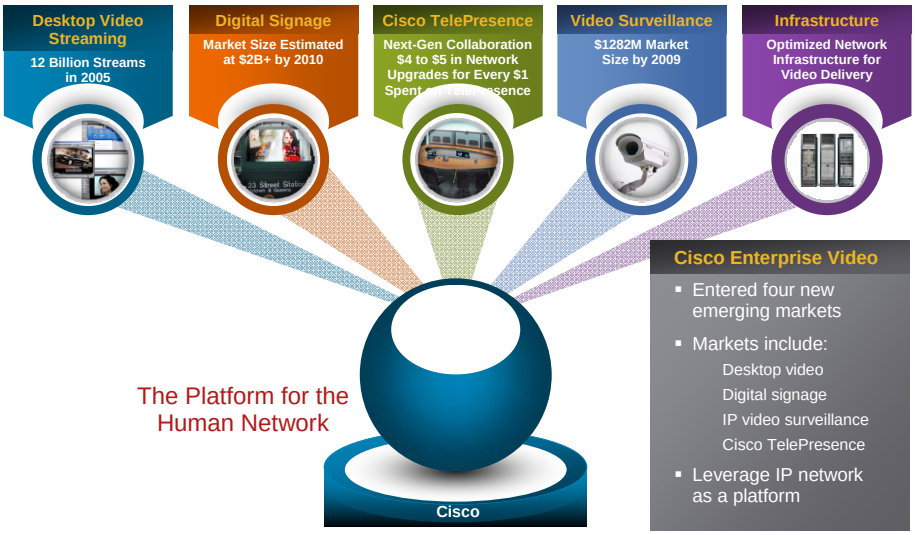


…and Mission

Shape the future of the Internet by creating unprecedented value and opportunity for our customers, employees, investors and ecosystem partners

Power of the Platform

Cisco Video Strategy

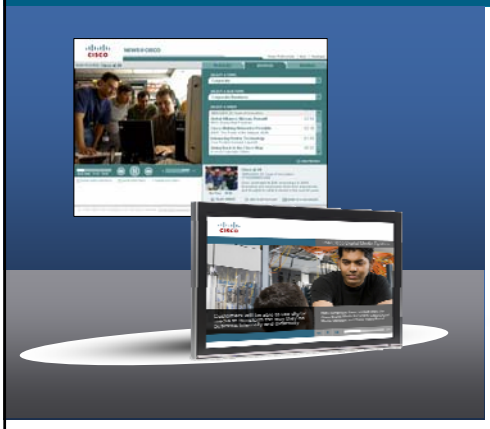


Cisco Enterprise Video

- Entered four new emerging markets
- Markets include:
  - Desktop video
  - Digital signage
  - IP video surveillance
  - Cisco TelePresence
- Leverage IP network as a platform

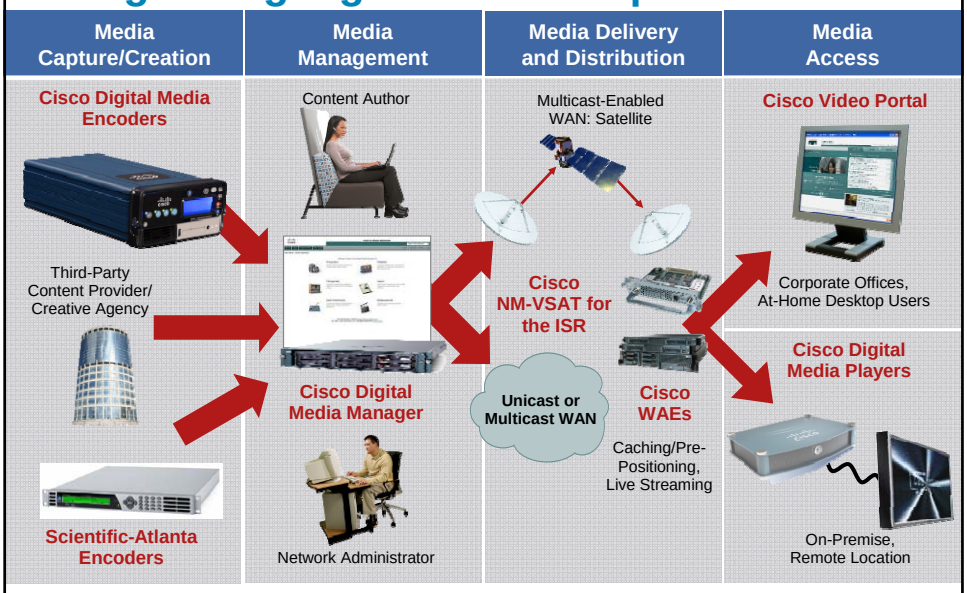
Cisco Digital Media System: Overview

A Comprehensive Solution for Creation, Management, and Access of Compelling Digital Media



- Comprehensive: One solution for desktop video and digital signage
- Scalable: To many thousands of users and signs
- Centralized: Web-based content management
- Integrated: With underlying network for optimal content delivery

Digital Media System:
Digital Signage and Desktop Vide



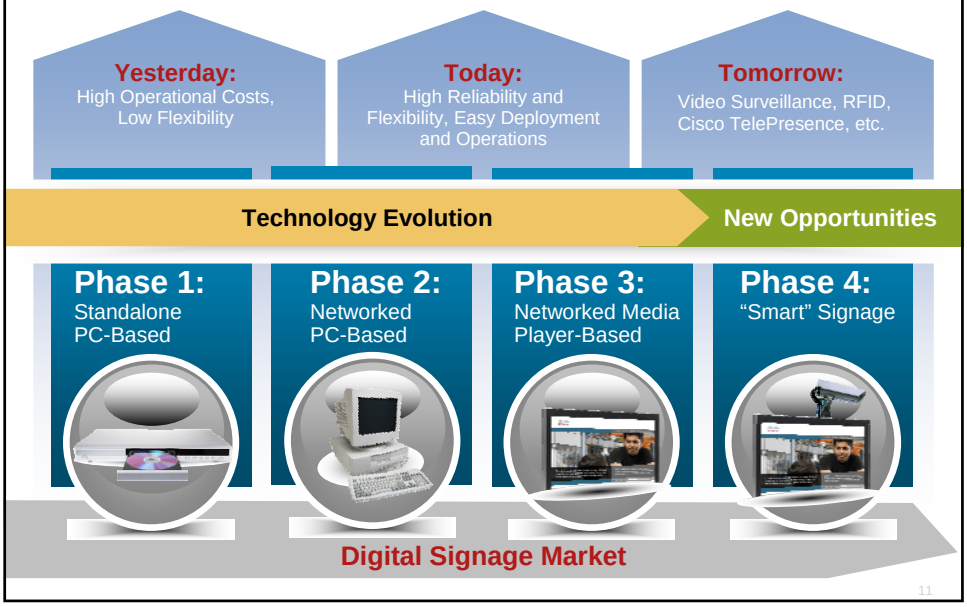
Digital Signage

Digital Signage Applications

Sales and Marketing	Corporate Communications	Training	Information Sharing
▪ Promote, cross-sell, and up-sell ▪ Product/service differentiation ▪ Enhanced store experience ▪ Reduce perceived wait time ▪ Advertising revenue	▪ Direct line of communications to customers ▪ Corporate messaging consistency ▪ Internal, executive communications ▪ Live broadcasting of company events	▪ Cost-efficient training to remote employees ▪ Information to break rooms, lobbies, etc.	▪ Directional signage (way-finding) ▪ Instant communications for rapid response ▪ Emergency/crisis communications ▪ Breaking corporate news relevant to employees

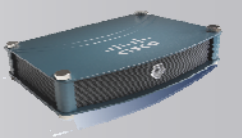
Digital Signage: The Basics

Digital Signage Technology Evolution



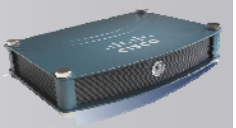
Cisco Digital Media Players Hardware Updates

- New DMP model 4305G
  - Increased local storage to 2GB SD card, other hardware identical to DMP 4300G
- **Embedded Linux – Special Version**
- **Media Processing : No Other Function**
- **10/100 Mbps NIC**
- DMP protective case accessory



DMP 4305G
2 GB Local Storage

- Fanless – Low Heat Emission
- No Hard Drives
- Ideal for Harsh Environmental areas
- MTBF = 25.3 (compared to 3.4 yers for PC Based)
- Power consumption = 15 Watt
- One Day of SD Video = 1GB



DMP 4300G
1 GB Local Storage

Cables & Connectors

- Composite
- Component
- S-Video
- HDMI
- DVI
- Analog Audio
- RS-232

Digital Media Players Firmware

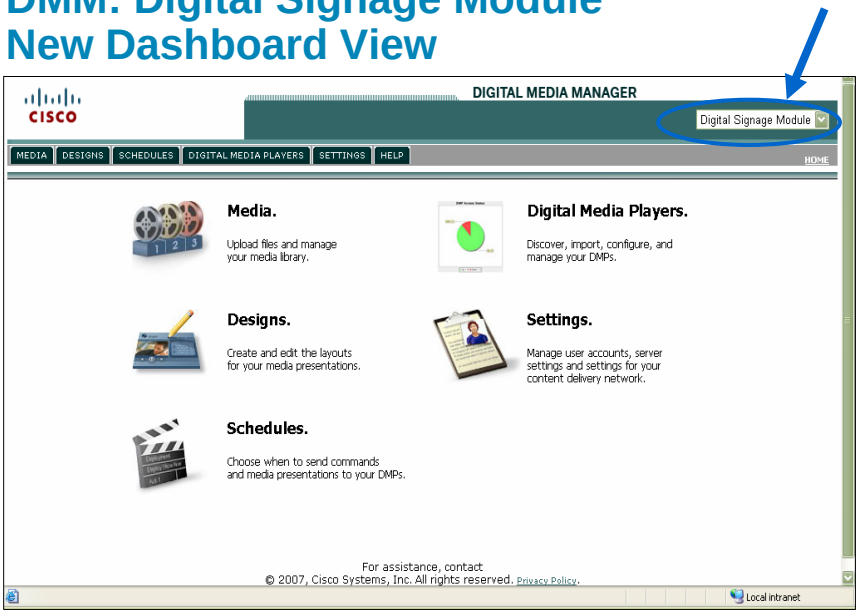
- RSS content syndication

  Display live and dynamic text information from internal/external RSS feeds: news, weather, finance, sports, local events

  Any and multiple areas on the screen

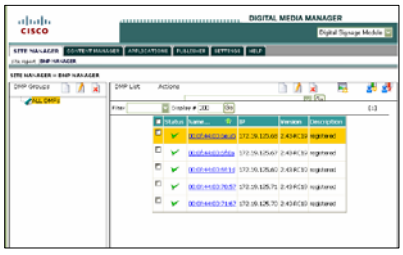
- Adobe Flash upgrade to support Flash animation version 7 for authors to create more sophisticated flash animations
- Content failover retry: DMPs can be configured to periodically attempt reconnection after loss of connection
- Audio over HDMI to support both video and audio carried over a single HDMI cable (no separate audio cable needed)
- Authentication option for DMM-to-DMP communications: on or off

DMM: Digital Signage Module
New Dashboard View



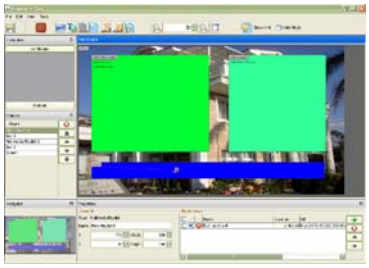
DMM Digital Signage Module
Signage Network Management Enhancements

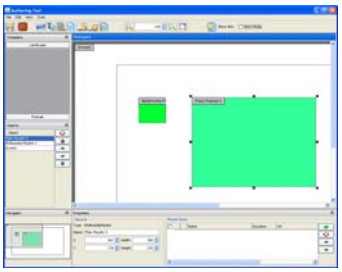
- Proof-of-play: GUI-based reporting of content schedule information with ability to export data
- DMP site management: easily sort and filter through large deployments of DMP lists for network monitoring and maintenance
- Integrated controls for NEC LCDs: pre-configured commands for on/off, volume, etc.



DMM Digital Signage Module
Digital Media Designer

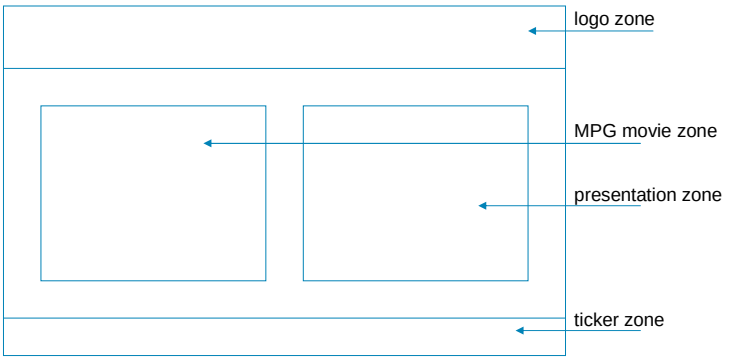
- Browser-based drag-and-drop interface for creating customized sign layouts
- Vertical and horizontal screen orientations
- Select from pre-designed templates or create your own
- Content can come from different sources like Third Party Media Agencies – Home Made, ASP provides, etc
- May use Streaming Server (s) and/or Other Web Servers to enhance performance – Many DMPs



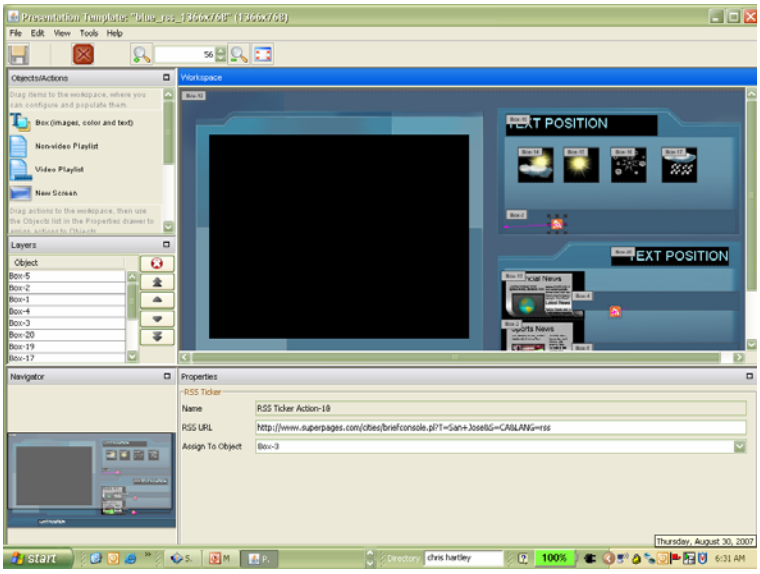


The Zones Definition

- ***4 zones template example***: logo zone, movie zone, presentation zone, and ticker zone:

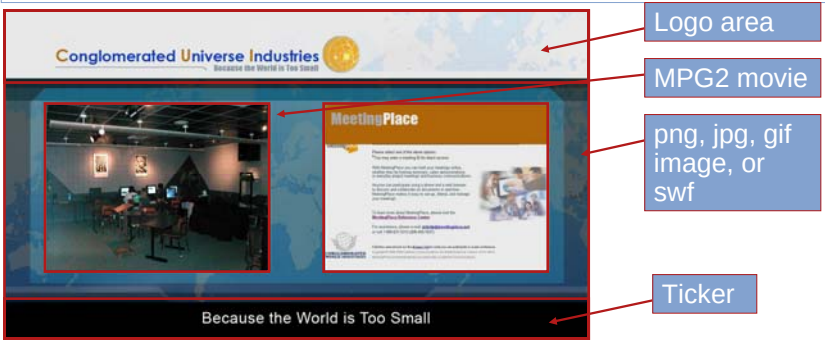


DMM: Designer for Digital Signage



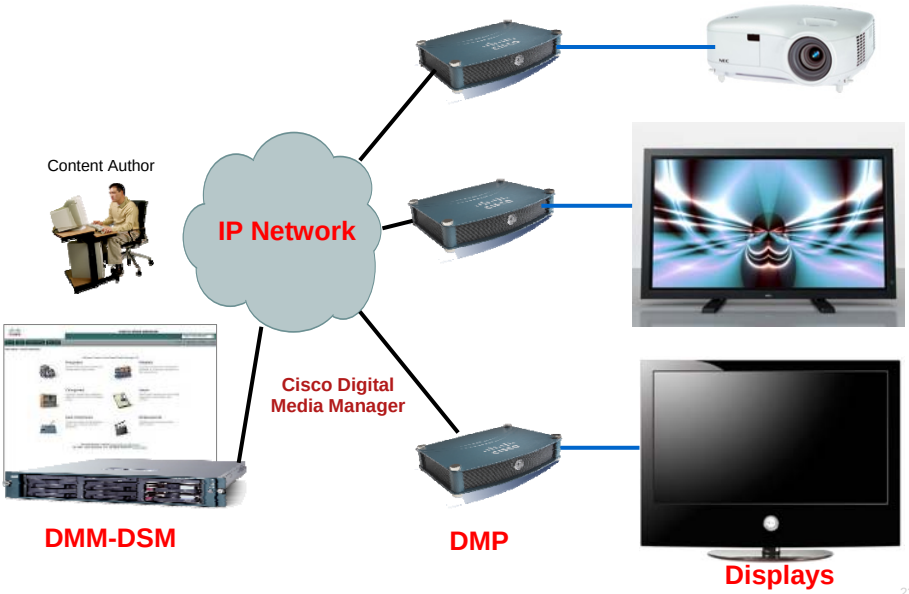
DMM Designer:
Benefits

- For *standalone demo* all of the multimedia content including **flash animations**, **java script**, **mpg2** movies is included into a html page and plays in **Mozilla Firefox browser**. Every object on the page has absolute positioning in tag on html page.
- Using **DMM** you can **schedule content** to be published using the playlist scheduler.
- For both *standalone demo and for DMM demo* you can upload and run content from the server or SD card. Demo files' bandwidth should not exceed Max capacity of your USB storage (up to almost 2GB if you have 2GB USB).
- In a *standalone demo* you have to create content manually. The **DMM Designer** has pre-designed templates that can save you time in template/layout creation.



Displays

DMP Supported Displays

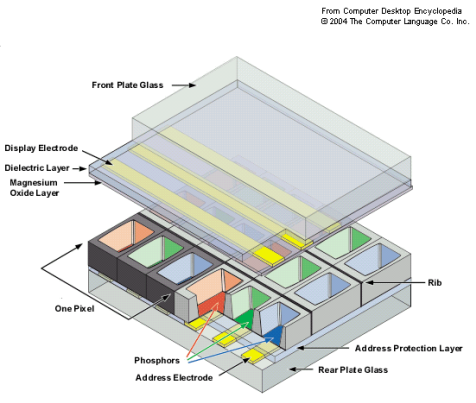


Plasma Screens

- Superior brightness
- Faster response time
- Greater color spectrum
- Wider viewing angle
- Largest Plasma Ever produced was 150”

Plasma Screens

- Two Layers of Glass Panels
- Cells Filled with Noberl Gase
- Neon and Xenon
- Excited by Electrodes
- Produces Plasma
- **Phosphor** Glow



Plasma vs LCD

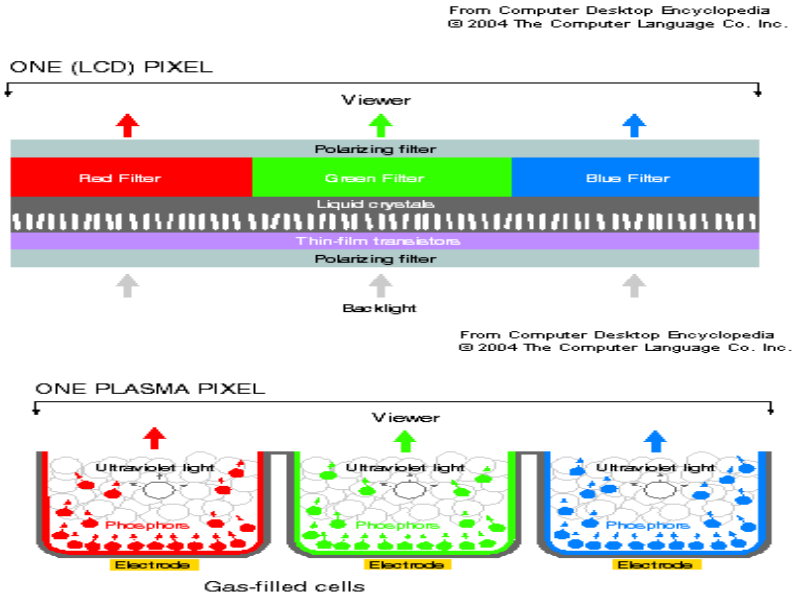
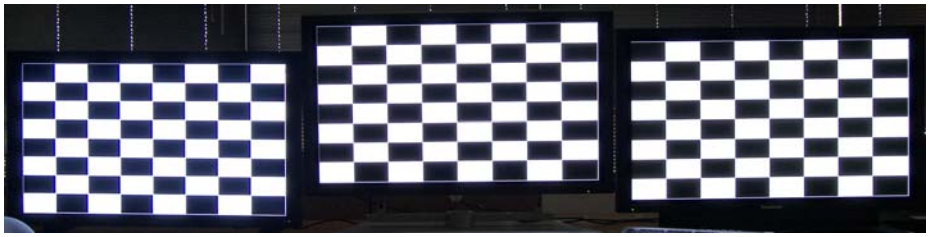


Image Burn-in vs. Persistence, cont.

- The worst case images for both technologies are when high contrast colors are used.

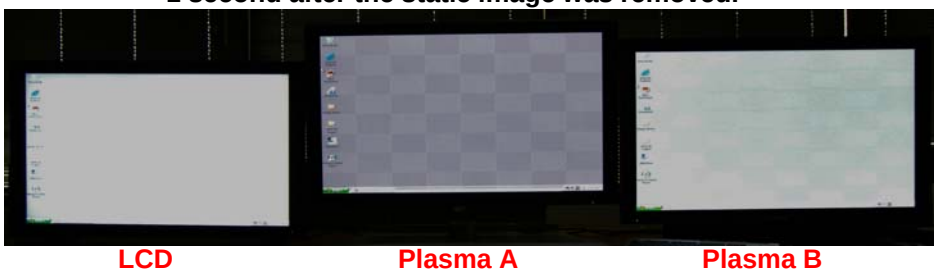


LCD **Plasma A** **Plasma B**

- We tested all three units with this image left static for 24 hours.

Burn in

1 second after the static image was removed.



LCD Plasma A Plasma B

8 hours after the static image was removed.

Viewing Angle

- Plasmas have always had a great viewing angle.
- LCD displays have been working on ways to increase the viewing angle for 10+ years.
- The viewing angle of both technologies is very similar.

Reflection/Glare

- Plasma displays are similar to CRT displays in the fact that they have a high degree of reflectivity and glare.

LCD Plasma A Plasma B

Power Consumption

- Since many of these displays can be used in one location, power consumption can quickly become a large concern.
- Measuring all units using a full white screen produced these results:

  LCD: 226 Watts (16% - 39% lower)

  Plasma A: 268 Watts

  Plasma B: 370 Watts
- If an “apples to apples” comparison is made at the same maximum brightness setting of the Plasma (314 cd/m²), the LCD showing a full white screen at 60% brightness (314 cd/m²) only consumes 169 Watts (37 – 54% lower) of power.

Which to Recommend for Digital Signage

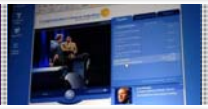
- For Digital Signage, we generally recommend LCD displays versus plasmas.
- LCD displays are less susceptible to image burn-in given that signage content is not always video and is more static in nature (for example, Web and Flash content).
- Plasma burn-in can occur more easily when content is not dynamic, has high contrast colors (e.g. black against white), or has sharp edges.
- Typical display sizes are 32", 40", 46", and 57".

Desktop Video

The Abbreviation Confusion

- CVP : Cisco Video Portal , a DMS Term
- CVP: Customer Voice Portal , a CC Term

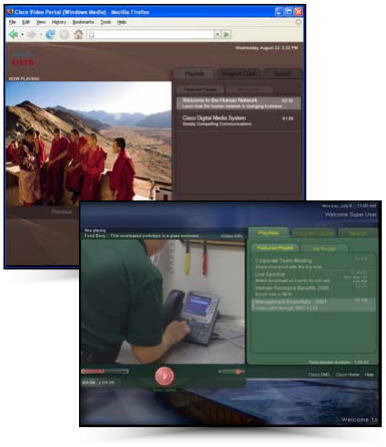
Desktop Video Applications

Sales and Marketing	Corporate Communications	Training	Information Sharing
			
▪ Marketing videos that grab viewer attention ▪ Compelling product and service information ▪ Provide a human face on content ▪ Increased customer satisfaction	▪ Direct line of communications to employees or customers ▪ Global corporate messaging consistency ▪ Immediate executive communications ▪ Live broadcast of company events	▪ Cost-efficient training to remote employees ▪ Information consistency across channels ▪ Power of video—users retain more information ▪ Increased ability to absorb information in searchable segments	▪ Instant communications for rapid response ▪ Informational videos available on-demand ▪ Breaking news relevant to employees

Desktop Video Components

Cisco Video Portal
Easy Access to Digital Media

- Customizable interface, program guide and search
- Personalized playlists and featured lineups
- Advanced player controls
- View synchronized slides
- Submit questions during live events
- Fully integrated with Cisco DMM and Video Portal reports
- Login and authentication through DMM
- Supports major formats: Windows Media, Flash, H.264, QuickTime

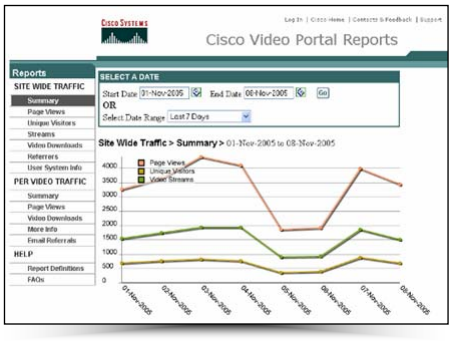


Customize the Look and Feel to Reflect the Organization Brand with the Digital Media Manager

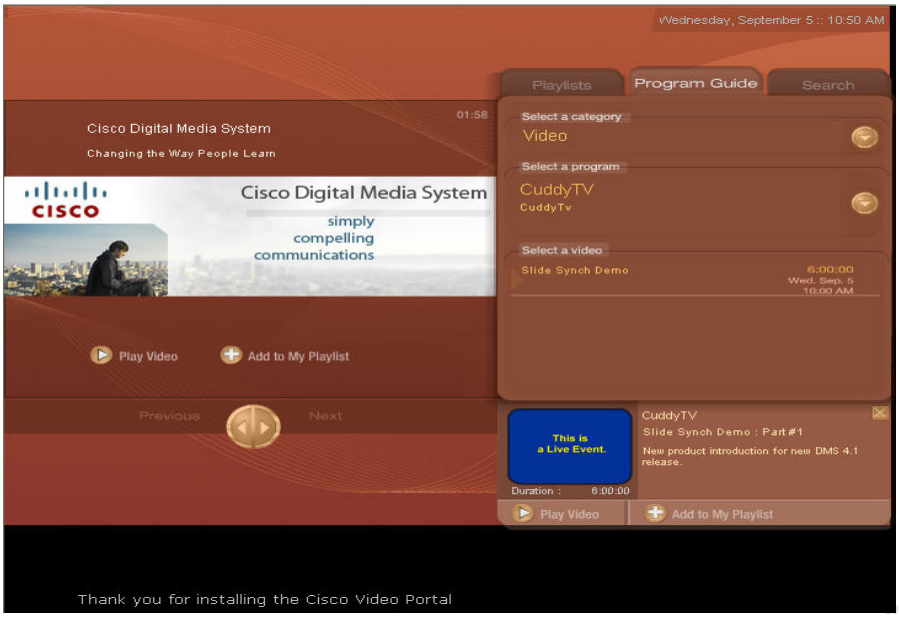
Cisco Video Portal Reports

Real-Time Reporting to Measure Content Effectiveness

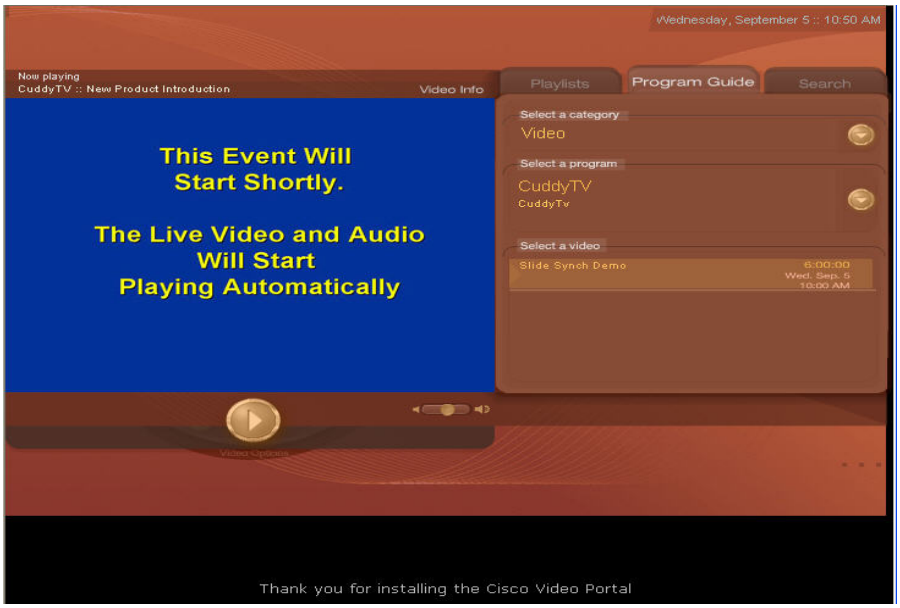
- Web-based reporting system
- Easily see trends, visitors, page views, streams, and downloads
  - Real-time reports and traffic metrics
- Monitor referrals; track top referring pages
- Understand visitor statistics: operating system, browser, and media plug-in



Video Portal Selections

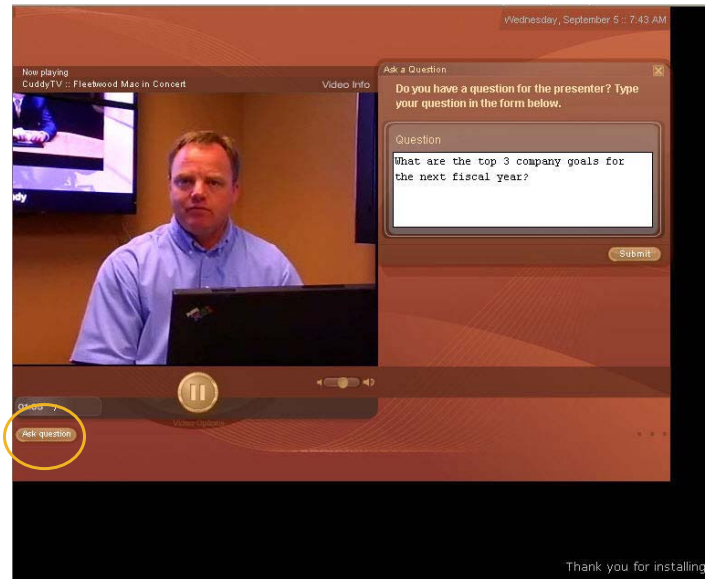


Live Session



Live Event Module – Slide Synchronization

Viewer Submits a Question



Question Submitted

Cisco Video Portal Server Appliance Options

	500 Concurrent Users Per Min	1,000 Concurrent Users Per Min
Add-on Software	Video Portal Reports , Live Event, Slide Synchronization	Video Portal Reports , Live Event, Slide Synchronization
Platform Software	Video Portal	Video Portal
Hardware (Chassis + Disk + Memory)	MCS 7825	MCS 7835

Cisco Digital Media Encoders
Capture/Encode Video and Audio Feeds

DME 2000 Features

- Studio-level, dual channel encoding appliance
- Ideal for corporate offices or data centers
- Live encoding/transcoding of media into standard formats (WMV, Flash, H.264, etc.)
- Local or remote management

DME 1000 Features

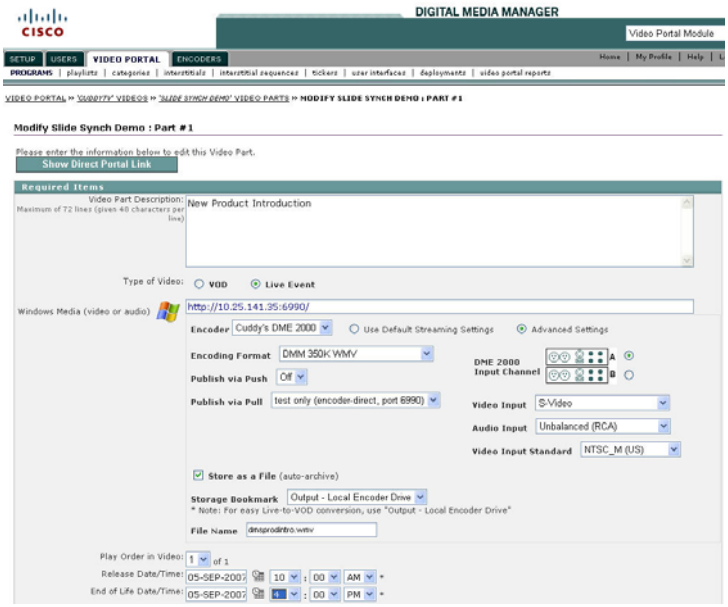
- Portable, lightweight, single channel encoder
- Ideal for outdoor, classroom, and conference room use
- Support for all standard video formats
- Encodes video onto iPods
- Local or remote management

Cisco Digital Media Manager for Desktop Video
Centralized Digital Media Management and Publishing

- Robust, Web-based content management features
  - Add, catalogue, and archive media
  - Preview content and manage approval workflow
  - Schedule instant and future deployments
- Flexibly, remotely publish content to Cisco Video Portal endpoint
- Easily customize Cisco Video Portal interface
- Live Event Module allows for slide synchronization and Q&A
- Active Directory and LDAP integration
- Cisco ACNS for optimized network delivery

Same Application for Managing and Publishing Cisco Digital Signage Content

New Video Part



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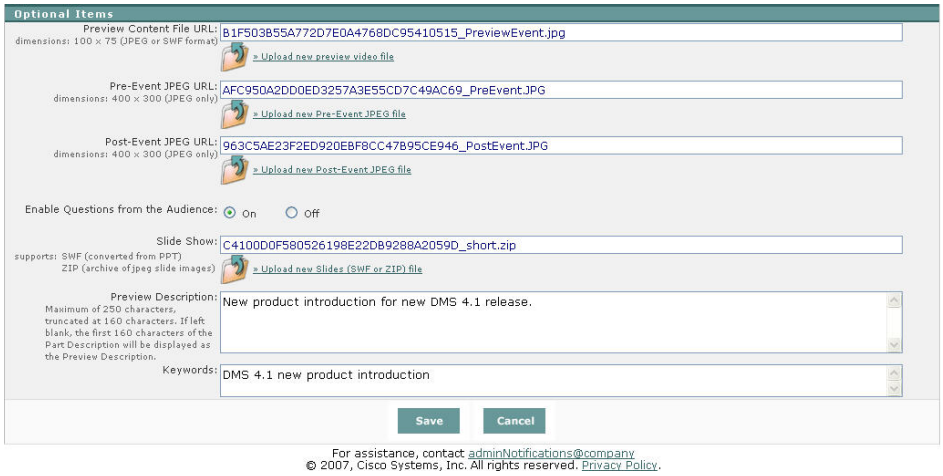

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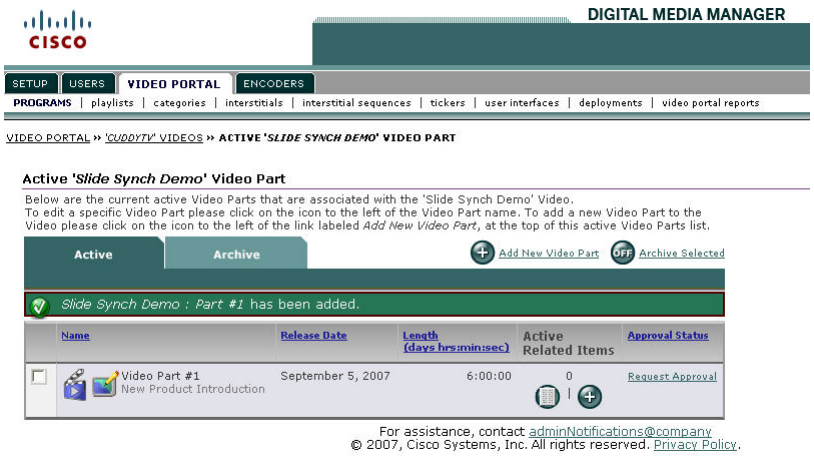
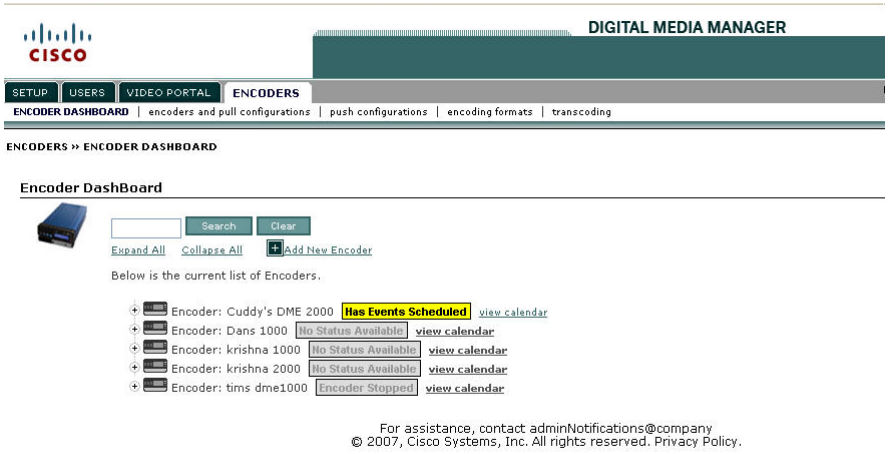
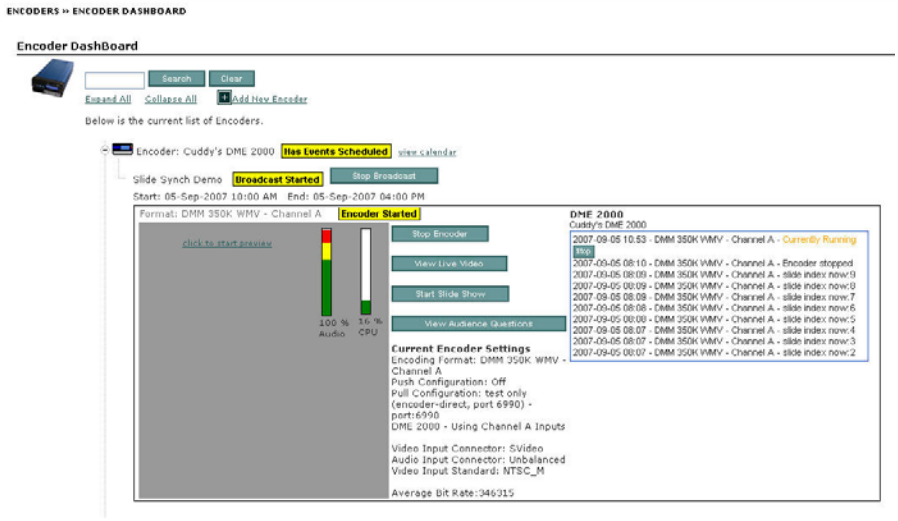


Encoder Dashboard



Start Encoder



Cisco on Cisco
News at Cisco Corporate Newsroom

- Over 13.8 million unique visitors—global
  - Downloaded by: press, analysts, partners, customers, instructors, investors, employees
- 500+ videos available
  - Topics include: business highlights, product demos, customer testimonials, etc.
- 2+ million streams per year
- 32,000+ downloads per year

http://newsroom.cisco.com
Brought to You by the Cisco Digital Media System

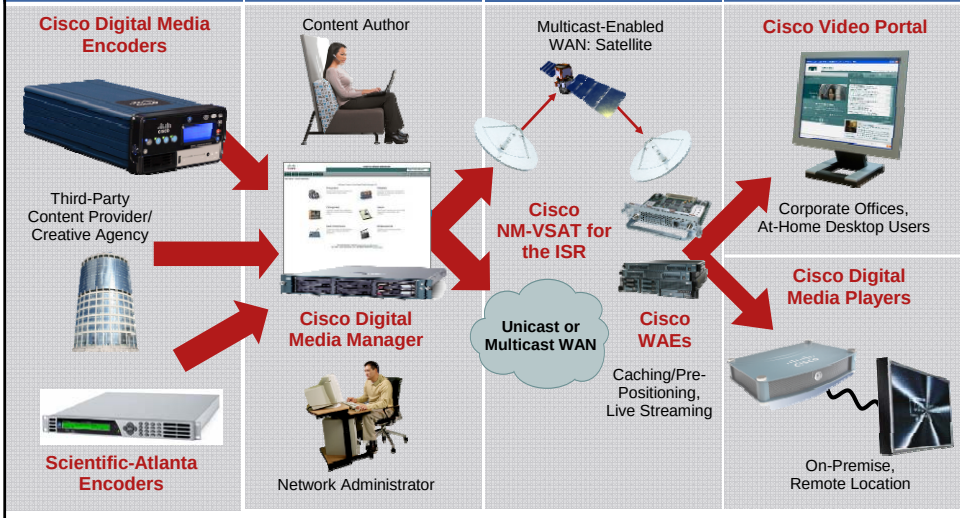
"Cisco has taken aggressive steps to use video internally for marketing, PR, executive communications, e-learning, and field training. Cisco Digital Media System is a pivotal foundation for us to be able to effectively deliver digital media across the enterprise."

– Dan Scheinman, SVP and GM, Media Solutions Group

Putting It All Together

Digital Media System: Across the Network

Media Capture/Creation	Media Management	Media Delivery and Distribution	Media Access



Q and A

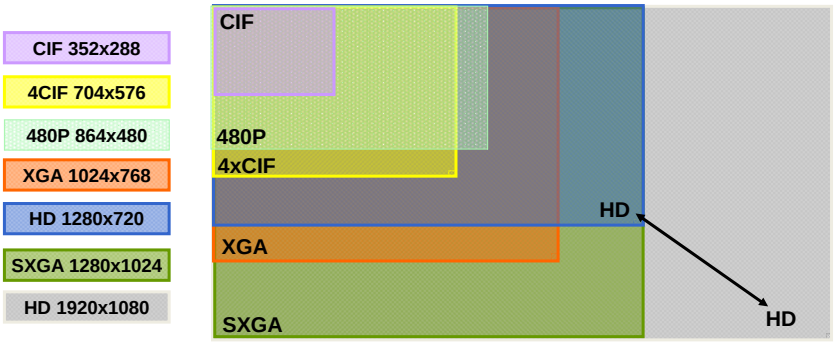
CISCO

CISCO

SPARE SLIDES

High Definition Video Resolutions

- A standard for improved video resolution
- A range of resolutions: 1280p x 720p to 1920p x1080p
- 2.5 to 6 x higher resolution than standard resolution (PAL, NTSC)
- 10 to 20 x higher resolution than CIF



Picture Format QCIF – 176x144 p

Picture Format CIF – 4 x QCIF

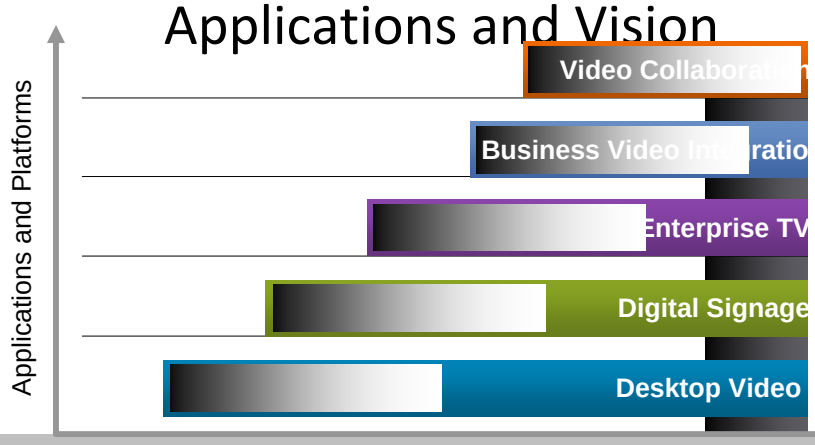
Picture Format 4CIF – 4 x CIF (DVD Quality)

Picture Format HD 720 – 9 x CIF

Q and A

SPARE SLIDES

Cisco Digital Media Applications and Vision

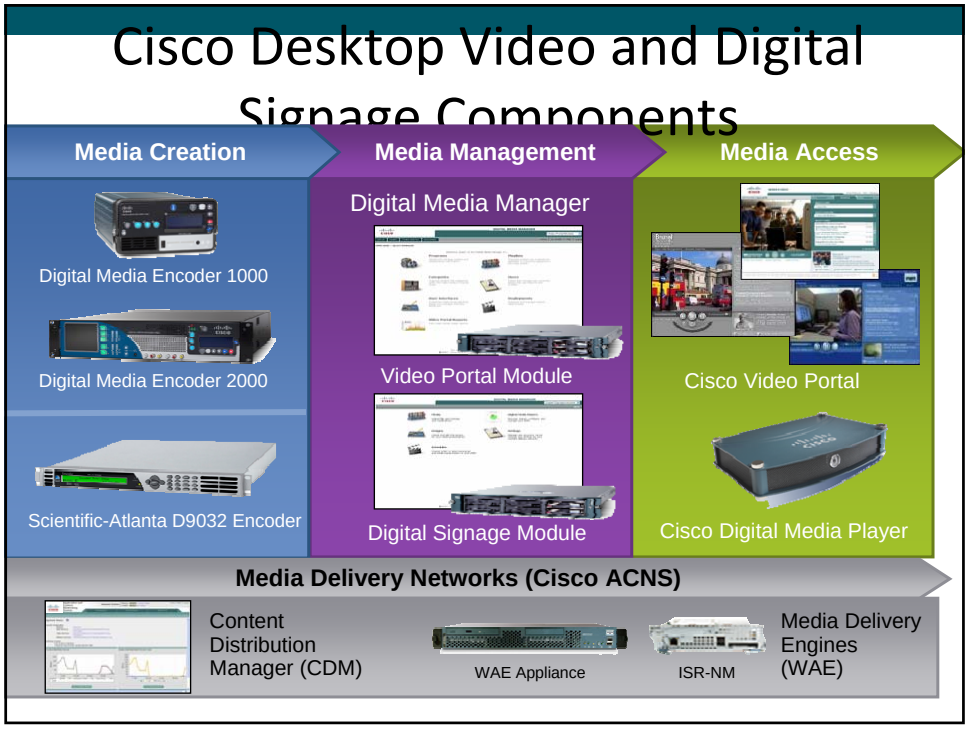


- Today: Desktop video (September 2006), digital signage (January 2007)
- Near term: Enterprise TV channel streaming and business video integration with Cisco TelePresence, video surveillance, unified communications, etc.

Business Transformation with Cisco Digital Media System

Scalability to 1000s of Endpoints	Compelling Global Communications
Centralized Web-based Content Management	Improved Customer Experience
Innovative Product	Improved Marketing and Branding
One Platform for Both DV and DS	More Effective Product/Service Roll-Out
Flexible Scheduling and Features	Live and On-Demand Video Broadcasts
Cisco: Trusted Source	Competitive Advantage

Growth and Results

- 180 customers in just 9 month
- Global momentum across all v rtical industries
- Customers now asking “how do I,” not “why” deploy

Cisco Desktop Video and Digital Signage Components