



# Networked Education



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# Agenda

Trends and Requirements

Virtual Classroom Solution

Video and Collaboration in Learning

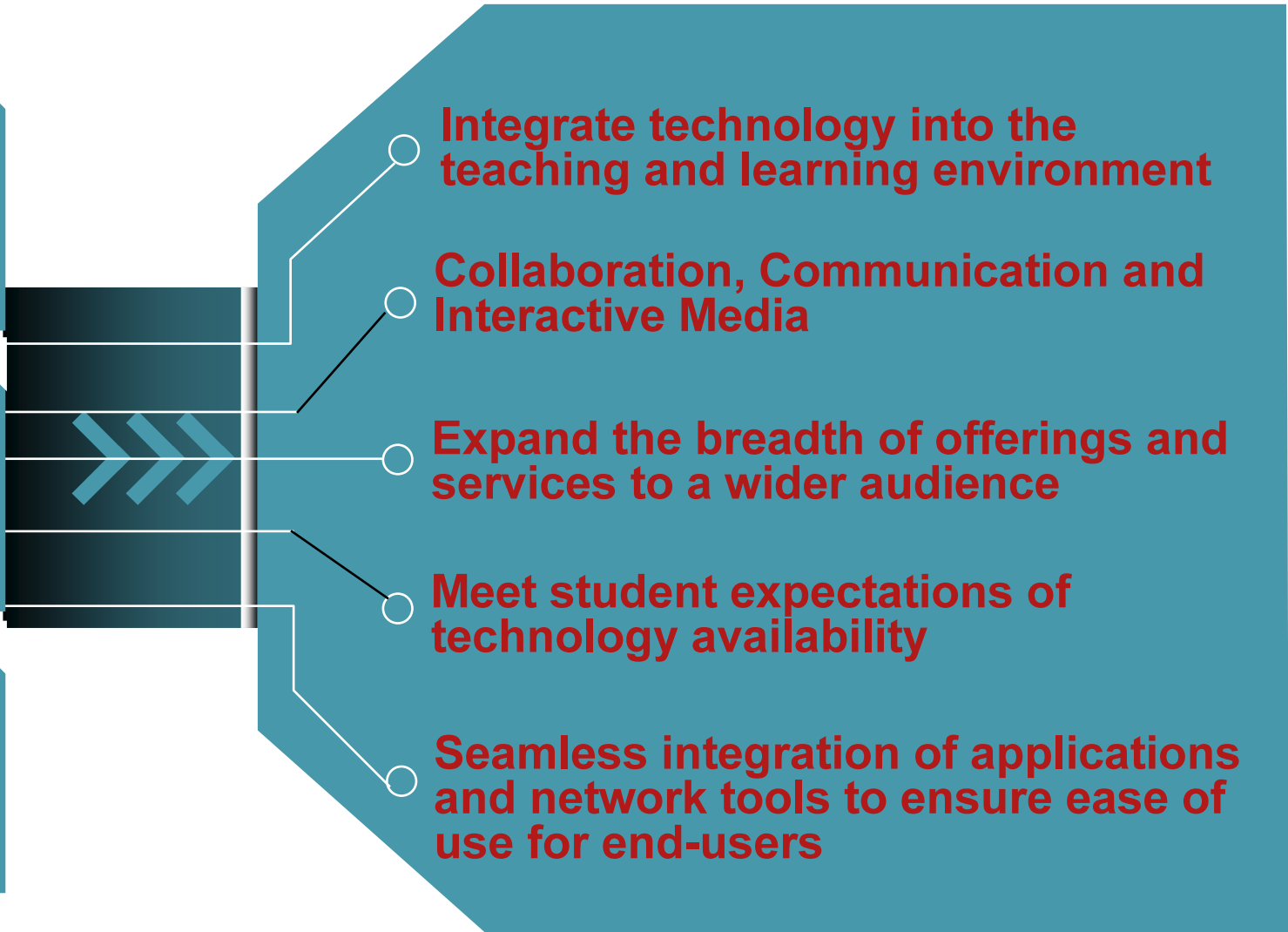
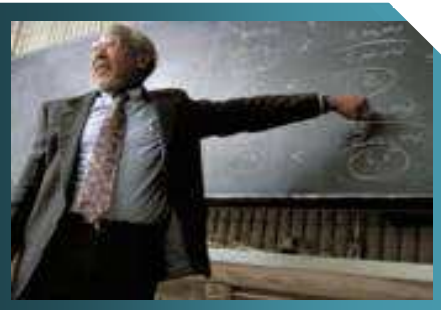
Q&A



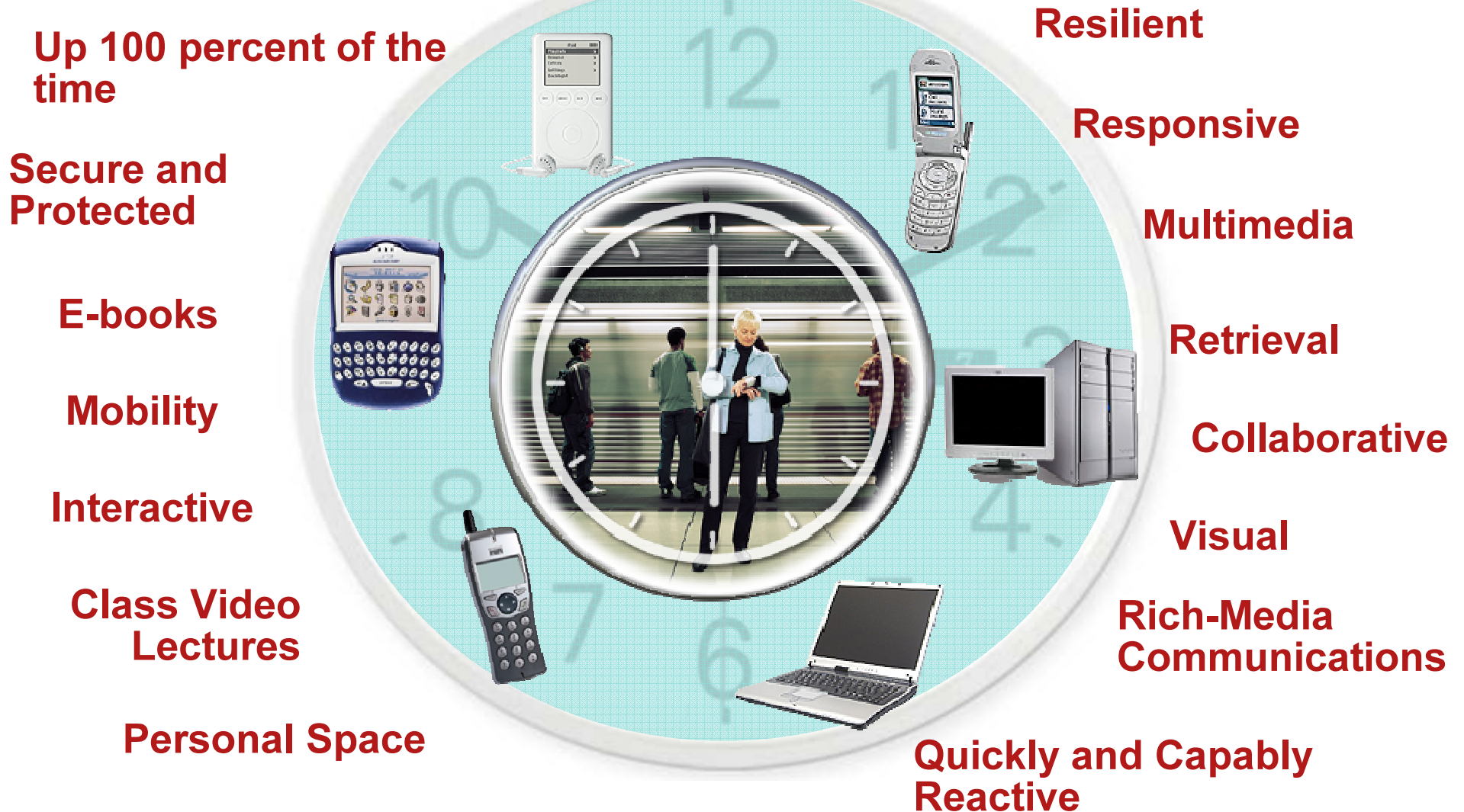
# Trends and Requirements



# Trends in Education



# Multiple Access Points Enable New Teaching and Learning Experiences



# Virtual Classroom: Integration and Implementation



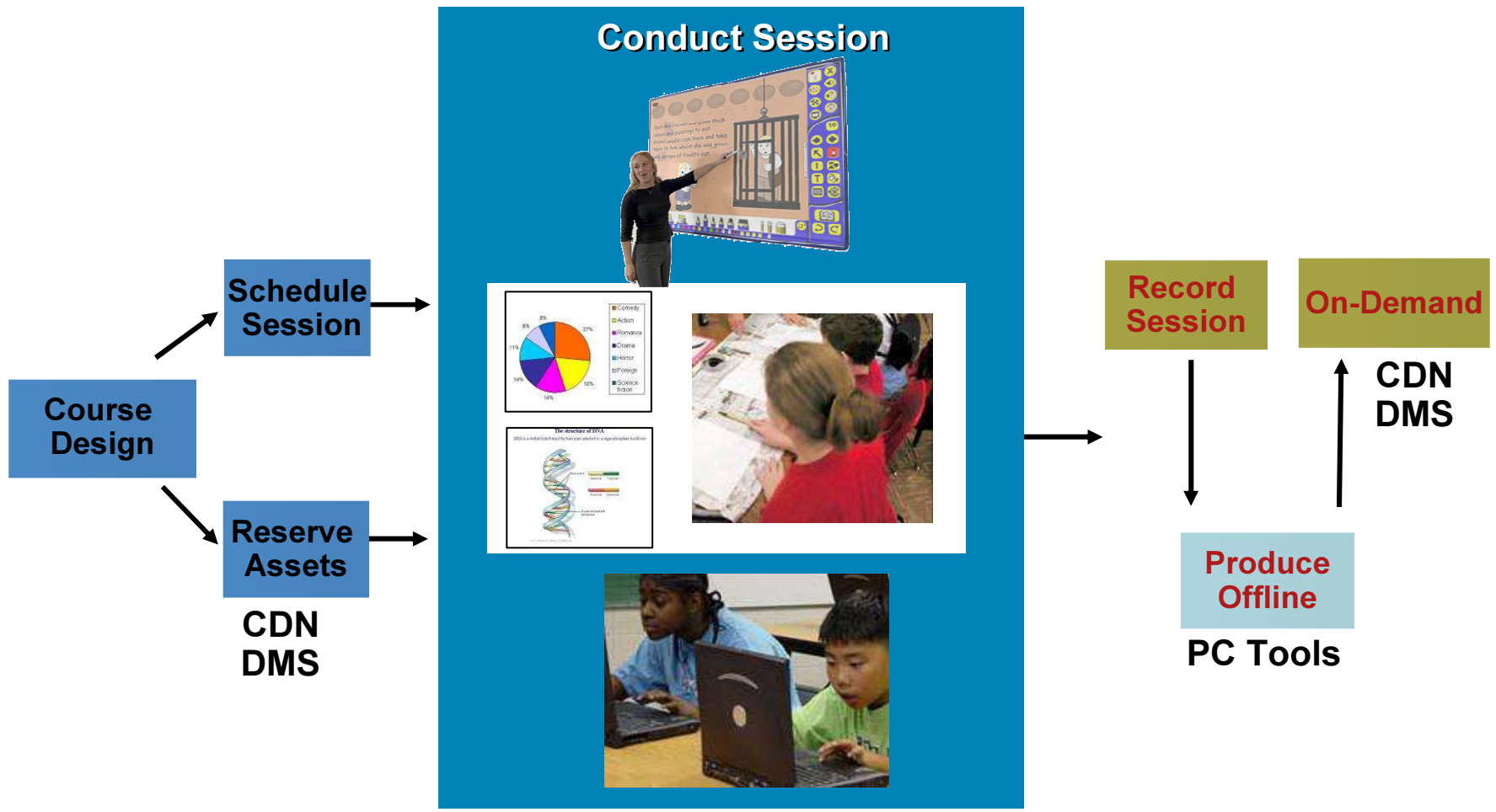
# Virtual Classroom Overview

Integration of Voice, Web and Video  
Collaboration with Digital Media Creation,  
Management and Delivery to Create a  
Virtual Learning Environment

- **Unified Communications**
- **TelePresence**
- **Video**
- **Content Delivery Networks**



# Virtual Classroom Scenario



# Cisco Unified Personal Communicator

Powerful personal tools in a single, easy-to-use desktop software application



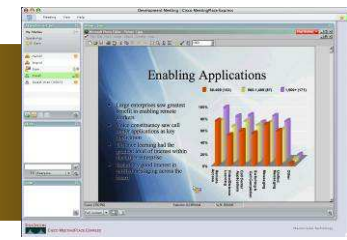
**Video**



**Basic Softphone**

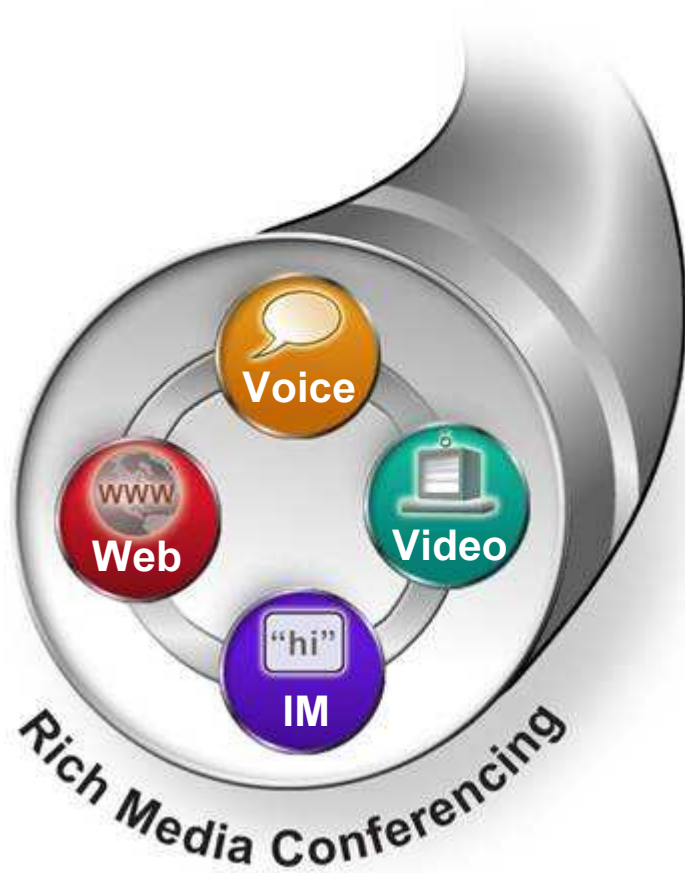


**Voice  
Messaging**



**Web Conferencing**

# Meeting Place Features



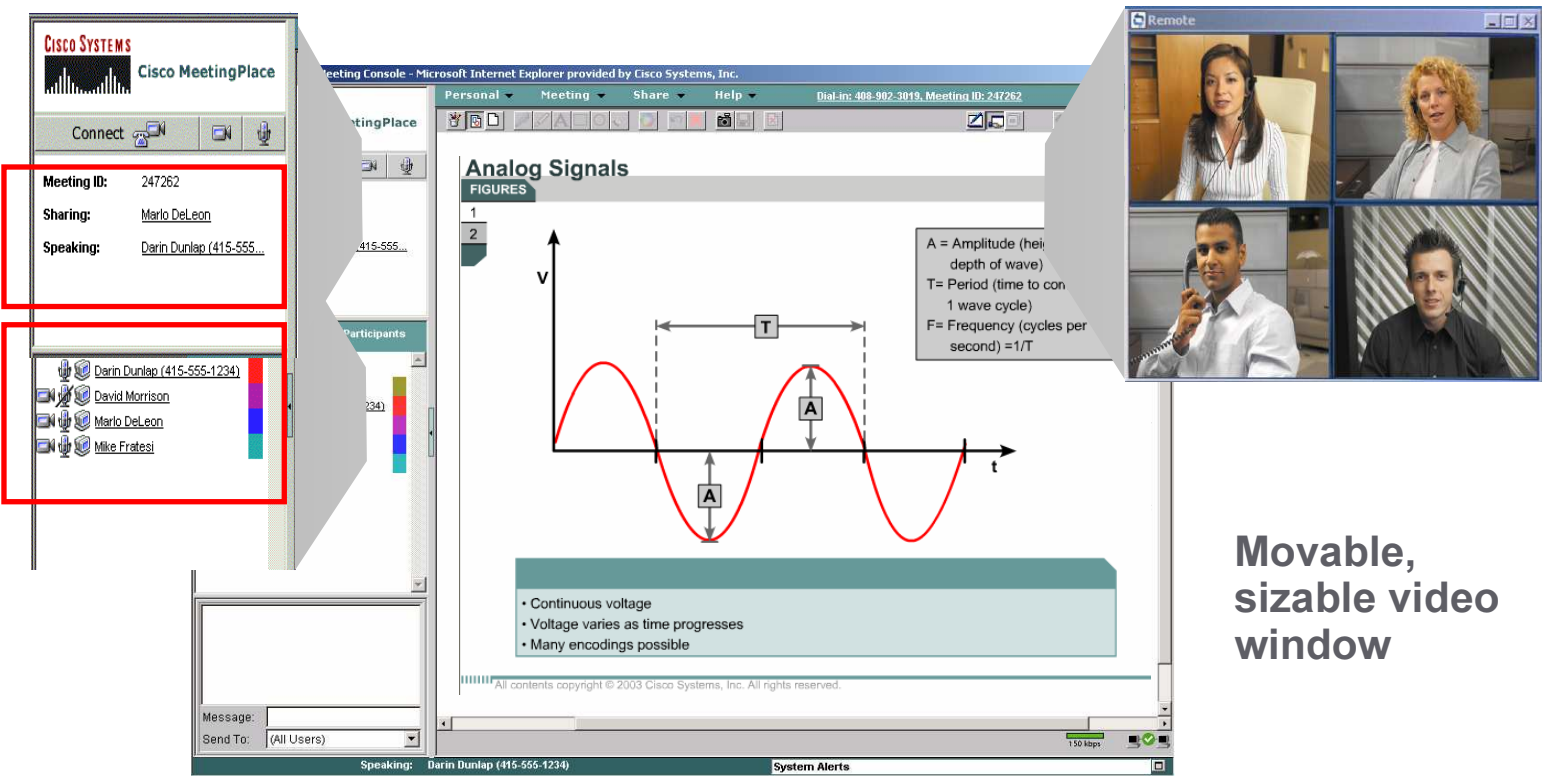
- Audio Conferencing
- Video Conferencing
- Web Sharing
- Application Sharing
- White Boarding
- Polling
- Desktop Sharing
- Instant Messaging
- All recordable & all on demand
- One platform

# Rich-media Virtual Classroom Experience

As natural and effective as face-to-face communication

**Who's Sharing**  
**Who's Speaking**

**Who's Attending**  
**How attending**



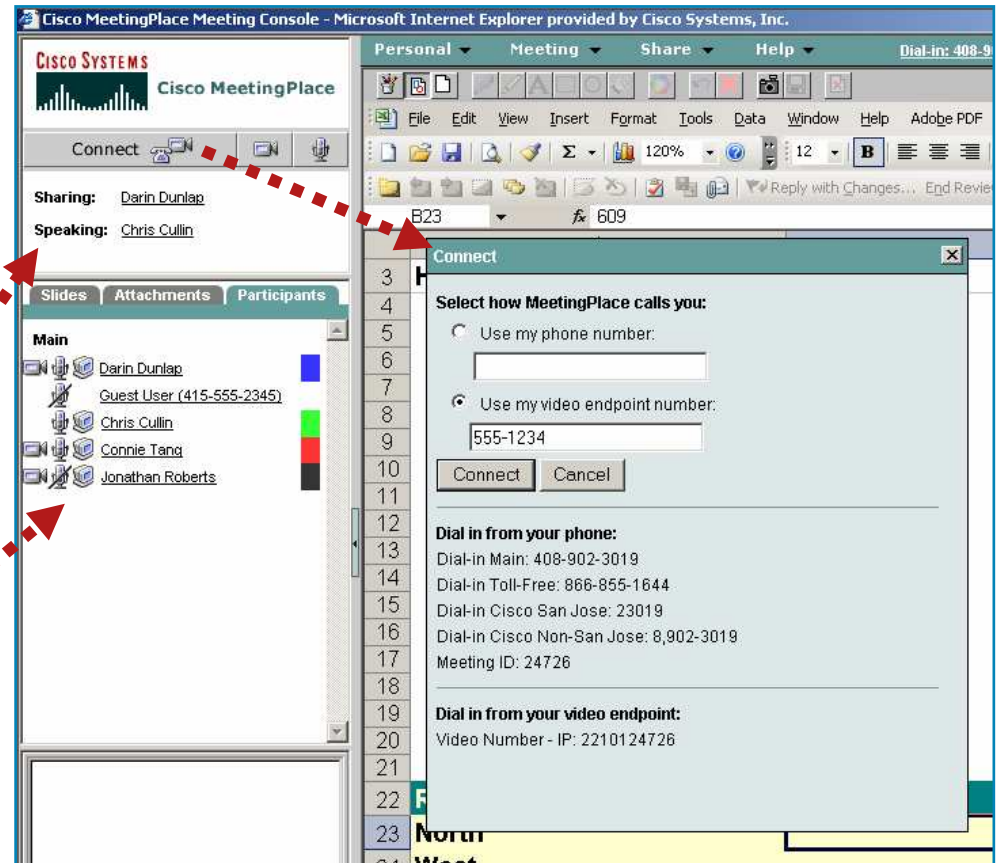
The screenshot displays the Cisco MeetingPlace interface. On the left, a 'Meeting Console' window shows 'Meeting ID: 247262', 'Sharing: Mario DeLeon', and 'Speaking: Darin Dunlap (415-555-1234)'. Below this, a 'Participants' list includes Darin Dunlap (415-555-1234), David Morrison, Mario DeLeon, and Mike Fratesi. The main window shows a presentation slide titled 'Analog Signals FIGURES' with a sine wave graph. The graph plots voltage (V) against time (t), with amplitude (A) and period (T) labeled. A legend defines A as Amplitude (height of wave), T as Period (time to complete 1 wave cycle), and F as Frequency (cycles per second) = 1/T. Below the graph, a text box lists: 'Continuous voltage', 'Voltage varies as time progresses', and 'Many encodings possible'. On the right, a 'Remote' window shows four video thumbnails of participants. At the bottom, a 'Message' field and 'Send To: (All Users)' are visible.

**Movable, sizable video window**

Complete voice, web and video capabilities and control

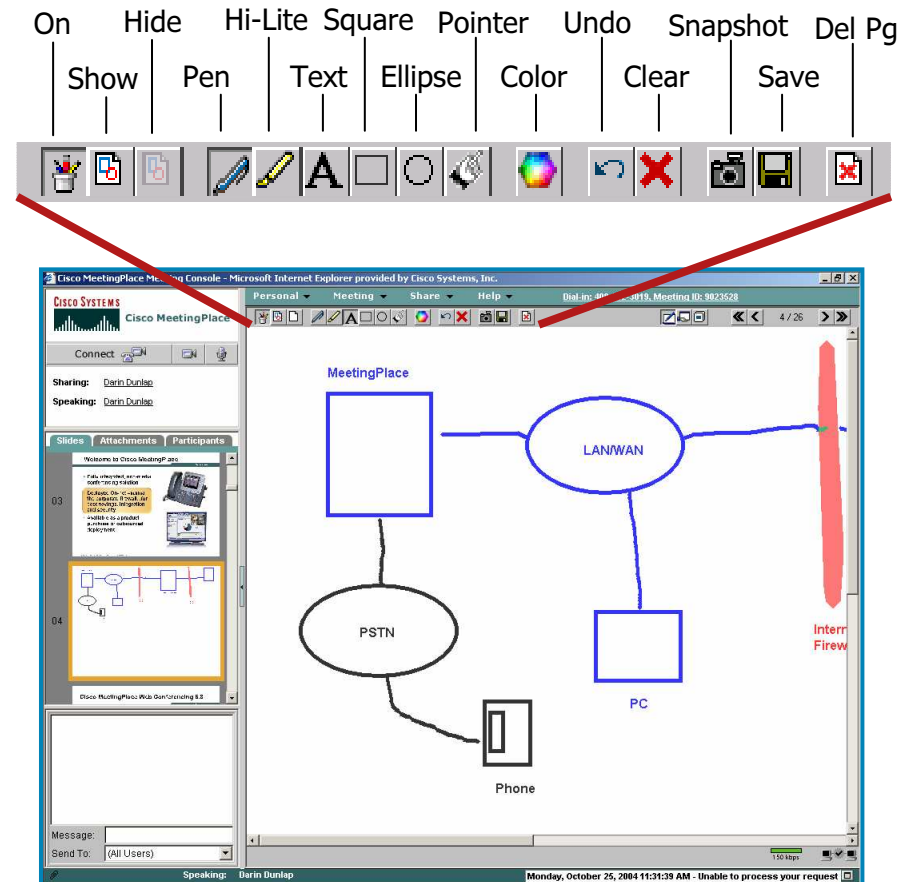
# Real-Time Class Events

- Begin classes and meetings on time
  - Integrated voice, video, Web attendance
- Eliminate wasted time of asking who's there, speaking or sharing
  - See list of who is speaking, sharing
  - View list of participants (voice, video & Web)
- Enhance curriculum
- Expand the campus
- Improve collaboration and interaction



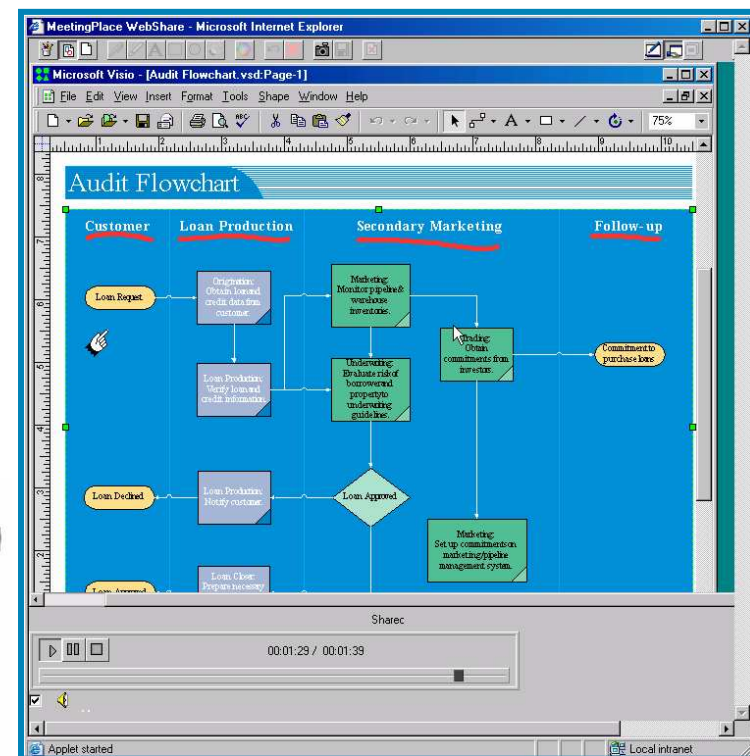
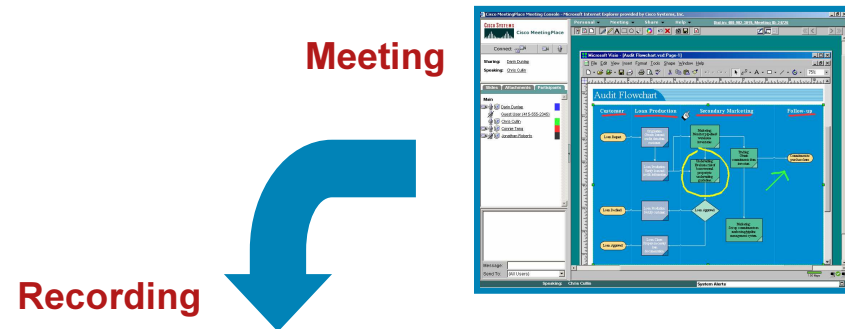
# Annotations And Whiteboard

- Mark up shared applications, presentations, whiteboard
- More effective communication through visual cues
- Improve brainstorming, illustrate complex topics
- Capture & reuse ad-hoc ideas and decisions



# Web, Voice, and Video Recording

- Play back using only a browser with full controls
- Fully synchronized with voice played through computer
- Voice-only recordings also available
- Video recording via 3<sup>rd</sup> party appliance
- High fidelity audio for better clarity



# Video and Collaboration in Learning

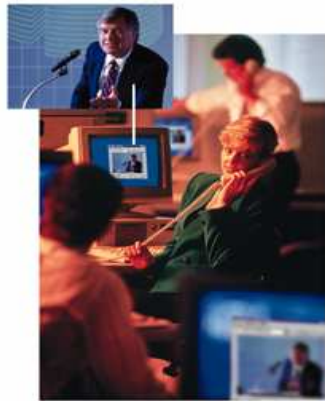


# Benefits of Video in Education

- Deliver educational content live and on demand to geographically dispersed audiences
- Addresses multiple learning styles
- Effective medium for communication and collaboration
- Enables resources and subject matter experts to be shared



# IP Video Delivery Models



**TelePresence**



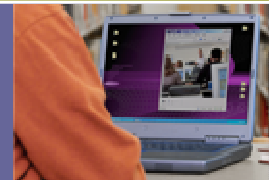
**Video Conferencing**



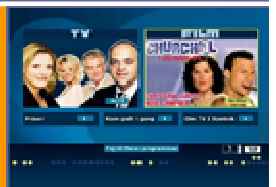
**Video Telephony**



**Live Webcasting**



**Video on Demand**

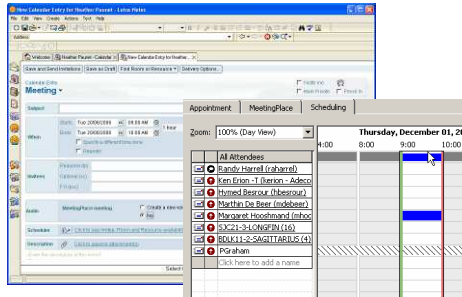


**Digital Media Management Systems**

# Cisco TelePresence



# Cisco TelePresence Manager Simplifying the Experience



Familiar Tools



One Button to Push

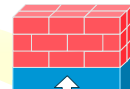


Real-Time Services



User Scheduling

Unified Call Manager



Cisco Network

**Cisco  
TelePresence  
Manager**

Web  
Microsoft Exchange  
IBM Lotus Notes



Unified  
Contact Center



Management



Meetings  
Collaboration  
Guest Lectures

# Cisco TelePresence Meeting Solution Endpoints Offerings



Cisco TelePresence System 3000  
12 seats at the virtual table  
Purpose-built room

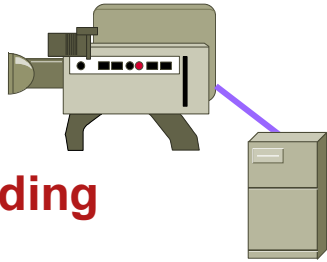


Cisco TelePresence System 1000  
4 seats at the virtual table  
General purpose room, office

# A Full Video System

**1. Content Creation**

**Video capture & encoding**



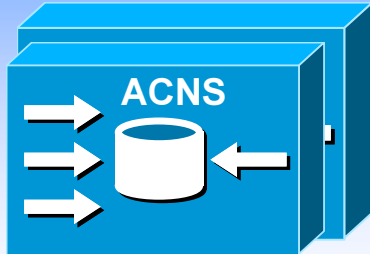
**2. Content Management**

**Ingest, scheduling, publishing, reporting**



**3. Content Distribution**

**Access over Network**



**4. Content Delivery/Viewing**

**Portal with program listings**



# Cisco Digital Media System Components

Media Creation



Digital Media Encoder 1000



Digital Media Encoder 2000

Media Management



Program Manager



Category Manager



Interface Manager



Lineup Manager



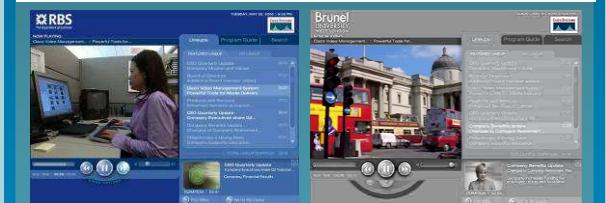
Account Manager



Deployment Manager

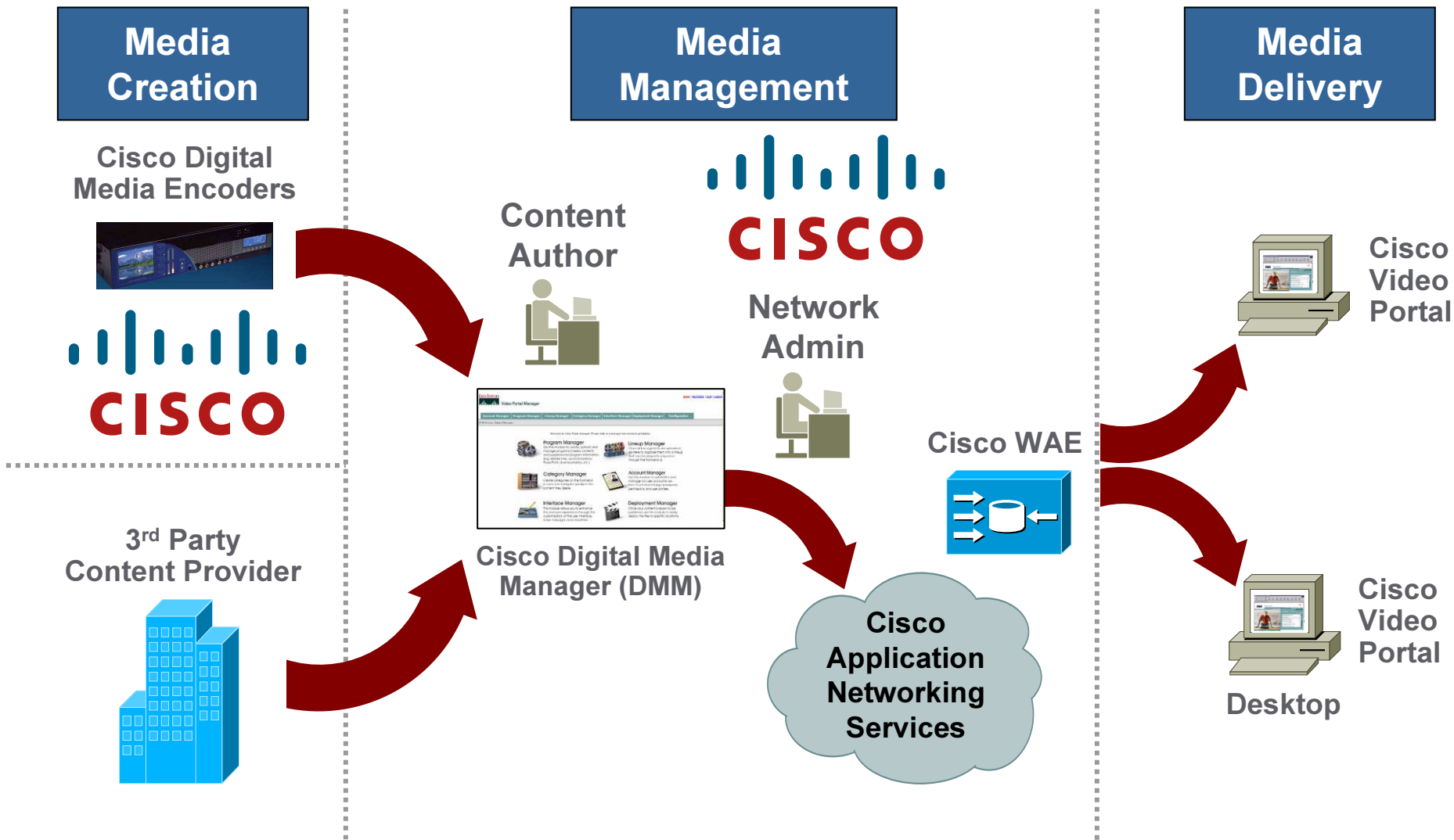
Digital Media Manager

Media Delivery



Cisco Video Portal

# Cisco Digital Media System—Across the Network





## Flash Demo