Envivio Mindshare™ Presentation System

for Corporate, Education, Government, and Medical

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**Introducing the Envivio
Mindshare Presentation System**

The Envivio® Mindshare Presentation system is a highly optimized one-to-many communication system that can deliver interactive media presentations live and on-demand to thousands of viewers over any IP network. Bandwidth friendly, the Mindshare Presentation system makes use of advanced MPEG-4 compression standards and technology to deliver all the elements of the presentation - video, audio, screen capture, text, images - as part of a single multi-track MPEG-4 stream. The system overcomes the usual limitations of synchronization, scalability, latency, and reliability found in traditional webcasting systems.
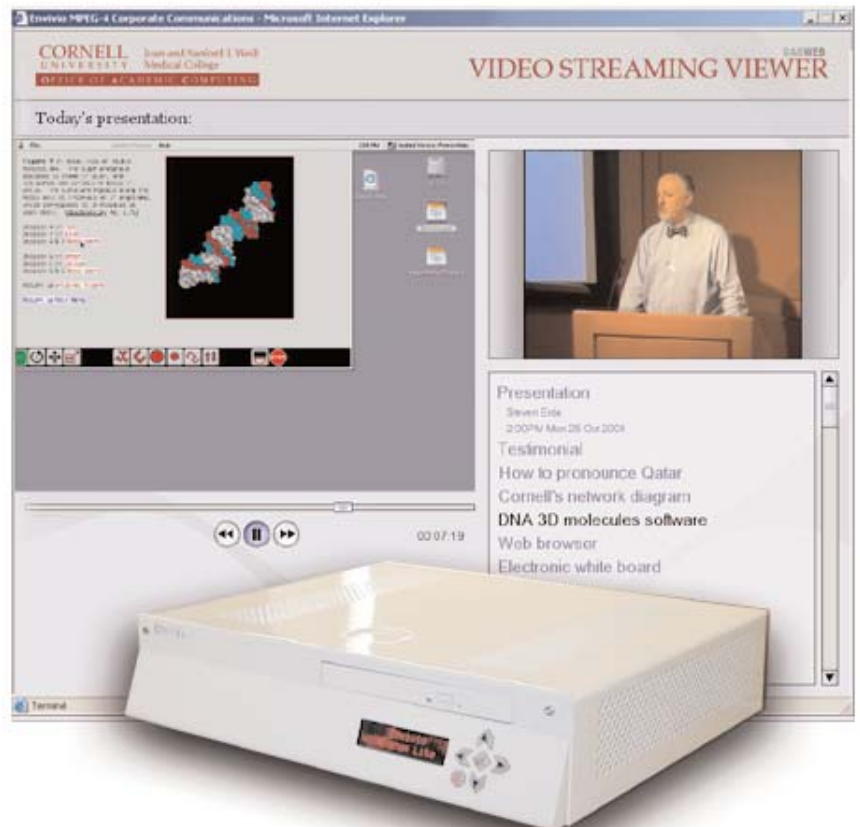
Using the interactive features of MPEG-4, Envivio, Inc. has created a presentation system that expands the boundaries of any classroom, conference room or auditorium. With the Mindshare system, the output of any VGA device such as Macs, PCs, electronic whiteboards, document cameras or medical imaging devices can be broadcast along with the video signal of either a live presenter or a pre-recorded video file. Viewers receive the information in a single synchronized high-quality, low bit rate MPEG-4 file and can view the presentation from a PC, Mac, or even from a large plasma screen. Behind the scenes, the system simultaneously records the entire presentation as one interactive file to create an immediate archive, for playback and distribution.

Whether recording a multimedia lecture describing a new medical surgery procedure, presenting in real-time the latest financial data to thousands of retail brokers across the country, or training a worldwide sales force in the field on a new strategy, the Mindshare system helps overcome the constraints of distance, time, and network infrastructure. The ability to synchronize audio and video across any IP network, provides a better viewing experience whether in real-time of offline.
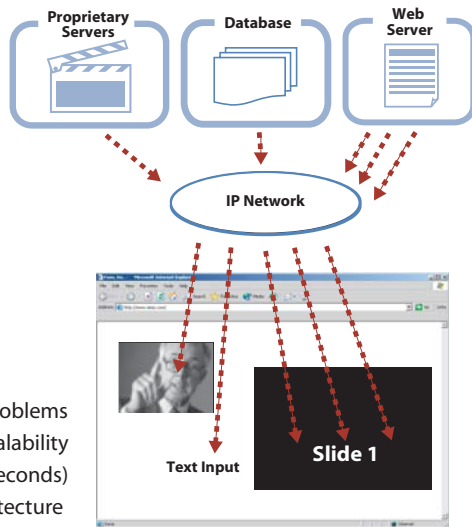
MPEG-4, The Mindshare Presentation System Advantage

The Mindshare Presentation system replaces older cumbersome and static webcasting systems with a high quality interactive viewing experience. A powerful MPEG-4 BIFS engine automatically synchronizes video feeds and allows dynamic interaction of the viewer with the content.

The entire presentation is rendered inside the MPEG-4 player to solve media synchronization and scalability issues while removing the limitations of traditional multiple hybrid based architectures.
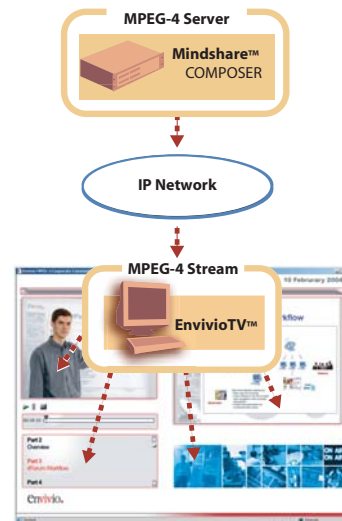
Traditional – Hybrid HTML Webcasting vs **Mindshare Presentation System**

Traditional – Hybrid HTML Webcasting
- Proprietary Servers
- Database
- Web Server
- IP Network
- Text Input
- Slide 1

• Synchronization problems
• Limited scalability
• Long latency (>10 seconds)
• Complex architecture

Mindshare Presentation System
- MPEG-4 Server
- Mindshare™ COMPOSER
- IP Network
- MPEG-4 Stream
- EnvivioTV™

• Synchronized presentations
• Seamless scalability
• Low latency (<1 second)
• Simple architecture

Traditional webcasting systems must take each element of a presentation (video, slides, and other data), package them individually for delivery and reassemble them in the viewer's player using HTML, JavaScript and/or proprietary encoding. In this process, quality and synchronization can be lost, distorting the presentation from its original source. Using Mindshare Presentation system with MPEG-4 BIFS (BInary Format for Scenes), all of the elements of a presentation are packaged together in a single high-quality MPEG-4 stream. The result is a synchronized presentation with rich media elements that can be enlarged and resized as desired.

The open standards-based system uses MPEG-4 compression technology to create very low bit rate files while maintaining the highest quality viewing experience. The IP network friendly Mindshare Presentation system provides for the distribution of video over networks without the issues and constraints of high bit rate alternatives.

Broadcast, Record and Communicate More Effectively

Mindshare Presentation is the one-to-many communication system that can deliver rich media content to thousands of viewers over IP Networks in real-time, while capturing the presented content into a multimedia file for later delivery via methods such as on-demand via streaming, download from a file server or CD distribution.

Mindshare Presentation System Components

The Mindshare Presentation system is composed of the following components:

- Mindshare Composer, a broadcast and recording system located in each meeting room, classroom or presentation area. Each Mindshare Composer captures two simultaneous video signals and combines them together into a multi-object MPEG-4 stream:

  - The first video input is a high quality video capture from a camera or a DVD Source using S-Video or analog composite

  - The second video input is a video capture whether it comes from the presenter's laptop, an electronic whiteboard, a document camera, an endoscope or any other device with a VGA input signal. The signal is captured at native resolutions, up to 1600x1200, allowing for pixel accurate playback.

    Mindshare Composer can simultaneously broadcast the synchronized live presentation as well as the VGA input signal and record both of the feeds into a single, synchronized MPEG-4 file for later playback.
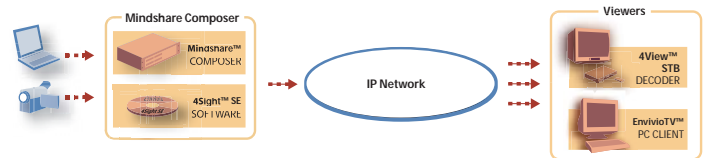
- 4Sight™ Server, the central streaming server which consolidates all live and recorded content from the Mindshare Composers located in each room for on-demand streaming.

- EnvivioTV™, the plug-in that enables PCs, Mac, and set-top boxes to play and view the multi-object MPEG-4 presentation for either real-time or on-demand viewing.

- 4Mation™ Authoring Tool (optional), the software used to create new and customized interactive MPEG-4 design templates to define the viewer's playback experience. Import multiple file formats, including images, video, audio, Flash and text and define their interactivity with this tool. Default templates are provided with every Mindshare Presentation system.
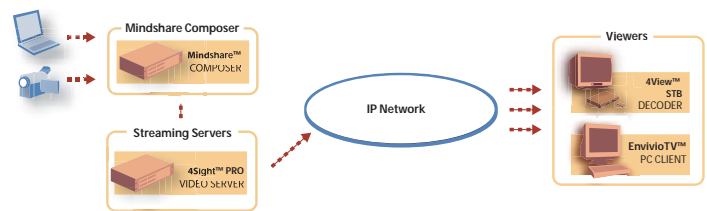
Distribution Examples

Interactive file production (e.g., training/usability testing)
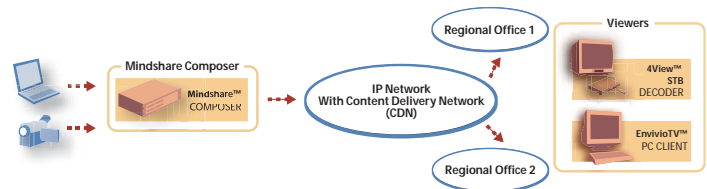

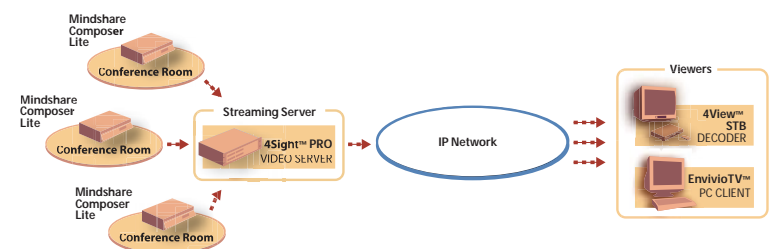Small deployments – 2 to 100 viewers (e.g., classroom/small conference)

Scalable deployments, homogeneous networks – 100 to thousands viewers

Scalable deployments, mixed unicast/multicast network

Multi-conference room environments

Business Applications for More Effective Communication:

In all environments, the Mindshare Presentation system captures live presentations in real-time while distributing it to targeted audiences and storing it for later playback. The system transparently records video, audio, and any material used for the presentations from Macs, PCs, electronic whiteboards, document cameras or medical imaging devices.

Corporate Communications and Training:
- Broadcast company-wide information such as executive announcements, new product introductions and HR directives.
- Instantly reach any employee connected to the public Internet or the private company network.
- Rich media presentations enhance corporate communications, increase employee comprehension and expedite new process implementation.

Education:
- Replace VCR and tape libraries with an on-demand database.
- Capture every aspect of a lecture with a high-quality recording system.
- Deliver highest quality playback experience available to the desktop.

Government and Corporate Employee Training:
- Expedite internal communications.
- Provide employees with the most up-to-date training material as presented by an expert.
- Deliver training sessions in real time or on-demand.
- Record, package and distribute training sessions worldwide.

Hotel Conference Rooms and Convention Centers:
- Enable additional services such as the ability to record and sell presentations to conference/seminar attendees for interactive viewing in real-time or offline.
- Facilities can receive or send a real-time broadcast between multiple auditoriums or conference rooms.
- Deliver presentations on large screens for conferences taking place across several locations.

Medical and Health Institutions:
- Ideal for clinical compliance, remote diagnosis, and medical education to both local and remote facilities.
- Capture VGA signals with resolutions up to 1600x1200 and frame rates up to 30 frames per second at 800x600.
- Capture images from an endoscope, a scanner, or any medical imaging device with a VGA output signal.
- Synchronize images with either a second video of a surgeon performing a procedure or a speaker describing the procedure.

Meeting Room Overflow:
- Broadcast live presentations between meeting rooms, throughout a conference center, and to remote locations.
- Distribute high-resolution video and screen capture on plasma displays and desktop computers.

Usability Testing Labs for Marketing and Technical Applications:
- Simultaneously capture the screens of testers evaluating application user interface prototypes and their corresponding comments and facial expressions.
- Watch evaluations live or view recording for further analysis.

Mindshare Presentation System: Features and Benefits

• **Ultra low latency in live mode over broadband networks.** Viewers can simultaneously use a telephone or software "chat" to interact with presenter.

• **Plug & Stream capabilities.** Instead of preloading presentations into the system, they can be activated and displayed as desired.

• **Anything displayed on presenter's screen, including mouse pointer, can be shared in real-time.** The system is not limited to Microsoft PowerPoint slides.

• **High quality screen capture with resolutions up to 1600 x 1200.** The decoded images match the presenter's screen and small text fonts remain sharp, because there is no down scaling, color space or scan conversions.

• **MPEG-4 BIFS technology allows viewers to interact with the content to zoom, navigate and modify their display in real-time.** Engaging and interactive viewer experience increases comprehension o Web-based wizard with a remote control interface. Easy to configure, use and deploy.

• **Encoding presets.** Choose existing presets or customize them to fit within bandwidth constraints.

• **Simple to use, web-based post-production interface.** Edit presentations with interactive indexes for easy navigation or to create presentation highlights.

• **Presentations are recorded as single interactive MPEG-4 (.mp4) files that can be streamed or downloaded.** Simplifies distribution workflow of live and on-demand content.

• **Design templates created with the optional 4Mation authoring tool.** Customize the view experience with graphics, layout, and interactivity.

• **Fully scalable in both multicast and unicast modes using Envivio 4Sight servers or MPEG-4 partners' Content Delivery Networks.** Deployment seamlessly grows as the viewer base expands.

• **Open standards-based technology for platform independent viewing.** With EnvivioTV player (an MPEG-4 plug-in to RealPlayer, Windows Media, QuickTime and Internet Explorer), watch and playback presentations on a PC, Mac, set-top box, and any MPEG-4 compliant playback device.

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