

Mindshare

Interactive MPEG-4 Webcast Presentation System for Enterprise, Government and Education Applications



Powering IP Video Convergence From Mobile to HD Frederic Blanc <u>fblanc@envivio.com</u> +1 212 332 2128

Mindshare Composer

Single MPEG-4 appliance with:

- -Hardware in rack and lite versions
- -Input 1: VGA input from laptop
- –Input 2: Video/Audio input from Camera
- -Input 3: Video Conferencing Input
- Output: Ethernet (MPEG-4 IP multicast and unicast) to thousands of viewers
- -Playback on PC, Mac
- -Available in English, Japanese, Chinese (simplified), Korean
- -Integrated portal with Jubilant



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Mindshare - Advantages

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Unique architecture overcomes all usual problems of HTML systems:

- ☑ Ultra Low latency live < 1 sec (proprietary video > 10 sec)
- Anything displayed on the computer screen is captured, native resolution up to 1600x1200 at 5-20fps
- Share and record white board, Mac screen, PC screen, visualizer or high resolution medical signal
- Presentation immediately available as a single .mp4 file

- Perfect sync between audio, video and screen capture
- Fully scalable to thousands of viewers via multicast
- Enhanced user experience: MPEG-4 interactivity
- Same file plays on multiple platforms, no transcodings:
 PC, Mac
- Easy! No need for video production or IT knowledge



Use Cases



- Current
 - On Demand university courses
 - Global corporate communication
 - Employee training
 - Usability testing
- Emerging
 - Telemedicine
 - Video Conferencing archiving/broadcast



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Cornell University



Reference Customers

Government/Military:

- SAP, USA
- Pentagon
- Sandia National Labs, NM
- US Department of State
- JWAC Joint Warfare Analysis Center
- European Community

Education:

- University of California Davis
- Cornell University Weill Medical College, USA
- University of Texas at Austin, USA
- University of Georgia, USA
- University of Maryland, USA
- Riverside Community College, USA College of North Atlantic, Qatar
- King Saud University, Saudi Arabia
- Oslo University, Norway
- Tokyo University, Japan
- Seoul University, Korea

Corporate:

- Citigroup, USA
- SAP, USA
- Adobe, USA
- Oracle, USA
- Cisco, USA

Medical/Health:

- Abbott Labs, USA
- Ministry of Health in Malaysia

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 King Fahd Specialist Hospital, Saudi Arabia

Other:

- Bell Canada
- NTT-NE

Mindshare Presentation System

Components

 Mindshare Composer, a recording appliance located in each meeting room, classroom or presentation area.

 - 4Sight Server, the central MPEG-4 streaming server, gathering all live and recorded content from the Mindshare Composers

 EnvivioTV plug-in and Java Player, the MPEG-4 BIFS layer that enables PCs, Mac, with the playback of multi-object MPEG-4 content



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Mindshare Presentation System

General Benefits

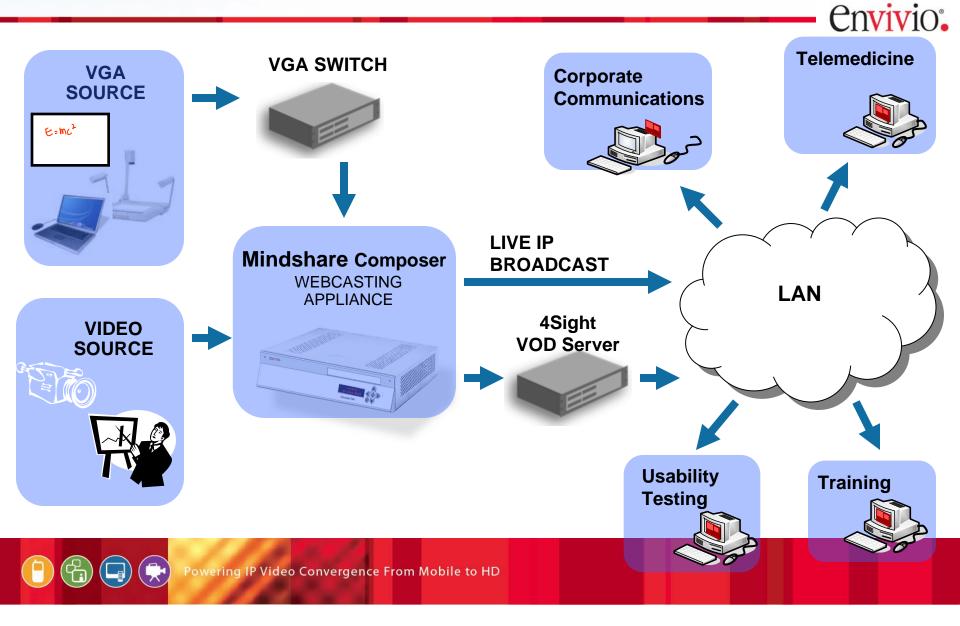
- Easy: you don't have to change your behavior and adapt to the technology, keep presenting as you were before
- You can capture and synchronize anything with no pre-authoring, not only PowerPoint but any application running on PC, Mac, or content from a white board, an endoscope, a overhead camera, and anything you can plug into its VGA input port

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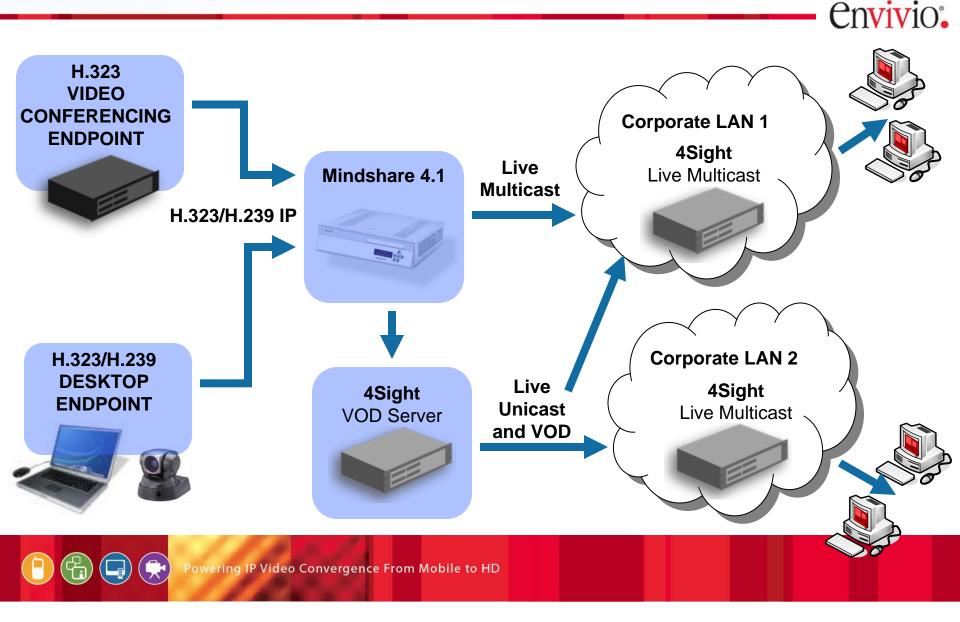
- Screen capture Quality identical to original: Pixel Accurate native capture
- Engaging viewer experience: closer to a real presentation than static HTML
- Save time: support playback on any platform, PC, Mac
- Scalability in terms of number of viewers and Easy Distribution (single files)
- Allows for audience to presenter interactions: low latency allows for interactions with the presenter



Use case : E-learning and training

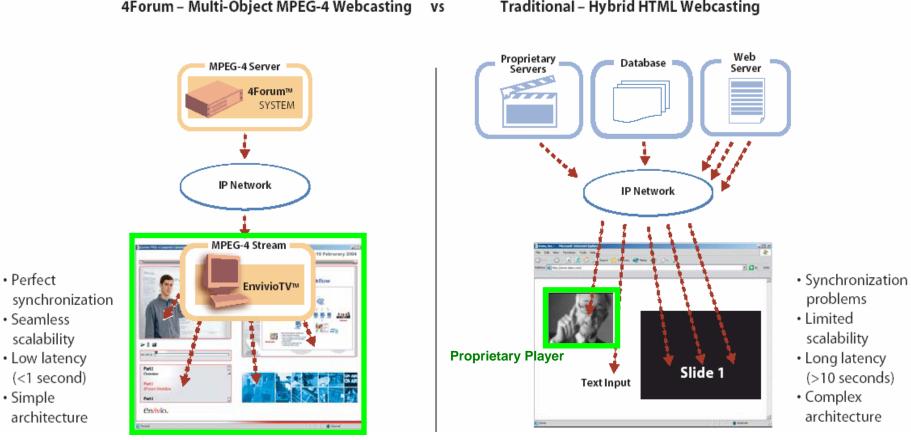


Use Case: Video Conference broadcast/publication



Mindshare – Innovative Approach

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4Forum – Multi-Object MPEG-4 Webcasting

Traditional – Hybrid HTML Webcasting

MPEG-4 Player



Perfect

Simple

Mindshare vs. HTML

Standard Technology	Х	Proprietary
Latest Technology	Х	Old
Low Latency <1 sec.	Х	High Latency >10 sec.
<u>Video</u> Encoding	Х	Slide Show
<u>Single</u> File	Х	Multiple Files
Highly Scalable	Х	Expensive & Clumsy
Multiple Players Support	Х	Limited
Server Included	Х	Server not Included





Mindshare – Features

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	Mindshare Composer - Rack	Mindshare Composer - Lite	
Storage	120 GB (upgradeable up to 730GB)	40 GB, fixed	
Drive Configuration	RAID 5, SCSI	No raid, ATA	
Max input VGA resolution	1600x1200 / up to 30fps	1024x768 / up to 5fps	
Max input Video resolution	640x480	320x240	
Concurrent streams	100+	5 max	
Scalable # concurrent streams	Yes (4Sight servers or Cisco CDN)	Yes (4Sight servers or Cisco CDN)	
Live production	Yes	Yes	
Streaming Supported	Yes	Yes	
On-demand file production	Yes	Yes	
Streaming Modes	Multicast and Unicast	Multicast and Unicast	
ACNS support	Yes	Yes	
Form Factor	2RU Rack Mount	Small portable appliance	
Rackable	Yes	No	
LCD control panel	No	Yes	
Web Admin interface	Yes	Yes	
English, Japanese, Chinese, Korean language support	Yes	Yes	
# Licenses of EnvivioTV included	100 ETV plug-in and 1000 Java Players	50 ETV plug-in and 500 Java Players	



Mindshare Solution – Q&A

- <u>Can I share a white board and more generally what devices can I record with Mindshare?</u>
 - Yes, the second input of the Mindshare is VGA. Whatever you plug will be recorded including a Mac, a SmartBoard or Mimio, a PC, a visualizer, an endoscope, etc.
 - You are not limited to PowerPoint, not even limited to computers...
- On what platform can I play Mindshare content?
 - The same mp4 file will play
 - On a PC: in QuickTime, Real, Windows Media or Internet Explorer
 - On a Mac: in QuickTime
 - No Transcoding is needed!!
- <u>Do I need to encode several times to play on different players, on PCs,</u> <u>Mac?</u>
 - No, the same file plays on all platforms

Powering IP Video Convergence From Mobile to HD

Mindshare Solution – Q&A

- <u>Do I need anything else than Mindshare to start streaming</u> and recording?
 - Mindshare is all you need to start recording, broadcasting and playing presentations

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- You can start small and scale later by adding more serving capability with 4Sight
- <u>Can I customize the viewer's experience</u> -change logos, <u>text, and interactivity?</u>
 - Yes, with the 4Mation template authoring tool, one can create new design templates for Mindshare.



Mindshare Solution – Q&A

How can I control Mindshare?

The Mindshare can be controlled by several means:

- Mindshare Web based interface
- Front panel and LCD
- Crestron or AMX (modules available with Jubilant)
- Third party application (using API)
- <u>Is Mindshare scalable to a large number of simultaneous viewers and how?</u>

- Yes, Mindshare can scale to as many viewers as wanted whether it is live or On-Demand:

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- Multicast: naturally
- To scale in Unicast: simple addition of 4Sight Streaming server
- For scalability on mixed and dispersed networks or the internet: use of CDN equipment (Cisco) or Host Services



4Sight[™] Video Streaming Server

The 4Sight[™] video streaming server from Envivio provides optimized MPEG-4 and H.264 streaming performance in small-, medium-, and large-scale enterprise, broadband, and broadcast deployments. It has been designed to meet the needs of all professional video distribution applications.



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Features

- Stream MPEG-4 and H.264 content
- Ability to stream MPEG-4 Systems content (BIFS)
- Playlist management
- Network selection on output relay
- Real-time stream switcher
- 'Trick Play' support
- Error resilience
- Remote administration and monitoring
- Load balancing
- Session Announcement Protocol (SAP) support
- Customizable authorization
- Linux Redhat 8.0 operating system
- Software Version Available

Benefits

- · Deliver top-quality video over existing IP networks
- Increase audience reach using scalable multi-server configurations
- Distribute standard MPEG-4 content to use on any client platform PC, set-top box, and wireless device
- Reduce bandwidth costs by streaming efficient MPEG-4 files

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