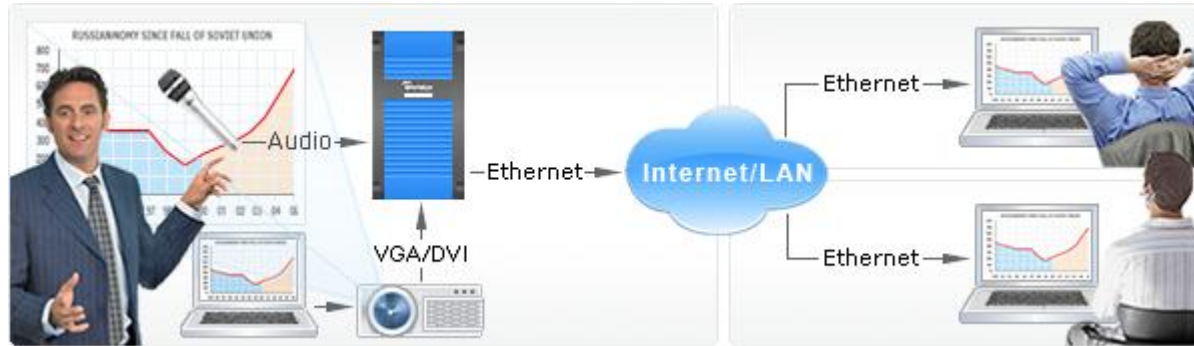


Epiphan Systems Inc.

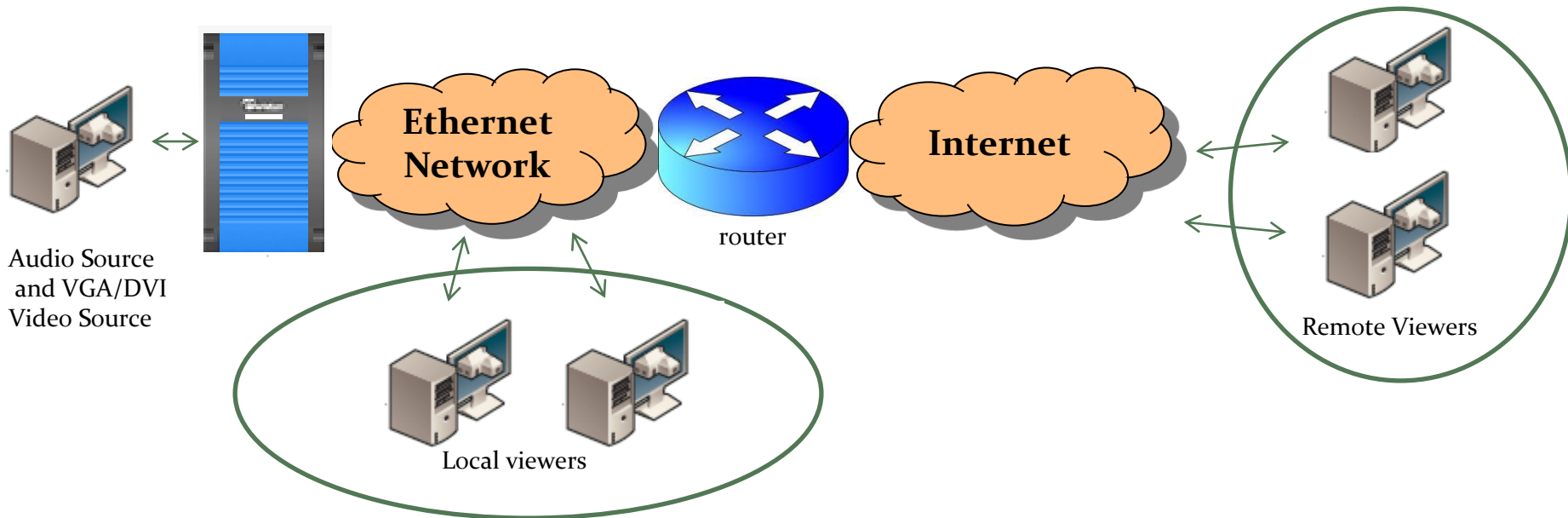


Epiphan VGA Broadcaster Lite™



Product Capabilities January 2011

Broadcaster Lite Typical Applications

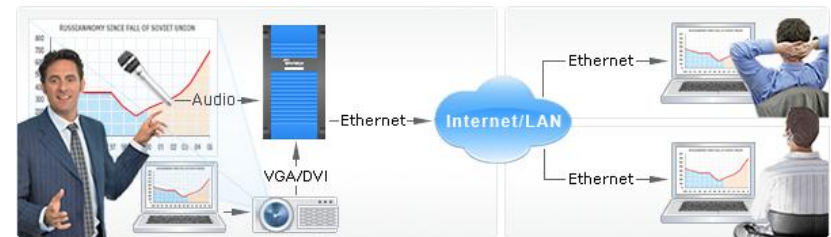


- On the fly streaming of Audio + Video (VGA/DVI/HDMI*) up to 30 FPS
- Presenter uses Video cable connection only – OS/CPU agnostic
- Presenter access to local network not required
- Real time slides or multi media not sent or stored at 3rd party before during/presentation

* Non encrypted hdmi, analog audio required

Broadcaster Lite Key Capabilities

- Real-time Video Broadcast of VGA/DVI/HDMI Video + Audio
 - ◆ On the fly Capture, Transcode, Compress to standard video formats
 - ◆ Transmit live video stream to remote clients
 - ◆ Frame rate up to 30 FPS (HD at 24 FPS)
- High performance Hardware Solution
 - ◆ OS agnostic, No software to deploy on presenter system
 - ◆ Security and Performance
 - ◆ Built in Active Video Splitter/Converter
 - ◆ Portable
- Typical Applications
 - ◆ Corporate Conference Rooms / Meeting Rooms
 - ◆ Webinars/Web-broadcasting, Online Training
 - ◆ Presentation Sharing / “Document Camera” for Audio/Video conferences
 - ◆ Customer Support, Video Call Center
 - ◆ Hearing, visual impairments aid, simultaneous translation



Key Features

■ Multiple Analog / Video Sources

- ◆ DVI-I (analog+ Digital) or VGA (analog) video input sources
- ◆ Supports resolutions up to 1920x1080

■ On the Fly Real-time Audio/Video Internet Broadcast

- ◆ Stream compression on-the-fly
- ◆ H.264/Adobe Flash
- ◆ RTSP streaming protocol support
- ◆ Encoding MPEG4 or H.264 at up to 30 frames per second (E.g HD video at 24 FPS)
- ◆ Synchronization of video with 3.5mm stereo audio input

■ Ease of Use - Plug and Play –

- ◆ Portable - Stand-alone internet appliance
- ◆ Video/Audio source are the presenter's only connections
 - no operating system dependency, no network setup for presenter
- ◆ Video/Audio Source does not have to be a computer (e.g. document camera, ultrasound)
- ◆ Active Splitter for VGA/DVI conversion, other projectors, simultaneous translation, etc.

■ Security and Performance

- ◆ Does not interfere with presenter's computer CPU/Application
- ◆ No client side software required
- ◆ Presenter does not require network access, no security risk
- ◆ No 3rd party hosting required



Key Changes Since Last Version

■ Video Sources

- ◆ DVI connector (digital and analog) or VGA (analog)
- ◆ Supports higher resolutions, digital video sources
- ◆ Embedded active splitter/converter
 - e.g. VGA in, DVI out and vice versa, useful with older projectors
 - Multi language channel broadcast



■ Performance

- ◆ Supports up to 30 frames per second (vs. previous 1-3 fps)
- ◆ Capture rate no longer dependent on the amount of change frame-to-frame in source signal.
- ◆ Real time compression improvements with reduced delay
- ◆ Now compatible with HD Video standard over HDMI up to 1080p24 and 1080p30, or other custom DVI/VGA video (x.y) resolutions
- ◆ Significant reduction in power consumption, temperature

Features and Benefits

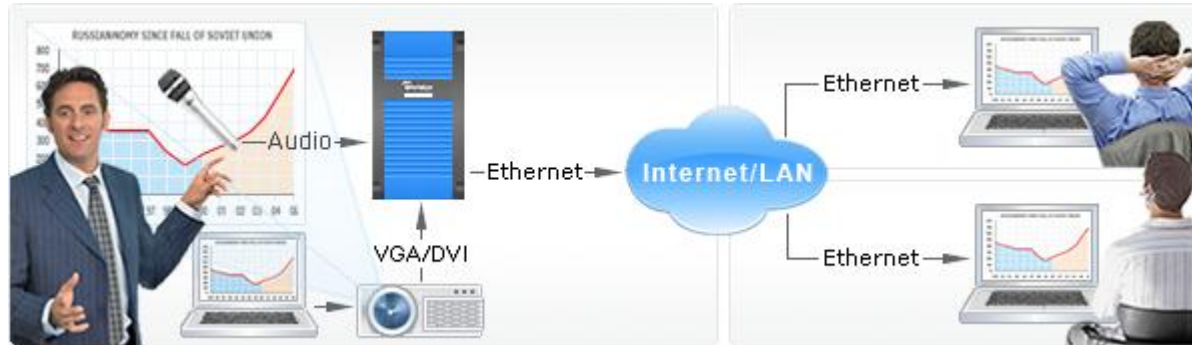


Key Feature	Benefits
DVI input	Capture analog(VGA/DVI) or DVI(digital) video sources including HDMI (non-protected) source
Real-time, on the fly capture, compress, transmit Supports resolutions up to 1920x1080	Broadcast lossless 1080p HD video over LAN or Internet in real time
H.264/Adobe Flash stream compression on-the-fly	Supports many different browsers
RTSP streaming protocol support	Seamless integration with CDNs (Content Delivery Network)
Encoding MPEG4 or H.264 at up to 30 frames per second	High quality image with fluid motion, high resolution
Synchronization of video with 3.5mm stereo audio input	Deal with network latency inherent with internet
Stand-alone internet appliance	Ease of use Secure hardware solution, no modification of source equipment needed No networking or OS dependency
Active VGA/DVI splitter	Daisy chain or test video source to projector Convert new/old connectors with older projects Create multi language channels

Typical Applications

End-User	Sample Applications
A/V Conference Host	Broadcast to remote audiences Simultaneous translation channel(s)
Corporate User and Conference Rooms	Remote presentation sharing Broadcast Document Camera
Sales and Marketing	Webinars, Webcasting Training, Live Demonstrations
Customer Support	Video call center Screen sharing Training Live Demonstrations
Visual/Audio impaired	Stream to laptop or other aid for storage, magnification, amplification
Skype, SIP Audio conference	Share presentations, video , screens at high FPS
Non Typical Video Sources	Ultrasound, document camera, air traffic panel, factory sensors, Linux OS sharing screen with remote

Epiphan Systems Inc.

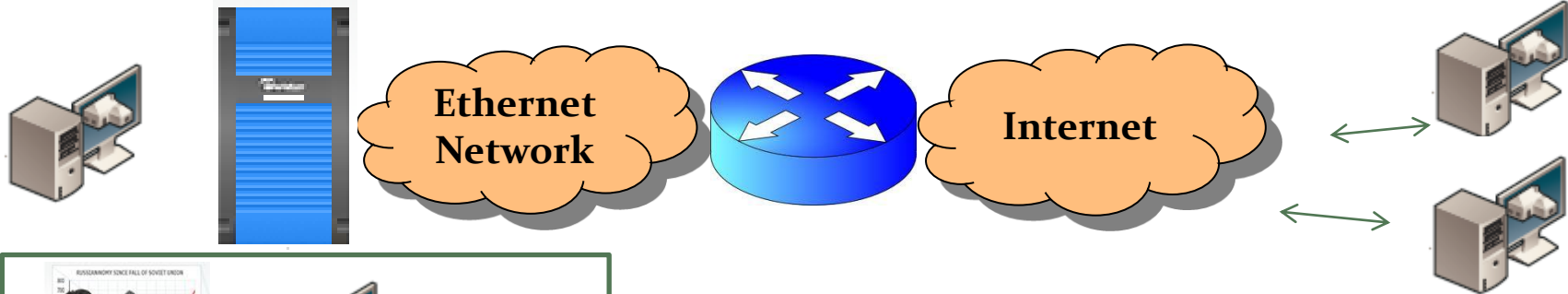


Epiphan VGA Broadcaster Lite™



Applications Guide

Broadcaster Lite Typical Applications




-  VGA
-  VGA to DVI
-  HDMI* to DVI
-  HDMI* to DVI
-  DVI

On-the fly live streaming Audio/video up to 30 FPS

- VGA
- DVI
- HDMI*

Supports multiple, Media Players, Browsers, plugins, CODECs and containers

- Flash/ASF/RTP
- MPEG4/H.264/MJPEG

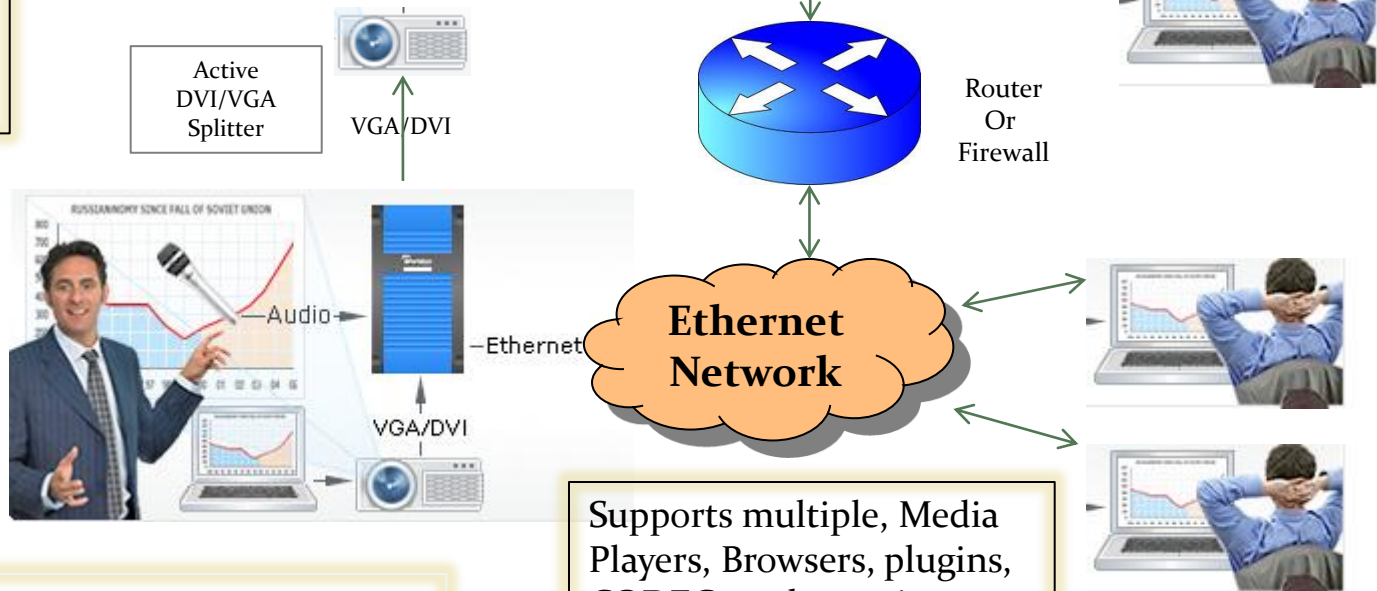
- Video cable connection only – OS/CPU agnostic
- Presenter access to local network not required
- Real time slides or multi media not sent or stored at 3rd party before during/presentation

* Non encrypted hdmi, analog audio required

Conference Room / Hall Broadcaster Lite Network Application Diagram

On-the fly live streaming
Audio/video up to 30 FPS

- VGA
- DVI
- HDMI (unencrypted source only with analog audio)



Administration can be Local and/or Remote

Supports multiple, Media
Players, Browsers, plugins,
CODECs and containers

- Flash/ASF/RTP
- MPEG4/H.264/MJPEG

Audio/Video Conference - Document Sharing “Camera”

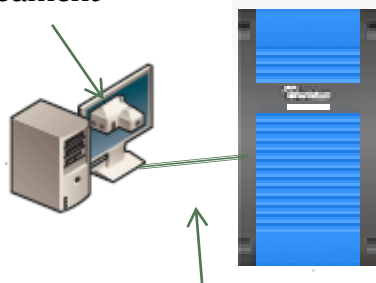


Plug and Play -

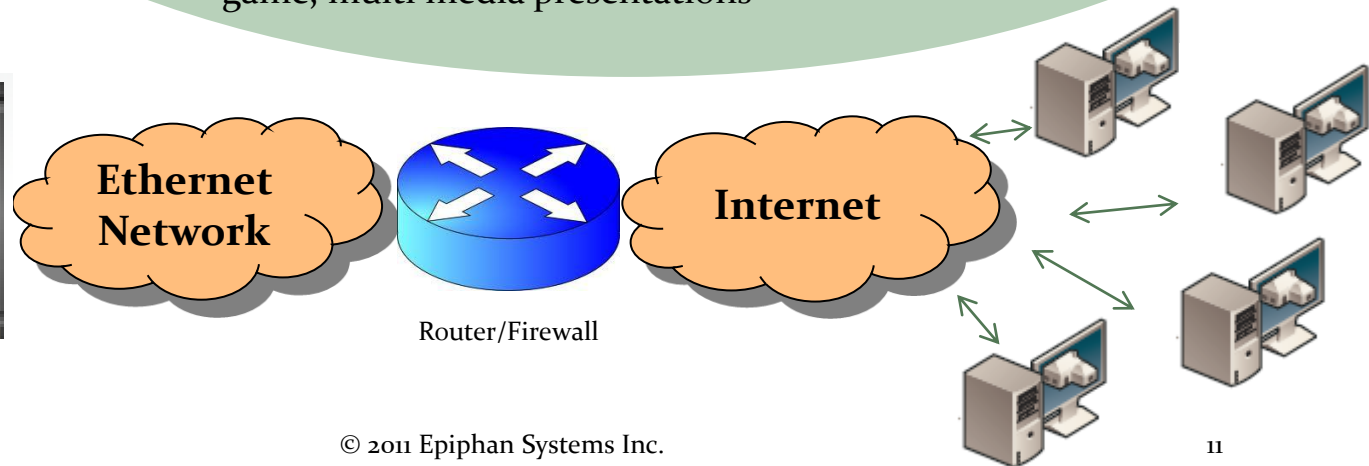
Video Conference - Document Sharing

- Video cable connection only
- Share documents while on video conference at conference's shared URL
- Presenter does not require access to corporate networks, email, etc. (“Video firewall”)
- No need to send slides via email or host by 3rd party
- Attendees will not see slides in advance of presentation
- Documents updated on the fly
- Documents can be “live videos” such as ultrasound, video game, multi media presentations

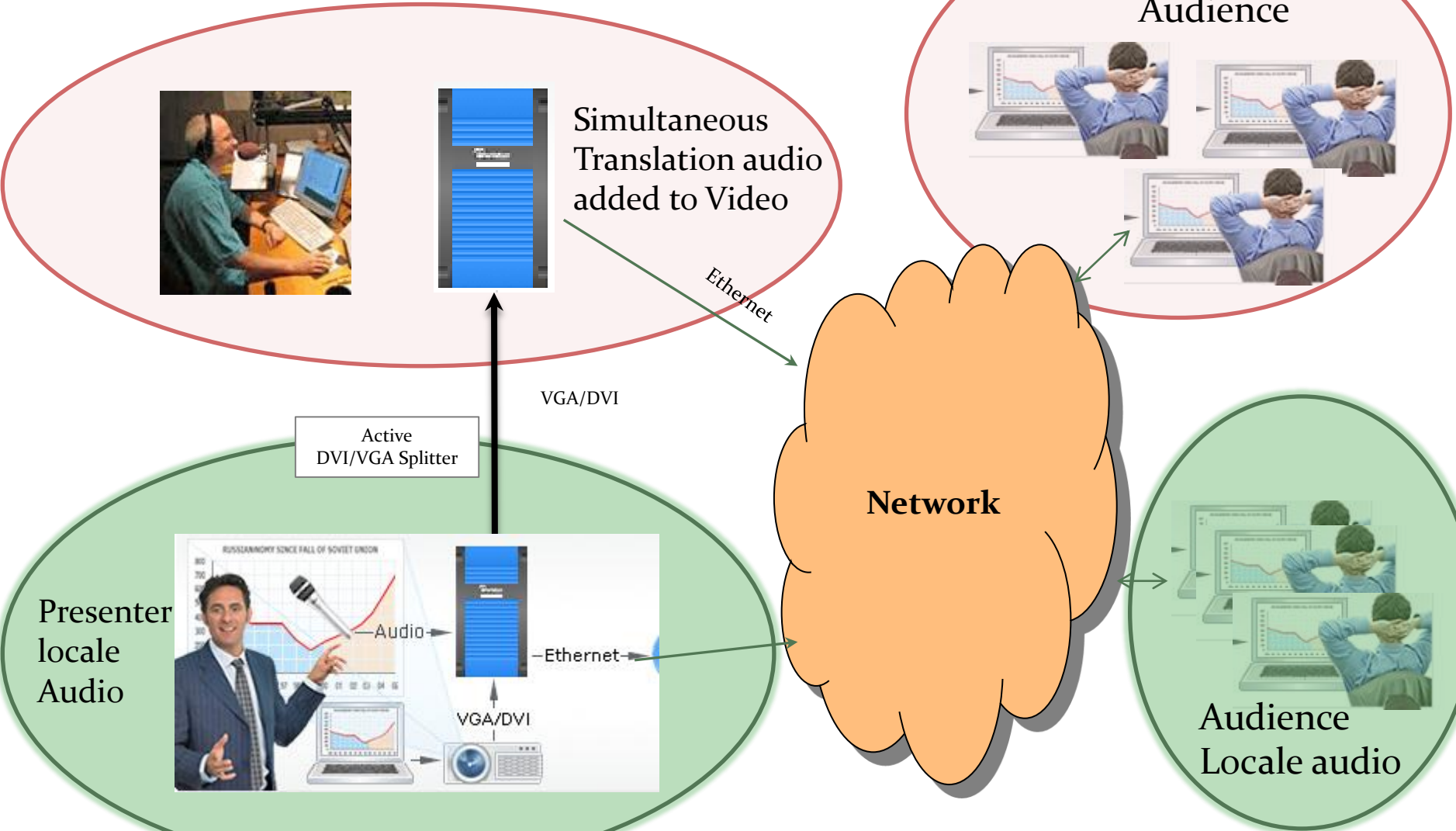
Presenter
Document



Video Cable only



Online WebCast Multi-Lingual Simulcast

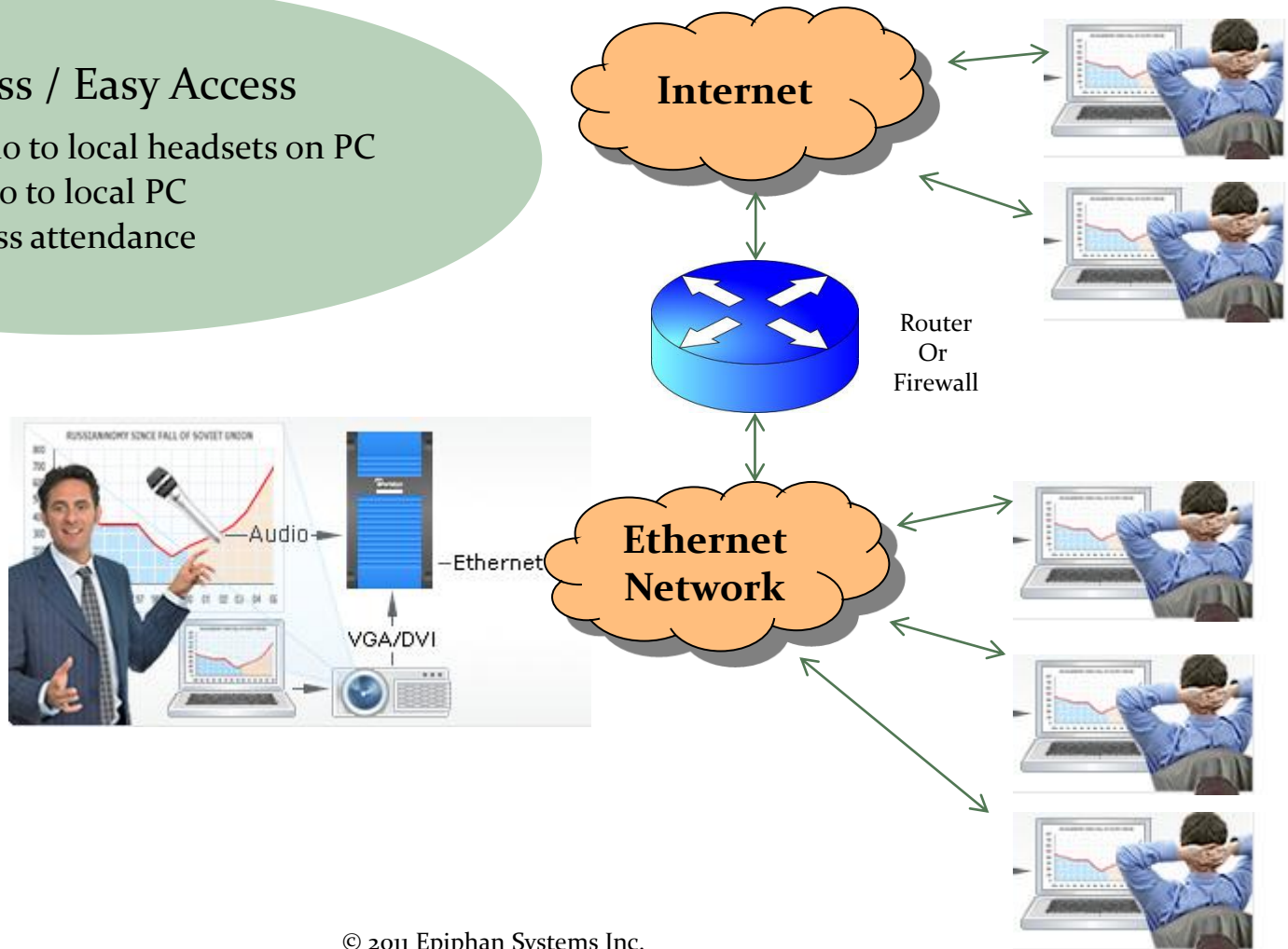


Conference Room / Hall

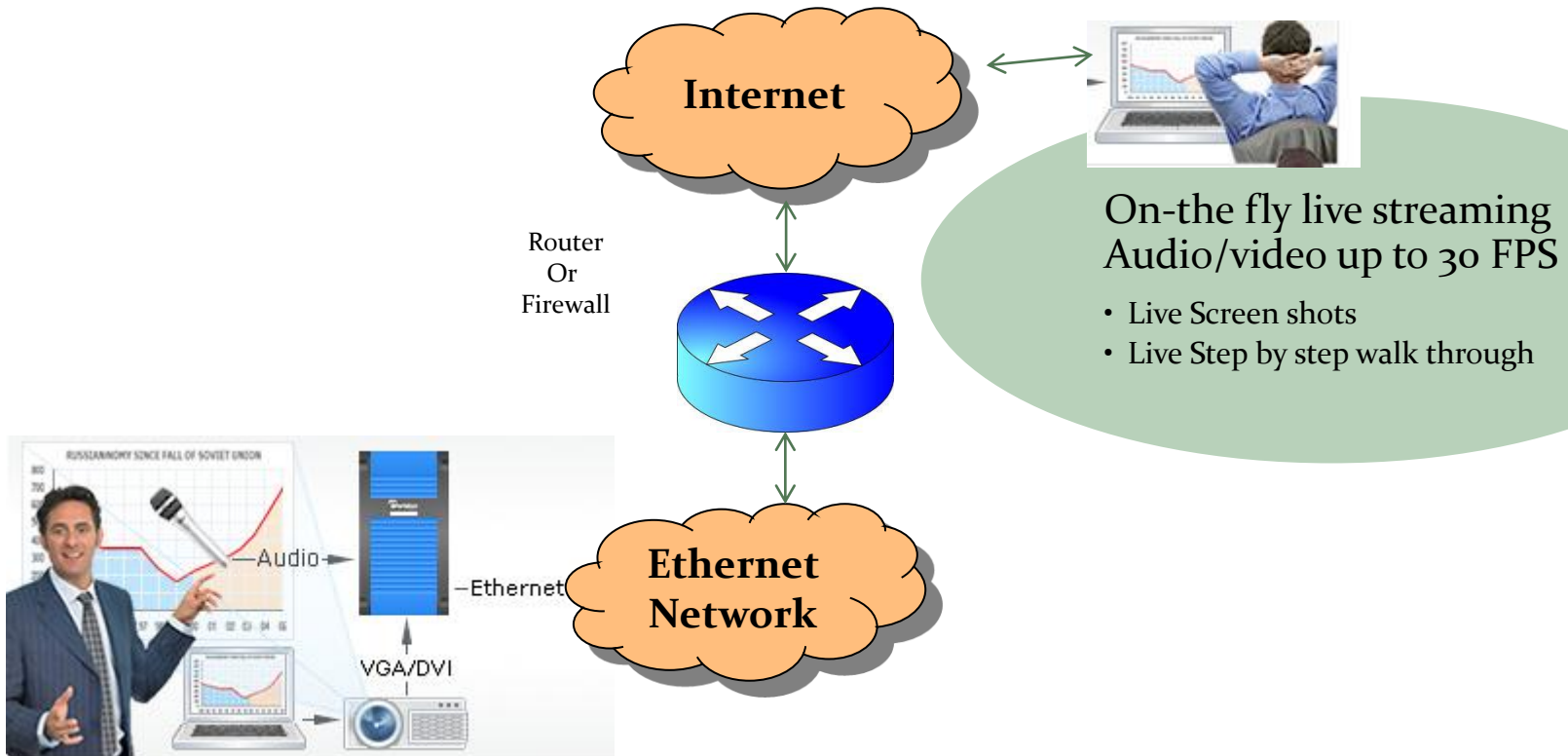
Assistance for Hearing / Visual/Mobility Impaired

Equal Access / Easy Access

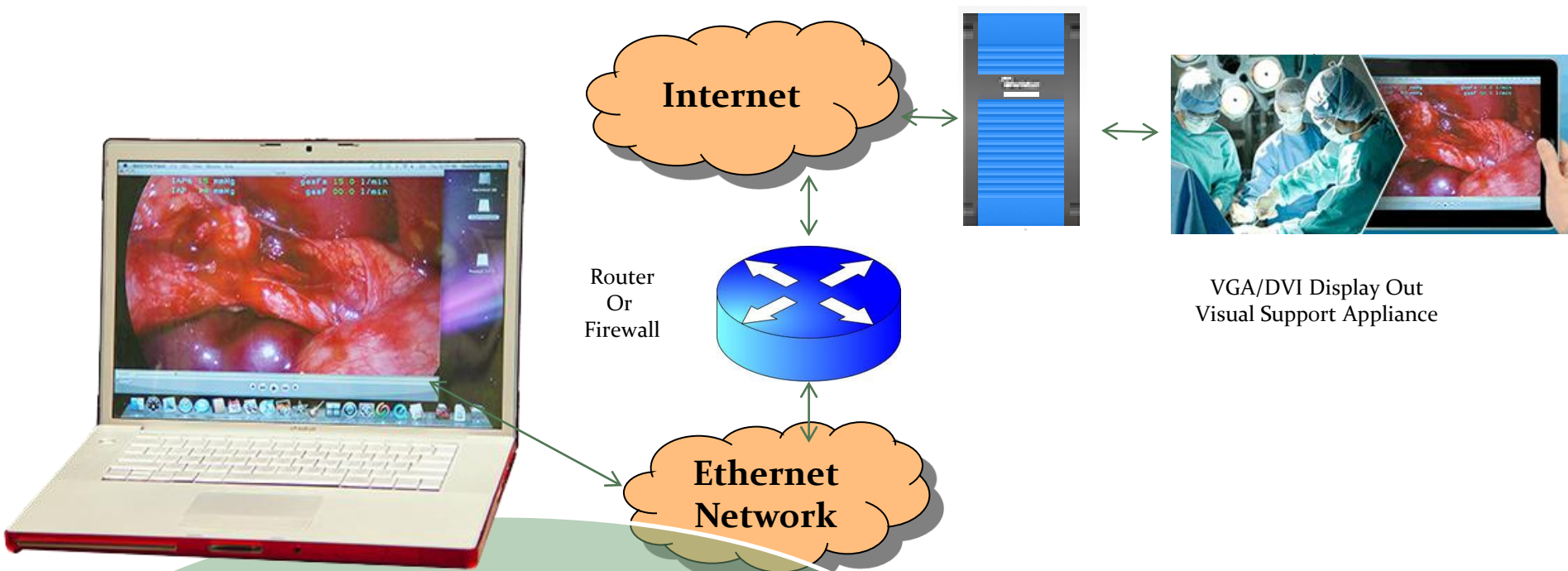
- Amplify audio to local headsets on PC
- Amplify video to local PC
- Remote access attendance



Customer Support – Outbound Video Call Center



Virtually There – Remote Expert Customer Support – “Inbound” Video Call Center



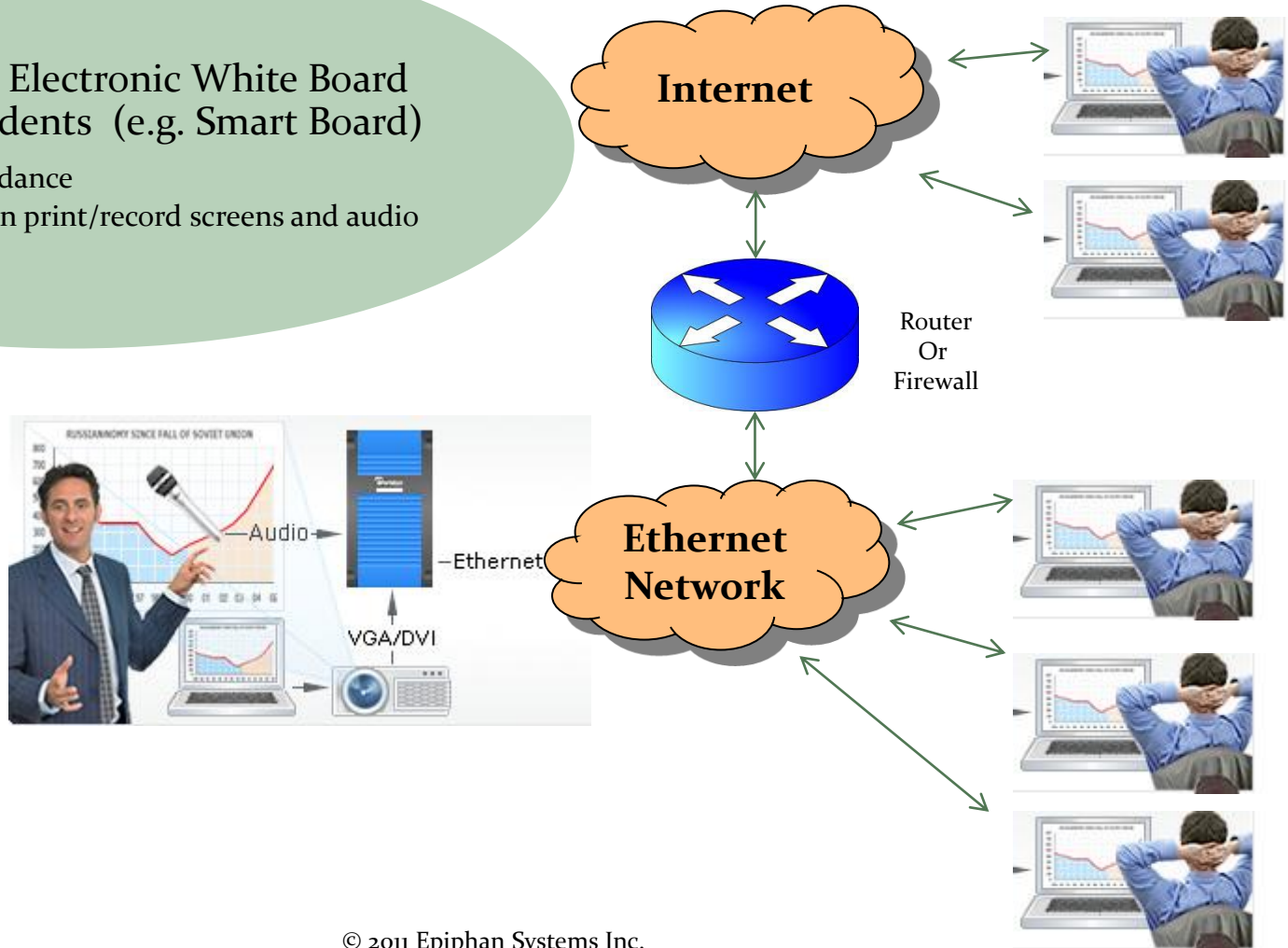
On-the fly live streaming Audio/video
up to 30 FPS

- Remote video shared with “expert” or “expert pool”
- Step by step walk through

Education Electronic White Board

Teacher Shares Electronic White Board with remote students (e.g. Smart Board)

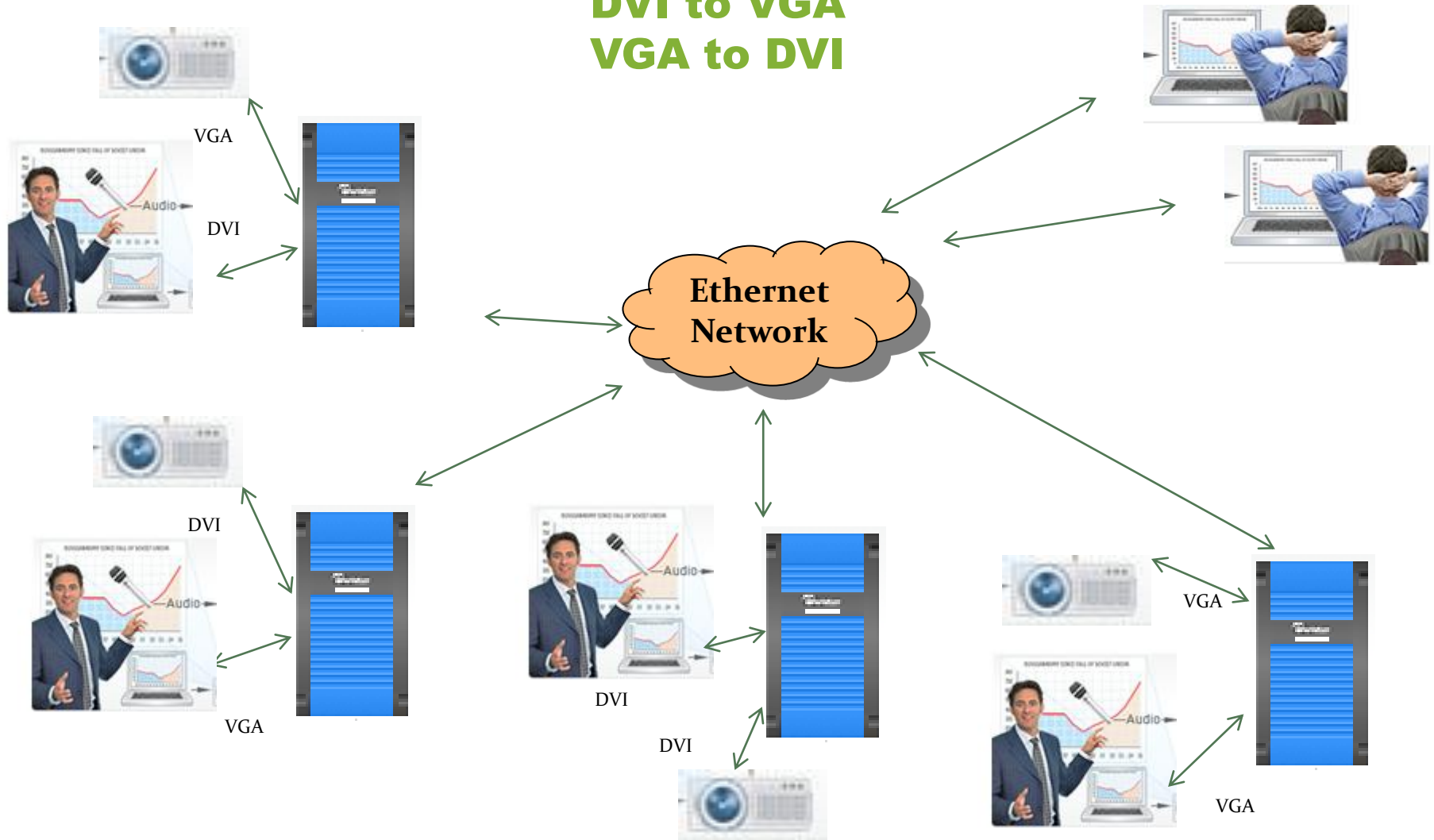
- Remote access attendance
- Dyslexic students can print/record screens and audio



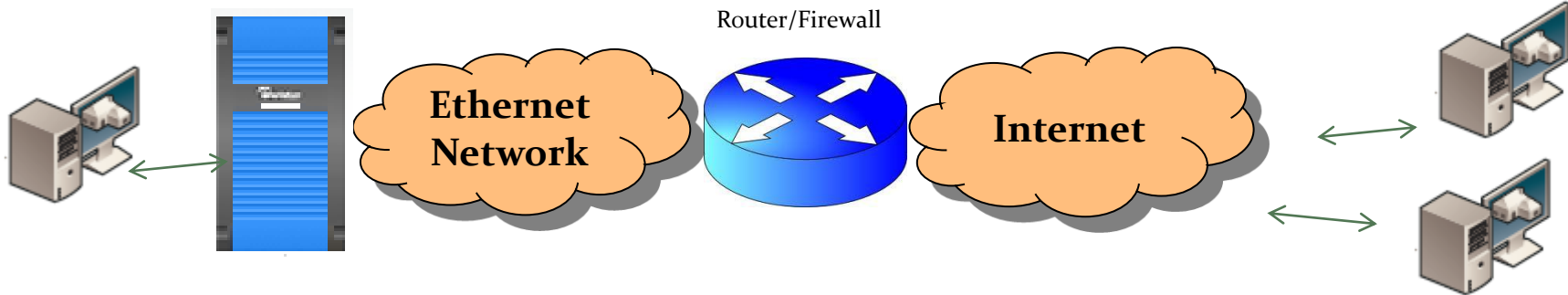
AV- Expert Friendly Active Splitter

DVI to VGA

VGA to DVI



Broadcaster Lite - Other Applications



Share Game HD Stream
(VGA, DVI, HDMI*)



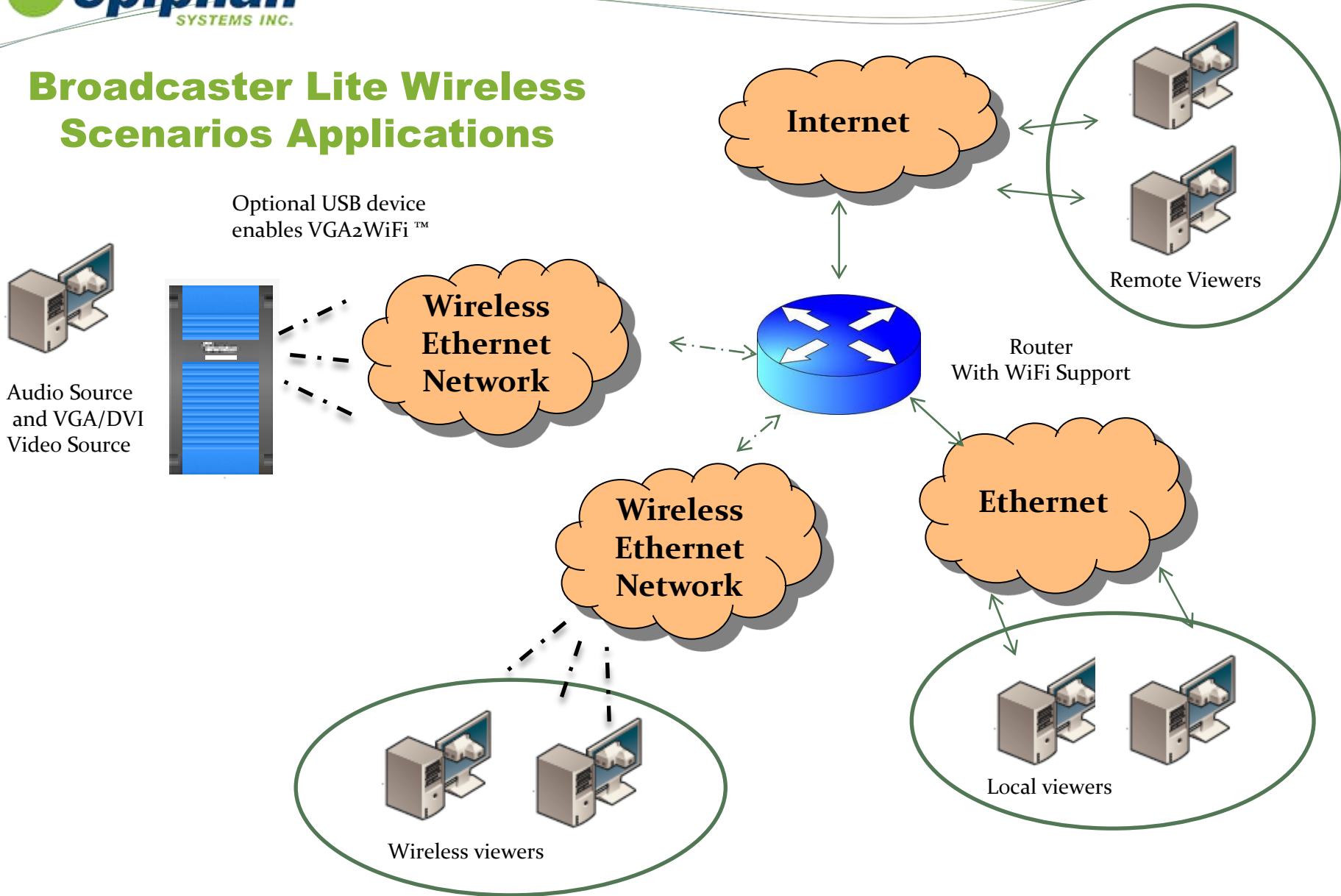
Broadcast VGA/DVI-Out
from Ultrasound or other
special video source



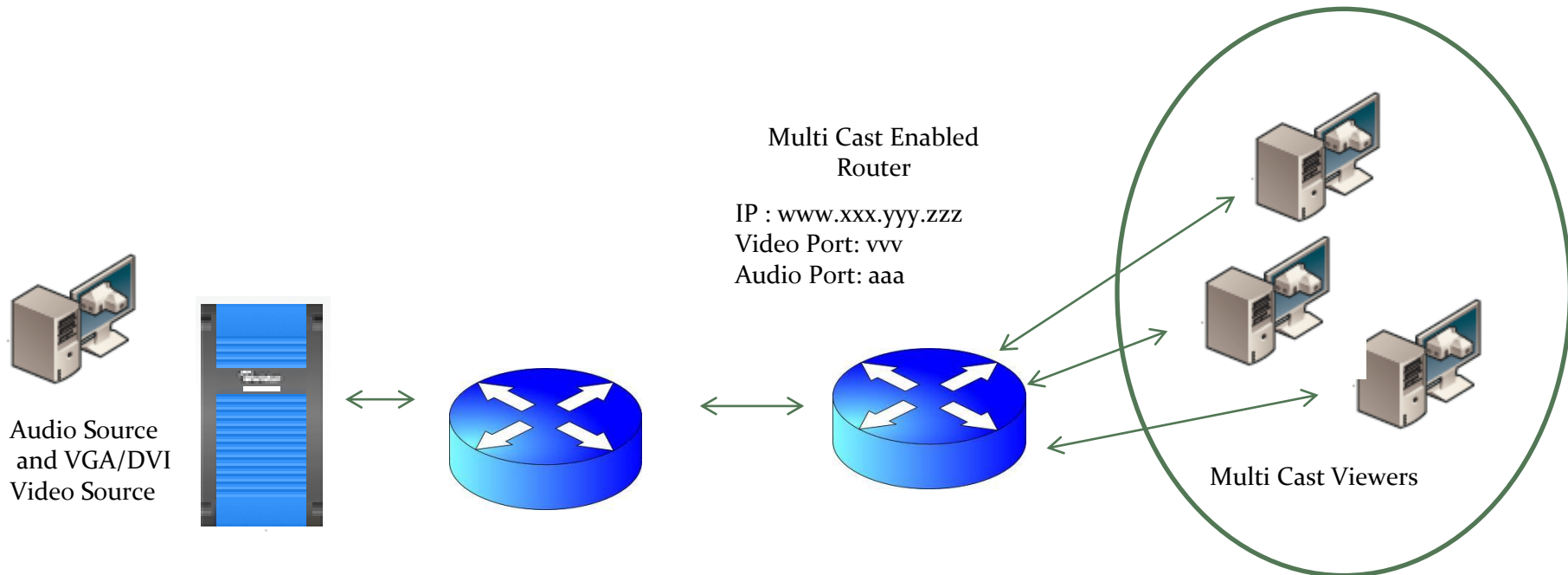
Broadcast audio/video
from multiple sites to
same "meet me" page

* Non encrypted hdmi, analog audio required

Broadcaster Lite Wireless Scenarios Applications

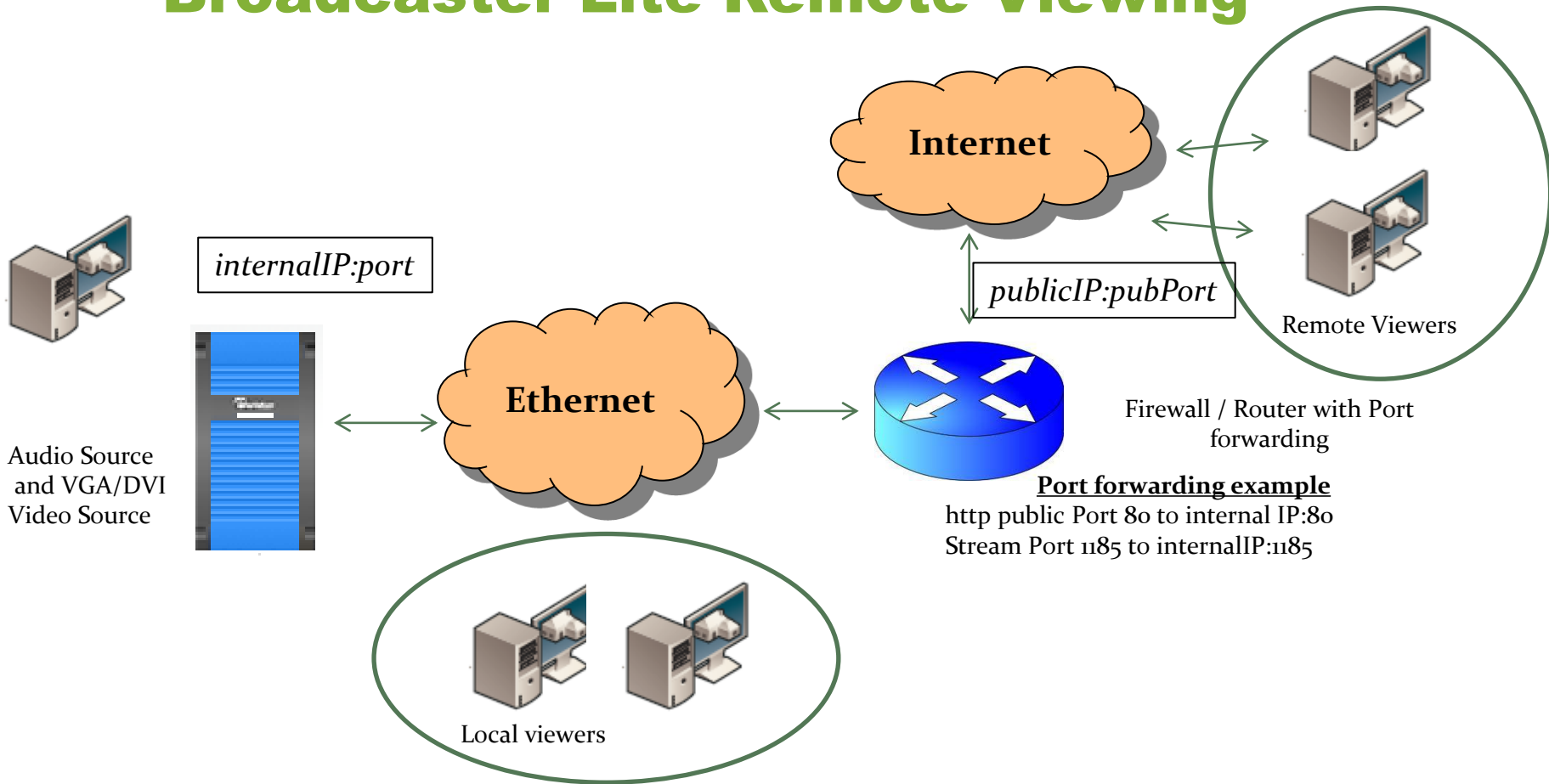


Broadcaster Lite Multicast Support



- Broadcast to more clients using a Multi-cast router
 - ◆ Configure IP and port numbers to stream broadcast through a multi-cast service

Broadcaster Lite Remote Viewing



Additional Information

- Additional Information

- ◆ <http://www.epiphan.com/products/broadcasting/>
- ◆ <http://www.epiphan.com/products/broadcasting/vga-broadcaster-lite/>

Customers like Broadcaster Lite because it is portable, non obtrusive, streams hi-resolution display content at video/audio cable level, no software, CPU/OS agnostic, performance/price

Thank You

Epiphan Systems Inc.

Epiphan Systems Head Office

555 Legget Drive
Tower A, Suite 101
Ottawa, Ontario, Canada,
K2K 2X3.

Phone: + 1 (877) 599-6581

Phone: + 1 (613) 599-6581

Fax: + 1 (613) 482-4613

United States Office

641 Lexington Avenue
15th Floor
New York, NY 10022

Phone: + 1 (212) 328-9535

Fax: + 1 (212) 328-9536

Subsidiary Offices in Europe

Moscow, Russia +7 (499) 518-2438

London, England +44 (203) 318-1906

Subsidiary Office in USA

San Jose, California +1 (408) 419-1941

Email: info@epiphan.com

Epiphan Systems Inc. and the Epiphan Systems Inc. logo are trademarks of Epiphan Systems Inc. The information found in this document is subject to change without notice. This material is provided on an "as is" basis. Epiphan Systems Inc. makes no representation or warranties of any kind, expressed or implied arising out of the application or use of any product described herein, neither does it convey any license under its patent rights, copyrights, or trade secrets nor the rights of others.

This document is the property of Epiphan Systems Inc. No part of this publication may be copied, reproduced, stored in a retrieval system, or transmitted, in any form by any means, electronic, photographic, or otherwise, or used as the basis for manufacture or sale of any items without the prior written consent of Epiphan Systems Inc.

Backup

Epiphan Product Lines

VGA Frame Grabbers



Our line of VGA frame grabber solutions allow you to capture output from virtually any VGA source.



20+ products
5000+ customers
50+ countries

DVI Frame Grabbers



Our line of DVI frame grabbers allow you to capture both single-link and dual-link DVI signals with ease.

VGA/DVI Broadcasting



Our Broadcasting products allow you to broadcast audio and visual signals over LAN or Internet.

Other Applications



Other products include KVM, VGA Printer, VGA Ground Loop Isolation

VGA/DVI Recording



Our Recorders are unique hardware solutions to view, record and store audio and video content.

Epiphan Systems Inc.

■ Company Focus

- ◆ High Resolution Video Capture, Broadcast, Recording and Display

■ Product Lines

- ◆ Frame Grabbers ([VGA](#), [DVI/HDMI](#))
- ◆ Video Broadcast and Streaming ([VGA/DVI/HDMI](#))
- ◆ Video Recording ([VGA/DVI/HDMI](#))
- ◆ Video Display ([Print](#), [Split](#), [Grid](#), [KVM](#))

20+ products
5,000+ customers
50+ countries

■ Field Proven Industry Solutions

- ◆ [Healthcare](#), [Education](#), [Simulation](#), [Transportation](#), [Security](#), [Computing/ IT](#), Conferencing, many others

Screen Capture

Broadcasting

Recording

Display



Field Proven Industry Solutions

- **Healthcare** ([more](#))
 - ◆ Hospitals, physicians, equipment vendors, emergency response teams, telemedicine, remote guidance, sport teams
 - ◆ 250+ Customers (e.g. Henry Ford, GE, NASA, US Olympic Team, eSaturnus, St- Jude, MedTronic)
- **Education, Training, Simulation** ([more](#))
 - ◆ Schools, Simulators, Conferences, Corporate Training, PodCasters, Product Training, useability testing
 - ◆ 250+ Customers (e.g. U Mich, Uppsala, U California, MIT, Matterhorn Project)
- **Transportation** ([more](#))
 - ◆ Air Traffic Control, Shipping, Subway, Traffic,
 - ◆ 50+ Customers (e.g. Seabrokers, SkySoft, NASA)
- **Computing/IT** ([more](#))/**Security** ([more](#))
 - ◆ KVM, Conference Apps, Useability, Risk Management, Critical Infrastructure Protection
 - ◆ 500+ Customers (e.g. Global 1000, Fortune 100, Hitachi, military)

