





# Vidyo Conferencing at a Glance



## VidyoRouter – A Video Conferencing Breakthrough

At the heart of the Vidyo Conferencing™ system is the VidyoRouter™ appliance, a new paradigm for multi-party conferencing, that eliminates the need for the Multipoint Control Unit (MCU) – required in traditional video conferencing systems.

Vidyo Conferencing was designed for general purpose IP networks. Encoding and decoding occurs only at the endpoints – leaving just video packet routing to be accomplished within the network itself. The VidyoRouter ensures that this packet-switching is handled without either degrading the quality of the video or adding noticeable latency, yet it delivers rate and resolution matched streams to each endpoint. The VidyoRouter provides industry leading network error resiliency. The VidyoRouter constantly tests and recalibrates what it should be sending to each endpoint, ensuring that each participant is provided with the highest quality experience their device is capable of receiving – even as conditions change. Each VidyoRouter supports up to 100 HD connections – called VidyoLines – and VidyoLines may move among a set of VidyoRouters.

The VidyoRouter Cloud Edition further improves bandwidth efficiency across the wide area network (WAN). Cloud edition networks VidyoRouters with one another, enabling endpoints to connect using the VidyoRouter that is the closest to them. As a result, traffic is localized around each VidyoRouter and sent as just one video stream across the WAN to the other VidyoRouter appliances. This eliminates the need to send each near-end participant's stream individually to each far-end participant – yielding significant operating cost savings for geographically dispersed deployments.



## VidyoPortal – A Powerful, Easy to Use Environment

The VidyoPortal is a web-based environment, providing end-users and administrators with access to the Vidyo Conferencing system. The VidyoPortal's flexible user interface features single-click-action buttons that take care of everything required to initiate a call. It is so incredibly straightforward, in fact, that even ordinary conference participants can use it to initiate meetings — via the Web — from anywhere. All users are assigned a password-protected personal space, thus making it possible for meetings to be held anytime — whether impromptu or by prior arrangement. Finally, the same reservation-less capabilities available for voice and web conferencing are available for video conferencing. The VidyoPortal provides a consistent environment that's compatible with Microsoft Internet Explorer, Firefox, Safari and Chrome.

The VidyoPortal also serves as a central management environment, allowing administrators to set system-wide parameters and policies, establish end-user and association privileges, and control and customize user conferencing capabilities.



## VidyoGateway – Incorporate Legacy Systems

Vidyo recognizes that when a company has existing video conferencing investments it's unlikely they're going to want to stop using all of their legacy systems to move up to a better solution, so, we created the VidyoGateway. Via the VidyoGateway, your Polycom, Tandberg or other MCU-based systems can be given the boost they need to interoperate with your new H.264 SVC systems.

The VidyoGateway supports H.323 and SIP. H.264 as well as H.263 for video and wide band audio, in addition to H.239 data collaboration.



## VidyoReplay – Record and Playback Vidyo Conferences

VidyoReplay is an easy-to-use webcasting and recording appliance that enables large numbers of users to watch a Vidyo conference concurrently via their web browsers, either in real time or at any time after the conference. Users can record and webcast from any Vidyo endpoint, including hand held devices, laptops, desktops and VidyoRoom™ systems. With VidyoReplay, every Vidyo endpoint is a Content Creation station.



### VidyoDesktop – Quality Conferencing from Anywhere

VidyoDesktop is a software-based solution that provides a telepresence experience on desktops, laptops and personal devices. Managed through the VidyoPortal, VidyoDesktop transforms almost any device into an HD quality VidyoConferencing endpoint. VidyoDesktop provides a personal, customizable experience to each user and integrates with commonly used UC tools such as Microsoft Lync and IBM Lotus Sametime.

utilization - delivering natural, face-to-face interaction with no delay or broken images. All you need is a good-quality webcam, a Mac or PC, and you're ready to participate in multipoint video calls with other participants, whether they're gathered in video conference rooms or sitting in front of VidyoDesktops of their own.

Vidyo's Adaptive Video Layering Architecture allows VidyoDesktop and VidyoRouter to work together to dynamically adjust each user's experience to account for network conditions and CPU



### VidyoRoom – HD Quality Delivered at 60 Frames/Second

VidyoRoom™ systems deliver the industry's best error resiliency and up to 1080p/30fps or 720p/60fps at a fraction of the cost of traditional systems. Designed specifically for use over converged IP networks, the VidyoRoom can decode and display multiple HD participants at video quality unequaled by systems that require dedicated bandwidth to perform at their best.

The VidyoRoom system is simple to use, easy to configure and voice-activated with continuous presence. Flexible conference control options make it a snap to manage, using either the VidyoPortal, a remote control device, or **VidyoRemote** — a web-based remote control that can be used

on a standard tablet. And because video conferencing ought to be a natural extension of the way people normally work, the VidyoRoom interoperates seamlessly with VidyoDesktop clients, making it possible for people to join a conference from their home office or wherever they happen to be.



### VidyoPanorama – Immersive Multi-Screen Telepresence

VidyoPanorama delivers truly immersive telepresence at a fraction of the cost of traditional telepresence systems. Designed to support highly distributed environments, VidyoPanorama enables multipoint HD video conferencing across telepresence rooms, PCs (Windows, Mac OS, Linux), room systems, and even mobile devices (iOS, Android).

Based on Vidyo's award winning, patented Adaptive Video Layering technology, VidyoPanorama goes beyond traditional telepresence solutions. By connecting any endpoint without transcoding, users experience up to 20x lower latency than MCU-based systems at resolutions up to

1080p/60fps. Better yet, VidyoPanorama does not require QoS-enabled networks — it works over generally available IP networks — enabling immersive, multi-point interactions with the industry's lowest total cost of ownership.



### VidyoMobile – Video Conferencing from your 3G/4G device

VidyoMobile delivers high-quality video conferencing on iOS or Android-based devices, extending your VidyoConferencing investment to workers on the go, in the airport, or out of reach of standard computers.

VidyoMobile provides the familiarity of VidyoDesktop in an easy to use mobile interface. Users can connect to any Vidyo conference wherever WiFi, 3G or 4G networks are available. VidyoMobile works with the VidyoRouter to optimize the experience and provide the highest quality mulit-point mobile video conferencing available.



All you need is a good-quality USB webcam, a Mac or PC, and you're ready to participate in multipoint video calls with other participants...

## FEATURES & BENEFITS:

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### SCALABLE MULTIPOINT HD VIDEO CONFERENCING

High resolution and high frame rate encode and decode at multiple frame rates and resolutions

### STANDARDS-BASED CODING TECHNOLOGY

H.264/AVC/SVC based (H.263 support provided for legacy devices)

### ERROR RESILIENCE

Maintains continuous high-quality video without broken pictures or other artifacts in environments with high packet loss

### RESOLUTION AND RATE MATCHING

Supports sending video to multiple endpoints with different bandwidths and resolution capabilities without transcoding

### DYNAMIC RATE CONTROL

Automatically and continuously senses the current network condition and adjusts bit rates accordingly

### ERROR LOCALIZATION

Individual client network errors do not affect other conference participants

### BUILT-IN INVESTMENT PROTECTION

Allows for the incorporation of legacy video conferencing equipment

### FIREWALL/NAT TRAVERSAL

Embedded functionality that provides a safe and secure connection through any firewall with no feature loss or requirement for additional equipment

### ROBUST MEDIA SWITCHING/ROUTING AND RANDOM ENTRY

Existing conference participants are not affected as new participants join conference

### EASY TO USE WEB-BASED INTERFACE

A consistent environment across endpoints with single-click action buttons

### PERSONAL VIDEO LAYOUT

Gives each user independent control over received video layout – as opposed to one prescribed layout for all in MCU-based systems

### WEBCAST & RECORD

Webcast VidyoConferencing effectively to large audiences – no client download or VidyoLine consumption to view

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