



**Vidyo**<sup>®</sup>  
Personal Telepresence

**SOLUTION BRIEF**

**VidyoPanorama**

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## Traditional Telepresence Solution: Costly, Static, Limited

Historically, the immersive telepresence solutions have been excessively expensive to deploy, maintain, and operate. They require specially-engineered environments with custom furniture, equipment, and lighting to create the “being in the same room” illusion. Also, they require extensive network upgrades and recurring bandwidth costs. Fundamentally, this static and symmetric one-size-fits-all approach enables mostly a point-to-point meeting with limited concurrent participants.

Furthermore, after the significant CapEx and OpEx incurred to deploy telepresence throughout the enterprise, organizations have frequently encountered poor experience when trying to hold multipoint video conferences with geographically dispersed participants. For example, today’s solutions lack the ability to display a high number of distributed participants simultaneously in HD – therefore losing the immersive experience.

Perhaps more importantly, the immersive experience can be easily broken if remote participants join from a desktop or mobile device over an imperfect network. A traditional MCU will be needed to transcode these participants, introducing up to 200ms of additional video latency and ruining the immersive experience altogether.

### VidyoPanorama: Telepresence with Immersive Interactions at 10% of the Cost

VidyoPanorama delivers personal telepresence with immersive interactions. Designed for the way people work, VidyoPanorama enables multipoint HD video conferencing across telepresence rooms, PCs, room systems, and mobile devices. Based on the award winning, patented Adaptive Video Layering technology, it goes beyond the traditional telepresence solutions available today and enables natural communications at a fraction of the cost of other solutions. With its software based architecture, VidyoPanorama is able to offer the industry’s lowest total cost of ownership, when factoring in CapEx, deployment, and OpEx such as bandwidth and support.

### VidyoPanorama: Telepresence with Exceptional Flexibility

With unprecedented flexibility, VidyoPanorama supports a wide range of use cases that traditional telepresence solutions cannot address:

- Symmetric 3-screen site-to-site Telepresence
- Asymmetric 9-screen hub and spoke Telepresence
- 1-to-many distributed communications - distance learning, financial services, and operations management

*“From our inquiries, an increasing volume of Gartner clients are expressing concern about the upfront capital investment in traditional videoconferencing models, and are asking about lower cost mechanisms to video-enable their workforces.”*

– Gartner Inc., Market Trends:  
Videoconferencing,  
Worldwide, 2011, April, 2011



## Industry's First 2-way 1080p 60fps Capable Telepresence

Every Telepresence solution supports 1080p at 30 frames per second, but only Vidyo sends and receives 1080p at 60 frames per second! The VidyoPanorama can decode and display multiple HD participants at video quality unequalled by systems that require dedicated bandwidth to perform at their best.



## Industry's Most Flexible 9-Screen Telepresence

Most Telepresence solutions are limited to 4-screen as a standard offering. Going beyond 4-screens requires significant engineering and customization. VidyoPanorama starts at 2-screens and supports up to 9 screens, with an architecture that can scale to 20 screens in the future. This flexibility allows you to support more use cases than traditional Telepresence solutions and adapt deployments easily and cost effectively as needs change.



## Highly Scalable Multi-point

VidyoPanorama is designed specifically to support today's highly distributed video deployments, where most remote participants are not together in a single room. VidyoPanorama allows 36 meeting locations to be simultaneously displayed with immersive interactions, 18x more than traditional site-to-site immersive Telepresence solutions



## Integrated Video Conferencing with Everyday Endpoints

VidyoPanorama interoperates seamlessly with VidyoMobile™ (iOS, Android) and VidyoDesktop™ (Windows, Mac, Linux) clients, VidyoRoom™ systems and H.264-based H.323 and SIP endpoints via the VidyoGateway, making it possible to connect with anyone, anywhere using off-the-shelf endpoint that they already have.



## 1-Touch to Call and View – Via an Off-the-Shelf Tablet

The VidyoRemote™ tablet starts a conference via one-touch, allowing you and your participants to enjoy crisp, HD interactivity with imperceptible latency. You'll be able to choose between full screen active speaker and continuous presence, as well as content layouts, independently of all other participants, via a simple touch.

*"VidyoPanorama further extends the notion of an immersive telepresence experience. Providing 5x screen real estate, multiple flexible layouts and low costs to fit different user needs, this solution will likely open up the market for new applications and use case scenarios. It's like telepresence on steroids."*

–Roopam Jain, Frost & Sullivan

*"Vidyo continues to demonstrate both innovation and price-performance leadership. With VidyoPanorama the company has created a visual collaboration environment that leverages their light-weight, low-cost, internet-friendly, high-quality desktop, mobile and room clients to bring in multiple participants for interactive group meetings on the industry's first 6 + screen solution. What is equally exciting is Vidyo's SDK and APIs provide the ideal platform for Vidyo and their systems integration partners to continue to evolve the environment, capabilities, and experience."*

- Howard S. Lichtman, President, Human Productivity Lab



## Imperceptible Latency – No Transcoding

VidyoPanorama connects geographically distributed room systems, desktops, mobile devices and telepresence systems in the same conference without transcoding. This capability is enabled by Vidyo’s patented Adaptive Video Layering technology, resulting in up to 20x lower latency compared to other conferencing systems with MCU transcoding among different end points.



## Telepresence Using General-purpose Data Networks

VidyoPanorama does not require expensive QoS-enabled networks. This allows organizations to conduct immersive meetings using the general converged IP network. Video and audio streams can be treated as regular IP streams, rather than requiring special purpose-built video overlay networks. This capability translates significant OpEx savings.



## High Quality Audio Using Off-the-Shelf Systems

VidyoPanorama saves you money by integrating with off-the-shelf audio equipment with exceptional audio quality. Customize your solution with multiple microphones and speaker options. For example, our entry-level recommended system supports the ClearOne Interact AT Bundle C.



## 1080p 60fps Capable Camera

VidyoPanorama integrates with off-the-shelf high-quality camera. It supports video privacy mode, local camera pan, tilt, zoom via a remote control, and advanced Far-End-Camera-Control during a conference.



## Management Simplicity

VidyoPanorama requires no Video Network Operations Center (VNOc) or concierge services. The VidyoPortal Web-based environment allows end-users to access and administrators to manage VidyoPanorama. 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. 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

## Highly Customizable

VidyoPanorama provides XML API for 3rd party control system integration. With the VidyoPanorama solution, integrators can provide their customers with design and implementation services including the furniture, displays, décor and unique telepresence space designs, additional cameras and audio sources.

*“With Vidyo's introduction of VidyoPanorama, and their vision, it's increasing clear that there will be little or no need for [or say no future for] hardware-based video conferencing systems in the future.”*

- Elliot Gold, Telespan

*“This is impressive that with all the form factors in this (demonstration) call (room systems, desktops and an iPad 2) that we never lost the audio sync with the video.”*

- Steve Wildstrom, Wildstrom on Tech

*“VidyoPanorama provides a Telepresence experience at a disruptive price point, lowering the barrier of entry for a much larger number of users. And just importantly, Vidyo provides an easy and flexible architecture for service providers to deploy cloud-based Telepresence services.”*

- Jeremy Duke, Synergy Research



## VidyoPanorama Specifications At-a-Glance

Complete solution starts with 2-screen configuration, supports up to 9-screens now, and scales to 20-screens in the future.

### Vidyo Components:

- Controller Node: Performing encoding and stream switching for the decoder node
- Panorama Decoder Node: Performing decoding for incoming streams
- VidyoRemote software: Providing user interface with simplicity and flexibility

### Off-the-Shelf Components:

- Displays
- Camera
- Audio system
- Tablet running VidyoRemote software

### Partner Components:

- Room design
- Room implementation

### Customer Components:

- Ethernet Switch: HP Procurve 1810G 24-Port Switch, or Cisco Catalyst 2960 Series Switch
- Modern quality Netgear or Linksys Wi-Fi Wireless Router

### Bandwidth Requirements:

- Minimum 1Mbps for 720p 30fps stream
- Minimum 2Mbps for 1080p 60fps stream