



# VidyoRouter



At the heart of the VidyoConferencing™ 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. The VidyoRouter is the keystone in this major architectural change for video conferencing.

## VidyoRouter Benefits:

- Enables every end point to perform up to its potential without impacting others in the conference
- Industry leading network error concealment – great quality over the Internet and wireless networks
- Highly scalable – 100 concurrent HD multipoint VidyoLines per networkable VidyoRouter
- Floating VidyoLine licenses – economical global deployment and redundancy
- Built-in secure firewall traversal

VidyoConferencing 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. Vidyo’s intelligent VidyoRouter ensures that this packet-switching is handled with optimal efficiency — without either degrading the quality of the video or adding noticeable latency, yet it delivers rate matched and resolution matched streams to each endpoint while providing industry leading network error resiliency – key to leveraging the public Internet and wireless networks to make visual communication work wherever you do.

The VidyoRouter significantly improves network utilization efficiency by sending along only as many packets as an endpoint is capable of handling, depending on limitations in bandwidth, processing power and screen resolution. And because the amount of processing power and bandwidth available is dynamic, the VidyoRouter constantly tests and recalibrates what it should be sending to each endpoint, ensuring that each endpoint is provided with the highest quality video it’s capable of receiving — even as local conditions change from one moment to the next.

VidyoRouter Cloud Edition further improves bandwidth efficiency across the wide area network (WAN). Cloud edition networks VidyoRouters with one another, enabling endpoints to connect to whichever VidyoRouter is closest, regardless of which VidyoRouter is “hosting” the meeting. As a result, traffic is localized at each VidyoRouter, which then sends the video stream of each of the near-end participants just once across the WAN to the remote VidyoRouter where far-end participants are connected, rather than sending each near-end participant’s video stream to each far-end participant individually. Elimination of this redundant transmission across higher cost WAN bandwidth yields significant operating cost savings for geographically dispersed deployments.

Firewall traversal is made easier and more cost effective than ever before with the VidyoRouter Cloud Edition. By deploying low cost VidyoRouters in the corporate network and in the DMZ or other publicly accessible location, administrators are able to define explicit IP to IP rules on the firewall to enable secure traversal without the performance impact that can be associated with a proxy-based solution. No costly purpose-built hardware or licensing schemes are required and there is no need to tunnel traffic on a specific port.



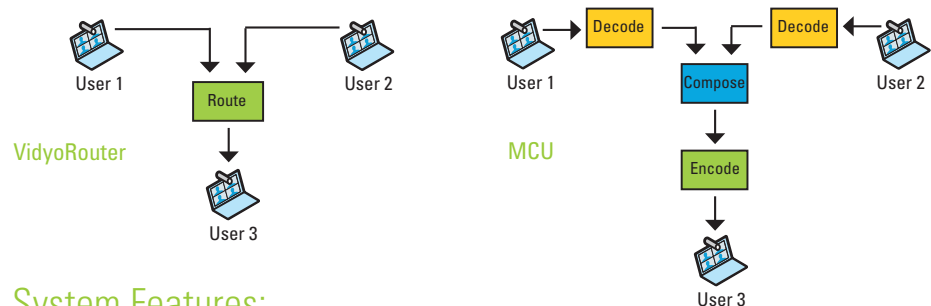


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Each VidyoRouter supports up to 100 HD 1440p perpetually licensed VidyoLines. A VidyoLine™ license is a shared resource that enables any VidyoDesktop user to participate in a point-to-point or multipoint Vidyo conference. Since VidyoRooms and legacy endpoints connected through the VidyoGateway do not consume VidyoLine licenses, purchasing and provisioning a VidyoConferencing system is easy and affordable – however many VidyoDesktop users you need to concurrently participate in calls is the number of VidyoLine licenses you need. It's that simple.

With VidyoRouter Cloud Edition, Vidyo conferences can occur across multiple VidyoRouters for unprecedented scalability. Since the VidyoLine software licenses are made centrally available to all VidyoRouters in the network, your ROI is expedited as capacity utilization increases from 8 to 24 hours per day for global deployments and redundancy costs are limited to low cost VidyoRouter appliances.

## VidyoRouter vs Multipoint Control Unit:



## System Features:

### Capacity

- Supports up to 100 HD (1440p) multi-point VidyoLines per VidyoRouter
- Stackable to scale capacity to thousands of HD multipoint VidyoLines
- Software-based VidyoLines – buy only what you need, grow on demand
- Maximizes VidyoLine utilization with “follow-the-sun” floating VidyoLine licenses
- Networkable to support calls spanning multiple VidyoRouters to support more than 100 HD connections in a single call (available in Cloud Edition)

### Performance

- Intelligently identifies and adjusts to bandwidth and network constraints per endpoint – on the fly
- Provides industry leading network error resiliency leveraging H.264 SVC standard
- Imperceptible delay (<20msec) introduced to media streams
- No transcoding - no video or audio quality loss
- Performs traffic localization to minimize WAN bandwidth consumption for geographically dispersed deployments (available in Cloud Edition)

### Deployment

- Provides N+1 redundancy with minimal cost due to floating port licenses
- Easy to deploy and scale – hours, not days
- Built-in NAT and firewall traversal software – no additional equipment required
  - VidyoProxy software included on VidyoRouter and VidyoDesktop
  - VidyoRouters on either side of the firewall with explicit IP to IP rules between them – no proxy required (available in Cloud Edition)

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## VidyoRouter Specifications:

The VidyoRouter ensures a video experience of consistent quality that is free of blurry images and broken pictures, even in lossy environments like wireless and the Internet.

### PHYSICAL SPECIFICATIONS

**DIMENSIONS:** Height: 14.96" (380 mm)  
Width: 16.92" (430 mm)  
Depth: 1.7" (43.4 mm)  
Gross Weight: 8.4 lbs (3.85 kg)  
Form Factor: 1U Rackmount

**BACK PANEL:** **Ports**  
2x RJ45 LAN ports - 100BASE-TX, and 1000BASE-T  
1 x External Serial Port  
2 x USB2.0 ports  
1 x VGA port  
1 x PS/2 Keyboard port  
1 x PS/2 Mouse port

**FRONT PANEL:** **Buttons**  
Power On/Off button  
**LEDs**  
Power LED  
Hard drive activity LED  
2x Network activity LEDs  
System Overheat LED  
**Ports**  
2x USB2.0 Ports

**OPERATING ENVIRONMENT:** **Operating Temperature**  
Range: 10° to ~35°C (50° to 95° F)  
**Non-Operating Temperature**  
Range: -40° to ~70°C (-40° to 158° F)  
**Non-Operating Humidity**  
Range: 20% to ~ 90% (non-condensing )

**REGULATORY:** US/Canada: (UL1950-CSA950)  
Europe: (CE, EN55022 compliance to EU Directive 89/366/EEC)  
Europe: (TUV)  
US: (FCC, CFR47 Part 15, Class A, Class B)  
Europe: (CE, EN55022 & EN55024)  
Australia: (C-TICK)  
Taiwan: (BSMI)  
China: (CCC)

**POWER SUPPLY:** INPUT: 100-240v ~, 4-2A, 60-50Hz  
OUTPUT: 220w Single Power Supply

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