

Problem Connecting VidyoDesktop: Not Fully Registered. Able to loain but not reaistering or connecting calls **Problems Starting VidyoConference** Check the following: Start the Vidvo Desktop application: Do vou see VidyoDesktop icon Is the person Firewall is blocking the VidyoRouter signaling port (default is SCIP Port: TCP 17990) Windows: ín your system tray icon next to Go to Start/Programs/Vidvo Desktop (Windows): or dot your name on Verify local security policy/malware/local firewall isn't blocking the next to Icon in Dock the portal page application. Mac: (Mac)? areen? Computer does not meet system minimum requirements. Typically a Click on VidyoDesktop icon in Dock. Error pop-up window is displayed with message or Exception fault. Refer to User Guide for minimum system requirements. For Windows and DirectX Error, refer to DirectX Troubleshooting flowchart. Yes If system is configured for encrypted media, client computer may not have required root certificate loaded. If common CA certificate used, No-Yes upgrade OS from OS manufacturer for latest Root Certificates update. From the VidyoPortal home For self-signed system, load self-signed root certificate on client system. page click on "My Room" Check the following: then "Join Room" No Verify local security policy/malware/PC Yes firewall isn't blocking the application Is the person registration: icon next to Make sure VidyoManager port is open (default is EMCP Port: TCP 17992). vour name on the portal page Client may be behind restricted firewall Did you Check the following:: green? (i.e. with only ports 80 and 443 open), Firewall is blocking the VidyoRouter media successfully ports (default range: UDP 50000-65535) such users may use VidyoProxy if start a configured for use on the VidvoPortal. Verify local security policy/malware/local conference? Enable 'Always Use VidyoProxy' in firewall isn't blocking the application. client configuration under Network Web Proxy or Filter is interfering with the UDP section, and attempt Portal login Yes, but call drops media. Check Proxy settings or see network again. within a few VidyoDesktop may have 'Always Use minutes Network Firewall/Router is set for UDP timeout VidyoProxy' enabled and VidyoProxy (indicative of consistent timing of call drop, i.e. is not configured for the system or Yes unavailable. Disable 'Always Use VidyoProxy' in client configuration under Network section, and attempt Portal login again. Yes, and stavs Check browser settings to see if a web connected, but Did vou Yes, see self and proxy is needed No Video - See From the VidyoPortal home Yes successfully start stays connected. If Web Proxy present: Either see about No Video page click on "My Room" and maintain a Exception for Vidyo being set in web Flowcharts/ then "Join Room" conference? proxy or filter: or use VidyoDesktop Web Proxy support feature to configure web proxy ·No info and authentication. Feature settings are located in VidyoDesktop Send VidyoDesktop logs to Support. configuration, under Network settings. Resolved Please refer to the VidyoDesktop User For Windows: Logs will be found in Documents/Vidyo Guide for more details. Desktop, Send all VidvoDesktop logs. For Mac: Logs will be found under /Users/{username}/Library/Logs/Vidyo Desktop

No Audio - Cannot Hear Others Cannot hear remote participants Check the following: Is the speaker icon in Click on Speaker the VidyoDesktop Can you hear Check VidyoDesktop application playback Resolved Yesicon in toolbar to Yeseveryone now? application toolbar volume: Click on the down-arrow next to the un-mute speaker Red (muted)? Speaker Icon and ensure volume is not all the way down. Proper speaker device is selected in the VidyoDesktop Configuration: Click the Settings icon (sprocket), go to Devices, Verify proper Speaker is selected. Headset or speakerphone speaker is muted or Issue is on the one volume too low: Check device locally for mute participant's end. button/switch, and volume levels. follow Is it only one Your computer's Playback level setting is muted "No Audio - Others participant who you Are others able to Noor too low: Check playback device settings in Cannot Hear Me" hear participant? cannot hear or all system audio/sound control panel. flowchart to participants? diagnose the If USB headset or speakerphone is plugged into unheard participant USB hub (note often desktop front USB ports are Yes actually a hub): move device to direct local USB port on computer (rear port for desktop). Is audio heard when using other applications? In Vidyo Desktop application toolbar, If not, check computer's audio setup and settings. click the Settings icon (sprocket), and on Status page, click Conference Audio packet loss - In Vidyo Desktop application Status button. Check for Audio Receive toolbar, click the Settings icon (sprocket), and on Bandwidth (A RX KBps) in the Status page, click Conference Status button. Participant list. Check for Audio Receive Bandwidth (A RX KBps) in the Participant list. If none, then the others are muted or audio packets are being dropped on the network, look for increasing NACKs for each participant, if increasing, then network is dropping packets - contact network admin. Are you receiving audio Can you heai packets from everyone now? the participant? Send VidyoDesktop logs to Support. No Yes For Windows: Logs will be found in Documents/Vidyo Desktop. Send all VidyoDesktop logs. Check with VidyoPortal

Resolved

For Mac: Logs will be found under

/Users/{username}/Library/Logs/Vidyo Desktop

system administrator,

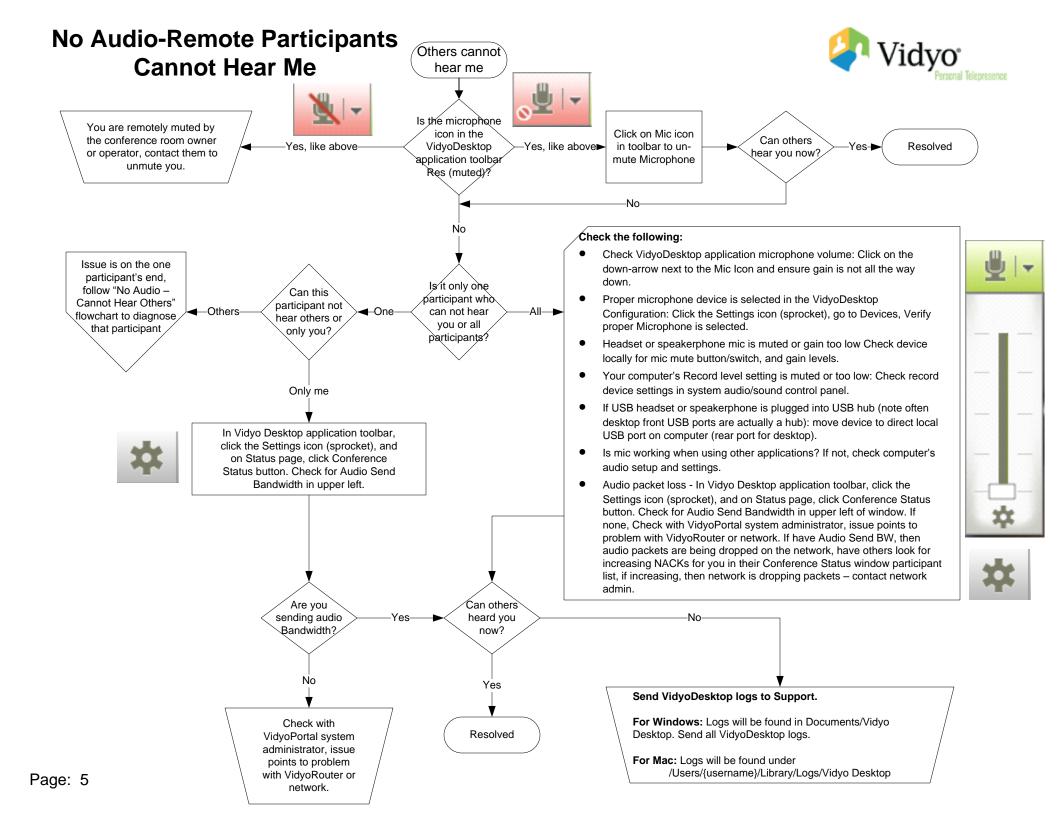
issue points to problem

with VidyoRotuer or network

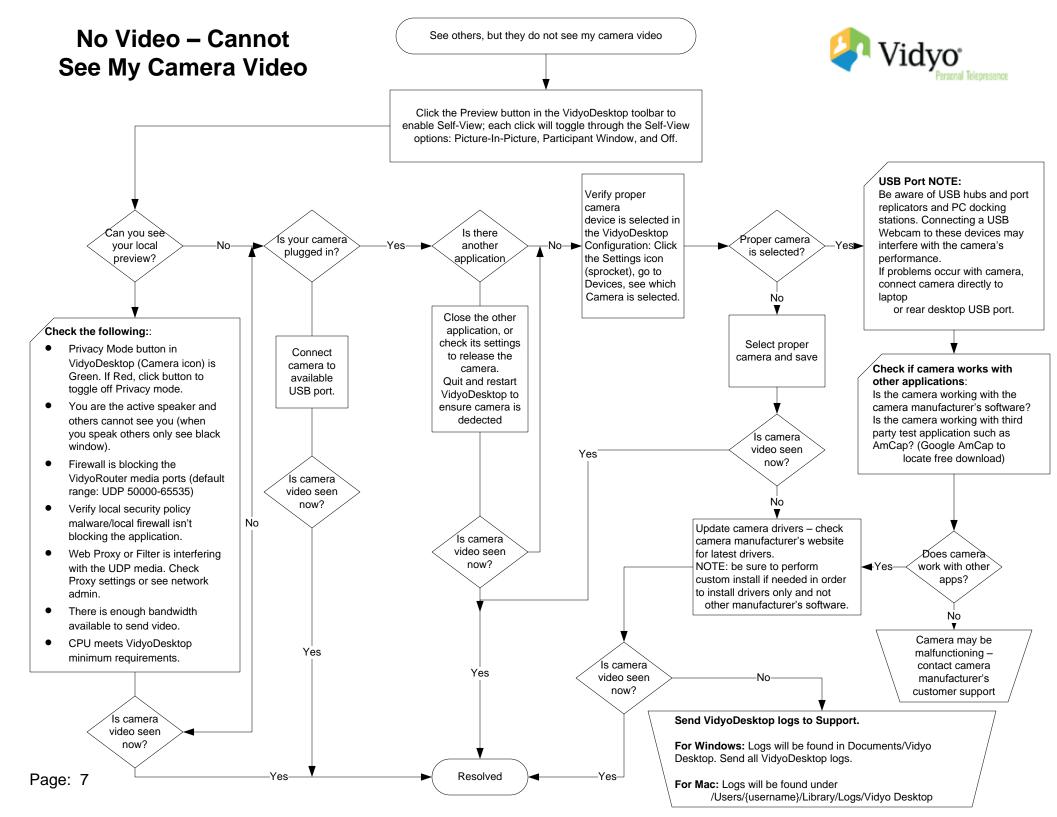








Hearing Echo (Echo, Echo..) on the Call Audio echo on call General Note regarding Echo: Echo is caused by audio looping back via remote Echo is being caused by multiple participants, including the meeting host (yourself). participants' speakers and into their microphone. When on calls with Start by resolving the host's cause of inducing echo by following the remainder of the ∜ho hears ar echo, always stop and ask who hears it. If you hear echo, flowchart tree. echo when Everybodythen you are NOT the source of the echo. The person who they speak? does not hear echo is the source. It is a bit backward from Then, as host, have all remote participants mute their microphone in the what you might think. The exception is if more than one VidvoDesktop application toolbar. source is causing the echo. Have remote users un-mute their microphone one at time until you find each user who is causing echo. Follow the remainder of the flowchart tree for each user causing echo. Everybody except 1 User Alternatively, as the Meeting Room owner/Operator/Admin, use the Control Meeting page of the Portal to control the Muting and UnMuting of each participant Verify that the correct speaker and microphone devices are selected in the User's VidyoDesktop application Enable "Echo Cancellation" in the VidyoDesktop application Configuration under Devices. Configuration under Devices. Does the User have a HINT: Have the User tap the microphone Headset, or NOTE: Enabling Echo Cancellation may cause some they believe they are using to verify the Speakerphone with cutting out of users' audio due to half duplexing. device. built-in echo cancellation? Alternatively have the user use earphones like those thatcome Have the User choose appropriate devices with an iPod to physically isolate the audio. (Headset or Echo Cancelling Speakerphone), and Save. If the User does not have a Headset or Echo Cancelling Speakerphone, return to previous question. Note: the built in camera mic does Check the following: not provide Echo Cancellation. VidyoDesktop Speaker and/or Mic volumes - lower each if high. High levels can overdrive the devices. Device Speaker and/or Mic volumes - lower each if high. High Is there still s there still an Resolved levels can overdrive the device. echo? echo? If using AEC Speakerphone, be sure device is clear of any obstacles. Paper, books, shelves, etc that are sitting on top of or too close to the device may cause feedback. No Send VidyoDesktop logs to Support. For Windows: Logs will be found in Documents/Vidyo Is there still an Resolved Yes Desktop. Send all VidyoDesktop logs. echo? Page: 6 For Mac: Logs will be found under /Users/{username}/Library/Logs/Vidyo Desktop

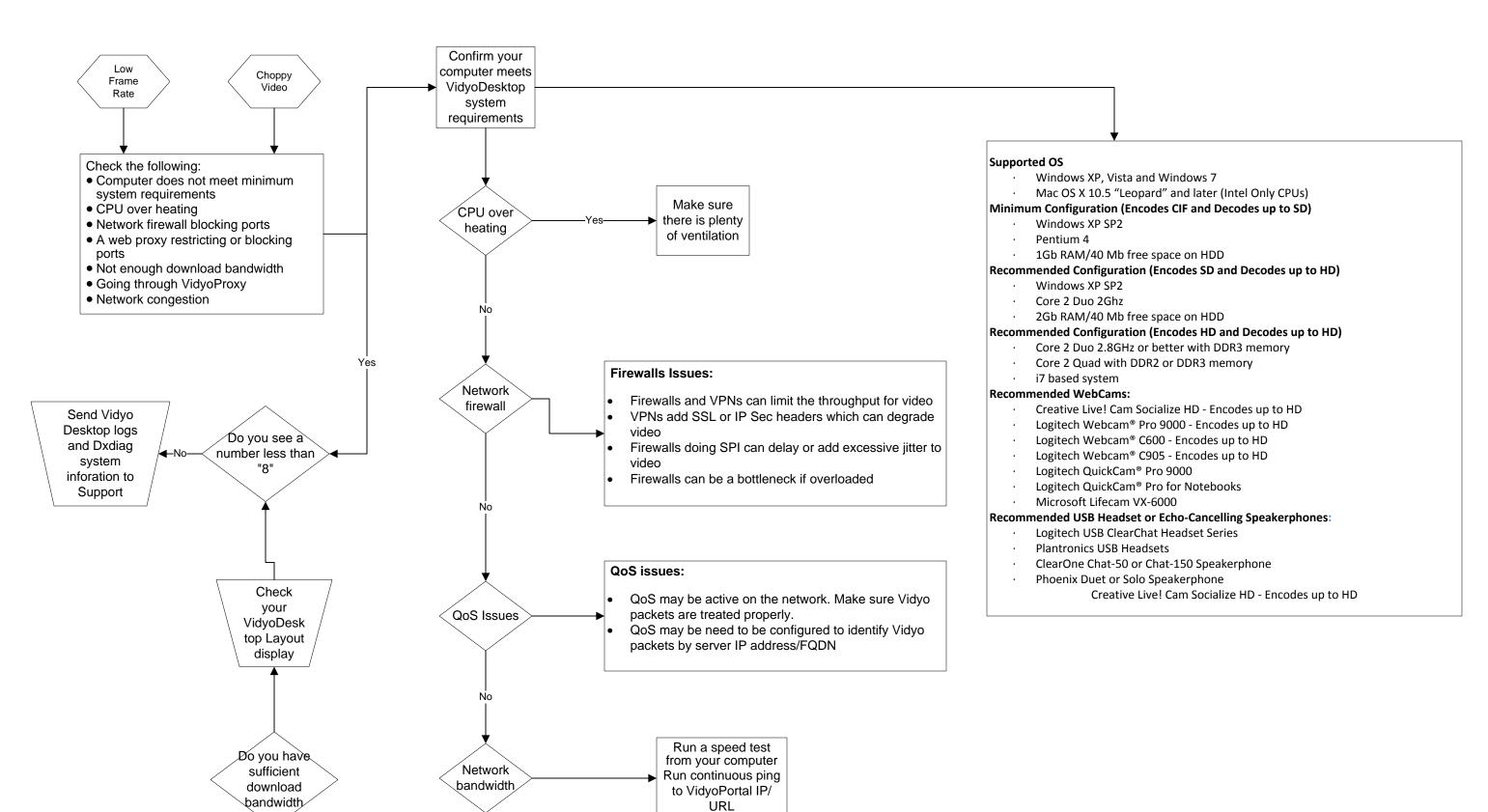


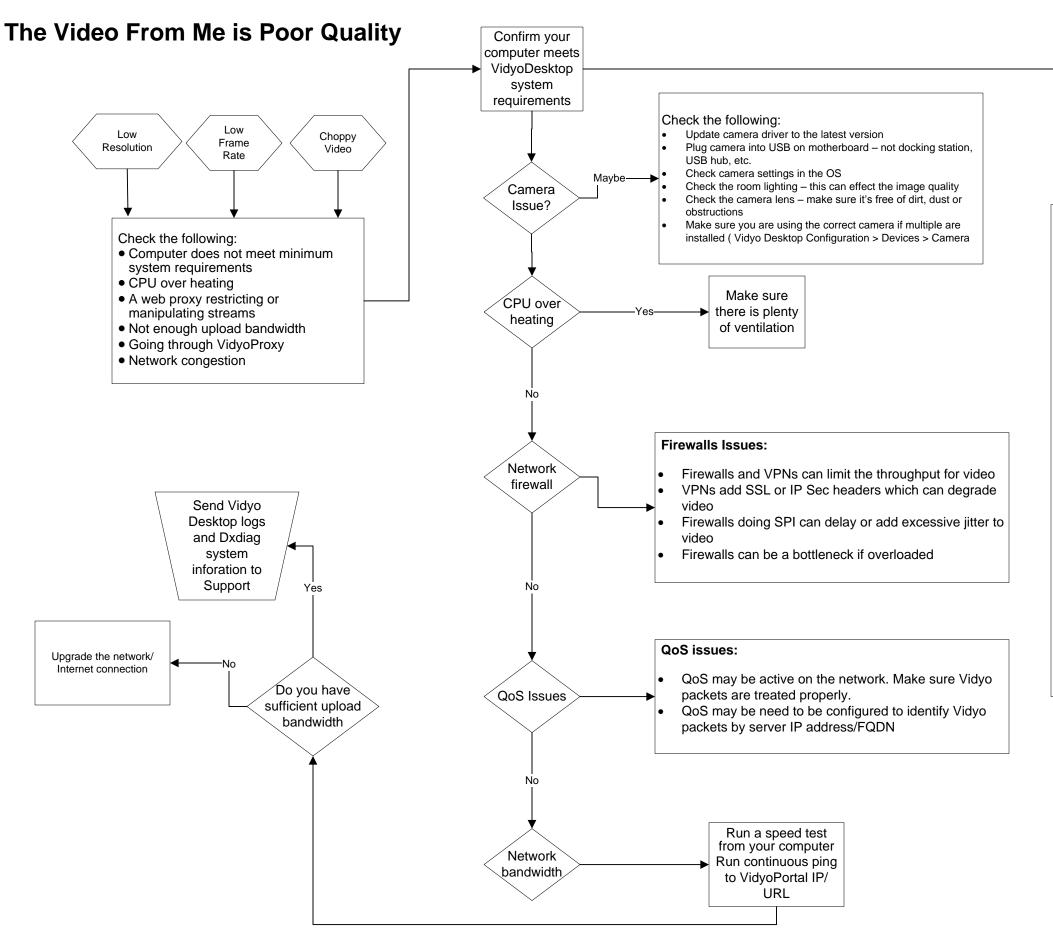
No Video - DirectX Error or See no video (just black window), **Black Window (with others Joined)** or receive a DirectX Error Check the following:: This error can be caused by a couple of issues: Firewall is blocking the VidyoRouter media ports (default DirectX is not installed or not updated to a currently range: UDP 50000-65535) supported version: Does call stay Verify local security policy/malware/local firewall isn't DirectX is installed but acceleration is not enabled: connected and Yes -No---**▶** blocking the application. DirectX is installed and up to date, but the video can you hear Web Proxy or Filter is interfering with the UDP media. card on the PC either does not support DirectX or others? its drivers are not up to date with DirectX support; Check Proxy settings or see network admin. The PC does not meet the minimum system Network Firewall/Router is set for UDP timeout (indicativ) of requirements to run VidyoDesktop. consistent timing of call drop, i.e. 2 Min) To resolve which one is causing the problem, do the following: 1) Verify that the PC's Hardware Acceleration is set to Full. Go to the DXDIAG Go to Start Menu then Settings / Control Panel and open the Display Display control panel. Select the Settings TAB, then the Is DirectX VidvoDesktop TAB and see s the VRAM Advanced button, then the Troubleshoot TAB, and make sure version 9.0c or requires minimum xorqqA' 128MB or Nothe Hardware Acceleration slider is all the way right to Full. higher 128MB of VRAM -Total Memory' line higher 2) Go to Start Run and enter DXDIAG and press OK. This will installed? upgrade graphics. under launch the DirectX Diagnostic utility. Verify your DirectX Device section. Version on the first tab 'System'; version is listed as the last **▲** No item in the middle of the window. No In DXDIAG / Display TAB, under DirectX Features: verify that both DirectDraw Is the error and Direct3D Acceleration Install DirectX or upgrade version. resolved and are Fnabled. Available at microsoft.com are you seeing video? If DirectX version is up to date and all the accelerations are Enabled or the acceleration Enable buttons are greyed out; then the PC's graphics adapter either does Are DirectDraw AND Yes not support DirectX or its drivers need to be updated to Direct3D Acceleration Yesenable full DirectX support. Enabled? Verify what display adapter is on the PC (view under Resolved DXDIAG / Display / Device), what drivers are installed No (view under DXDIAG / Display / Drivers), and check out the manufacturer's website to determine if that particular card supports DirectX and at what Driver version. Enable these options in DXDIAG: Is the error resolved and **Direct Draw Acceleration** Update the display adapter drivers for full DirectX Yes are you seeing support. **Direct 3D Acceleration** video? If the graphics card in use does not support DirectX – upgrade graphics. Send VidyoDesktop logs to Support. If none of the above is Is the error the answer, then it most For Windows: Logs will be found in Documents/Vidyo resolved and likely means the CPU Desktop. Send all VidyoDesktop logs. are you seeing and GPU combo does video? not meet minimum For Mac: Logs will be found under Page: 8 requirements. /Users/{username}/Library/Logs/Vidyo Desktop

No Video - DirectX Error or Choppy/Freezing Video/Audio Low Video Resolution / Frame Rate **Black Window (with others Joined)** Is the AV issue Check the following: All points to issue with experienced by all Group points to a network issue for the overall network, usually AIIparticipants, or a Group— VidvoPortal Group setting: see if at server side. group/single group's network Meeting Room's or Owner's participant? Group setting has Bandwidth restrictions. VidyoRouter Bandwidth - 2-3MB Single per Port/Line Check the following: Server Ethernet Speed/Duplex-Single points to network VidyoPortal Group setting: see if Meeting Auto/Auto by default; if switch issue on that user's side, or Room's or Owner's Group setting has port is 100/Full, change Porta/ a issue with user's Computer Bandwidth restrictions. Router port via Shell Admin A Web Proxy / Filter restricting or inspecting Menu Option 5 to Auto Off. traffic Not enough bandwidth - check VidyoDesktop Settings Status page for Alarm messages [Config icon (sprocket) will Firewalls Issues: In Vidyo Desktop application toolbar, click the be Red]. Run tests at speedtest.net and Firewalls and VPNs can limit the Settings icon (sprocket), and on Status page, pingtest.net to check network conditions (test to servers close to Router location and click Conference Status button. Bandwidth/ throughput for video Firewall/VPN Check Total Send and Receive Bandwidths (in close to user to compare) .. Network VPNs add SSL or IP Sec upper left), see if low. Using VidyoProxy - check user's Settings headers which can degrade Check CPU Usage (lower left), see if over 80% Status page for 'Using VidyoProxy video message: VidyoProxy may degrade quality Firewalls doing SPI can delay or of conference due to using all TCP (usually add excessive jitter to video worse quality the further user is from VidyoRouter) Firewalls can be a bottleneck if High CPU overloaded Network congestion - packet loss - In Vidyo Check the following: Desktop application toolbar, click the Computer on low end of system requirements: refer to Settings icon (sprocket), and on Status page, click Conference Status button. Check VidyoDesktop User Guide for minimum vs recommended system for Receive Bandwidths (RX KBps) in the requirements. QoS issues: Participant list. If none, then the others are CPU in heavy use – Stop other apps to free resources. QoS may be active on the muted or packets are being dropped on the CPU in PowerSaver mode – if on battery, connect to power supply. network, look for increasing NACKs for each network. Make sure Vidyo packets are treated properly. participant, if increasing, then network is CPU over heating - check System Control Panel and look for large dropping packets - contact network admin. QoS may need to be configured discrepancy between rated and actual running speed of CPU -Users on wireless - test wired only to see if to identify Vidyo packets by check PC ventilation. Portal and Router(s) IP wireless issue (Access Point placement, USB issue – USB bus is interfering with audio or video throughput: Wireless interference / Channel overlapping, address(es)/FQDN(s) try other ports, update BIOS and/or chipset drivers. Congestion / Half Duplex / Collisions Send VidyoDesktop logs to Support. After checking and For Windows: Logs will be found in Documents/Vidyo working through all bullet Desktop. Send all VidyoDesktop logs. points, is AV quality better? For Mac: Logs will be found under /Users/{username}/Library/Logs/Vidyo Desktop Yes Page: 9 Resolved

My Receive Video is Poor









Supported OS

- · Windows XP, Vista and Windows 7
- Mac OS X 10.5 "Leopard" and later (Intel Only CPUs)

Minimum Configuration (Encodes CIF and Decodes up to SD)

- Windows XP SP2
- Pentium 4
- 1Gb RAM/40 Mb free space on HDD

Recommended Configuration (Encodes SD and Decodes up to HD)

- Windows XP SP2
- · Core 2 Duo 2Ghz
- 2Gb RAM/40 Mb free space on HDD

Recommended Configuration (Encodes HD and Decodes up to HD)

- Core 2 Duo 2.8GHz or better with DDR3 memory
- Core 2 Quad with DDR2 or DDR3 memory
- · i7 based system

Recommended WebCams:

- Creative Live! Cam Socialize HD Encodes up to HD
- Logitech Webcam® Pro 9000 Encodes up to HD
- Logitech Webcam® C600 Encodes up to HD
- Logitech Webcam® C905 Encodes up to HD
- Logitech QuickCam® Pro 9000
- · Logitech QuickCam® Pro for Notebooks
- Microsoft Lifecam VX-6000

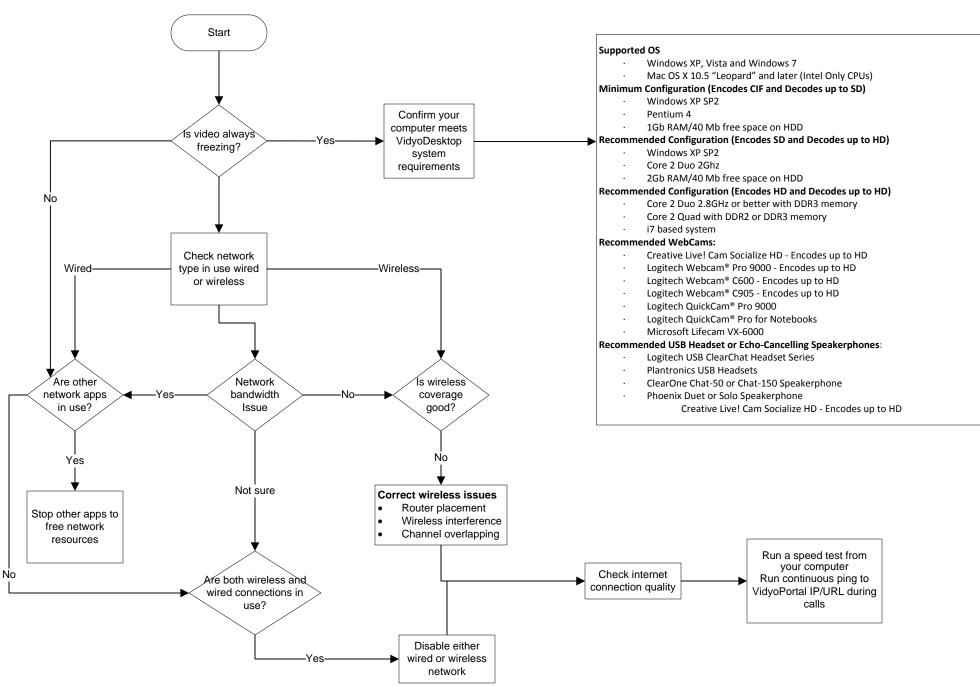
Recommended USB Headset or Echo-Cancelling Speakerphones:

- · Logitech USB ClearChat Headset Series
- Plantronics USB Headsets
- ClearOne Chat-50 or Chat-150 Speakerphone
- Phoenix Duet or Solo Speakerphone

Creative Live! Cam Socialize HD - Encodes up to HD

Video is Bad (Choppy/Freezing)





VidyoConferencing Specific Ports (ports in red are critical):

TCP Port 80 Web Access to VidyoPortal
TCP Port 443 Seccure Web Access to VidyoPortal
TCP Port 17992 Clent Connection to VidyoPortal
TCP Port 17990 Client Connection to VidyoRouter
Dynamic UDP Ports 50,000-65535 Inbound/Outbound Media (6 ports per call)

Start the Vidyo Desktop application:

Windows: Go to Start/Programs/Vidyo Desktop

Mac: Click on VidyoDesktop icon in Dock.

Check the following:

- Corporate firewall is blocking the required TCP ports (17990 and 17992)
- Web proxy is denying access.