

Tech specifications for users Webcamconsult

1. Supported platforms (device, os, browsers)

1.1 Desktop

- Chrome latest release version
- Firefox latest release version
- Opera latest release version
- Electron latest release version
- Safari latest release version
- Microsoft Edge latest release version

1.2 Mobile

- iOS 6.0 and higher
 - Safari
- Android 4.1+ and higher
 - Firefox for Android latest release version
 - Chrome for Android latest release version

2. Minimum system requirements

2.1 Bandwith

- Video: 300 kbps (recommended lowest level).
- Audio: 50 kbps (recommended lowest level).

2.2 Video

- Video resolutions — browsers:
 - 1280 x 720

- 640 x 480
- 320 x 240
- Video resolutions — mobile:
 - Dynamic/responsive
- H.264 video format (WebRTC standard/iOS compatible)
- OpenTok Intelligent Quality Control traffic shaping

2.3 Other recommendations

- Headsets with microphone for improved audio quality and privacy
- USB echo-cancelling speaker telephones for meeting rooms.
- Please check table below for video quality vs bandwidth + packet loss.

Quality	Video Resolution @ FPS	Video kbps	Packet Loss
Excellent	1280x720 @ 30	> 1000	< 0.5%
Excellent	640x480 @ 30	> 600	< 0.5%
Excellent	352x288 @ 30	> 300	< 0.5%
Excellent	320x240 @ 30	>300	< 0.5%
Acceptable	1280x720 @ 30	> 350	< 3%
Acceptable	640x480 @ 30	> 250	< 3%
Acceptable	352x288 @ 30	> 150	< 3%
Acceptable	320x240 @ 30	> 150	< 3%

3. Firewalls

For usage in firewall protected environments, our services require access to specific ports. At a minimum the following requirements must be met:

Open TCP port 443 and whitelist the following domains: *.tokbox.com and *.opentok.com

Along with the minimum requirements, opening UDP Port 3478 will give you a better experience. UDP is highly recommended over TCP for better quality audio and video. The protocol favors timeliness over reliability which is consistent with the human perceptive preferences; where we can fill in gaps but are sensitive to time-based delays.

This port only accepts inbound traffic after an outbound request is sent. The connection is bidirectional but is always initiated from the corporate network/client so it is not possible for an external entity to send malicious traffic in the opposite direction. For the best possible experience, we recommend opening UDP ports 1025 - 65535.

4. VDI

Citrix and VMware networks often show problems because originally they are not designed for videostreaming to clients (Thin or Zero). However recent versions (since the end of 2018) are capable of handling videostreaming. This relates also to firmware for clients. For older versions in some case patches are available through specialists in the field.