

Streaming video functions

For each function the following is provided:

The operation flowchart specifying interaction protocols between the client (clients) and the server (servers)

Function operation sequence (Call Flow)

Brief manual on how to test the function based on examples shipped with WCS and available via the web interface

Changes in server settings (if necessary)

- Stream capturing and publishing to the server
 - From a web camera in a browser via WebRTC
 - From the computer screen (screen sharing) in a browser via WebRTC
 - From an HTML5 Canvas element (whiteboard) in a browser via WebRTC
 - By means of Flash Player via RTMP
 - Using RTMP encoder
 - Using Adobe FMLE
 - Using ffmpeg
 - Using OBS Studio
 - Using Wirecast
 - From an IP camera via RTSP
 - From another server via RTMP
 - RTMP stream capturing by re-publishing from another RTMP server
 - From another WCS server via WebRTC
 - From an Android mobile app via WebRTC
 - From an iOS mobile app via WebRTC
 - Capturing VOD from a file
 - RTP stream publishing via RTSP
 - MPEG-TS RTP stream publishing
 - WebRTC publishing via WHIP
 - Automatic streams capture on server start
 - RTSP-interleaved stream capture from dump file
 - Managing camera and microphone
 - Bitrate management when capturing WebRTC stream in browser
 - Key frames management while capturing WebRTC in browser
 - Published stream normalizing
 - Jitter buffer and frames collection in stream published
- Captured stream management
 - Stream recording
 - Stopping the video stream on the server side
 - Taking a PNG snapshot of the stream
 - Stream decoding
 - Stream transcoding
 - Stream watermarking
 - FPS filter
 - Using AAC codecs
 - WebRTC stream picture rotation
 - Minimal publishing bitrate control
 - Decoded frames interception and handling
 - Decoded frames interception and handling with OpenCV
 - Server audio processing
 - Injecting one stream into another
- Playing a video stream from the server
 - In a browser via WebRTC
 - In a browser using Flash Player via RTMP
 - In a browser via MSE
 - In a browser via Websocket + Canvas, WSPlayer
 - In a browser via HLS
 - In an Android mobile application via WebRTC
 - In an iOS mobile application via WebRTC
 - In a player via RTSP
 - In a player via RTMP
 - In a browser with Delight Player
 - In a browser via WebRTC ABR
 - Stream availability for playback
- Publishing and playing stream via WebRTC over TCP
- Publisher and player channel quality control
- WebRTC traffic encryption hardware acceleration
- DTLS support for WebRTC streaming
- WebRTC RTP bundle support
- IPv6 support for WebRTC
- Websocket traffic proxying for WebRTC publishing/playing
- H264 encoding profiles management
- Stream event passing to subscribers
- Republishing a video stream
 - To another RTMP server
 - Republishing to Youtube
 - Republishing to Facebook
 - Republishing to Wowza
 - Republishing to WCS
 - Republishing to Azure Media Services
 - Republishing to AWS MediaLive
 - Republishing to Periscope, Twitch, Telegram etc

- To another WCS server via WebRTC
- Working with chat rooms