Kyber

High-quality Remote Control of Machines SDK

KYBER

JBK

Jean-Baptiste Kempf

Geek

President of VideoLAN

Developer of VLC media player

Maintainer of libdvdcss/nav/read, libbluray, dav1d...

Community Member of FFmpeg *(CC)*

President of Videolabs, FFlabs

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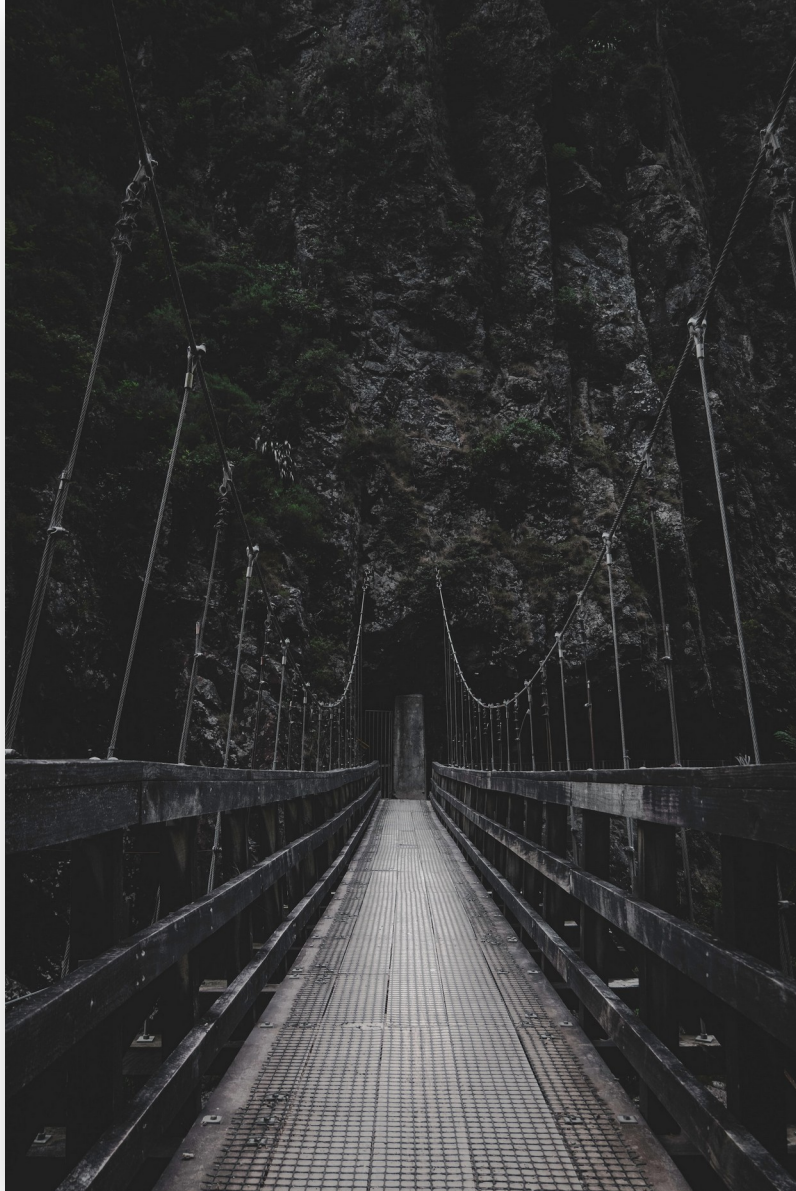
ex-CTO of Cloud Gaming Company Shadow

VP of Engineering of Veepee/Vente-Privée/Privalia

Consultant for boring companies



Remote machines

Remote work.

More mobility.

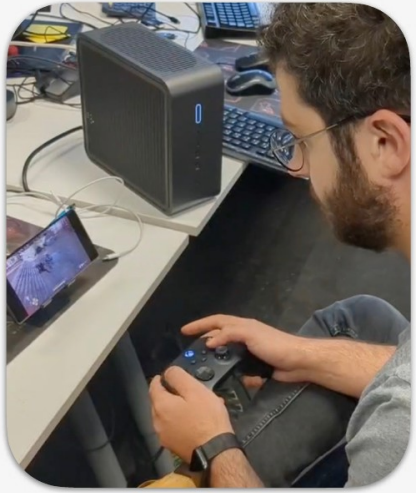
More powerful computation needed

Remote control of machines is an unsolved topic.

Applications of remote interactions

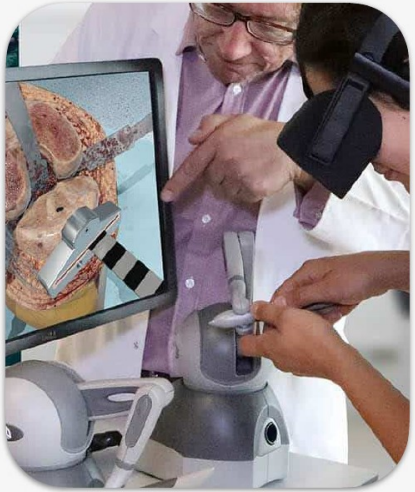
Cloud Desktop

Remote Desktop
VM / VDI
Cloud Gaming



Camera / Robots

Drone Control
Robots
VR / AR supervision

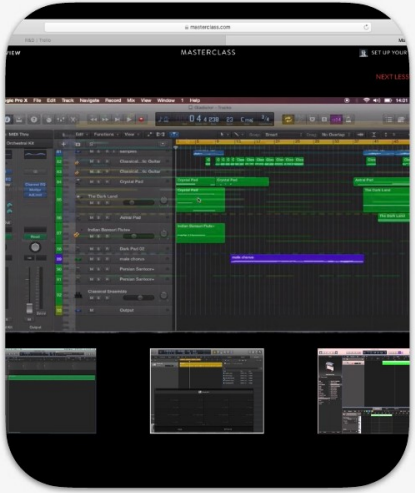


Remote Monitor

Remote Console / STB
Event Production
Industrial supervision

App Streaming

Video Production in the cloud
Demo streaming
Cloud hosted app



Similar Concept
Same technology

KYBER

Our Solution

Technical

WHAT IS IT

- Realtime Video Server, based on FFmpeg libraries

    Pushed-based, graph-oriented, configurable at runtime

- Realtime Video Player, based on libVLC

    Push-based, 0-buffering, modular, configurable at runtime

- Inputs Streaming server

    Pushed-based, graph-oriented, configurable at runtime

- Networking stack

    QUIC, TLS, one-socket, reliable + unreliable, FEC

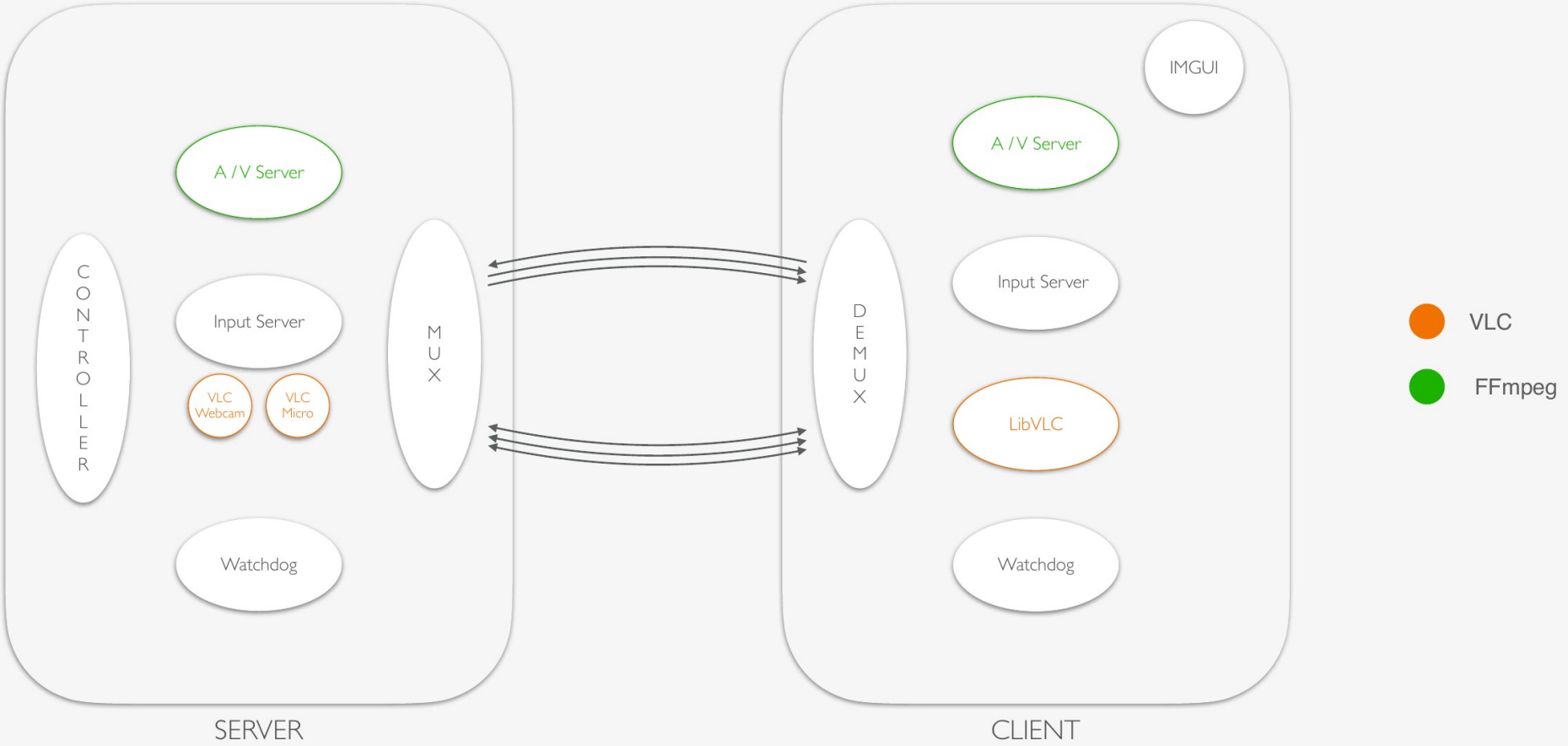
- Controller

    Client to Server interactions

Built in Rust

AGPL + commercial

Cloud computing & Cloud Gaming Architecture



Technical

WHAT CAN IT DO

- Server support

  Windows, Linux *(Wl+X11)*, macOS, Android

- Client support

  Windows, Linux *(Wl+X11)*, macOS, Android, Android TV, ChromeBook, iOS, AppleTV, *Web?*

  Mouse, Keyboard, Gamepad, Copy-paste, File Transfer, USBoIP

- Hardware support

  AMD, nVidia, Intel, ARM hw encoders, Software encoders

- Codec support

  H.264, H.265, AV1. 4:2:0, 4:4:4

  NN for video quality

- Use cases

  Grab desktop, camera, HDMI, Framebuffer *(Hypervisor grab or app)*

THANKS