### WEBRTC

### REAL-TIME COMMUNICATION FOR WEB BROWSERS AND MOBILE APPS

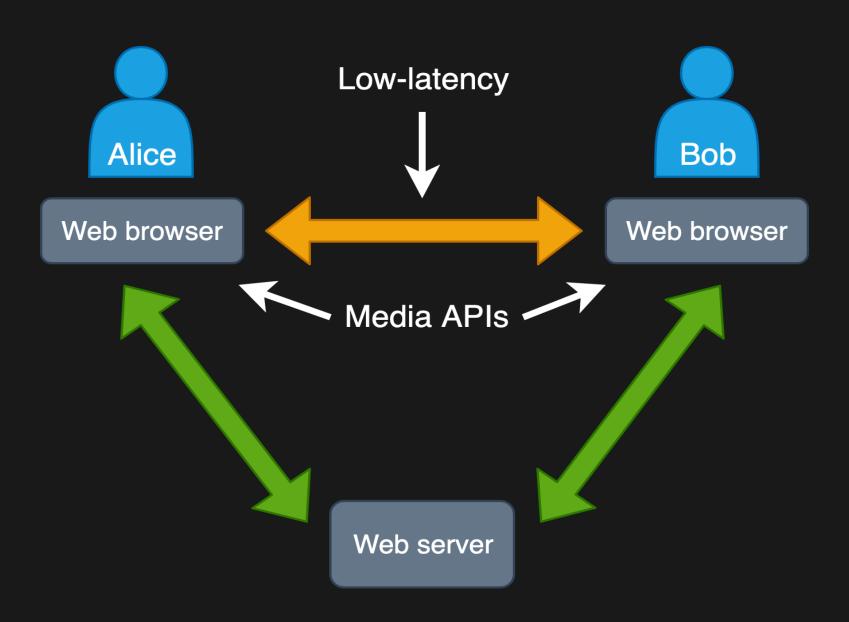
Presented by Marc Plouhinec for the SZJUG.



#### MARC PLOUHINEC

- Passionate full-stack engineer
- 11 years of professional experience
- Currently working at Lazada (Alibaba Group)
- m\_plouhinec@yahoo.fr
- https://github.com/marcplouhinec

### WHAT IS WEBRTC?

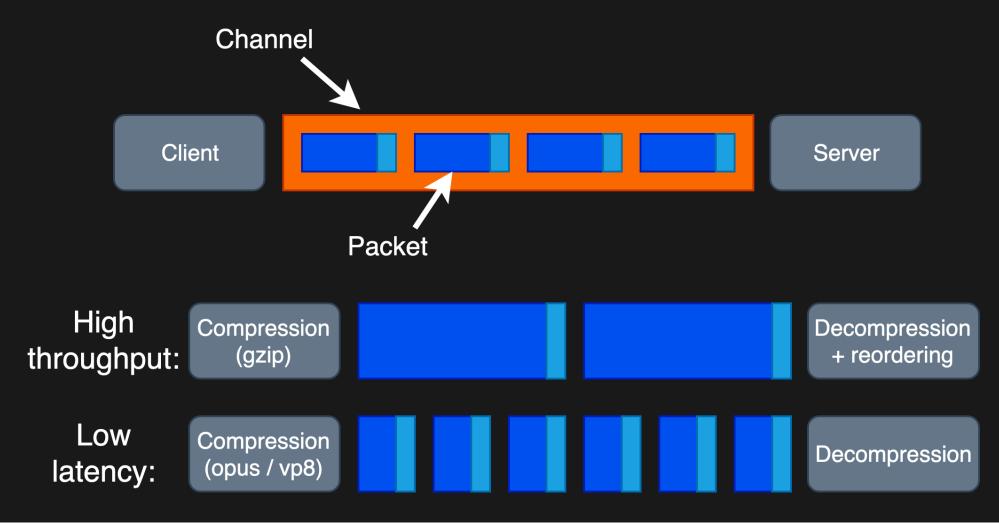


### **USE CASES**

- Conference call (audio, video)
- Games
- Remote desktop
- Local file sharing
- Video on demand
- Collaborative real-time editor
- Video broadcasting
- Remotely-assisted self-driving car

### LOW LATENCY?

- Peer-to-peer connection
- Protocol optimized for low-latency

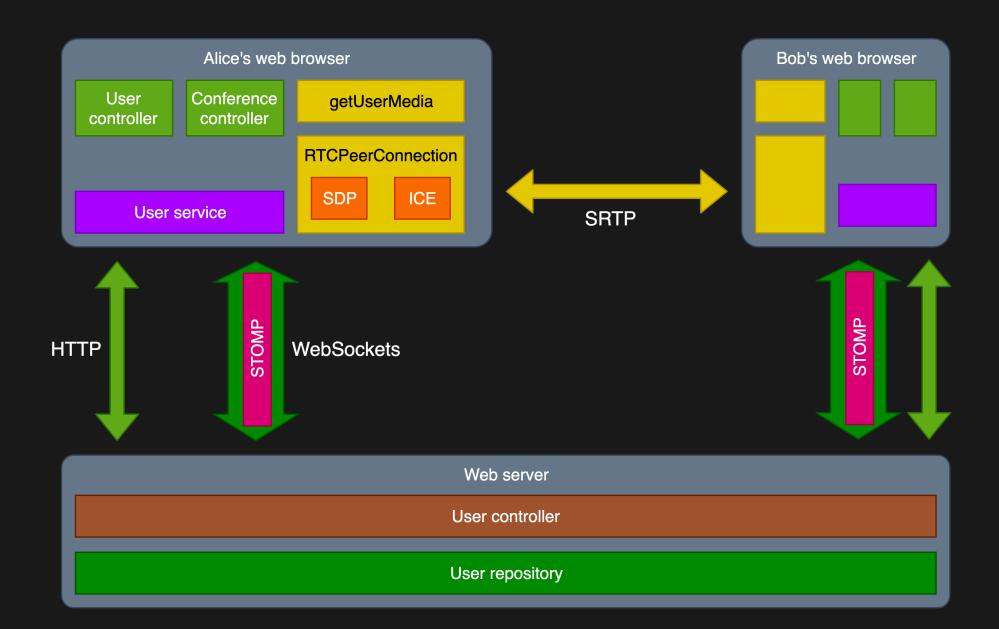


#### **DEMO**

Allow users to find each others and make a video call.

https://github.com/marcplouhinec/webrtcdemo

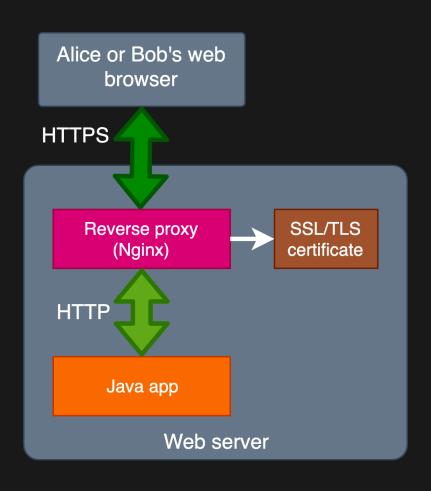
### DEMO ARCHITECTURE



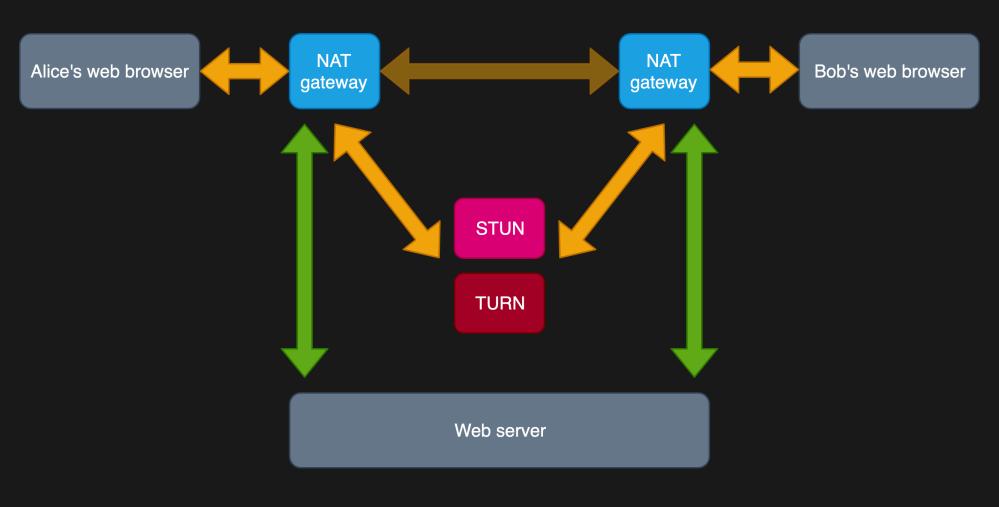
### LOCAL DEPLOYMENT FIRST TRY

Only works locally with Firefox.

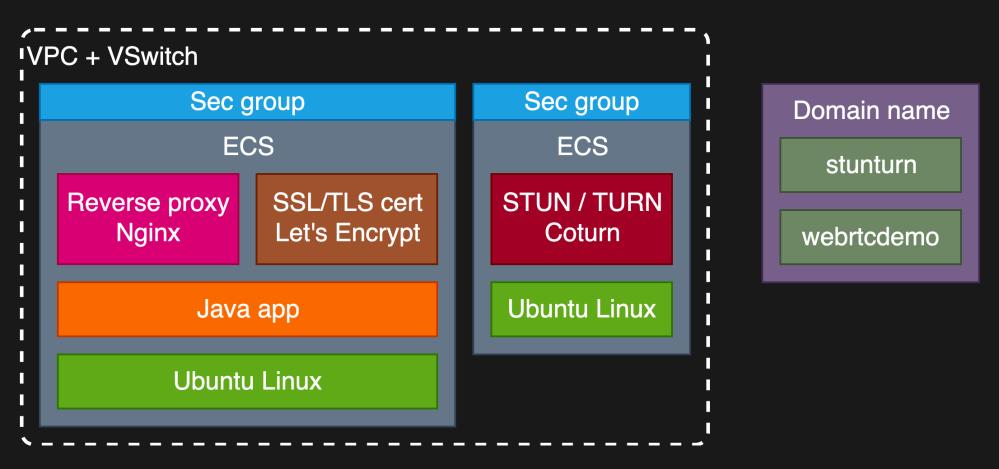
## LOCAL DEPLOYMENT WITH HTTPS



# LOCAL DEPLOYMENT WITH A STUN / TURN SERVER

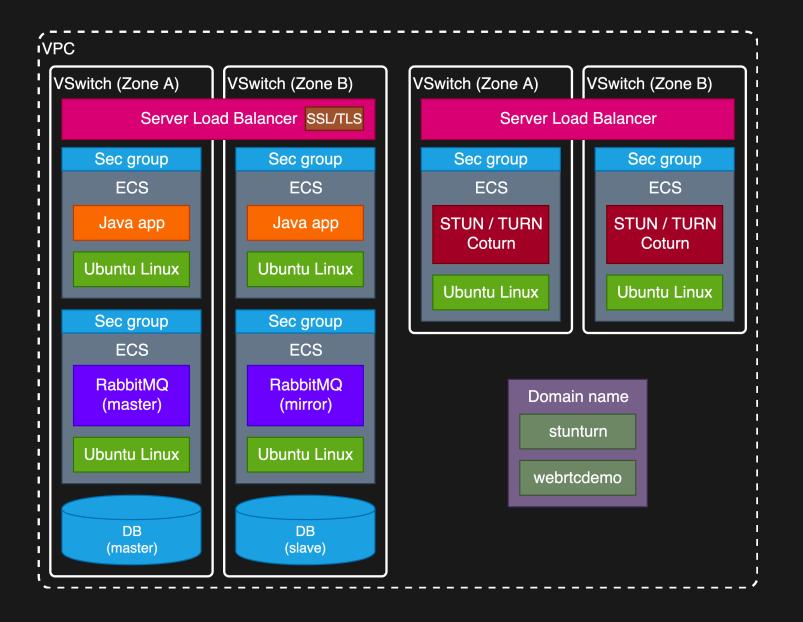


### **CLOUD DEPLOYMENT**



https://webrtcdemo.ydev.xyz/

### **CLOUD DEPLOYMENT (HA)**



### MORE?

- Conference call with more than 2 users → SFU
- Exchanging binary or textual data → DataChannel
- WebRTC for mobile apps Android and iOS libs

#### **USEFUL LINKS**

- Great documentation about WebRTC:
  - https://developer.mozilla.org/en-
  - US/docs/Web/API/WebRTC\_API
- Detailed explanations about the APIs and protocols: https://hpbn.co/webrtc/
- Demo source code:
  - https://github.com/marcplouhinec/webrtcdemo