WHATRTC?

Everything you need to know about connecting browsers to the world

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twilio

CLOUD COMMUNICATIONS

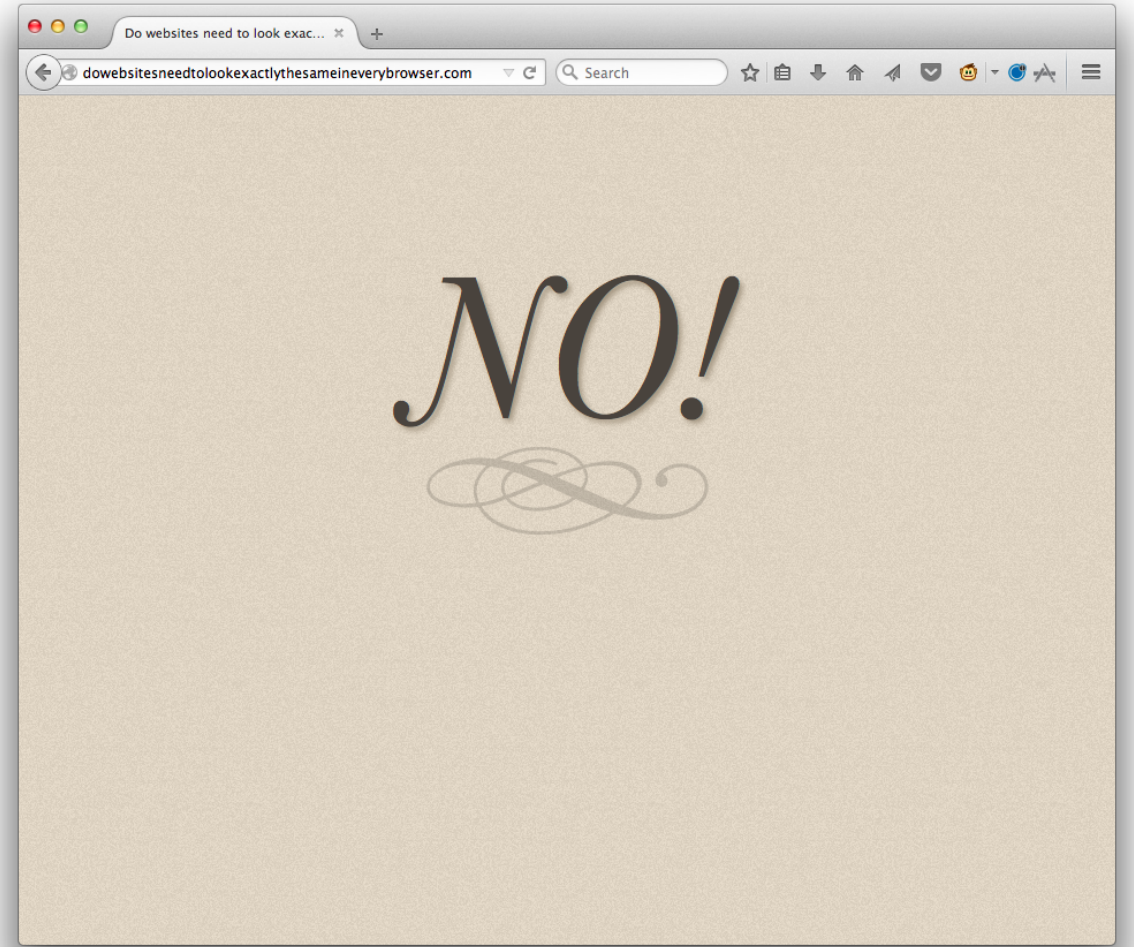
(+48) 79 944 93 06

TECH CHECK

Today

- What is WebRTC?
- How to do WebRTC?
- What to do with WebRTC?

COMMUNICATION


Do websites need to look exac...
dowebsitesneedtolookexactlythesameineverybrowser.com
Search
NO!

Facebook

https://www.facebook.com/?_rdr

Search

Search for people, places and things

Phil | Home

Phil Nash
Edit Profile

- News Feed
- Messages
- Events

PAGES
- Hammer VS The S…
- Create Advert
- Pages feed 20+
- Like Pages
- Create Page

GROUPS
- DevEvangelists
- The Secret Larder …
- (Contains SPOILE… 20+
- Hackathon Hackers 20+
- Techrunners 6
- Touch The Cup
- New Groups 1
- Create group

APPS
- Games
- On This Day
- TwoDots
- Words With Friends
- Pokes

Update Status | Add Photos/Video | Create Photo Album

What's on your mind?

Suggested Post

Property Partner
Sponsored ·

Like Page

Property Crowdfunding

Invest in residential property without a mortgage

All at the click of a button

PROPERTYPARTNER.CO

Learn More

Like · Comment · Share · 64 12 23

Kevin [redacted]
1 hr ·

2 events this week

TRENDING

FC Barcelona: Club Defeats Bayern Munich, 3-0, in 1st Leg of Champions League Semifinal Matchup

Louis Tomlinson: One Direction Singer and Ex-Bandmate Zayn Malik Get Into Social Media Feud

James Duddridge: Conservative Candidate Points Out Spelling Error on Election Leaflet

See more

FEATURED GAME

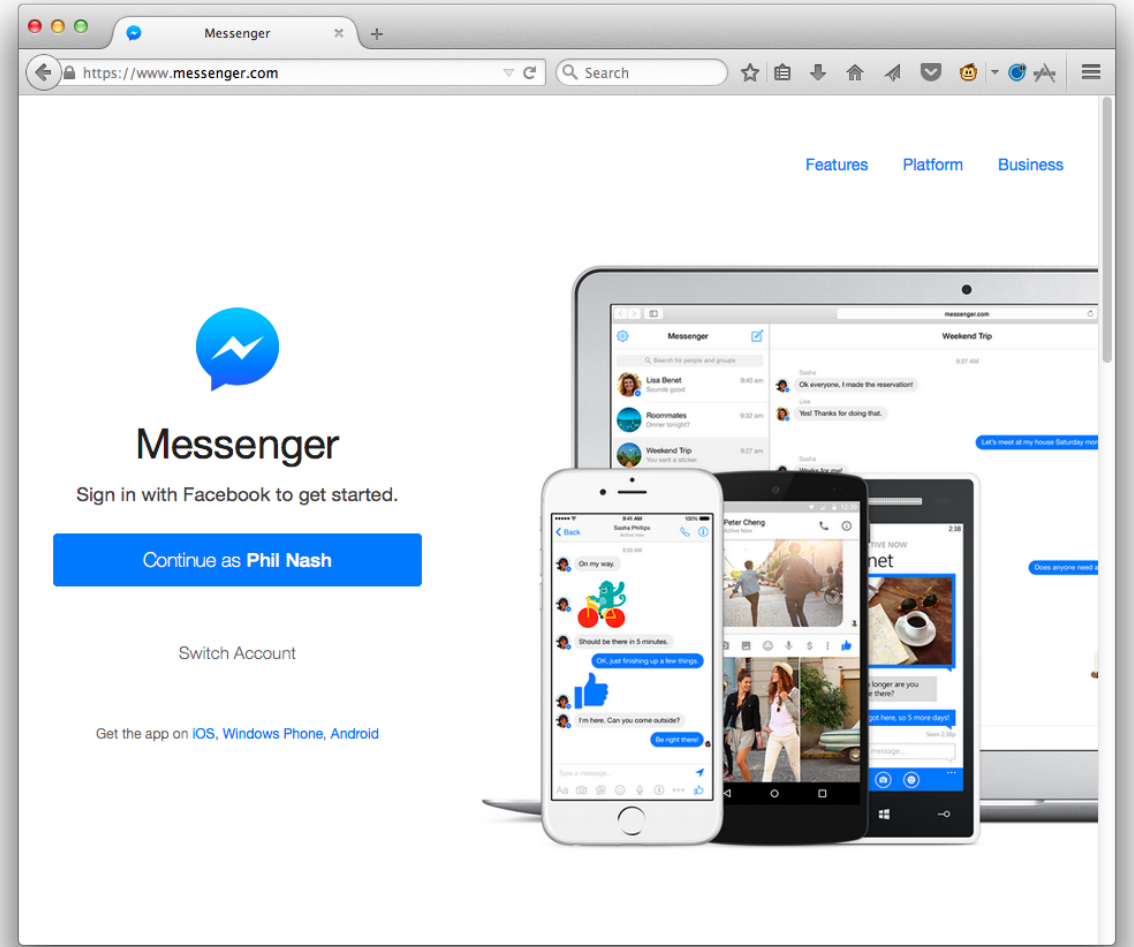
RECOMMENDED GAMES

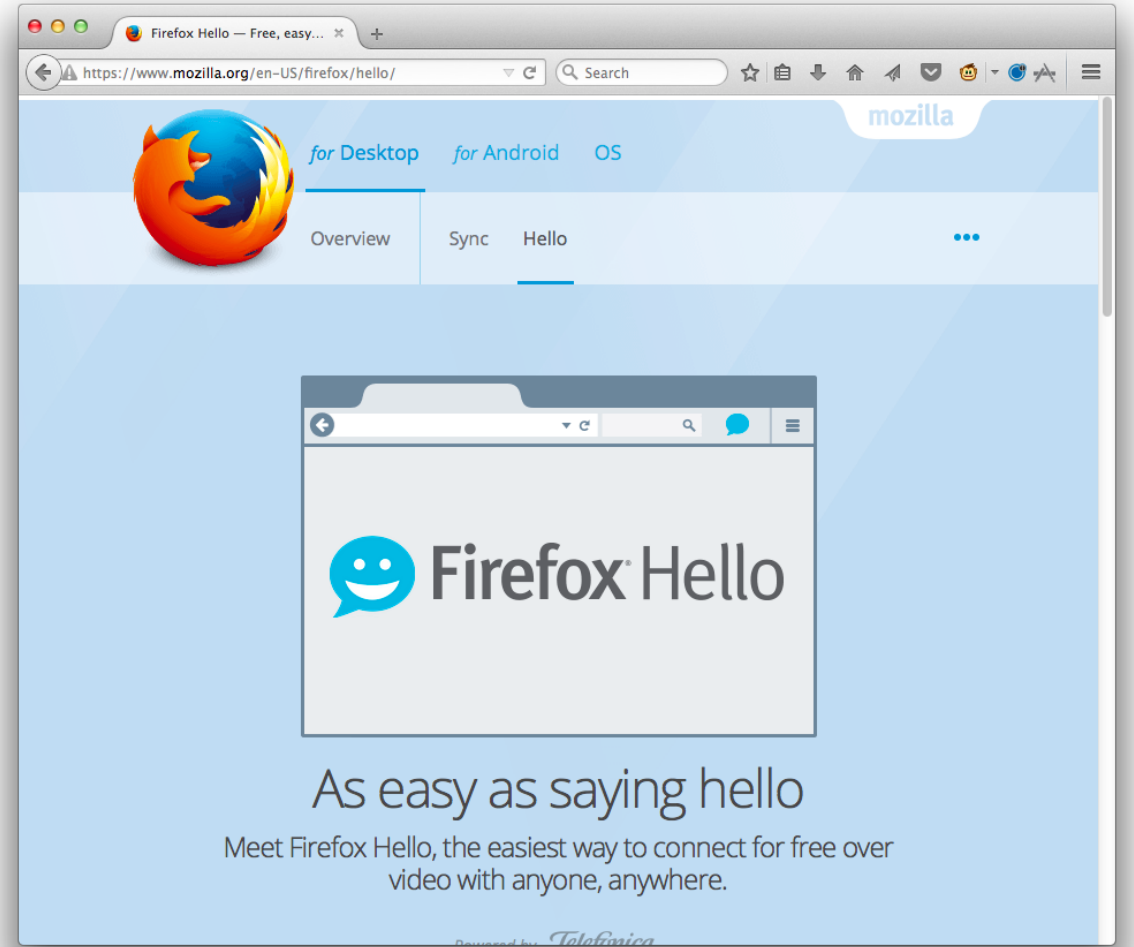
See More

SPONSORED Create Ad

Chat (17)

https://propertypartner.co/?utm_source=facebook_exp&utm_medium=CPC&utm_campaign=C01-I02&utm_content=25724518&utm_term=T01-K26


Messenger
https://www.messenger.com
Search
Features
Platform
Business
Messenger
Sign in with Facebook to get started.
Continue as Phil Nash
Switch Account
Get the app on iOS, Windows Phone, Android
Weekend Trip
Peter Cheng


Firefox Hello — Free, easy...
https://www.mozilla.org/en-US/firefox/hello/
Search
mozilla
for Desktop
for Android
OS
Overview
Sync
Hello
Firefox Hello
As easy as saying hello
Meet Firefox Hello, the easiest way to connect for free over video with anyone, anywhere.

Jay's Kindle
12:20 PM
Auto-Rotate
Brightness
Wireless
Quiet Time
Mayday
Settings
IFE OF PI
the perks of being a wallflower
STEPHEN CHBOSKY
GAME OF THRONES
amazon
Amy
Mail
MON
24
Calendar
Silk
Web Browser
iHeartRadio
Hipmunk
Facebook

POWERED BY WEBRTC

WHAT IS WEBRTC?

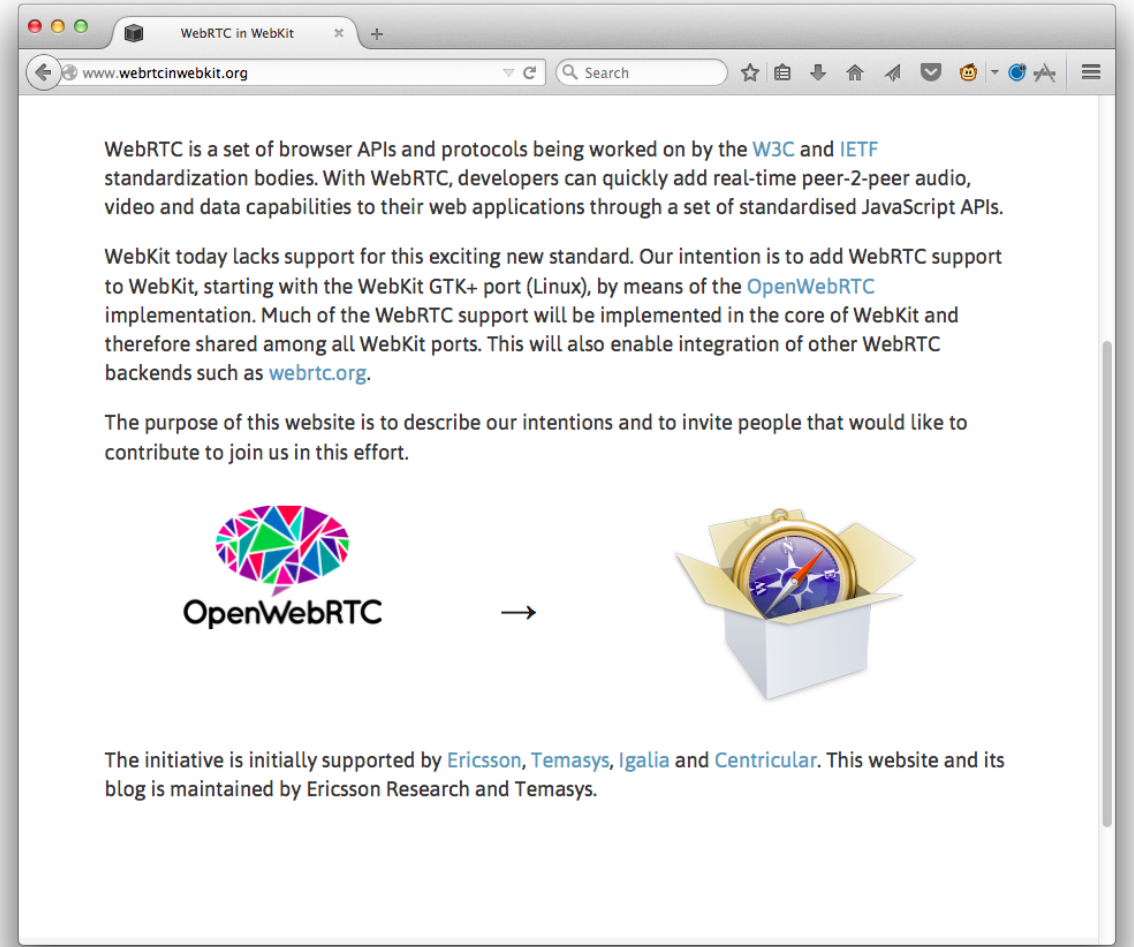
WEB REAL TIME COMMUNICATION

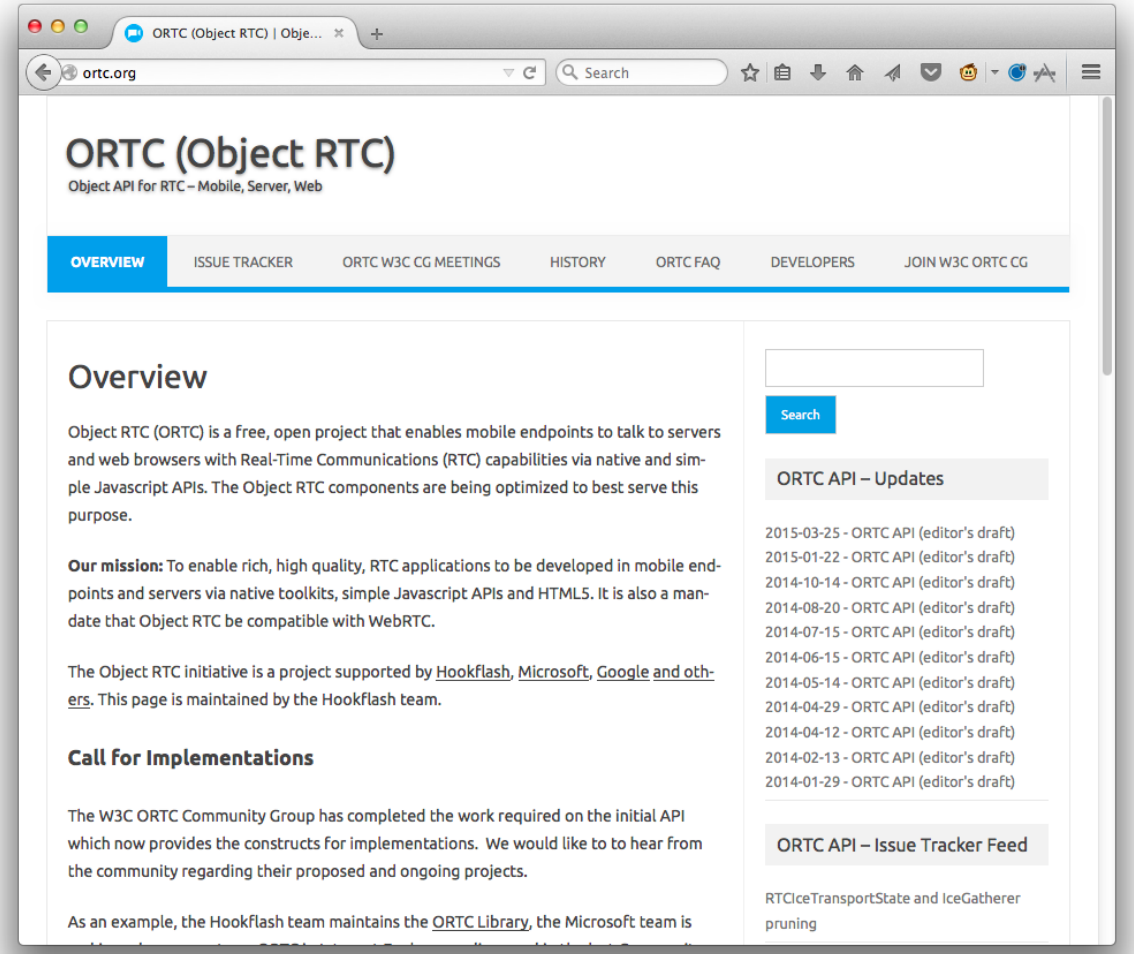
REALLY REAL TIME

PEER TO PEER

VIDEO, AUDIO AND DATA

SUPPORT


WebRTC in WebKit
www.webrtcinwebkit.org
Search
WebRTC is a set of browser APIs and protocols being worked on by the W3C and IETF standardization bodies. With WebRTC, developers can quickly add real-time peer-2-peer audio, video and data capabilities to their web applications through a set of standardised JavaScript APIs.
WebKit today lacks support for this exciting new standard. Our intention is to add WebRTC support to WebKit, starting with the WebKit GTK+ port (Linux), by means of the OpenWebRTC implementation. Much of the WebRTC support will be implemented in the core of WebKit and therefore shared among all WebKit ports. This will also enable integration of other WebRTC backends such as webrtc.org.
The purpose of this website is to describe our intentions and to invite people that would like to contribute to join us in this effort.
OpenWebRTC
→
The initiative is initially supported by Ericsson, Temasys, Igalia and Centricular. This website and its blog is maintained by Ericsson Research and Temasys.


ORTC (Object RTC) | Obje...
ortc.org
Search
ORTC (Object RTC)
Object API for RTC – Mobile, Server, Web
OVERVIEW
ISSUE TRACKER
ORTC W3C CG MEETINGS
HISTORY
ORTC FAQ
DEVELOPERS
JOIN W3C ORTC CG
Overview
Object RTC (ORTC) is a free, open project that enables mobile endpoints to talk to servers and web browsers with Real-Time Communications (RTC) capabilities via native and simple Javascript APIs. The Object RTC components are being optimized to best serve this purpose.
Our mission: To enable rich, high quality, RTC applications to be developed in mobile endpoints and servers via native toolkits, simple Javascript APIs and HTML5. It is also a mandate that Object RTC be compatible with WebRTC.
The Object RTC initiative is a project supported by Hookflash, Microsoft, Google and others. This page is maintained by the Hookflash team.
Call for Implementations
The W3C ORTC Community Group has completed the work required on the initial API which now provides the constructs for implementations. We would like to to hear from the community regarding their proposed and ongoing projects.
As an example, the Hookflash team maintains the ORTC Library, the Microsoft team is
Search
ORTC API – Updates
2015-03-25 - ORTC API (editor's draft)
2015-01-22 - ORTC API (editor's draft)
2014-10-14 - ORTC API (editor's draft)
2014-08-20 - ORTC API (editor's draft)
2014-07-15 - ORTC API (editor's draft)
2014-06-15 - ORTC API (editor's draft)
2014-05-14 - ORTC API (editor's draft)
2014-04-29 - ORTC API (editor's draft)
2014-04-12 - ORTC API (editor's draft)
2014-02-13 - ORTC API (editor's draft)
2014-01-29 - ORTC API (editor's draft)
ORTC API – Issue Tracker Feed
RTCIceTransportState and IceGatherer pruning

MOBILE SUPPORT

APIS

APIs

- getUserMedia
- RTCPeerConnection
- RTCDataChannel

getUserMedia

HOW DOES IT WORK?

Meet Alice and Bob

Alice

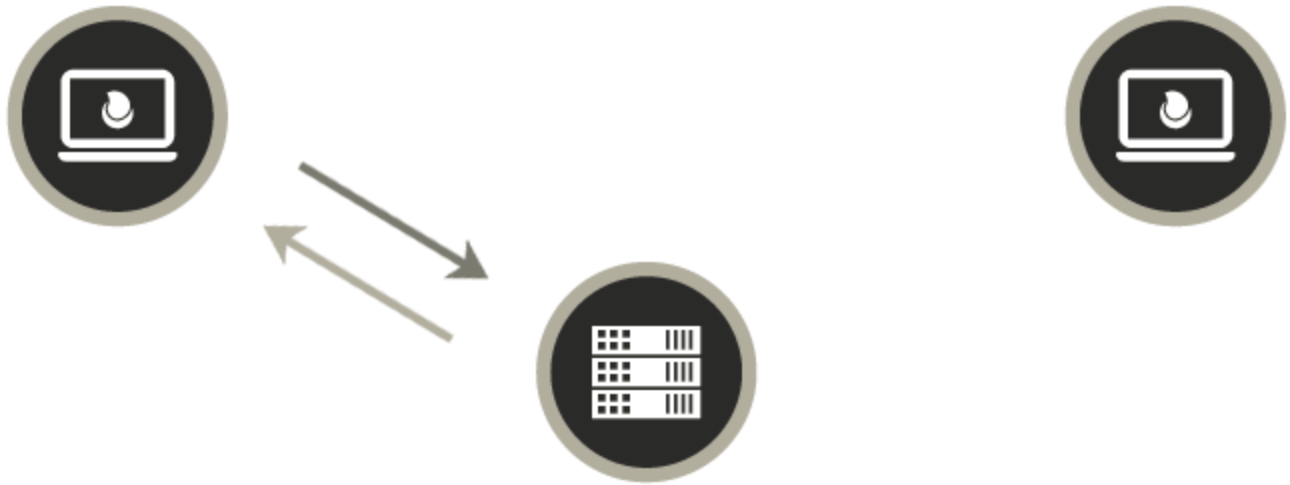
Bob

PRESENCE

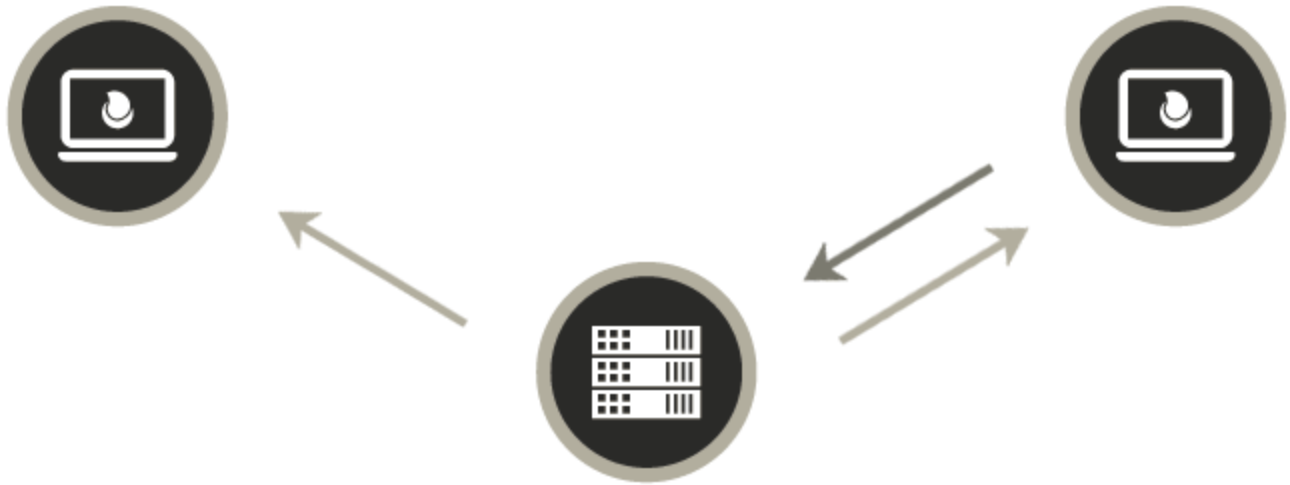
You need a server

Your server

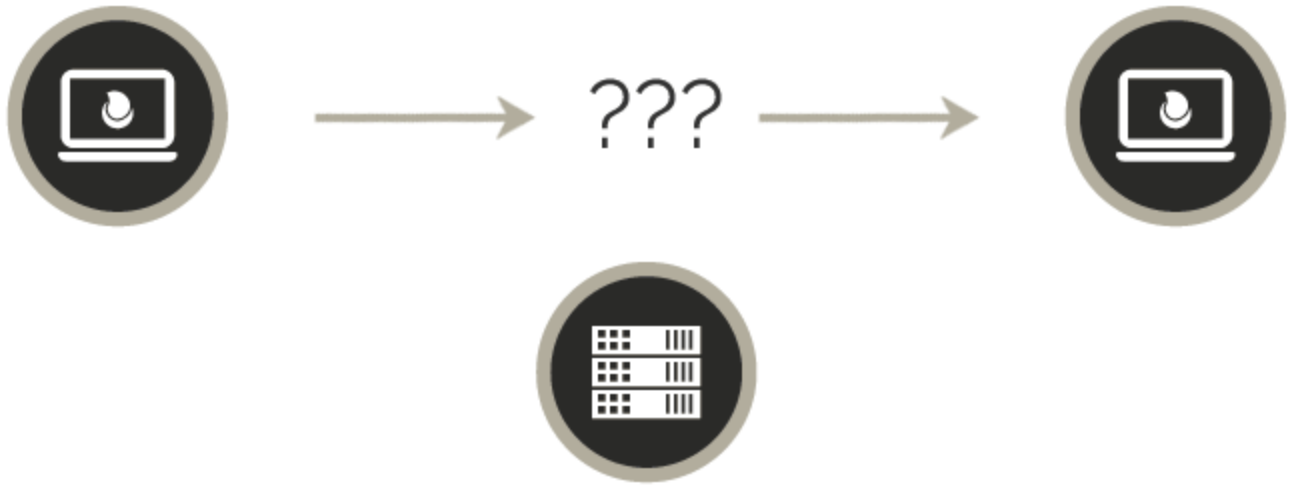
Alice logs on



Bob logs on



Alice knows Bob is there



NAT TRAVERSAL

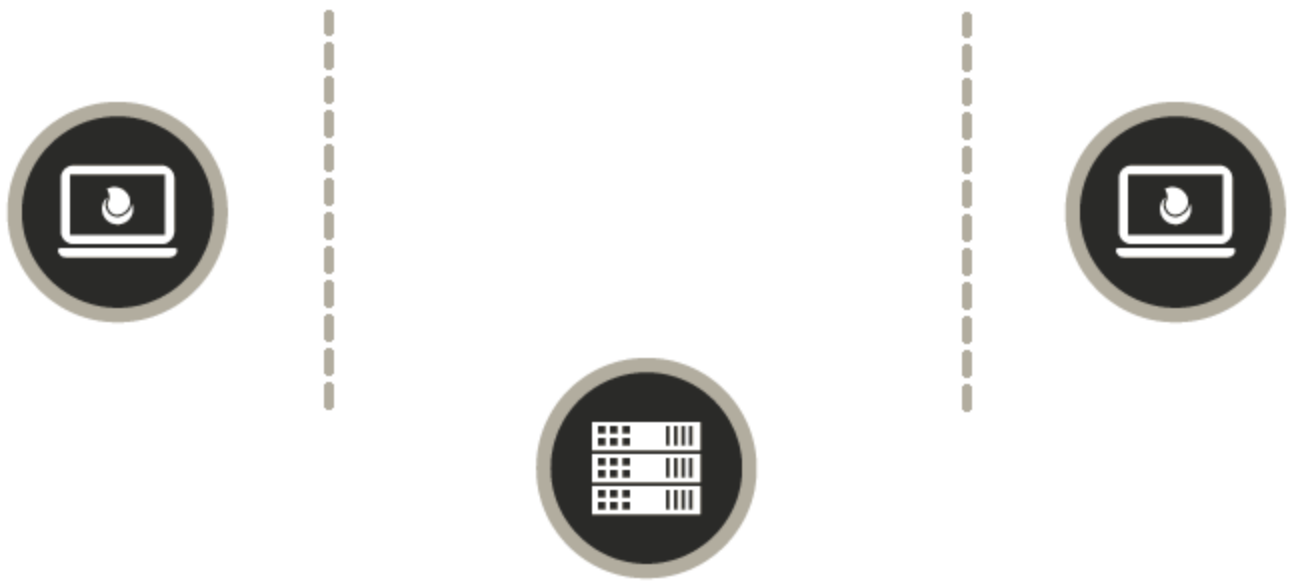
NTA
NATIONAL
TELEVISION
AWARDS
WIDEOPEN

ICE ICE BABY

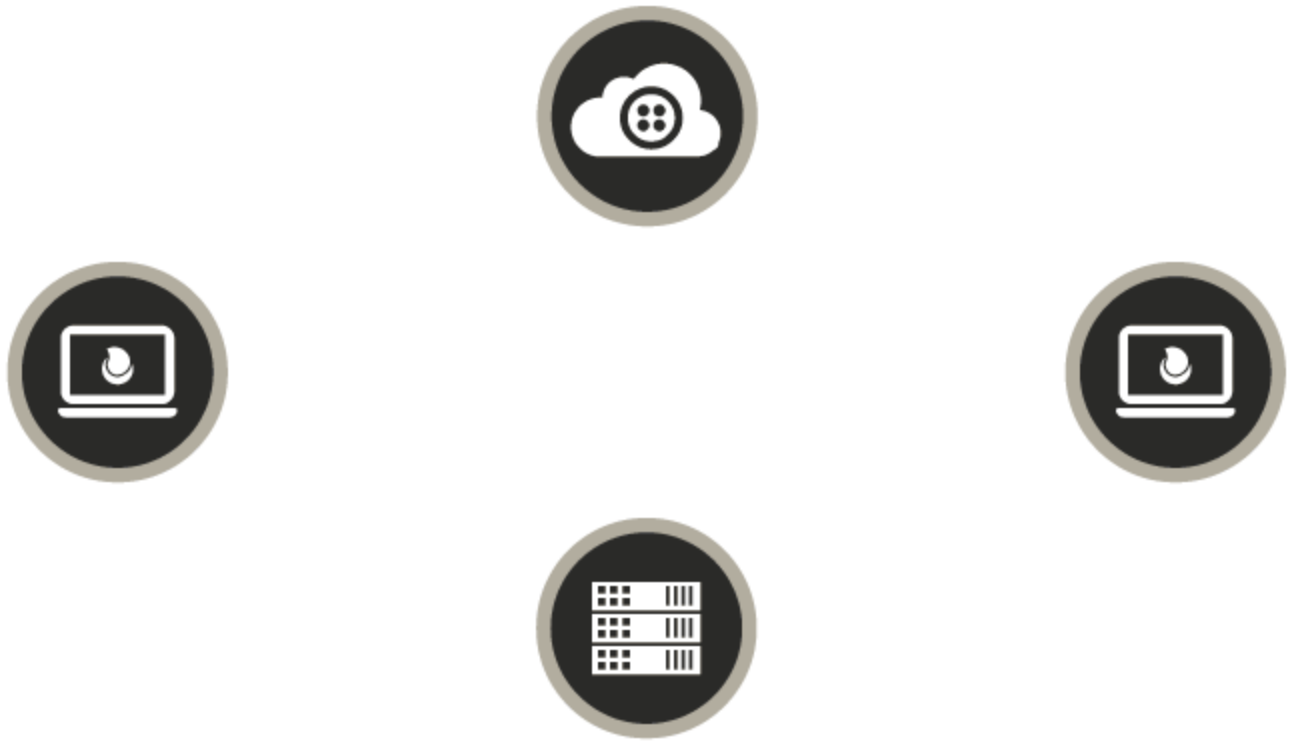
ICE ICE Baby

- ICE — Interactive Connectivity Establishment
- NAT — Network Address Translation
- STUN — Session Traversal Utilities for NAT
- TURN — Traversal Using Relays around NAT

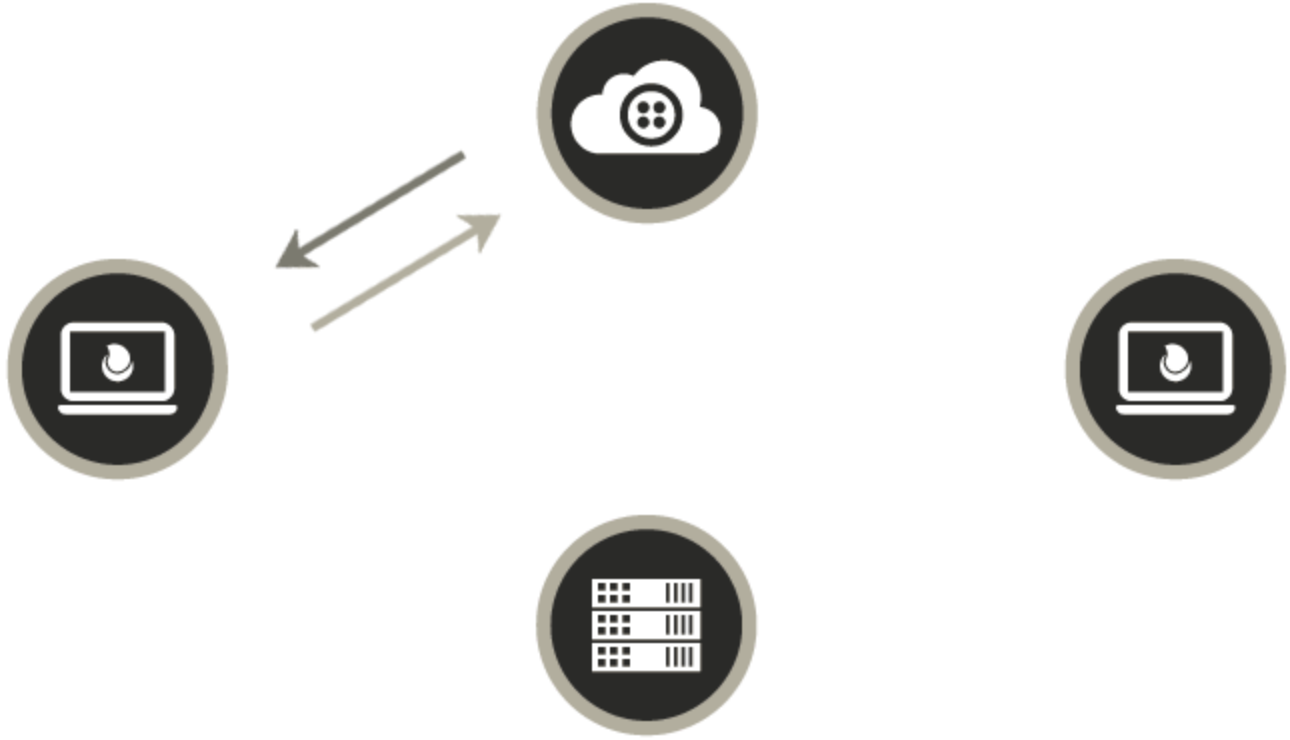
Hidden behind NAT



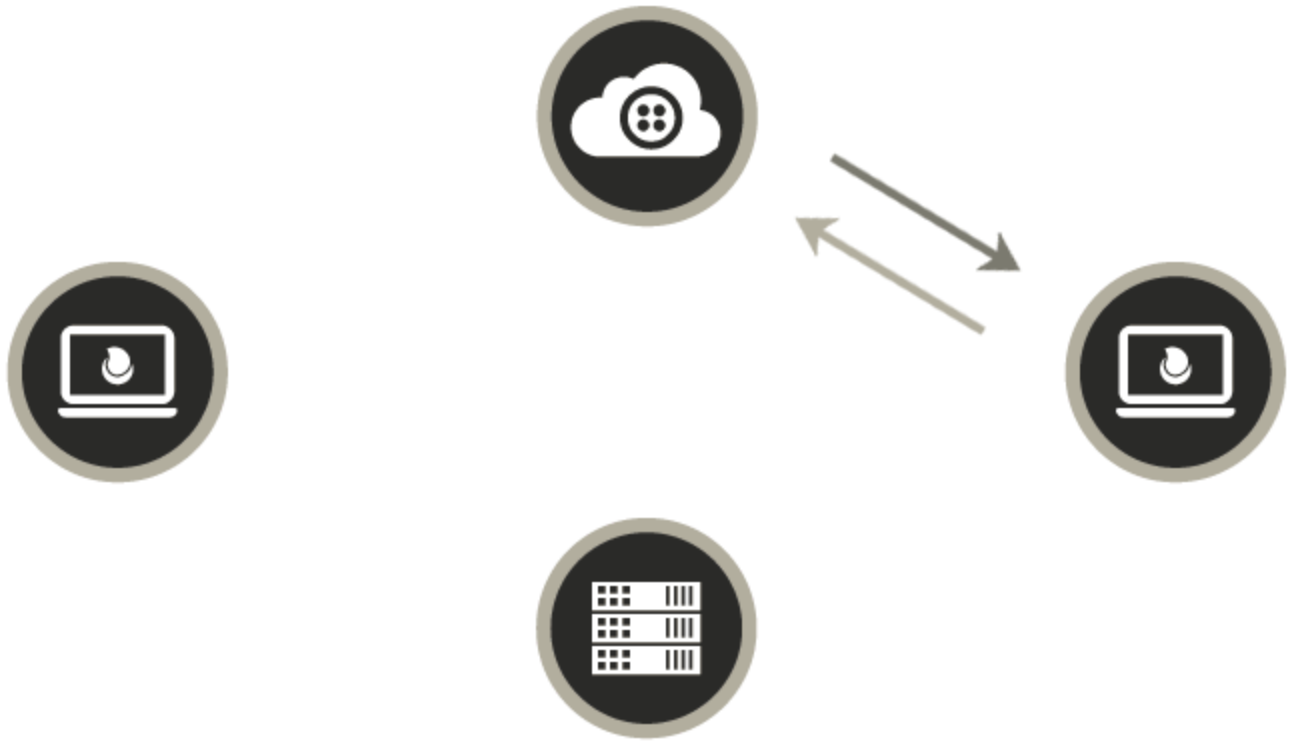
STUN/TURN



Alice gets ICE candidates

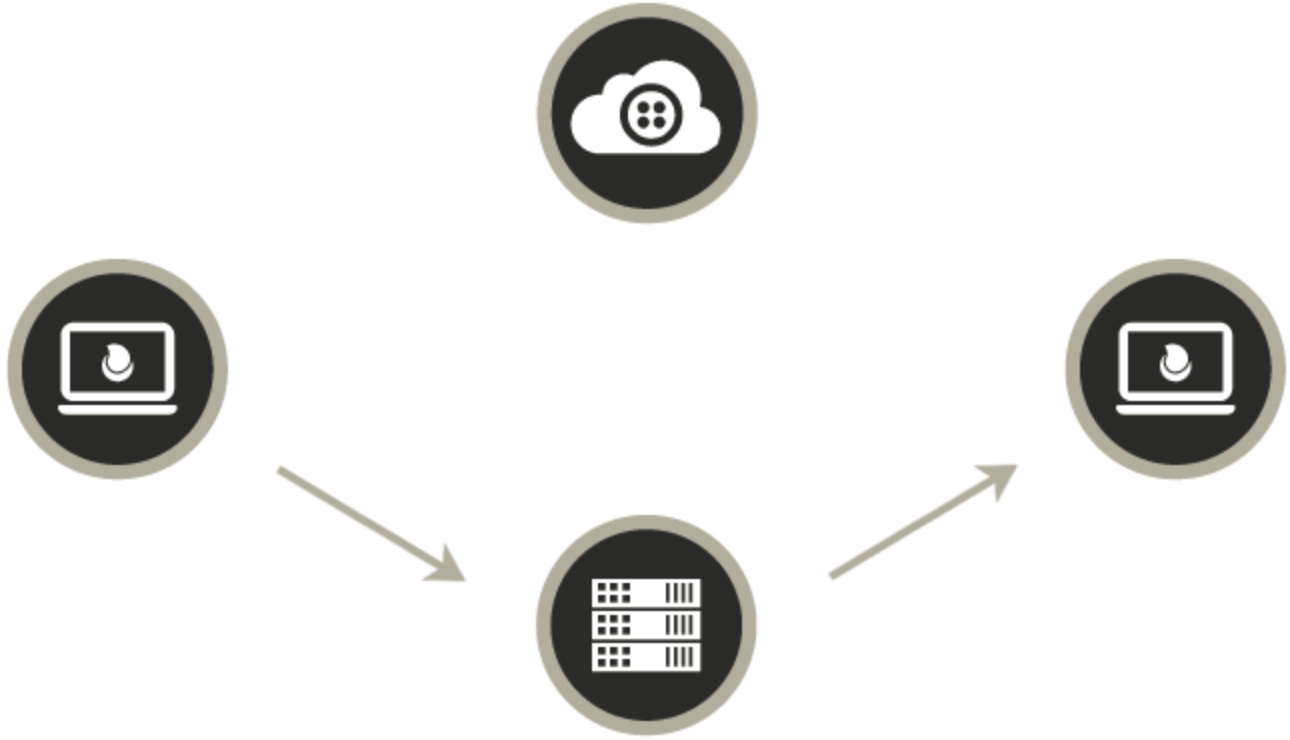


Bob gets ICE candidates

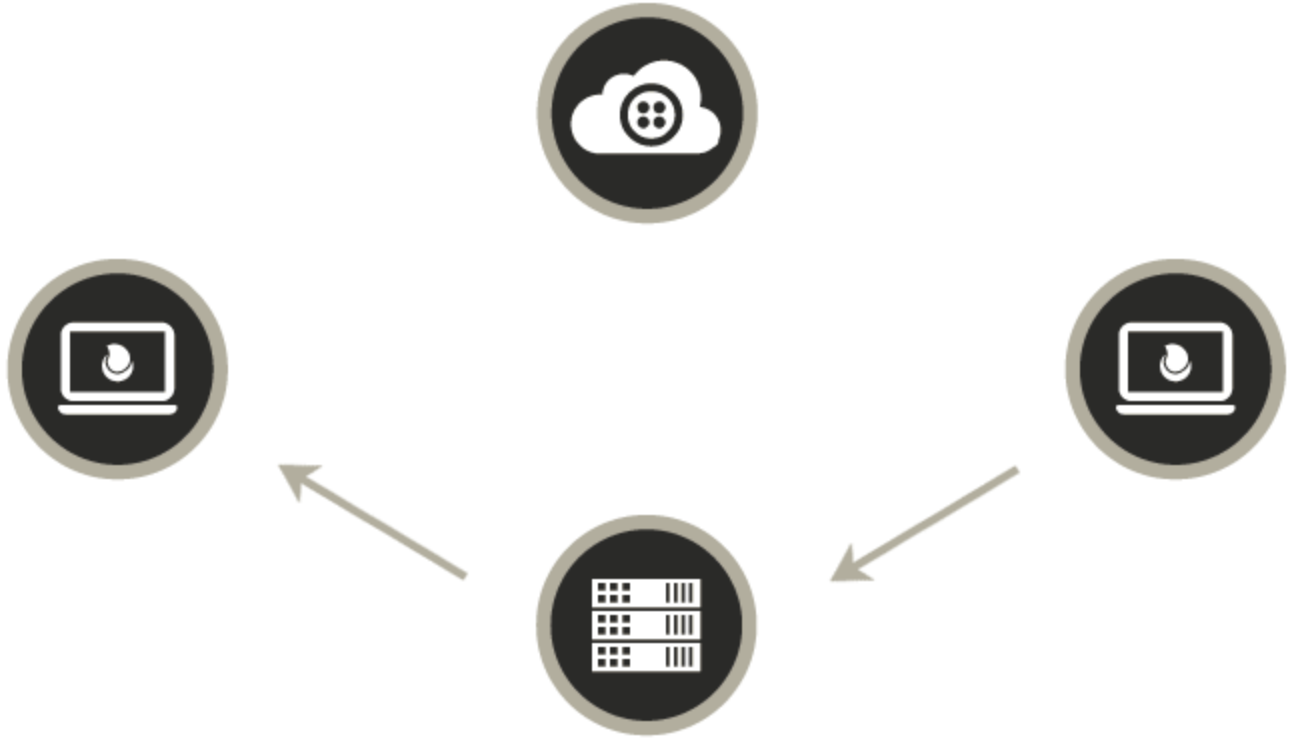


SIGNALLING

Alice sends candidates to Bob



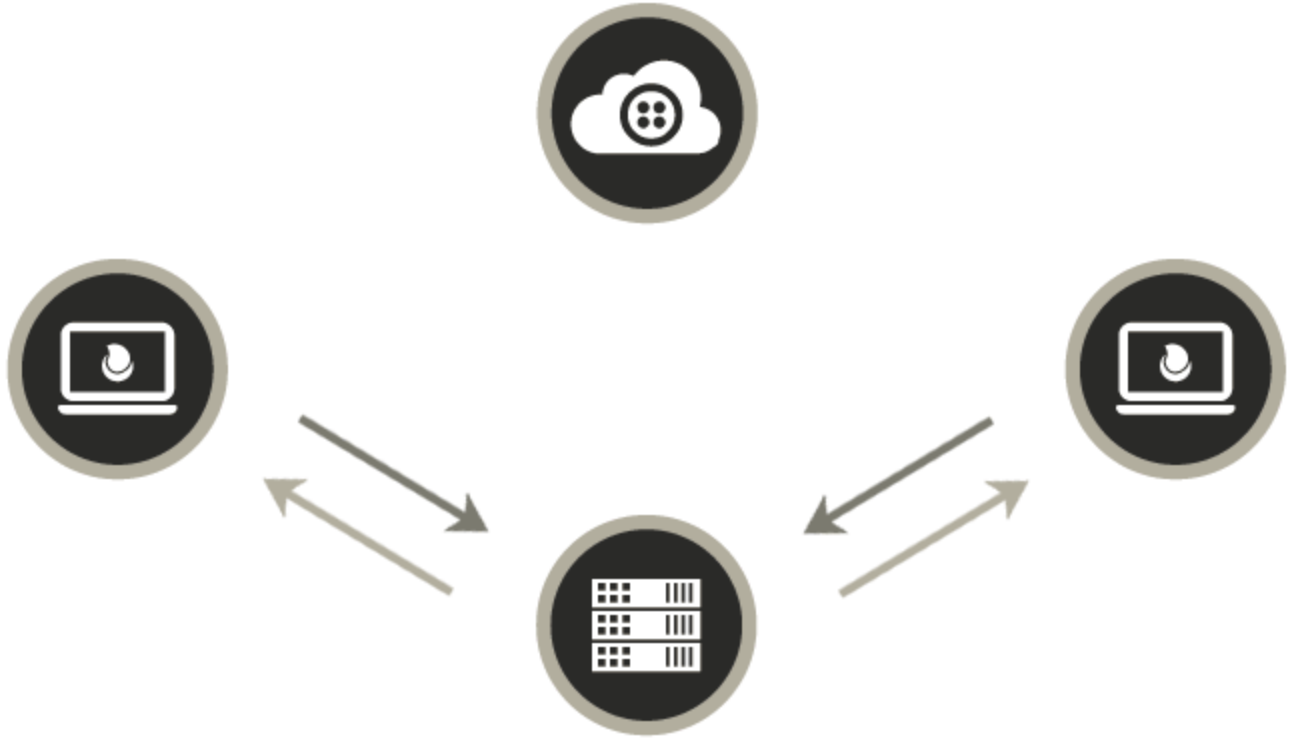
Bob sends candidates to Alice



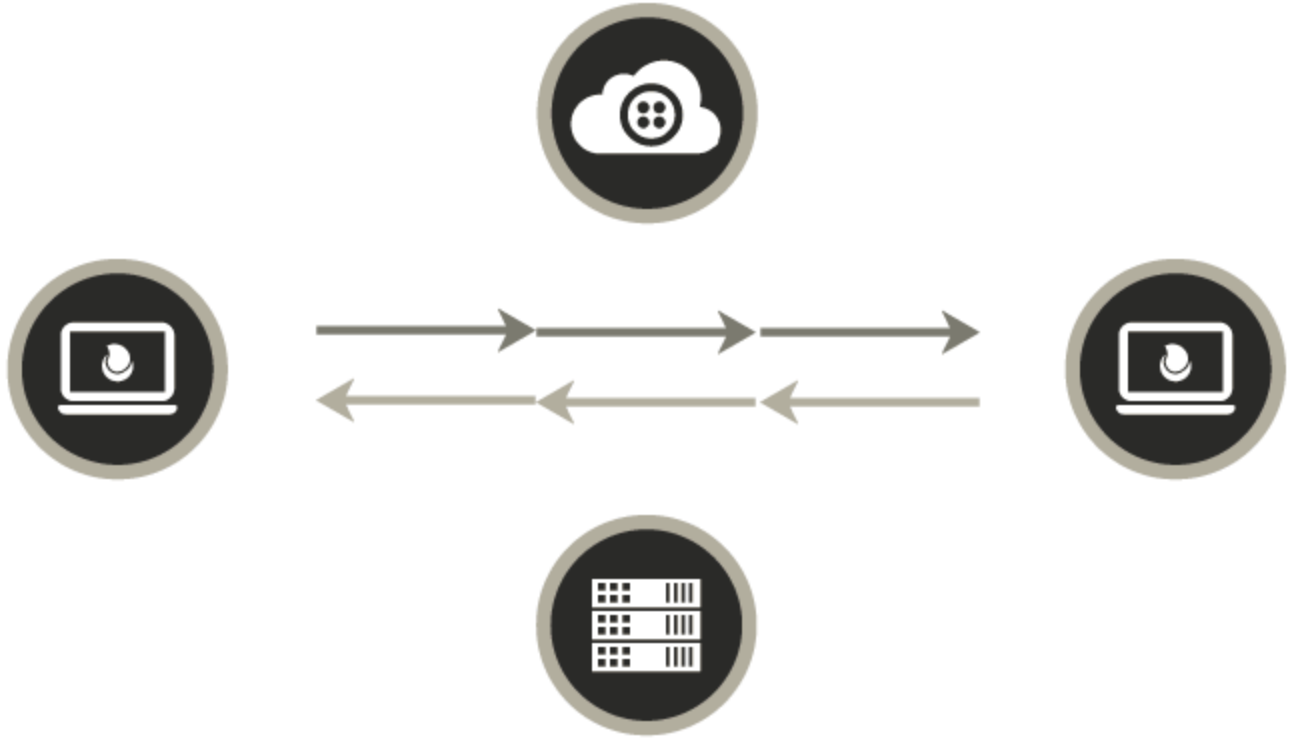
USER MEDIA

getUserMedia

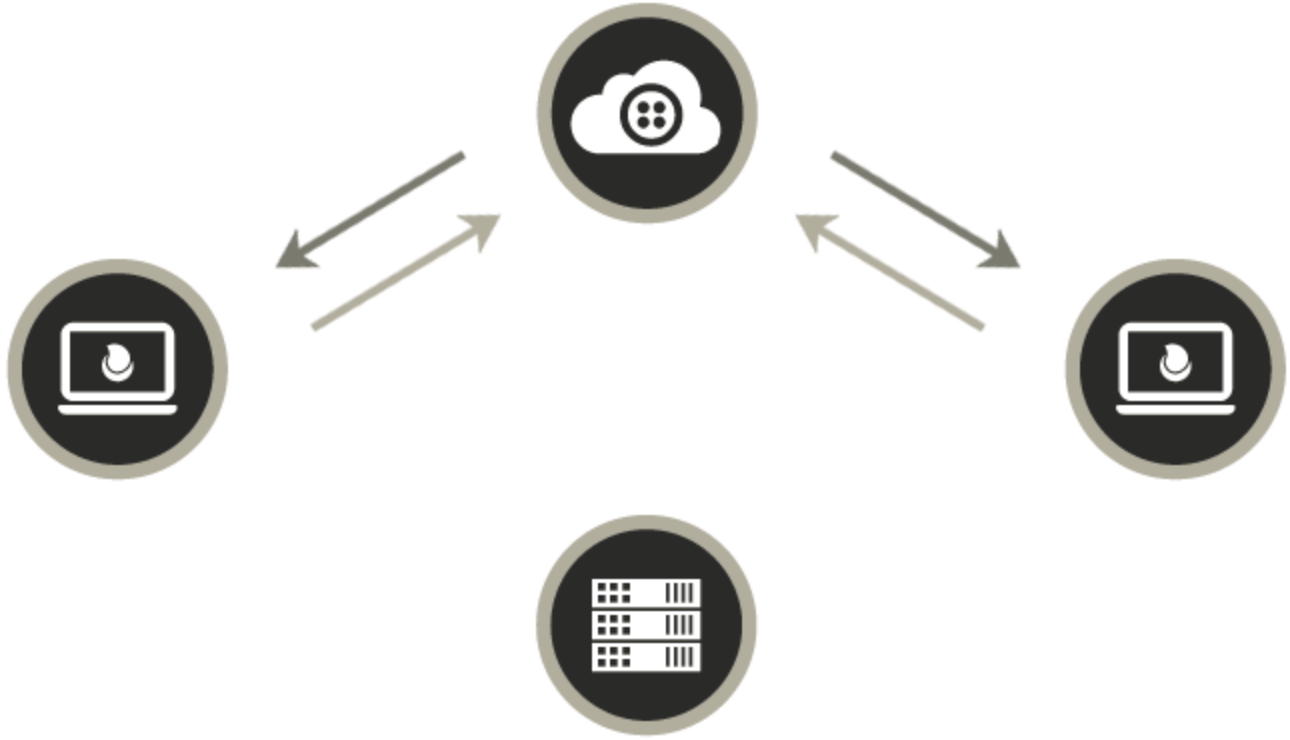
Media offer/answer



Connection!



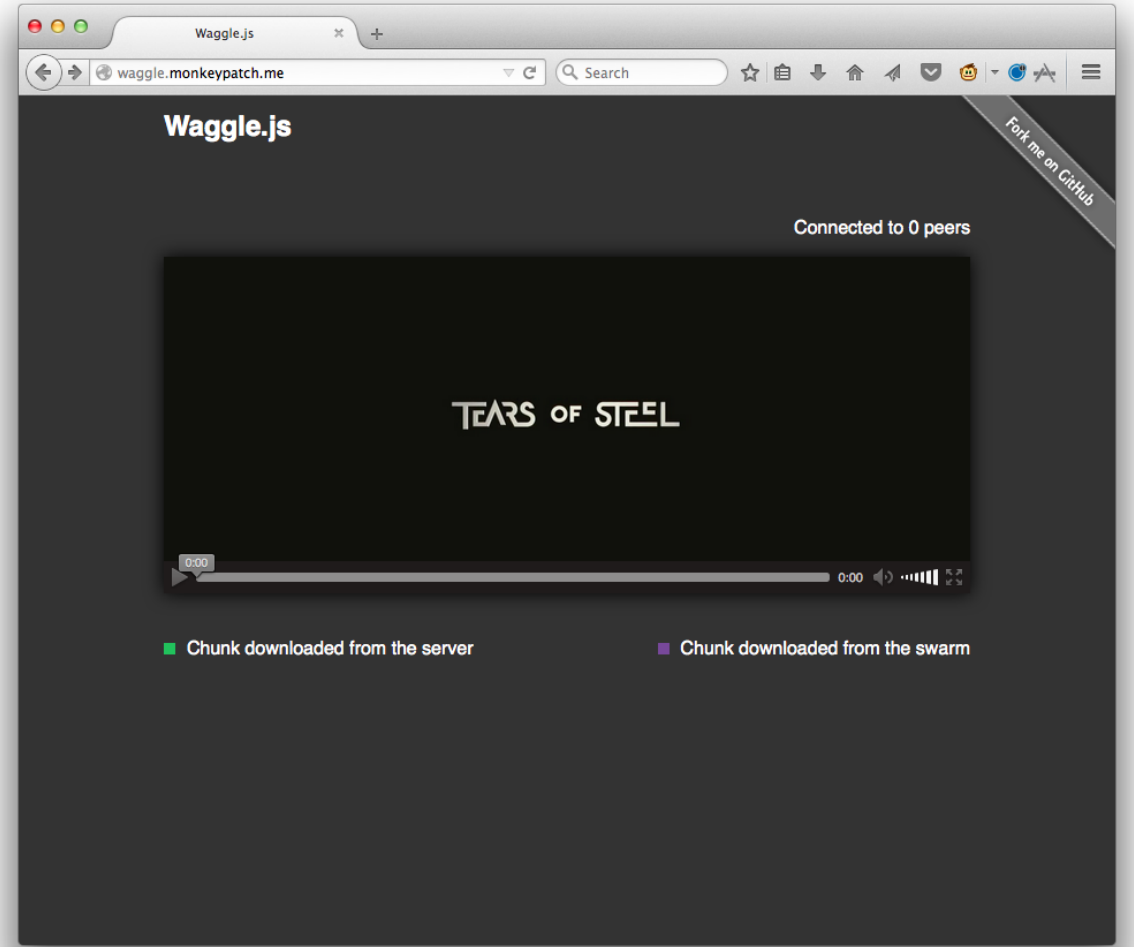
TURN Connection!



Summary

- Presence
- NAT Traversal
- User Media
- Signalling

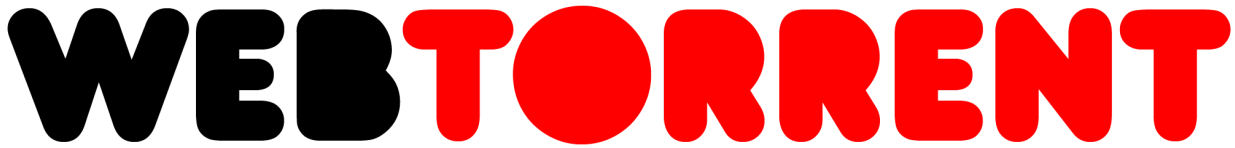
OTHER WEBRTC IDEAS


Waggle.js
waggle.monkeypatch.me
Search
Waggle.js
Fork me on GitHub
Connected to 0 peers
TEARS OF STEEL
0:00
0:00
Chunk downloaded from the server
Chunk downloaded from the swarm

Waggledance

Distribute bandwidth amongst video viewers

- Example: http://waggle.monkeypatch.me/
- Code: https://github.com/tOkeshu/waggle.js
- Video: https://www.youtube.com/watch?v=pyIIkUV3moM


WEBTORRENT

Webtorrent

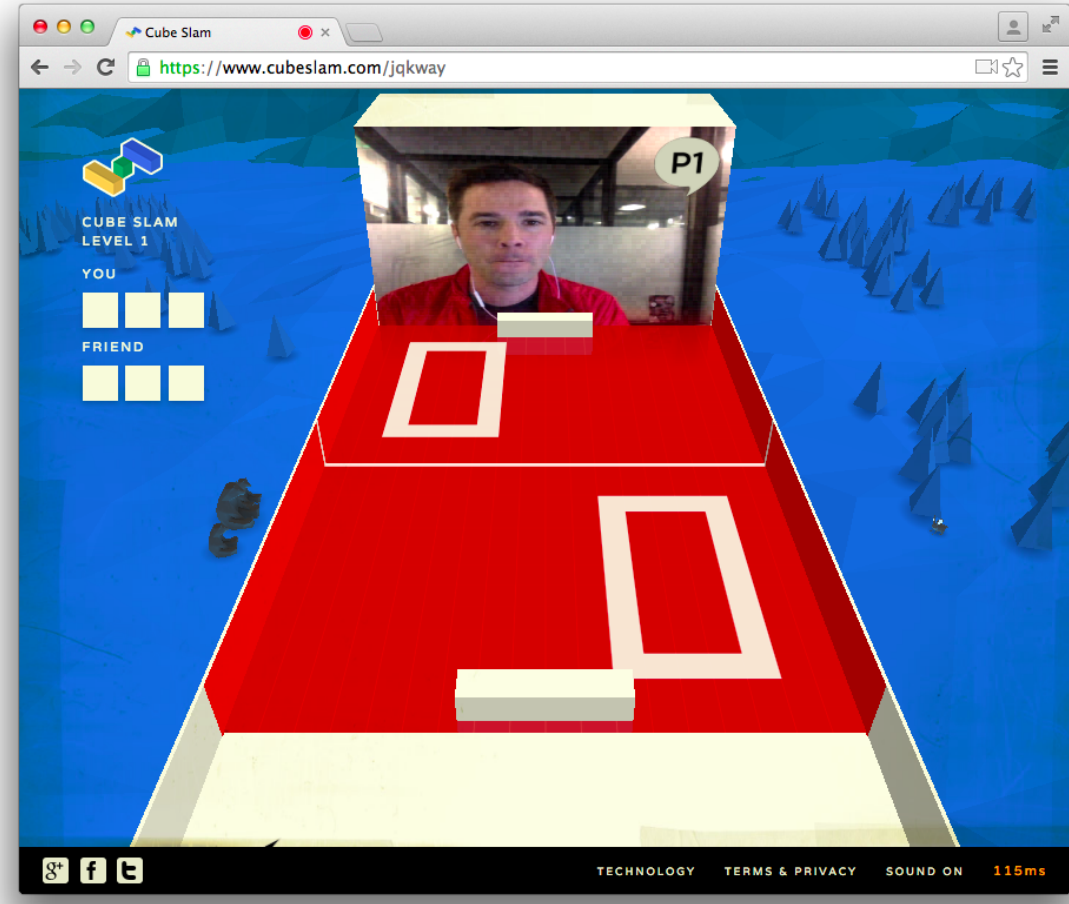
Streaming torrent client for node and the browser

- Code: http://webtorrent.io/
- npm: https://www.npmjs.org/package/webtorrent

Gaming

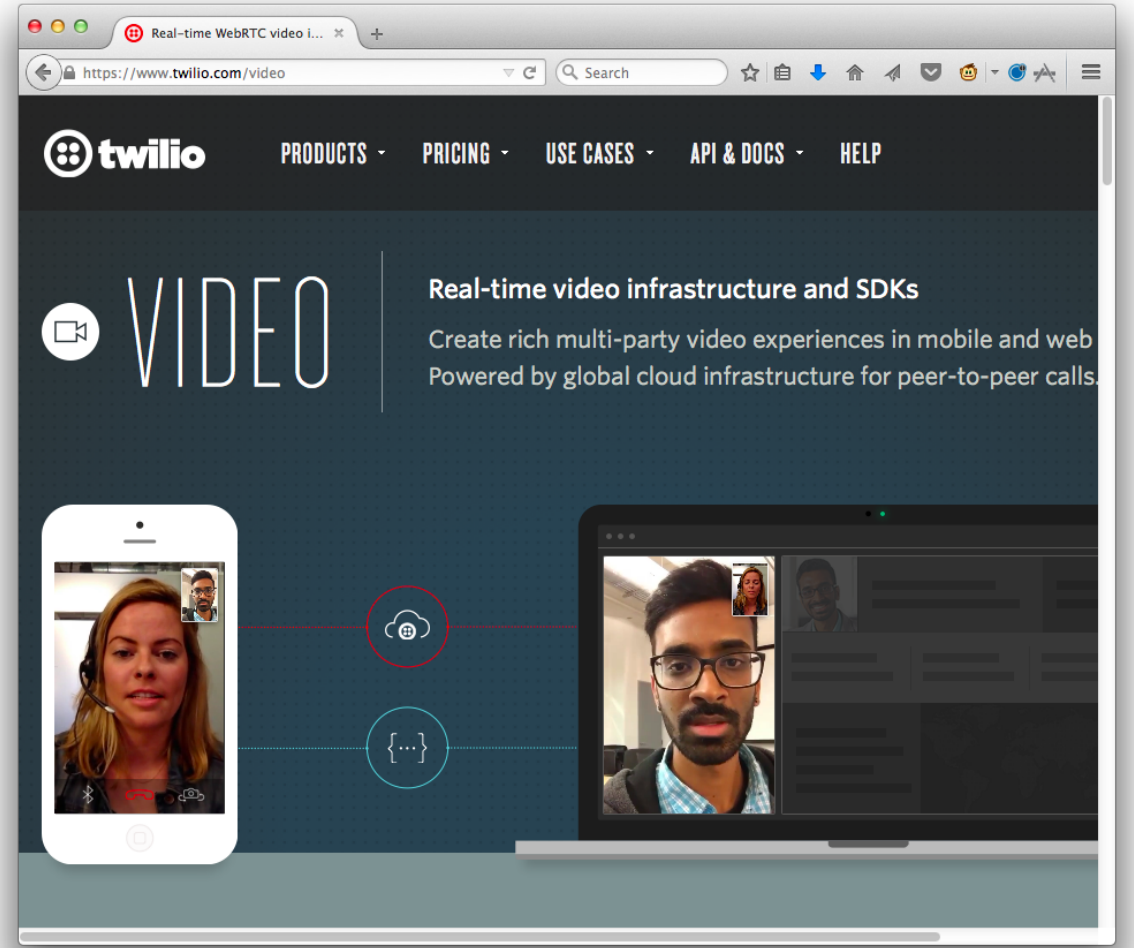
- Live gaming against friends
- CubeSlam: https://www.cubeslam.com/

Cube Slam
https://www.cubeslam.com/mcsglx
BOB
CUBE SLAM
LEVEL 1
YOU
BOB
TECHNOLOGY
TERMS & PRIVACY
SOUND OFF


Cube Slam
https://www.cubeslam.com/jqkway
CUBE SLAM
LEVEL 1
YOU
FRIEND
P1
TECHNOLOGY
TERMS & PRIVACY
SOUND ON
115ms

Remember those texts?

BUT WAIT...


Real-time WebRTC video i...
https://www.twilio.com/video
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twilio
PRODUCTS
PRICING
USE CASES
API & DOCS
HELP
VIDEO
Real-time video infrastructure and SDKs
Create rich multi-party video experiences in mobile and web
Powered by global cloud infrastructure for peer-to-peer calls.

DEMO

twilio presents
SIGNAL
Developer Conference
MAY 19/20 2015
FORT MASON FESTIVAL PAVILION
SAN FRANCISCO, CA

NASH20

MayDay results

Launched September 2013, by April 2014

- 44 advisors sang happy birthday
- 648 advisors had been serenaded
- 35 advisors had received marriage proposals
- 3 customers asked for a bedtime story
- 1 customer asked for help with a particularly difficult level of Angry Birds

Resources

- http://bit.ly/stunturn
- https://github.com/philnash/video-chat
- https://github.com/philnash/whatrtc
-

Help me!

On a scale of 0 to 10, how likely is it that you would recommend this talk to a friend or colleague?

(+48) 79 944 93 06

ONWARD!

Thanks!

@philnash

http://philna.sh

philnash@twilio.com

twilio

On a scale of 0 to 10, how likely is it that you would recommend this talk to a friend or colleague?

(+48) 79 944 93 06