

# Orchid Labs Inc.

MARCH 2018

brian j. fox  
free software advocate  
co-founder, orchid labs  
**[bfox@orchid.com](mailto:bfox@orchid.com)**





nursery school, 1964

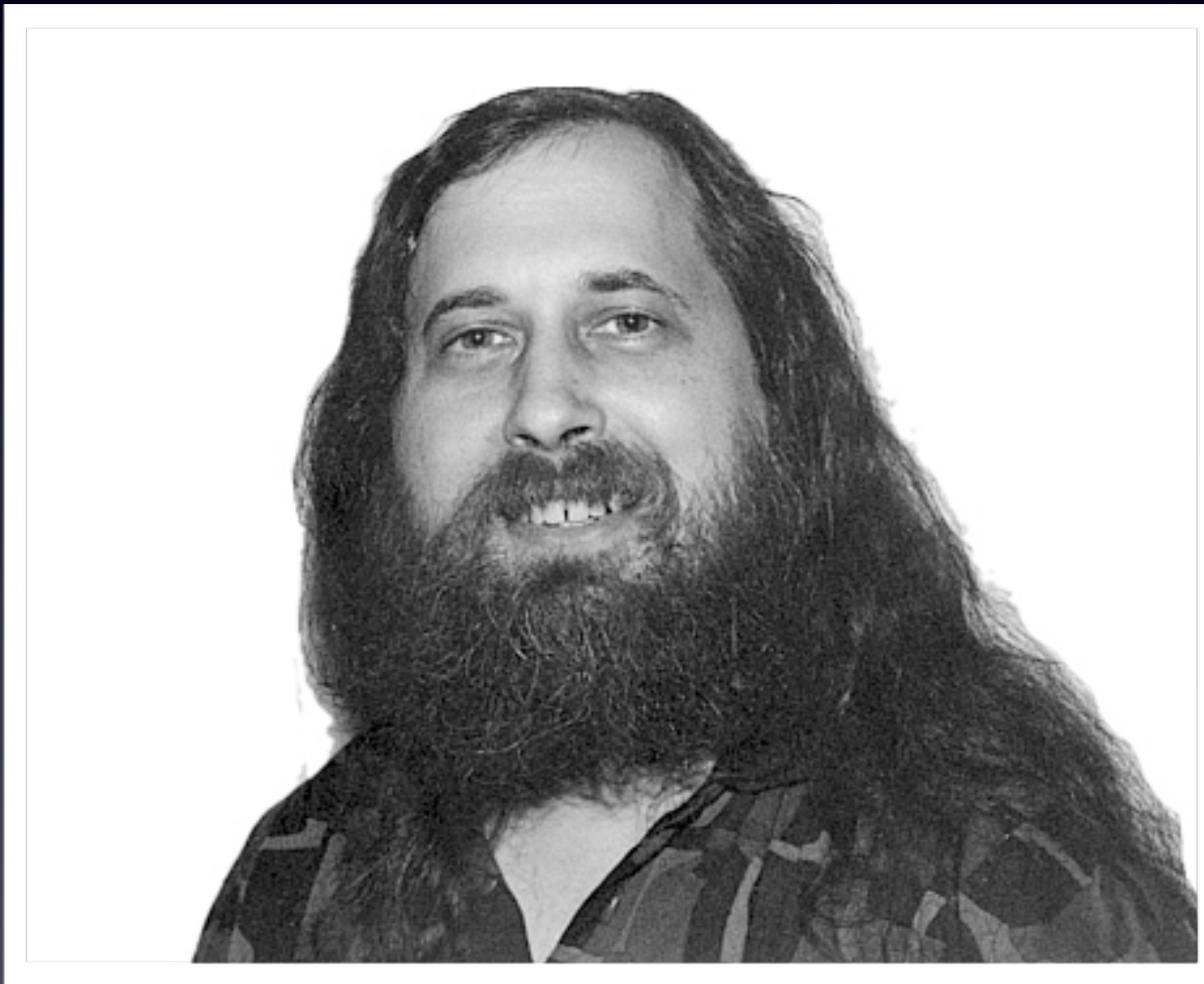




nursery school, 1964

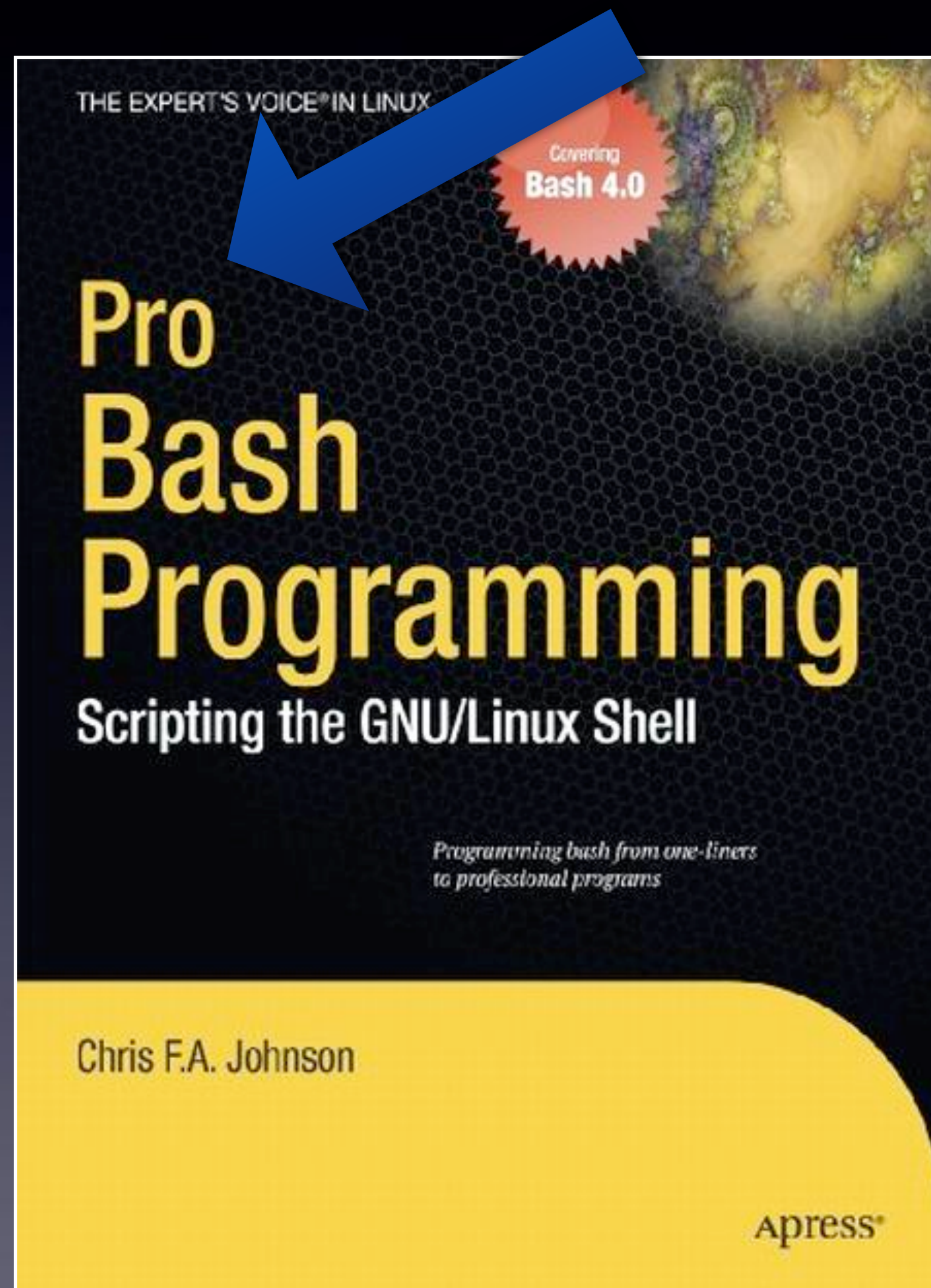


# how i met rms



I wrote some software

# write some software



makeinfo

readline

bash

history

info

gdb remote debugging

maintain emacs

# Orchid

Orchid is an open source movement to create a new internet — one which is controlled by you, and *not* your government or ISP.



# Orchid

Orchid is a network built by everyone who joins — it's like a party — can't really have one by yourself.

➡ open source internet 2.0

# Orchid

Orchid is *incentivized* — just like existing infrastructure, people pay to use it. And the people providing the infrastructure get paid for doing so.

➡ open source internet 2.0

➡ built by its members



# Orchid

Orchid is a free and open marketplace and platform for the delivery of digital services. Bandwidth is the flagship service, but compute, storage, and other services can be trivially built on top of the Orchid Protocol.

- ➡ open source internet 2.0
- ➡ built by its members
- ➡ incentivized via blockchain token payments

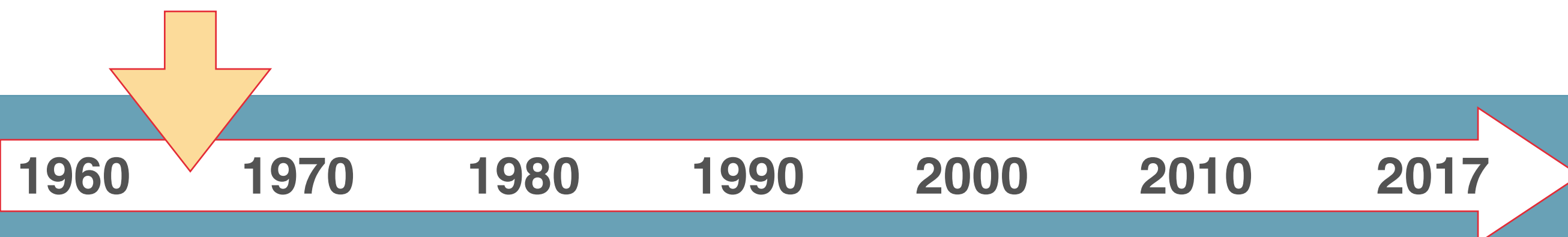
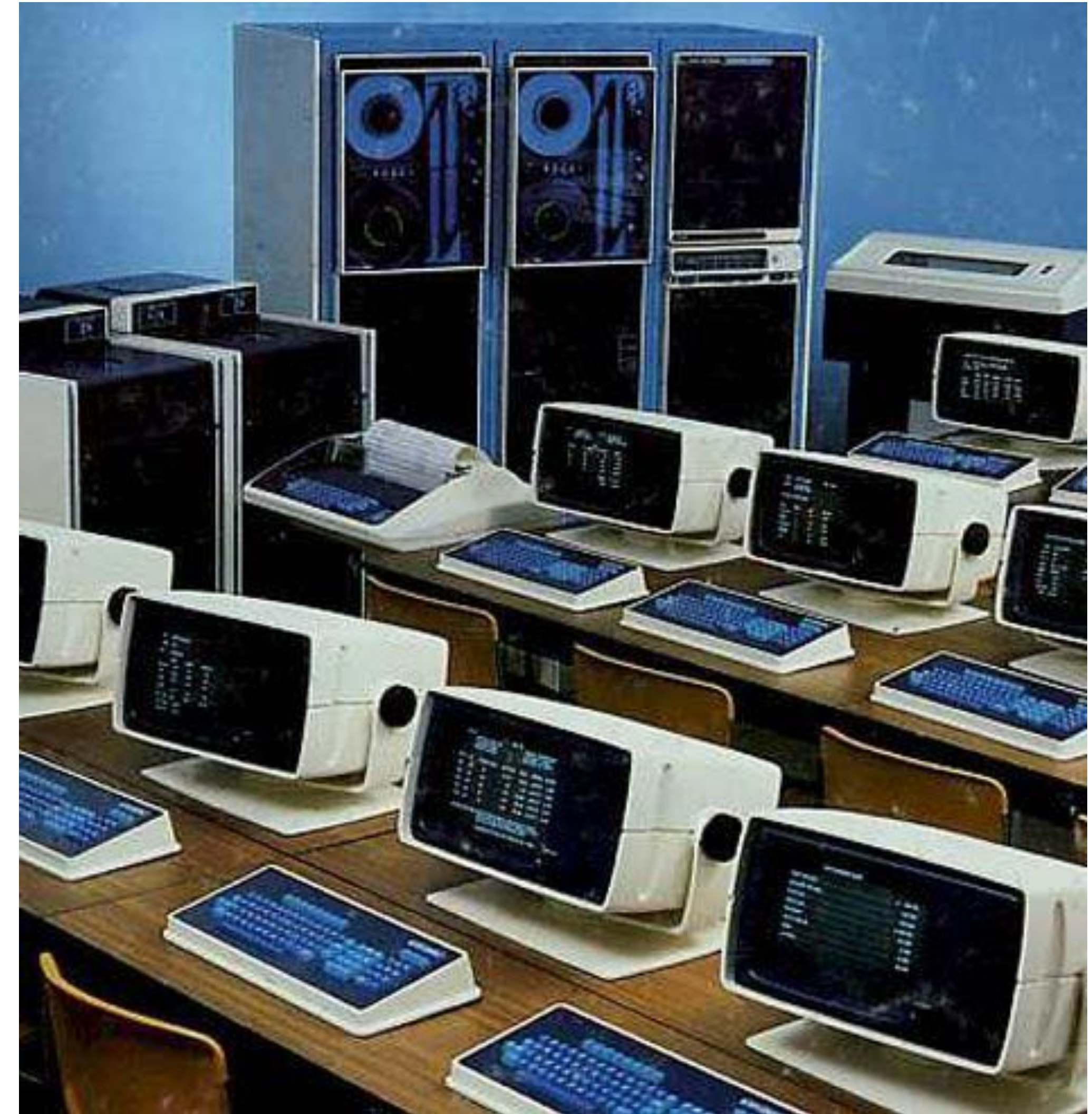


# when we started

mainframe

centralized

what's a network?



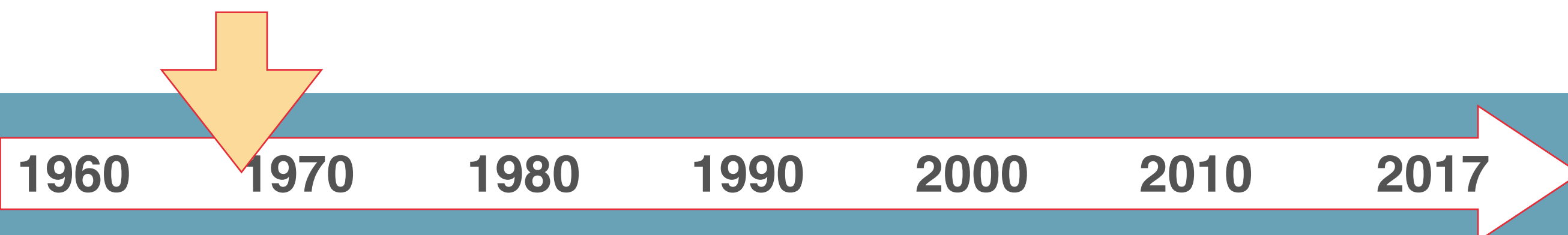


# ARPA & IMPs

1969 UCLA

telephone network

tcp/ip





# independence

decentralized

workstation

MIT AI LAB chaosnet



1960 1970 1980 1990 2000 2010 2017



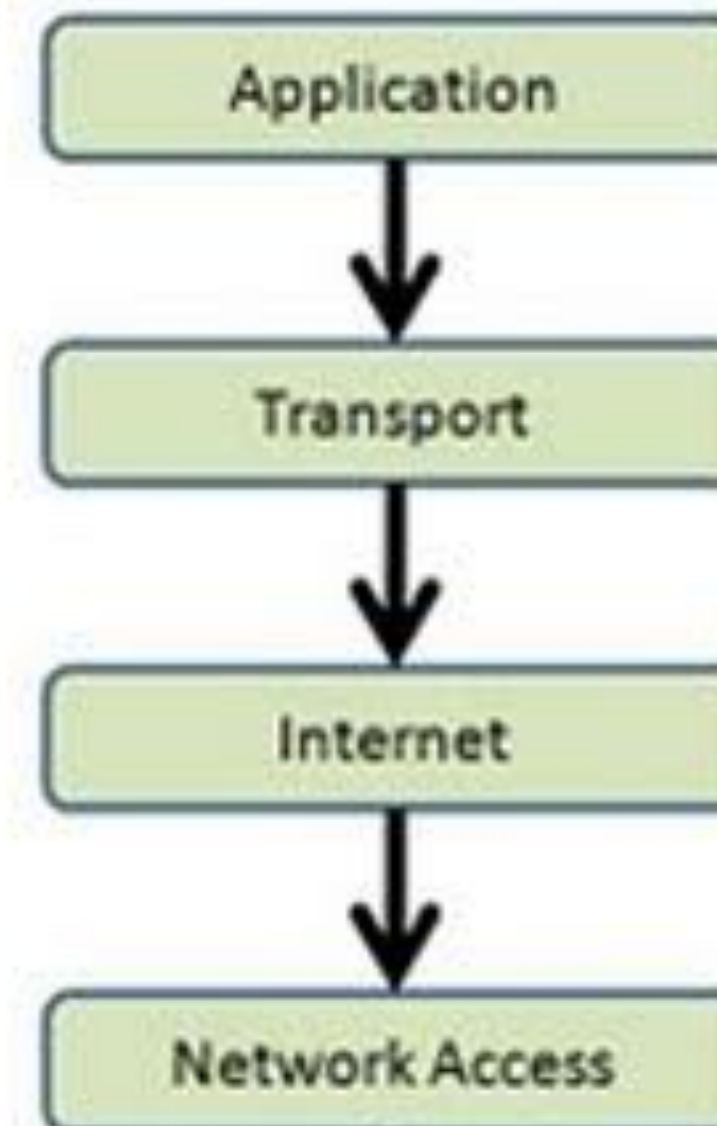
# collaboration

arpanet — long haul

LANs — office/lab

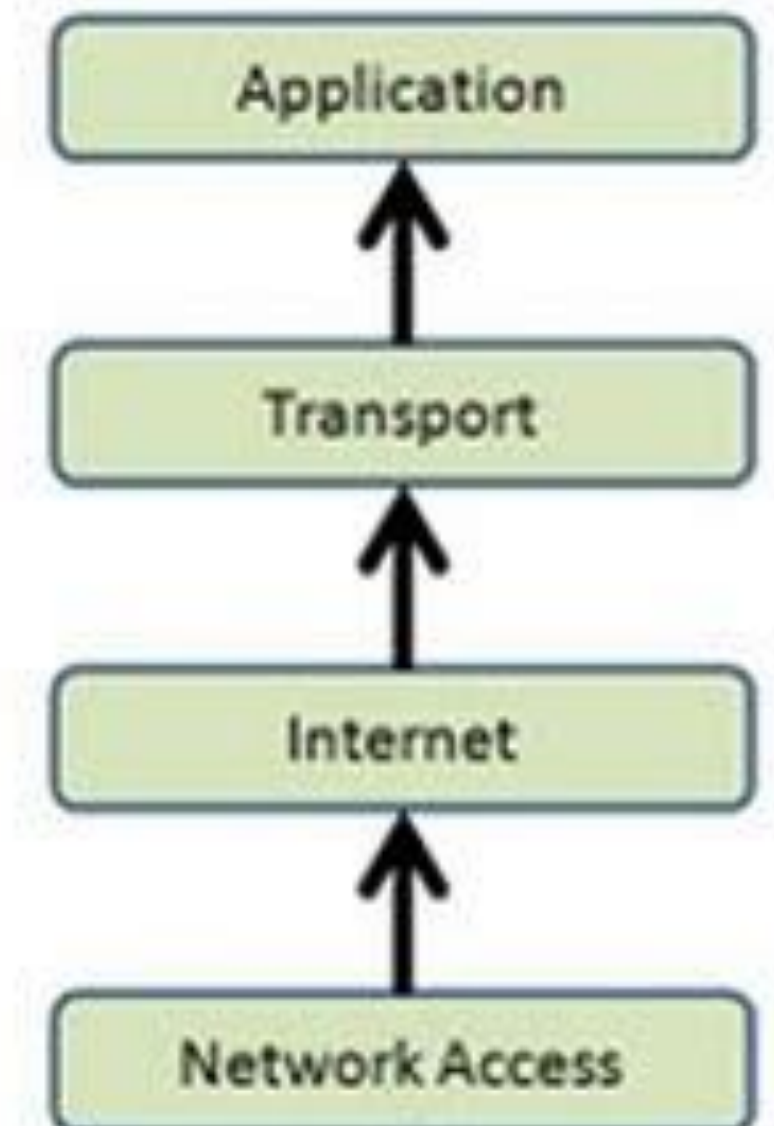
connectivity increasing

Computer A sends data.



TCP/IP Model

Computer B receives data.



1960 1970 1980 1990 2000 2010 2017

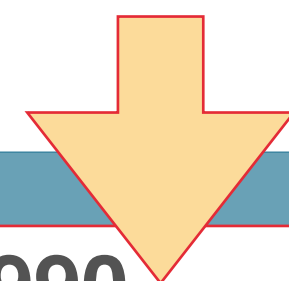


# the internet!

from gopher

to http/www

and ISPs



1960 1970 1980 1990 2000 2010 2017



# the killer app for internet 1.0



# killer app for internet 2.0?

**bandwidth**





# killer app for internet 2.0?

## bandwidth creates web 3.0

**bandwidth**







all your traffic are belong to us



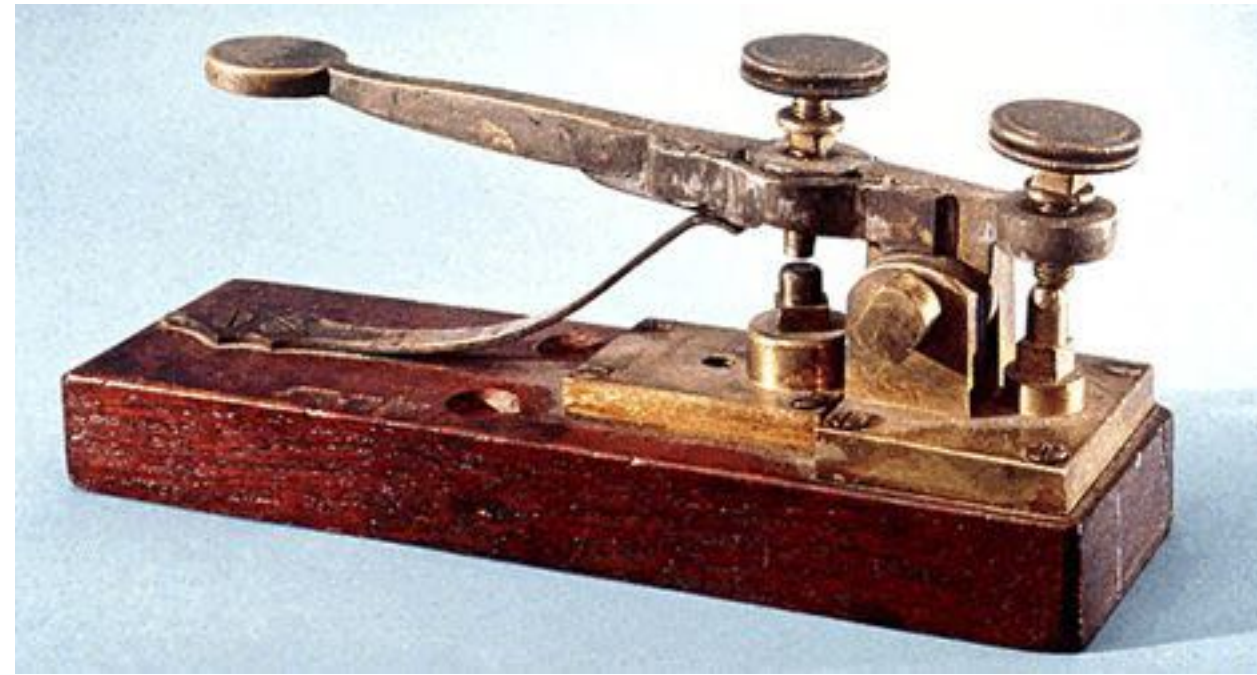
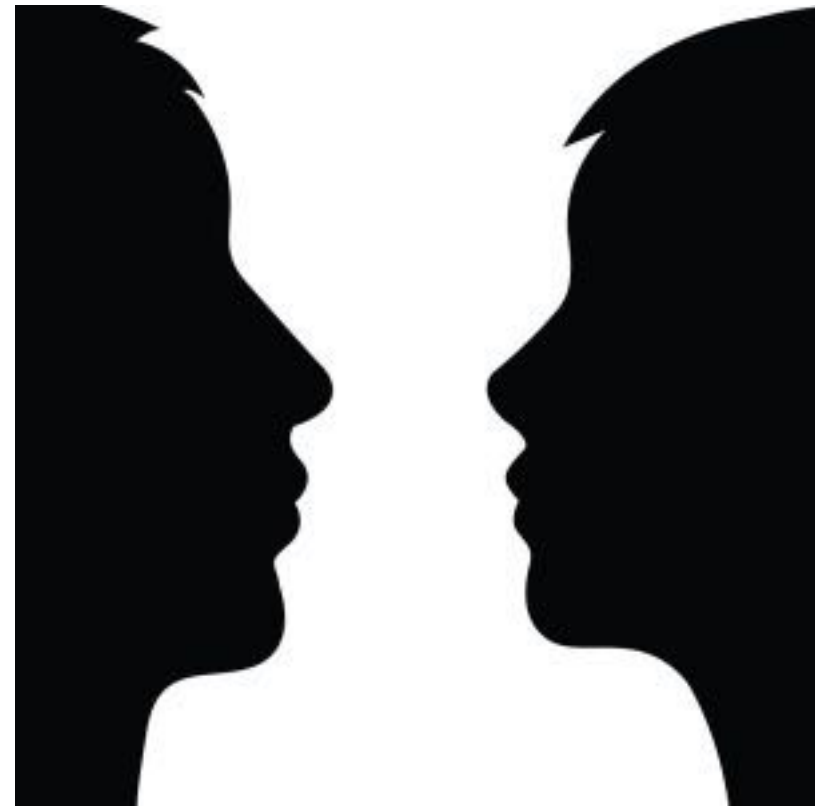
# all your data are belong to us, too



- my name
- my phone number
- my physical address
- my credit card number
- my social security number
- my browsing history



# the internet at its core is a communications system



# a communications medium where you cannot communicate doesn't really work

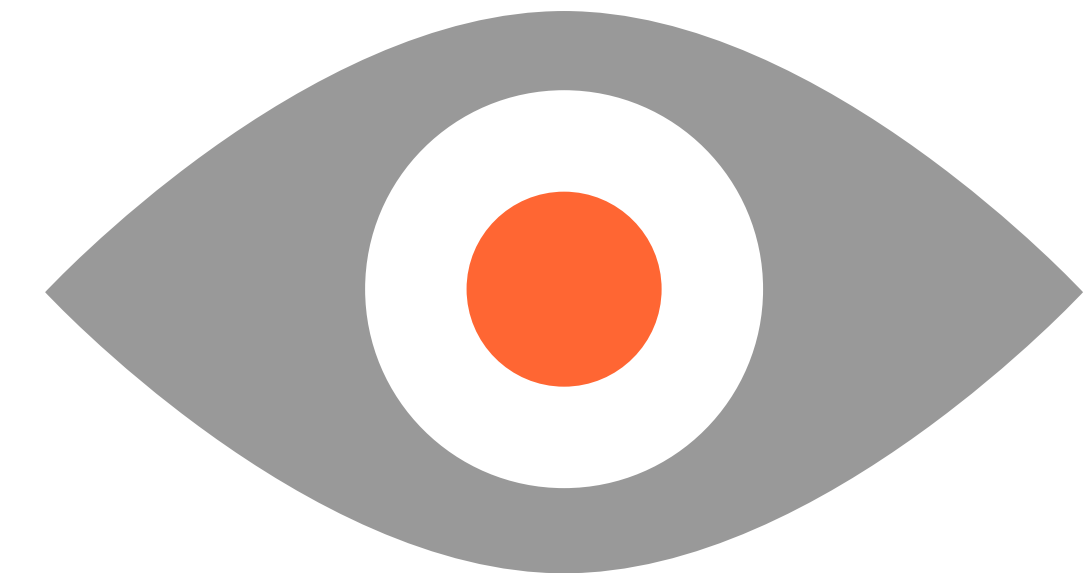
## you are censored

Two thirds of all Internet users live in countries subject to strict censorship



## you are surveilled

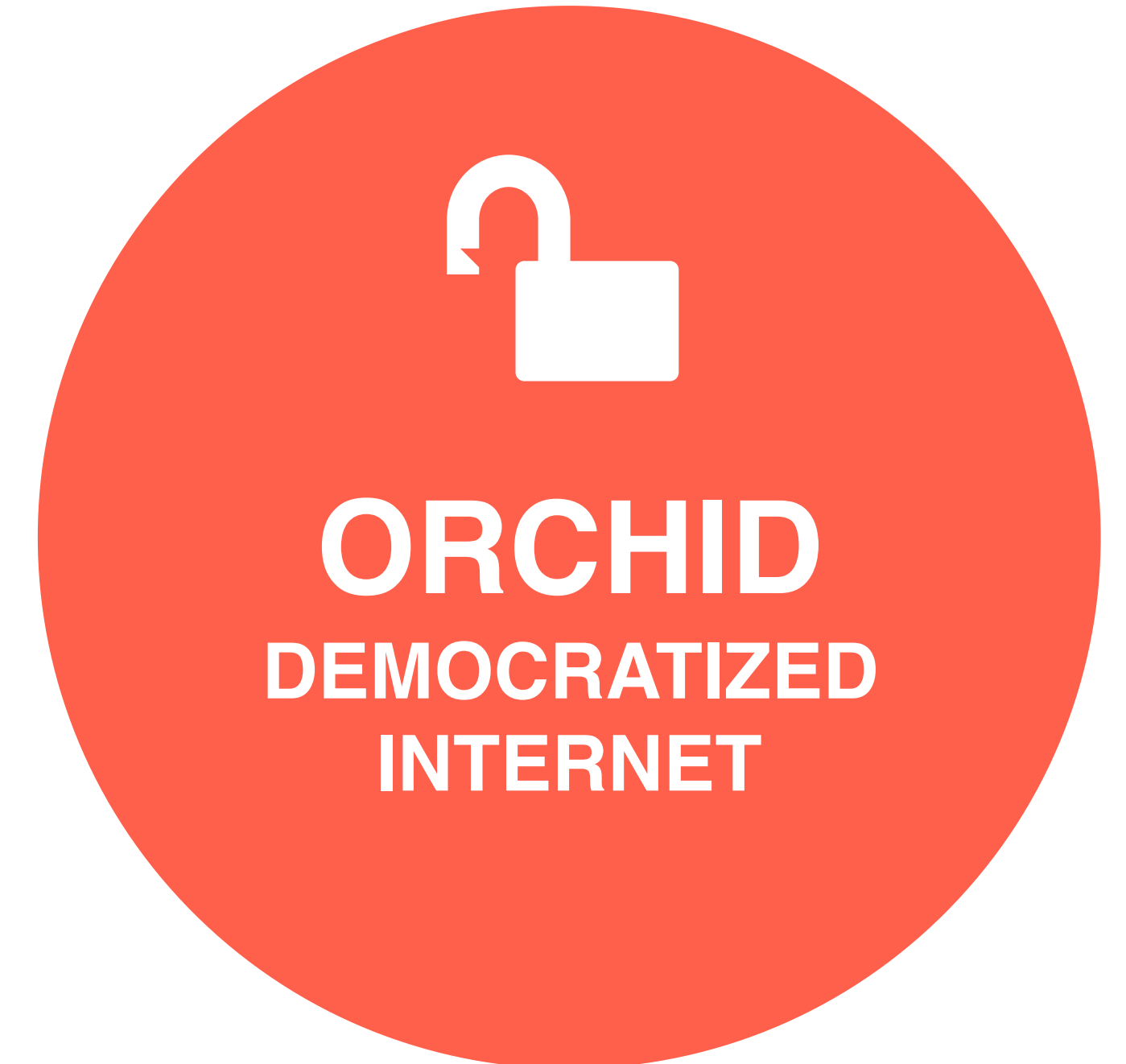
ISPs and firewalls watch where you go and what you do



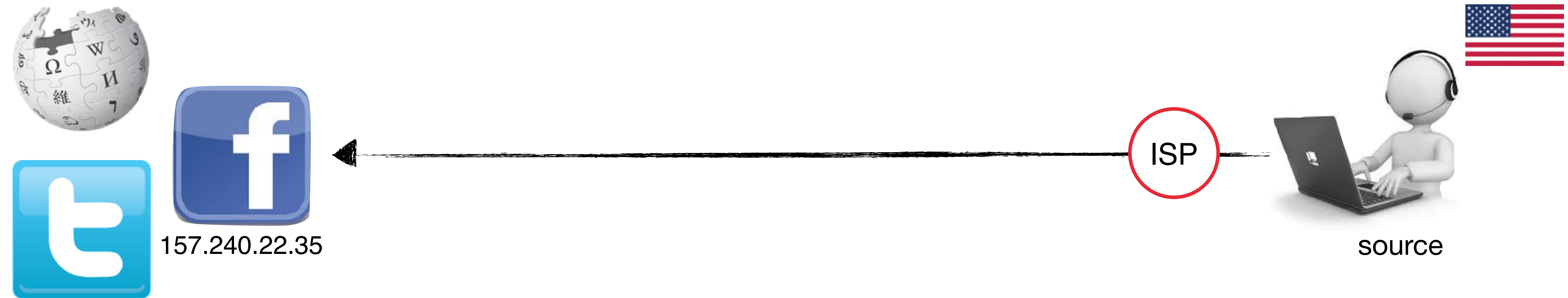
## you are denied



# a new network

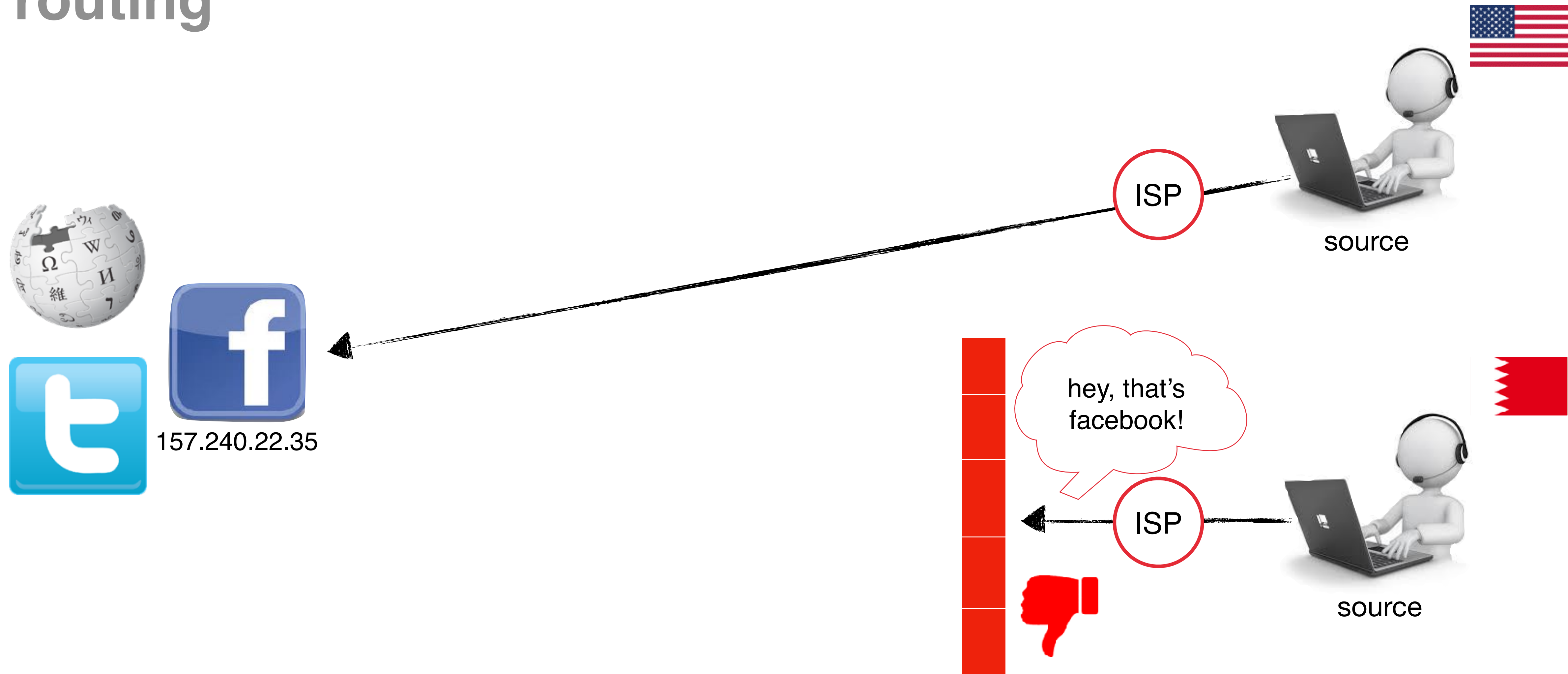


# routing

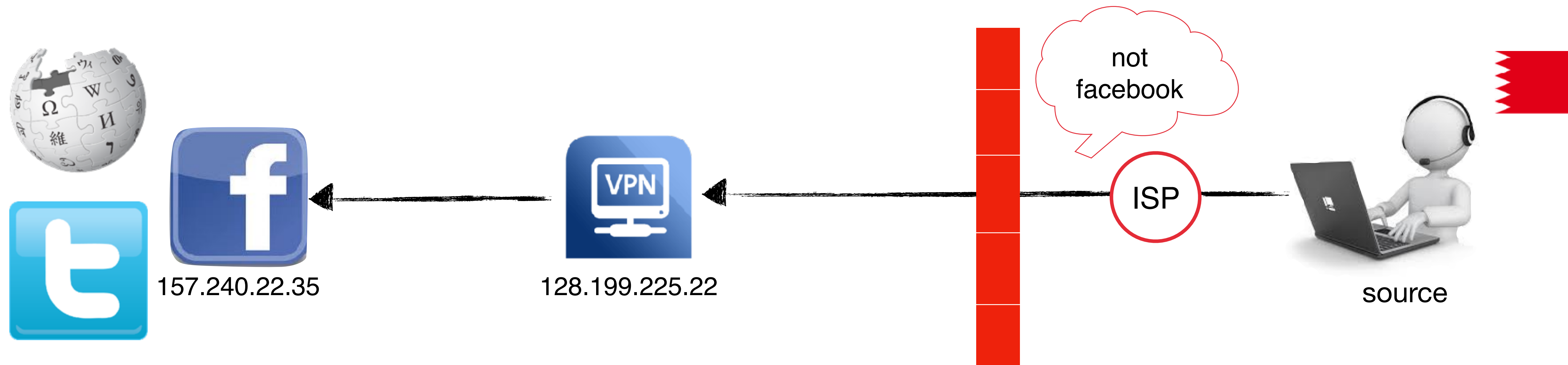




# routing

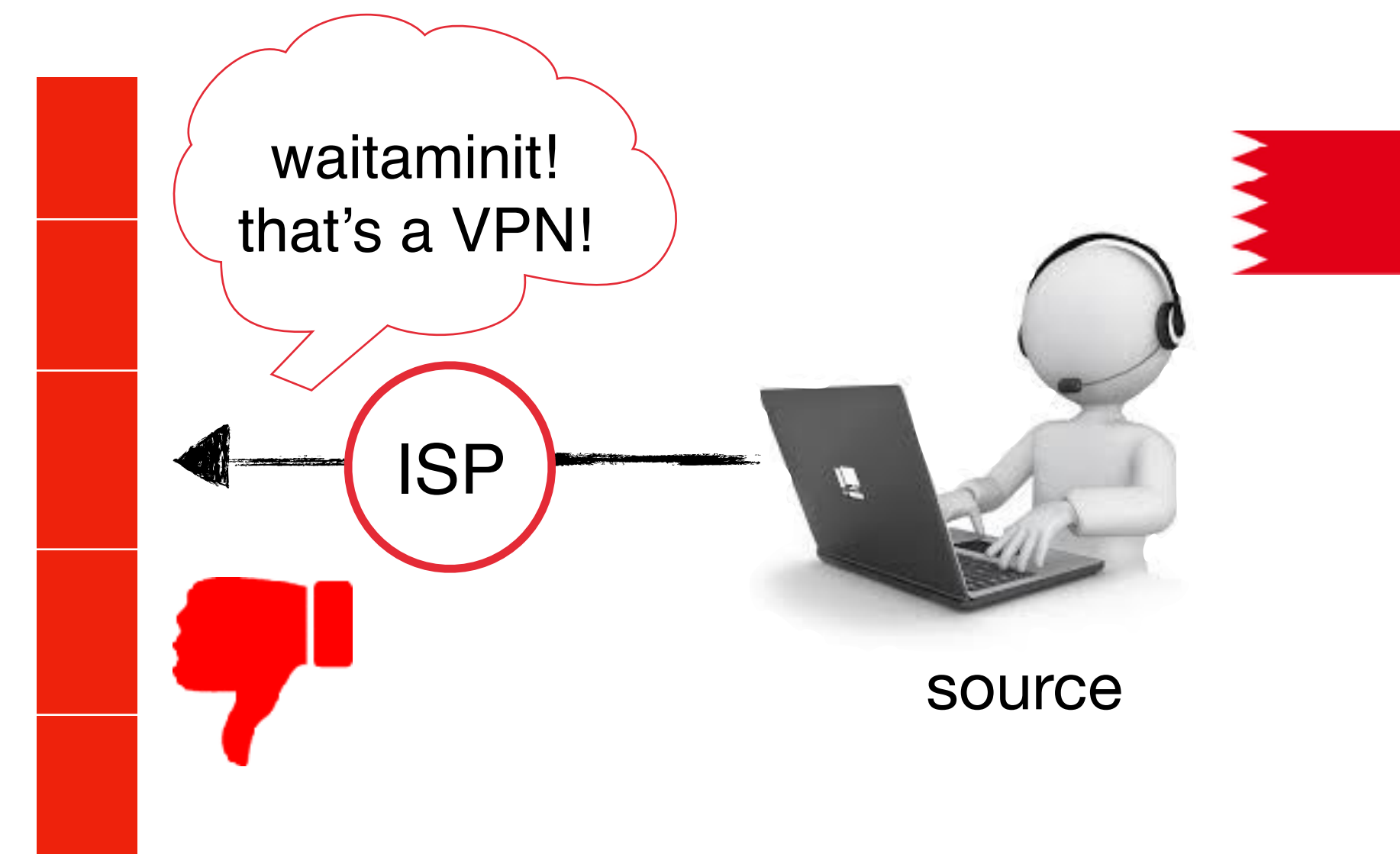


# routing



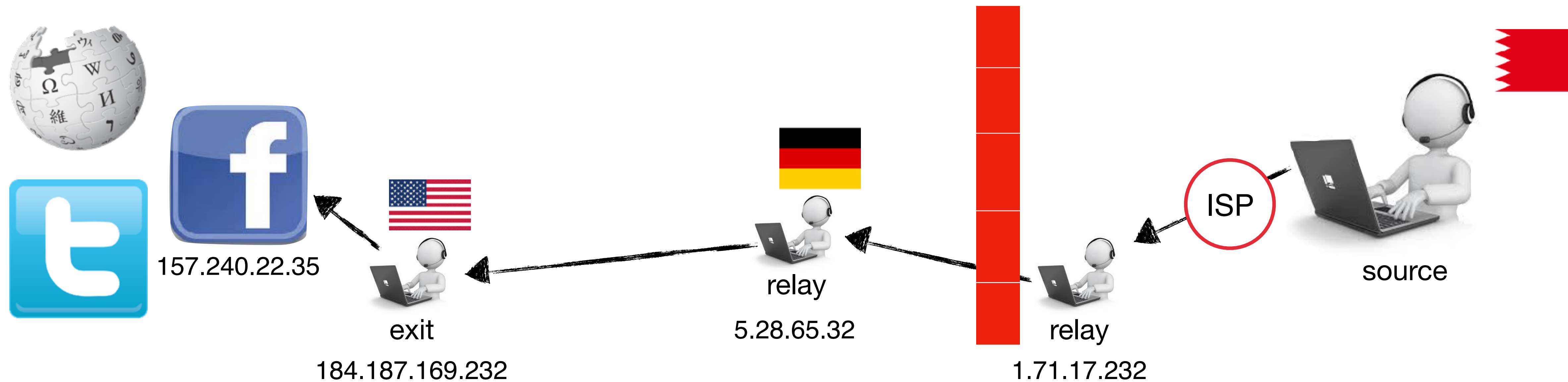


# routing



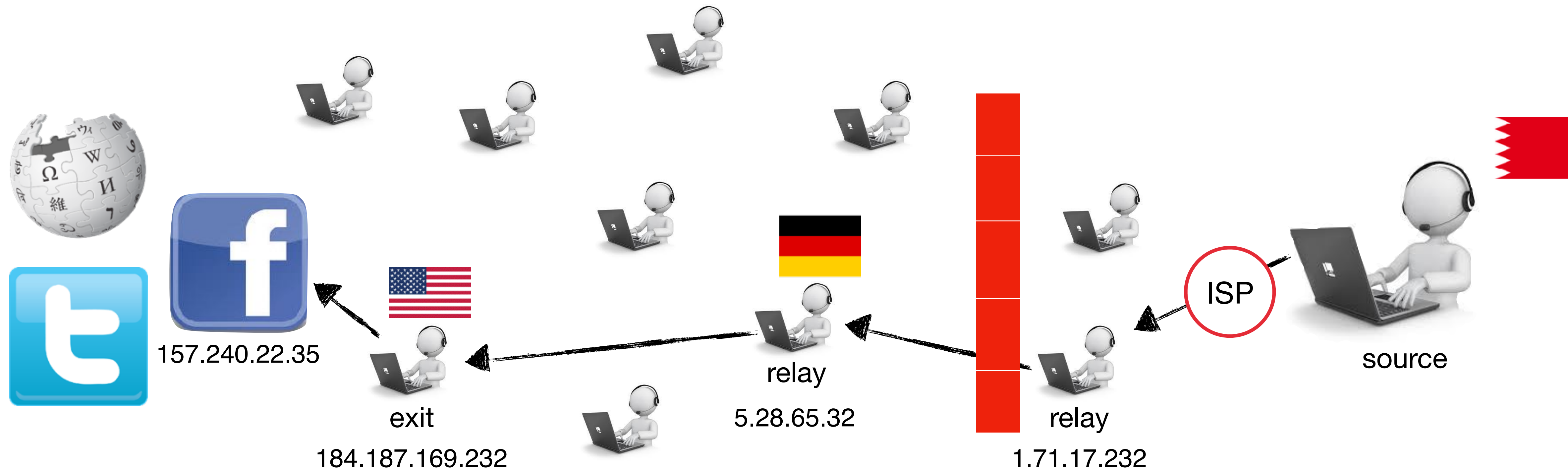
# routing

all traffic looks like any encrypted internet traffic, such as webRTC

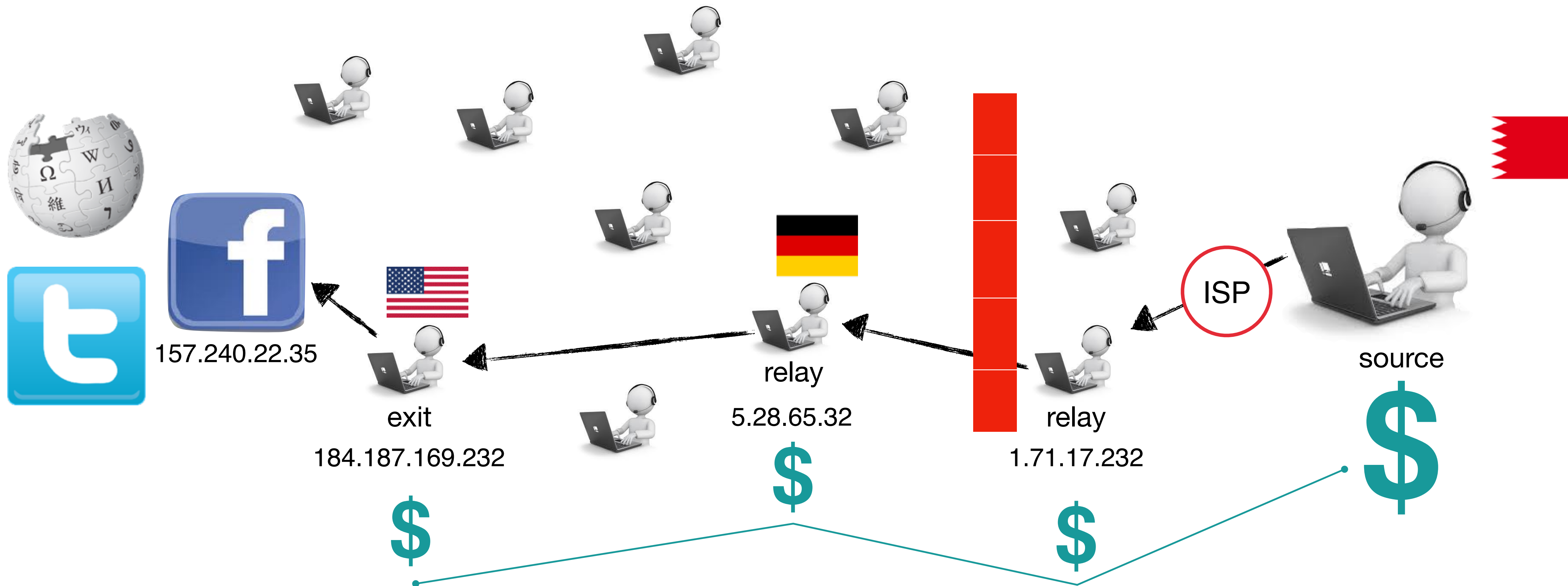




# routing - dynamic paths



# payments





# ORCHID tokens

- are a *utility* token, for use within the orchid network
- won't exist until the network is launched (Q4/2018)
- 1,000,000,000 will be minted, and no more
- velocity managed by both supply/demand, and by network connection structure



# 100% Free Software - completely copyleft

- ▶ we use the AGPLv3
- ▶ we require changes to be shared back
- ▶ we are as close to being RMS compatible as anything can be
- ▶ we are focused on the ecosystem
- ▶ we control nothing





# Founding team



**Steve Waterhouse**  
VC Visionary

Pantera, Fortress, RPX, Sun,  
PhD. Cambridge



**Steve Bell**  
VC Visionary

Trilogy Ventures (BTCC Seed),  
ShangBy, Trilogy, Supply Solution



**Brian Fox**  
Open Source Software  
FSF, GNU, Bash Shell, TeXinfo,  
WFB Online, 15 patents



**Gustav Simonsson**  
Blockchain  
Ethereum Core Dev (security),  
String Labs, Ericsson



**Jay "Saurik" Freeman**  
Network  
Cydia/Jailbreaking  
UCSB

## Supported by

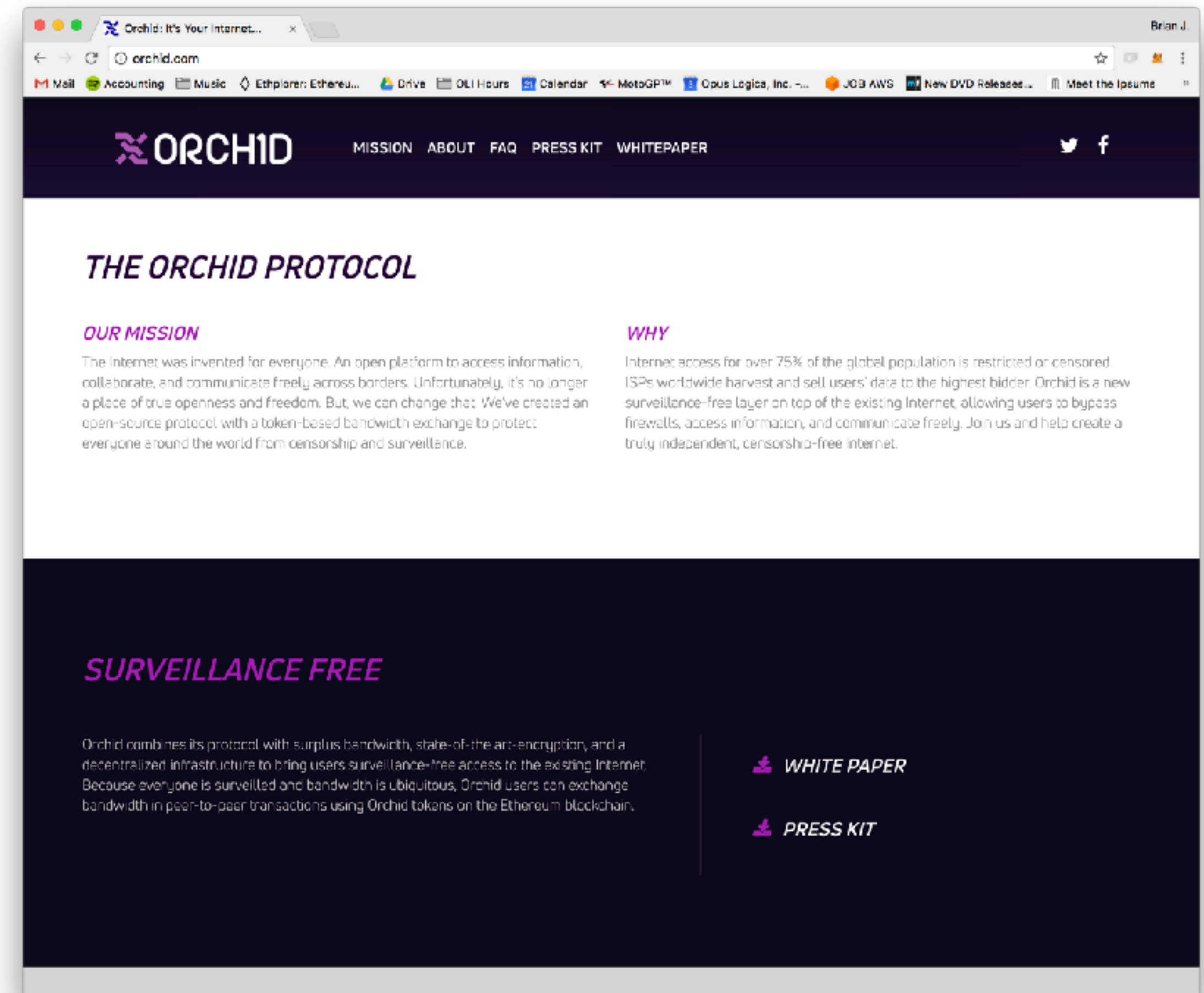
**Marco Santori**  
Cooley

**Gavin Wood**  
Ethereum, Parity

**Dr. Dan Boneh**  
Stanford

# quick takeaways

- ✓ decentralized anonymous network
- ✓ provides infrastructure for resource market
- ✓ participants pay and are paid using tokens
- ✓ proof-of-concept software demoed in Cancun
- ✓ whitepaper available at <https://orchid.com>





# we need you, too

- you've learned from open source - please teach
- you've built on other's work, please create
- you've used open source products, make more
- you know about FOSS, tell others about it



# how to get involved

contribute@orchidsource.org  
github:orchidsource

- write code - core protocols, networking, etc.
- help with user interface testing - feedback, art, etc.
- help with community - orchidsource@reddit
- help with bug finding - github:orchidsource

JOIN **ORCHID**





# everyone deserves the internet

- ❖ Orchid is designed to scale to 100s of millions of relays, proxies, and users
- ❖ traffic on the internet belongs to the users, not to centralized corporations or governments
- ❖ the dropping of privacy protections affects all of us

*“whoever controls the media, the images, controls the culture.”* — Allen Ginsberg



# Orchid

Orchid is a free and open marketplace and platform for the delivery of digital services. Bandwidth is the flagship, but compute, storage, and other services can be trivially built on top of the Orchid Protocol.

brian j. fox  
free software advocate  
co-founder, orchid labs  
[bfox@orchid.com](mailto:bfox@orchid.com)