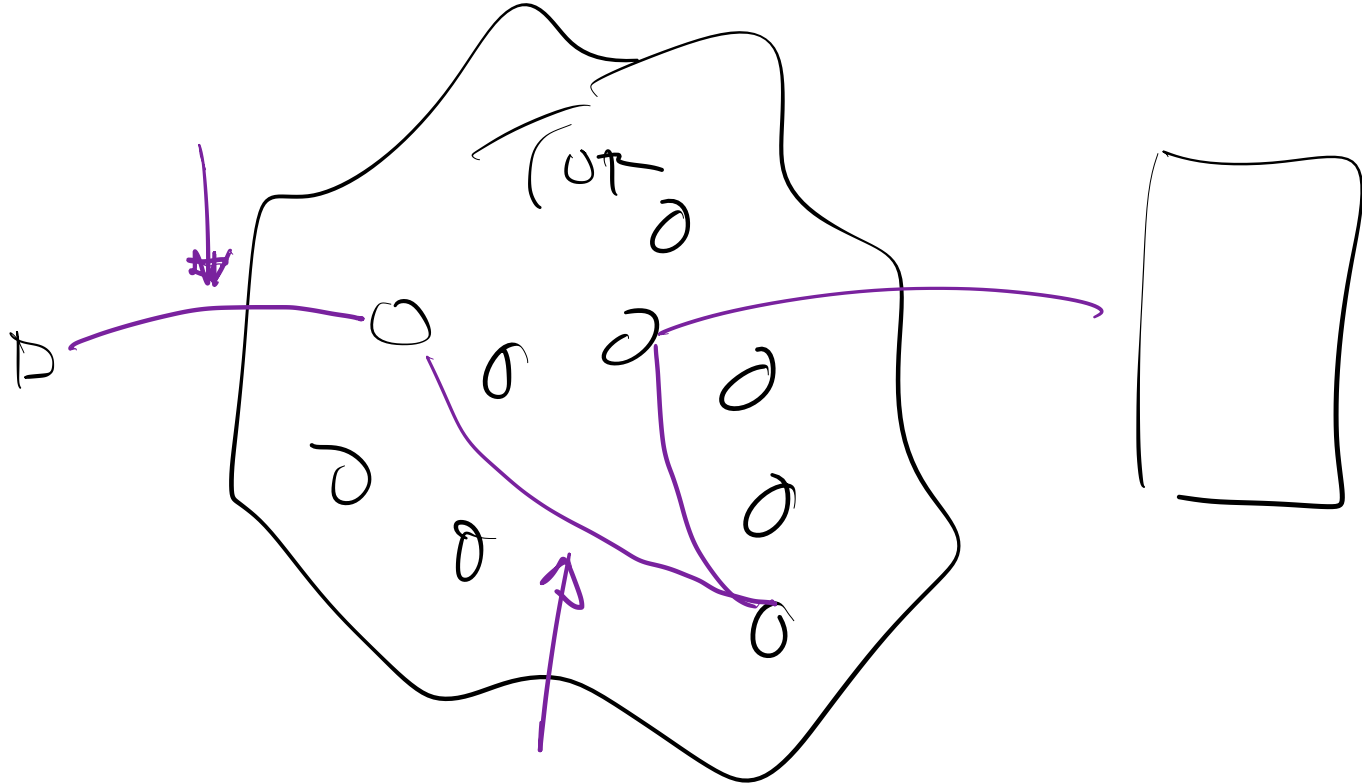


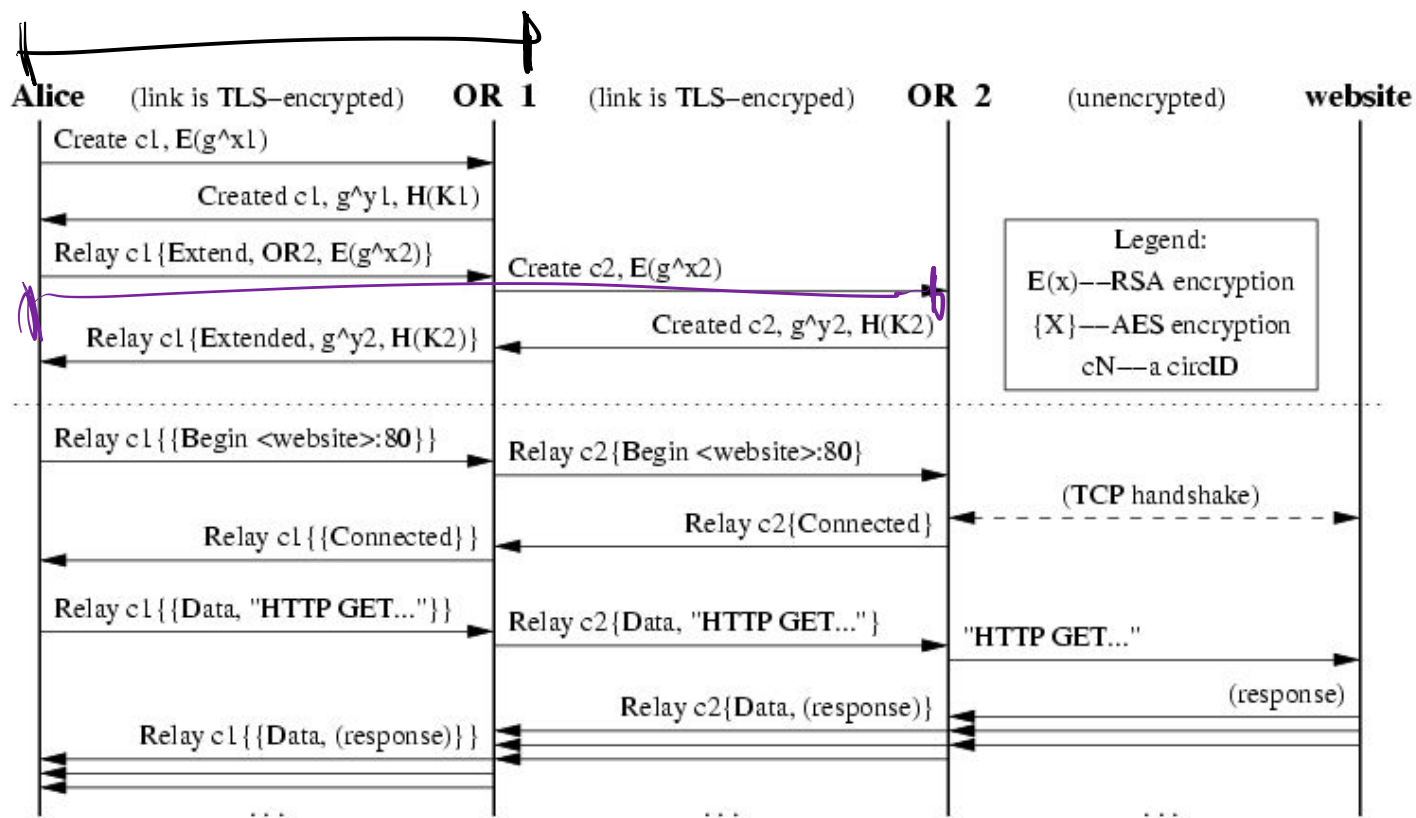
CS558 Network Security

hello

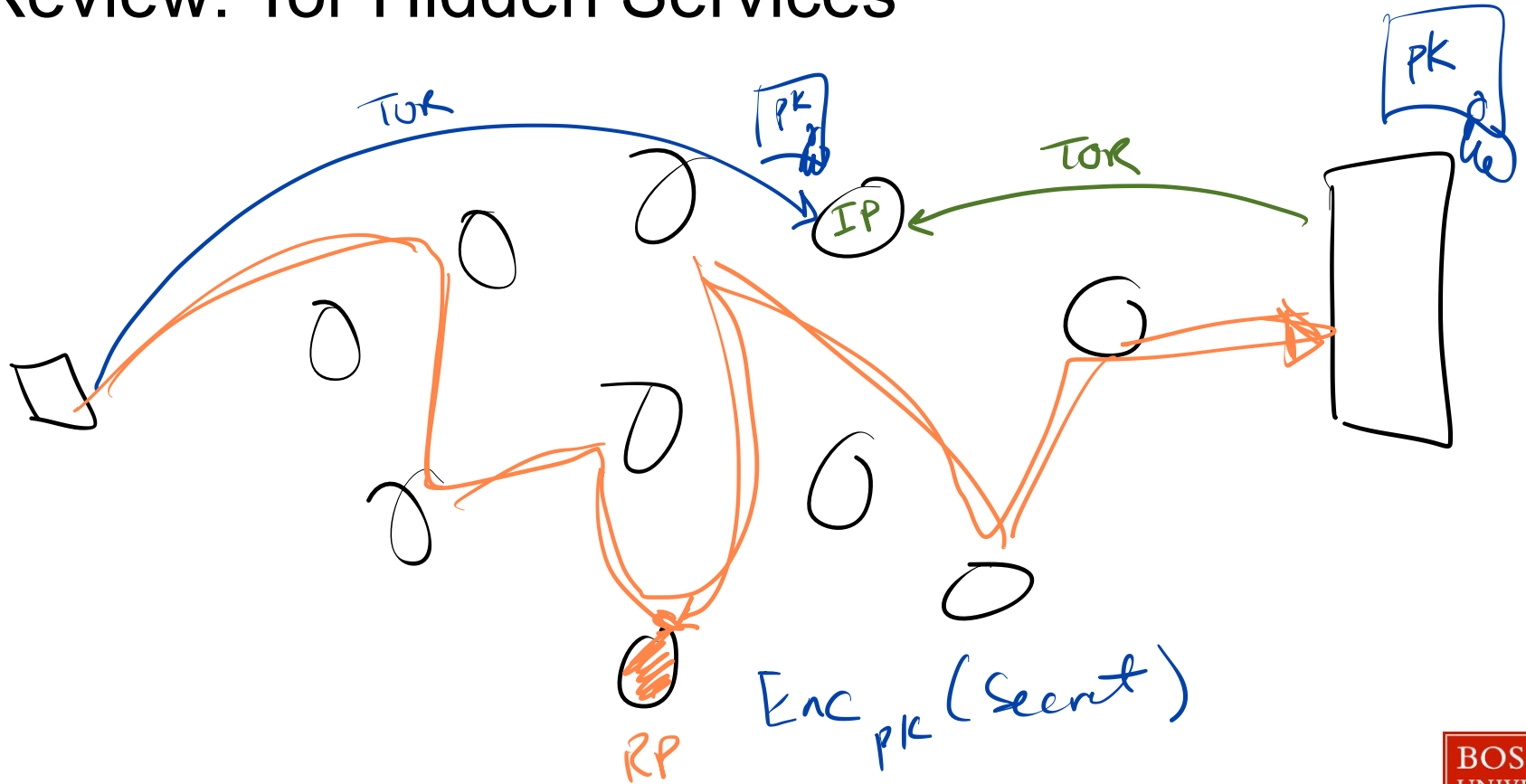
Lecture 19: Censorship Circumvention

Review: Tor Circuits





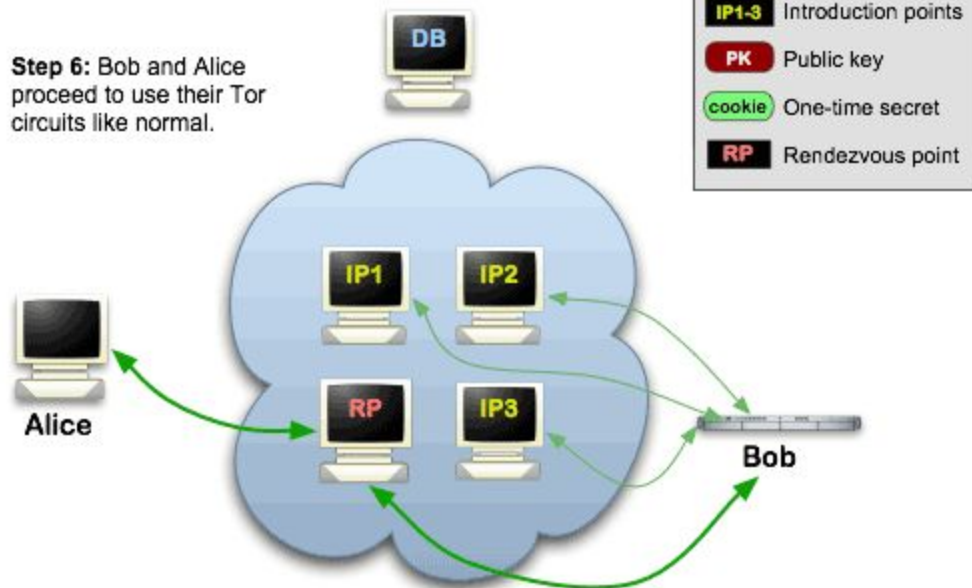
Review: Tor Hidden Services



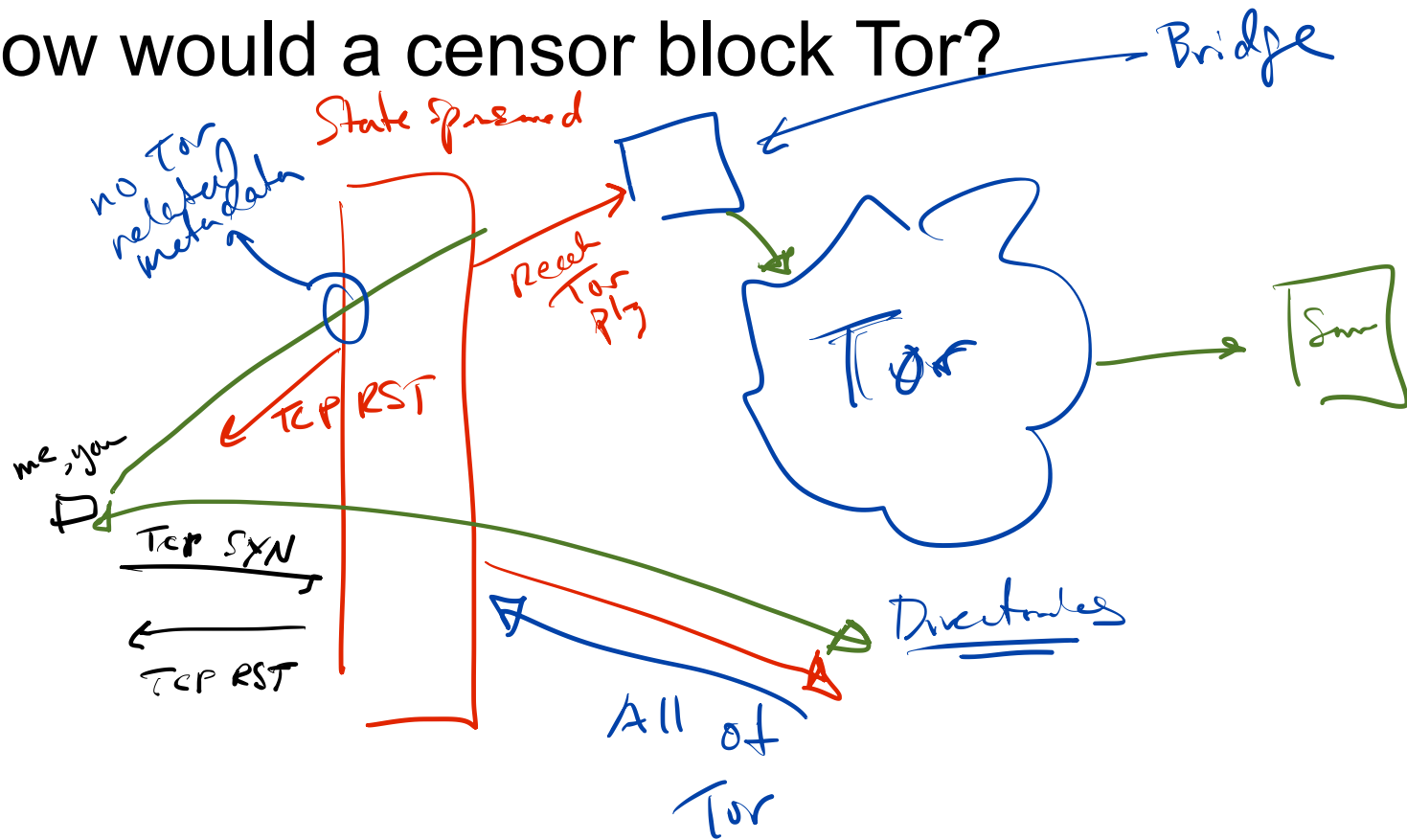


Onion Services: Step 6

Step 6: Bob and Alice proceed to use their Tor circuits like normal.



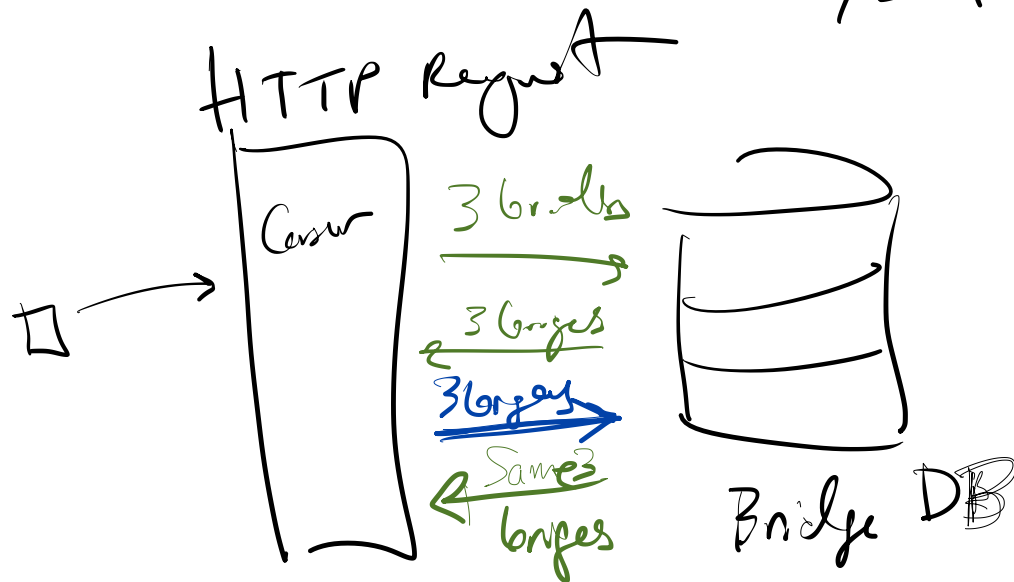
How would a censor block Tor?



Active Attacks

Tor's BridgeDB

/24 of the request

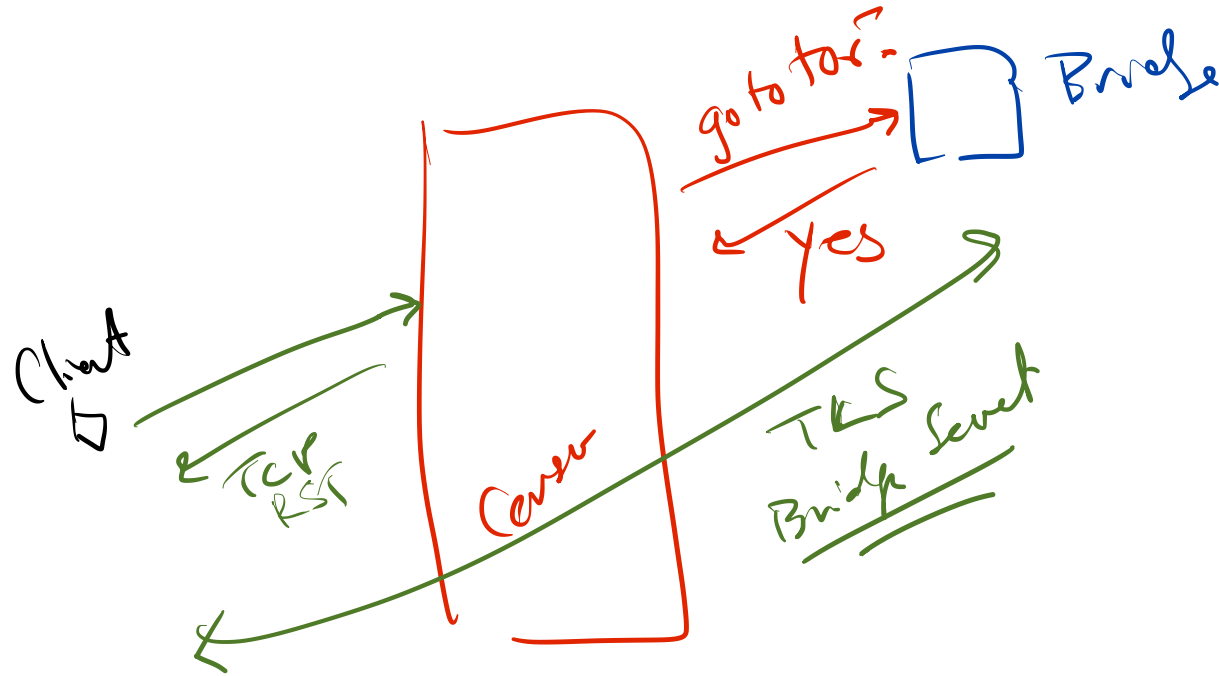


① Event

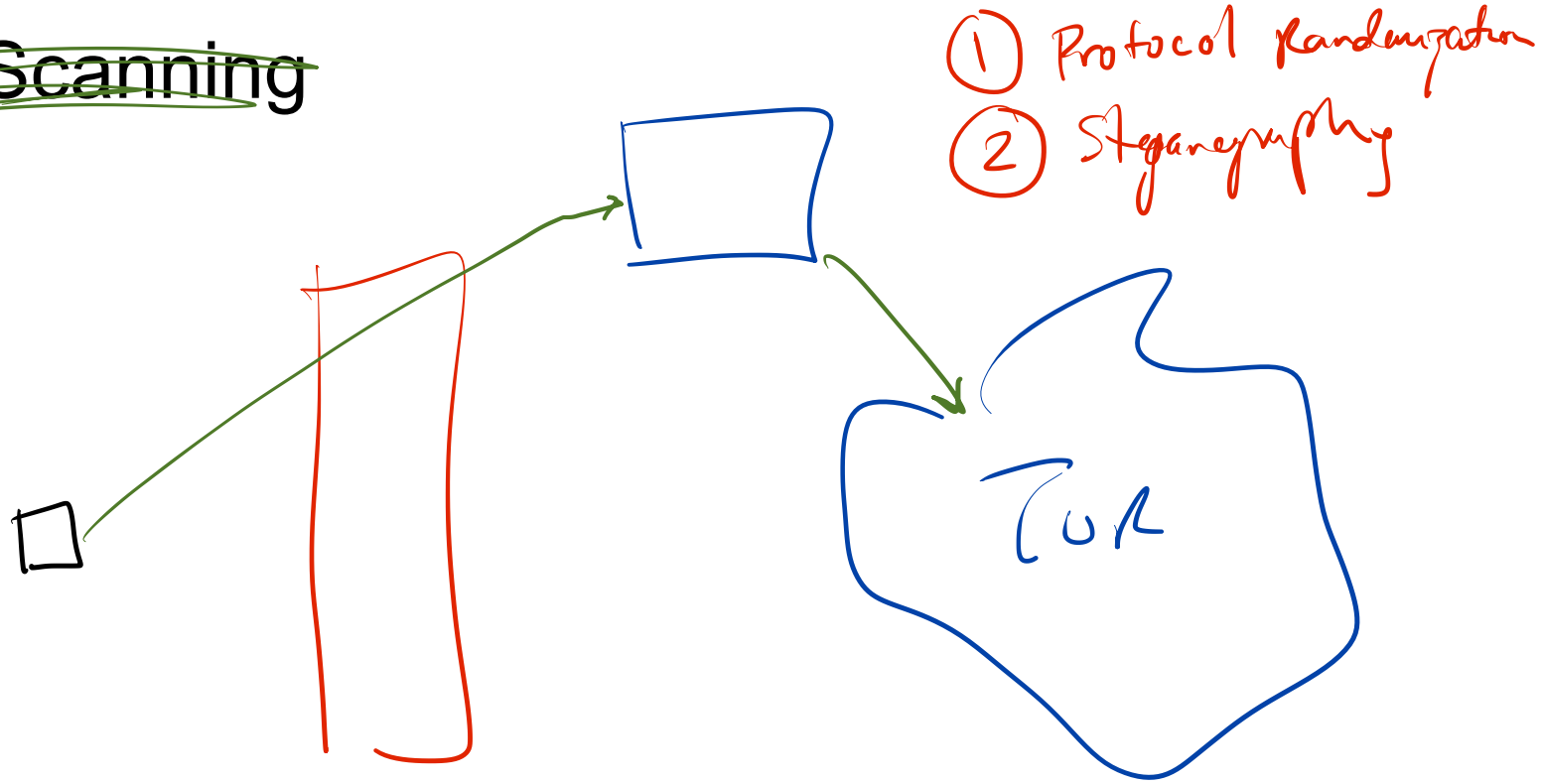
② Send them mail

~~Tor Bridges~~

Active Attacks

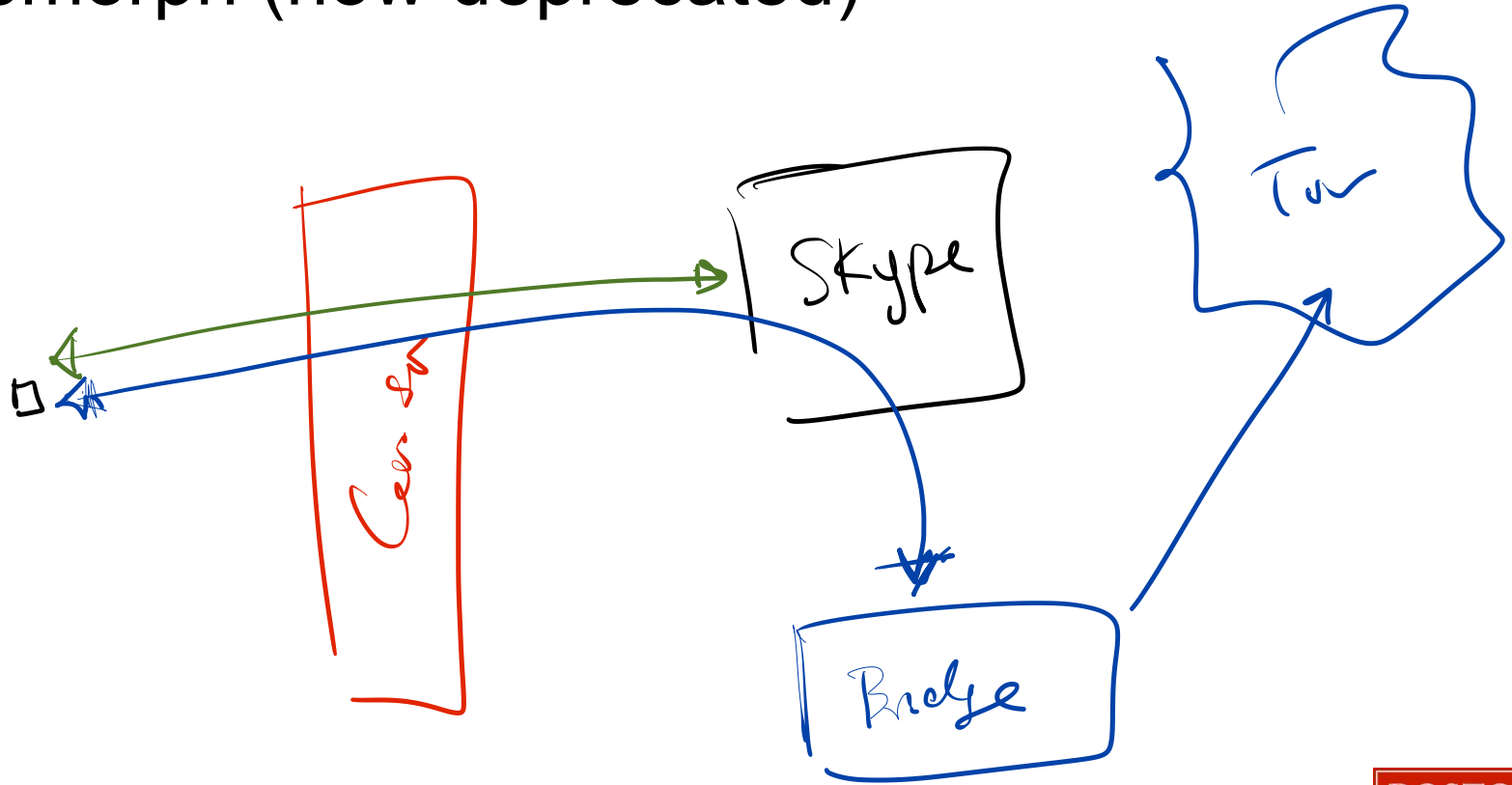


Active Scanning



Classification of the Tor Protocol into
→ metadata about the protocol

Skypemorph (now deprecated)



Obfs 4

Randomizer

* require default open channel
"fail open"

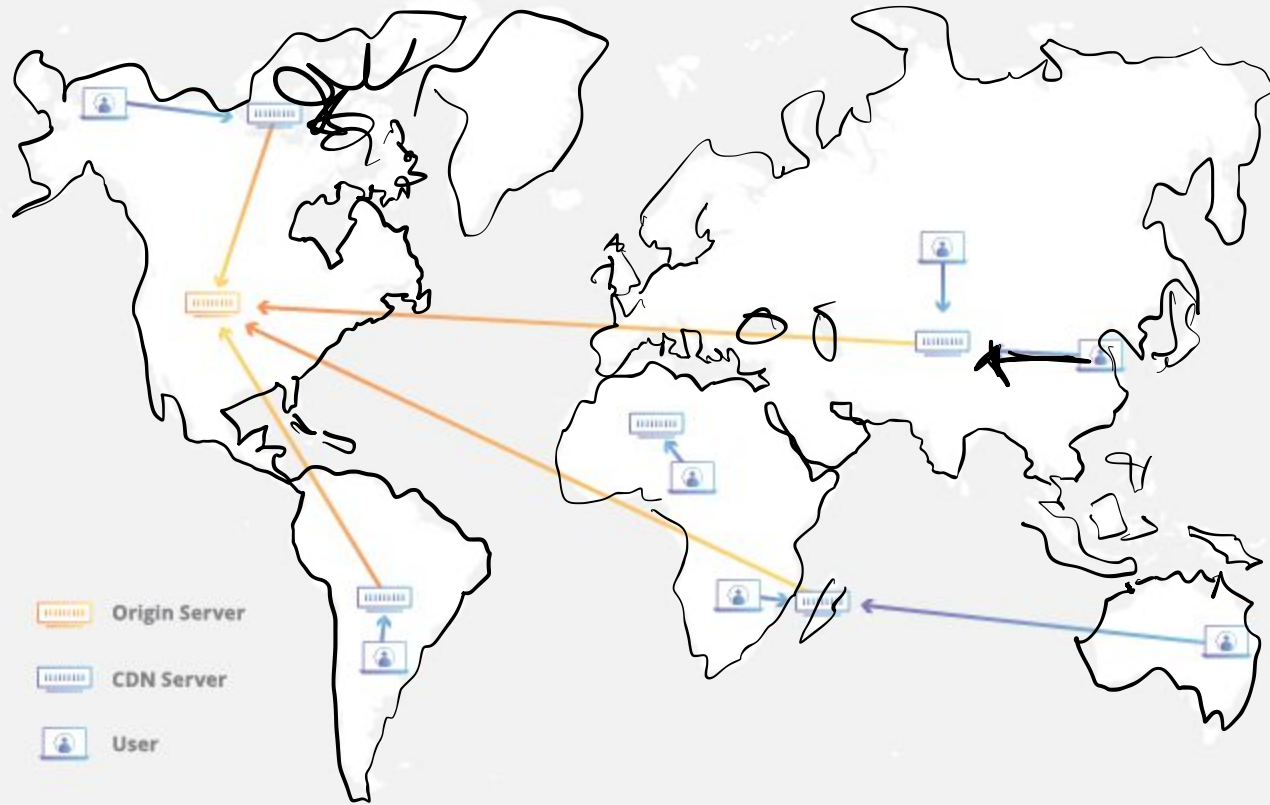
Content Distribution Networks (CDNs)

CDN

V1: my hardware my IP

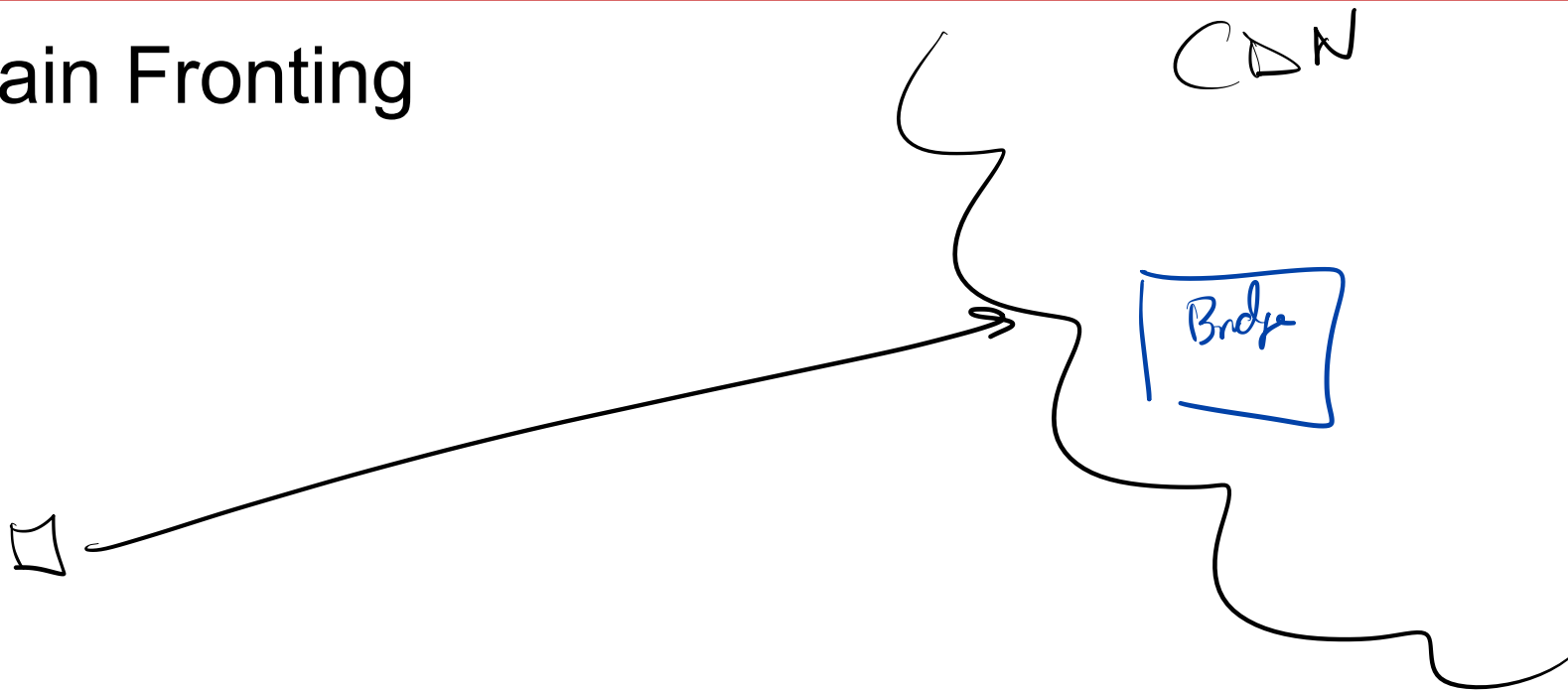
V2: Virtual Servers

V3: Serverless deployment just code

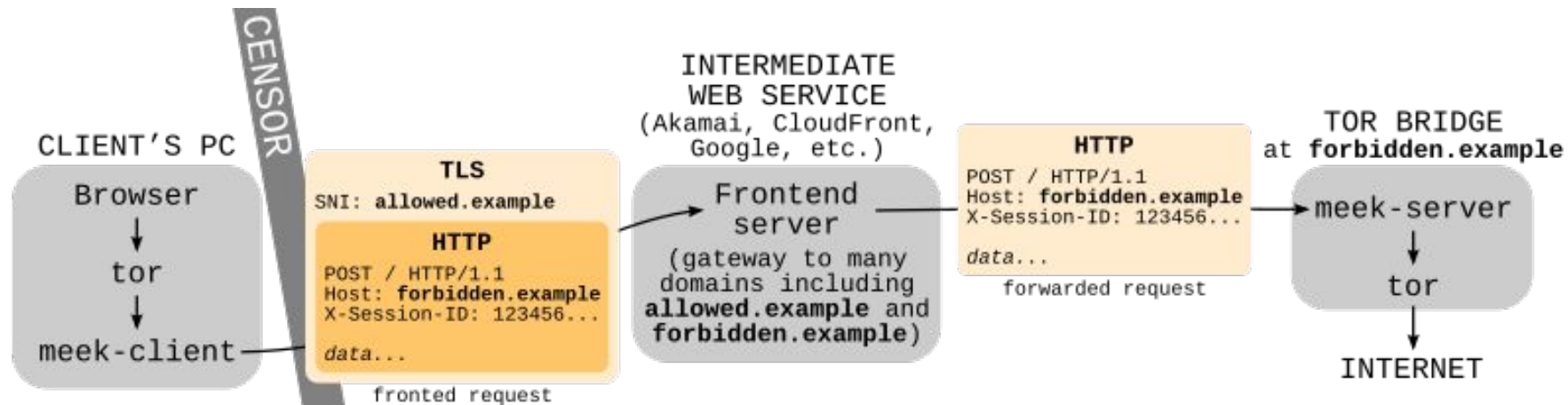


What's the point of CDNs?

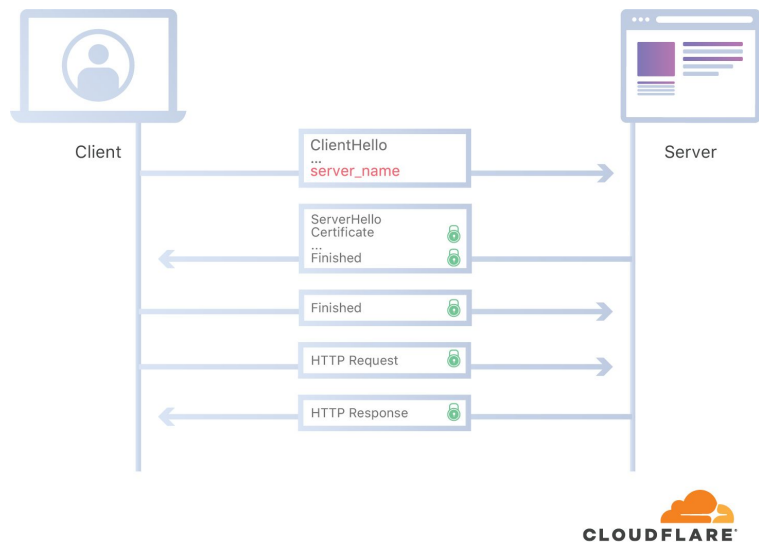
Domain Fronting







Encrypted SNI in TLS1.3



Encrypted SNI in TLS1.3

