

Le web décentralisé

Qui suis-je ?



@AntoineCailly



acailly



zenika
<animés par la passion>

<https://acailly.github.io/>

**Il était une fois le web
en 2020...**



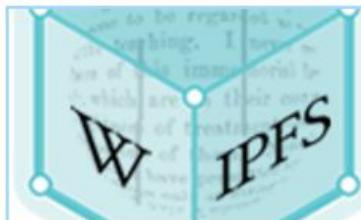
Censure

Access to Wikipedia restored in Turkey after more than two and a half years

By Wikimedia Foundation • 15 January 2020



**Welcome back,
Turkey!**



Vikipedi'ye hoş geldiniz

Herkesin katkıda bulunabildiği Özgür Ansiklopedi

Türkçe madde sayısı: 288.931

9 Ocak 2017, Pazartesi

- Bilim

- Coğrafya

- Din

- Fizik

- Matematik

- Sanat

- Spor

- Tarih

- Tüm portaller

Haftanın seçkin maddesi



Mars, Güneş Sistemi'nin Güneş'ten itibaren dördüncü gezegeni. Roma mitolojisindeki savaş tanrıları Mars'a ithafen adlandırılmıştır. Yüzeyindeki yaygın demir oksitten dolayı kızılımsı bir görünümü sahip olduğu için *Kızıl Gezegen* de denir. İnce bir atmosferi olan Mars gerek Ay'daki gibi meteor kraterlerini, gerekse Dünya'daki

gibi volkan, vadi, çöl ve kutup bölgelerini içeren çehresiyle bir *yerbenzeri gezegendir*. Ayrıca dönme periyodu ve mevsim dönemleri Dünya'ninkine çok benzer.

<https://ipfs.io/ipfs/QmT5NvUtoM5nWFfrQdVrFtvGfKFmG7AHE8P34isapyhCxX/wiki/Anasayfa.html>
Güneş Sistemi'nde bilinen en yüksek dağ ve *Marineris Vadisi* adlı kanyon en büyük kanyondur. Ayrıca Haziran 2008'de *Nature* dergisinde yayımlanan üç makalede

Günün seçkin resmi



Suppression des données





Donald J. Trump 
@realDonaldTrump



Suivre

It's freezing in New York—where the hell is global warming?

21:37 - 23 avr. 2013



397



470



281



Trump Just Deleted Obama's Climate Change Webpages



By Brian Kahn

Follow @blkahn

9,117 followers



Published: January 20th, 2017

At the exact hour when the presidency transferred hands, the Obama administration's climate and energy webpages became some of the first casualties of the new Trump administration.

In their place is an "["America first" energy plan](#)", which talks at length about tapping fossil fuel resources in the U.S. but makes no mention of climate change or renewable energy. Investing in the latter will be crucial to avert catastrophic changes to the world.



<http://www.climatecentral.org/news/trump-delete-climate-change-webpage-21091>

Obama's climate page has been sent off to the archive.

Building refuge for federal climate & environmental data

DataRefuge helps to build refuge for federal data and supports climate and environmental research and advocacy. We are committed to fact-based arguments. DataRefuge preserves the facts we need at a time of ongoing climate change.

This site is one part of the project. The vast majority of the government information gathered through this project is available from the Internet Archive through the [End of Term project](#). This data catalog is a place to store data that is difficult or impossible to harvest through web crawlers. Data was added to this site by volunteers at [Data Rescue events](#). You can see the [workflow](#) used at many of these events on the Data Refuge project site, however this workflow is no longer supported.



<https://www.datarefuge.org/>

Search & Browse | Open Data

Secure https://open.whitehouse.gov/browse

open.whitehouse.gov

Search

0 Results

Categories

- Business
- Education
- Finance

No Results

```

xrd
x Archive Backup
pu/3/section/package_searchToOrganization:rep-gov on Jan 28, 2017
No. In the resources described from the metadata linked above.
No. This package is included in the package and the download script I used is at "dl.js"
missing.txt. Note many can be found at https://openwhitehouse.archives.gov
3799582293e3b7d156c177 5986d24884282304bb6e177fa5e00d03f0f8ea0835e4d9ba2c2631173e3dd4488b 3d0808eb1b1c7f58dc5e
444022936188138436908d95162541e5d299221a5085e31158a2a362d1483f360a36d888013995c1344067
x20343227eab4efb1f231 5e13542c5ac745d1c39391f15100ad739da7ec05b3e45256e1284e0262
x3296cad91801581ff83977 5e9bf4aa1e0b323b306dded2d8444f5ea7798cecafd5e3f28a7fdaf73908433a 8bd7e0d51587d11409
7078238e48422108eb05 8bad04f7262712c1822b47430db0323595088832c0d0f13779edc70e696204
4094248282504e402894052 8c0a30a38347e4020a13d242a208958177985a78580f666506926
3a7a2b113e4da44373f08e023 8e0900a01d38234535173781a28b5d48113a7867f092ef bcfax1ed3e239a30844
p27234948481132599932 8219a3613c38a58917ba725db0517e082747432733909529e5f05411
70479897422388564802144 8303d3435e89e6892d5015213f8a929083a10356d5a190800155967
x11202343d477191373446 842525a2b2e9e59068752c2237385221a3c298455475add0512c15628b463c1
x0e868849894615d600e0899 879746dc3113eaae079434293771a5e048022478338c9a346e
0687232746013d624a08826a41e821383501f80a36d2991d86417a03f2d273
0582604477700e682105a721a 8d297444623d5a193932d13116533d1539064579235093d40048
14486515d0085787a8d 8d2f68a61f7a78c4884d8a7823609673174867141d3627374853a09801146a4
x077482cc55d0085787a8d 8e0d913122516a6080a74623995c5e4f8c08975e672ce7735d4230e1c8879c
2195998310508822859 8e4650384030a811693748450d85930711a539872983653946037818760
k88579d00331c173b6e7 7549b93f681d80de3b489c45c4caad59c38c9397918991c323aa511e6f78 dat.json
95518e1818857e0d1915e1 788426982f4f7300a2b4c5a2e02090da0d7a4887fx377704292a600d
x094697138502a52a59f19 78e79a5057e429153f686277591409950d737100960d6f5
x02913647e0cd0149746 7c7d6be078-e772eae17d025427d29564422323548e14f512e0f8e7b2d
x379175006877485197139 88263e9198398349761454112913579759061d10497e15088c23f1
x023113788944893097481 8338484c539780604329784297e4179a510d1c1a576186a65460d9
75121111a74528a783a37020 8582a164d1723956493913217a7462430301135795100721
x0924551d5c07084076446 86211b771f030a2080223741687446378a31816548853997v23c1f9847383a
x0e3137398944893097481 8688e7d464e97347240904d87589f4d491c778d0408165484597
08542098832779955901 87060346854494442461d326287005835953859403243250656683777
x549526d4715173f73ca 8835242786185380d36526e5138c1f32c76c77a4d86e88683
0887051593171ef1a32937 8424e013243241248839446c9c6d3d31c731da78a87fc1c8d89144a
208251308410999333 86644898035597889875758845771a5797844e38a3658d45048e756
x0930130723113333ee 86644898035597889875758845771a5797844e38a3658d45048e756
x181350246256d600e43b 868172c1e08af7485c975a5e24908804b1745a731fb8e0a333e377936e7
71311381661940380321 93931a6e04d72908e0520242744729568a21a80a082d84856012ad0f
x05645728124461380 94004a1d9a20646174863d4645704a24288760053a5004e1174444073311838472
x092520bb0123e71c804269 9222247e75682244697f4e704879973b621572c346426c8d3f722a674733 4343b3c0894379547949
x777bf16827444e4575880 9279088983c3938429f143579914e444164039080154342617980d9879874460
x3542285d01383913804 93287184557738854024564521824379d2816d306464653796417
7d3ec05087387f7ba6539 933479898775ba5h2b6e5d159f4250763b188a452a7e2f8e8a08465655
x33287364413c48997732 94130e50402808e0334ed748c1c7391a20851206877f71bcb521d3bc
x0885060032291133333 95031048291893785633130151188a0a274332274305206105821
x07770597486439867044 968114c927ada187601700d889592898421861e915d4ca289987a3
x0680c9f18284849061584 975313d0928c5d45e5h1c62a5e4440d6b915e12374a9e7bmc512c6
x09845934848488384032684 97f166d04607129a7158042324601595865a13674f0a87847856
x0421465312106743377104 98160745817131872988190421125342182124063923231
x077531447726d5995f89 982363d6f72f1fex72c8863f17868526b197a24ea337f5d07b76aa41252a59b89e1

```



maxwell ogden
@denormalize

Suivre

Today Trump removed all open data (9GB) from the White House open.whitehouse.gov/browse but I grabbed it all Jan 20! Will distribute soon

21:12 - 14 févr. 2017

288

8 854

12 877

Shared with Dat

Explore public data shared with Dat.



EXECUTIVE OFFICE OF THE PRESIDENT

Archive of open.whitehouse.gov

Backup of the open data released by President Barack Obama
before being deleted in February, 2017.

Preview

<https://datproject.org/explore>



Centralisation des services



Recherche



Maps



YouTube



Play



Actualités



Contacts



Drive



Agenda



Docs



Traduction



Photos



Inbox



WhatsApp



waze



Instagram



ANDROID



chrome

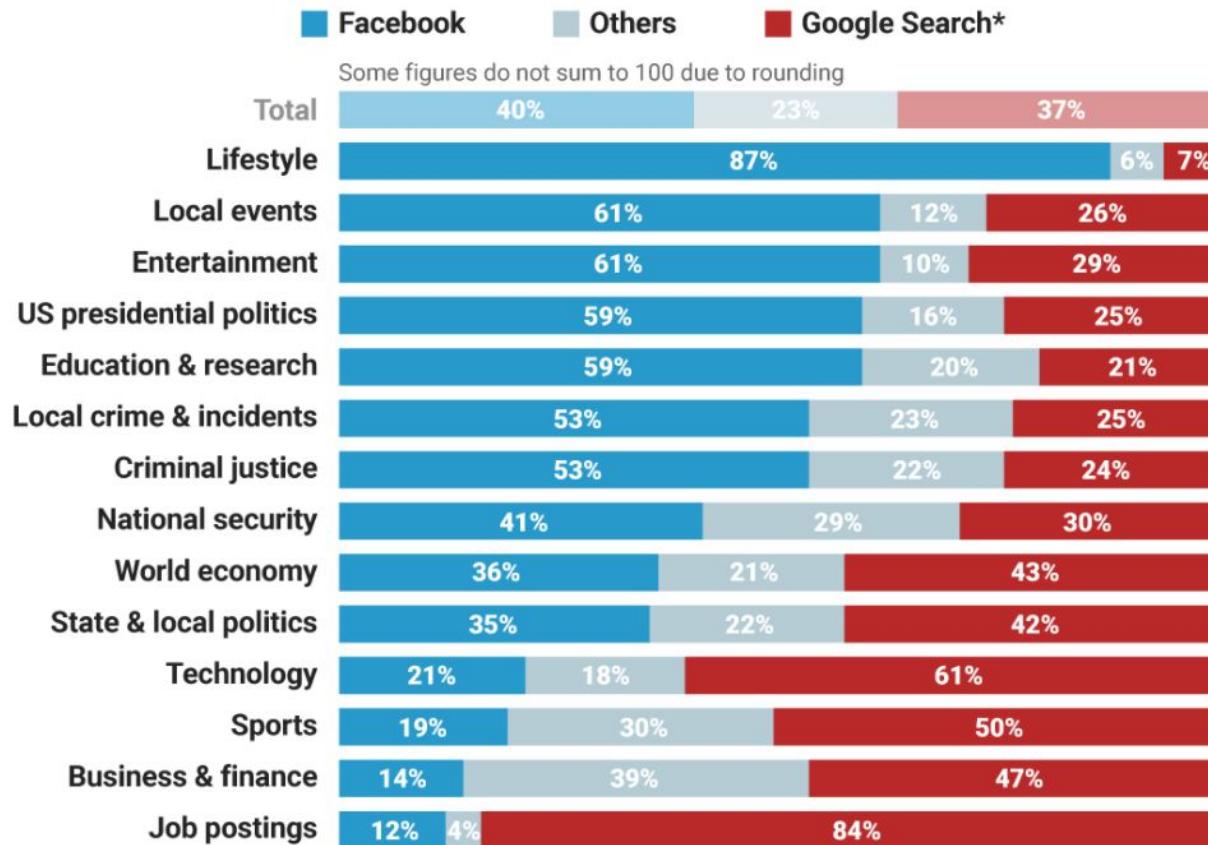


et Google, Amazon, Microsoft, Apple, Uber...

Centralisation du trafic



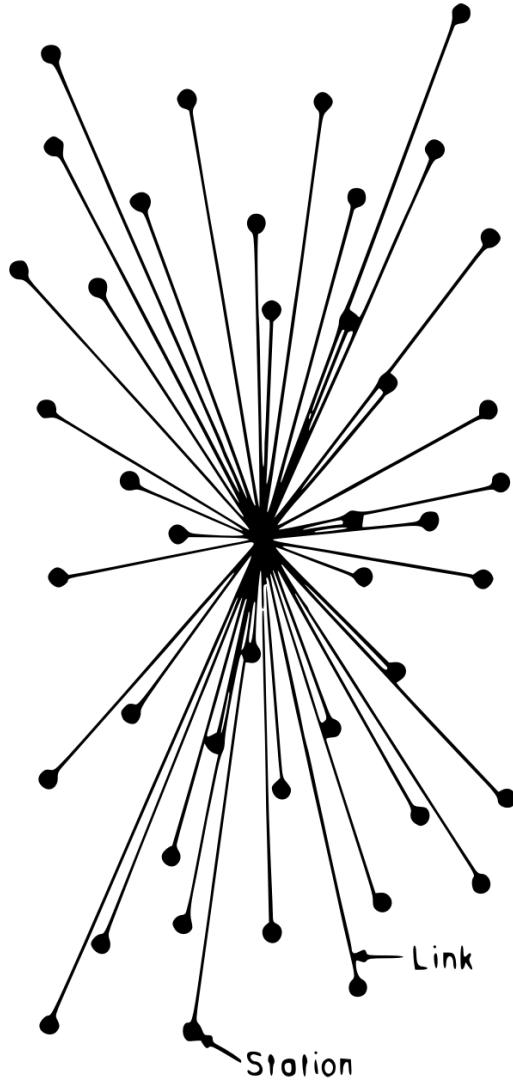
DISTRIBUTION OF REFERRAL TRAFFIC SOURCES BY TOPIC



SOURCE: Parse.ly *Not including Google AMP

statista | BUSINESS INSIDER

**Un point
commun ?**



Station

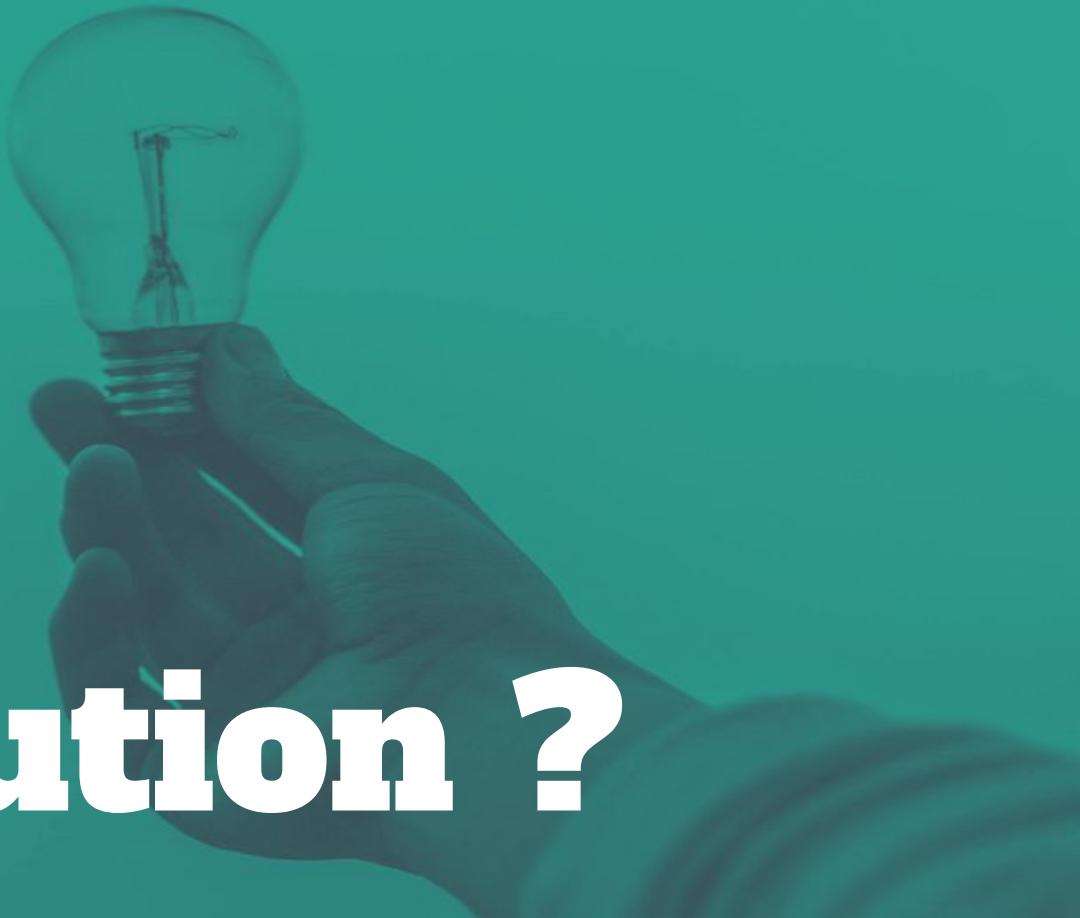
Link

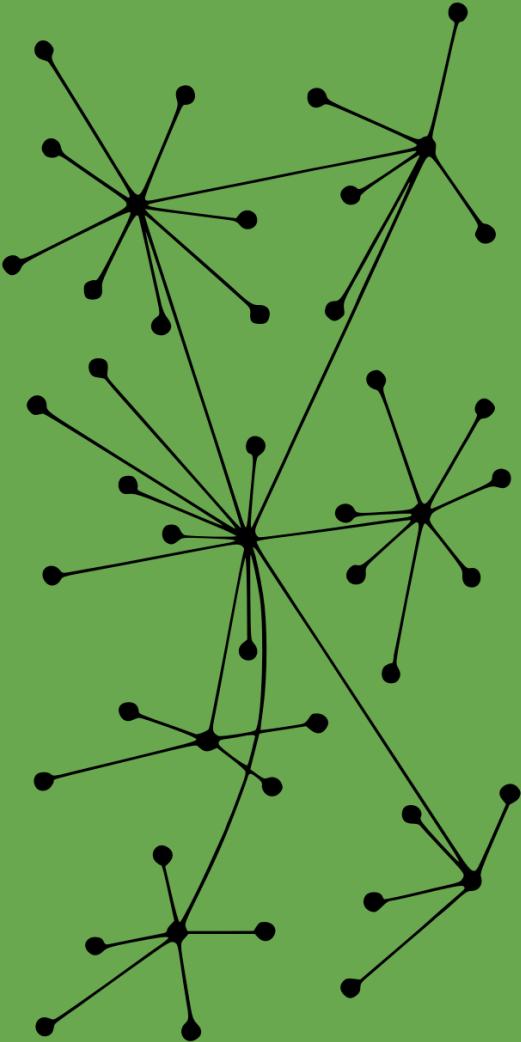
**Single
point of**

failure

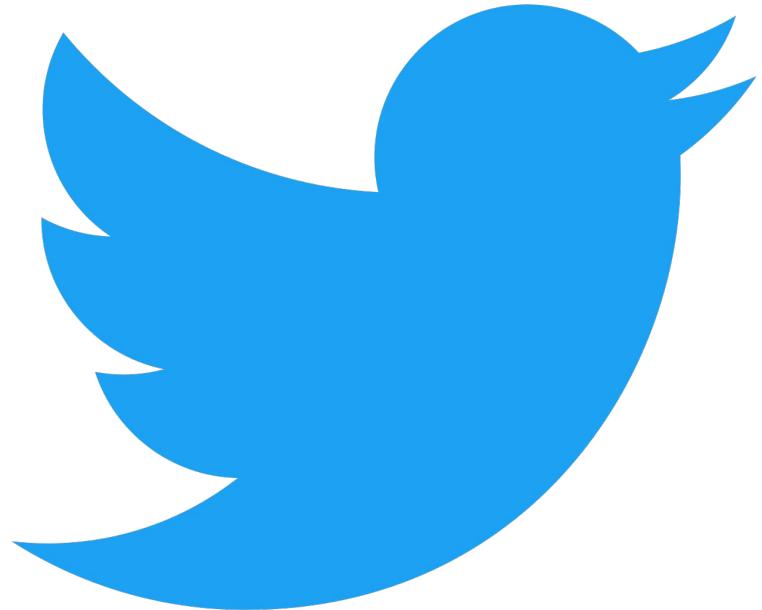
**Single
point of
control**

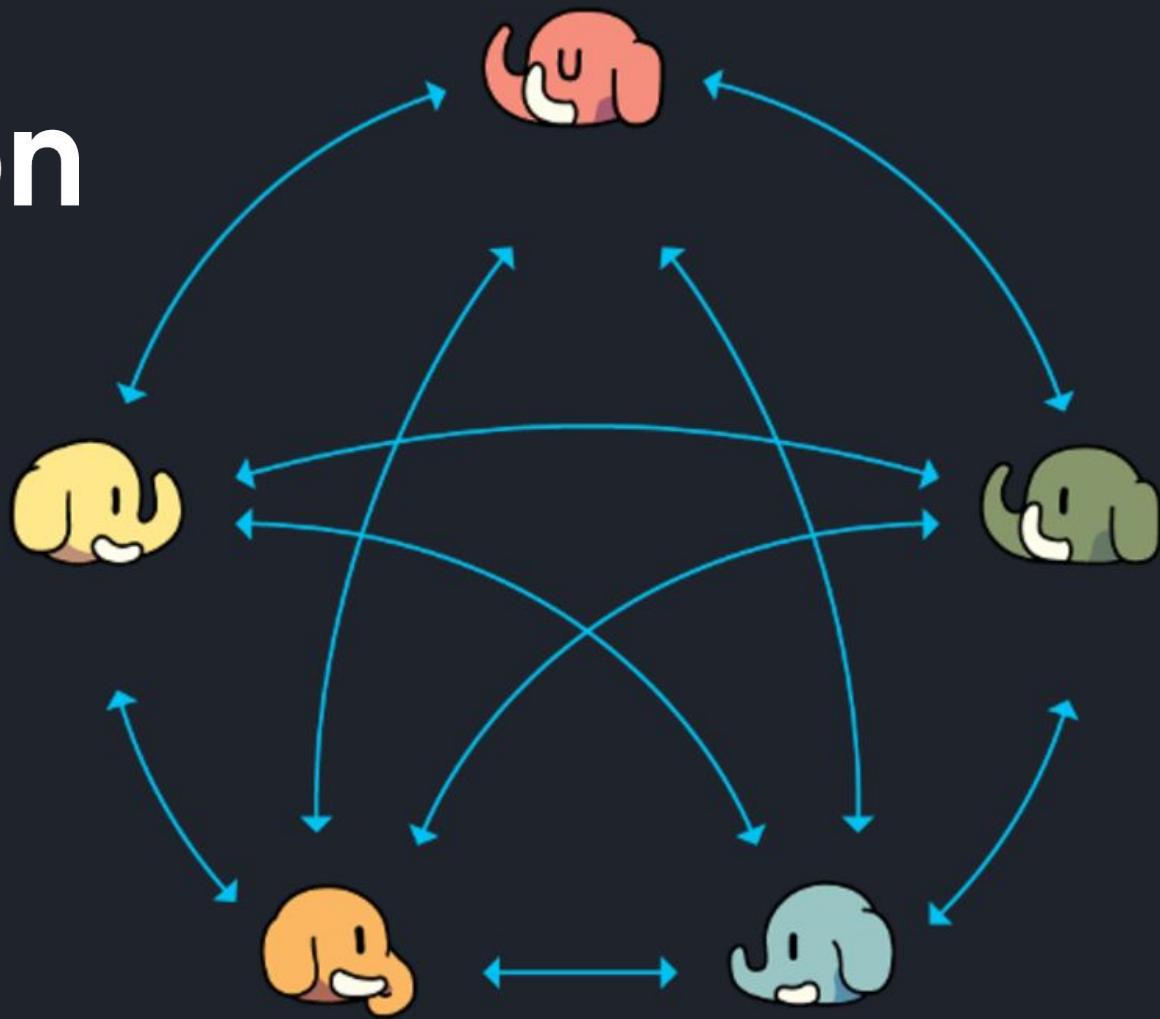
Une solution ?





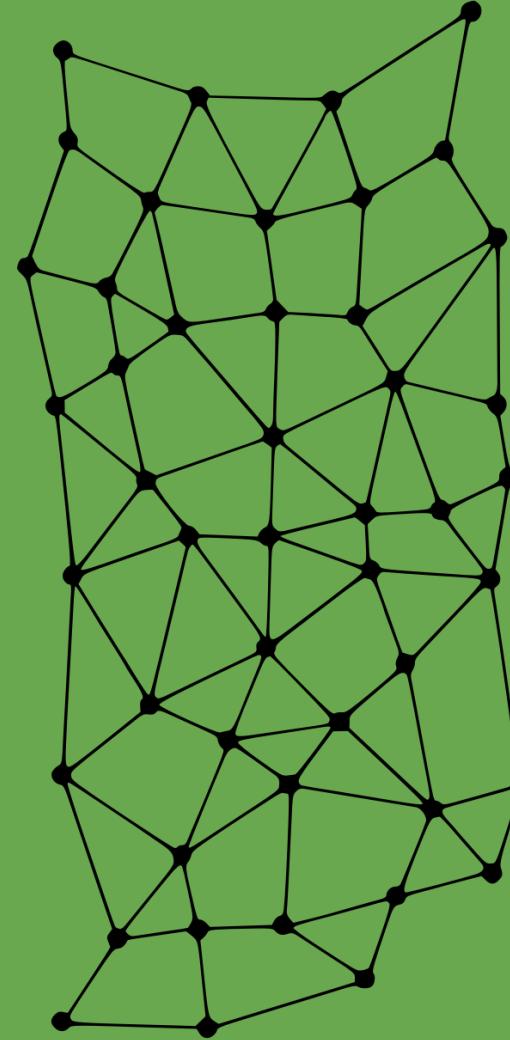
Décentralisé

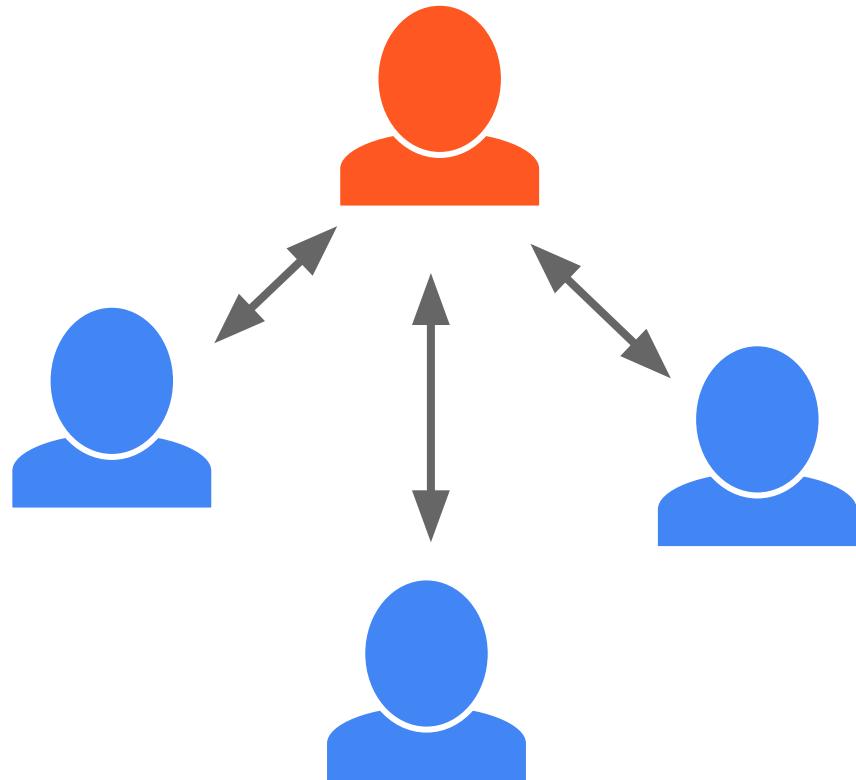




<https://joinmastodon.org/>

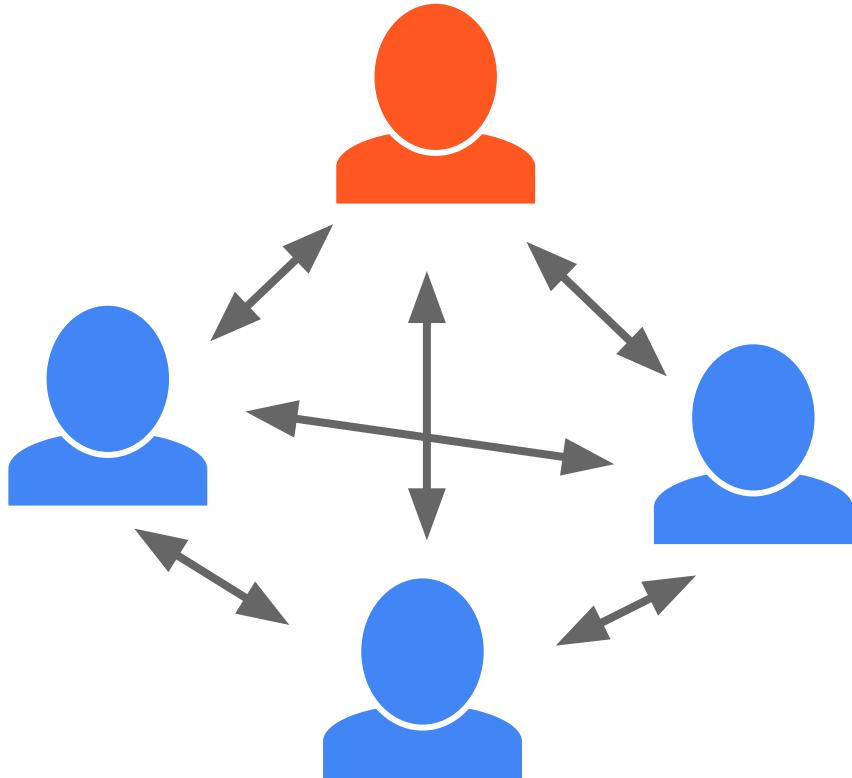
Distribué

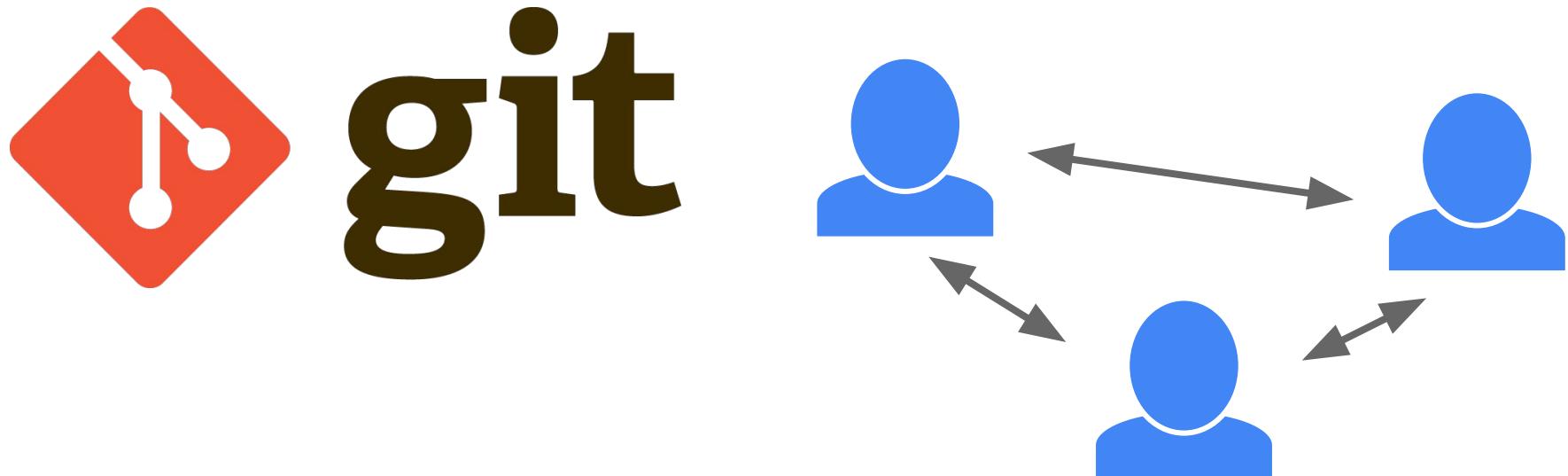




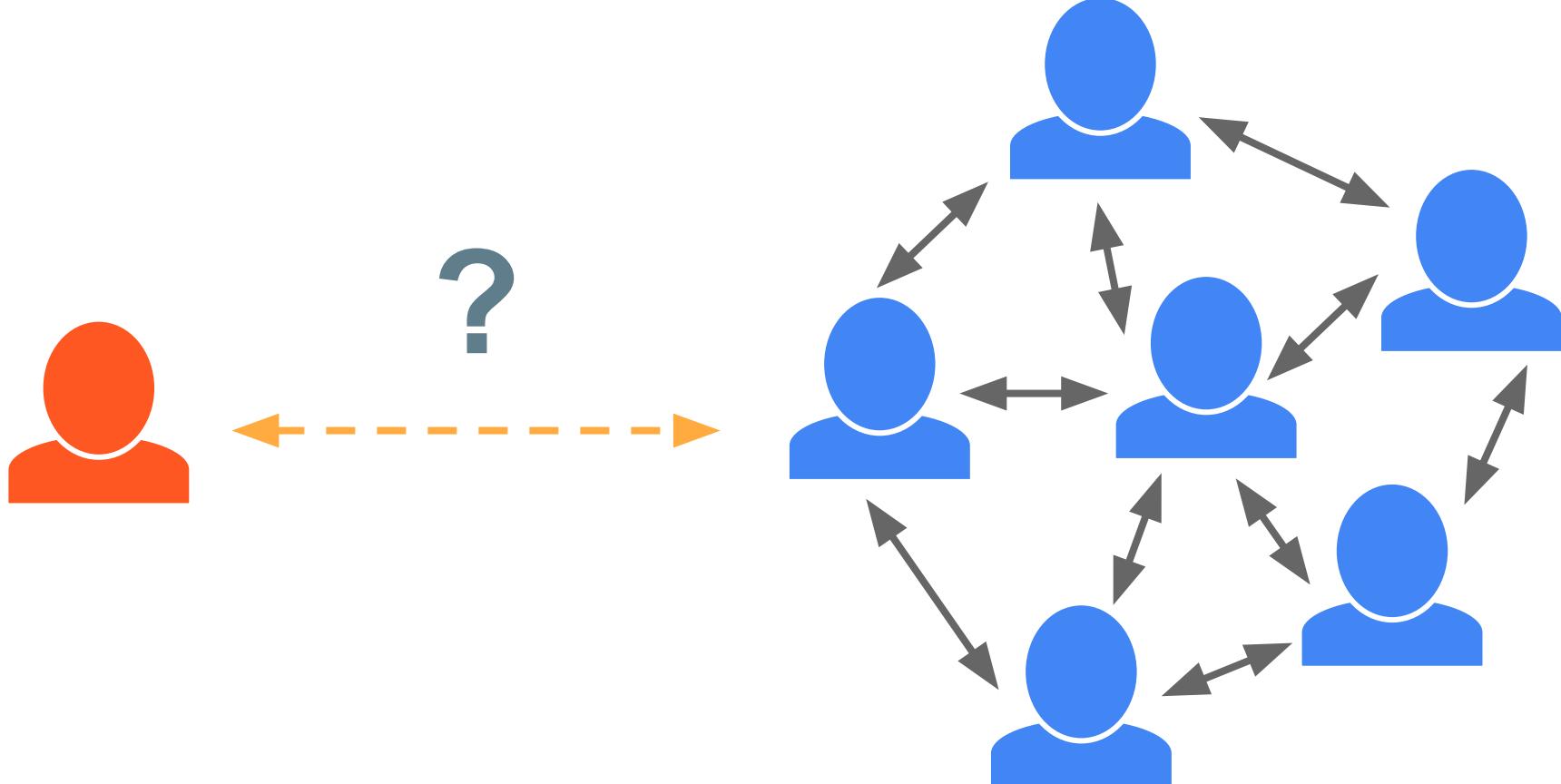


git



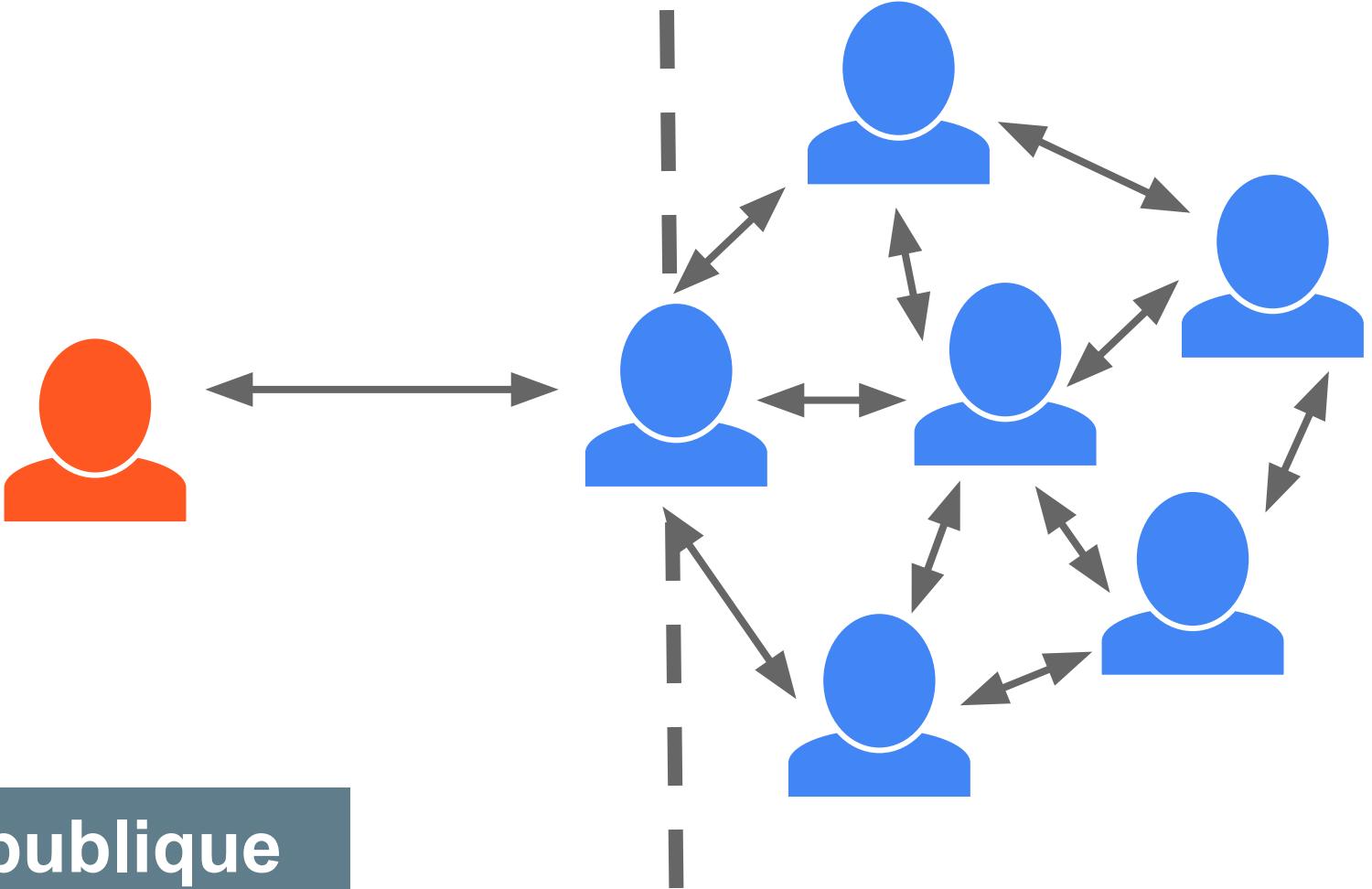


Comment ça marche ?

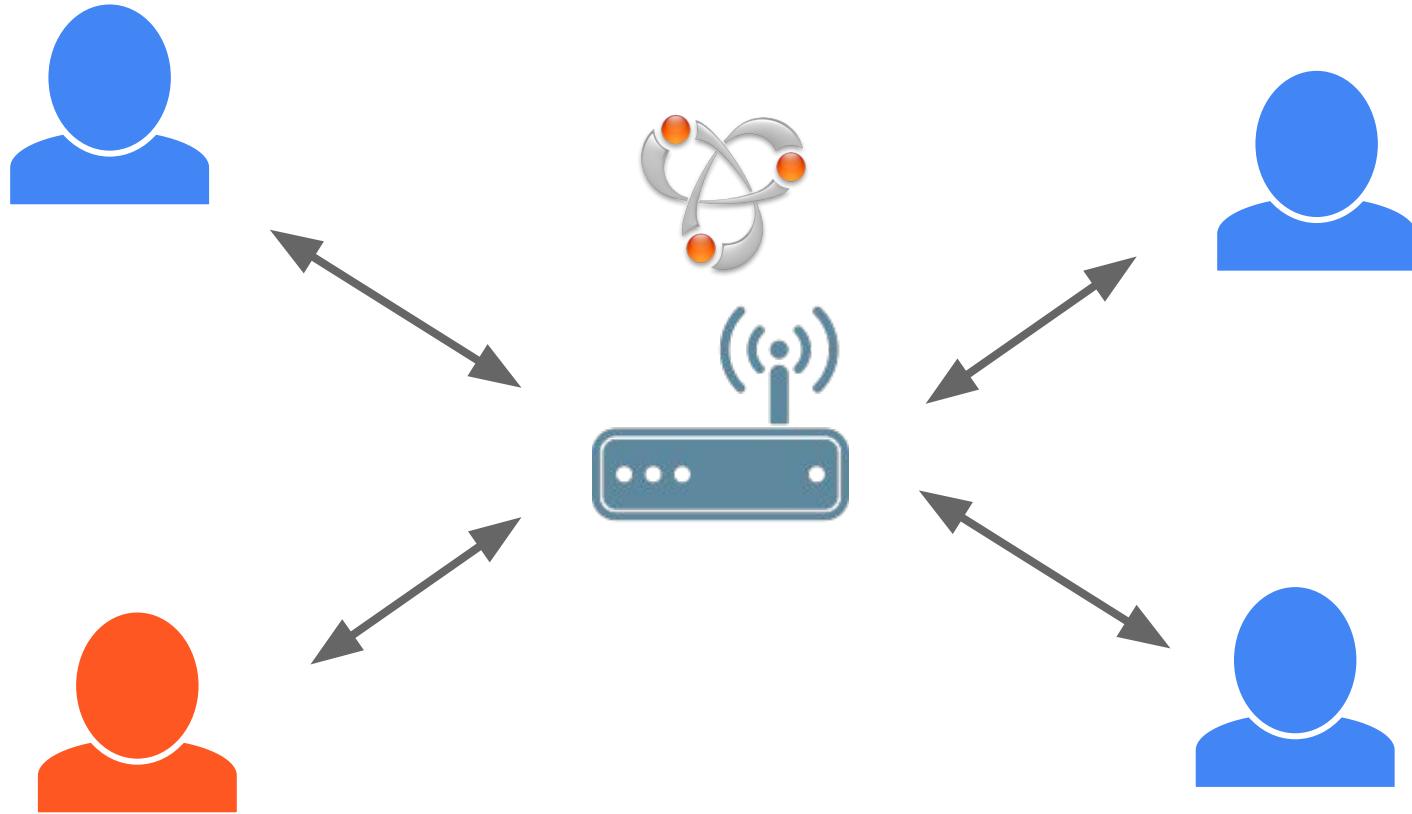


Bootstrapping





Node publique



Multicast DNS (ZeroConf, Apple Bonjour)

Démo

Trouver une node
publique Bitcoin

PS C:_Projets\Perso\doc> nslookup bitseed.xf2.org

Serveur : dns2.proxad.net

Address: 212.27.40.241

Réponse ne faisant pas autorité :

Nom : bitseed.xf2.org

Addresses: 24.52.35.44

50.177.196.160

68.48.214.241

76.111.96.126

85.214.90.1

94.226.111.26

96.2.103.25

97.117.255.48

99.242.230.163

162.243.194.210

173.69.49.106

198.38.93.227

209.208.110.92

PS C:_Projets\Perso\doc> nslookup bitseed.xf2.org

Serveur : dns2.proxad.net

Address: 212.27.40.241

Réponse ne faisant pas autorité :

Nom : bitseed.xf2.org

Addresses: 24.52.35.44

50.177.196.160

68.48.214.241

76.111.96.126

85.214.90.1

✓ 85.214.90.1:8333 /Satoshi:0.15.99(UASF-SegWit-BIP148)/

99.242.230.163

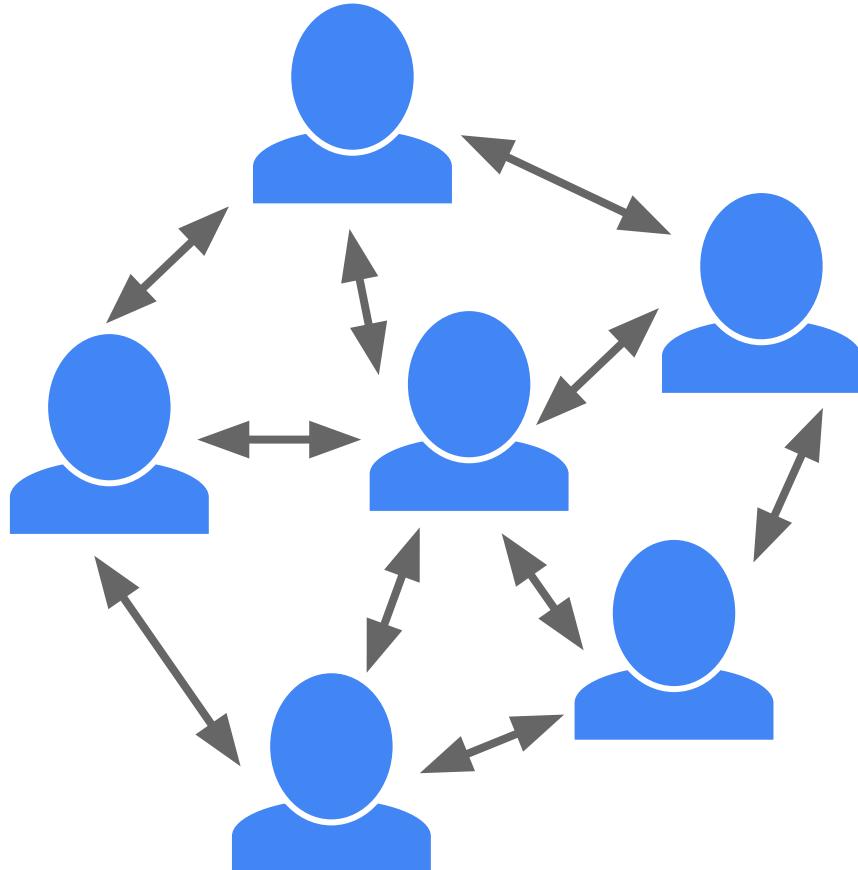
162.243.194.210

173.69.49.106

198.38.93.227

209.208.110.92

foo.txt ?

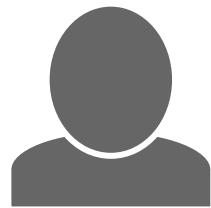


Discovery

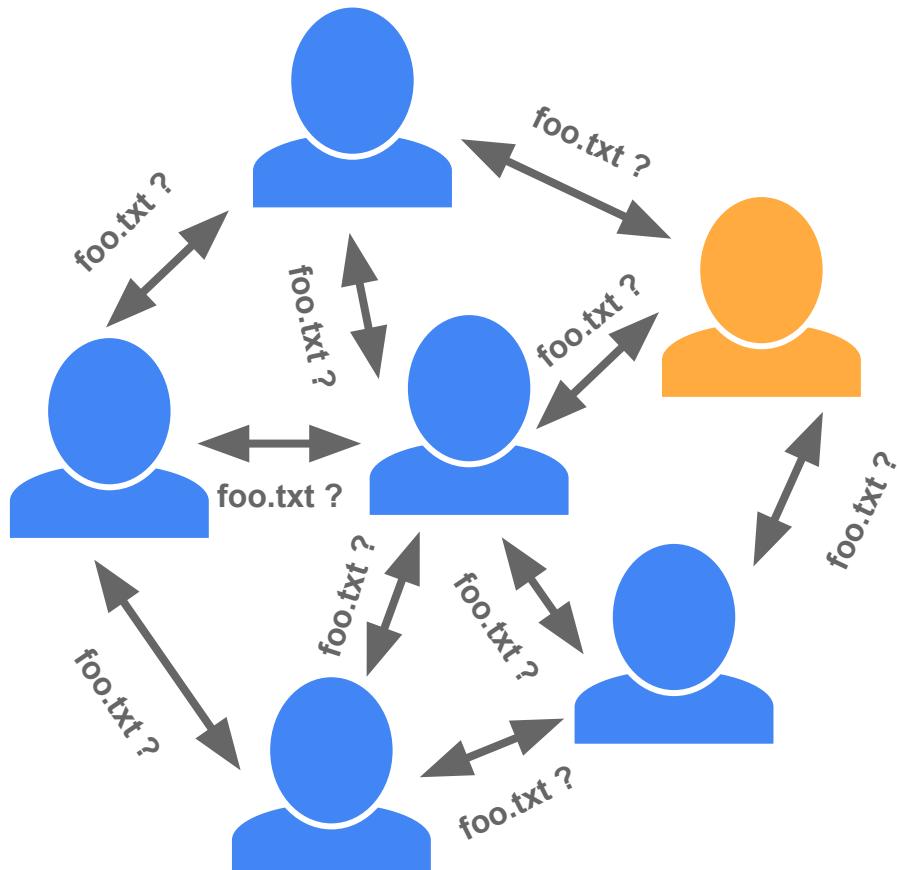


**Retour dans les années
2000...**

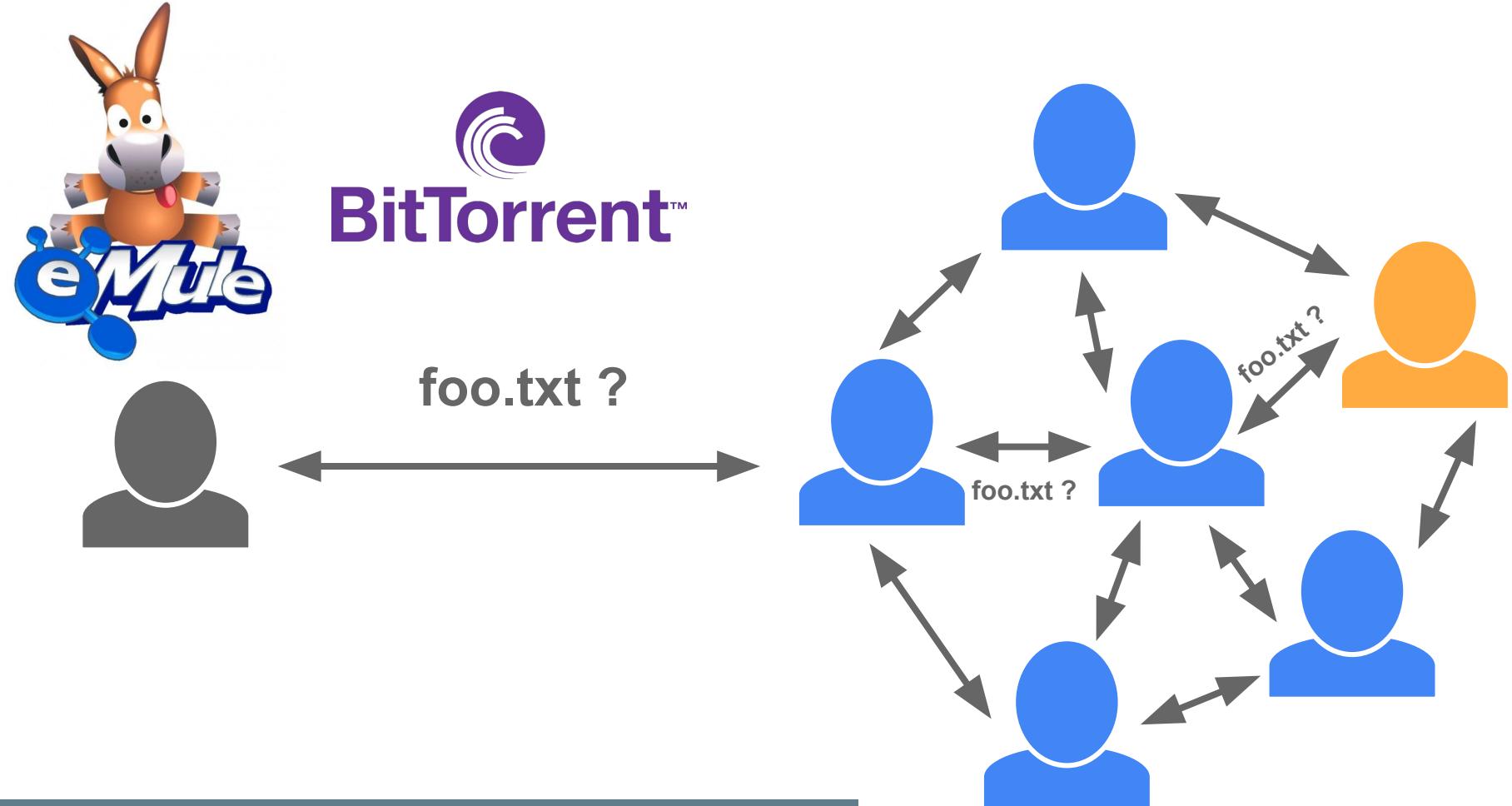
gnutella



foo.txt ?



Query Flooding

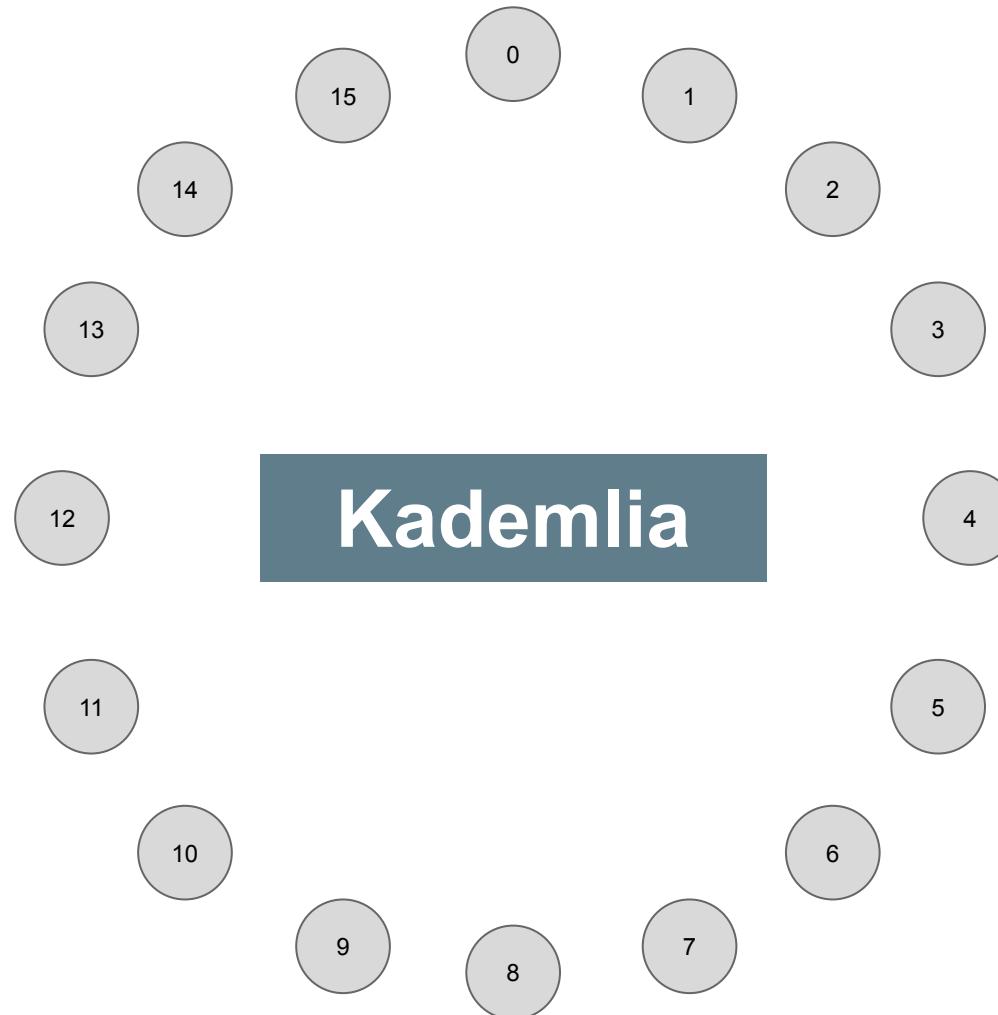


Distributed Hash Table

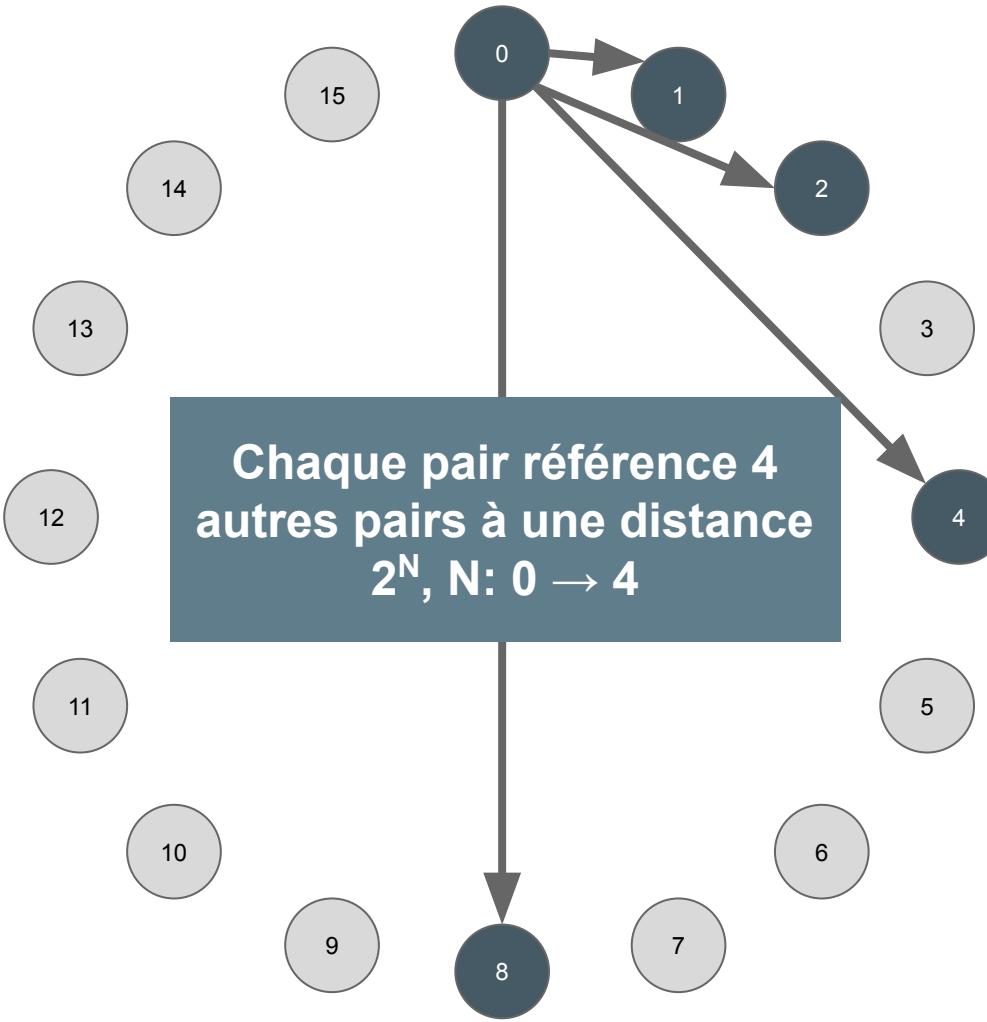
Distributed Hash Table

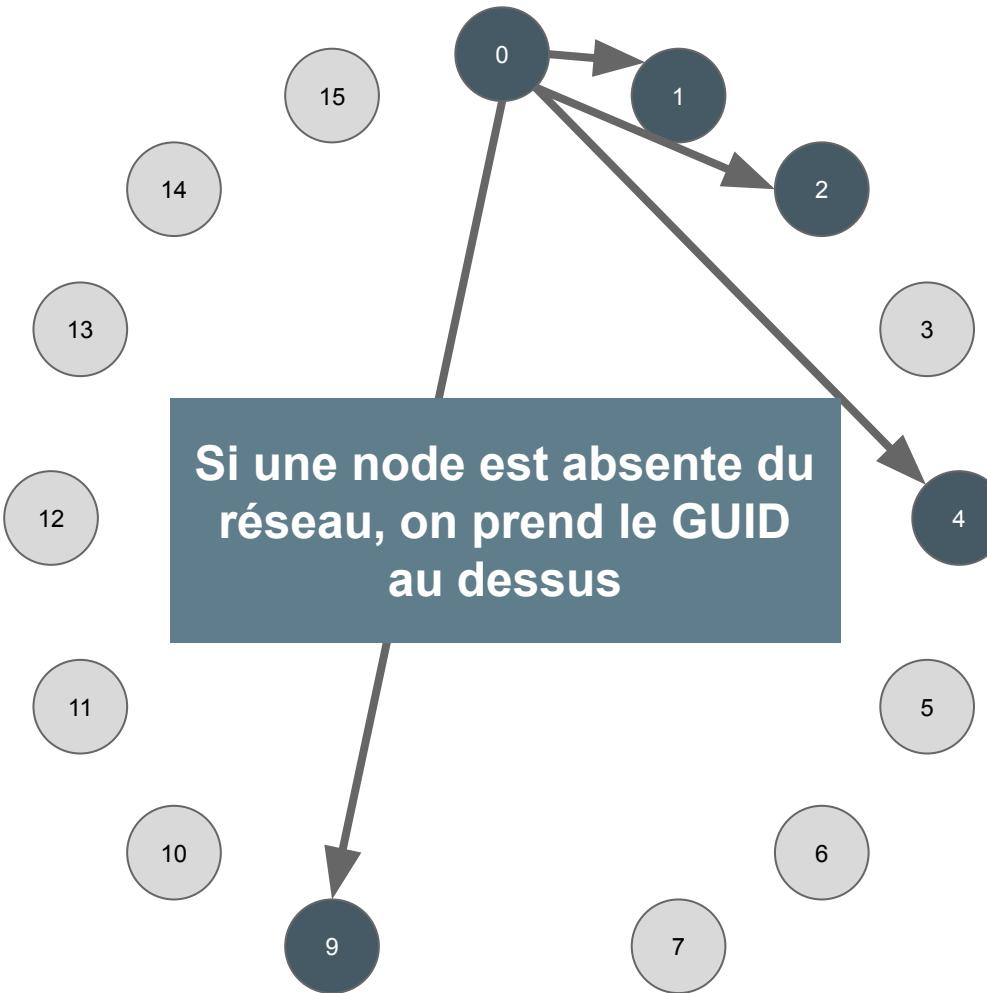
DHT ?

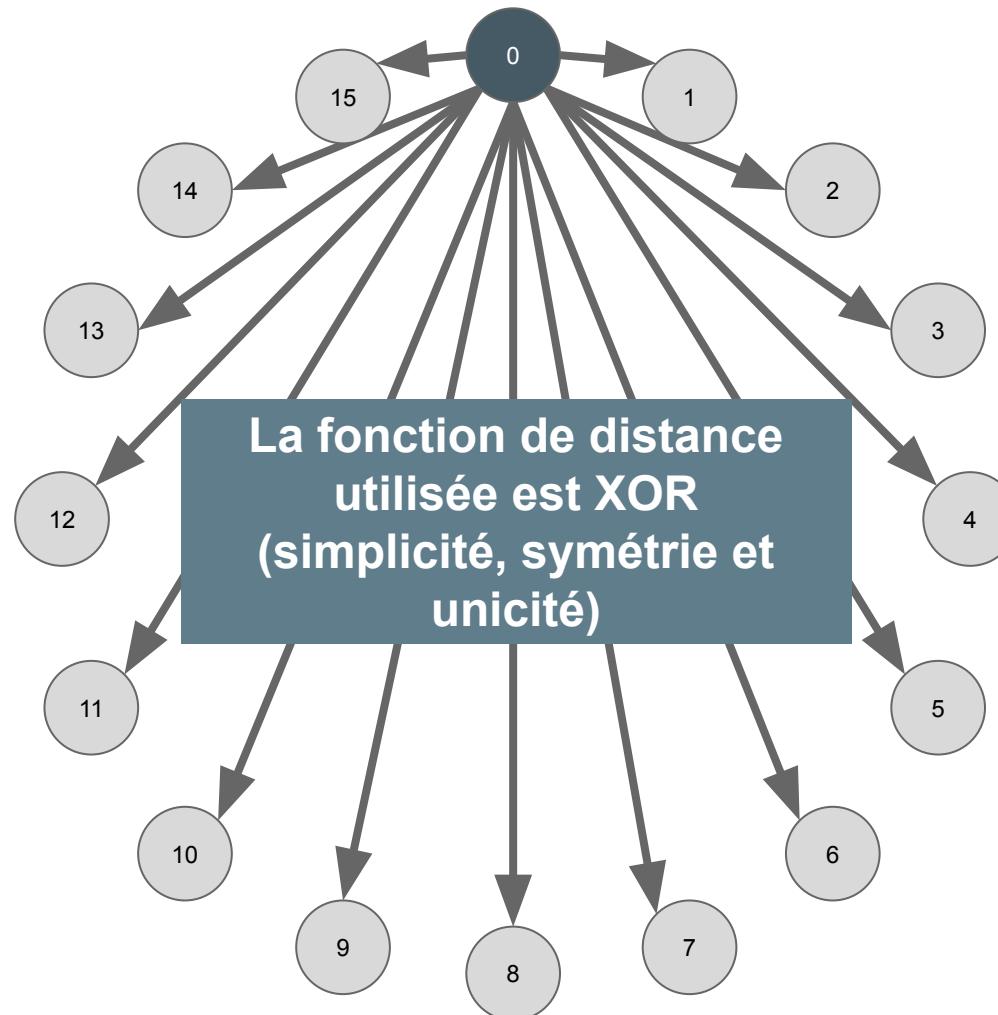
Kademlia



GUID sur 4 bits
0 → 15
16 pairs max.







0

qui possède
foo.txt ?

15

14

1

2

13

3

12

4

11

5

10

6

9

7

8

infohash(foo.txt) = 15

0

15

14

qui possède
foo.txt ?

1

2

13

3

12

4

11

5

10

6

9

7

8

il sait !

$\text{infohash}(\text{foo.txt}) = 15$

15

0

1

14

2

13

3

12

4

11

5

10

6

9

7

8

qui possède
foo.txt ?

On prend le plus près

8

0

1

2

4

5

7

6

9

10

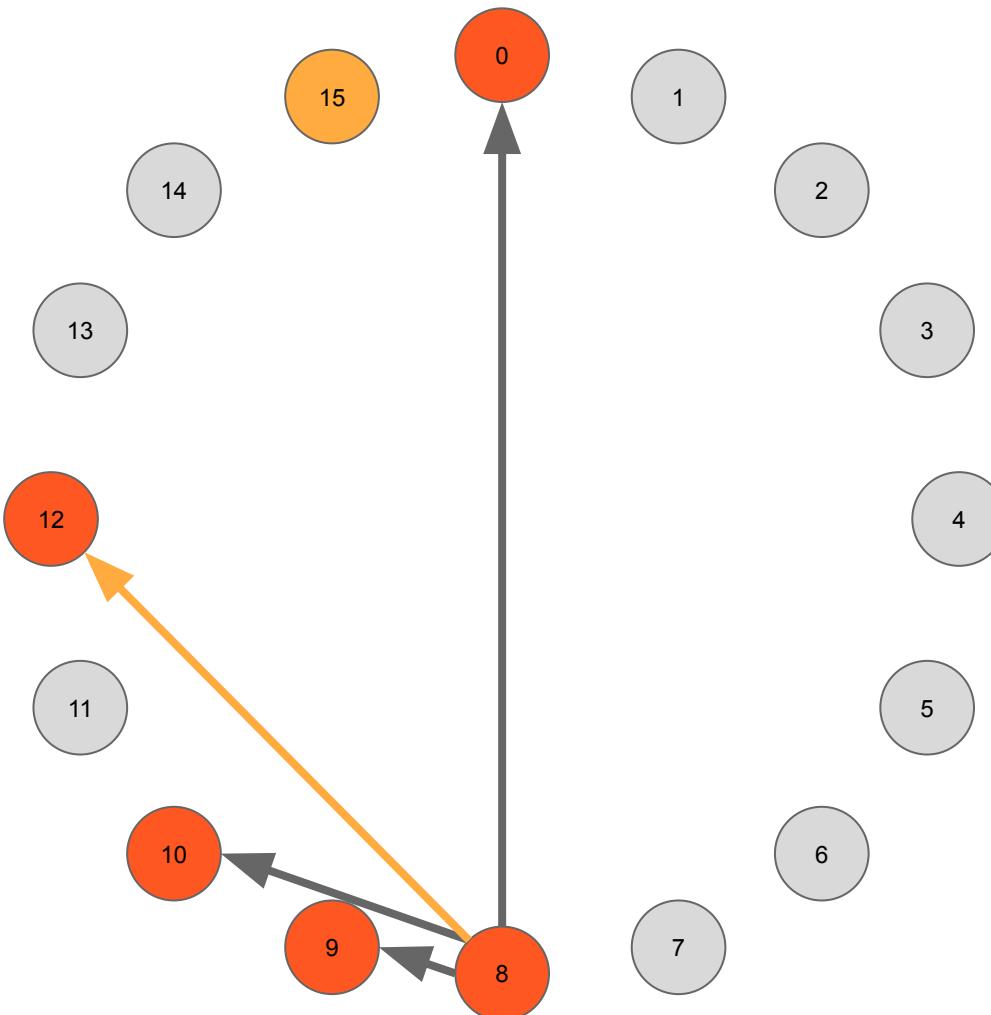
11

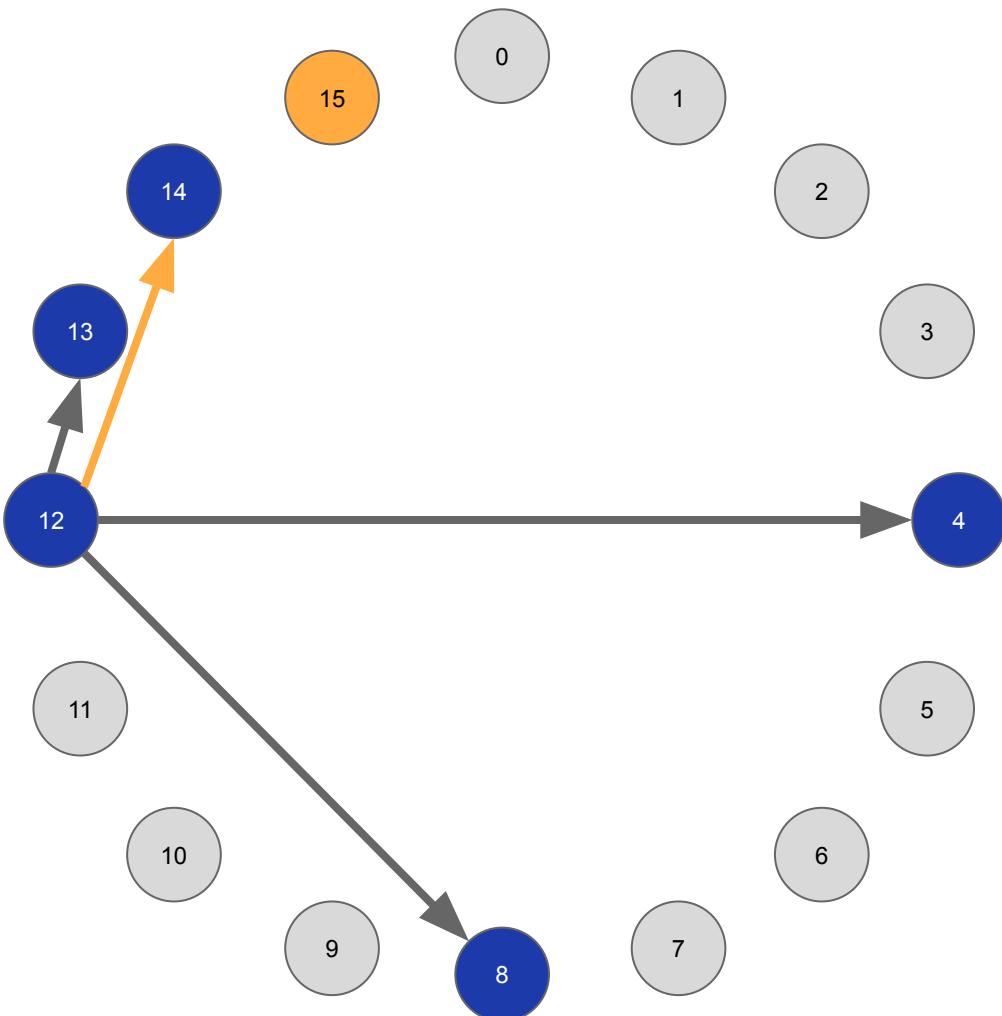
12

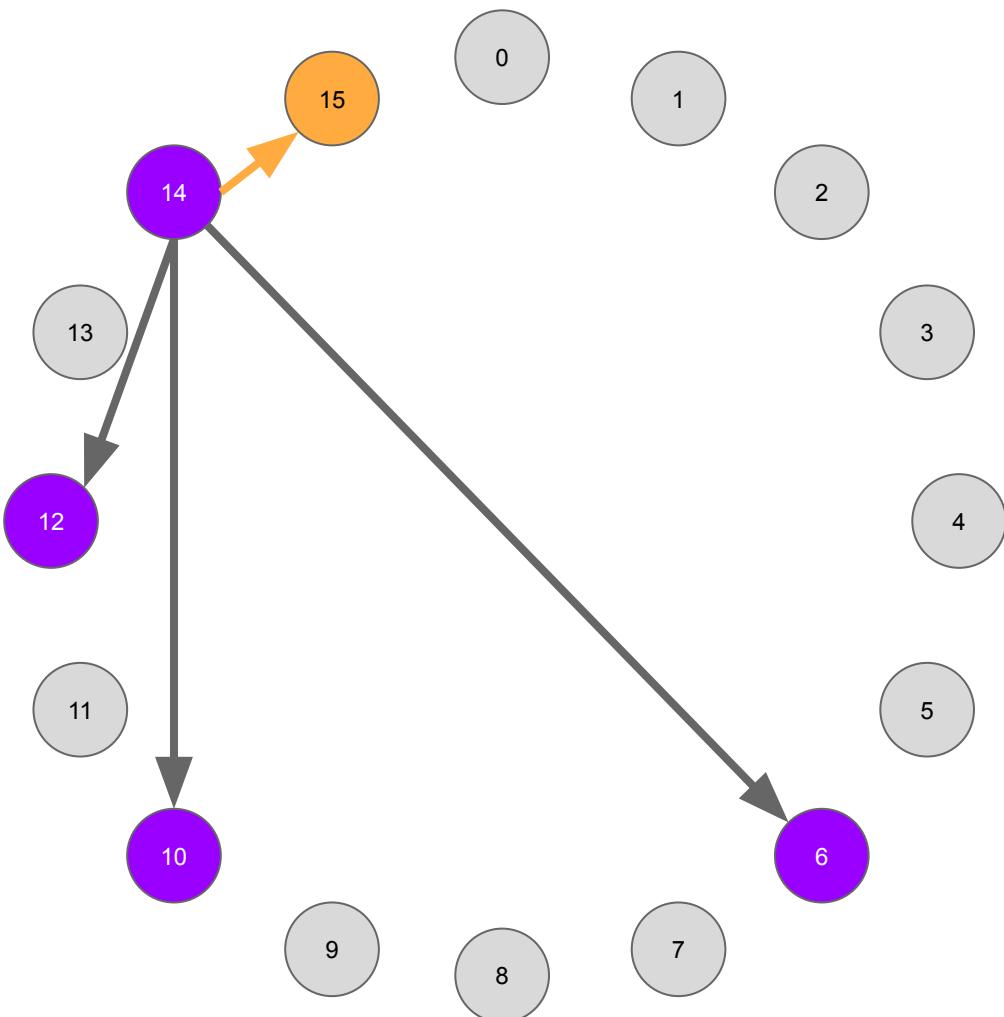
13

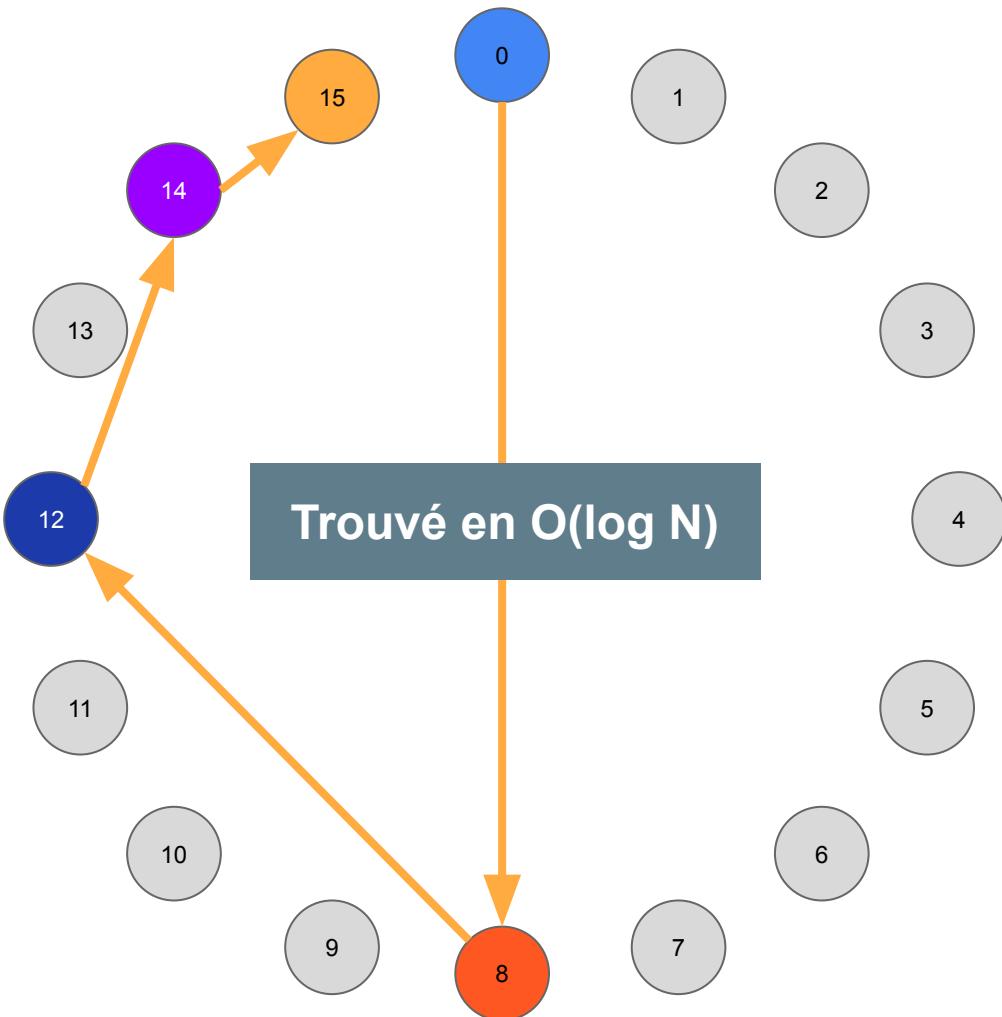
14

15









Démo

Les magnet links
sur Bittorrent

Hadopi

**Haute Autorité pour la diffusion des œuvres
et la protection des droits sur internet**

TELEMA ET LE STUDIO CANAL+ PRESENTENT UN FILM

PRODUIT PAR CHARLES GASSOT

LE FILM DE LES NULS[®]



LA CITE DE LA PEUR

Une comédie familiale.

RÉALISÉ PAR ALAIN BERBERIAN

TELEMA ET LE STUDIO CANAL+ PRESENTENT UN FILM PRODUIT PAR CHARLES GASSOT LE FILM DE LES NULS LA CITE DE LA PEUR UNE COMEDIE FAMILIALE

CHANTAL LAUBY • ALAIN CHABAT • DOMINIQUE FARRUGIA • GERARD BARRONI • SAM KAHAN

SCÉNARIO ORIGINAL CHANTAL LAUBY ALAIN CHABAT DOMINIQUE FARRUGIA • DIRECTEUR DE LA PHOTOGRAPHIE LAURENT DAILLAND

MUSIQUE PHILIPPE CHANY • MONTAGE VÉRONIQUE PARNET

PRODUCTEUR DÉLEGUÉ CHARLES GASSOT • PRODUCTEUR EXÉCUTIF DOMINIQUE BRUNNER

UNE PRODUCTION TELEMA LE STUDIO CANAL+ FRANCE 3 CINEMA M6 FILMS

[Pirate Search](#)

Audio Video Applications Games Porn Other [All](#) ▾

Details for this torrent

La citÃ© de la Peur by LADB

Type:	Video > Movies	Uploaded:	2008-05-02 19:15:37
Files:	2	GMT	
Size:	691.28 MiB (724855831 Bytes)	By:	wazany
Spoken language(s):	French		
Texted language(s):	French		
Seeders:	13	Leechers:	0
Comments	1		

Info Hash:

96BFF9E1F47398C3807071B55AD658ED50F2042F

[GET THIS TORRENT](#) [PLAY/STREAM TORRENT](#)

(Problems with magnets links are fixed by upgrading your torrent client!)

Synopsis :

Odile Deray, attachÃ©e de presse, vient au Festival de Cannes pour prÃ©senter le film "Red is Dead".

Malheureusement, celui-ci est d'une telle faiblesse que personne ne souhaite en faire l'Ã©cho.

Mais lorsque les projectionnistes du long-mÃ¢trage en question meurent chacun leur tour dans d'Ã©tranges circonstances, "Red is dead" bÃ©nÃ©ficie d'une incroyable publicitÃ©. Serge Karamazov est alors chargÃ© de protÃ©ger le nouveau projectionniste du film...

```
var _ = require('lodash')
var DHT = require('bittorrent-dht')
var geoip = require('geoip-lite-country')
```

```
var _ = require('lodash')
var DHT = require('bittorrent-dht')
var geoip = require('geoip-lite-country')
```

```
var peers = []
var dht = new DHT()
```

```
var _ = require('lodash')
var DHT = require('bittorrent-dht')
var geoip = require('geoip-lite-country')

var peers = []
var dht = new DHT()
```

```
dht.on('peer', function (peer, infoHash, from) {
  var geo = geoip.lookup(peer.host)
  peers.push(
    peer.host + ':' +
    peer.port + ':' +
    geo.country
  )
})
```

```
var _ = require('lodash')
var DHT = require('bittorrent-dht')
var geoip = require('geoip-lite-country')

var peers = []
var dht = new DHT()

dht.on('peer', function (peer, infoHash, from) {
  var geo = geoip.lookup(peer.host)
  peers.push(
    peer.host + ':' +
    peer.port + ':' +
    geo.country
  )
})
})
```

```
setTimeout(function () {
  dht.destroy()
  console.log(_.uniq(peers))
}, 10 * 1000)
```

```
var _ = require('lodash')
var DHT = require('bittorrent-dht')
var geoip = require('geoip-lite-country')

var peers = []
var dht = new DHT()

dht.on('peer', function (peer, infoHash, from) {
  var geo = geoip.lookup(peer.host)
  peers.push(
    peer.host + ':' +
    peer.port + ':' +
    geo.country
  )
})

setTimeout(function () {
  dht.destroy()
  console.log(_.uniq(peers))
}, 10 * 1000)
```

dht.lookup(infoHash)

```
var _ = require('lodash')
var DHT = require('bittorrent-dht')
var geoip = require('geoip-lite-country')

var peers = []
var dht = new DHT()

dht.on('peer', function (peer, infoHash, from) {
  var geo = geoip.lookup(peer.host)
  peers.push(
    peer.host + ';' +
    peer.port + ';' +
    geo.country
  )
})

setTimeout(function () {
  dht.destroy()
  console.log(_.uniq(peers))
}, 10 * 1000)

dht.lookup(infoHash)
```

Done crawling

Found 12 peers

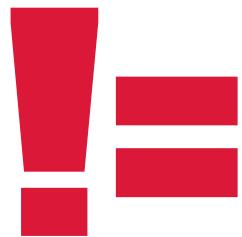
```
[ '91.138.225. [REDACTED]:62762:GR',
  '178.194.206. [REDACTED]:17132:CH',
  '5.51.42. [REDACTED]:33457:FR',
  '51.15.3. [REDACTED]:54728:NL',
  '5.51.42. [REDACTED]:45442:FR',
  '88.191.54. [REDACTED]:62348:FR',
  '51.15.3. [REDACTED]:51413:NL',
  '178.194.206. [REDACTED]:60482:CH',
  '82.253.38. [REDACTED]:61818:FR',
  '82.249.8. [REDACTED]:33876:FR',
  '178.194.206. [REDACTED]:45429:CH',
  '178.194.206. [REDACTED]:37603:CH' ]
```

Crawl ended

Done in 10.57s.



Peer to Peer



Privé

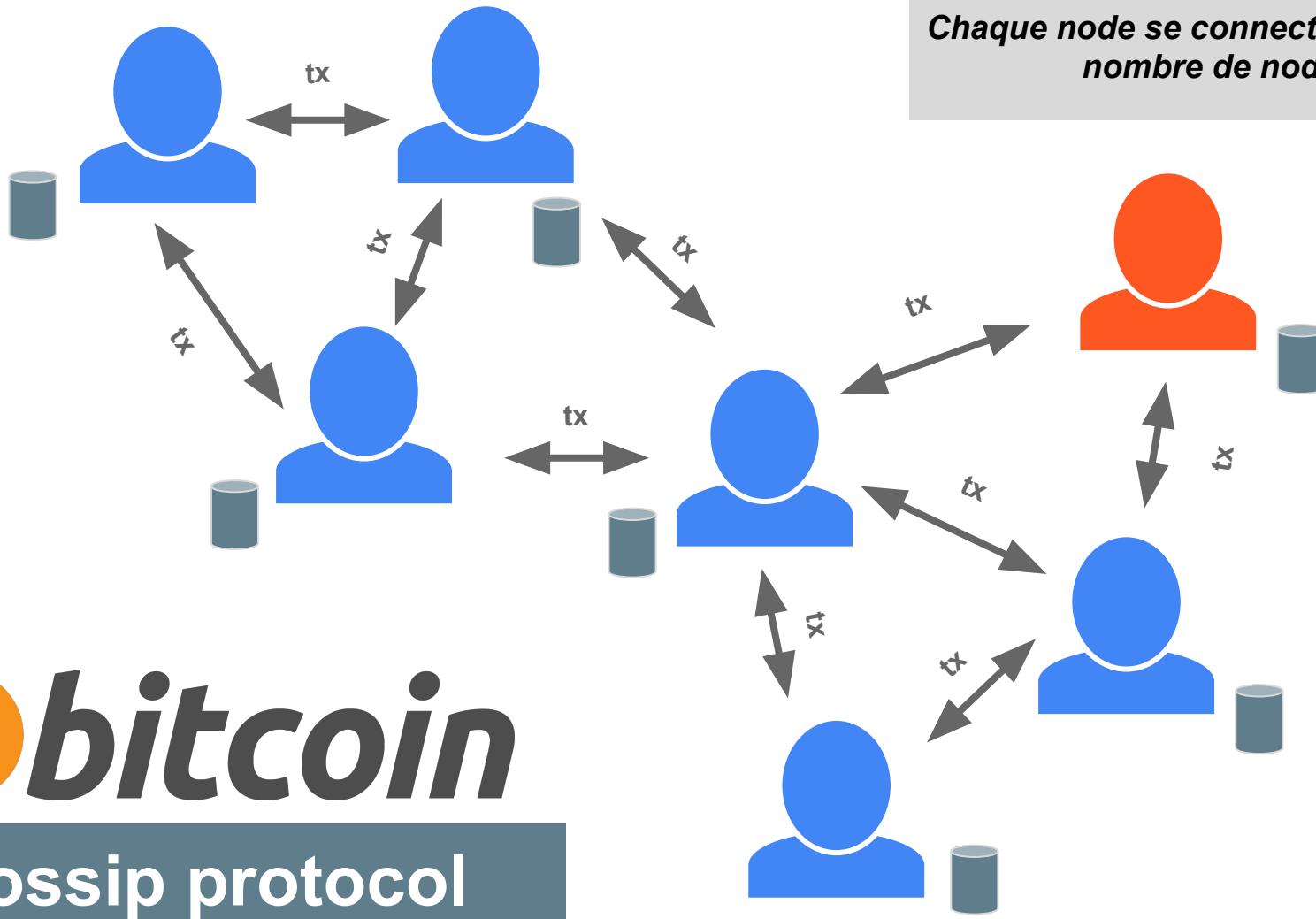


Et la blockchain dans tout ca ?

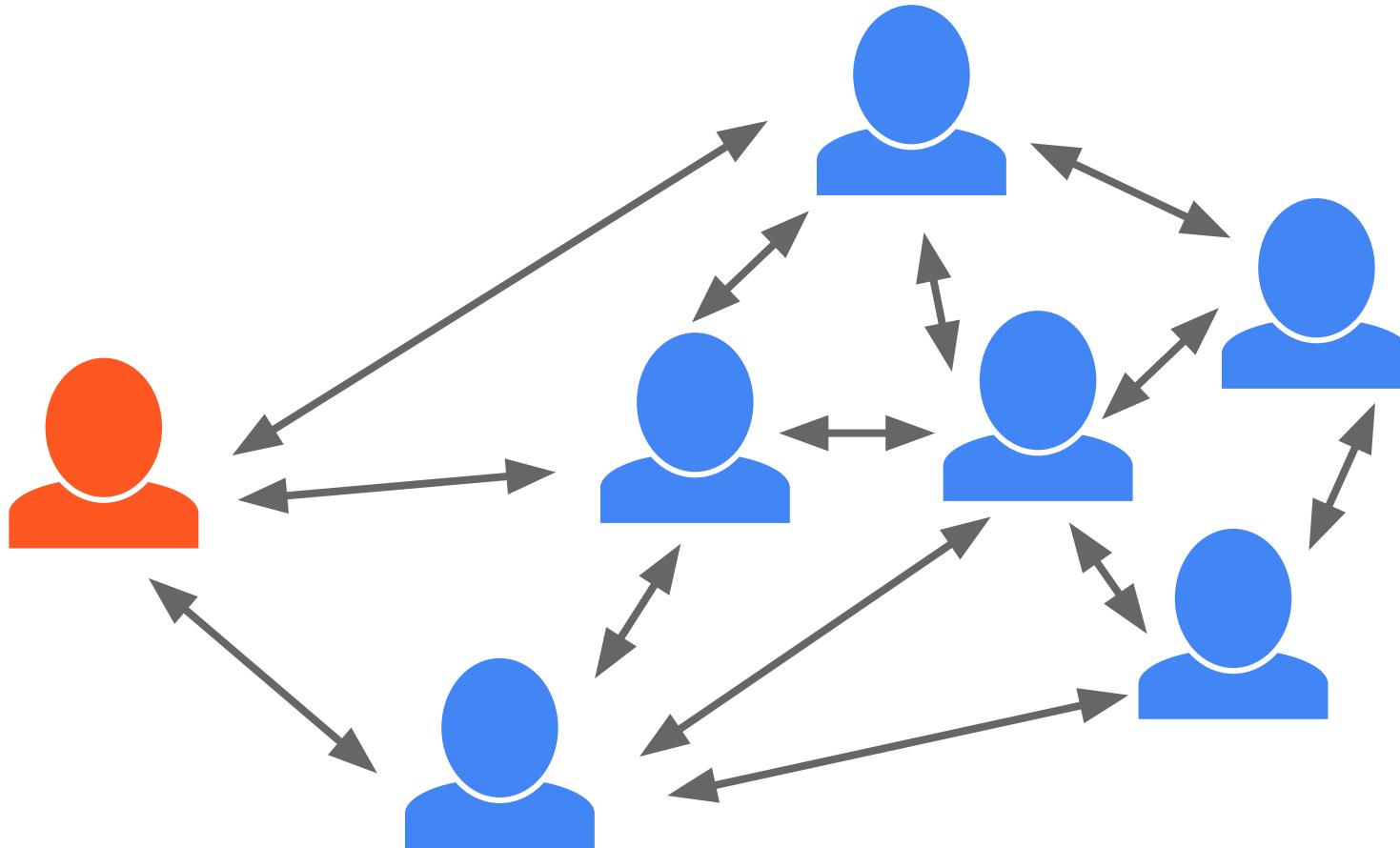


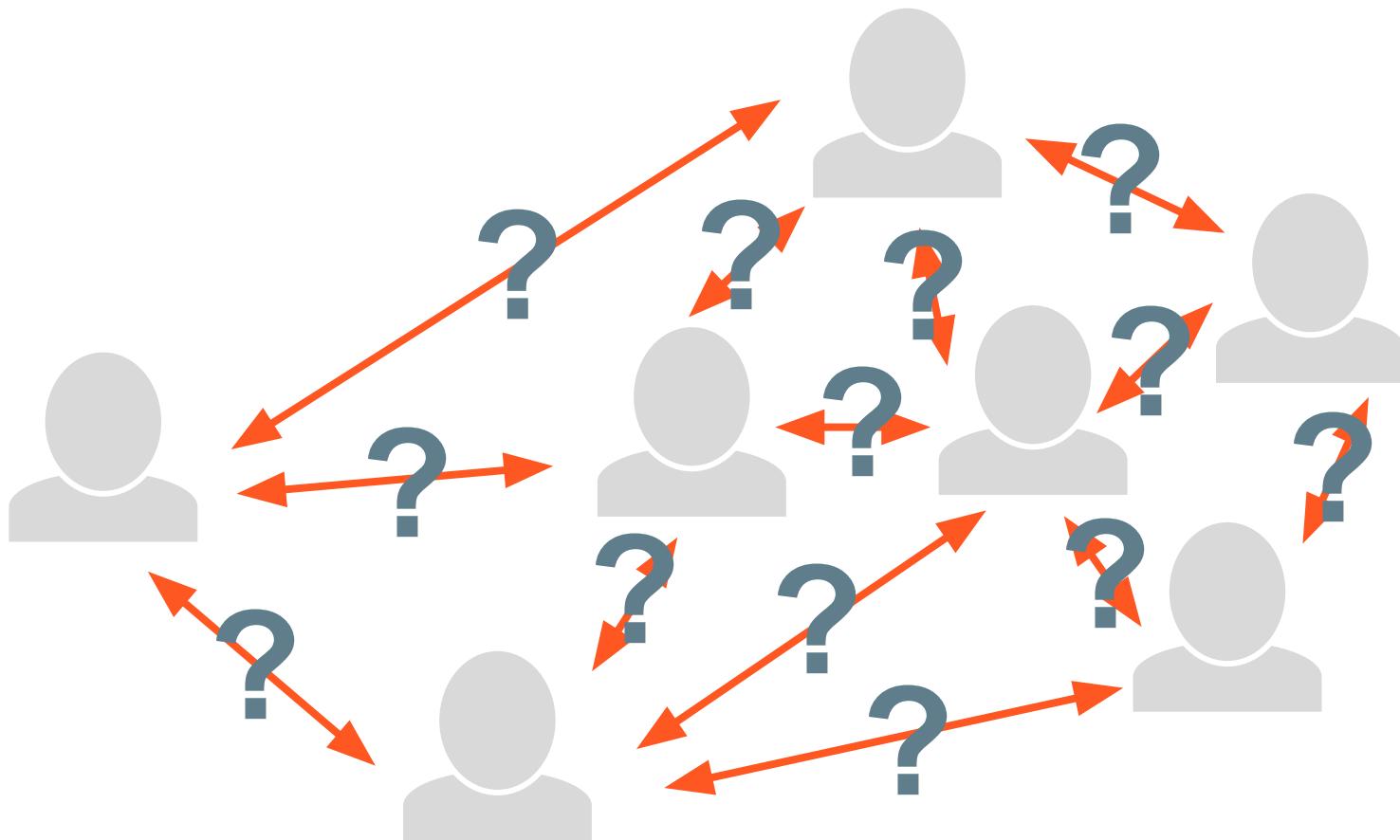
bitcoin

Gossip protocol



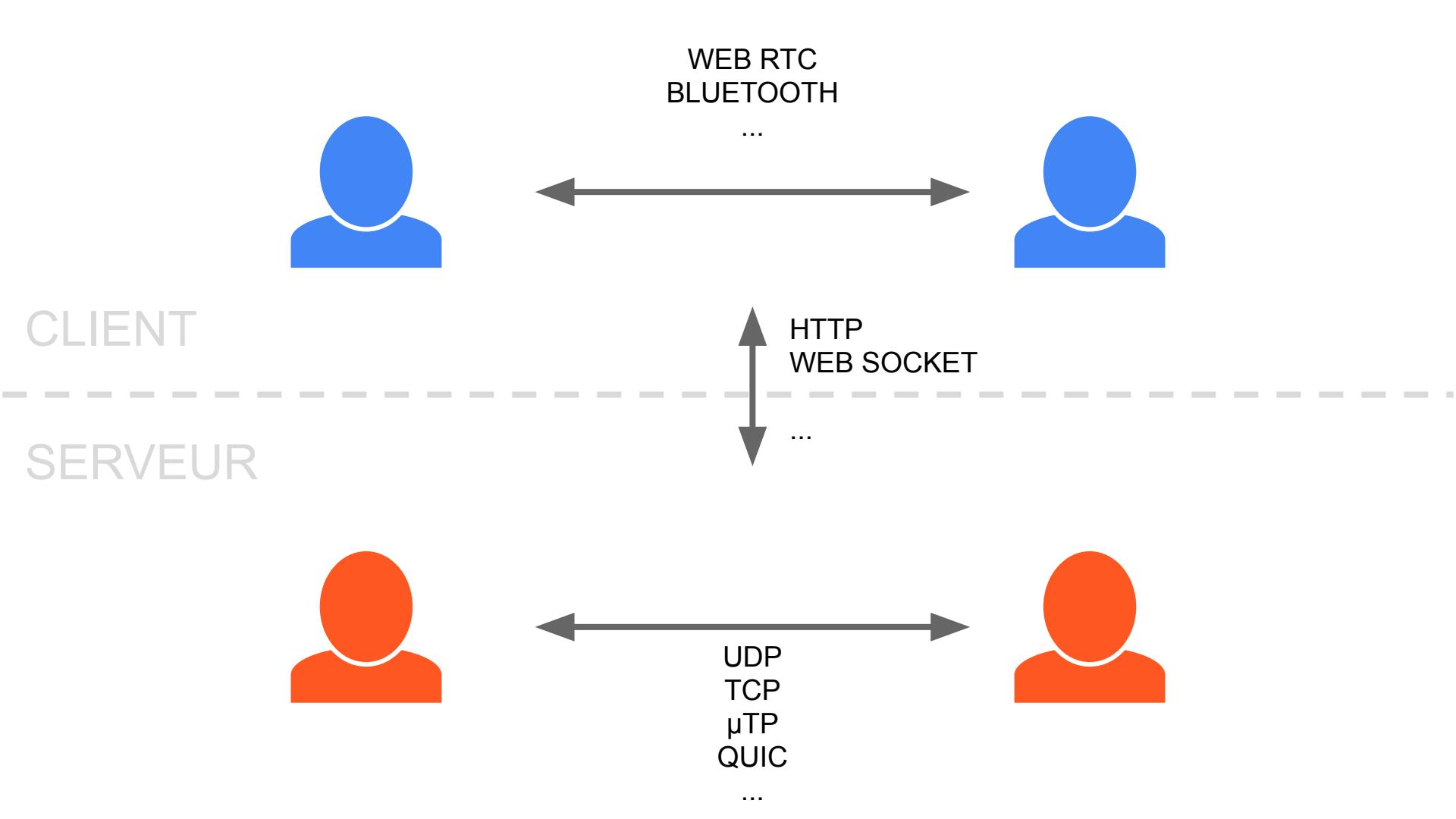
*Chaque node se connecte à un grand
nombre de nodes*

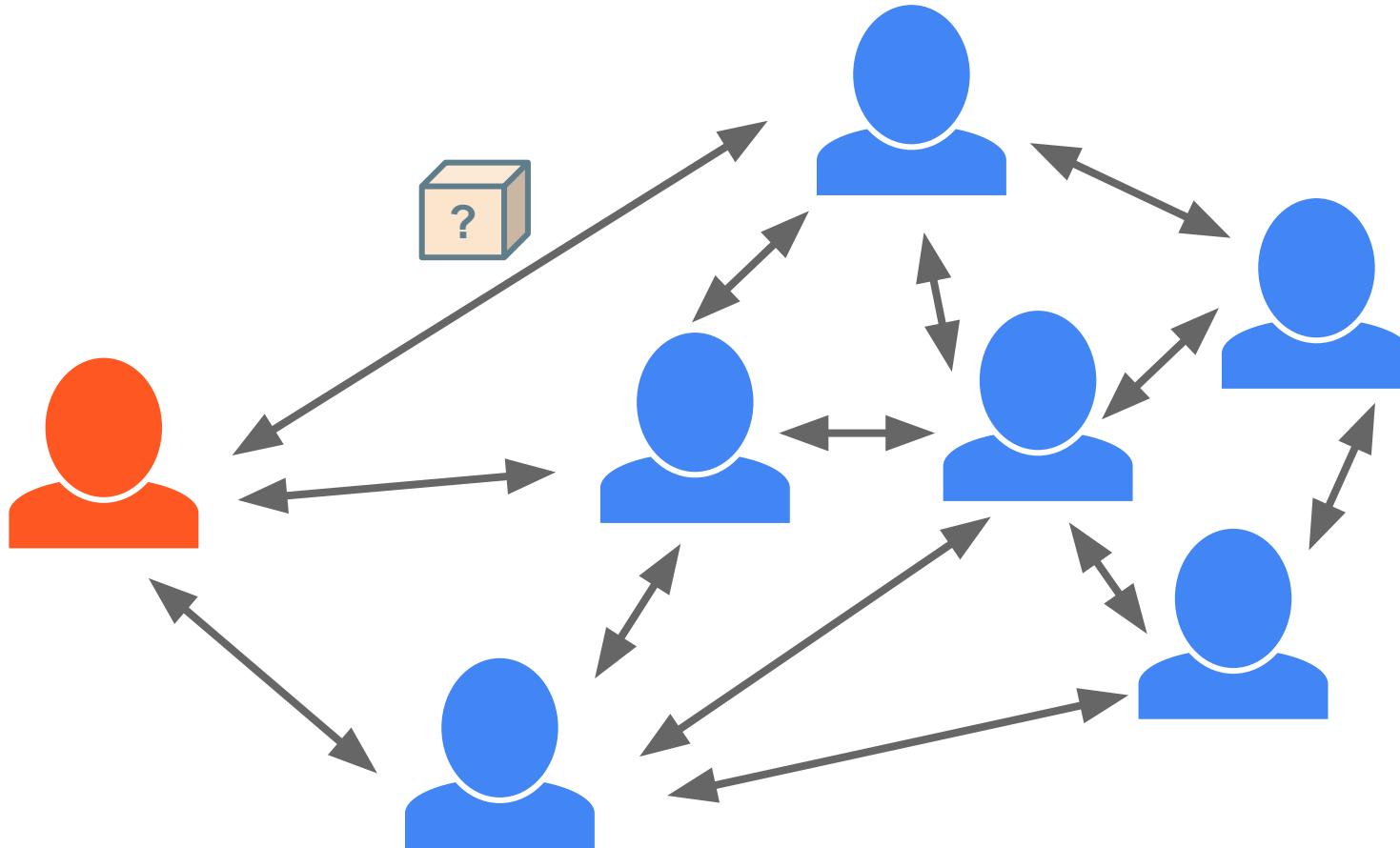






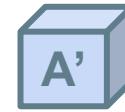
Transport







diff ?





Data integrity

Merkle “Tree”

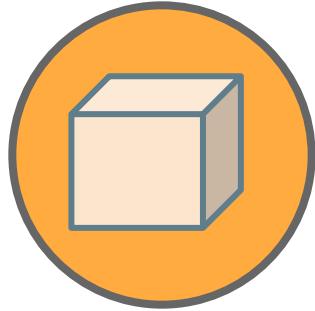
Merkle Directed Acyclic

Graph

Merkle “Tree”

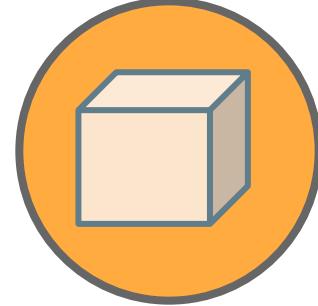
Merkle Directed Acyclic Graph



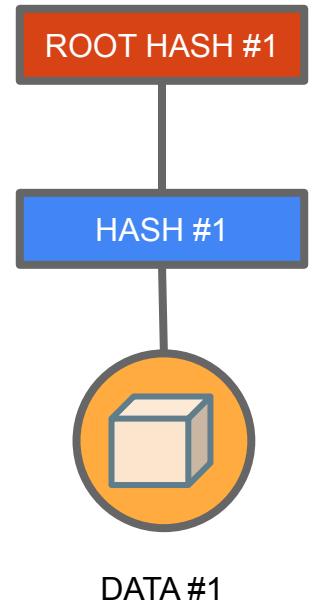


DATA #1

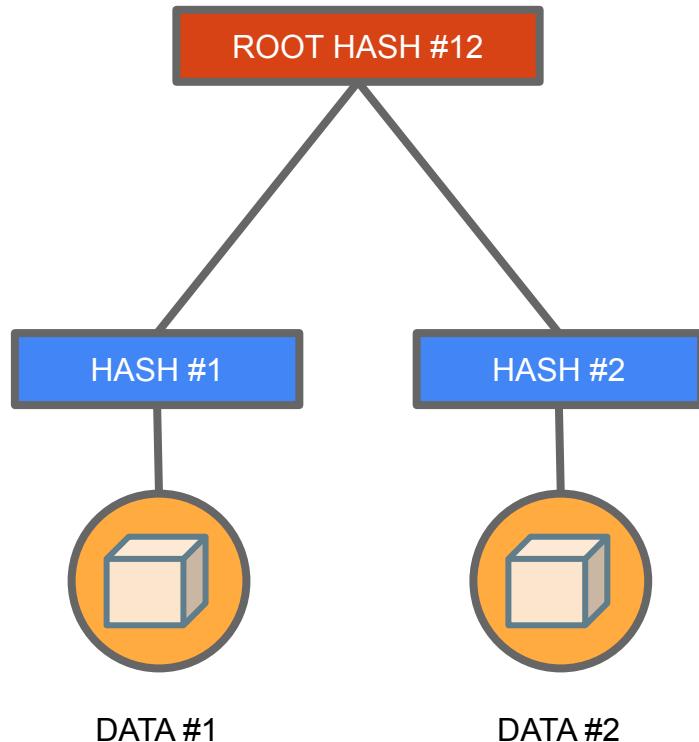
HASH #1

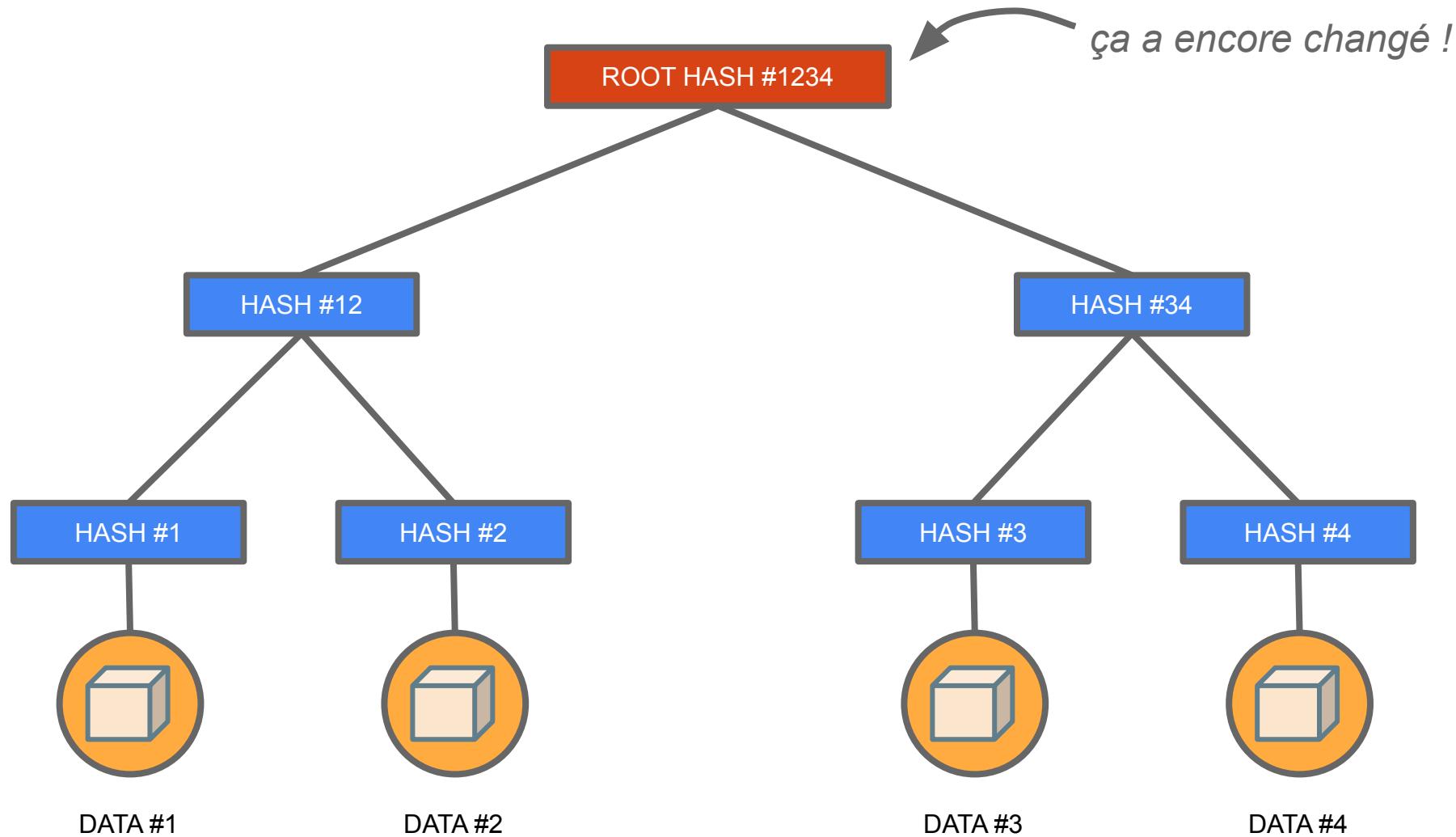


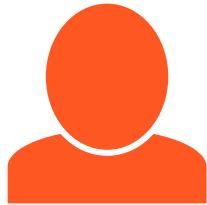
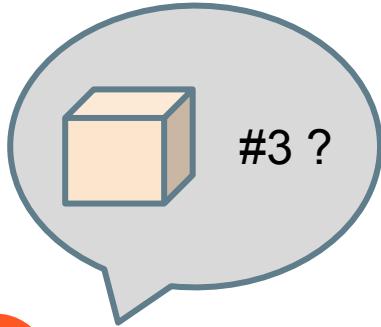
DATA #1



ça a changé !



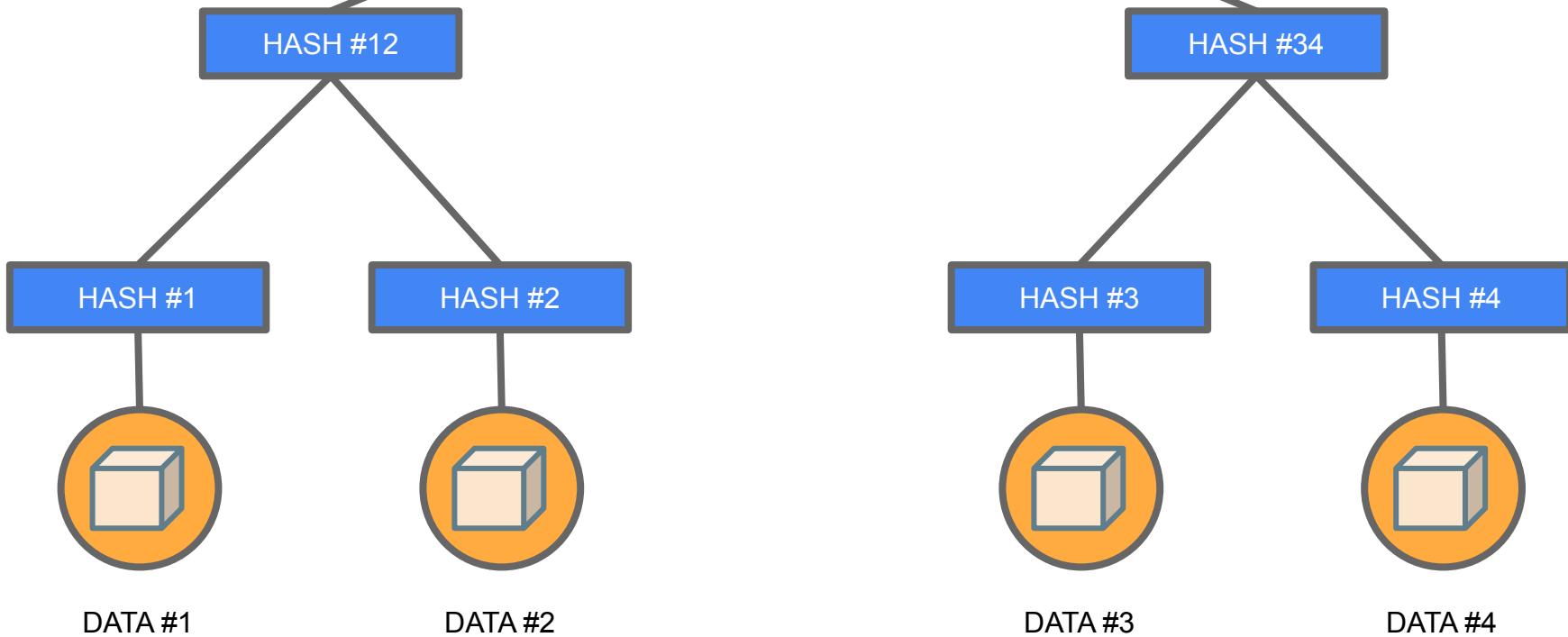


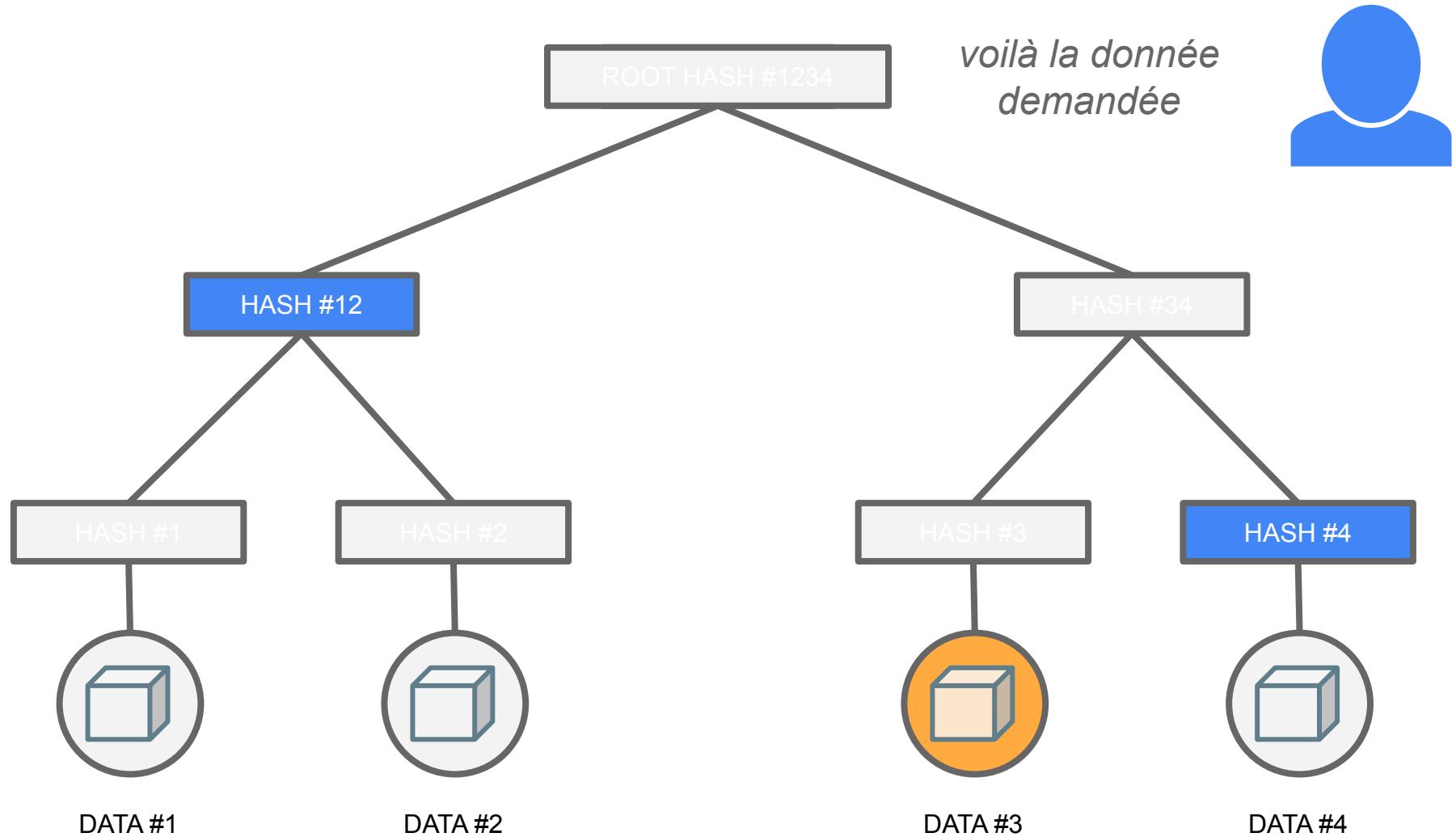


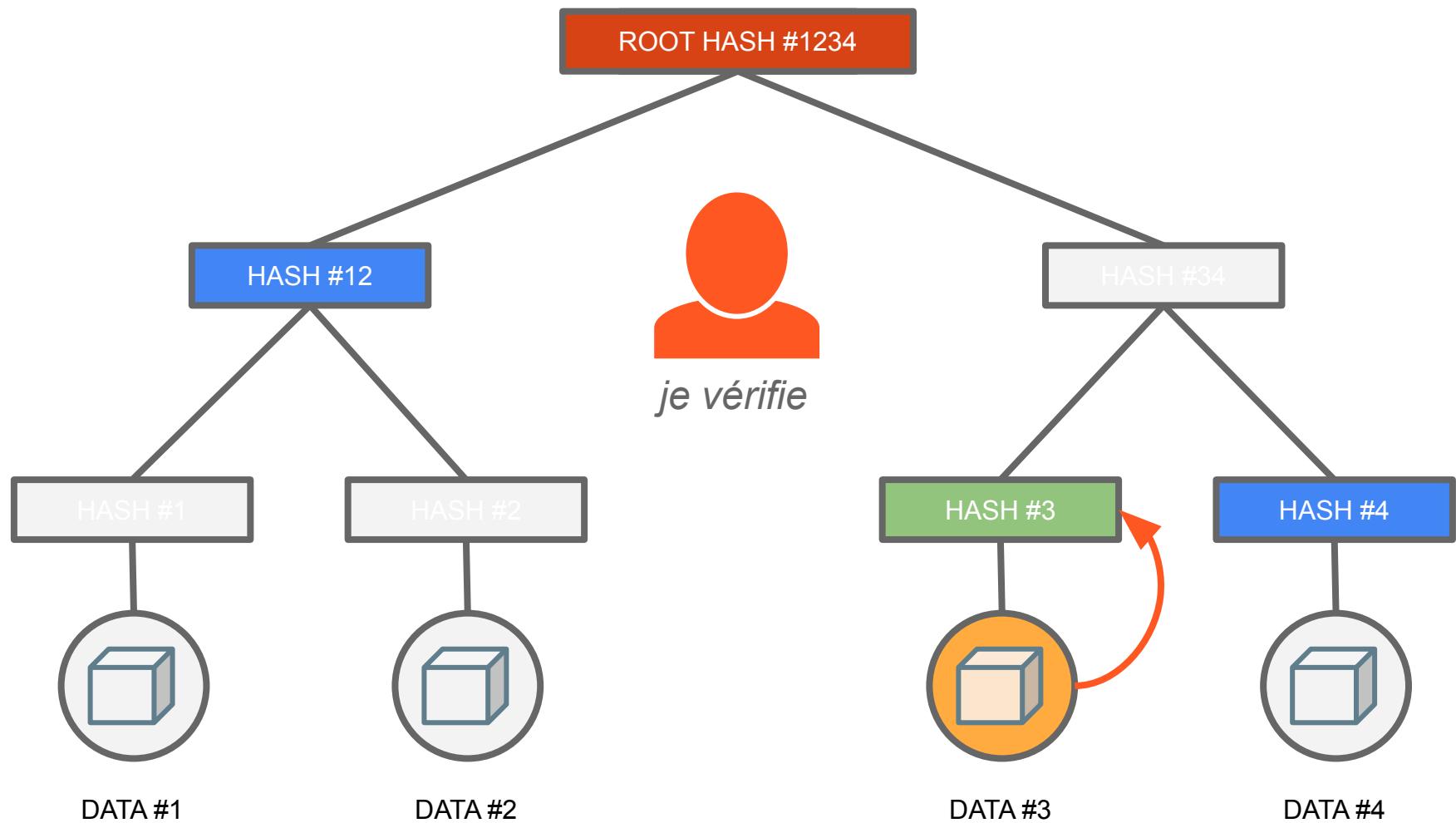


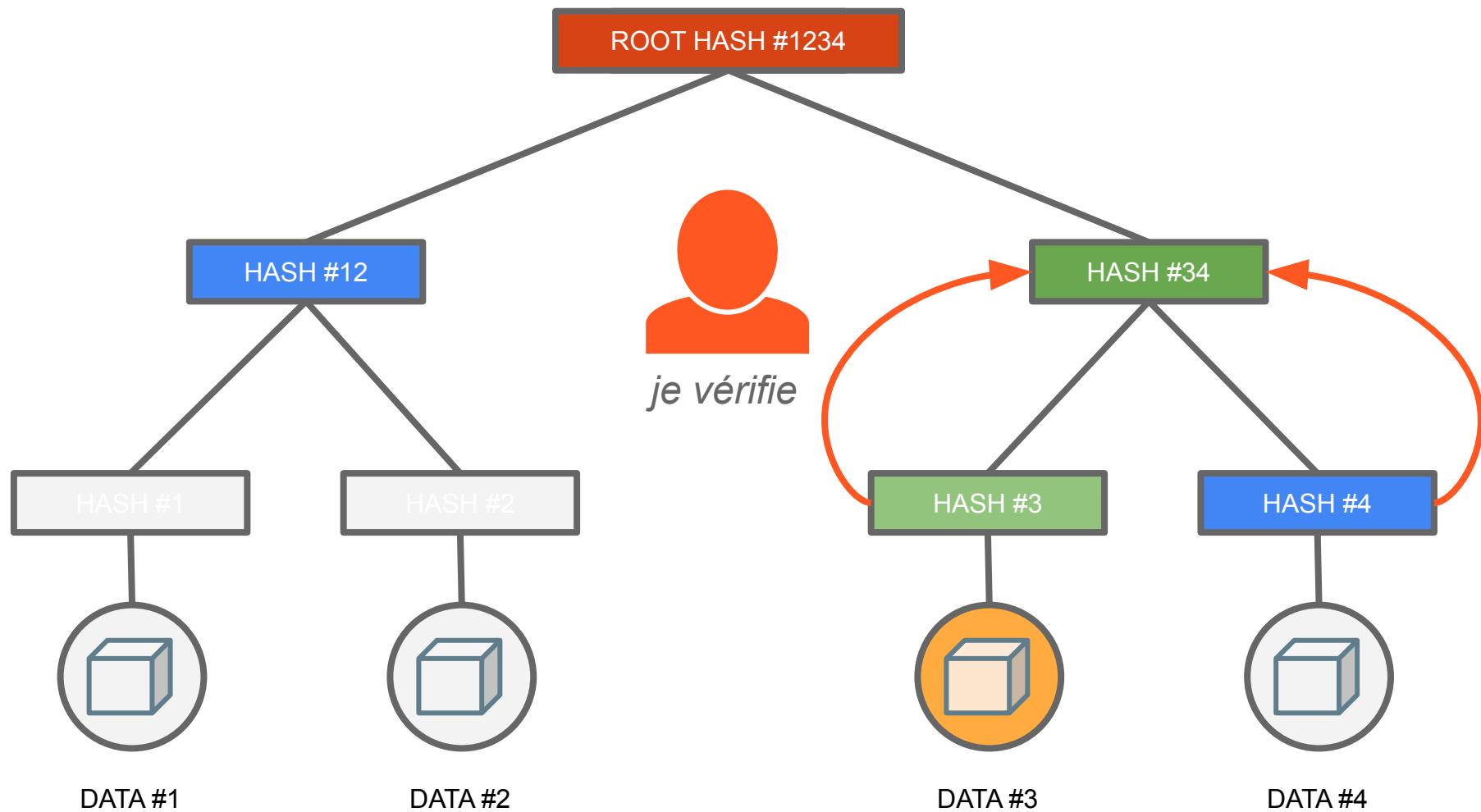
*je connais le
root hash de
source sûre*

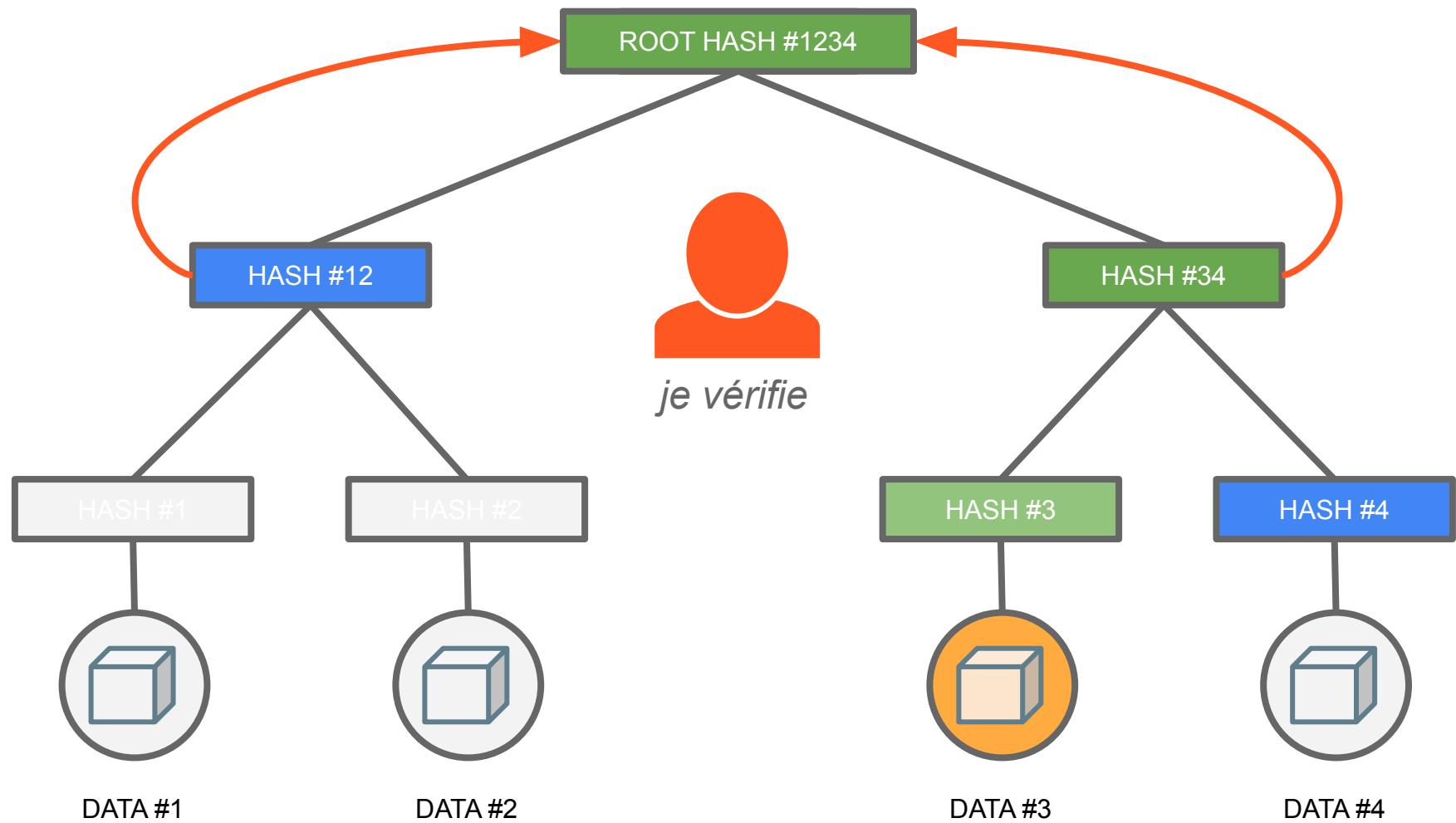
ROOT HASH #1234

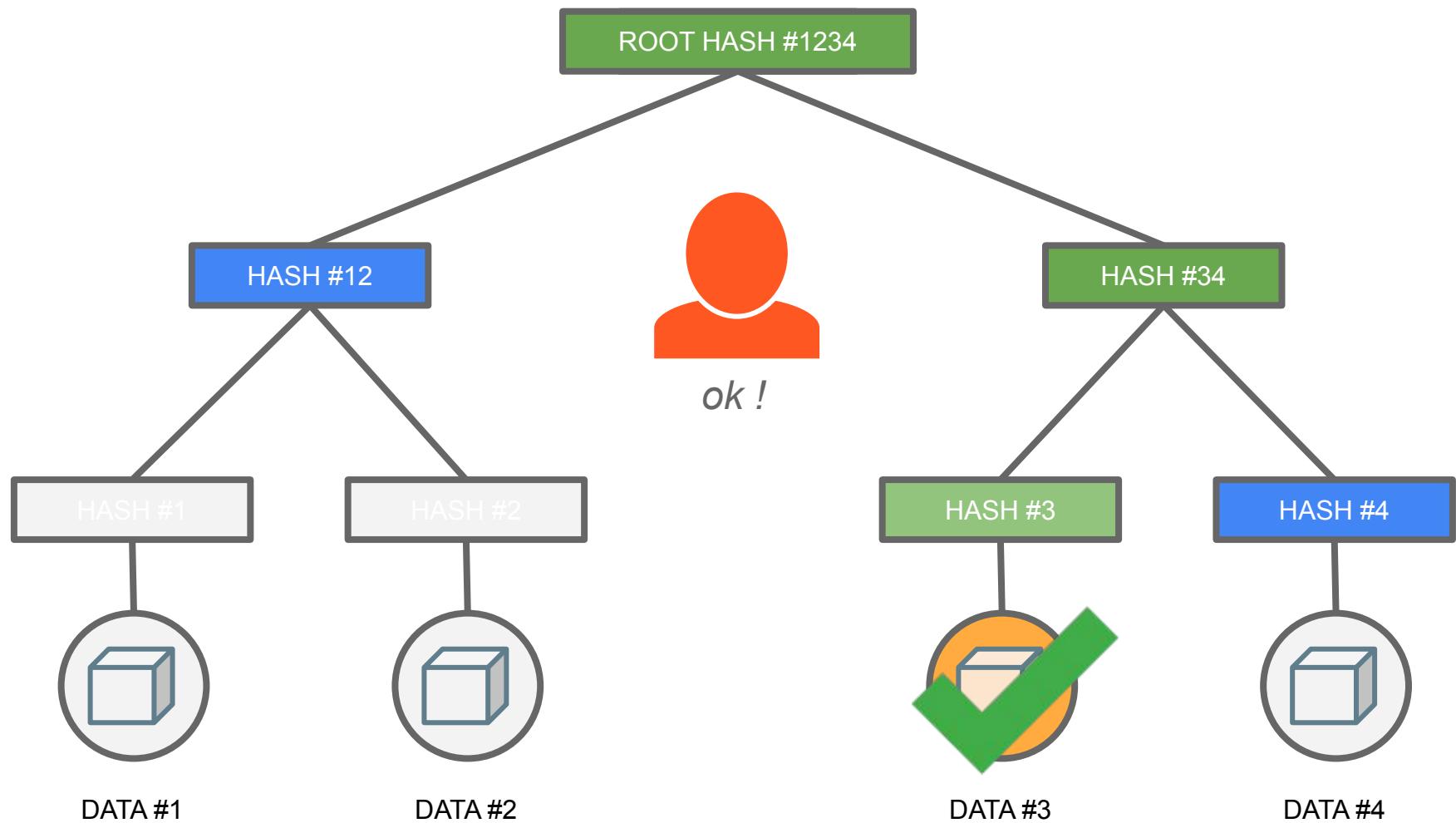




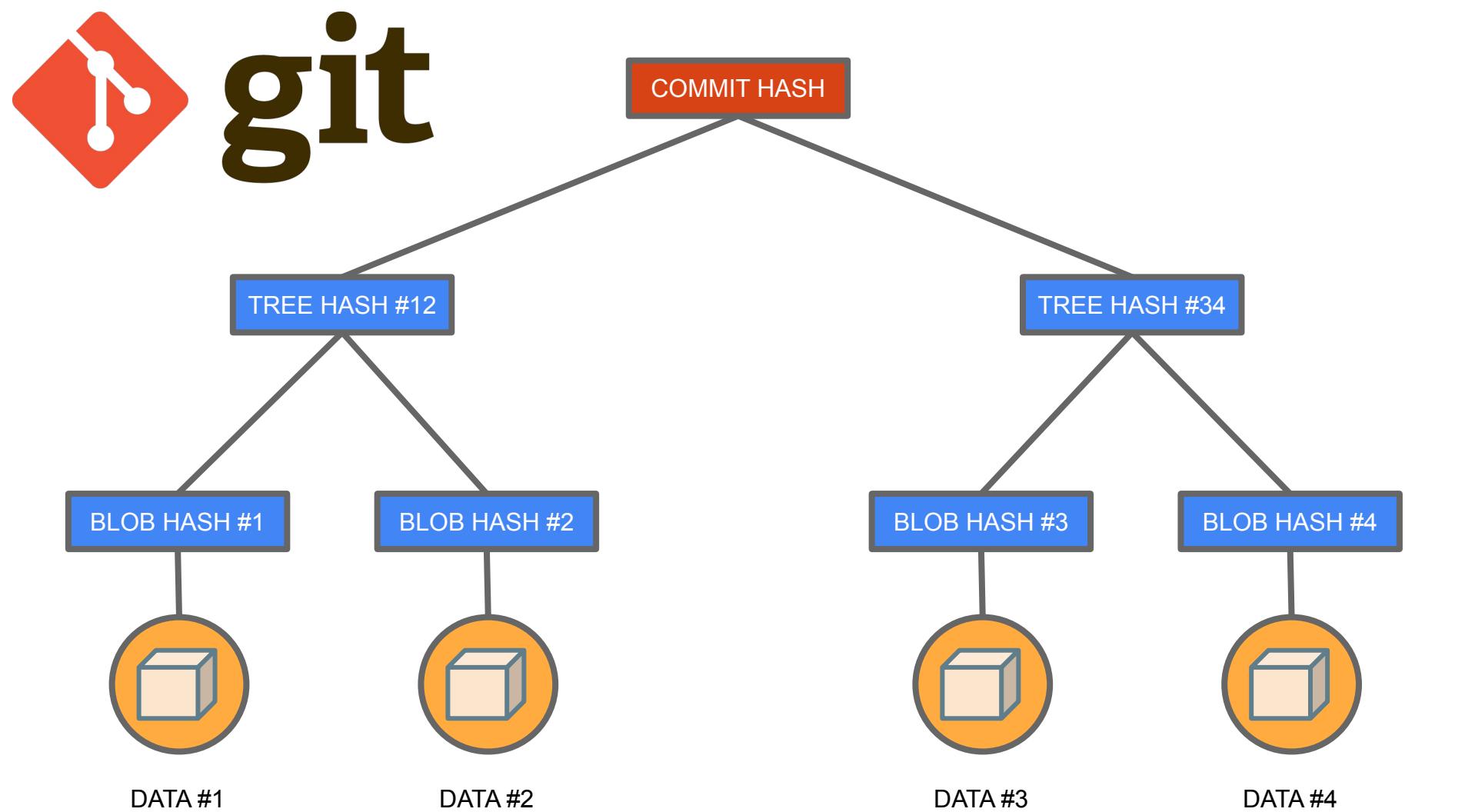


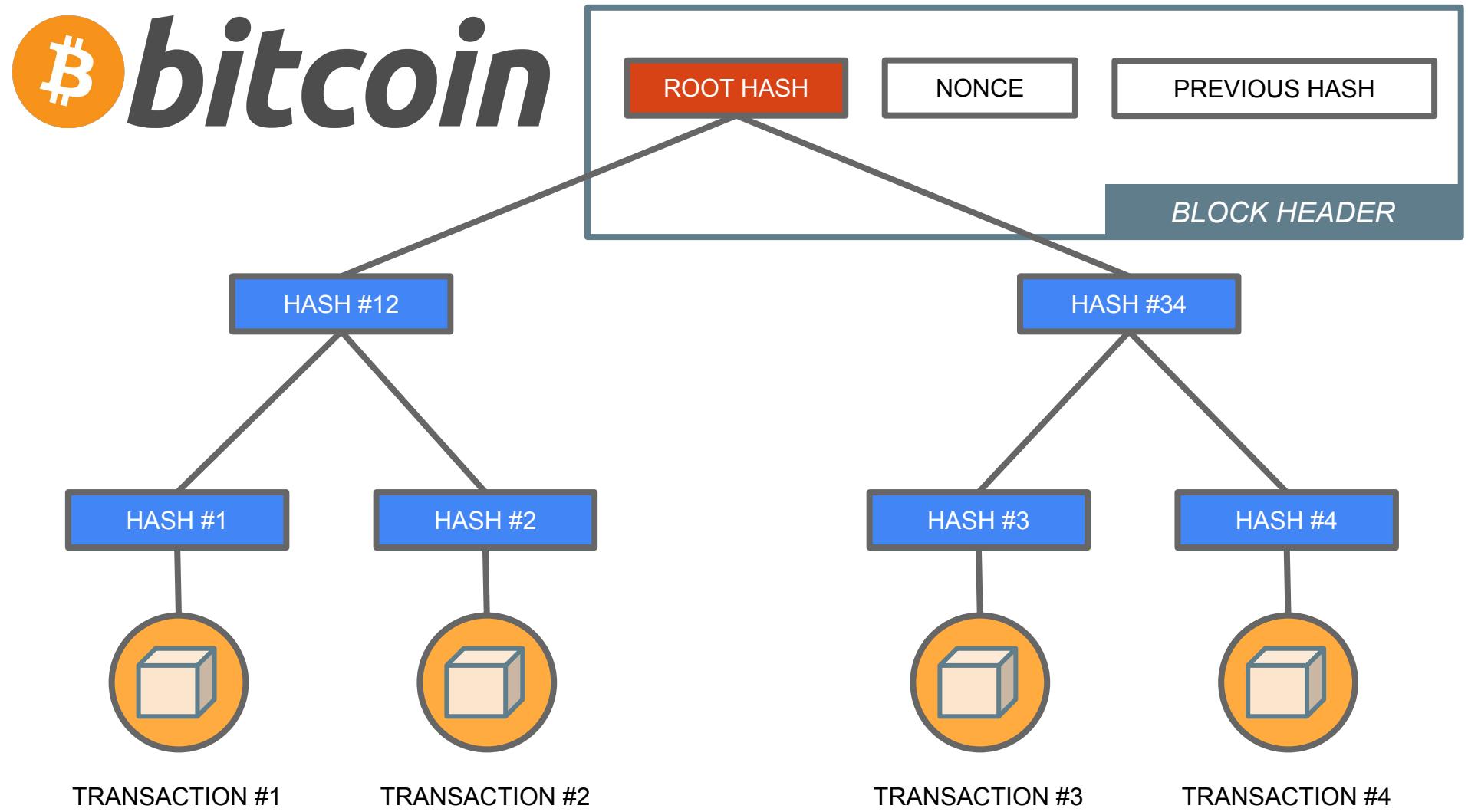






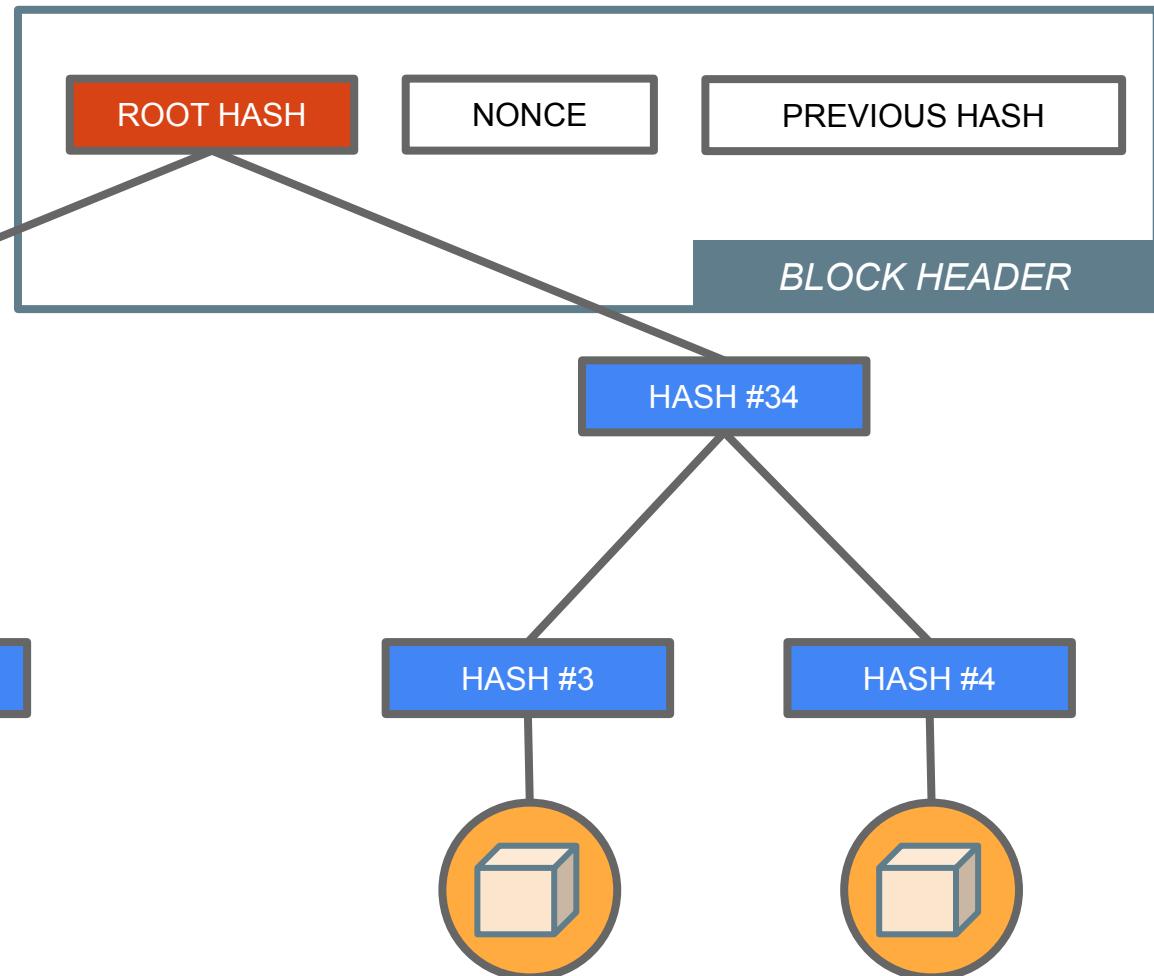
Utilisé ?







ETHEREUM



TRANSACTION #1

TRANSACTION #2

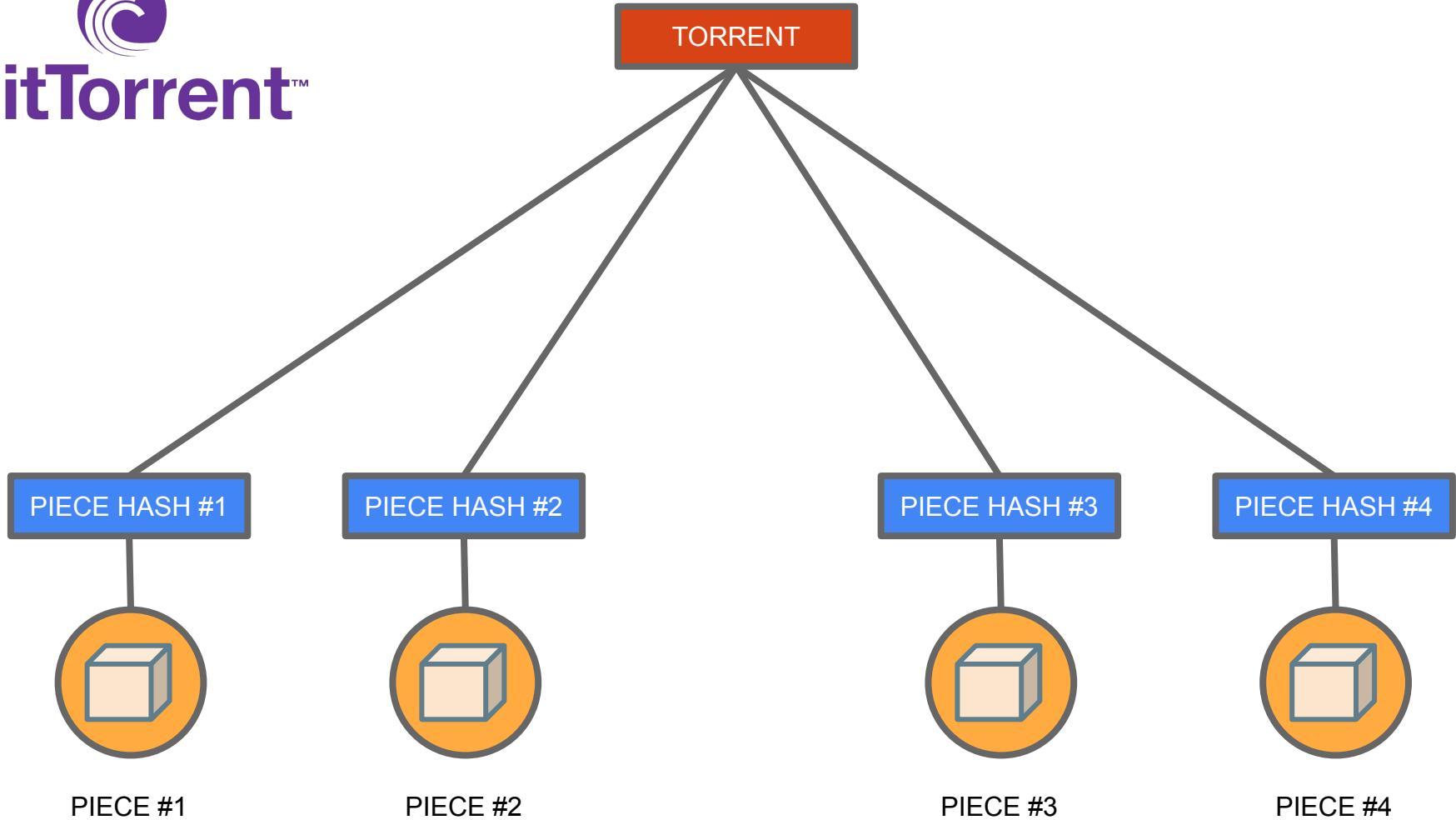
TRANSACTION #3

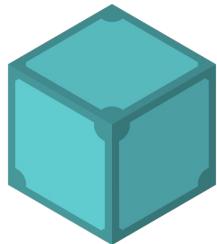
TRANSACTION #4



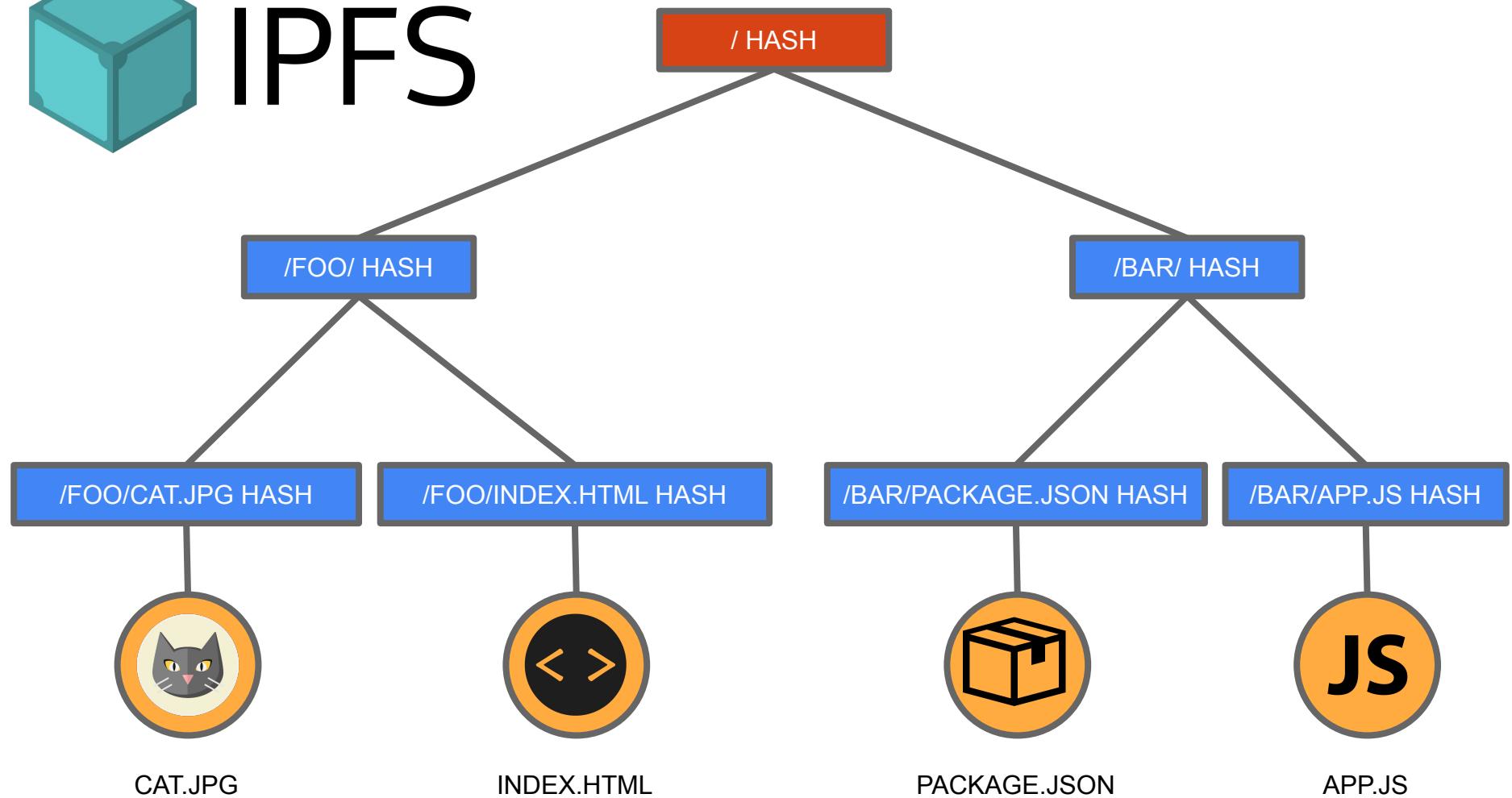
BitTorrent™

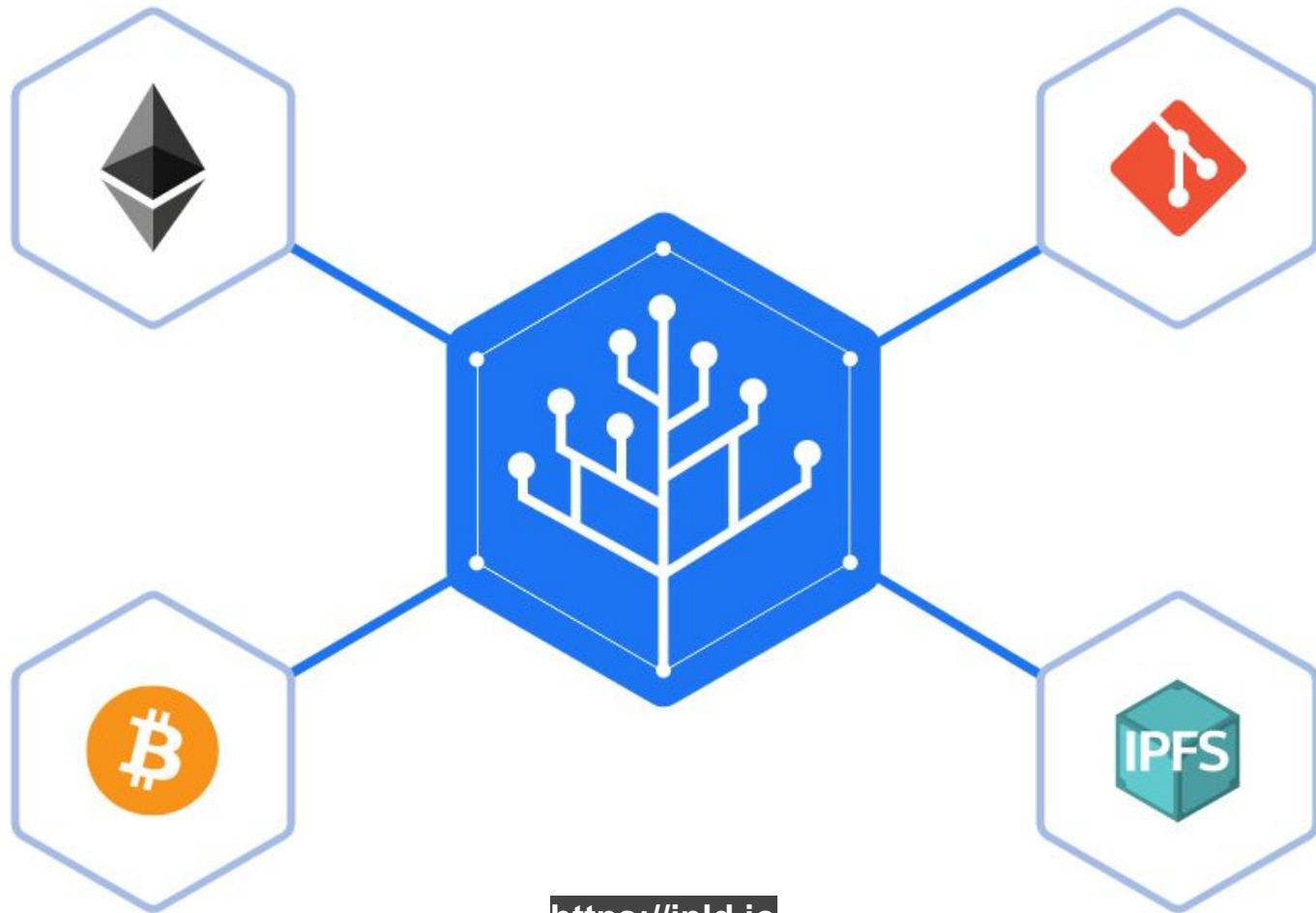
TORRENT



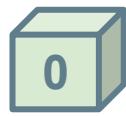
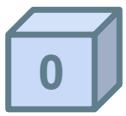
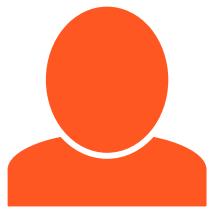


IPFS

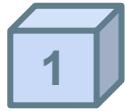




<https://ipld.io>



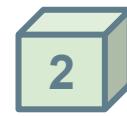
+1





+2





Conflict resolution



Conflict-free Replicated Data Types

CRDT ?



INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE

Conflict-free Replicated Data Types

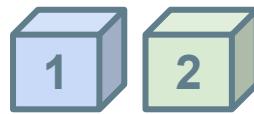
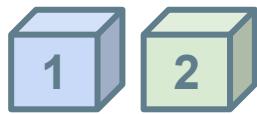
Marc Shapiro, INRIA & LIP6, Paris, France

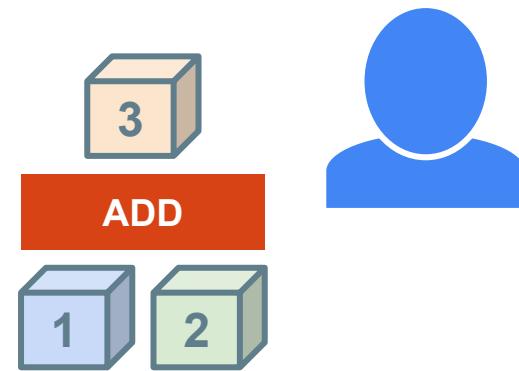
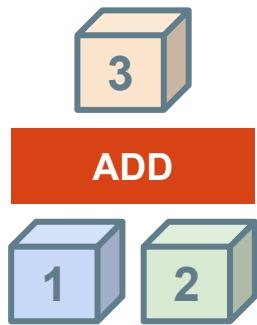
Nuno Preguiça, CITI, Universidade Nova de Lisboa, Portugal

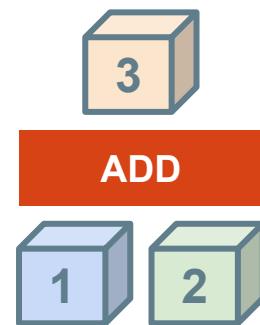
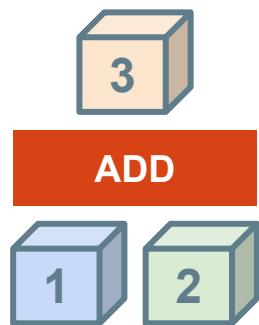
Carlos Baquero, Universidade do Minho, Portugal

Marek Zawirski, INRIA & UPMC, Paris, France









Grow-only Counter



-1



ADD



ADD



-1



ADD



- ADD



ADD



-1



ADD



- ADD



-3



ADD



- ADD





- ADD



- ADD





-1

ADD

1 2

- ADD

1 3

-1

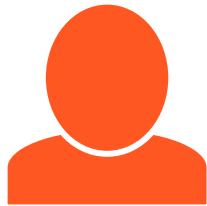
ADD

1 2

- ADD

1 3





-1
ADD

1 2

- ADD

1 3



-1
ADD

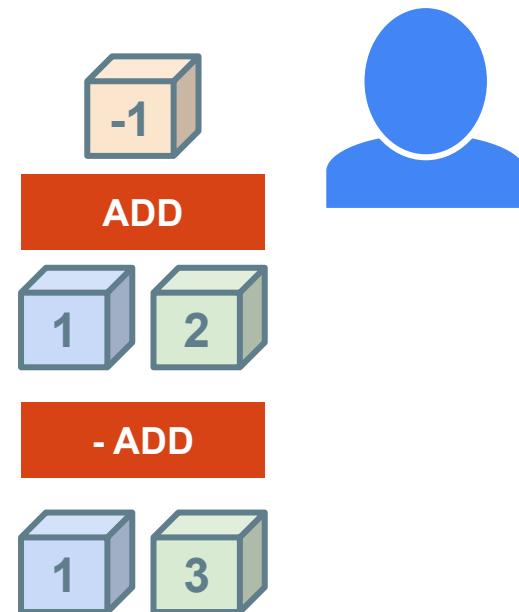
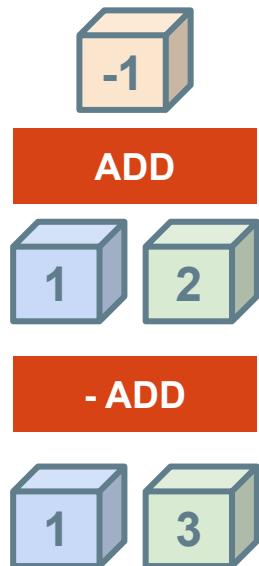
1 2

- ADD

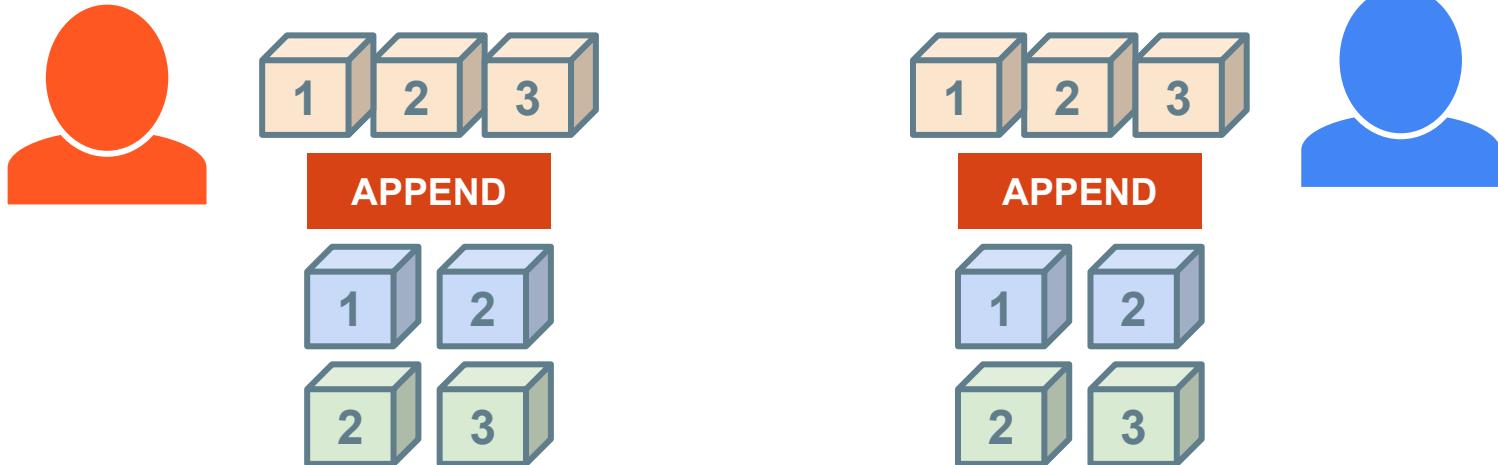
1 3



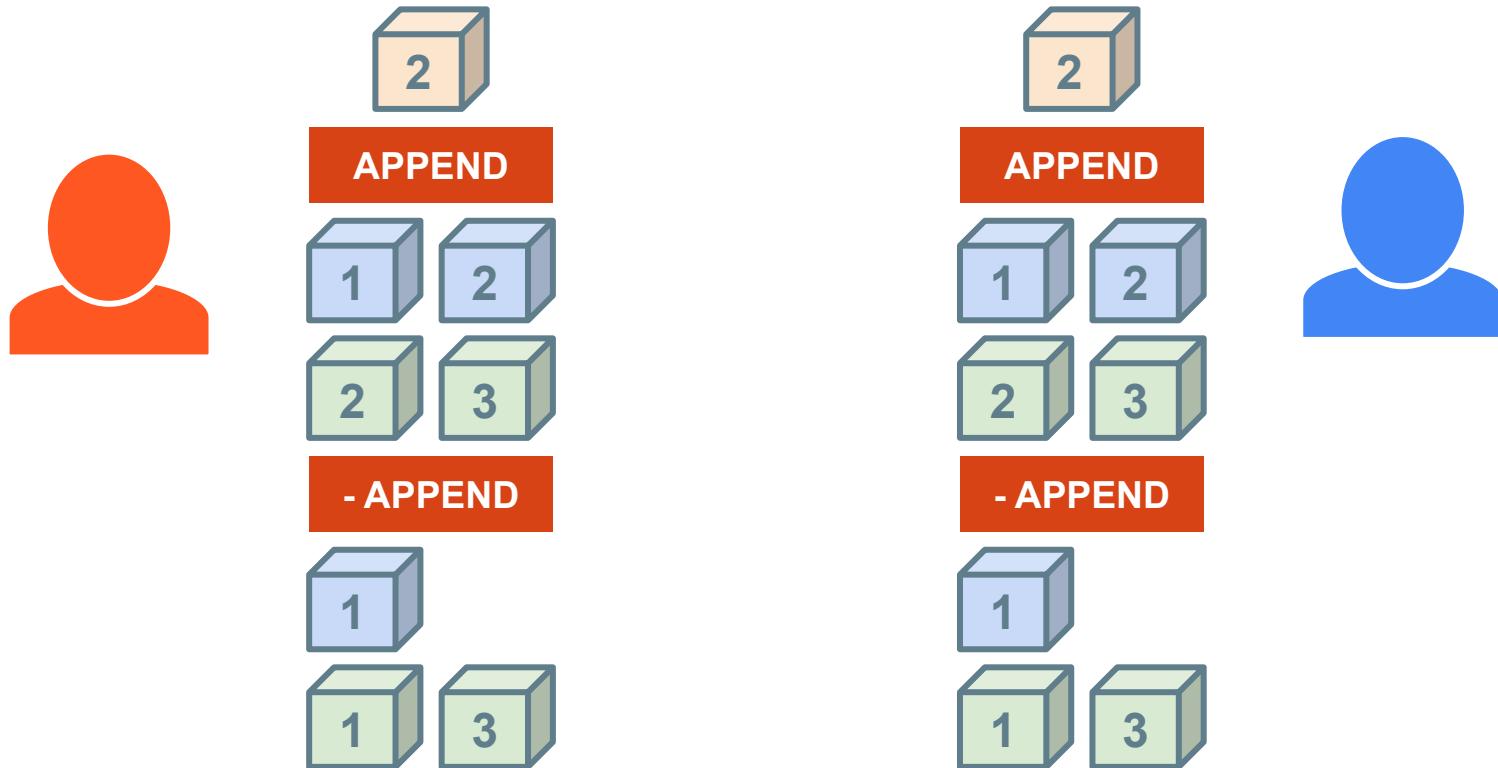
Positive-Negative Counter



Grow-only Set



2-Phase Set



2-Phase Set

+



Timestamp



=

Last-Write-Wins-Element-Set

OR-Set

MC-Sets

U-Set

LWW-Register

MV-Register

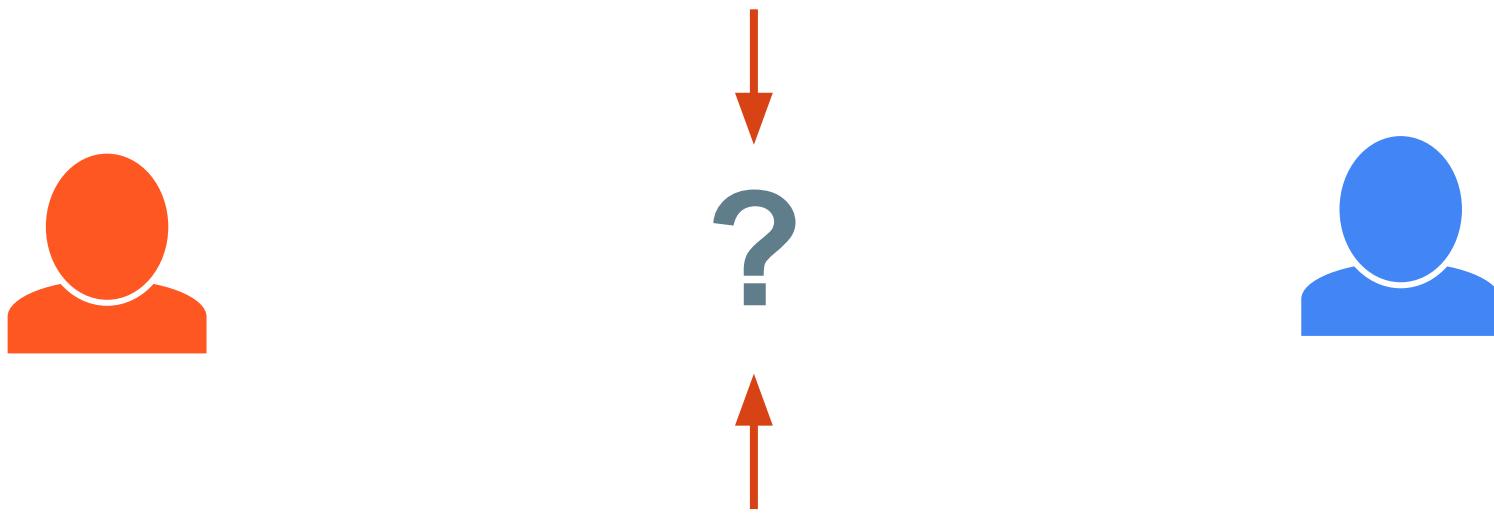


Add-only monotonic DAG

Add-Remove Partial Order

...

Compromis sur les fonctionnalités (Ajout, Suppression, Modification...)



Compromis sur la performance (bande passante, perte de paquet, mémoire...)

Utilisé ?



Bases de données distribuées



Distributed Data



SOUNDCLOUD

News feed

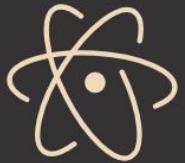


Chat (70M utilisateurs)



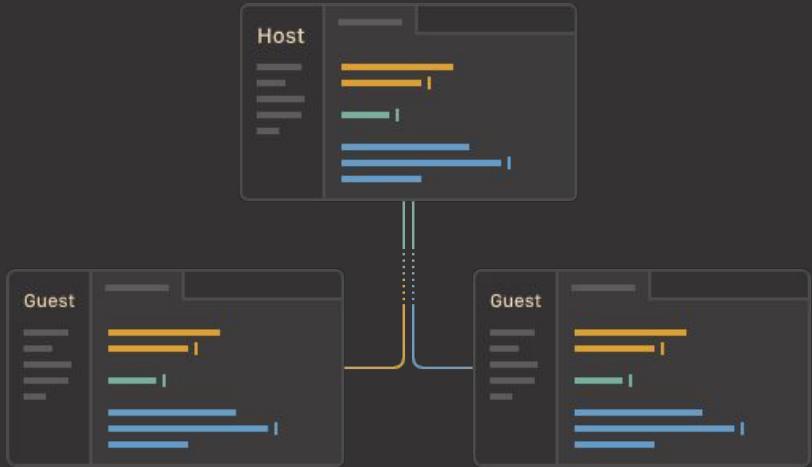
Sync. des localisations
favorites

Mais aussi...



Collaborate in real time in Atom

Teletype^(beta) for Atom lets developers share their workspace with team members and collaborate on code in real time.



Mais aussi...



How Figma's multiplayer technology works



Evan Wallace, CTO at Figma

October 16, 2019

<https://www.figma.com/blog/how-figmas-multiplayer-technology-works/>

Mais aussi...

Démo

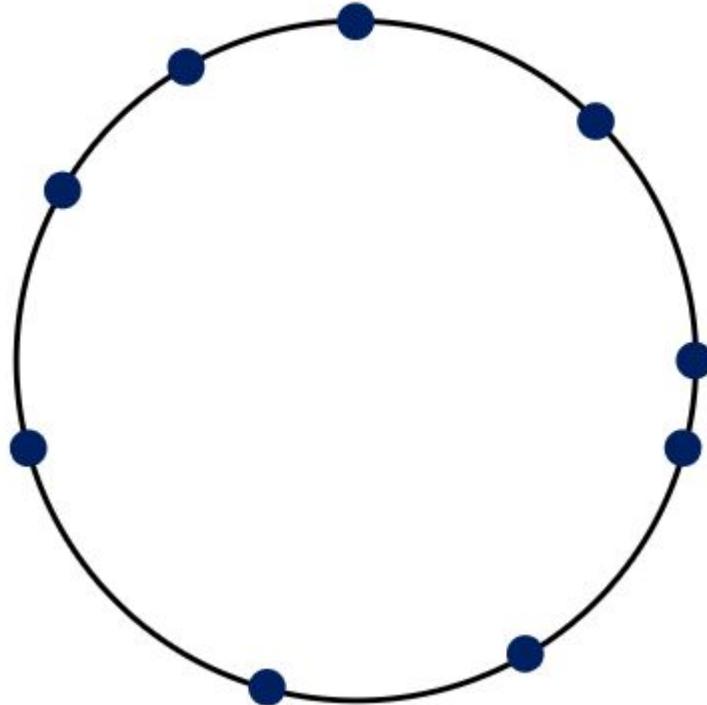
à la fin...

<https://acailly.github.io/roti/>

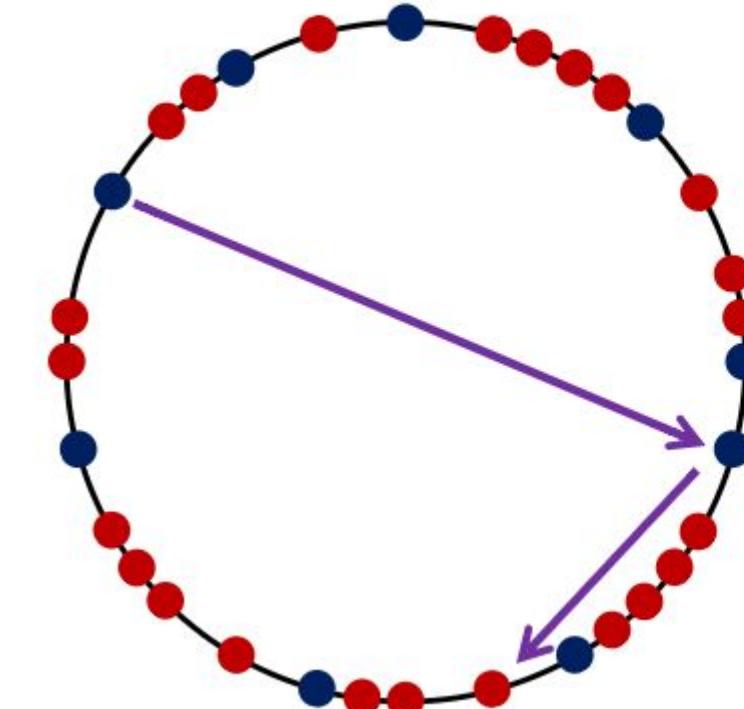


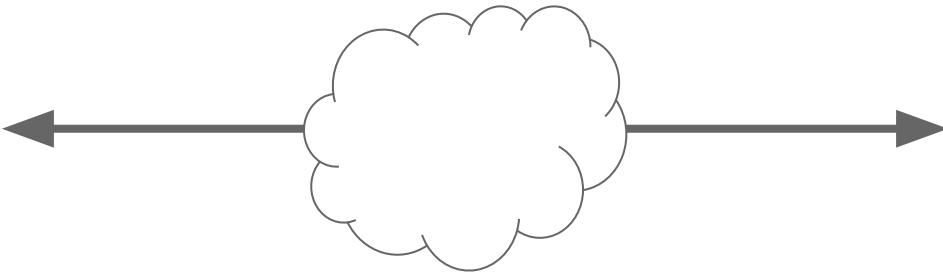
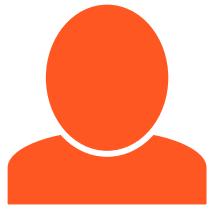
Et si on quittait le monde des bisounours ?

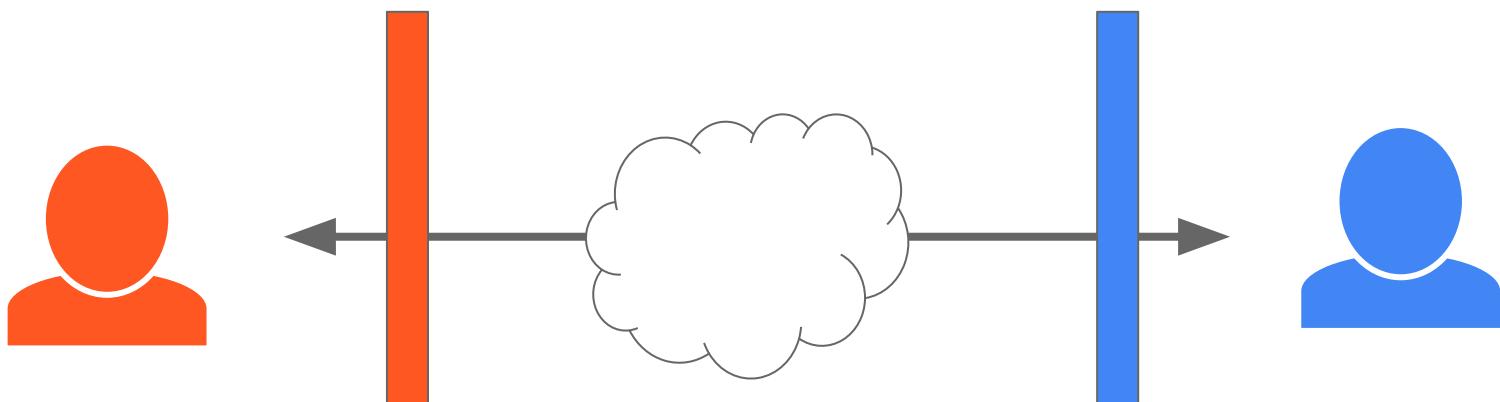
Sybil attack



Brute-force attack







Réseau privé

Réseau public

Réseau privé

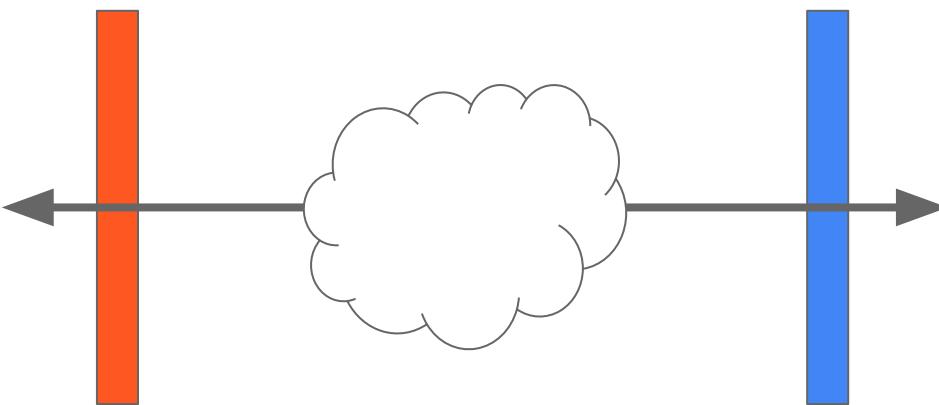
NAT Traversal



Session Traversal Utilities for NAT (STUN)

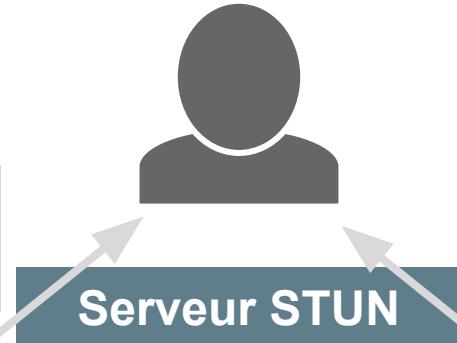


Adresse IP
privée



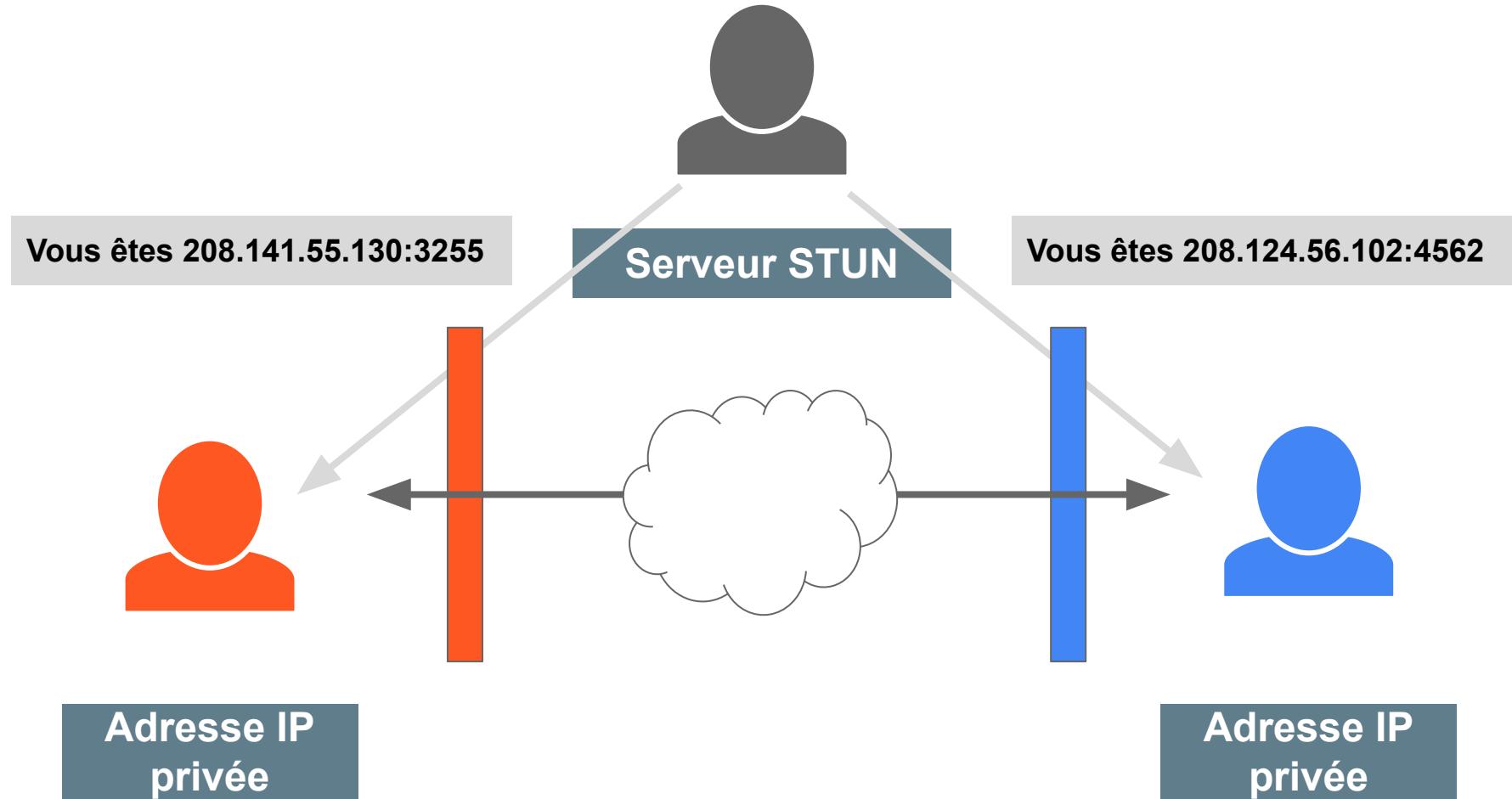
Adresse IP
privée

**Quelle est mon adresse IP publique ?
Suis-je accessible de l'extérieur ?**



**Adresse IP
privée**

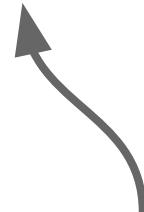
**Adresse IP
privée**



Adresse publique du routeur

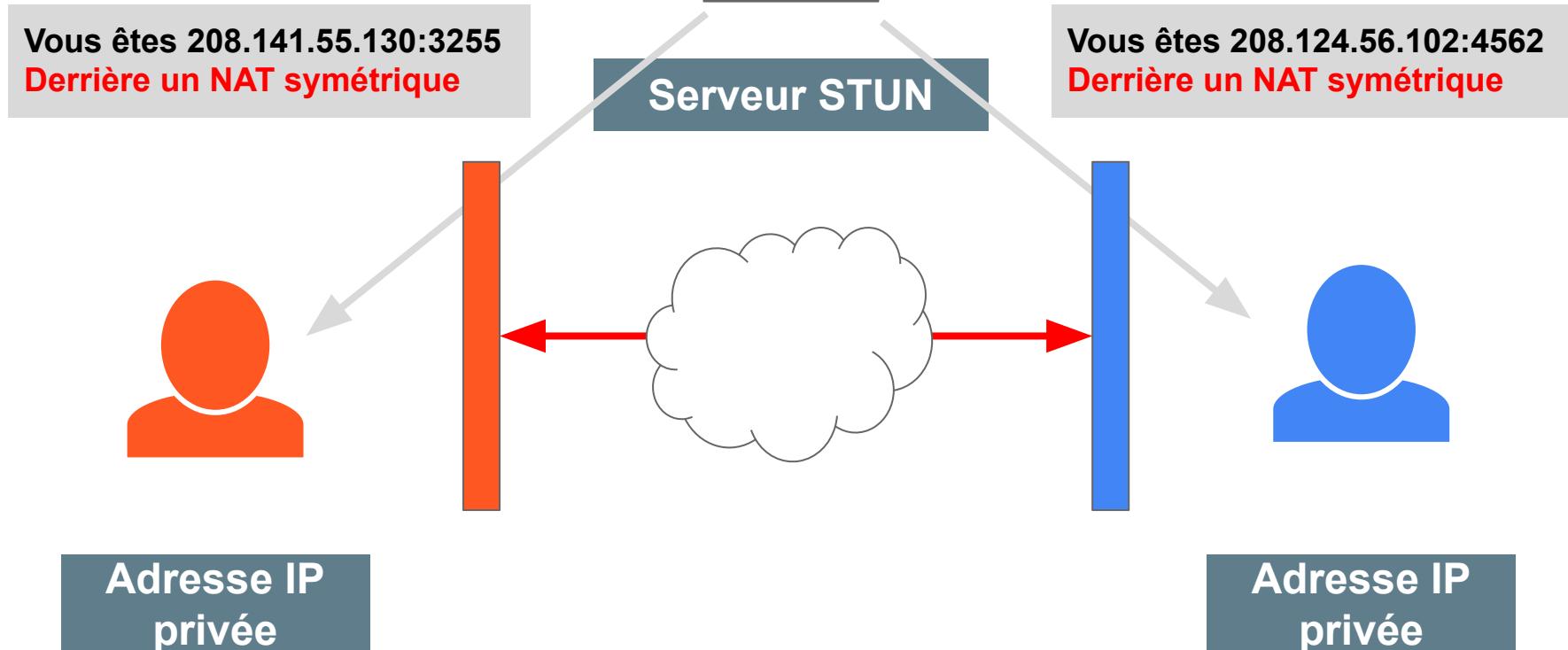


208.141.55.130:3255

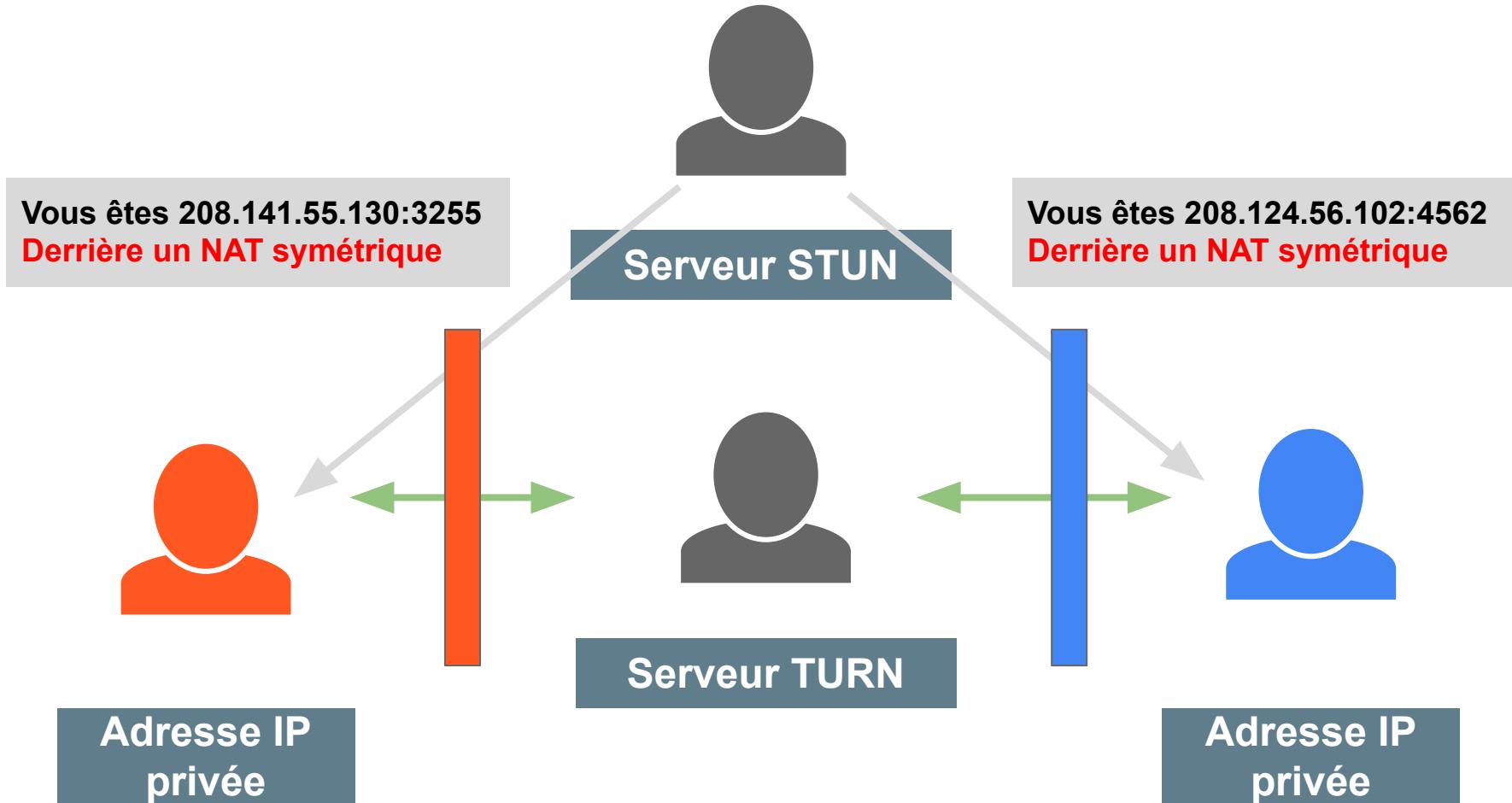


Port unique pour chaque device
derrière le routeur

Qui n'accepte que les connexions entrante s'il y a une connexion sortante sur ce pair



Traversal Using Relays around NAT (TURN)





**Que nous
réserve le futur ?**





Scalabilité ?

Impact écologique ?

Arnaques ?

Centralisation ?



True data ownership

Users should have the freedom to choose where their data resides and who is allowed to access it. By decoupling content from the application itself, users are now able to do so.



Modular design

Because applications are decoupled from the data they produce, users will be able to avoid vendor lock-in, seamlessly switching between apps and personal data storage servers, without losing any data or social connections.



Reusing existing data

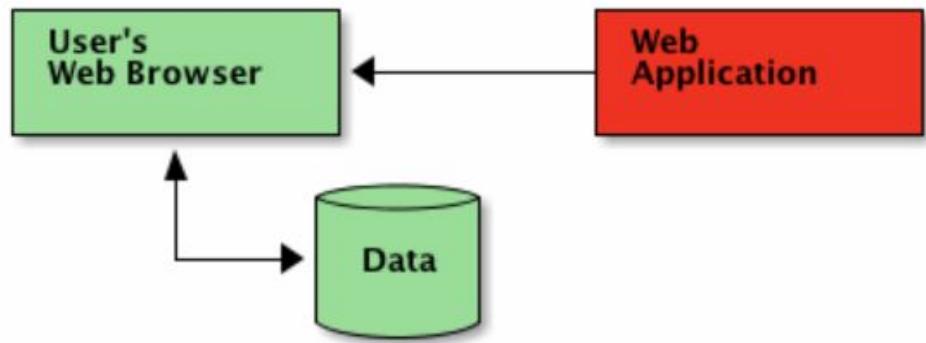
Developers will be able to easily innovate by creating new apps or improving current apps, all while reusing existing data that was created by other apps.



remoteStorage

An open protocol for per-user storage on the Web

<https://remotestorage.io/>



<https://unhosted.org/>

IPFS is the Distributed Web

A peer-to-peer hypermedia protocol
to make the web faster, safer, and more open.

Try it

Watch demo

The IPFS Stack

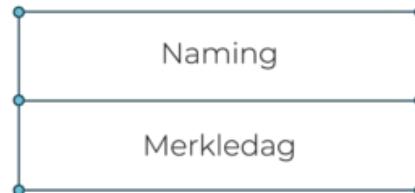


Using the Data

IPNS



IPLD



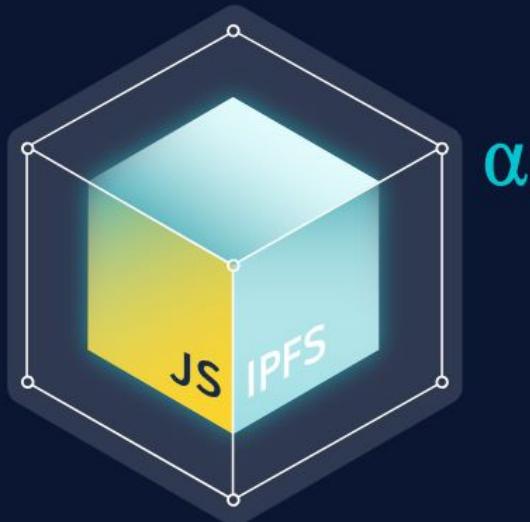
Defining the Data



libp2p



Moving the Data



A full P2P protocol written entirely in JavaScript

js-ipfs paves the way for the Browser implementation of the IPFS protocol. Written entirely in JavaScript, it runs in a Browser, a Service Worker, a Web Extension and Node.js, opening the door to a world of possibilities.

<https://www.coindesk.com/257-million-filecoin-breaks-time-record-ico-funding/>



\$257 Million: Filecoin Breaks All-Time Record for ICO Funding

Sep 7, 2017 at 20:45 UTC by Stan Higgins



Distributed Web Gateway

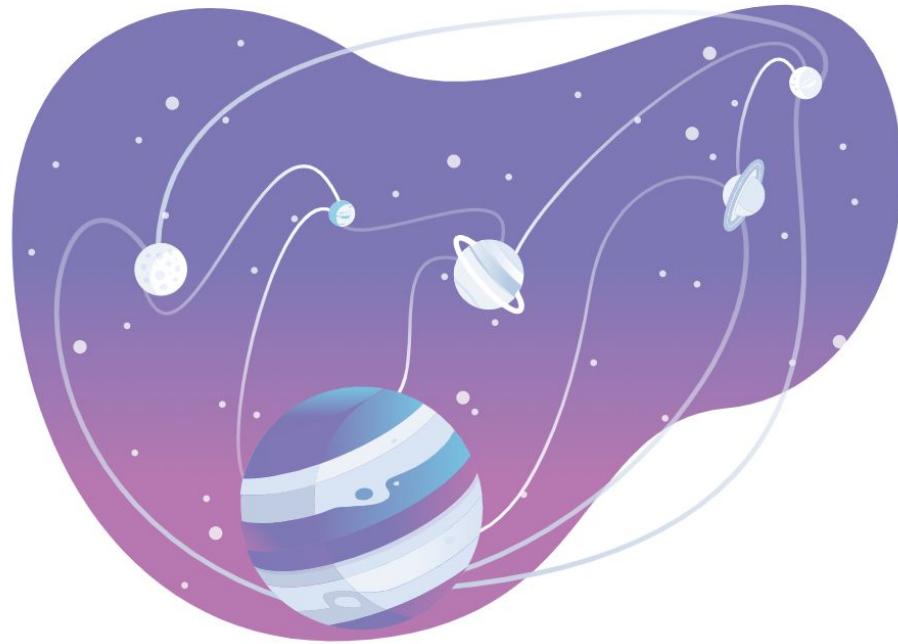
Simplify, speed up, and secure access to both the Ethereum network and the InterPlanetary File System (IPFS)

Use Cloudflare's gateways to access the Distributed Web easily, quickly, and securely, no software required.

Serve content hosted on IPFS or interact with an Ethereum distributed app from a custom domain over HTTPs.

[Read IPFS Blog](#)[Read Ethereum Blog](#)

[Distributed Web Gateway Terms of Use](#)



<https://www.cloudflare.com/distributed-web-gateway/>

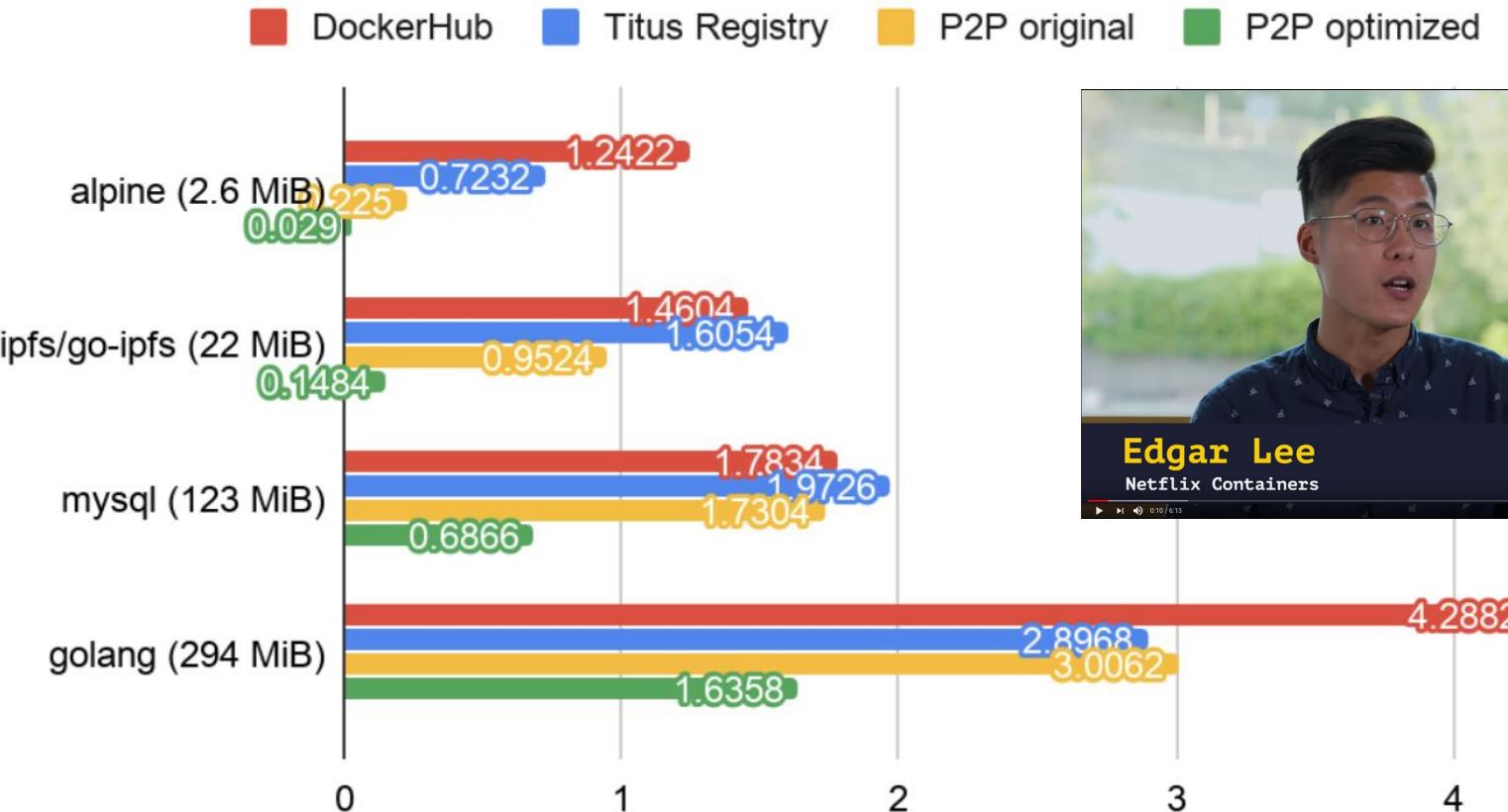


Opera adds built-in support for IPFS sites

IPFS in Opera for Android

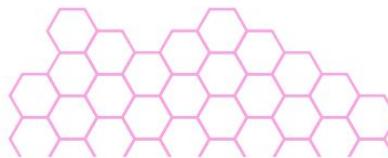
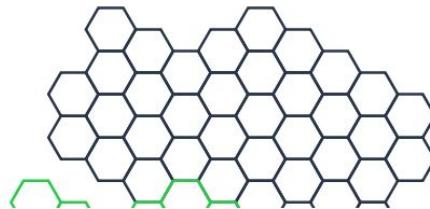
<https://blog.ipfs.io/2020-03-30-ipfs-in-opera-for-android/>

Total time to pull a container image

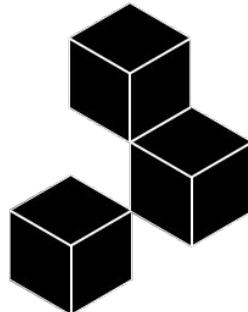


dat:// – a peer-to-peer protocol

A community-driven project powering a next-generation Web



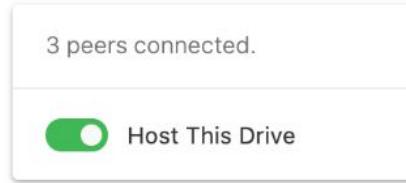
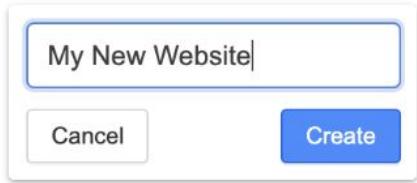
<https://hypercore-protocol.org/>



Hypercore is a distributed append-only log

Hyperdrive is a P2P filesystem

Hyperswarm is a DHT for the home



Deploy instantly

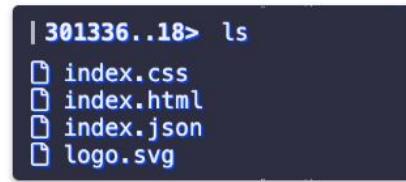
Create a new Hyperdrive site with one click.

Co-host sites

Reduce costs and help keep sites online using peer-to-peer hosting.

Build p2p apps

New Web APIs make building peer-to-peer apps easier than ever.



Explore files

Hyperdrive is a fully-featured filesystem which you can explore.

Run commands

Browse the Web and get work done with the integrated terminal.

Edit source

The integrated editor lets you work side-by-side with your page.

Scuttlebutt



<https://www.scuttlebutt.nz/>



<https://www.youtube.com/watch?v=ymDi-gwWvrc>

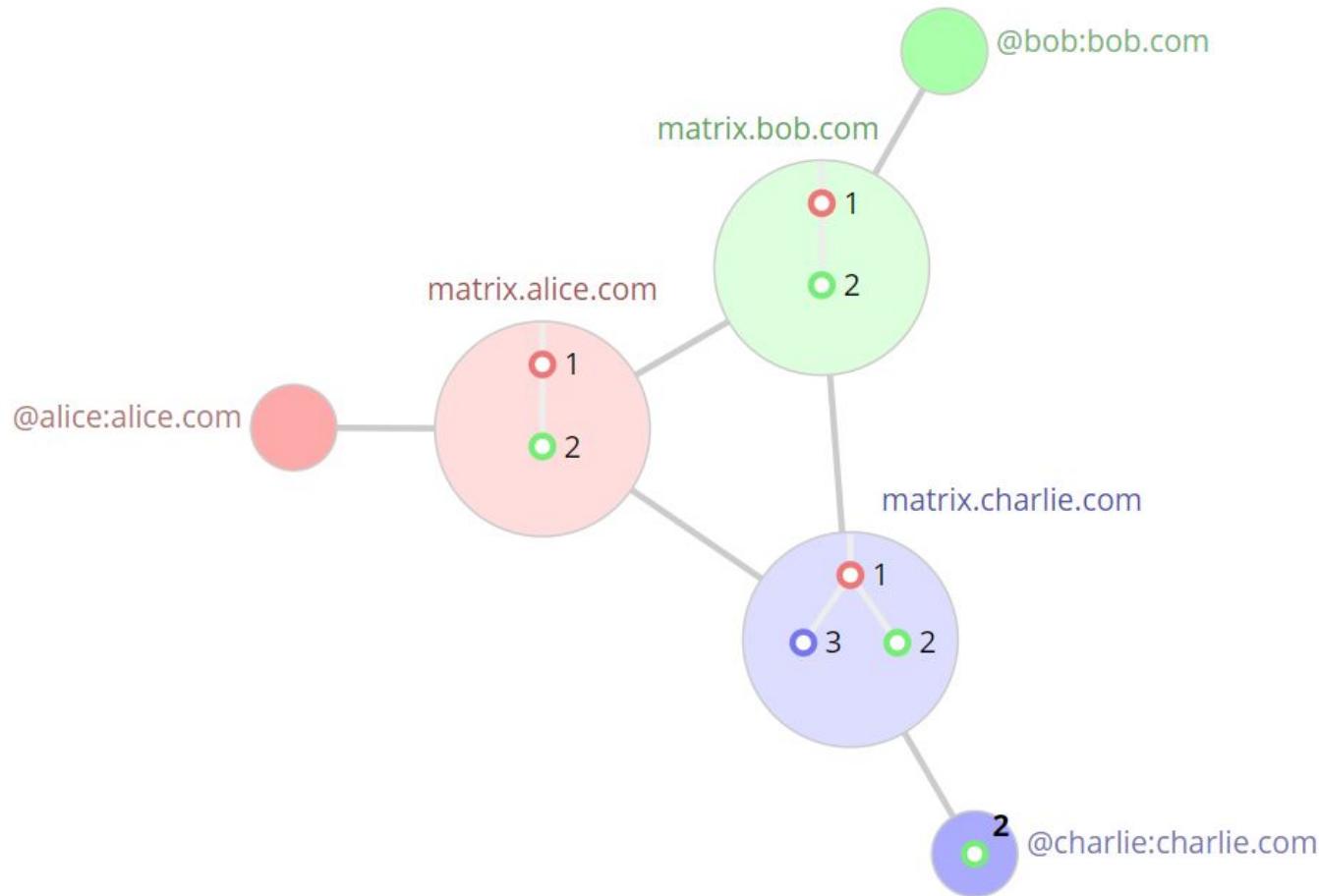
@Antoine Cailly

@UP7zpmox0RbLL1wMZ00xtYbpwmc/AQtmix5zbDLh0P8=.ed25519

[matrix]

An open network for secure, decentralized
communication

<https://matrix.org>



[matrix]

- Started out in Sept 2014
- Released Matrix 1.0 in June 2019
- ~10.0M global visible accounts
- ~2.5M messages per day
- ~4.5M unbridged accounts
- ~500K unbridged messages per day
- ~2.1M rooms that Matrix.org participates in
- ~20,000 federated servers
- ~3000 msgs/s out, ~30 msgs/s in on Matrix.org
- ~400 projects building on Matrix
- ~70 companies building on Matrix



Paris, le 20/04/2018

L'État adopte sa propre messagerie instantanée sécurisée

D'ici l'été 2018, l'État disposera de sa propre messagerie instantanée, alternative aux applications WhatsApp et Telegram.

Elle garantira des **échanges sécurisés**, chiffrés de bout en bout, sans dégradation de l'expérience utilisateur. Elle sera compatible avec n'importe quel terminal mobile ou poste de travail, d'État ou personnel. En effet jusqu'à maintenant l'installation des applications comme WhatsApp ou Telegram n'était pas possible sur les téléphones mobiles professionnels ce qui ne permettait pas une fluidité parfaite de l'information et des partages de documents.

Piloté par la **direction interministérielle du numérique et du système d'information et de communication de l'Etat (DINSIC)**, le projet reçoit les contributions de l'**Agence nationale de la sécurité des systèmes d'information (ANSSI)**, des DSI du **ministère des Armées** et du **ministère de l'Europe et des affaires étrangères**.

L'outil développé s'appuie sur un **logiciel open source** (Riot) qui implémente un **standard ouvert** (Matrix). Porté par une startup Franco-Britannique (New Vector), et bénéficiant de nombreuses contributions, ce standard d'échanges de messages instantanés a déjà retenu l'attention d'autres Etats tels que les **Pays-Bas** et le **Canada**, avec qui la DINSIC collabore étroitement.

TCHAP



Télétravail

La messagerie instantanée de l'État
dépasse le cap des

120 000 utilisateurs



TCHAP



La messagerie instantanée
de l'État est désormais ouverte
à l'ensemble des **SDIS**



TCHAP



La messagerie instantanée
de l'État est ouverte
aux **parlementaires**
& agents des parlements



https://twitter.com/_DINUM/status/1242111814168698880
https://twitter.com/_DINUM/status/1243595481449717761
https://twitter.com/_DINUM/status/1265272132935856133

Welcoming Mozilla to Matrix!

2019-12-19 — [In the News](#) — Matthew Hodgson

Hi all,

We're incredibly excited that [Mozilla just announced](#) that they've selected Matrix as the successor to IRC as the communication platform for the public Mozilla community!! This comes off the back of a [formal 1-month trial](#) in September to evaluate various options side by side, and now New Vector will be helping Mozilla get their homeserver up and running on the [Modular.im](#) hosting platform over the coming weeks - and federating openly with the rest of the open global Matrix network! :)

We have always been massive fans of Mozilla: they have been an excellent role model as champions of the open web, open standards, not to mention open source - and it's fair to say that Mozilla has been a major inspiration to how Matrix has evolved (Riot aspires to be to Matrix what Firefox is to the Web: a flagship open source app which provides an accessible friendly interface into an open standard network). It's very reassuring to see that Mozillians from the trial recognise the alignment and have converged on Matrix as the way forward - it's a massive win for the open web and standards-based communication in general.

It's worth noting that we've also always been massive fans of IRC, and Matrix is unashamedly derivative of IRC in capabilities and culture, while broadening the scope to decentralised synchronisation and relaying of any kind of data. For context, the genesis of the team which eventually spawned Matrix was on a student IRC server ~20 years ago - and subsequently

<https://matrix.org/blog/2019/12/19/welcoming-mozilla-to-matrix>

Welcoming Automattic to Matrix!

2020-05-21 — [General](#) — Matthew Hodgson



Hi all,

We're very excited indeed to announce that [Automattic](#), the creators of [WordPress.com](#), are jumping head first into the Matrix ecosystem with a strategic investment of almost \$5M into [New Vector](#) (the company which makes [Riot](#) and [Modular.im](#), founded by the core Matrix team in 2017). More importantly, Matt Mullenweg (co-founder of WordPress and founder of Automattic) and the Automattic gang are committing to make the most of Matrix in their work going forwards!

<https://matrix.org/blog/2020/05/21/welcoming-automattic-to-matrix>



Brussels / 1 & 2 February 2020

[schedule](#)

[News](#)

[Sponsors](#)

[Contact](#)

[FOSDEM 2020](#) / [Schedule](#) / [Events](#) / [Developer rooms](#) / [Decentralized Internet and Privacy](#) / [The Path to Peer-to-Peer Matrix](#)

The Path to Peer-to-Peer Matrix

In which we throw away DNS and run Matrix clientside over libp2p and friends



Brussels / 1 & 2 February 2020

[schedule](#)

[News](#)

[Sponsors](#)

[Contact](#)

[FOSDEM 2020](#) / [Schedule](#) / [Events](#) / [Developer rooms](#) / [Decentralized Internet and Privacy](#) / [The Path to Peer-to-Peer Matrix](#)

The Path to Peer-to-Peer Matrix

In which we throw away DNS and run Matrix clientside over **libp2p** and friends

Démo

Beaker Browser,
un navigateur P2P

<https://beakerbrowser.com/>

Démo

ROTI en peer to peer

<https://acailly.github.io/roti/>

<https://acailly.github.io/roti/>

Merci



@AntoineCailly