

# Le web décentralisé

REVOLUTION

Antoine Cailly

# Qui suis-je ?



@AntoineCailly



acailly



zenika

<animés par la passion>

Great  
Place  
To  
Work.

Best Workplaces™

50 à 500 salariés

FRANCE

2018

**Il était une fois le web  
en 2018...**



**Censure**

Sat Apr 29 2017 08:02:55 GMT+0300 (+03)  
https://en.wikipedia.org 5005 DOWN  
https://tr.wikipedia.org 5009 DOWN  
https://az.wikipedia.org 5009 DOWN  
https://fr.wikipedia.org 5007 DOWN  
https://www.wikipedia.org 5007 DOWN



Turkey Blocks 

@TurkeyBlocks



Suivre

Confirmed: All editions of the [#Wikipedia](#) online encyclopedia blocked in [#Turkey](#) as of 8:00AM local time [turkeyblocks.org/2017/04/29/wik...](http://turkeyblocks.org/2017/04/29/wik...)

07:22 - 29 avr. 2017



86



2 875



1 015



## Vikipedi'ye hoş geldiniz

Herkesin katkıda bulunabildiği *Özgür Ansiklopedi*  
Türkçe madde sayısı: 288.931

9 Ocak 2017, Pazartesi

- Bilim
- Fizik
- Spor
- Coğrafya
- Matematik
- Tarih
- Din
- Sanat
- Tüm portaller

### Haftanın seçkin maddesi



**Mars**, Güneş Sistemi'nin Güneş'ten itibaren dördüncü gezegeni. Roma mitolojisindeki savaş tanrısı Mars'a ithafen adlandırılmıştır. Yüzeyindeki yaygın demir oksitten dolayı kızılımsı bir görünüme 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 *Mariyeris Vadisi* adlı kanyon en büyük kanyondur. Ayrıca Haziran 2008'de *Nature* dergisinde yayımlanan üç makalede

### Günün seçkin resmi



# Referèndum 2017

Inici

Normativa electoral

Sindicatures electorals

Sala de premsa

Com s'ha de votar

On votar



## Col·laboradors del referèndum

### El més destacat

- Material per descarregar
- Calendari electoral
- Call for international monitoring

### Preguntes més freqüents

Electors

Meses electorals

<https://ipfs.io/ipns/QmZxWEBJBVkGDGaKdYPQUXX4KC5TCWbvur4iYZrTML8XCR/>



# Suppression des données

A red line-art illustration on a dark red background. It depicts a stylized human figure standing next to a trash bin. The figure is composed of simple lines, with a circular head and a rectangular body. The trash bin is also made of simple lines, with a grid pattern on its front. The overall theme is data deletion or disposal.





**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 x

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

open.whitehouse.gov

Search

0 Results

Categories

No Results

- Business
- Education
- Finance

```

x Archive Backup
url: https://open.whitehouse.gov/browse
date: 2017-02-28 20:17
...
3798d2c37a70216c137 17846dc48323980e177ac...
413299514c72a42862a6 19315a852add0e0157712140898037380a406787ab405778ac80987c09
...

```



**maxwell ogden**  
@denormalize



Today Trump removed all open data (9GB) from the White House [open.whitehouse.gov/browse](https://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

facebook



WhatsApp



waze



Instagram



ANDROID



chrome

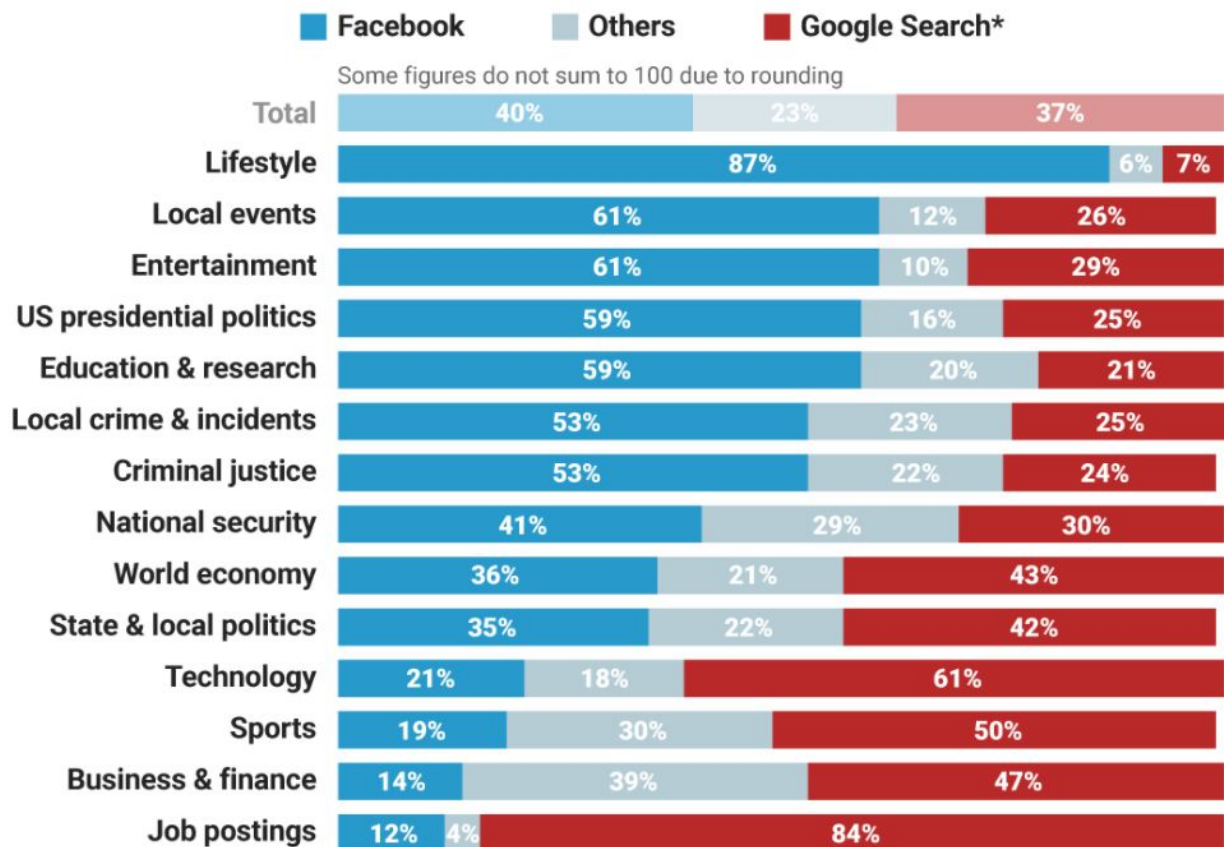
**DELETE**  
**facebook**

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

An aerial photograph of a complex highway interchange, overlaid with a semi-transparent red filter. The image shows multiple lanes of traffic, overpasses, and surrounding urban and wooded areas. The text is centered in the lower half of the image.

# **Centralisation du trafic**

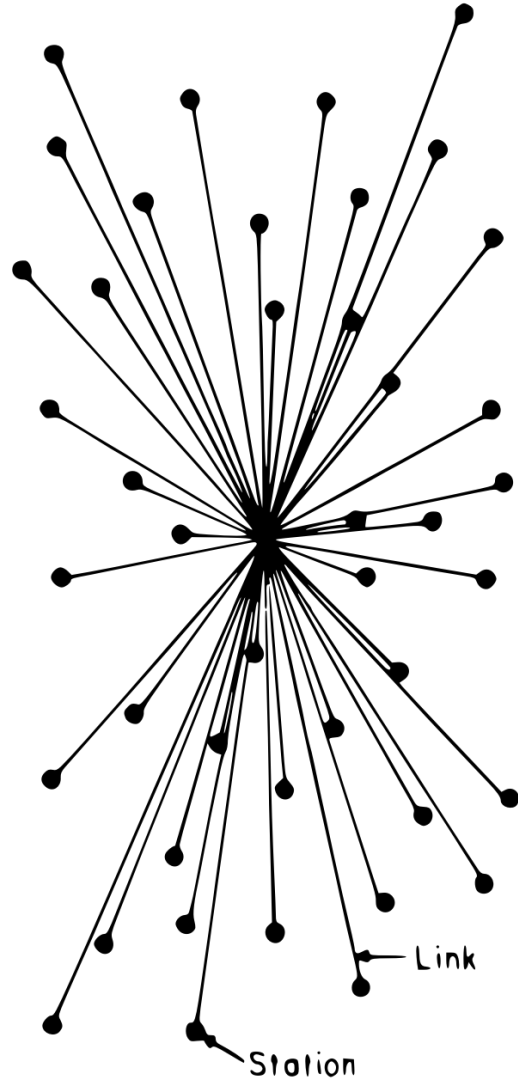
# DISTRIBUTION OF REFERRAL TRAFFIC SOURCES BY TOPIC



SOURCE: Parse.ly \*Not including Google AMP



**Un point  
commun ?**



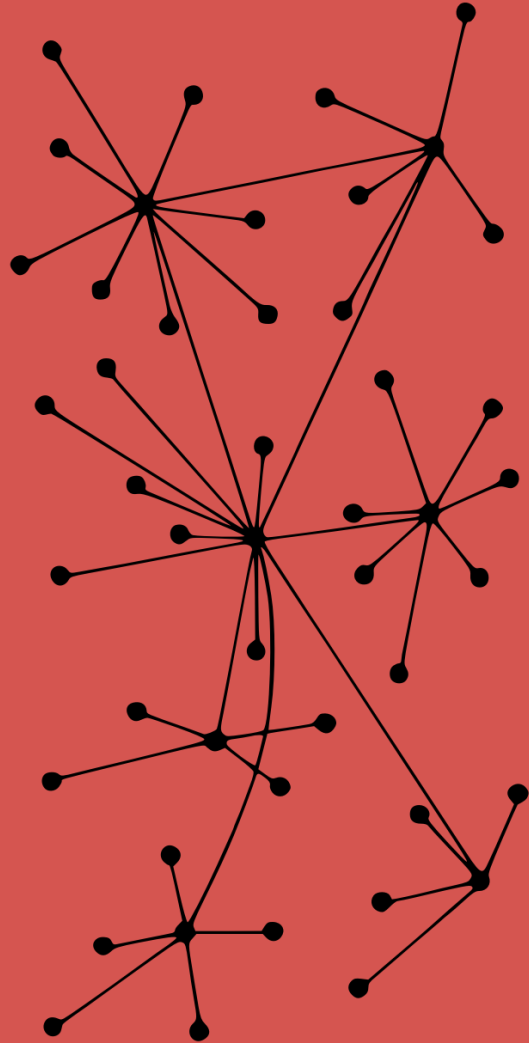
**Single  
point of  
failure**

**Single  
point of  
control**

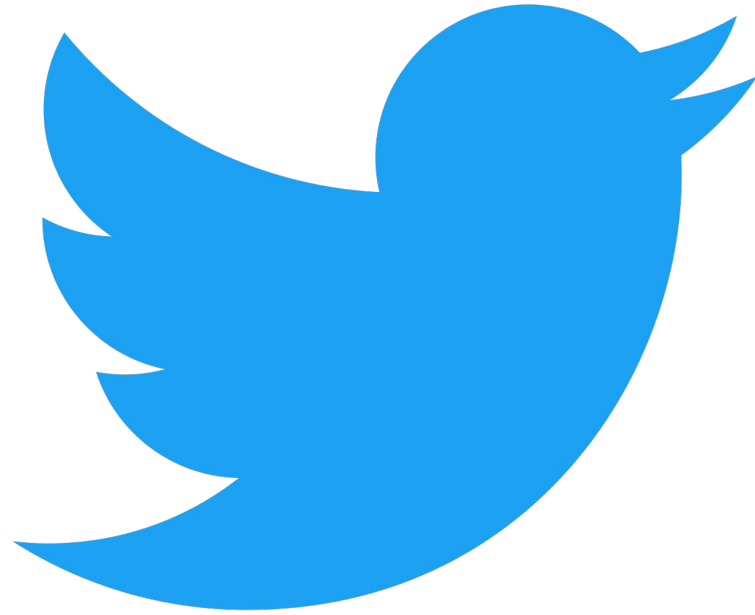
A hand holding a glowing lightbulb against a red background. The lightbulb is illuminated, casting a warm glow. The hand is positioned in the lower right quadrant, with the fingers wrapped around the base of the bulb. The background is a solid, vibrant red color.

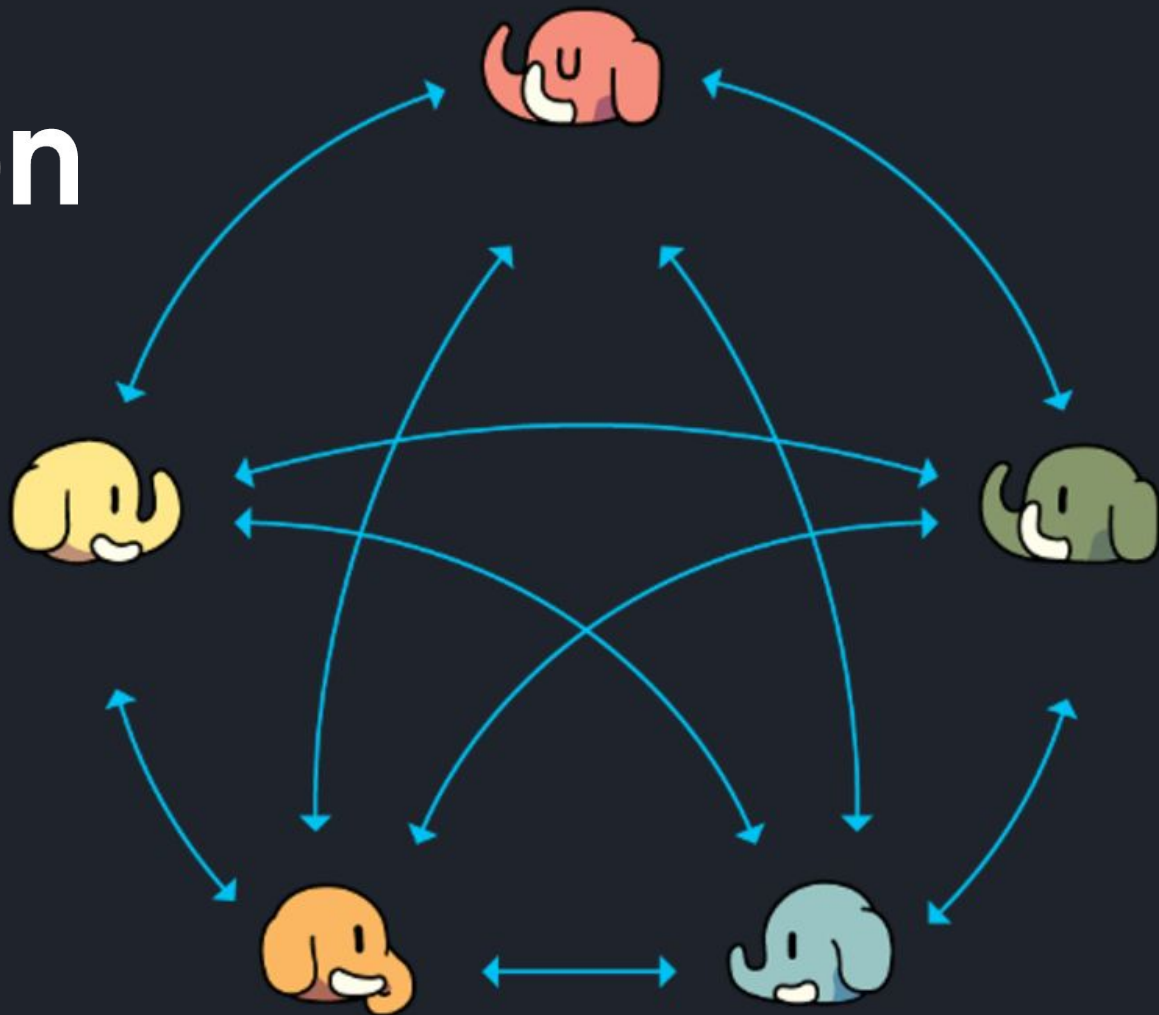
**Une solution ?**





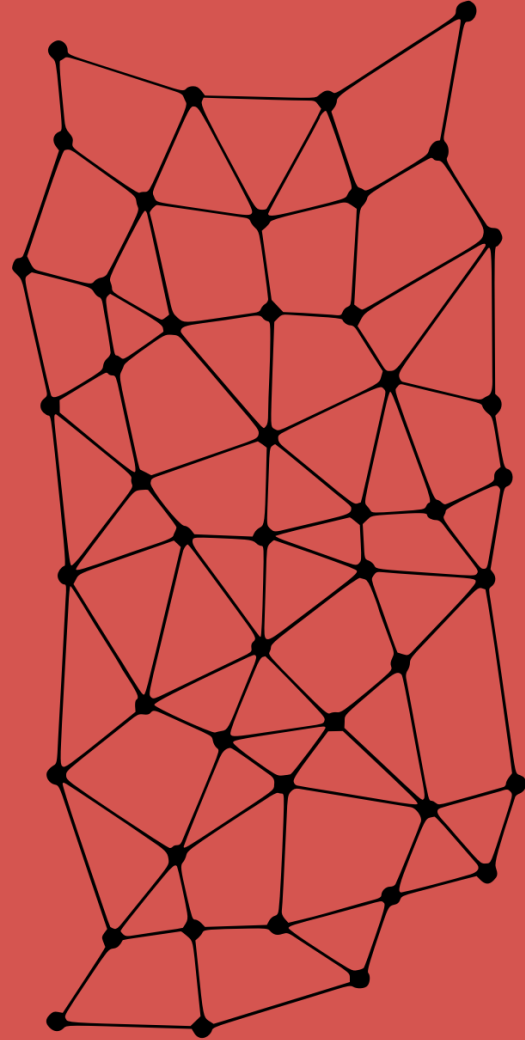
Décentralisé

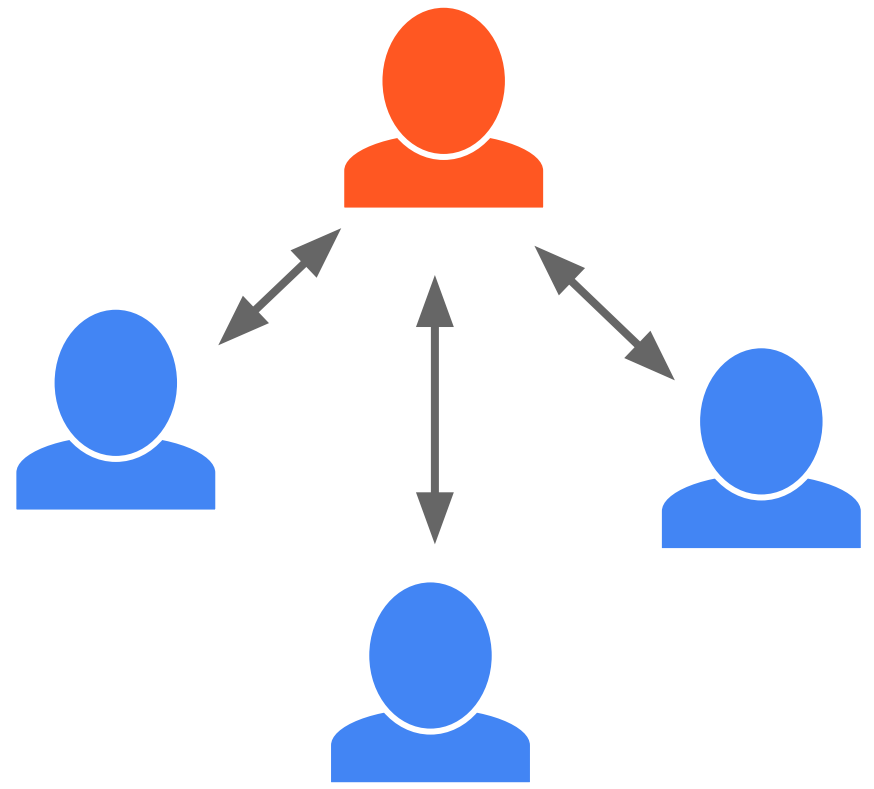




<https://joinmastodon.org/>

Distribué

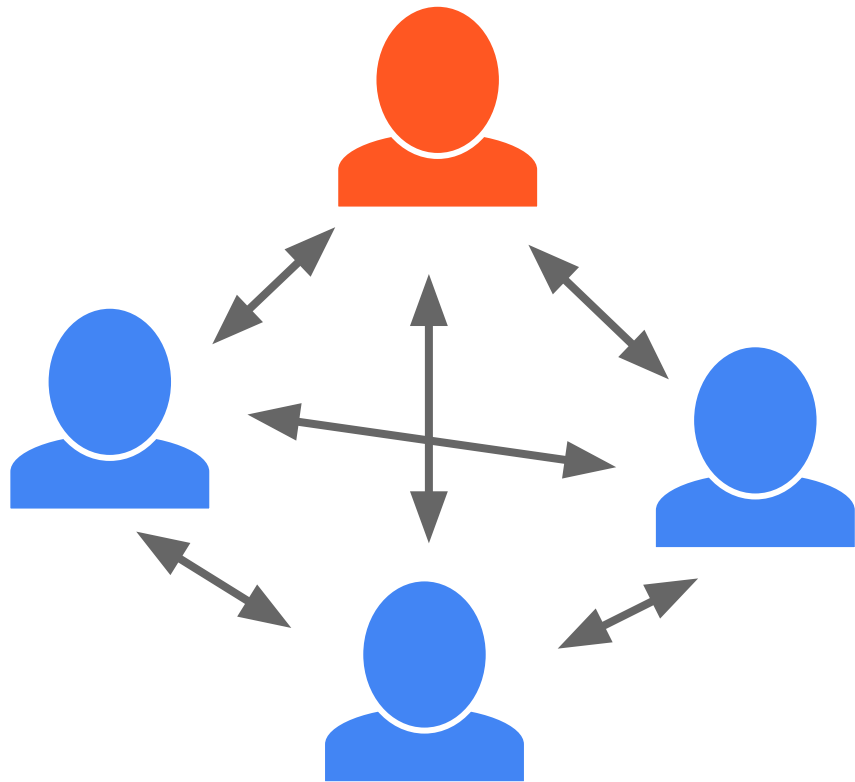






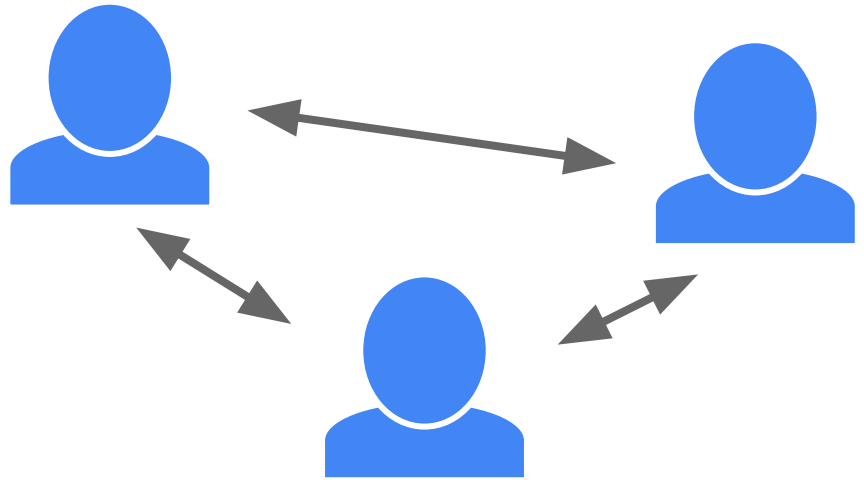


**git**





**git**

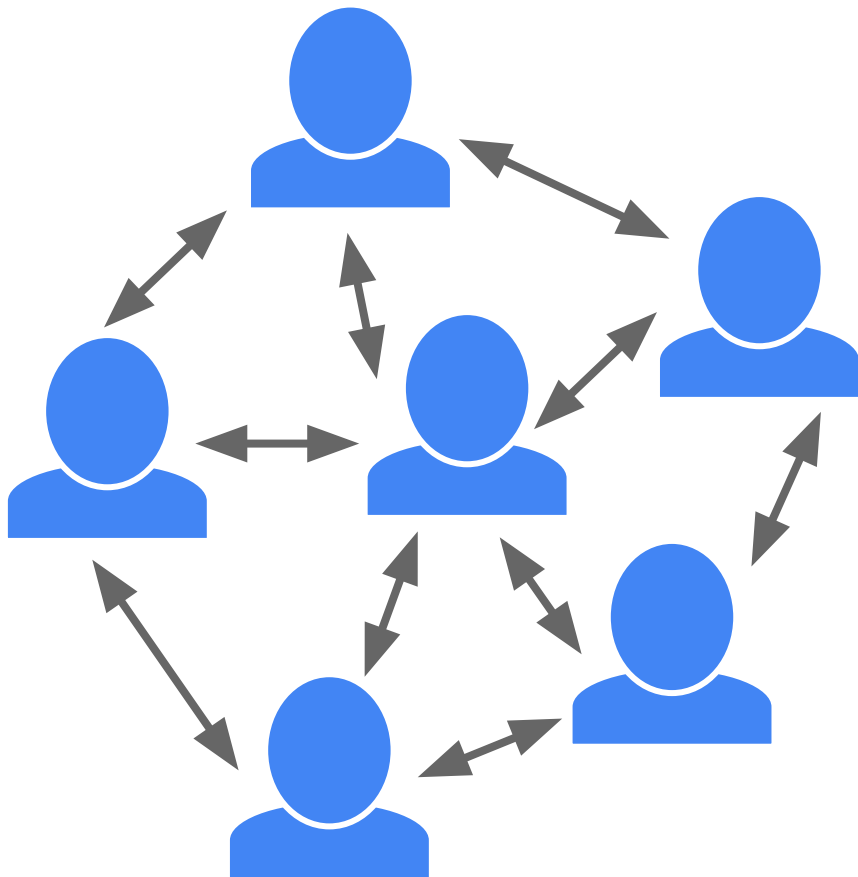




**Comment ça marche ?**

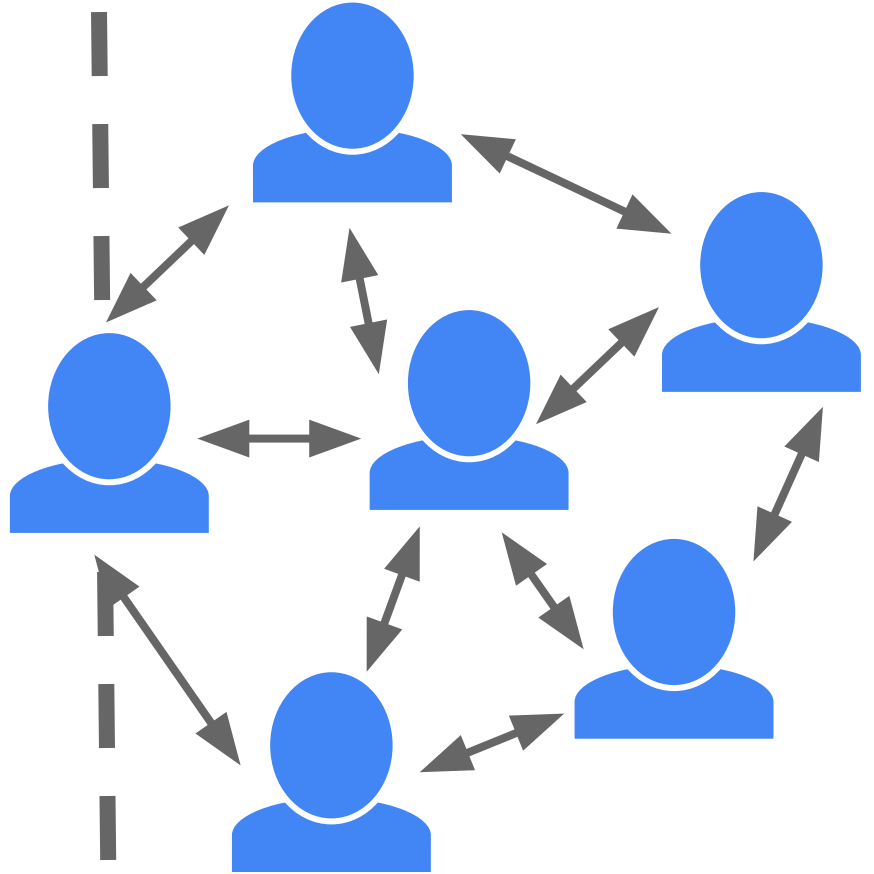


?

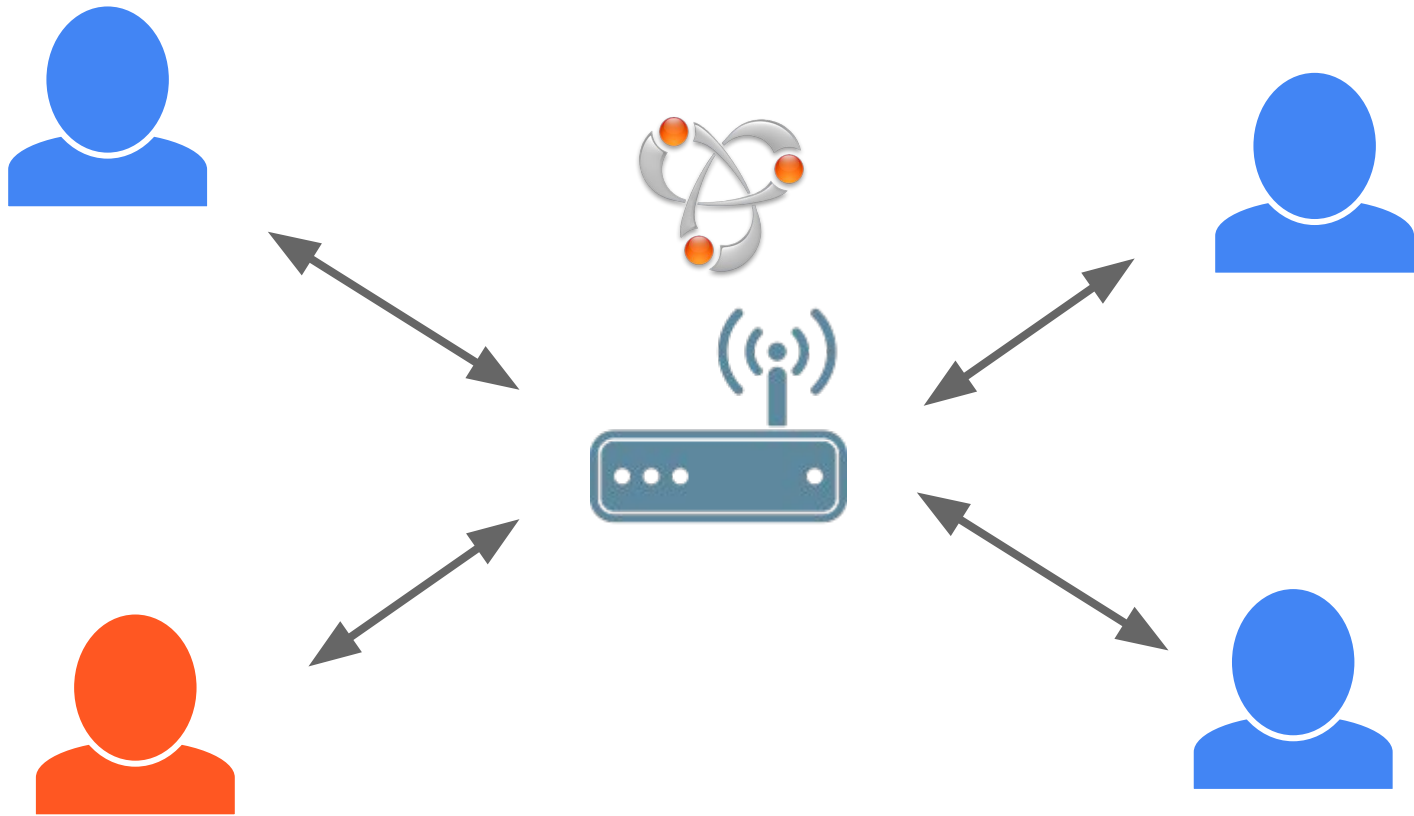


# Bootstrapping





**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 :
```

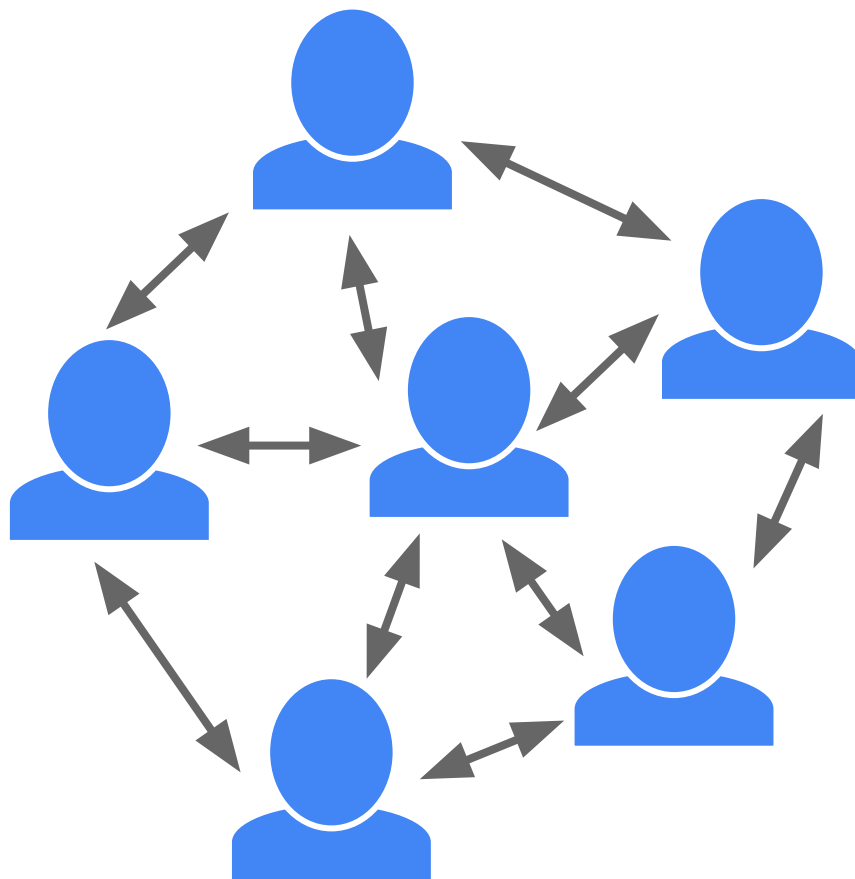
```
Nom : bitseed.xf2.org
```

```
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 ?



A red background with a silhouette of a person holding a flashlight that illuminates a path.

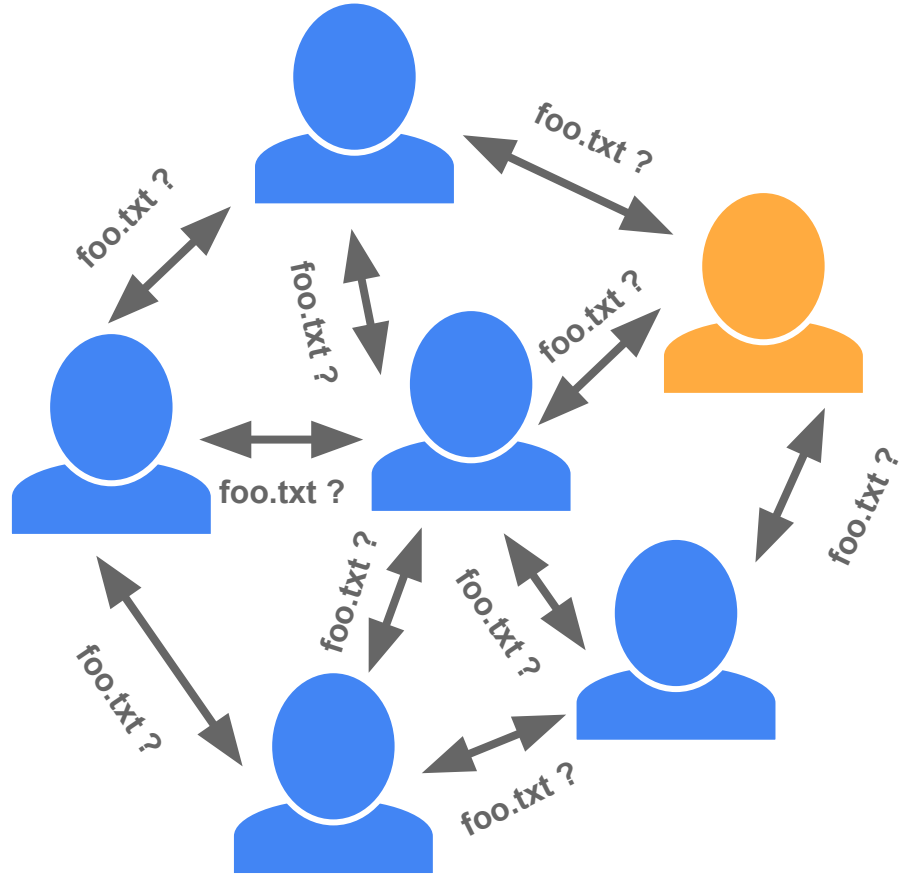
**Discovery**

**Retour dans les années  
2000...**

# gnutella



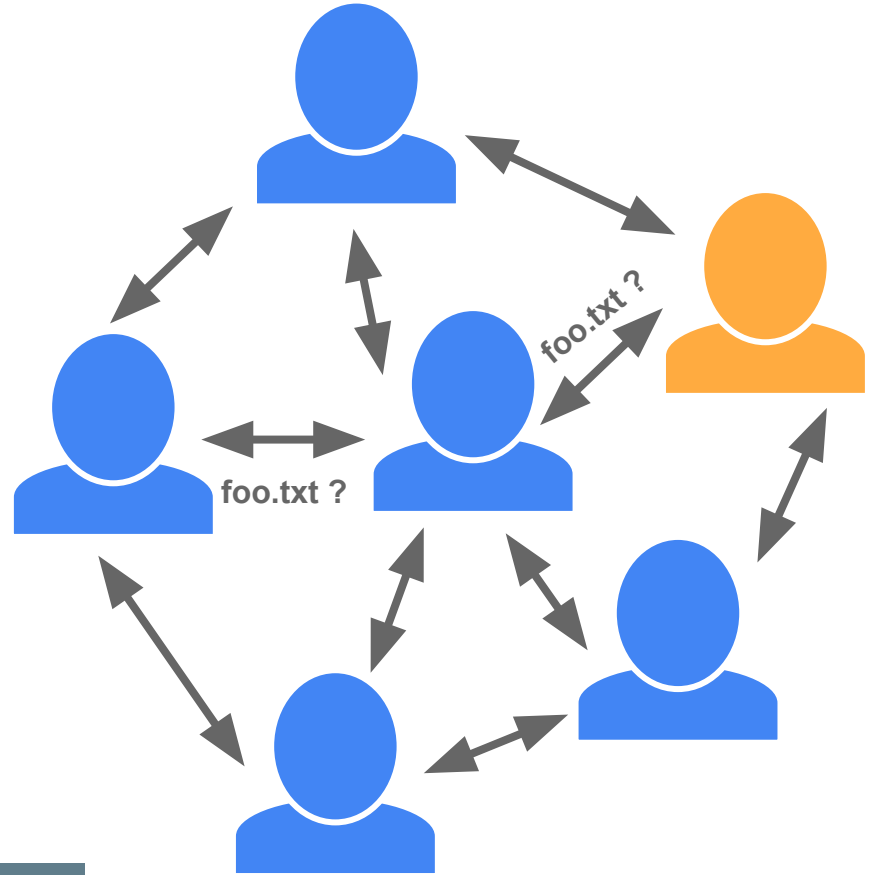
foo.txt ?



Query Flooding



foo.txt ?

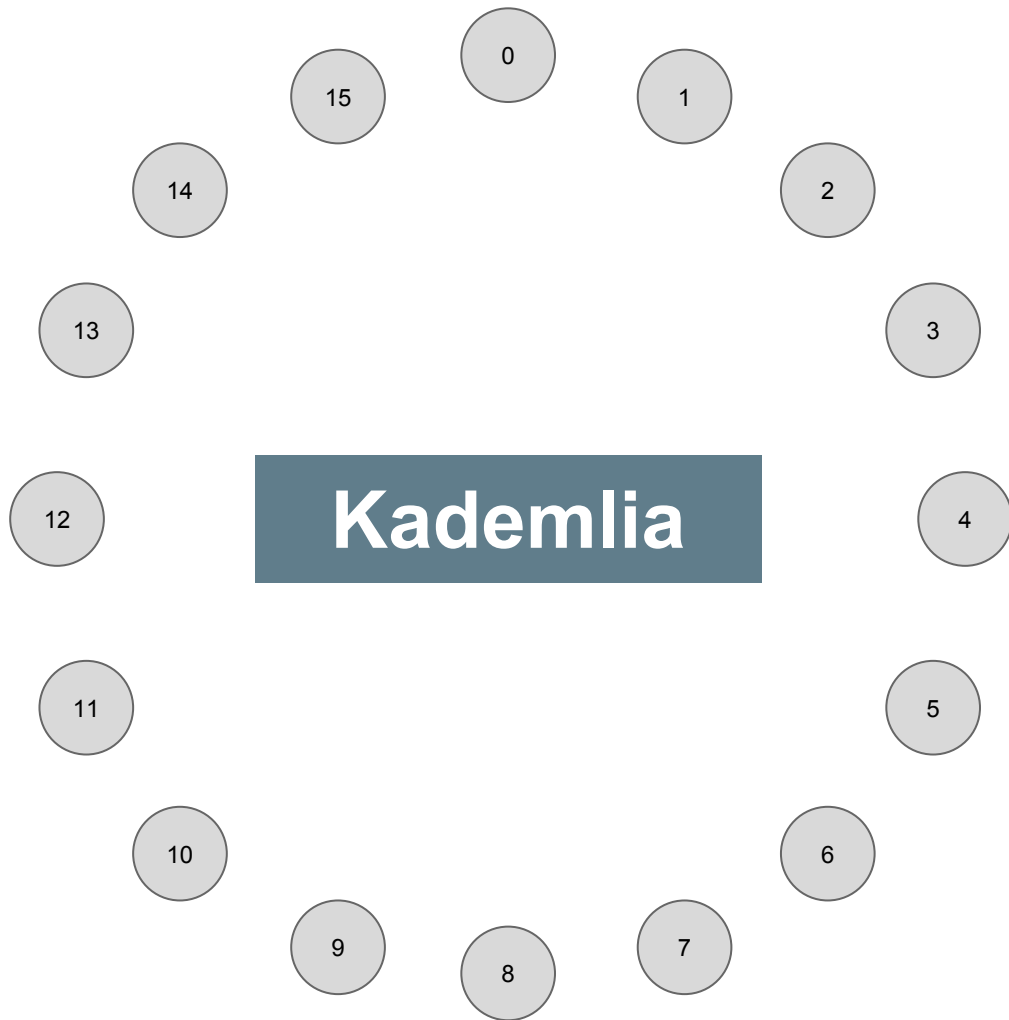


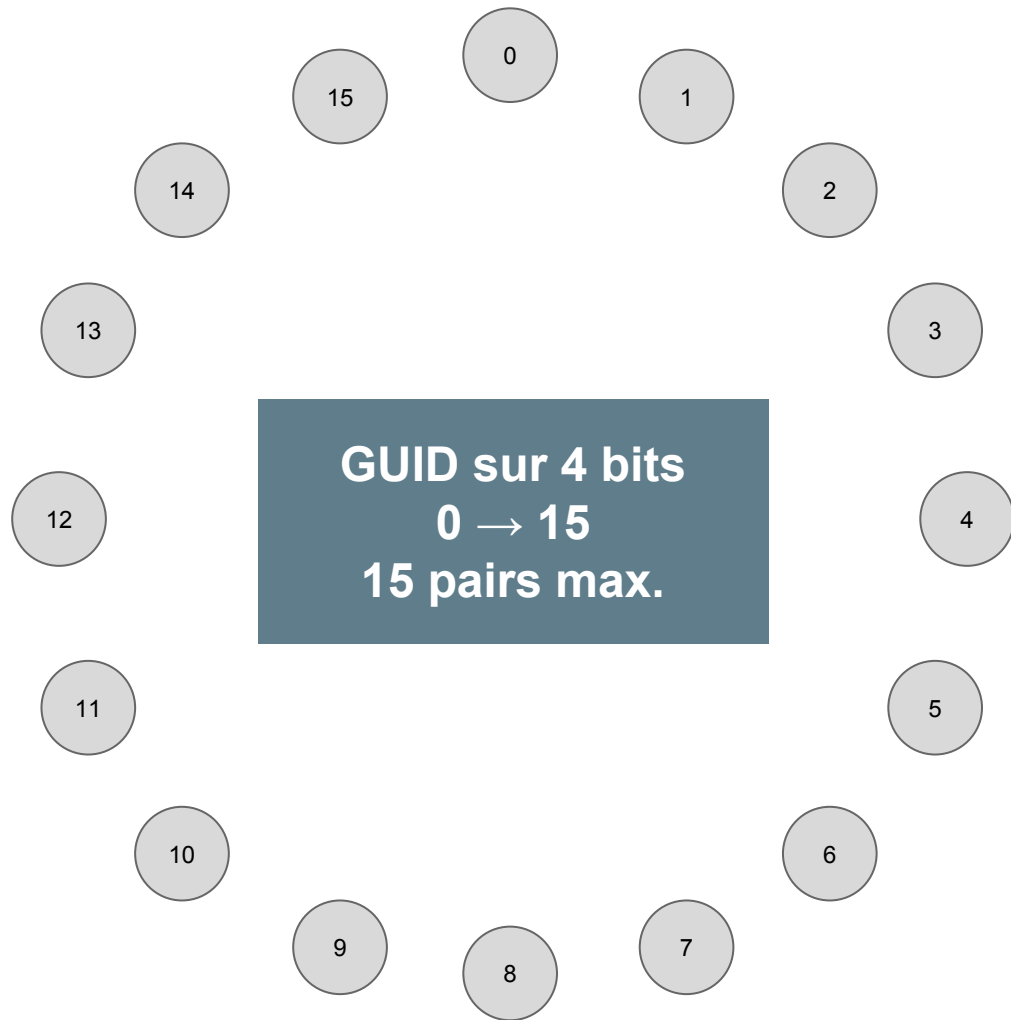
Distributed Hash Table

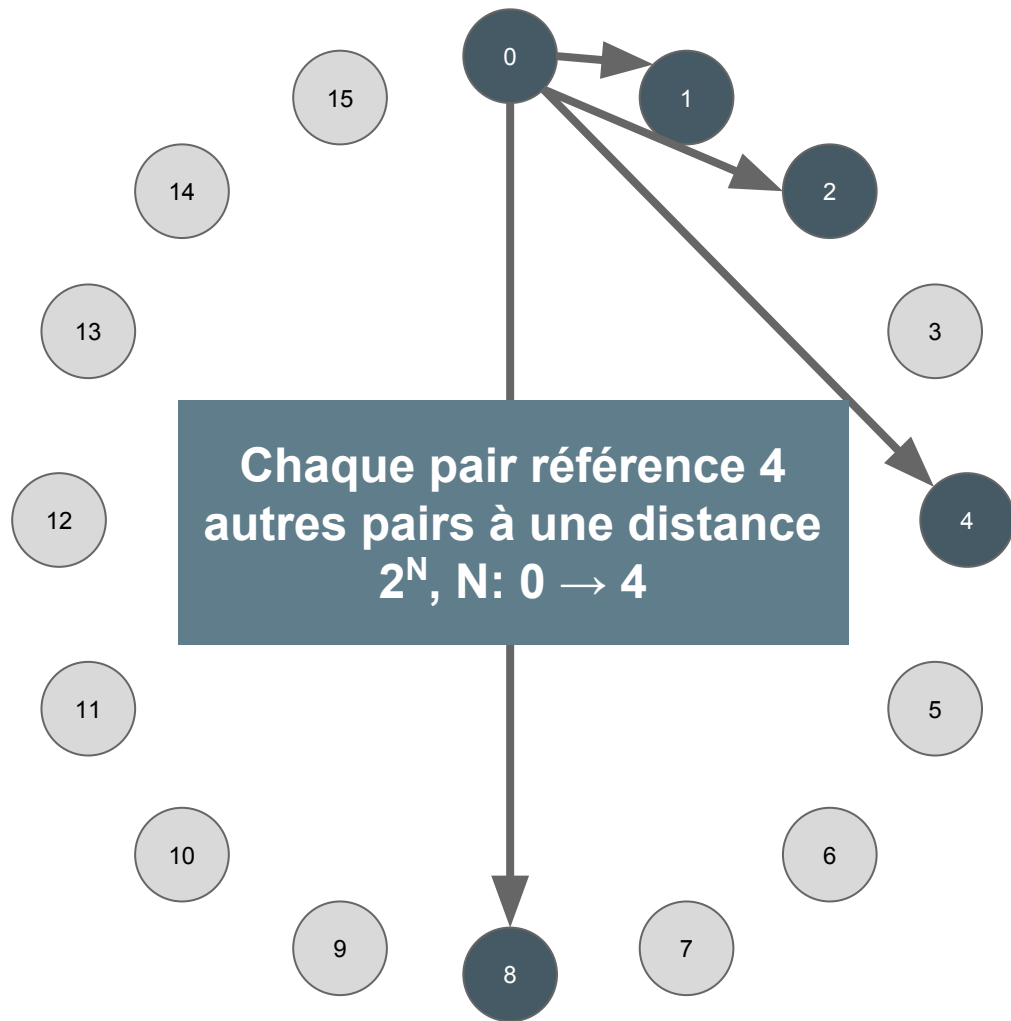


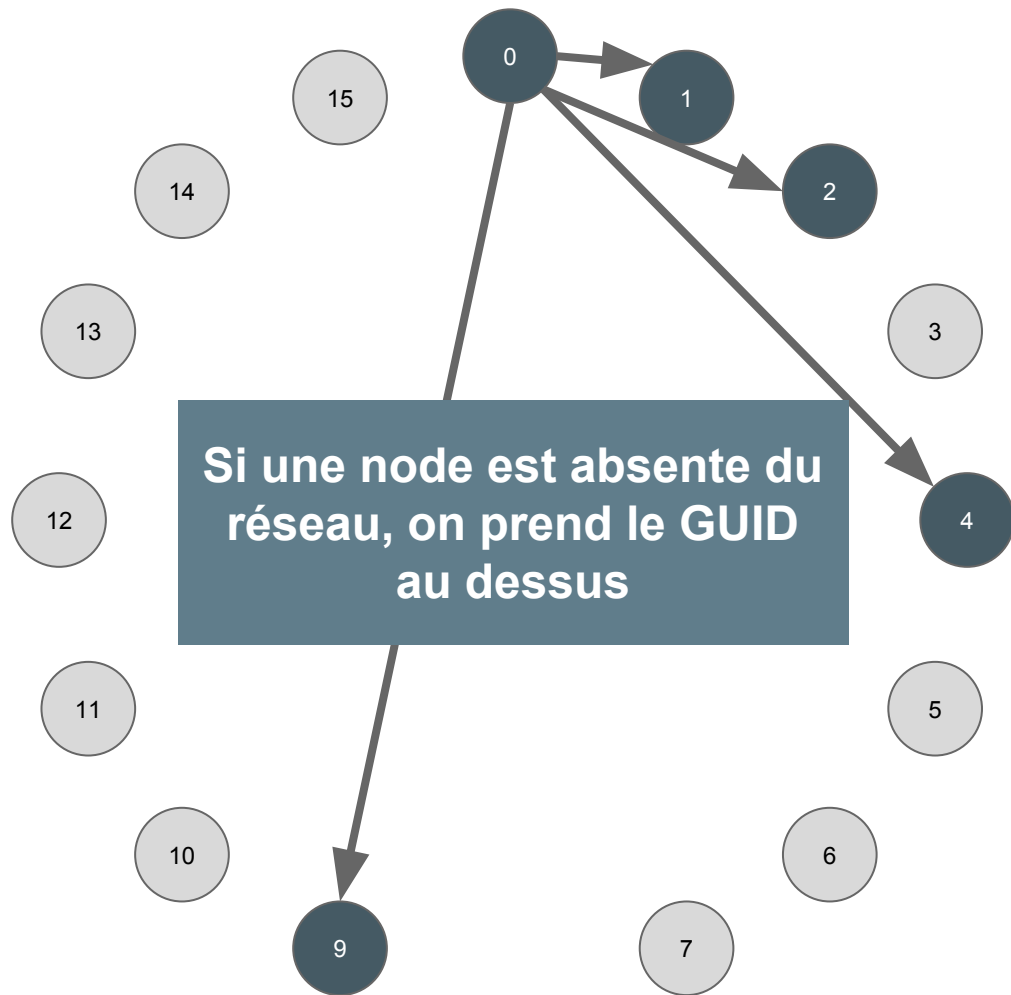
# **Distributed Hash Table**

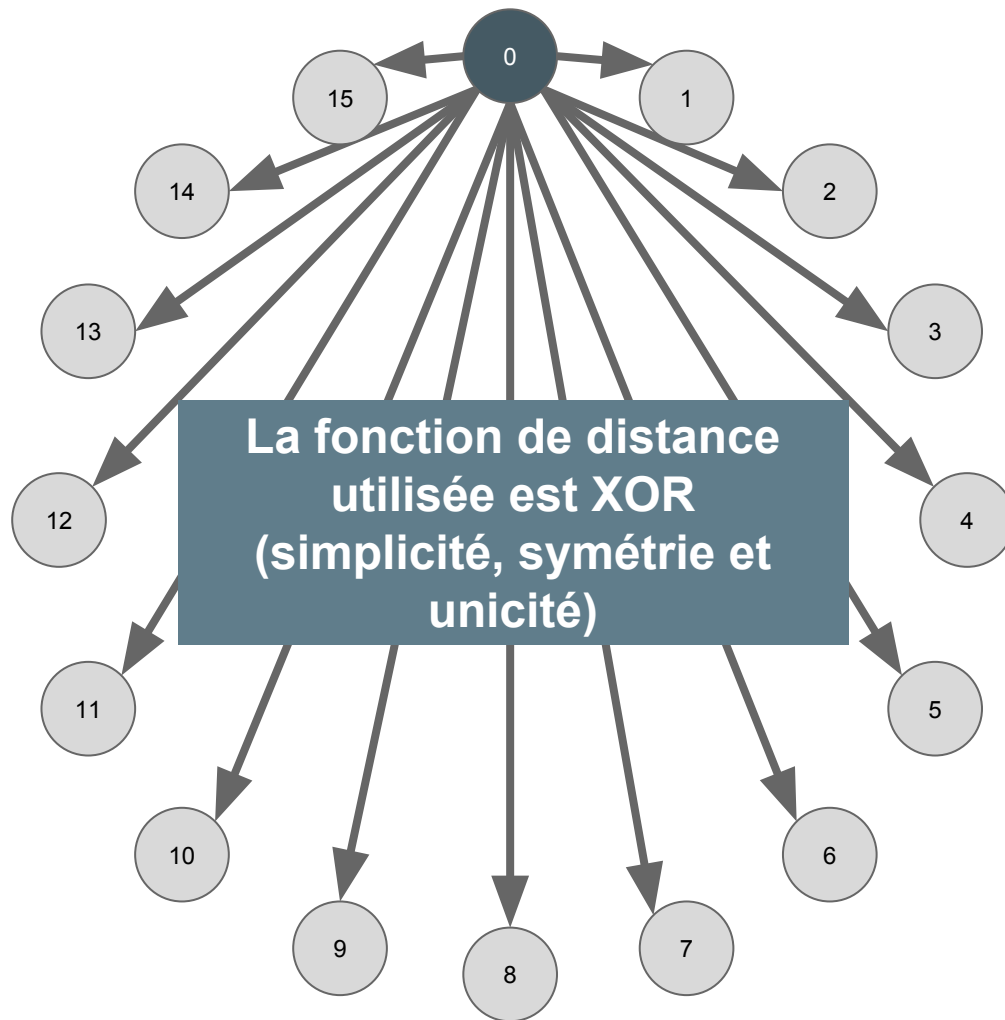
## **DHT ?**

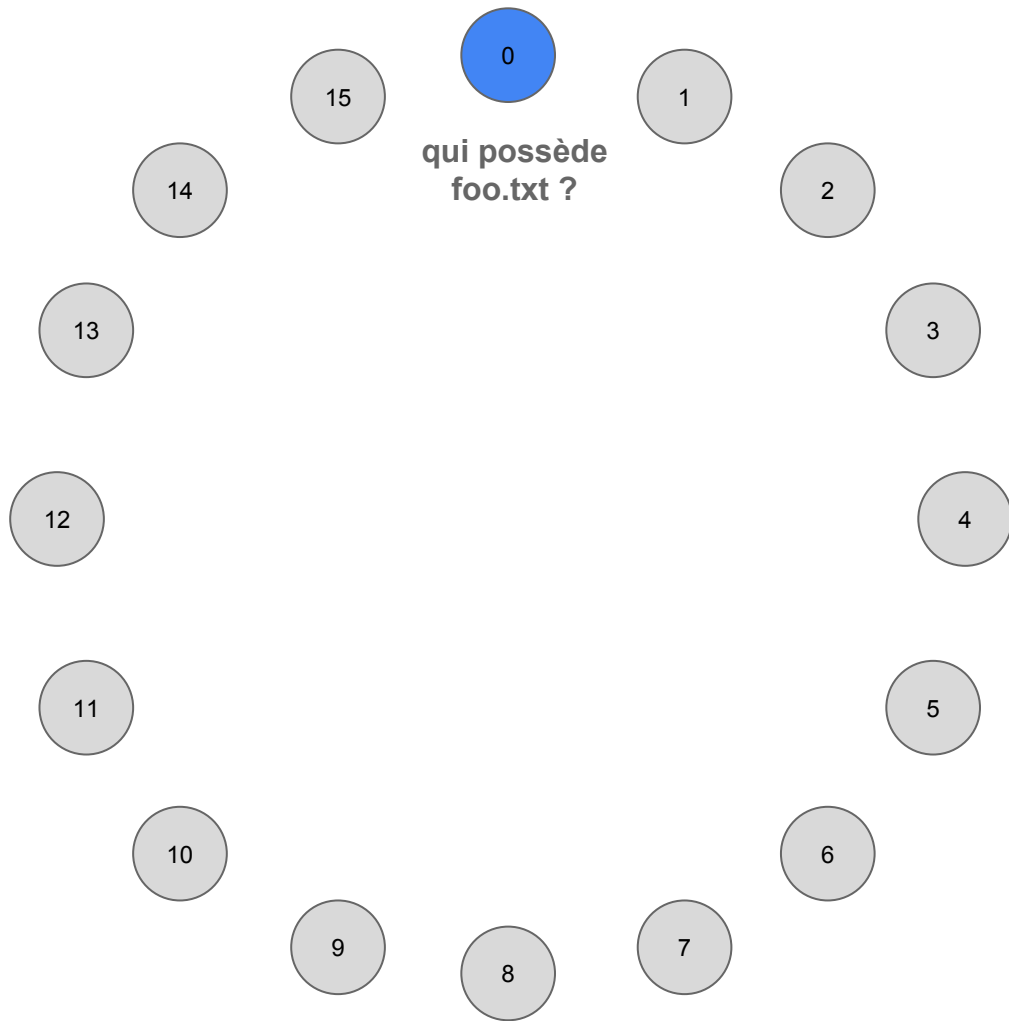




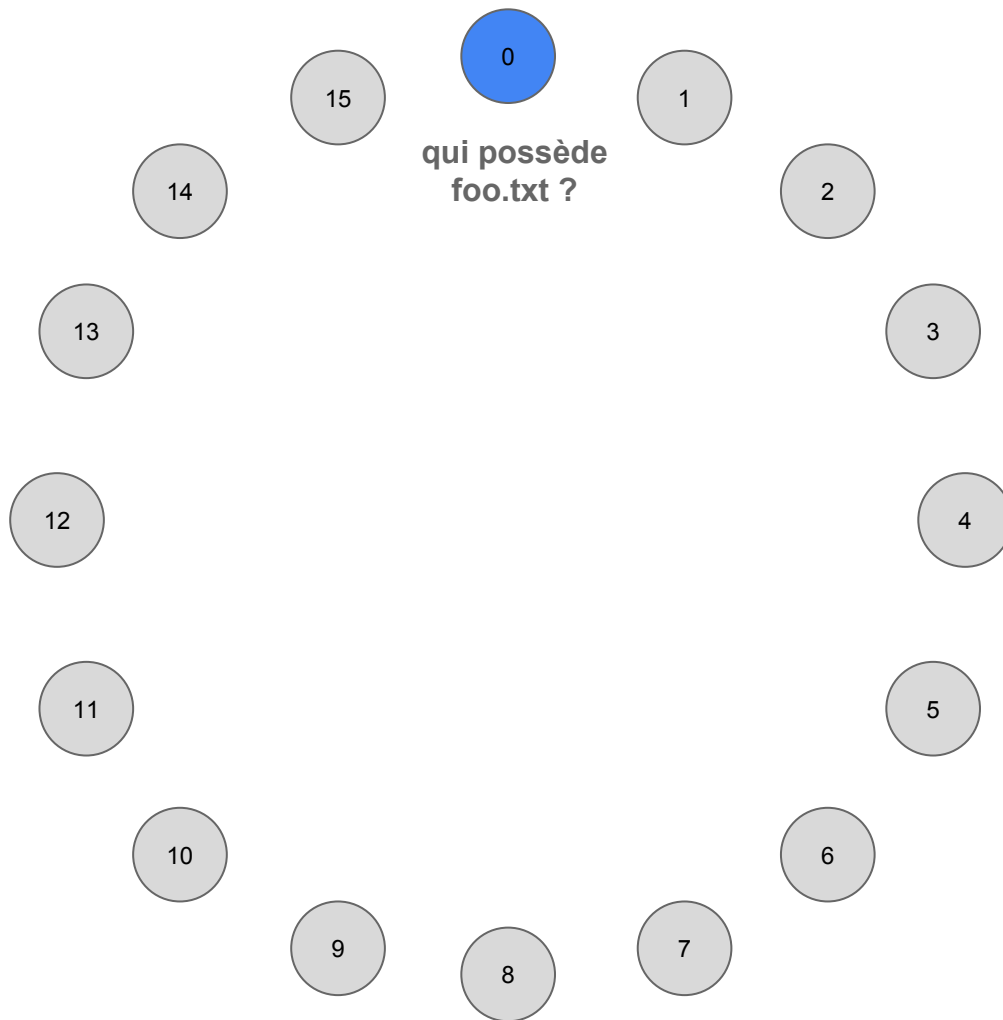








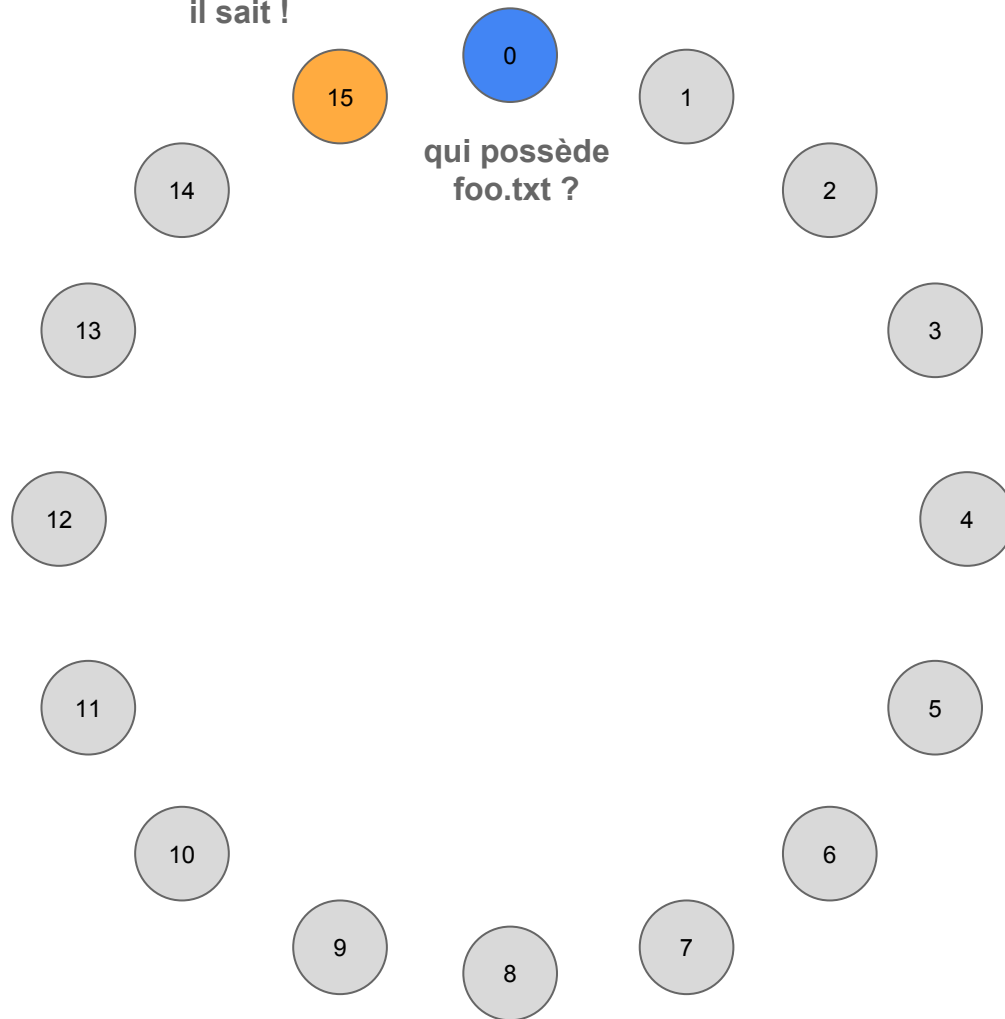
*infohash(foo.txt) = 15*

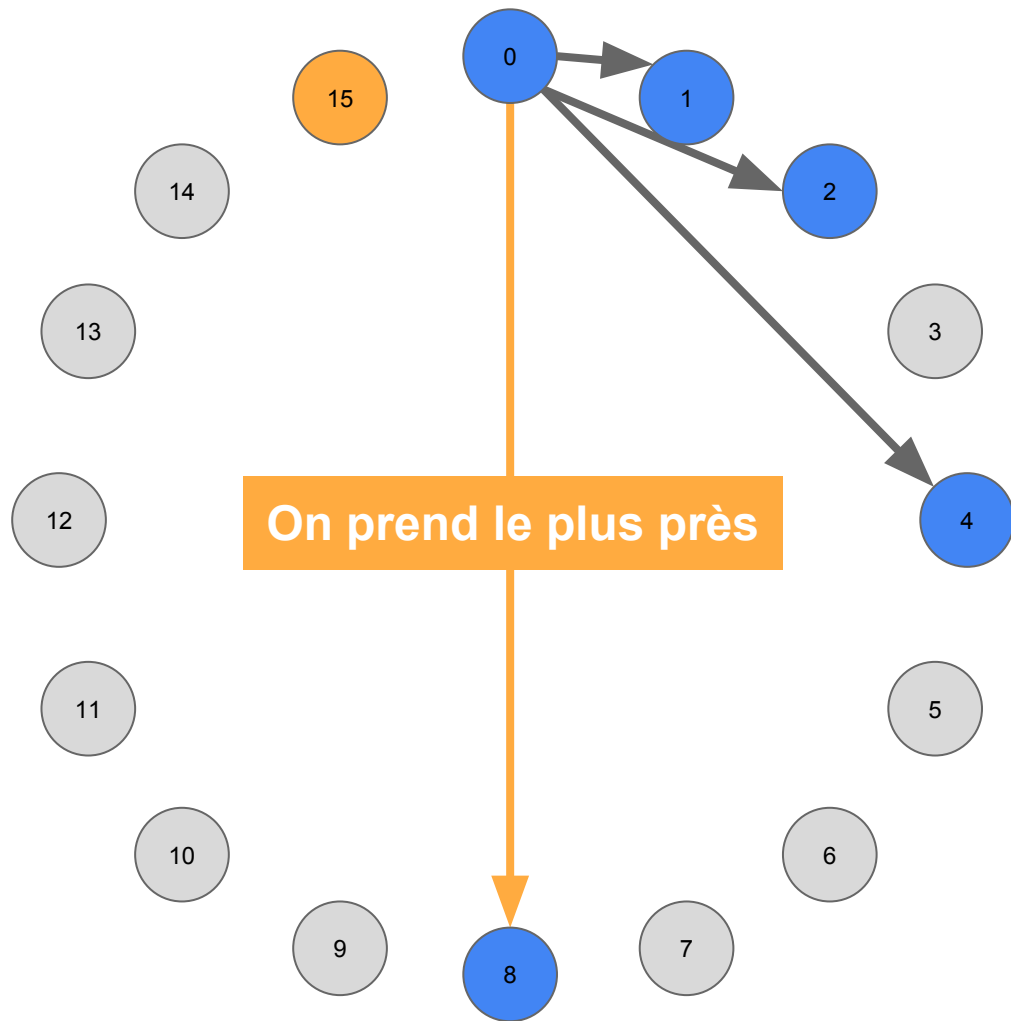


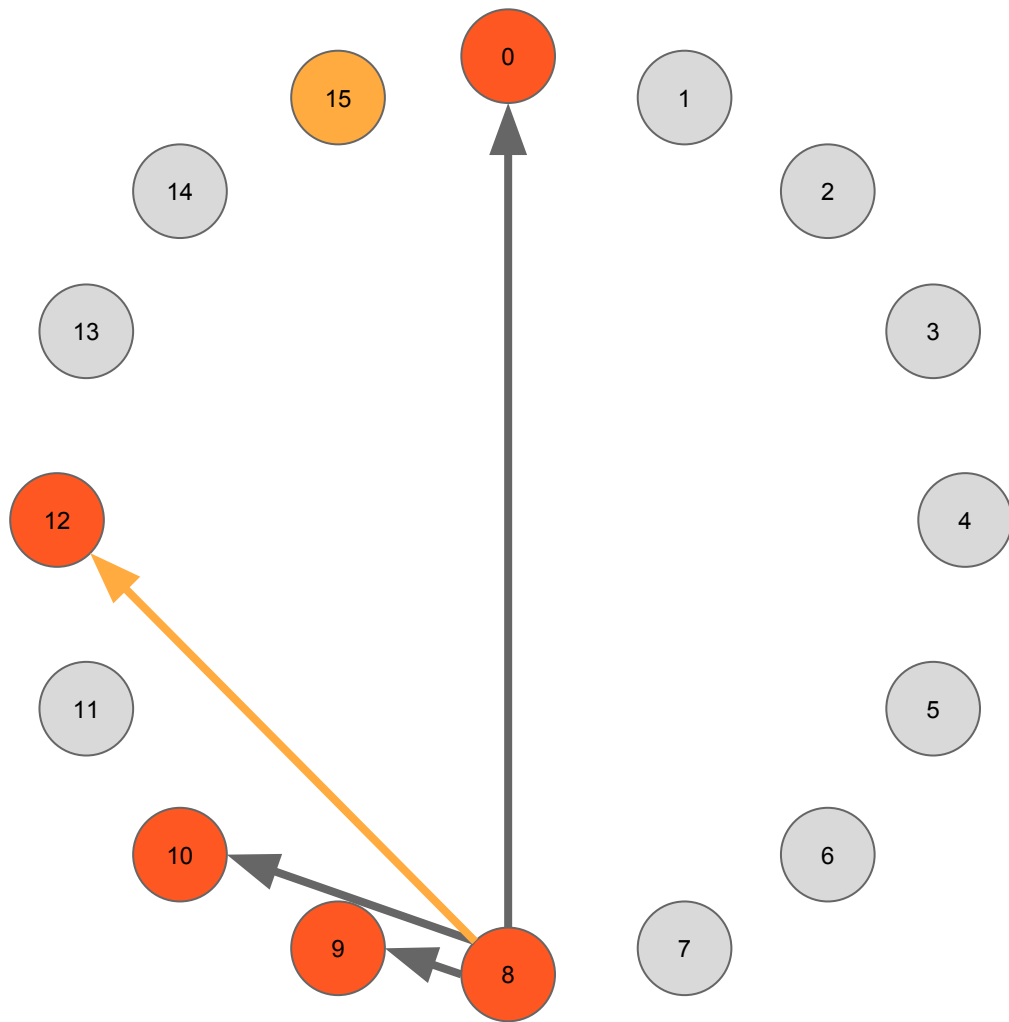


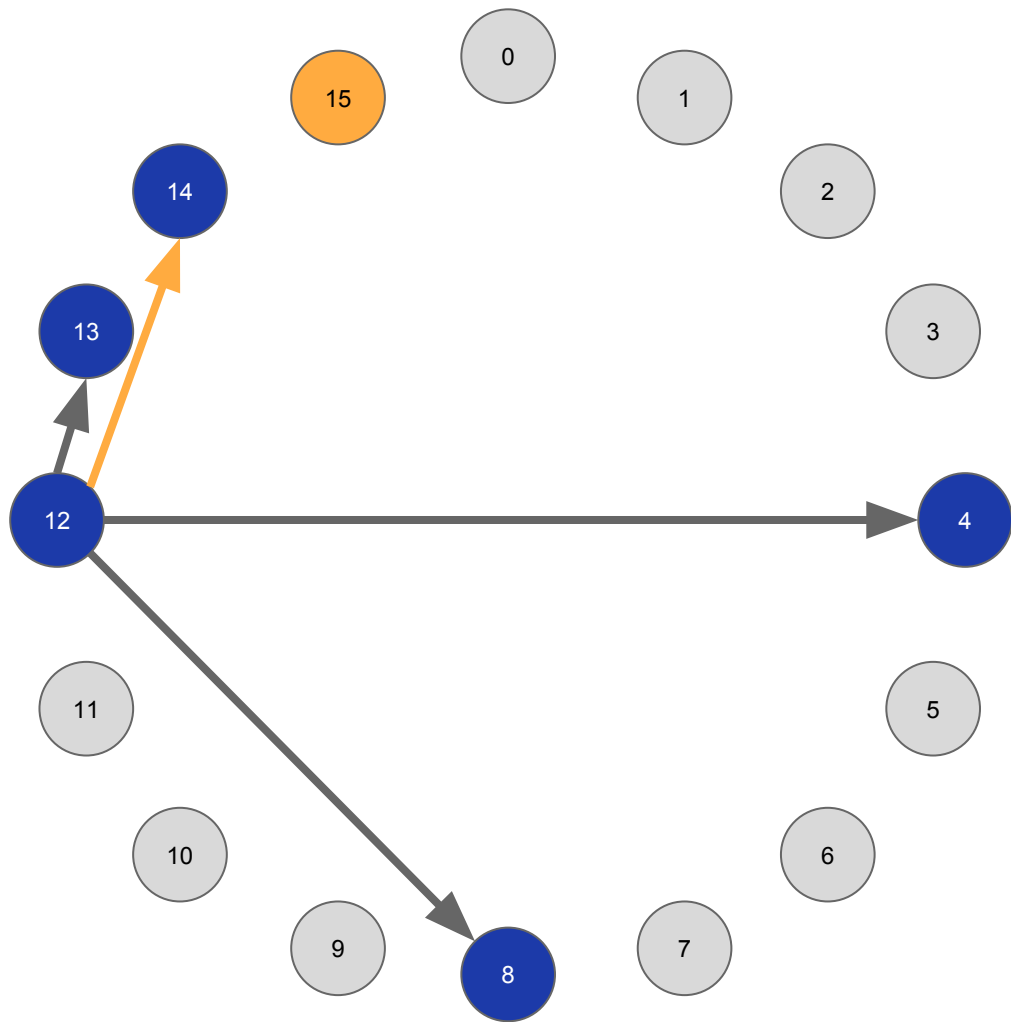
il sait !

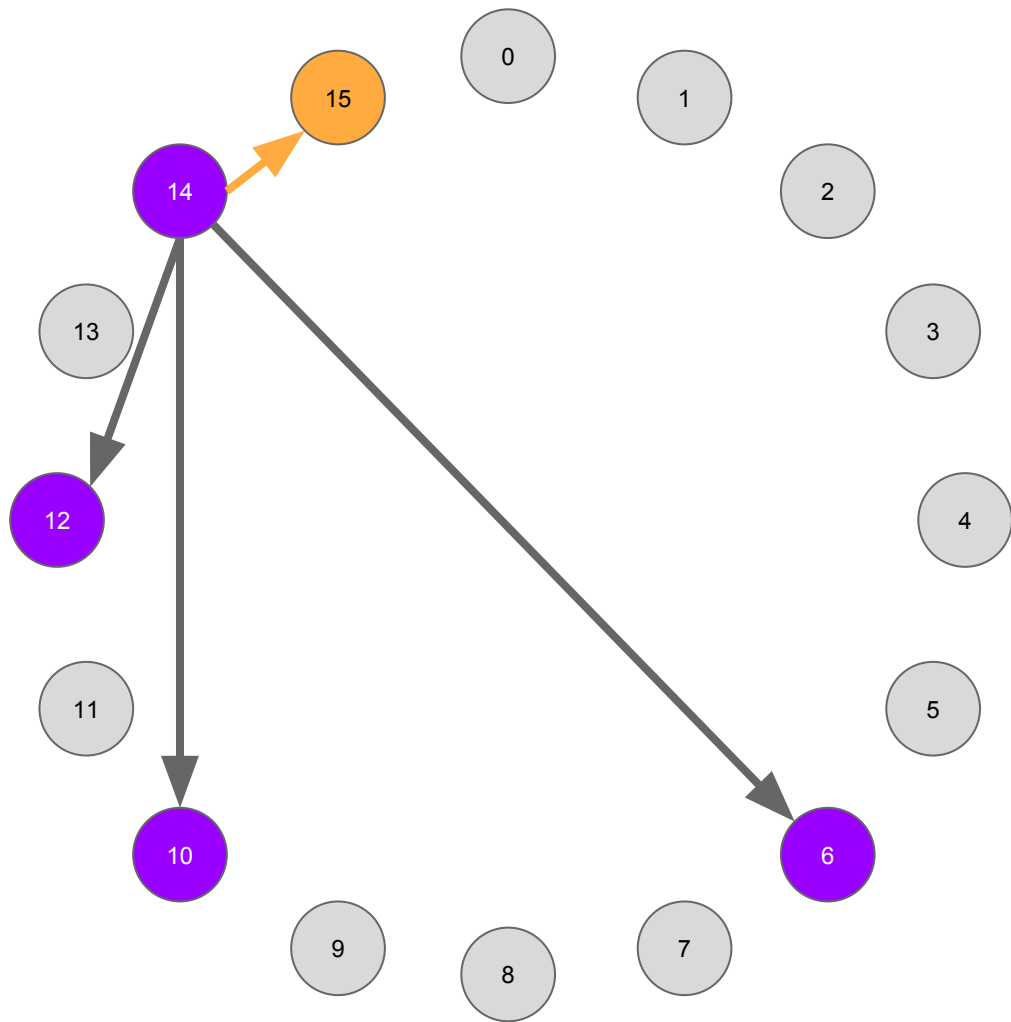
*infohash(foo.txt) = 15*

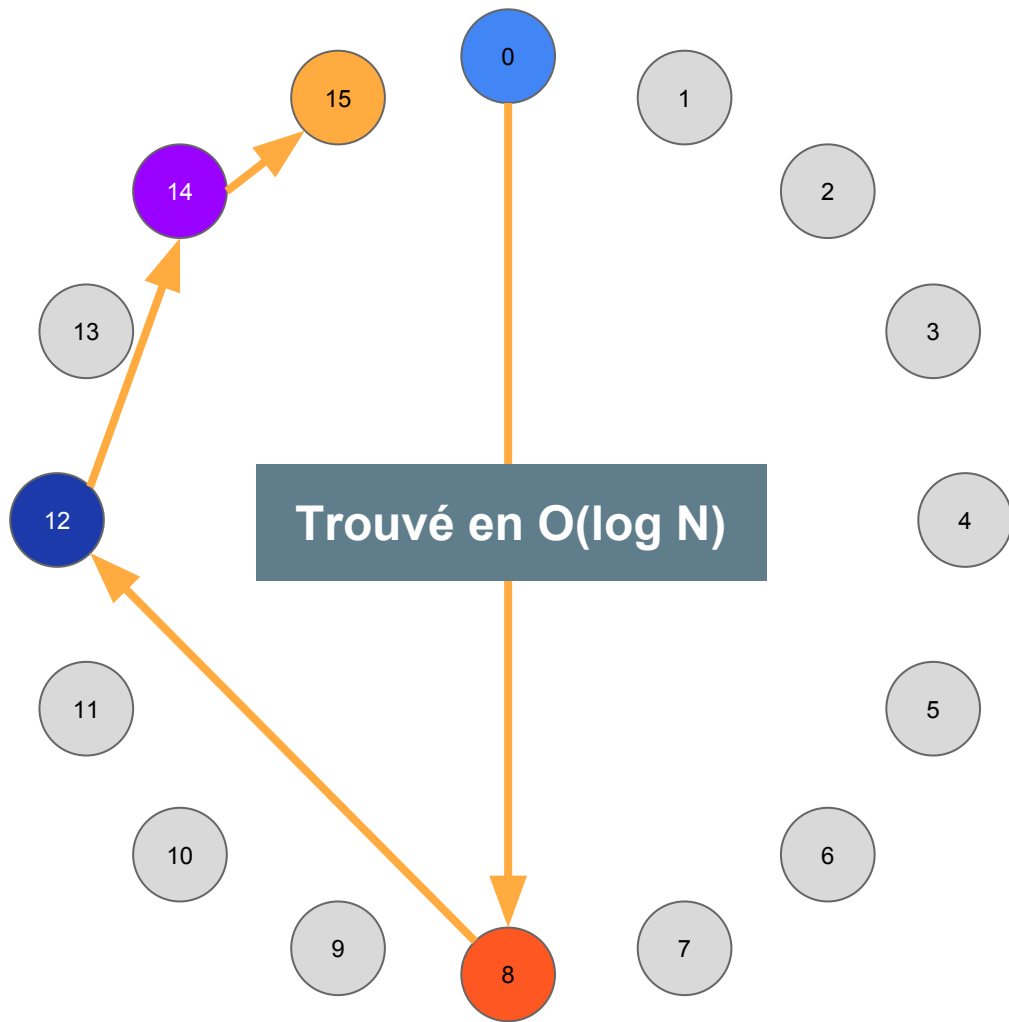












# Démo

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 COMÉDIE FAMILIALE

CHANTAL LAUBY • ALAIN CHÂBAT • DOMINIQUE FARRUGIO • DÉPARTEMENTAL GARDON • GUY PARMANNI

SCÉNARIO ORIGINAL CHANTAL LAUBY • ALAIN CHÂBAT • DOMINIQUE FARRUGIO • DIRECTEUR DE LA PHOTOGRAPHIE LAURENT DOLLAUD

MUSIQUE PHILIPPE CHAVY • MONTAGE VÉRONIQUE PARINET

PRODUCTEUR DÉLÉGUÉ CHARLES GASSOT • PRODUCTEUR EXÉCUTIF DOMINIQUE BRUNNER

UNE PRODUCTION TELEMA • LE STUDIO CANAL+ • FRANCE 3 CINÉMA • M6 FILMS



Audio  Video  Applications  Games  Porn  Other  ▼

## Details for this torrent

### La cit  de la Peur by LADB

**Type:** [Video > Movies](#)  
**Files:** [2](#)  
**Size:** 691.28 MiB (724855831 Bytes)  
**Spoken language(s):** French  
**Texted language(s):** French

**Uploaded:** 2008-05-02 19:15:37 GMT  
**By:** [wazany](#)  
**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, attach e de presse, vient au Festival de Cannes pour pr senter le film "Red is Dead". Malheureusement, celui-ci est d'une telle faiblesse que personne ne souhaite en faire l' cho. Mais lorsque les projectionnistes du long-m trage en question meurent chacun leur tour dans d' tranges circonstances, "Red is dead" b n ficie d'une incroyable publicit . Serge Karamazov est alors charg  de prot 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 geoup = require('geoup-lite-country')
```

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

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

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

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

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

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

dht.on('peer', function (peer, infoHash, from) {
  var geo = geoup.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 geoup = require('geoup-lite-country')
```

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

```
dht.on('peer', function (peer, infoHash, from) {
  var geo = geoup.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 geoup = require('geoup-lite-country')

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

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

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

```
dht.lookup(infoHash)
```



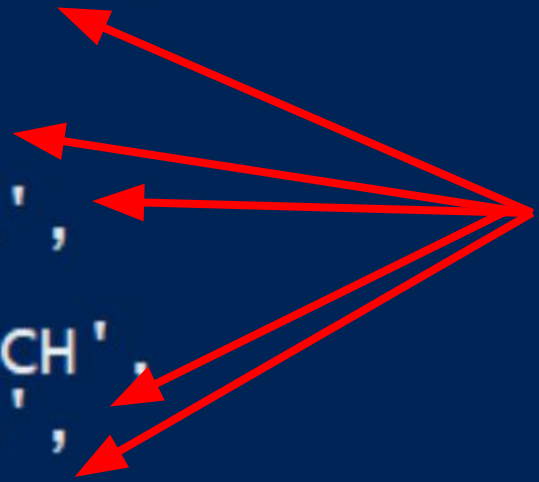
Done crawling

Found 12 peers

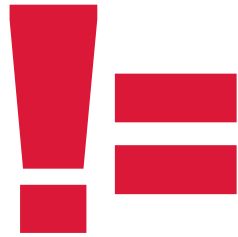
```
[ '91.138.225.█:62762:GR',  
  '178.194.206.█:17132:CH',  
  '5.51.42.█:33457:FR',  
  '51.15.3.█:54728:NL',  
  '5.51.42.█:45442:FR',  
  '88.191.54.█:62348:FR',  
  '51.15.3.█:51413:NL',  
  '178.194.206.█:60482:CH',  
  '82.253.38.█:61818:FR',  
  '82.249.8.█:33876:FR',  
  '178.194.206.█:45429:CH',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

Crawl ended

Done in 10.57s.



# Peer to Peer

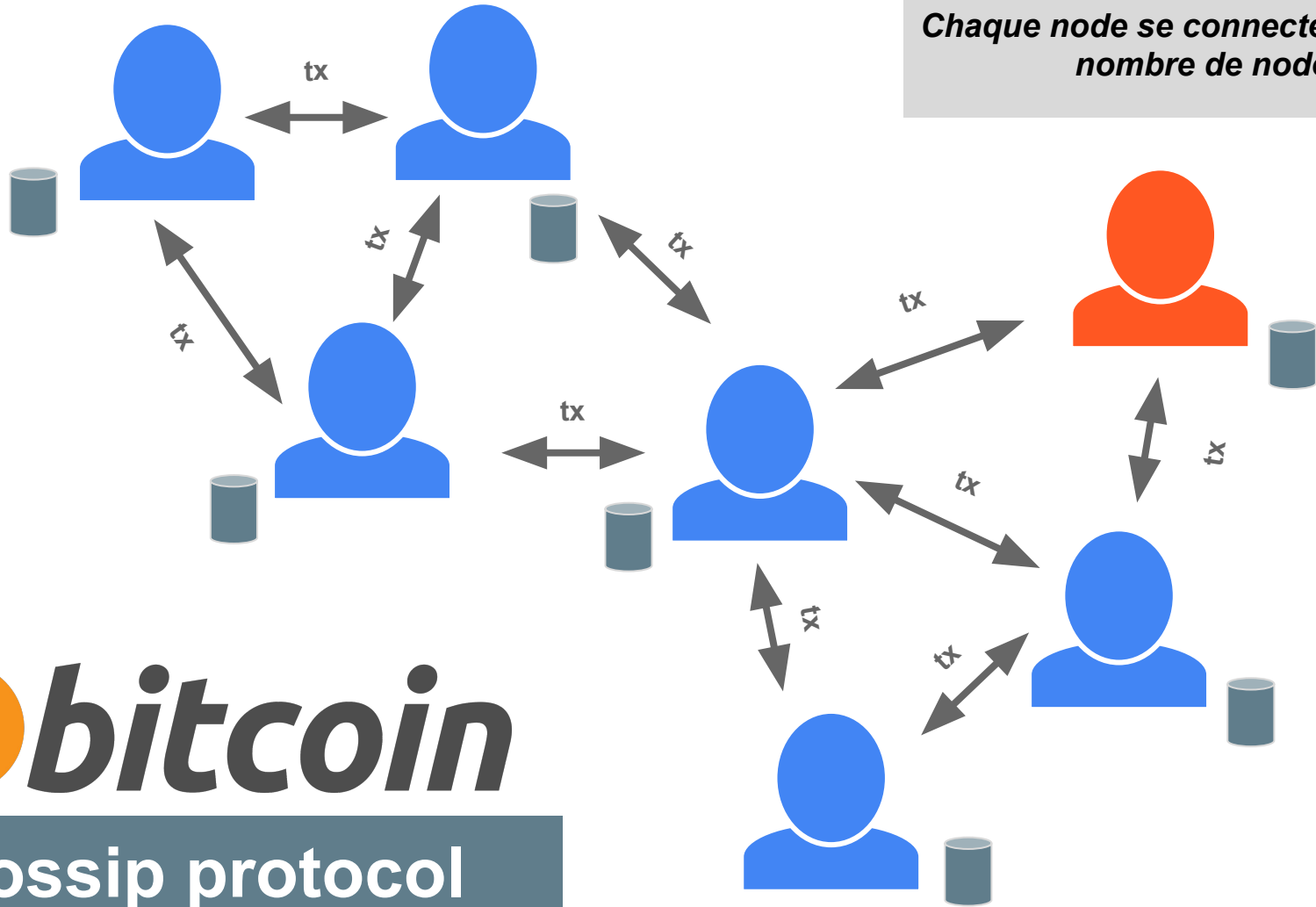


# Privé



**Et la blockchain dans tout ca ?**

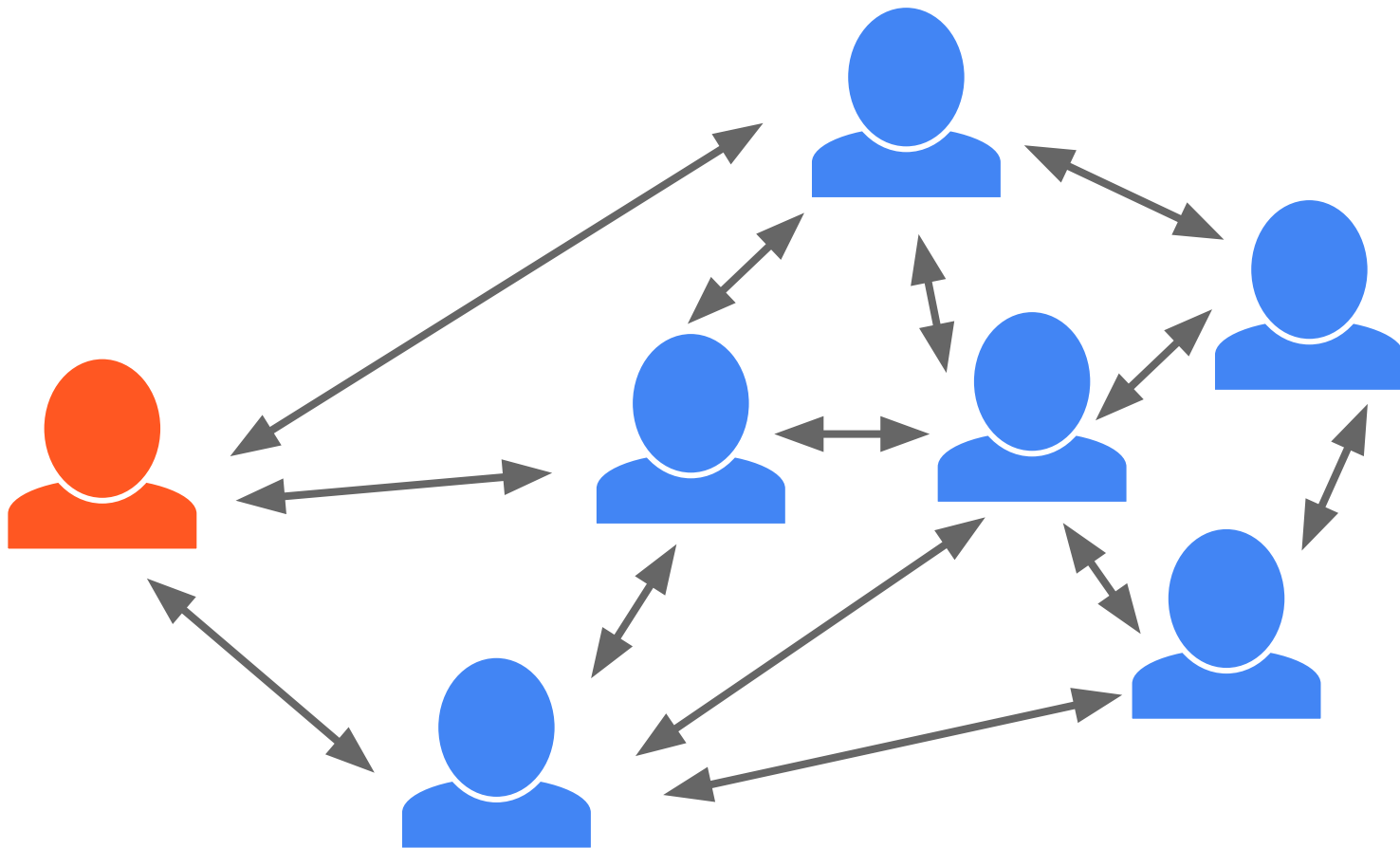
*Chaque node se connecte à un grand nombre de nodes*

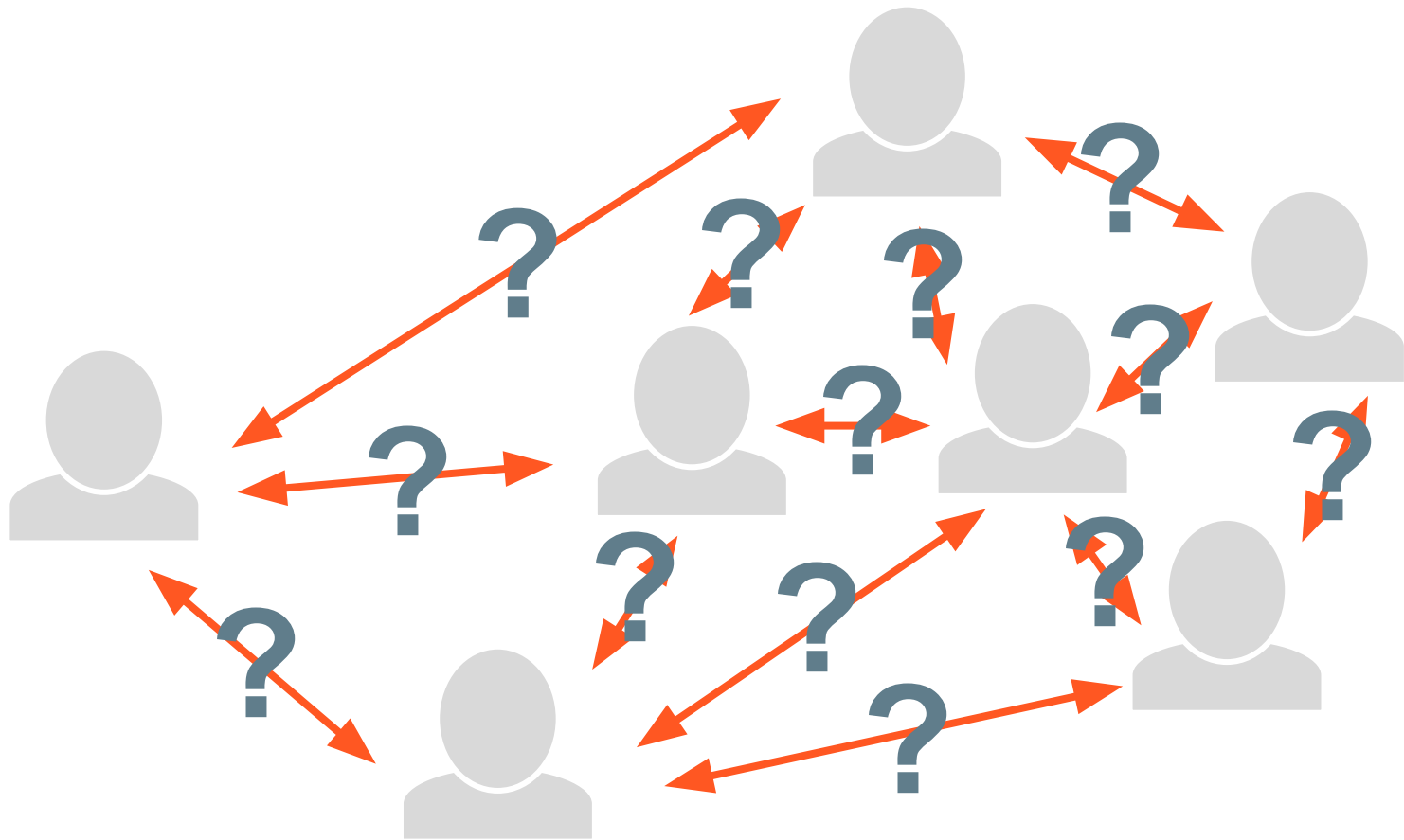


 **bitcoin**

**Gossip protocol**





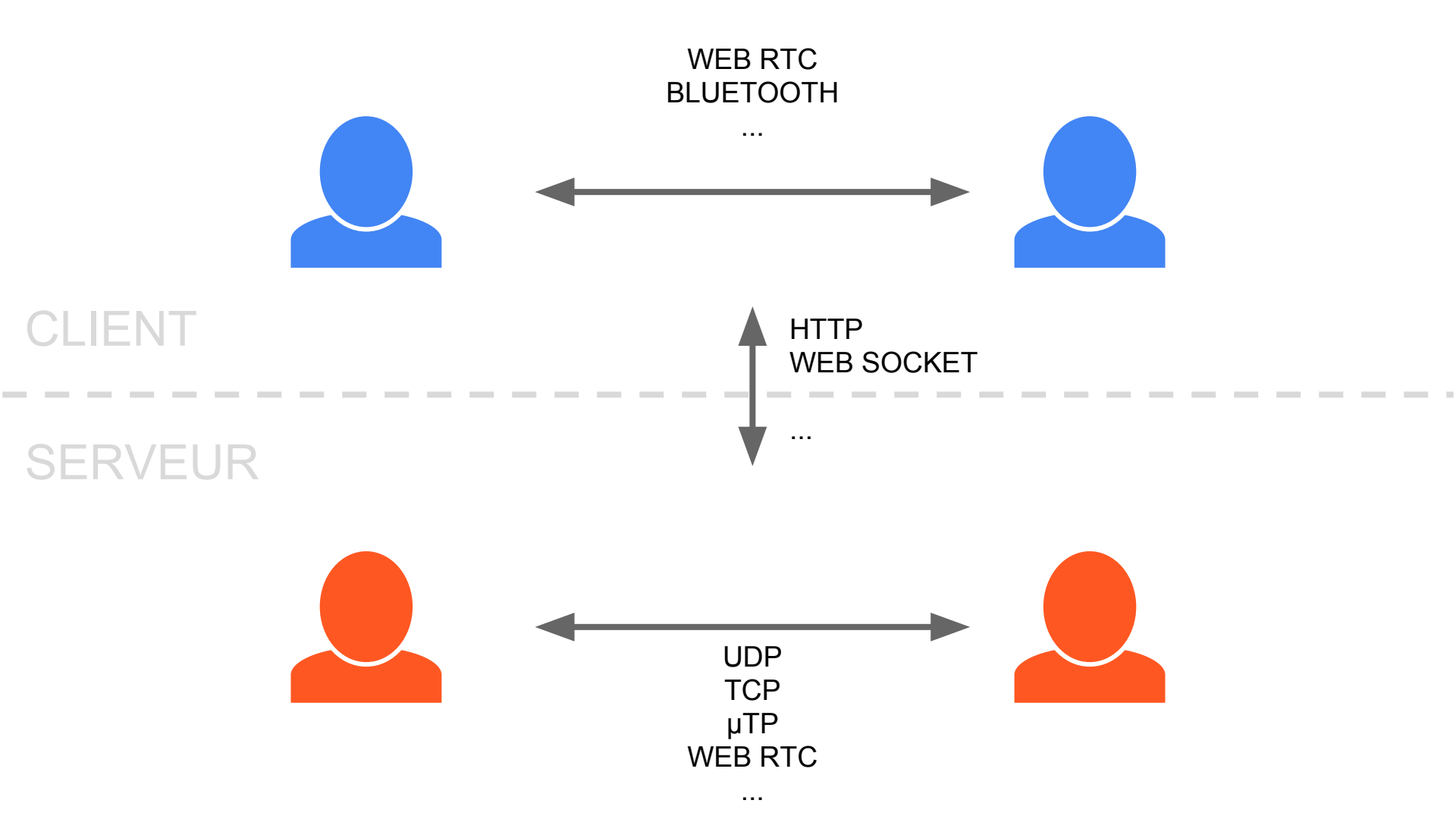




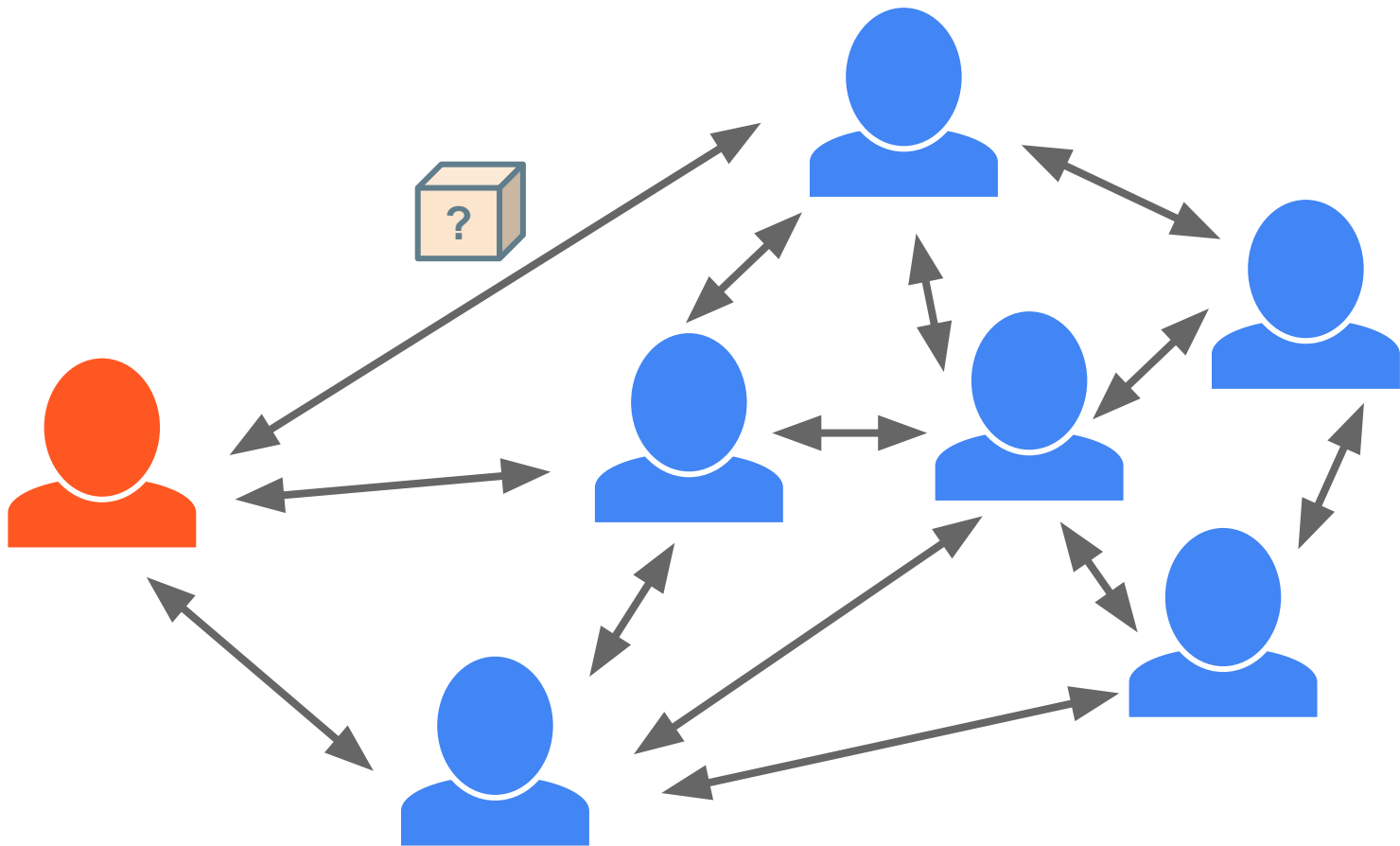
# Transport

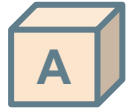




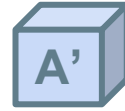








**diff ?**



A stack of old, worn books with a red overlay. The books are stacked on a wooden surface, and the red overlay is semi-transparent, allowing the texture of the books and the wood to be visible. The text 'Data integrity' is written in a bold, white, sans-serif font across the bottom of the image.

**Data integrity**

**Merkle “Tree”**

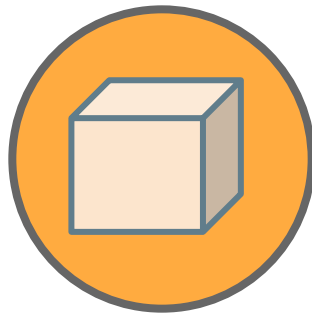
**Merkle Directed Acyclic  
Graph**

# **Merkle “Tree”**

# **Merkle Directed Acyclic**

# **Graph**

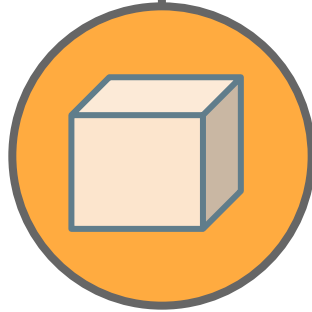




DATA #1



HASH #1



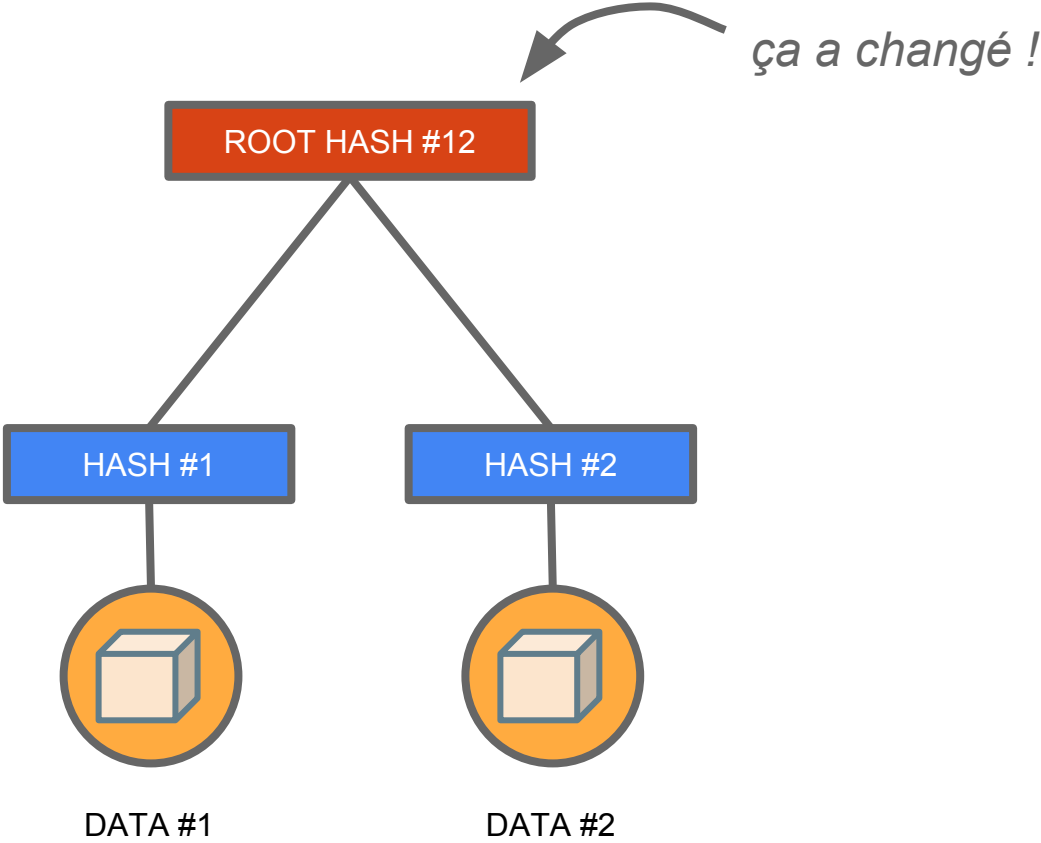
DATA #1

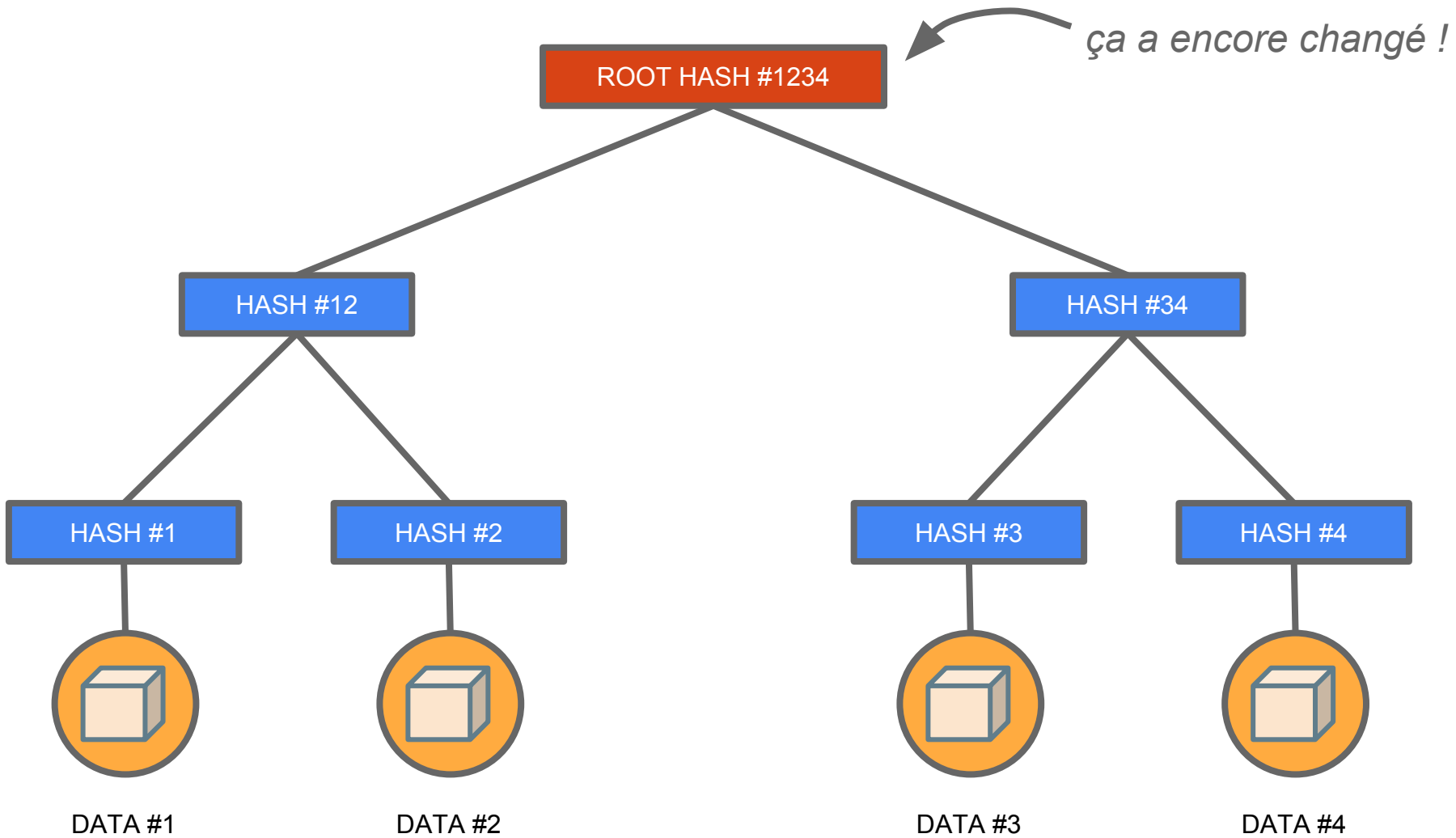
ROOT HASH #1

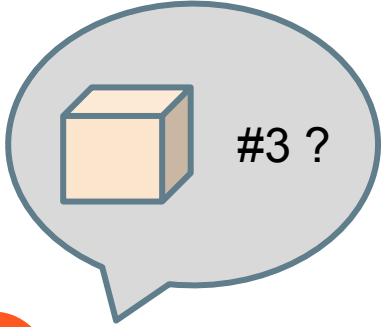
HASH #1



DATA #1

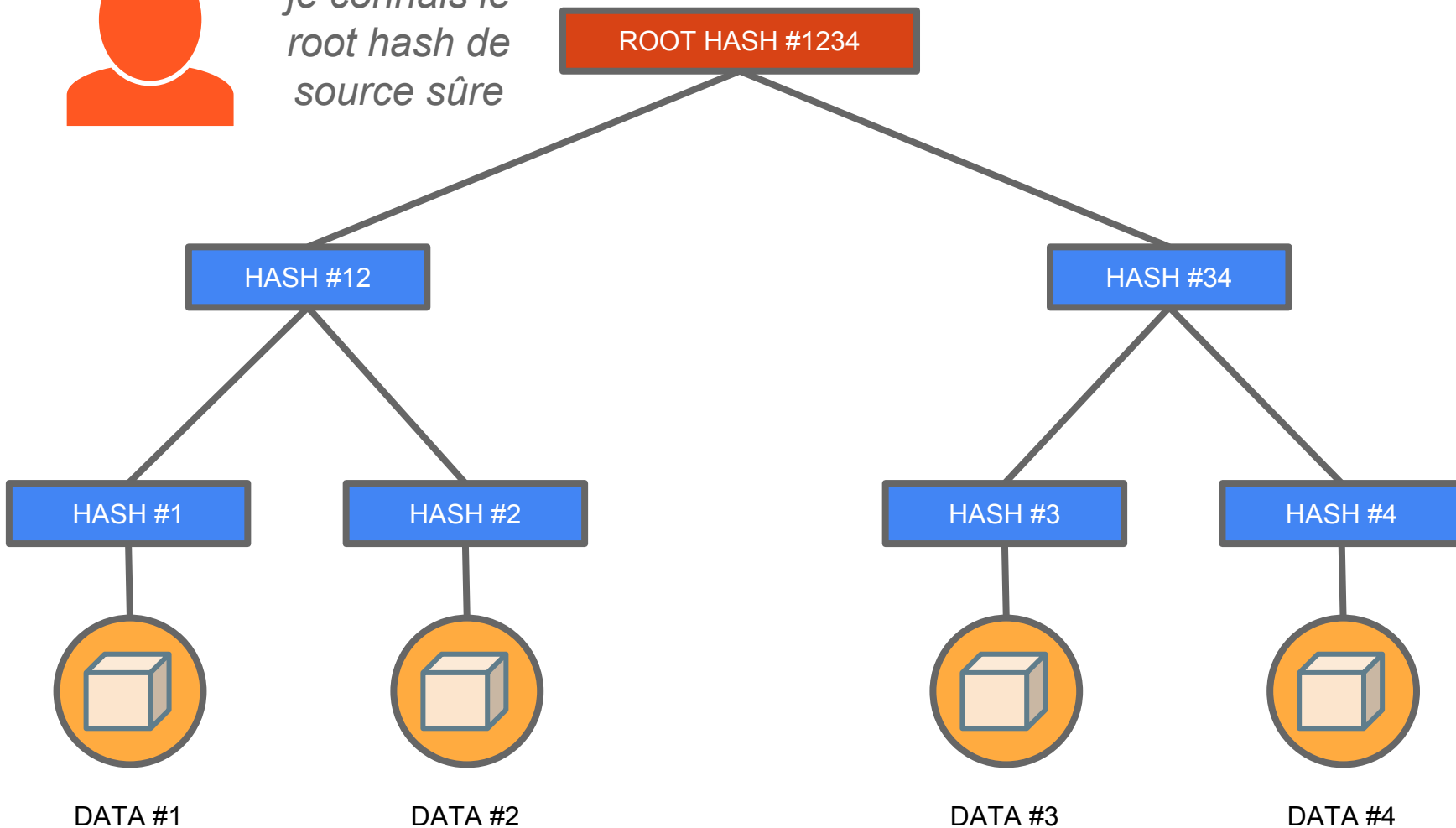








*je connais le  
root hash de  
source sûre*



ROOT HASH #1234

*voilà la donnée demandée*



HASH #12

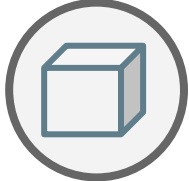
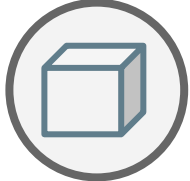
HASH #34

HASH #1

HASH #2

HASH #3

HASH #4

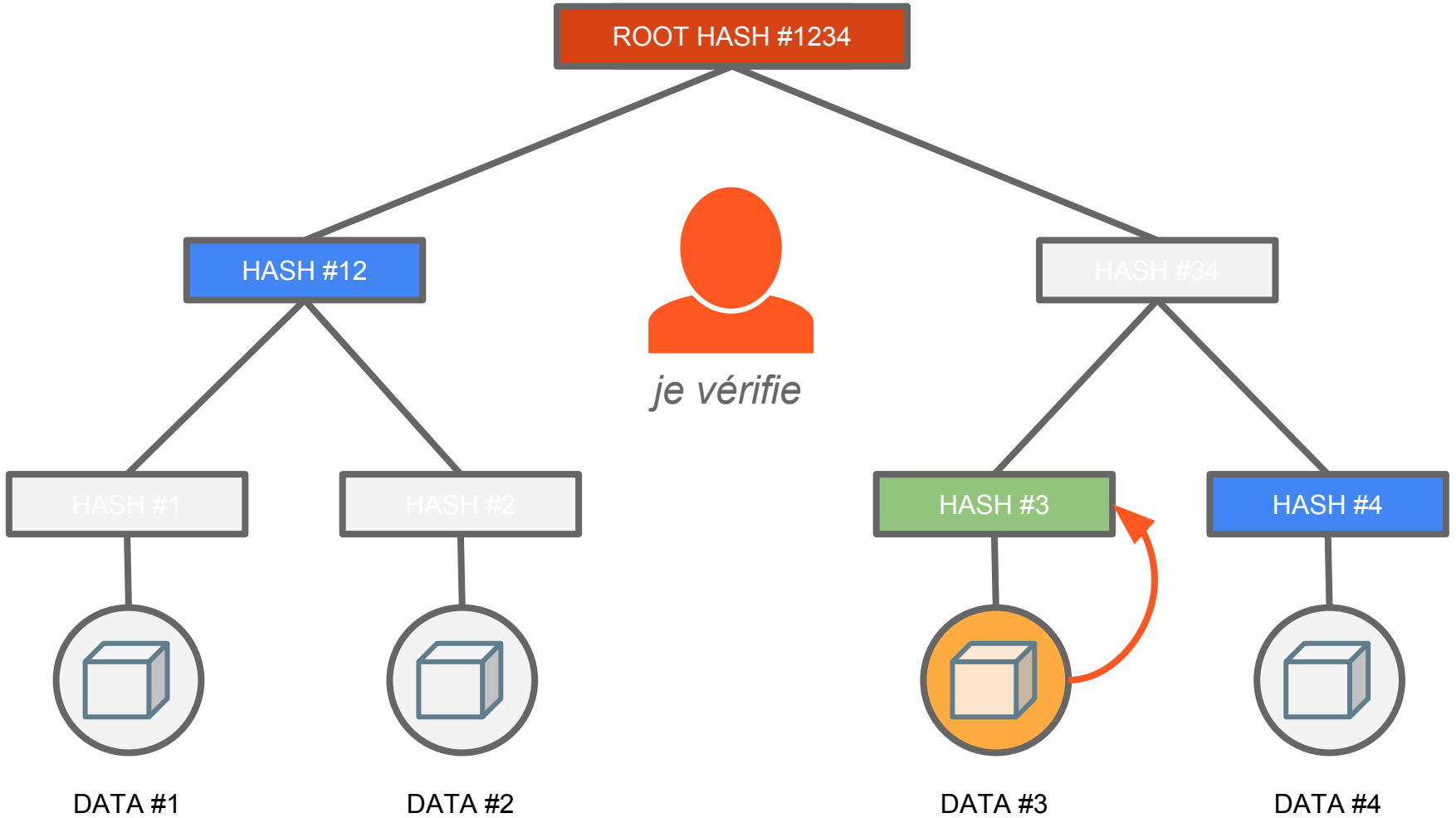


DATA #1

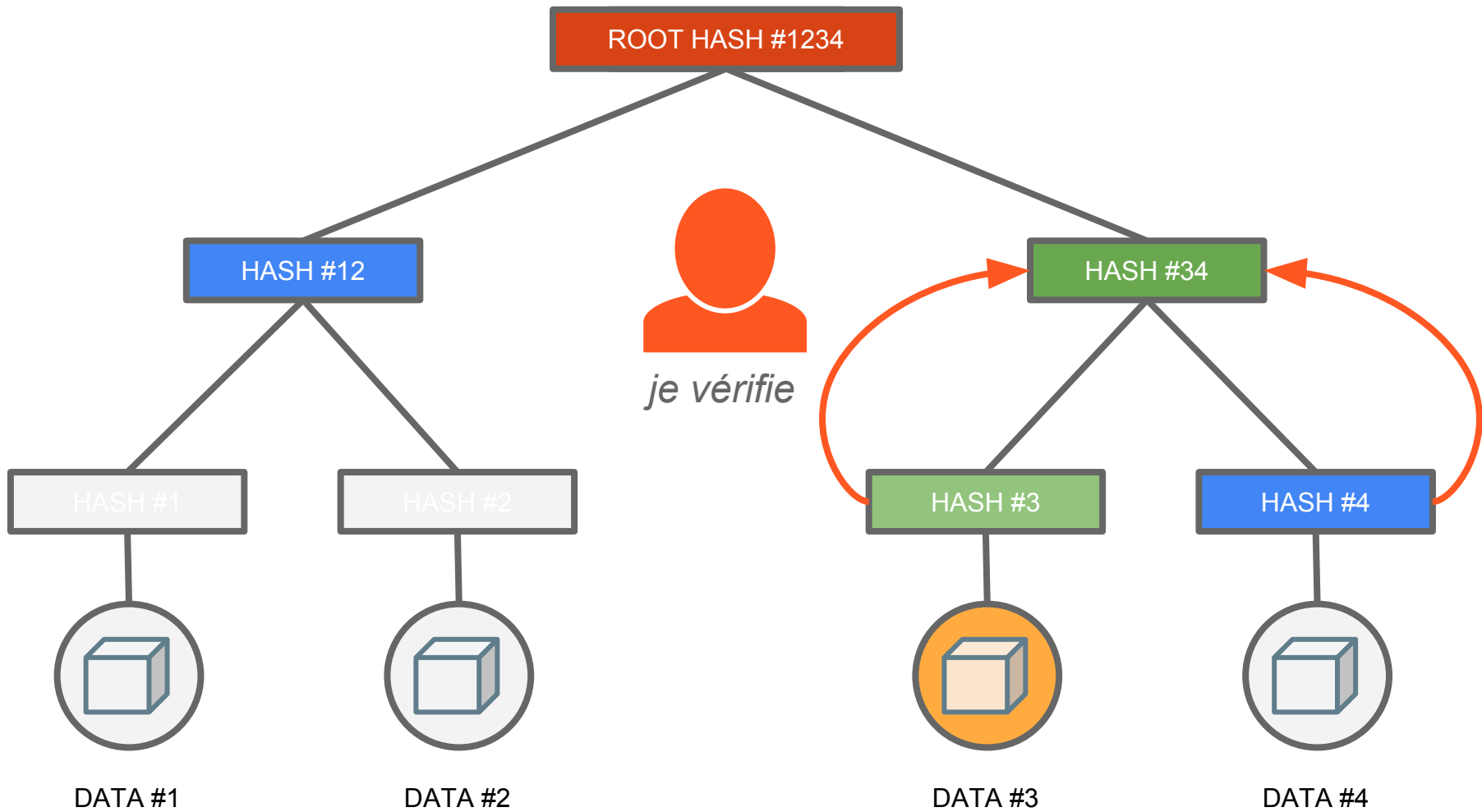
DATA #2

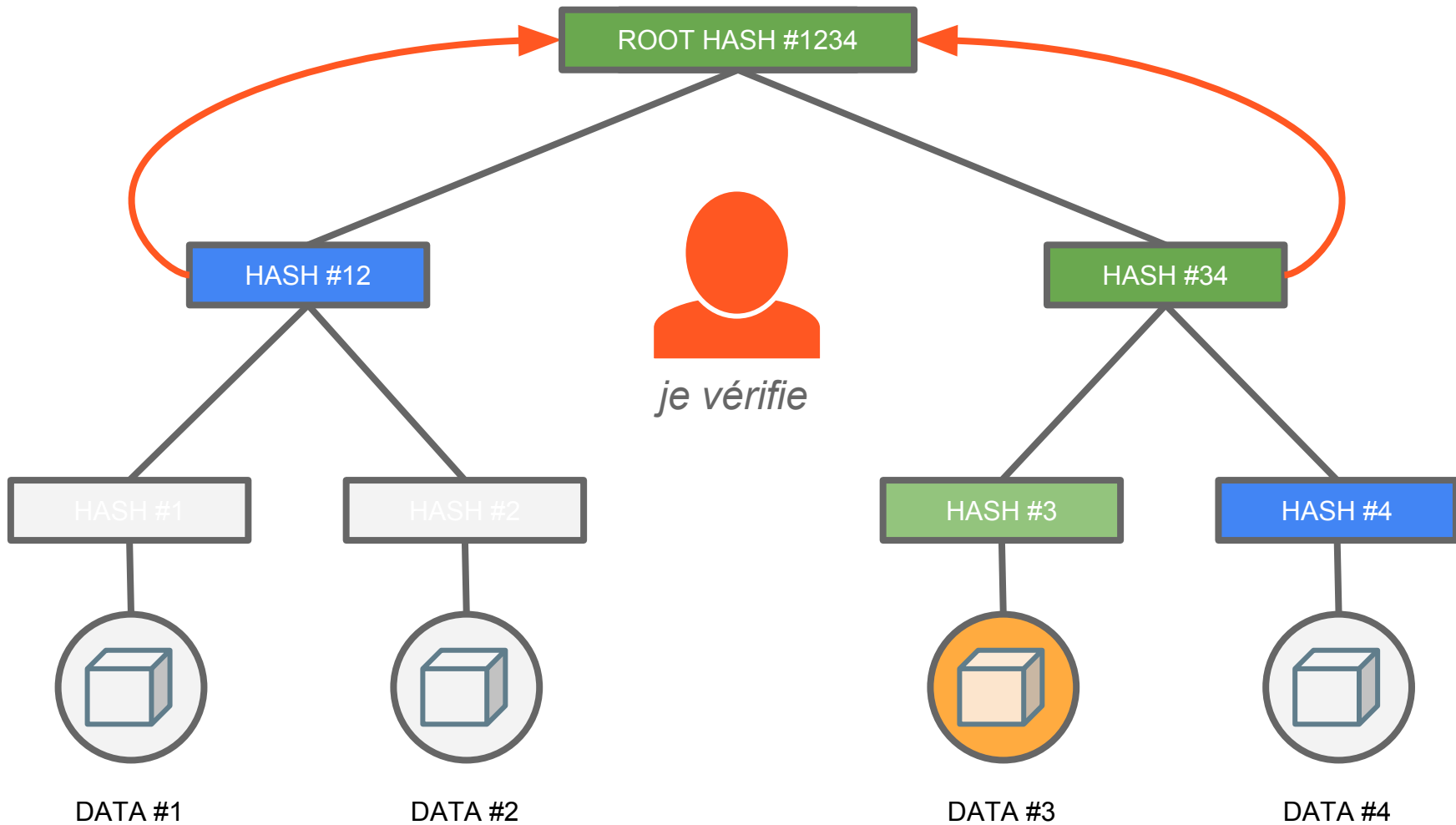
DATA #3

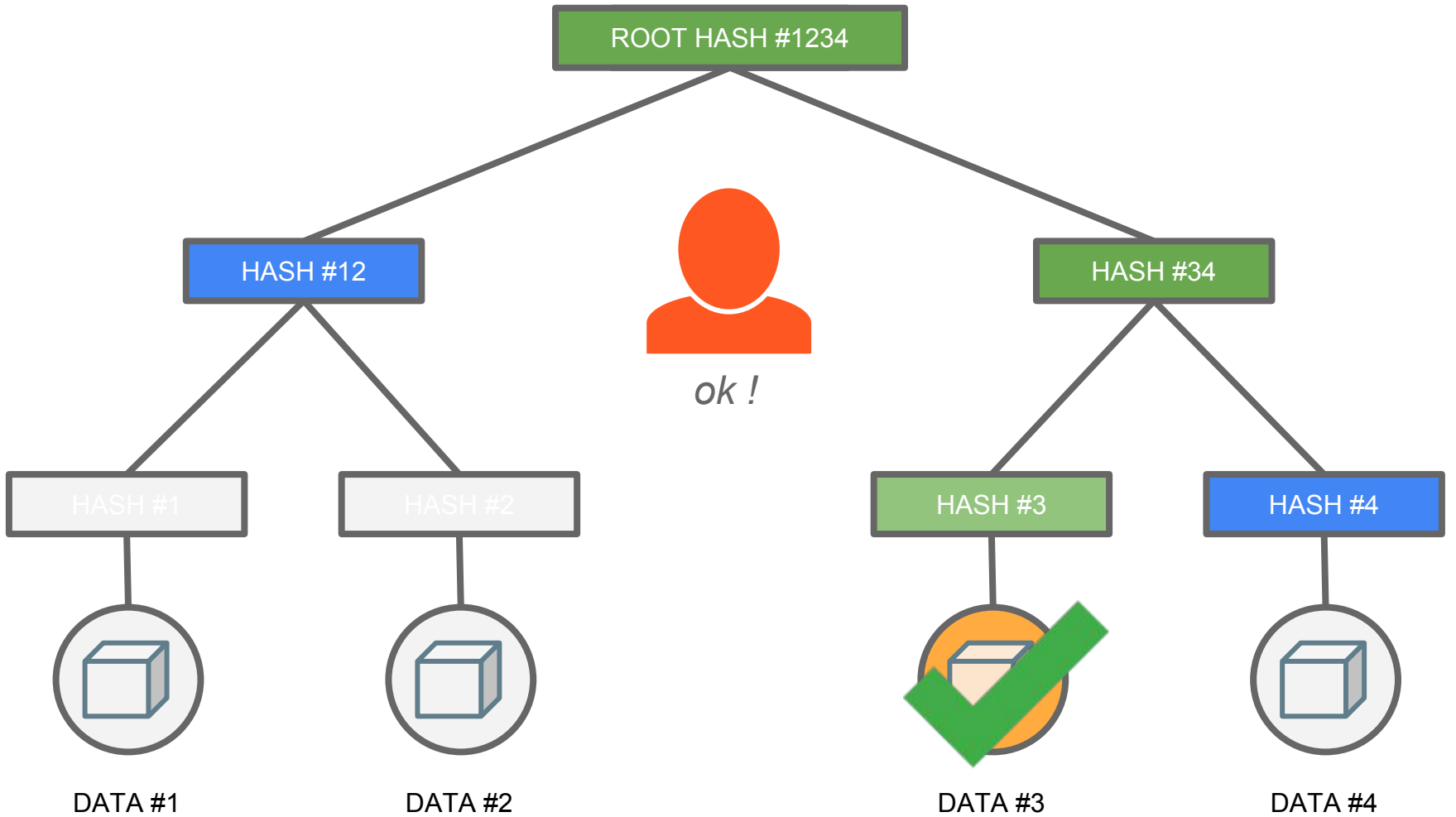
DATA #4







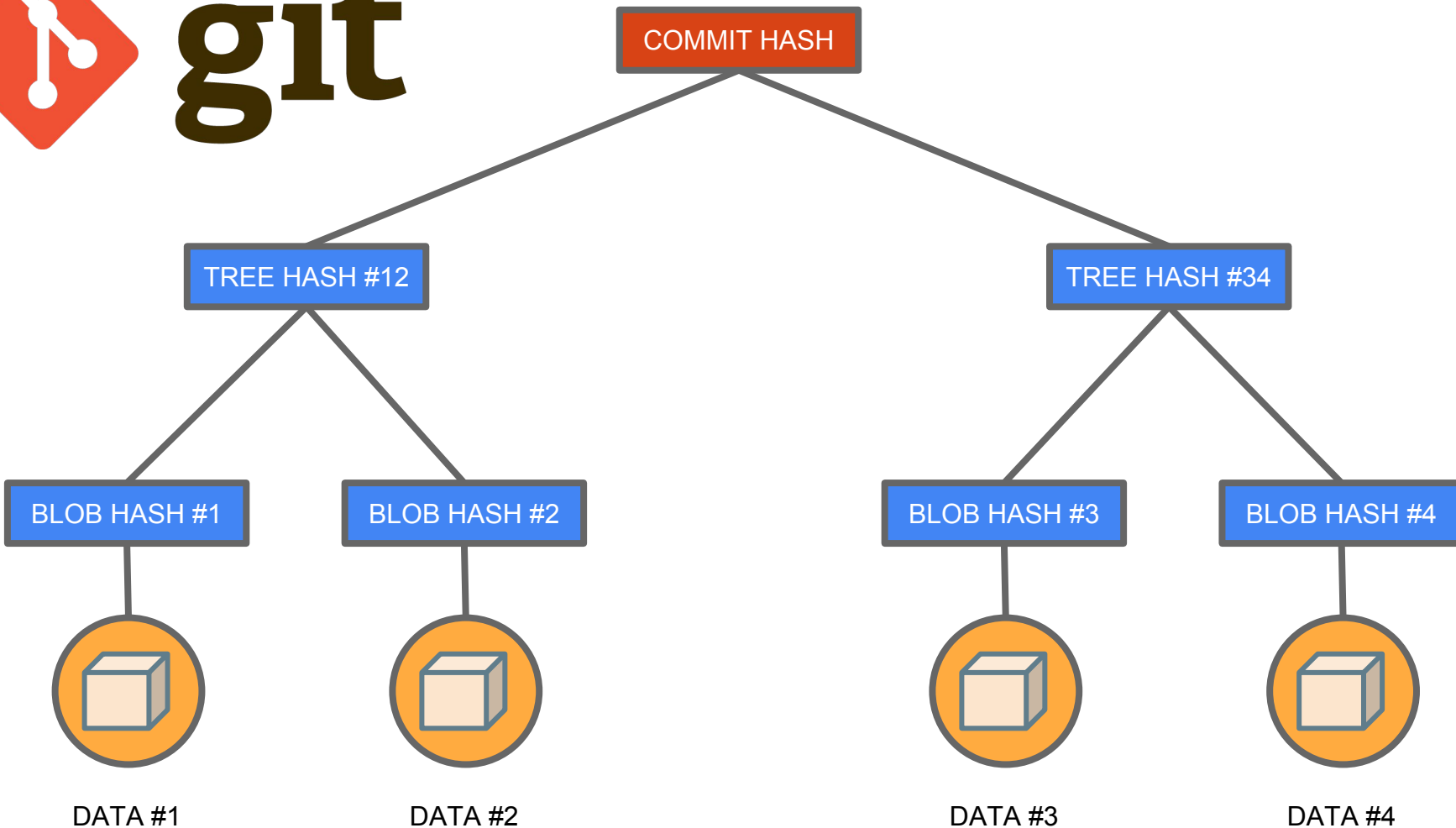


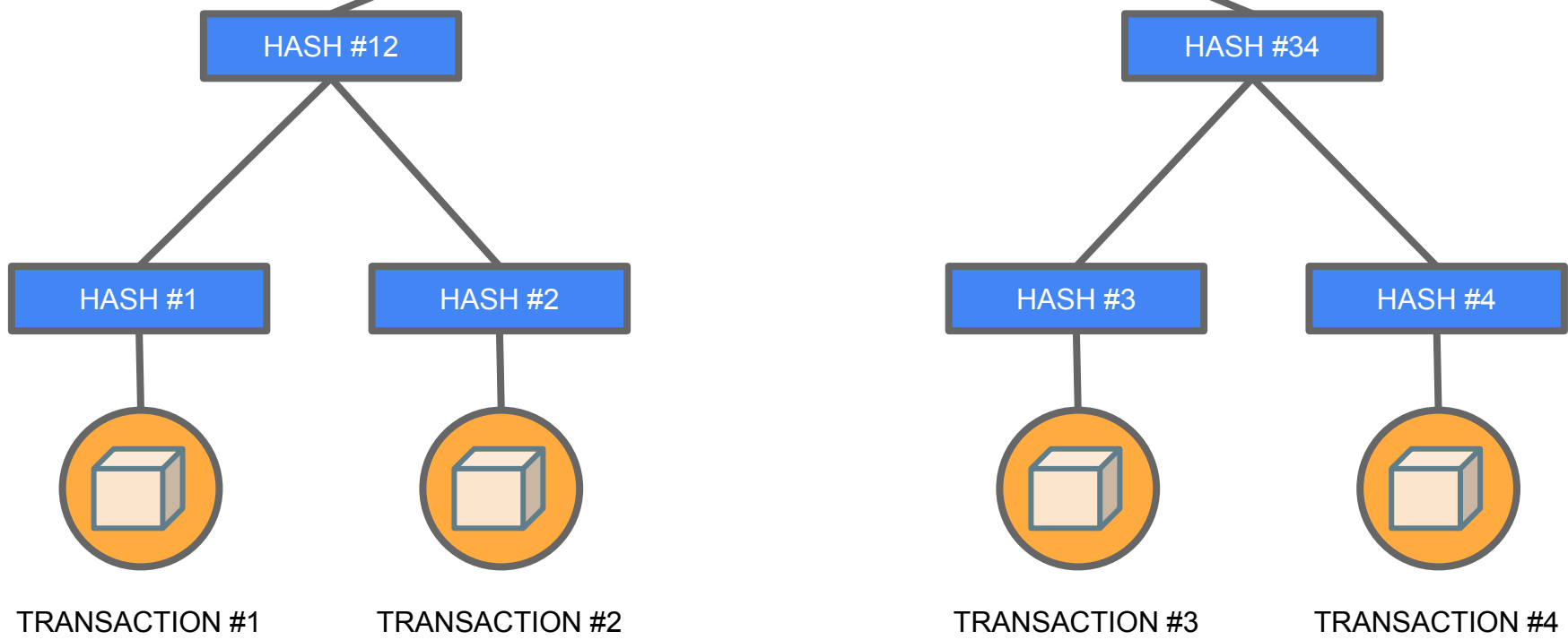
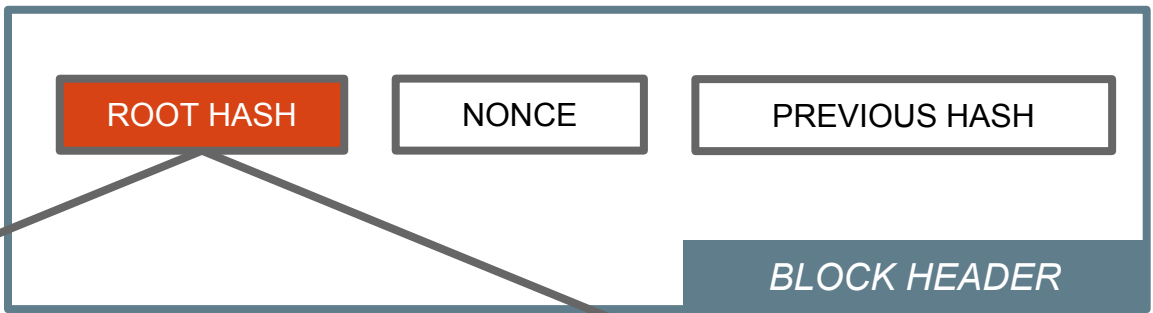


**Utilisé ?**



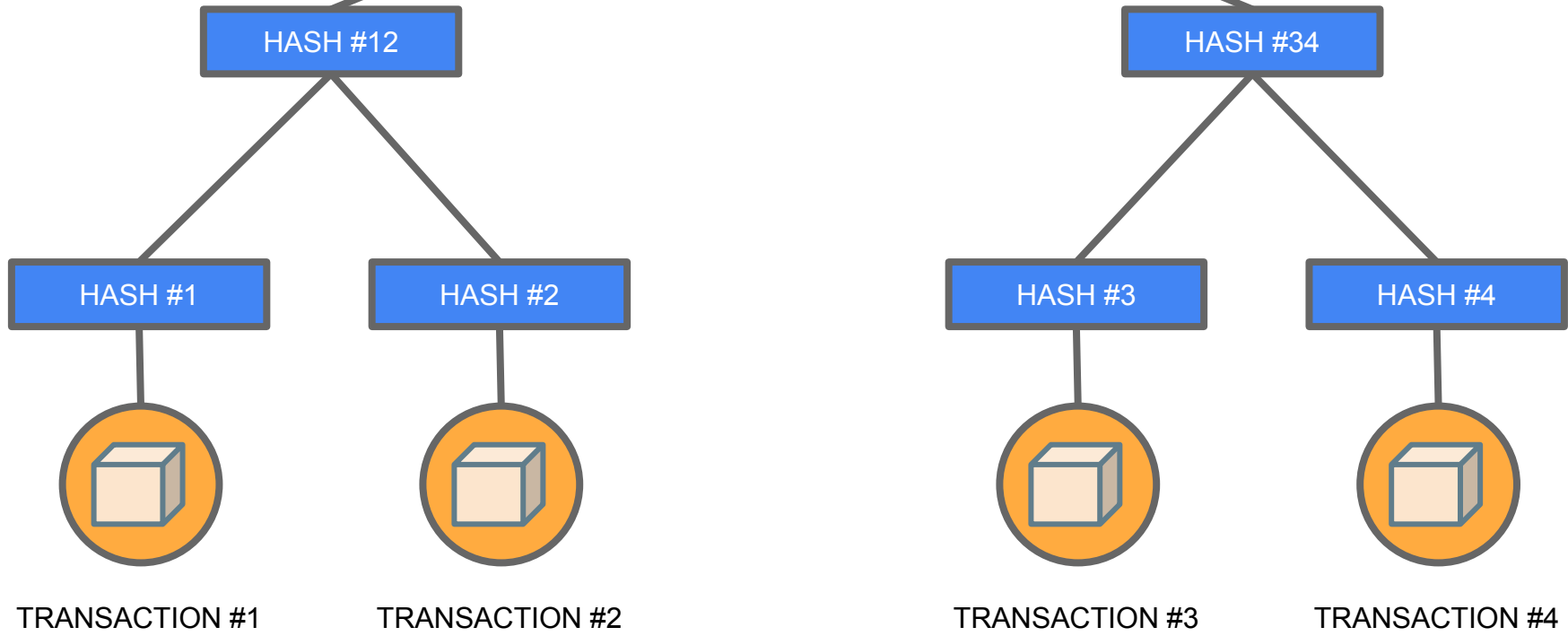
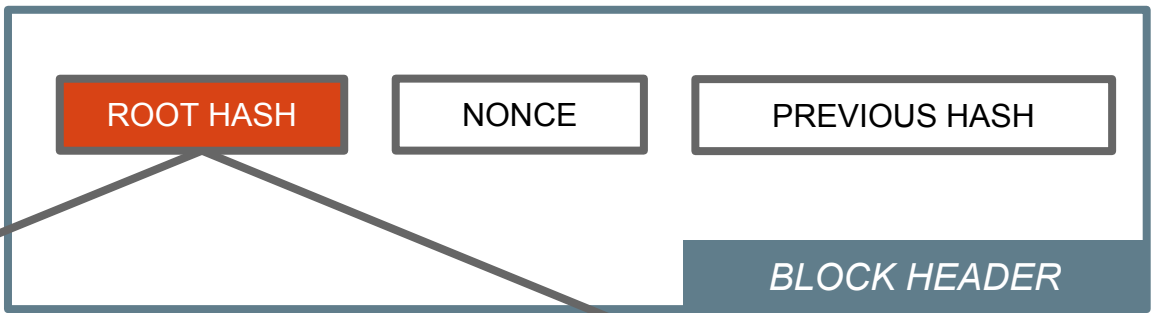
# git

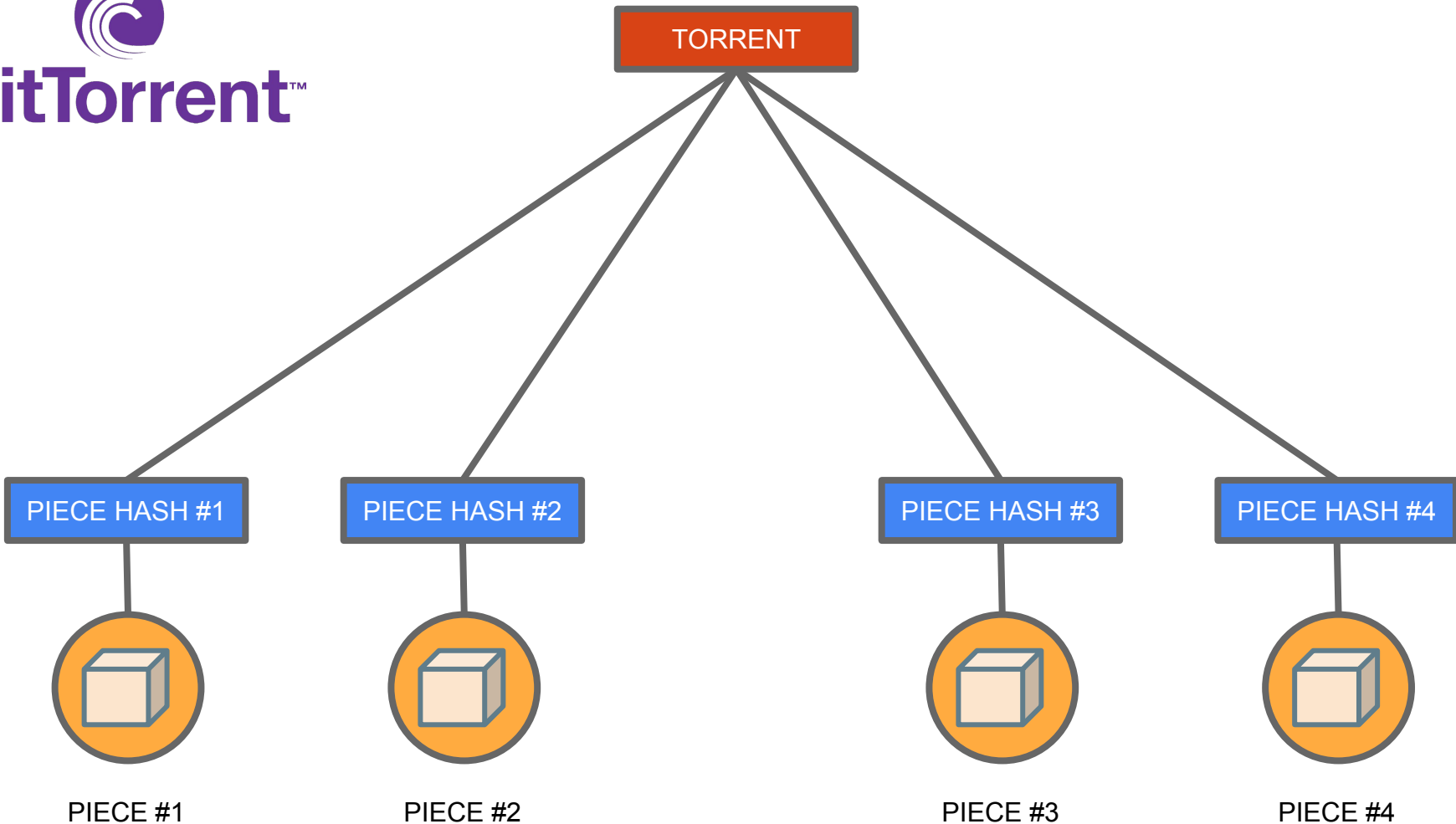




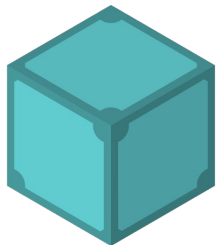


# ETHEREUM









# IPFS

/ HASH

/FOO/ HASH

/BAR/ HASH

/FOO/CAT.JPG HASH

/FOO/INDEX.HTML HASH

/BAR/PACKAGE.JSON HASH

/BAR/APP.JS HASH



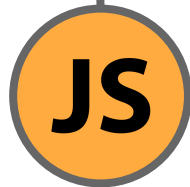
CAT.JPG



INDEX.HTML



PACKAGE.JSON

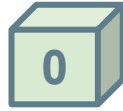
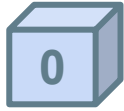


APP.JS



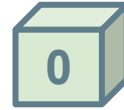
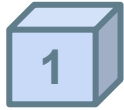
<https://ipld.io>

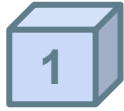




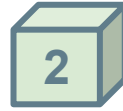


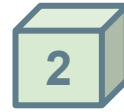
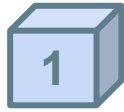
**+1**





**+2**







# **Conflict resolution**



# **Conflict-free Replicated Data Types**

**CRDT ?**



INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE

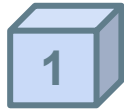
## *Conflict-free Replicated Data Types*

Marc Shapiro, INRIA & LIP6, Paris, France

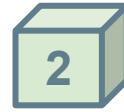
Nuno Preguiça, CITI, Universidade Nova de Lisboa, Portugal

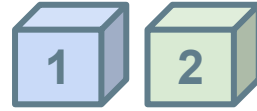
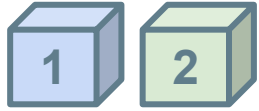
Carlos Baquero, Universidade do Minho, Portugal

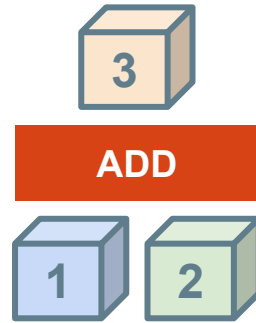
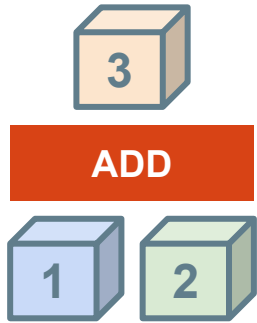
Marek Zawirski, INRIA & UPMC, Paris, France

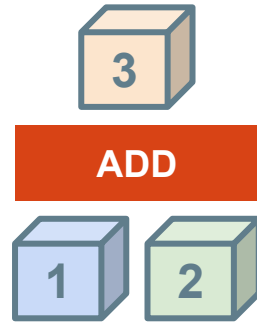
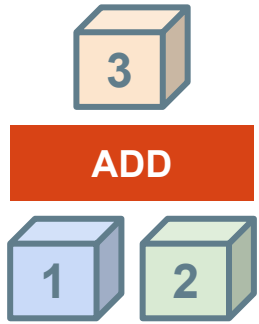


?

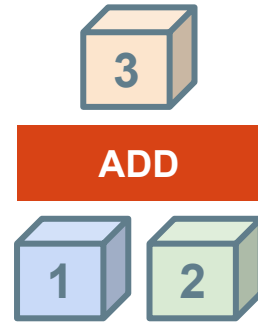
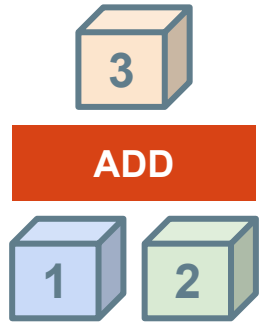






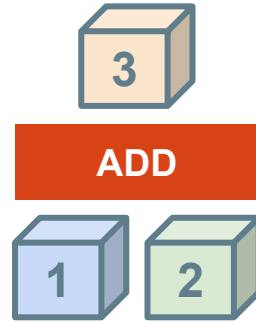
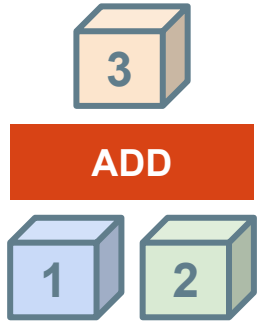


# Grow-only Counter





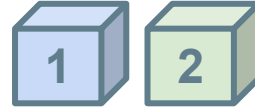
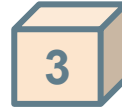
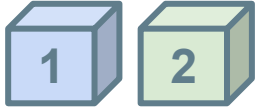
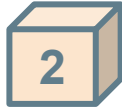
**-1**





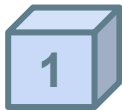
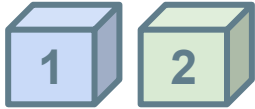
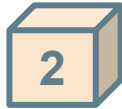


**-1**

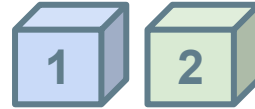
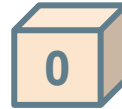


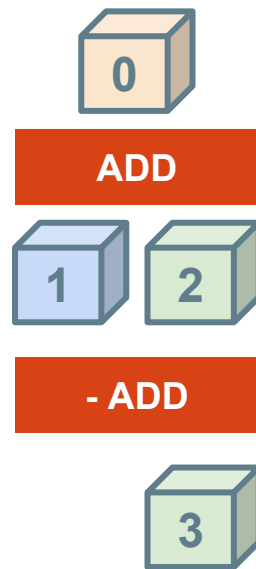
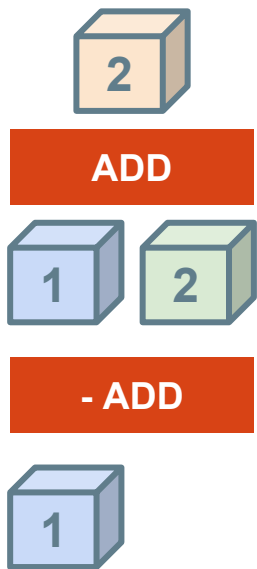


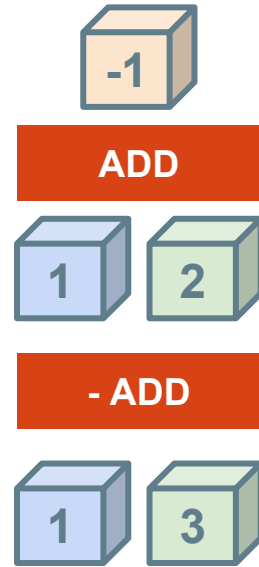
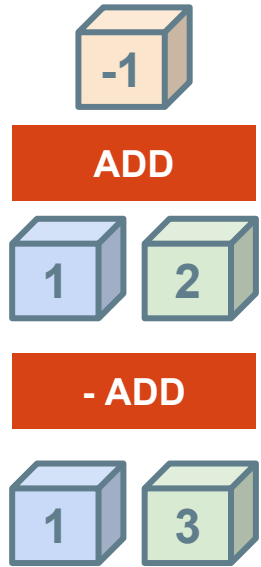
**-1**

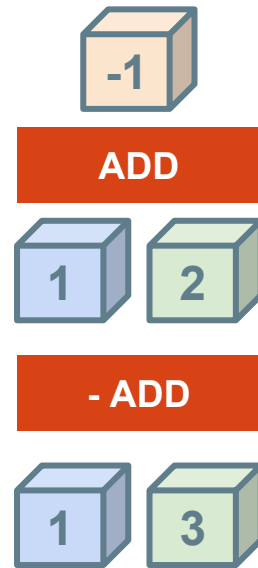
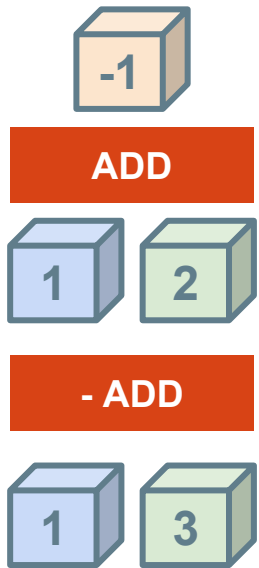


**-3**

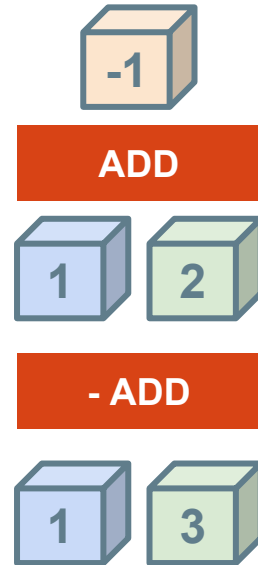
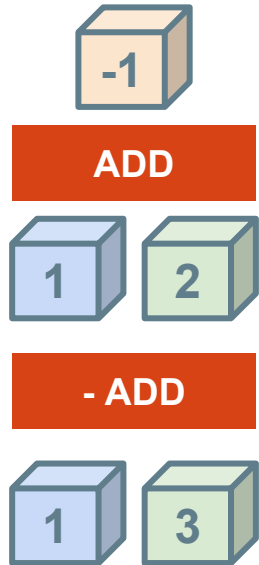




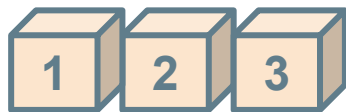




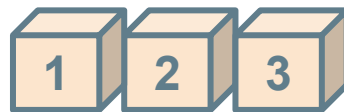
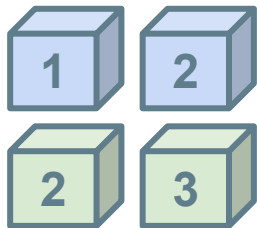
# Positive-Negative Counter



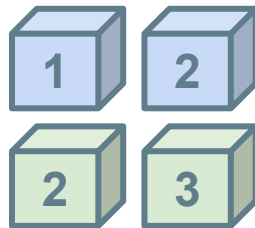
# Grow-only Set



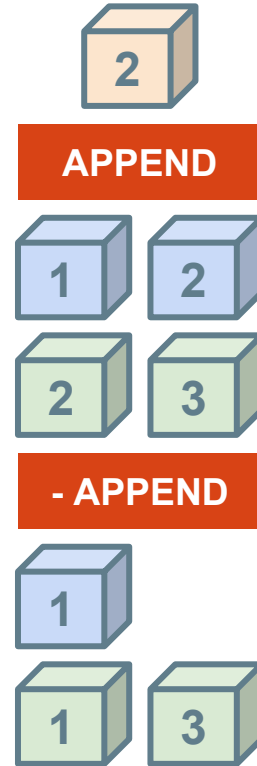
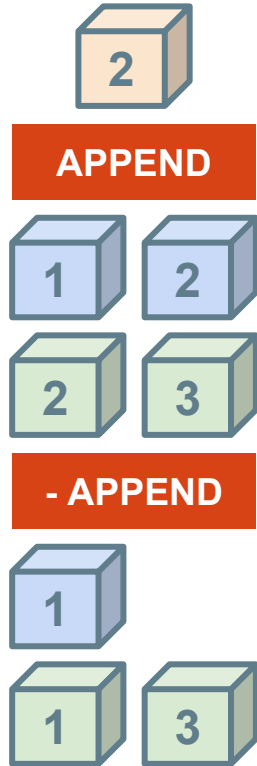
**APPEND**



**APPEND**



# 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



Chat (70M utilisateurs)



SOUNDCLOUD

News feed



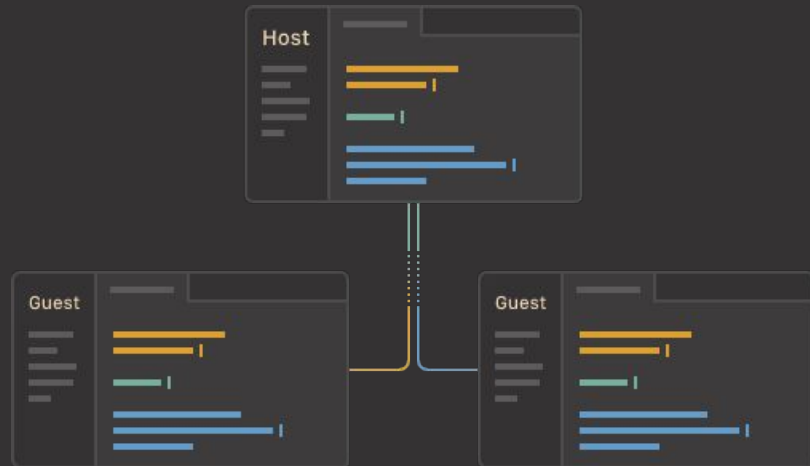
Sync. des localisations favorites

Mais aussi...



## Collaborate in real time in Atom

**Teletype<sup>(beta)</sup> for Atom** lets developers share their workspace with team members and collaborate on code in real time.



**Mais aussi...**

# Démo

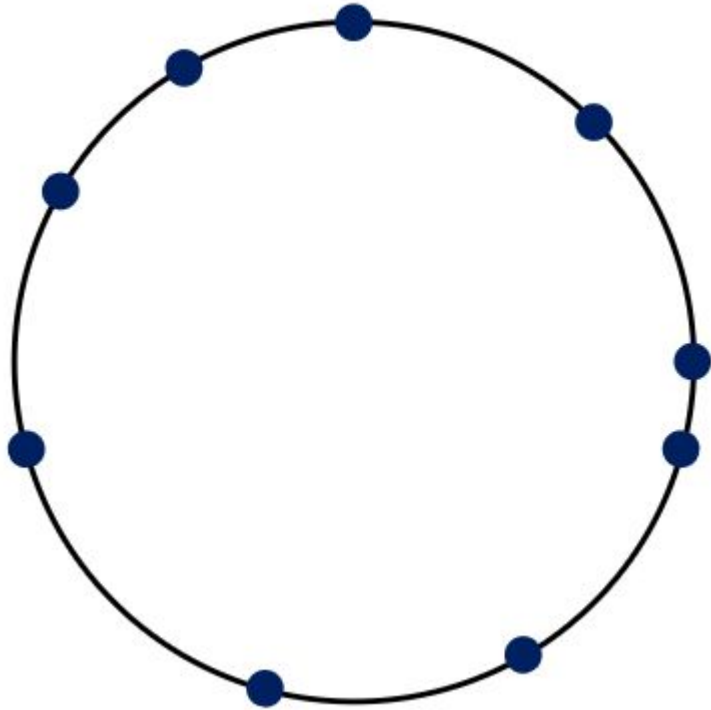
à la fin...

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



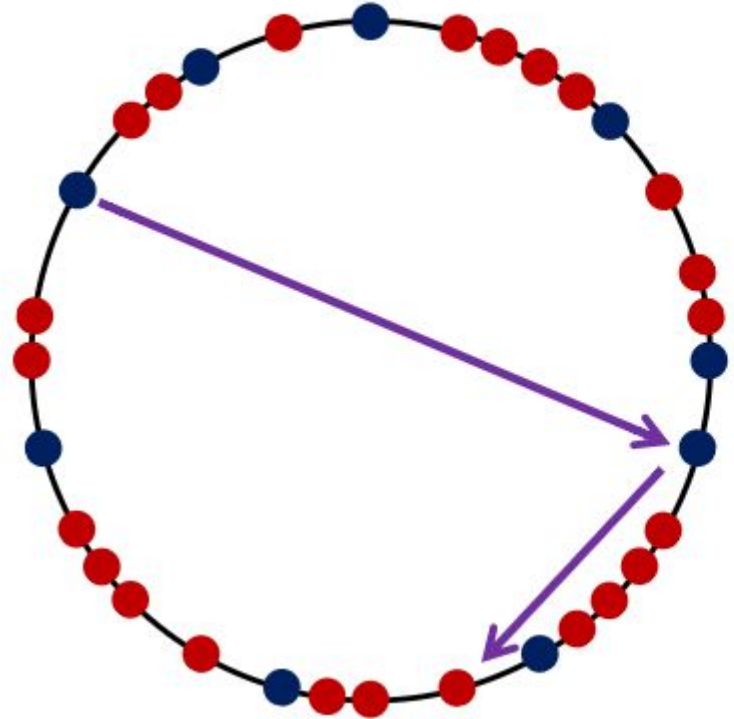


**Et si on quittait le monde des bisounours ?**

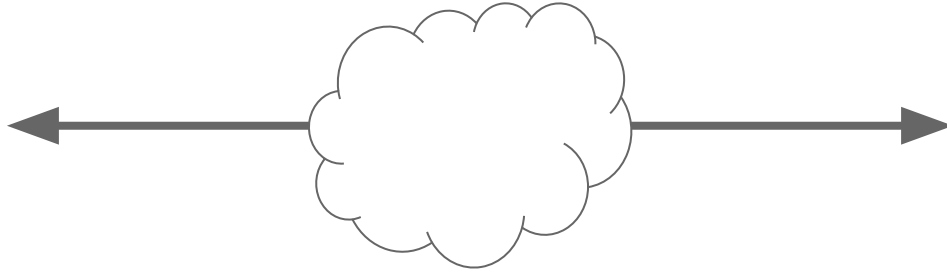


**Sybil attack**

**Brute-force attack**

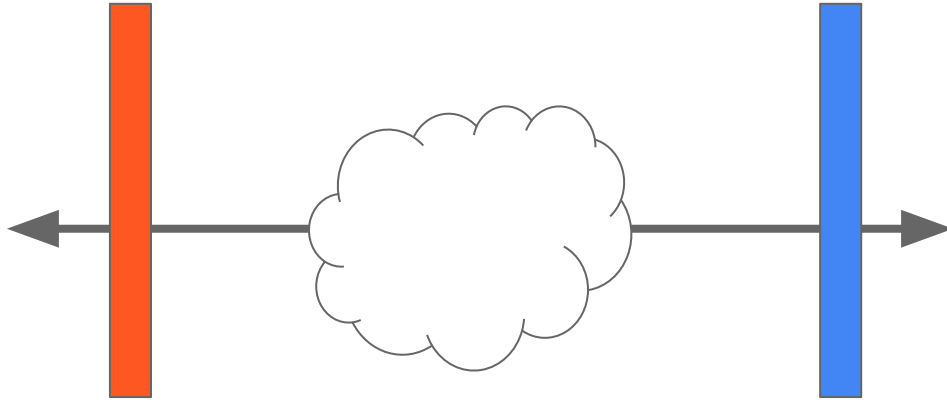








Réseau privé



Réseau public



Réseau privé

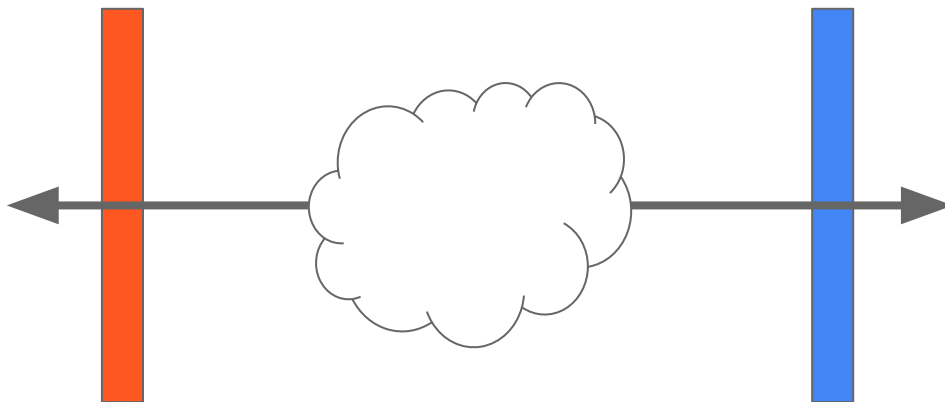


# NAT Traversal

# **Session Traversal Utilities for NAT (STUN)**



**Adresse IP  
privée**



**Adresse IP  
privée**

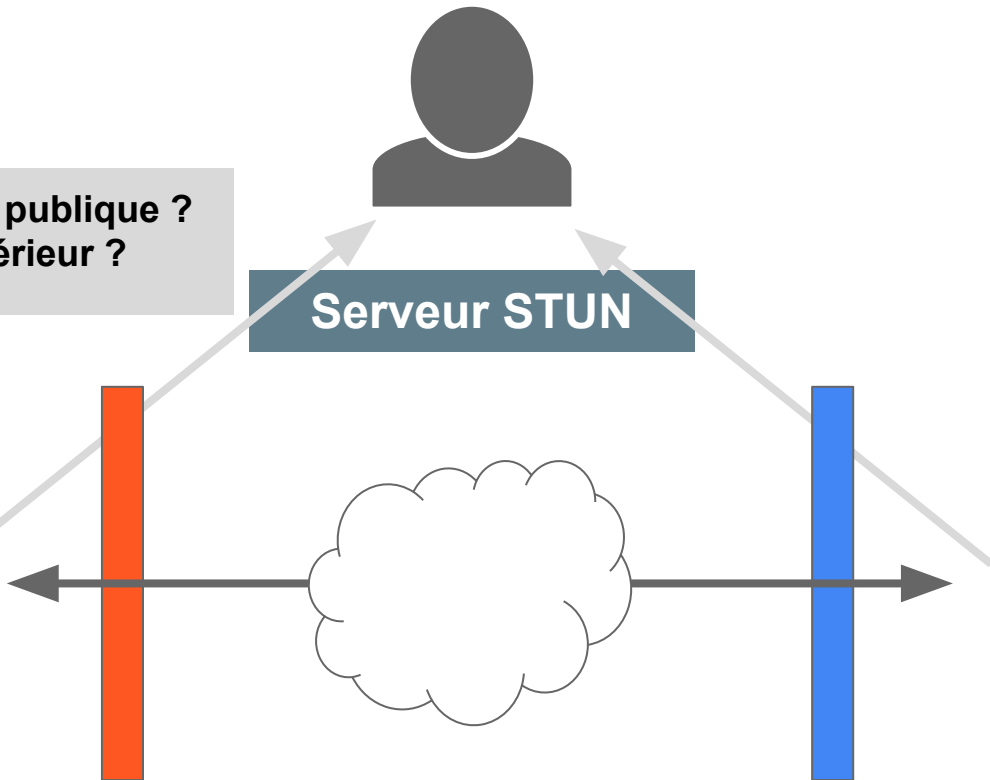


Quelle est mon adresse IP publique ?  
Suis-je accessible de l'extérieur ?

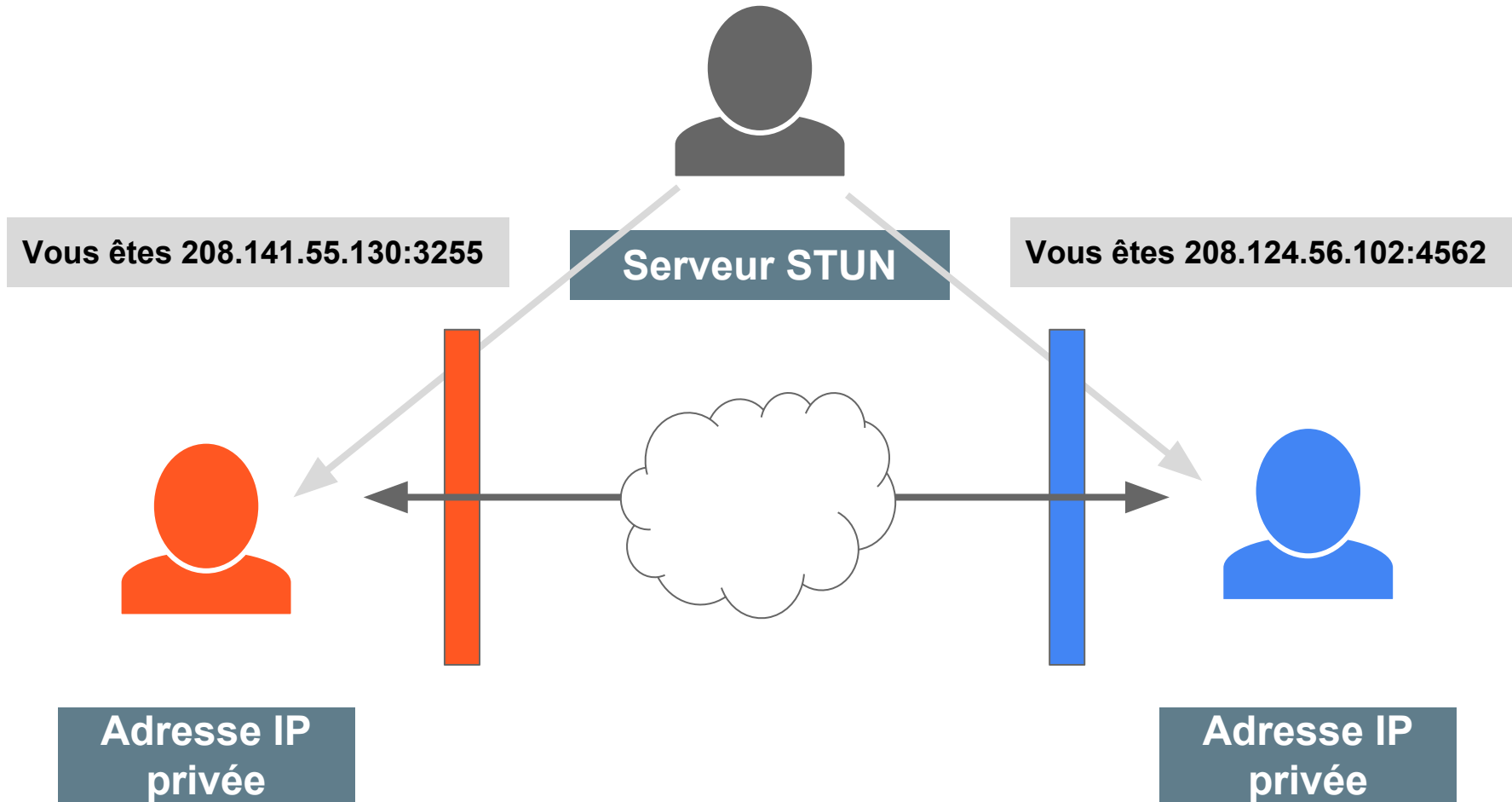
Serveur STUN



Adresse IP  
privée



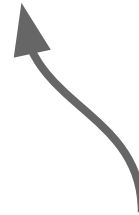
Adresse IP  
privée



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*

**Vous êtes 208.141.55.130:3255**  
**Derrière un NAT symétrique**

**Serveur STUN**

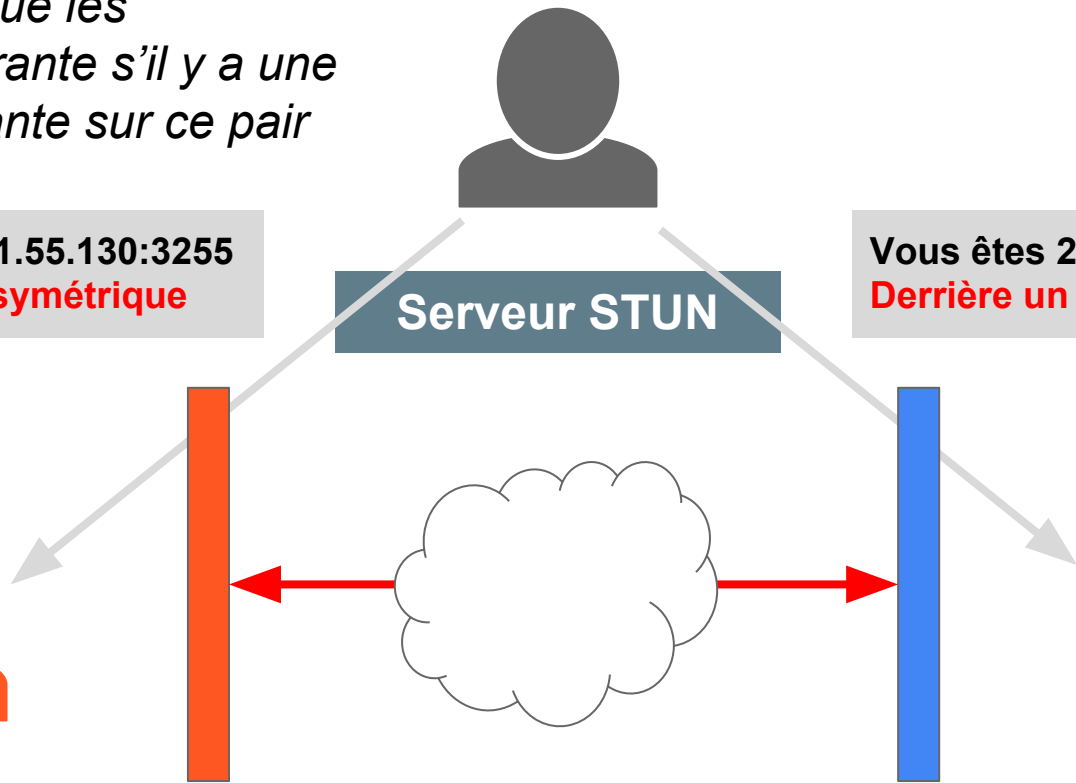
**Vous êtes 208.124.56.102:4562**  
**Derrière un NAT symétrique**



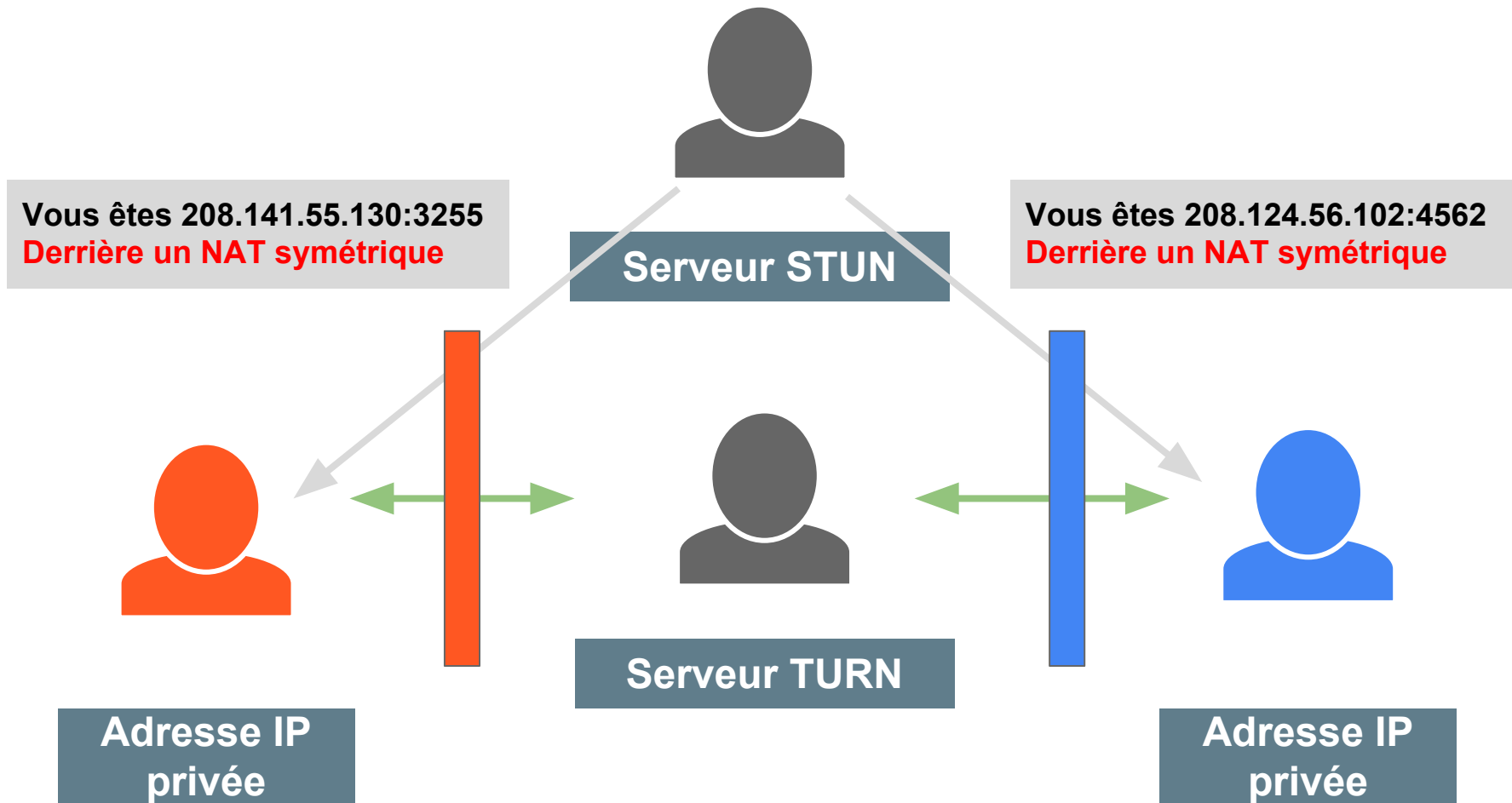
**Adresse IP  
privée**



**Adresse IP  
privée**



# **Traversal Using Relays around NAT (TURN)**





**Que nous  
réserve le futur ?**

A vintage telescope on a tripod is positioned in the center of the frame, viewed through a diamond-patterned wire mesh. The background is a solid red color. The text "Que nous réserve le futur ?" is overlaid on the left side of the image in a bold, white, sans-serif font.





A close-up photograph of a gold Bitcoin coin. The coin is the central focus, showing its intricate circuit-like patterns and the embossed Bitcoin symbol. The background is blurred, showing other coins and a soft light source. Overlaid on the coin are four red rectangular boxes, each containing a white question in French.

**Scalabilité ?**

**Impact écologique ?**

**Arnaques ?**

**Centralisation ?**

# IPFS is the Distributed Web

---

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

Try it

Watch demo

<https://ipfs.io/>

<https://libp2p.io/>



The  IPFS Stack

applications

Using the Data

IPNS

naming

Defining the Data

IPLD

merkldag

exchange

libp2p

routing

Moving the Data

network

<https://ipfs.io/>

<https://libp2p.io/>

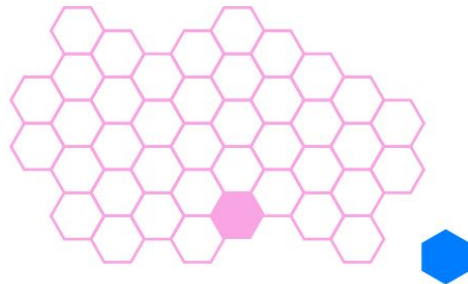
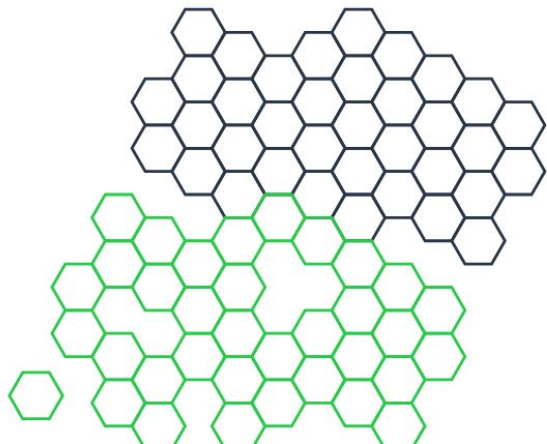
<https://www.coindesk.com/257-million-filecoin-breaks-time-record-ico-funding/>

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

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

# A distributed **data** community

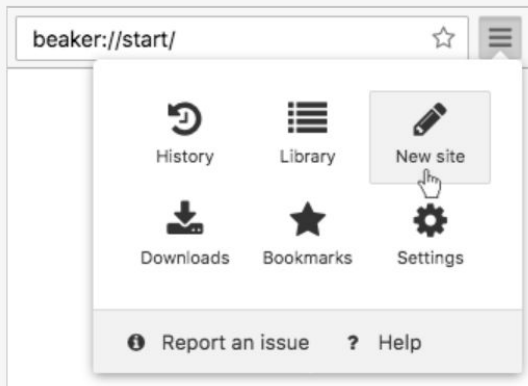
Dat is a nonprofit-backed community & open protocol for building apps of the future.



# Rethink the Web browser

Beaker is a peer-to-peer browser with tools to create and host websites. Don't just browse the Web, build it.

<https://beakerbrowser.com/>



Can your browser do this?



None of us are as smart as all of us.

Fork



@leokewitz  
December 13th, 2017  
3 min read

## New release 0.2.0

I'm really happy to announce that I finally learned how to version <sup>[1]</sup>! Also there are a lot of new features!

### Footnotes

As you might noticed one of the new features is being able to add footnotes <sup>[2]</sup>. Footnotes can be inlined or manually referenced.

```
This is how you manually[^manual] reference something[^1].
```

```
This is how you add inline^[You don't need to specify inlined notes  
at the end of the file.] notes.
```

```
...
```

```
// In the end of the file...
```

```
[^1]: This is a footnote
```

```
[^manual]: manually referenced
```

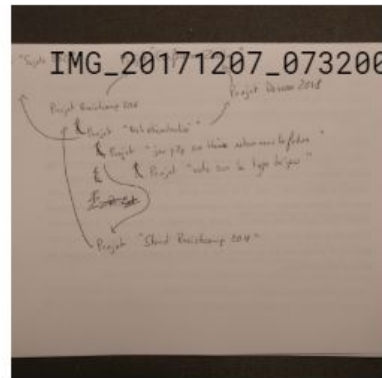
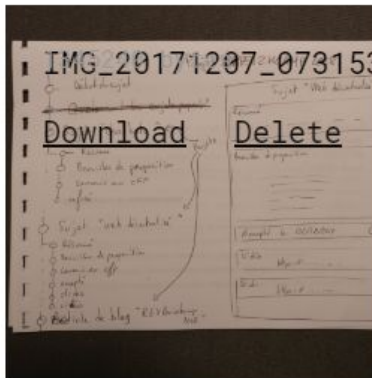
<https://github.com/kewitz/dat-medium>



carbon.png

```
require('lodash')
= require('bittorrent-dht')
ip = require('geopip-lite-co
```

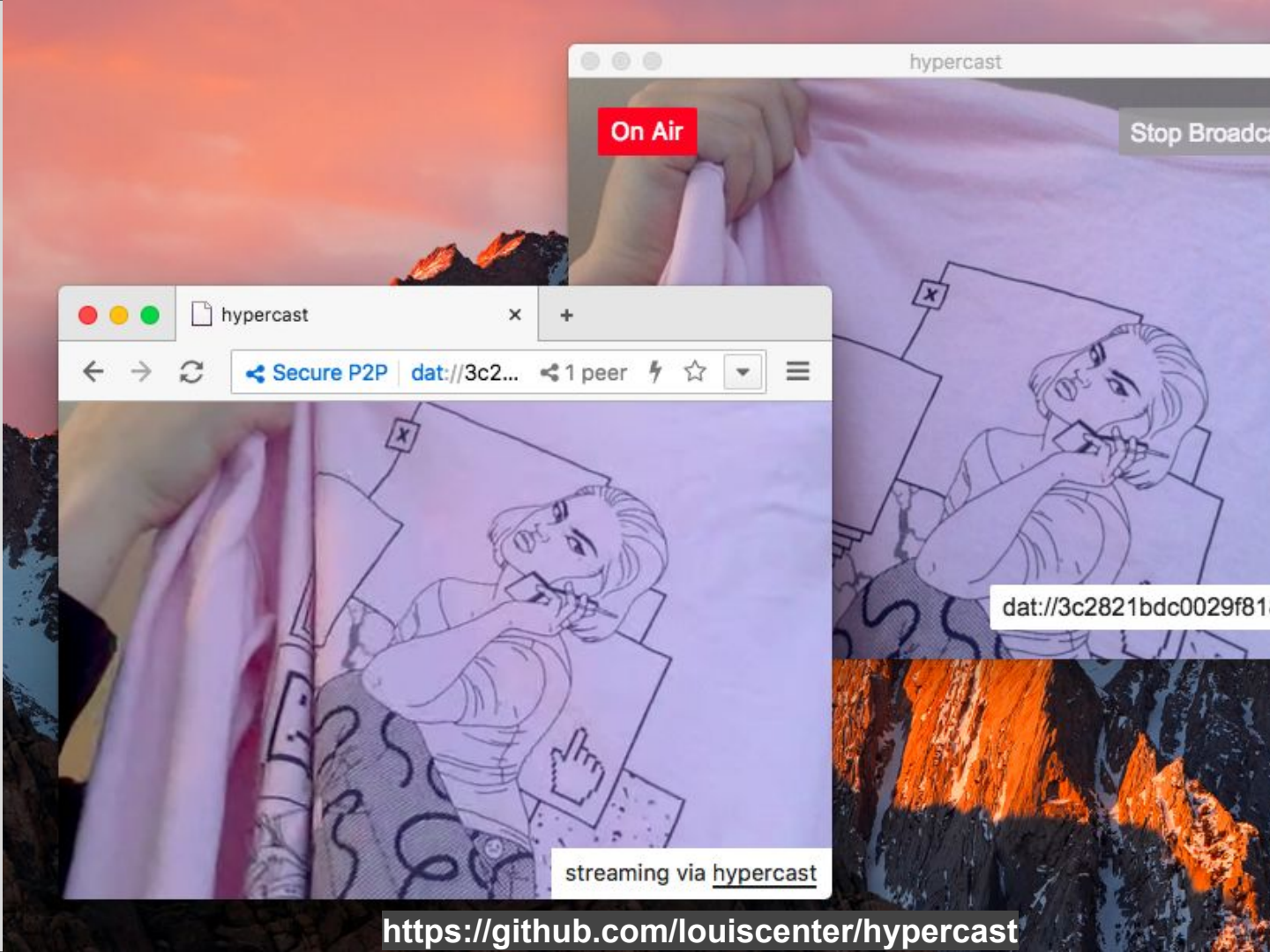
guide.txt



<http://hex22.org/projects/ntain/>



# Dropbox



<https://github.com/louiscenter/hypercast>



Paul Frazee

Following

Web nerd re-decentralizing the Web. Unblockchain consultant. Founder of the Beaker browser and Hashbase. Previously Secure Scuttlebutt.

Make sure your profile stays online! Share your profile URL with a public peer like Hashbase.

Feeling ambitious? Deploy your own public peer.

Copy your profile URL

Who to follow



Tim Caswell

Follow



Ross Schulman

Follow



Sander Moolin

Follow



PsaeBrai

Follow

Posts  
68

Following  
39



Paul Frazee · 4d ago

No need to fret that you're missing frets. Fritter now tells you (once again) when there are new frets.



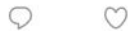
Paul Frazee · 4d ago

Fritter update was published. You shouldn't need to be afraid to click on links anymore.



Paul Frazee · 4d ago

Doing some work on Fritter today, fixing some of the annoying things like the issue clicking on links and the lack of "new posts" notification. Also going to look at Sander's mentions PR (finally!). Also using this to QA our 0.8 fork & edit flows... which needs a little work but it's working ok so far.

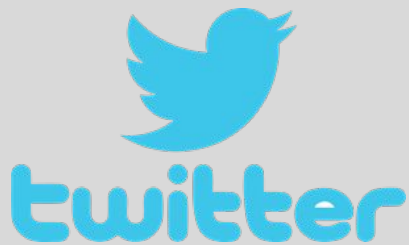


Paul Frazee · 4d ago

Replying to this post

Cool idea! I'm certain people will find that interesting and worth talking about.





> Discovering network of 82 portals...

0C 0W

168 Entries

0 Mentions

0 Whispers

2170 Discoveries



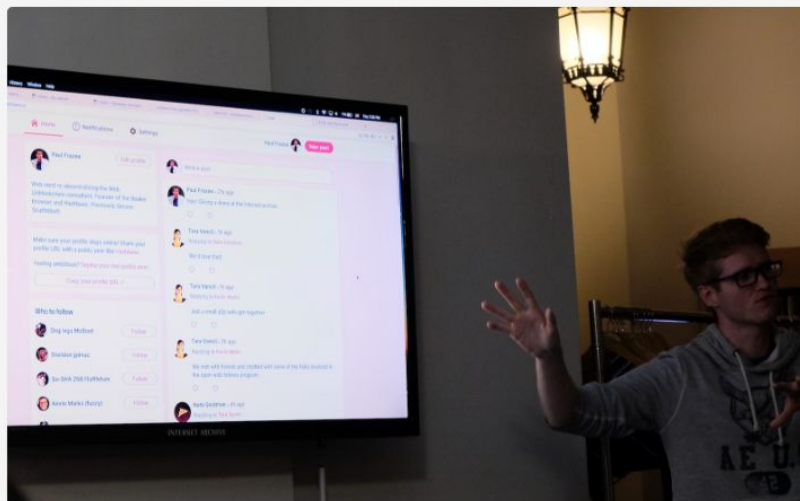
~neauoire quoted ~jimpick 13 days ago

very cool! Where was this? Where even is the internet archive?



~jimpick Scene from the Internet Archive...

Expand Entry



<https://louis.center/p2p-social-networking/>

# Mozilla Add-ons Blog

<https://blog.mozilla.org/addons/2018/01/26/extensions-firefox-59/>



## Extensions in Firefox 59

### Support for Decentralization Protocols

Mozilla has always been a [proponent of decentralization](#), recognizing that it is a key ingredient of a healthy Internet. Starting with Firefox 59, several protocols that support decentralized architectures are approved for use by extensions. The newly approved protocols are:

- [Dat Project](#) (dat://)
- [IPFS](#) (dweb:// ipfs:// ipns://)
- [Secure Scuttlebutt](#) (ssb://)

Firefox itself does not implement these protocols, but having them on the approved list means the browser recognizes them as valid protocols and extensions are free to provide implementations.

**Mais aussi...**



Scuttlebot  
a peer-to-peer log store

<http://scuttlebot.io/>



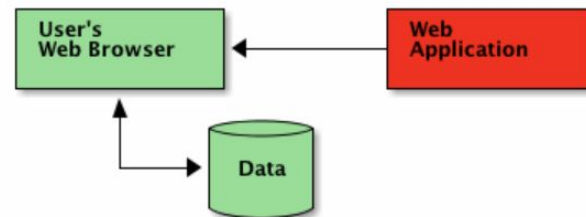
<https://solid.mit.edu/>



<https://matrix.org/>



remoteStorage



<https://remotestorage.io/>

<https://unhosted.org/>



Ethereum  
CONTRACTS



Swarm  
NET / FILE STORE



Whisper  
DYNAMIC COMMS

<https://ethereum.org/>





**André Staltz** @andrestaltz · 25 févr.

If SpaceX's Starlink will provide internet access, obviously it will also provide a single IPv6 network, and could be a great opportunity for NAT-less peer-to-peer connections within Starlink only.

I hope @elonmusk chooses wisely.

🌐 À l'origine en anglais



16



217



3,2 k



**Elon Musk** ✓

@elonmusk

Abonné

En réponse à @andrestaltz

Will be simpler than IPv6 and have tiny packet overhead. Definitely peer-to-peer.



# Démo

Rotonde,  
twitter peer to peer

<https://louis.center/p2p-social-networking/>

# Démo

ROTI en peer to peer

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



**Merci**