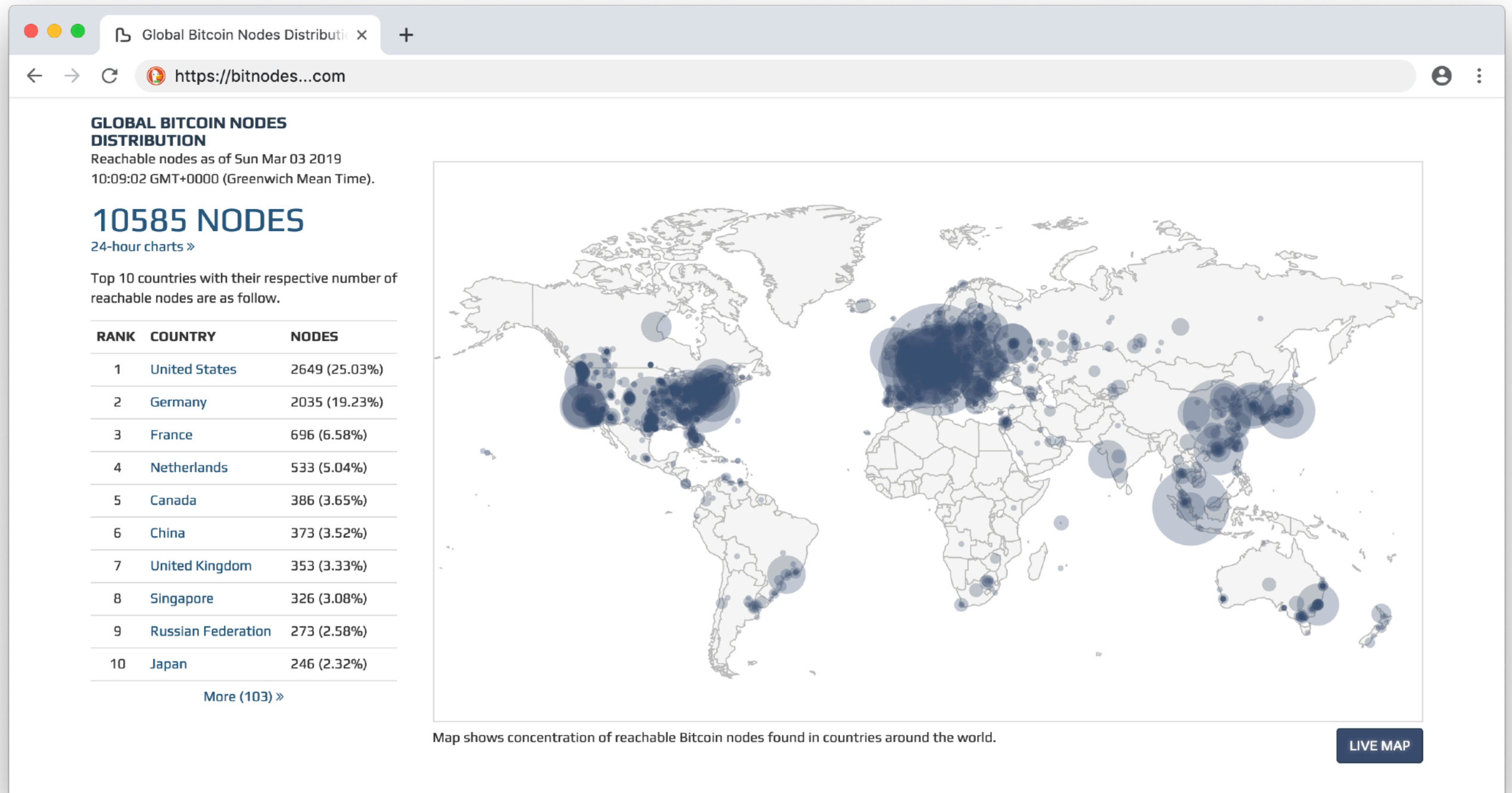


Blockchain Privacy Network Layer

Peer to Peer Network



- Loosely connected network
- Validating nodes / Lightweight clients / Miner




Network Privacy Leakages


- IP addresses of other nodes
- Client version -> Fingerprinting
- Port scans can reveal operating system
- Which transactions are forwarded?
- I see a transaction first from you, are you the originator?

Network Privacy Leakages

BTC Transaction 438c91af6d53e467a03a0a3bb48e1b6b8e5675aa64247d0375ee4b686548617a

← → ↻ 🔒 https://live.blockcypher.com/btc/tx/438c91af6d53e467a03a0a3bb48e1b6b8e5675aa64247d0375ee4b686548617a/ ☆ ⓘ ⋮

 **BLOCKCYPHER**

BTC ▾ Address, transaction or block 🔍 

↔ Bitcoin Transaction

438c91af6d53e467a03a0a3bb48e1b6b8e5675aa64247d0375ee4b686548617a

AMOUNT TRANSACTED

0.02518809 BTC

FEES

0.00000647 BTC

RECEIVED

🕒 3 minutes ago

CONFIRMATIONS ⓘ

🔒 0/6

Confidence ⓘ

43.17%

Miner Preference

LOW

Size

266 bytes

Lock Time

Version

1

Relayed By:

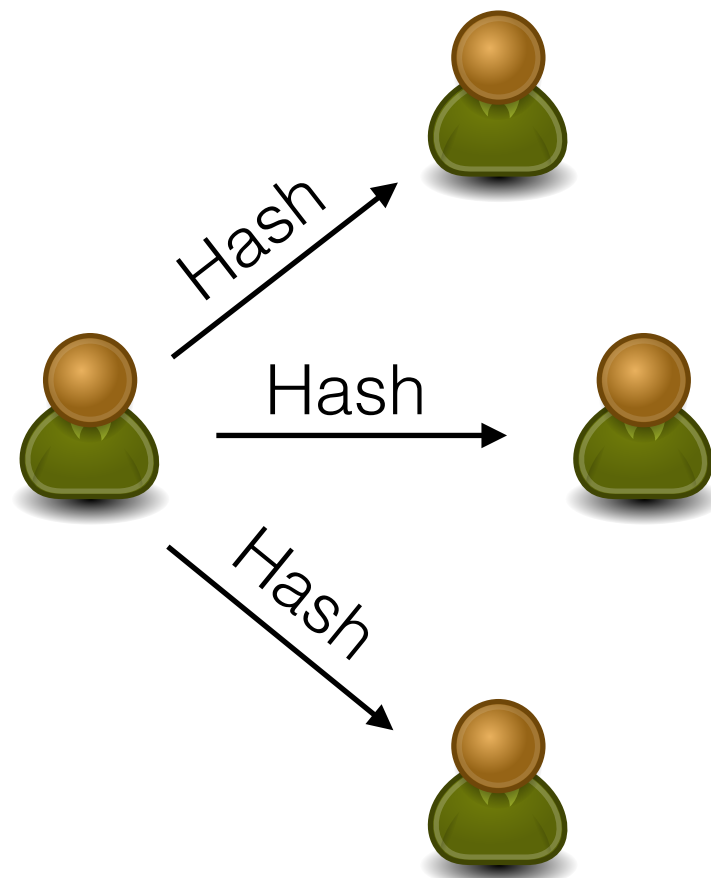
107.20.94.164:8333

</> API Call

🔗 API Docs

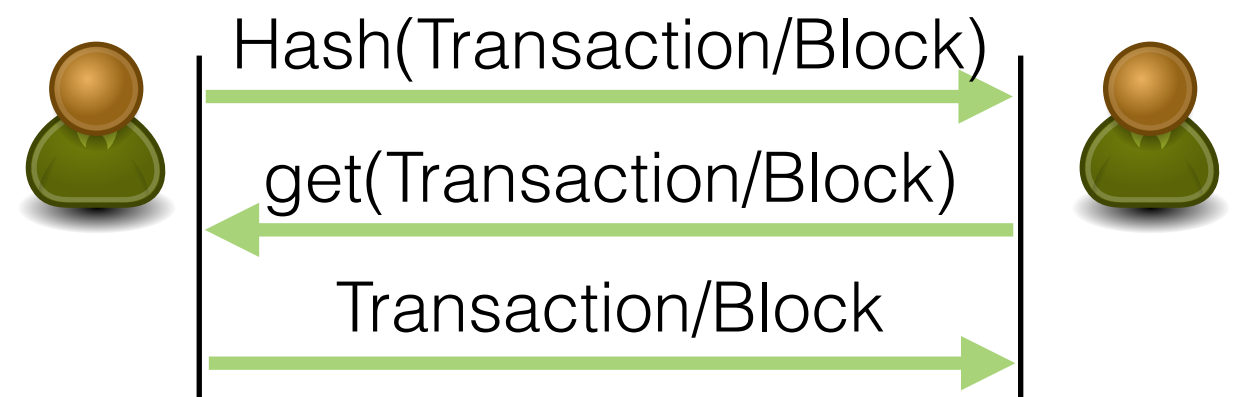
Remember?

1. Transaction/Block hash broadcast



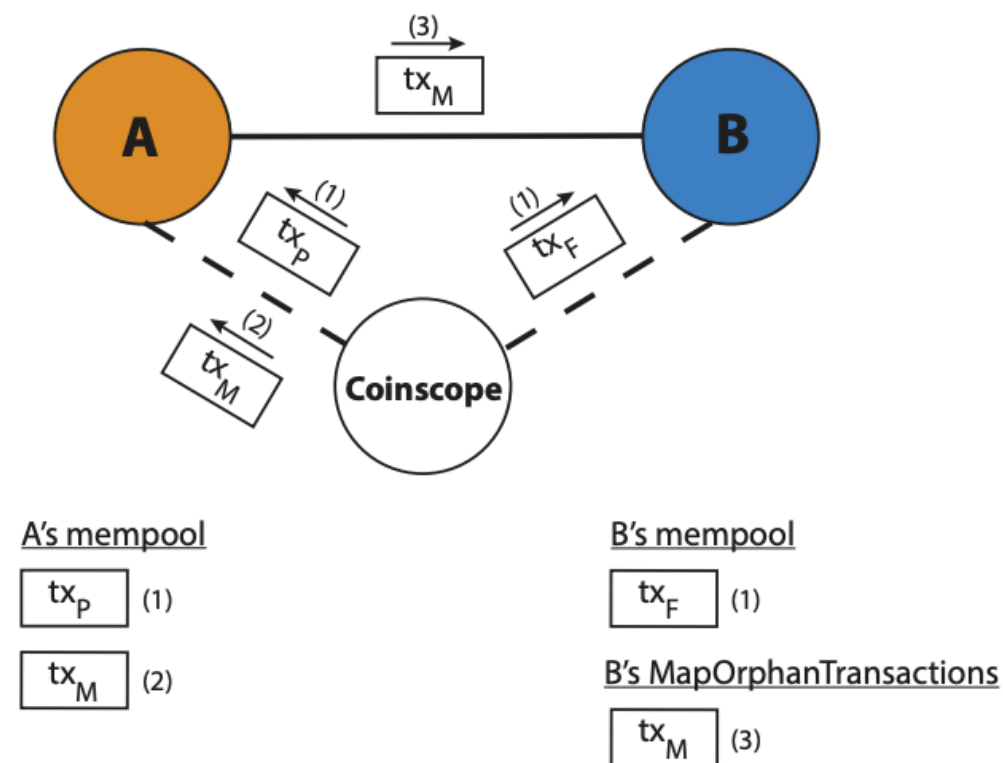
Broadcast

2. Transaction/Block request

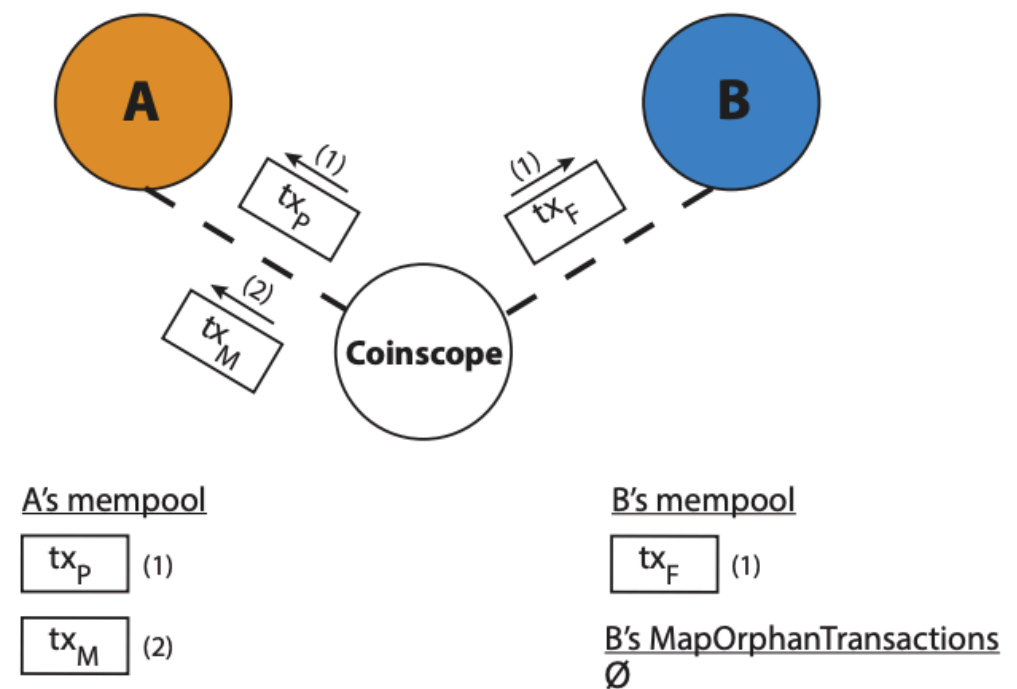


TCP/IP

Port 8333



(a) Basic positive edge inferring technique between two nodes.



(b) Basic negative edge inferring technique between two nodes.