The Path to Decentralization

Why Infura is launching a new decentralized network in 2023

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Infura was created in order to make interacting with Ethereum as easy as possible and to lower the barrier for others to build and deploy dapps.
Infura launched at DevCon2 2016
2016 Feels (and looks) like a Long Time Ago...
Points of Centralization

- Centralized Exchanges
- Fiat On/Off Ramps
- Code Repositories
- Rollups
- Off-Chain Data Troves
- Bridges
Why not start as decentralized?

A centralized system enabled Ethereum development to flourish.

- Technology stack is non-trivial
  - It is more than just a load balancer
- Handle billions of requests per day
  - With quick response time
- Operationally complex
  - Continuous upgrade and upkeep
- Guarantee 99.99% uptime for customers
  - Infura has provided consistently reliable service for over 6 years
2016
Infura launches

2017 - 2018
ICO Bubble

2019
Crypto Winter

2020
DeFi Summer

2021 - 2022
NFTs

2022
Infura announces plan to launch a decentralized infrastructure network

2021
External bug causes service outage

Pressure forces innovation
Decentralization was always the plan
The Node Provider Ecosystem Has Flourished
Decentralization: The gateway to an open future
What does Decentralizing Infura look like?
Infura, the company, will become a partner in a permissionless network alongside all other network operators.
End user

Wants to connect to a Web3 network

Network Participants

- Infrastructure (Node) Providers
  Provides service in return for reward

- Network Status Watchers
  Provides performance and capability reports

- Ingress Nodes
  Sells network resources to users
Infrastructure (Node) Providers

- Commit to provide network capacity
- Specify the protocols and capabilities supported
- Specify the traffic throughput supported
- Compensated for providing service
Infrastructure (Node) Providers

-API Requests
-Consistency System
-Load Balancer
-Blockchain Nodes
-Snapshot System
-Indexers & Accelerators (e.g. event and NFT indexes)
Network Status Watchers

- Periodically test infra providers with a small volume of requests
- Measure performance and correctness
- Report to a federated status page
- Provably incorrect responses can inform penalties
Network Status Watchers

Infra providers

Blockchain Nodes

Periodic tests

Status watcher

Federated status page
Same (web2) UX, Better Results
Web3 UX

Payment via crypto

End user

Ingress node

API Access
On-Chain Registry

```json
{
    "infura": ["arbitrum", "avax", "eth", "optimism", "polygon"],
    "operator_a": ["eth", "polygon"],
    "operator_b": ["near", "solana", "bsc"],
    ...
    "anon": ["bsc", "near", "aurora"]
}
```
On-Chain Registry

Time

Smart contract is deployed
On-Chain Registry

Infrastructure providers register
- Protocols
- Capabilities
- Throughput
On-Chain Registry

- Infra provider #1
- Infra provider #2
- Infra provider #3

Network Watchers Register
- For one or many registered providers
- Protocols
- Capabilities
On-Chain Registry

Consumers purchase throughput
- From one or more providers
Decentralized Architecture

Blockchain API Consumers

On-Chain Registry

Network Watcher

Anon Infra Provider

Ingress

Operator B

Infura

Operator B

Network Watcher

Infura

Operator A

Infra Provider

Ingress

Anon

Operator A

Infra Provider

Network Watcher

Anon

Infura

Operator B

Infra Provider

Network Watcher

Anon

Infura
Decentralized Infrastructure Network

A self-sustaining, reliable, and robust network of infrastructure providers built to serve a high-throughput of blockchain API requests

✔ Remove single point of failure
✔ Collaborative Web3 spirit
✔ Improve reliability for users
✔ Guarantee towards 100% uptime
✔ Same, easy-to-use Web2 UX

Infura is seeking strong Web3 infrastructure providers to work together towards a decentralized future

Apply via QR Code
Thank you!

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