

**Node as a Service and Staking as a Service**  
**NaaS and SaaS**  
**<https://ethereumnodes.com/>**

Operating a personal node can pose technical difficulties for users. Node as a service (NaaS) offers an alternative for users to run their node without the hassle of maintaining their own infrastructure. Node service providers run distributed node clients behind the scenes for users so that they do not have to.

**Positives**

The main benefit for using a node service is not having to spend engineering time maintaining and managing nodes yourself. This allows you to focus on building your product rather than having to worry about infrastructure maintenance.

**Negatives**

By using a node service you are centralizing the infrastructure aspect of your product. For this reason, projects that hold decentralization to the utmost importance might prefer self-hosting nodes rather than outsourcing to a 3rd party.

**There are many popular node services but some noteworthy ones are:**

- **Alchemy** (Most popular ~70% of all DeFi Apps were published via Alchemy nodes).
- **All That Node** (24+ chains, largest fee tier: 150,000 requests daily)
- **Ankr** (Ankr Protocol - open access public RPC API for 8 chains. (40+ chains total)).
- **Chainstack** (Free shared and archive nodes, GraphQL support)
- **DataHub** (largest tier 3,000,000 requests/month)
- **GetBlock** (40+ chains, 40k free daily requests, High connection speed (1GB/s))
- **Infura** (Default for Metamask, acquired by ConsenSys (Ethereum OG))
- **Kaleido** (Customizable clients; GETH, Besu, Quorum etc.)
- **Moralis** (Privacy focused, Excellent Ethereum SDK, Firebase of Crypto, Dev-friendly)
- **Pocket Network** (Decentralized RPC protocol and marketplace)
- **QuickNode** (Industry-leading performance, SOC2 Certified, suitable for enterprise)
- **Tenderly** (Free tier including 25 million Tenderly Units/month, 8x faster reading)
- **ZMOK** (Front-running as a service, global transactions mempool with search filter)

**Node as a service businesses are different to staking as a service businesses.**

**Staking as a service can usually be broken into two different camps:**

**Custodial:**

Custodial staking platforms include entities such as Binance, Gemini and Nexo. These businesses are able to offer users a percentage return on their assets by re-lending the deposited assets to other businesses. Usually custodial platforms carry greater risks and as a consequence offer higher returns to users.

**Non-custodial:**

Non-custodial platforms include entities such as Allnodes, Chorus One, P2P Validator and Stake.Fish. These businesses usually operate by staking their tokens inside of their own blockchain node(s) and get rewards for helping to keep the networks secure.

**The following page offers a more detailed overview of non-custodial staking:**

## Running a Validator Node:

Allows you to contribute to the blockchain network directly, and become a validator.

Validators earn the highest possible staking rewards, and may set their own commissions for providing services to delegators. However, this approach usually requires a significant number of tokens for the start (E.G. 32ETH is required for the Ethereum network), specific technical knowledge, and a lot of effort to remain a proper validator.

## Delegating to a Validator:





















Token delegation to validators is a much easier option to stake assets. Delegators can choose the validator they want to stake with, or manage assets between different validators. But it is important to keep in mind that not validators are equal. They have different fees for their service, and have a different reputation.

**Furthermore, validators that misbehave more frequently than others may show worse performance, putting delegators' assets at risk of slashing or providing lower staking rewards. This incentivises validators to be good-faith actors.**

Delegators usually take anywhere from 5-15% as a commission (oftentimes depending on the network and quantity of tokens).

Users that choose to run their own nodes naturally keep 100% of the profits. If their node is robust enough, they can also decide if they want to offer delegating services and can then consequently charge a commission for their node's reliability.

Below is an example of the top 20 validators for the layer 2 blockchain Oasis Network. It is a privacy preserving blockchain where staked funds are slashed for bad node performance.

Rank	Validator	Escrow ↕	Change(24h) ↕	Delegators ↕	Commission ↕	Status	Sign(1k block) ↕
1	 BinanceStaking	520,738,259.15 (10.59%)	-1,689,539.49	11,707	10.00%	✓	100%
2	 stakefish	353,330,518.41 (7.18%)	+ 228,975.61	11,886	5.00%	✓	100%
3	 Chorus One	242,959,304.04 (4.94%)	+ 293,849.90	3,001	5.00%	✓	100%
4	 Simply Staking	148,257,352.22 (3.01%)	+ 111,154.67	751	10.00%	✓	100%
5	 oasis1qz...w5nt7aj5	139,178,418.81 (2.83%)	+ 22,211.03	69	12.00%	✓	100%
6	 GoStaking	105,528,760.81 (2.15%)	+ 147,678.50	1,317	1.00%	✓	100%
7	 Mars Staking   Long term fee 1%	101,128,537.44 (2.06%)	+ 166,653.54	23,162	1.00%	✓	100%
8	 Forbole	82,634,673.74 (1.68%)	+ 13,187.40	133	20.00%	✓	100%
9	 Bit Cat 🐱	78,492,269.04 (1.60%)	-24,651.75	458	20.00%	✓	100%
10	 Munay Network	76,483,980.38 (1.55%)	+ 12,205.83	41	20.00%	✓	100%
11	 Jr	75,989,197.52 (1.54%)	+ 12,126.87	11	20.00%	✓	100%
12	 P2P.ORG - P2P Validator	72,504,075.13 (1.47%)	+ 11,570.69	160	10.00%	✓	100%
13	 Everstake	71,154,158.10 (1.45%)	+ 10,373.97	296	15.00%	✓	100%
14	 Tessellated Geometry	70,862,852.25 (1.44%)	-602.50	1,944	3.00%	✓	100%
15	 Doorgod	65,889,896.56 (1.34%)	+ 10,515.15	28	20.00%	✓	100%
16	 Citadel.one	65,328,905.68 (1.33%)	-218,614.29	474	5.00%	✓	97%
17	 Hashed x DELIGHT	64,503,697.68 (1.31%)	+ 10,293.93	39	10.00%	✓	98%
18	 Staking Fund	63,235,185.06 (1.29%)	-29,093.14	1,069	15.00%	✓	100%
19	 SerGo	59,801,087.21 (1.22%)	+ 9,543.46	18	20.00%	✓	100%
20	 Nodeasy	58,216,264.11 (1.18%)	-33,400.48	17	18.00%	✓	100%