Validators

General considerations

Important Please check out the [security considerations](#) before using Nethermind as a validator. For Ethereum validators, we highly recommend checking out [Staking with Ethereum](#) and [Validator checklist](#) .

Hardware configurations

The following hardware configurations for Ethereum Mainnet validators have been battle-tested by us and our users. We have observed excellent validator performance and stability with these configurations.

note Before setting up your infrastructure, check out [Nethermind hardware requirements](#) .

On-premises

A single validator on Intel NUC 11:

- CPU: Intel Core i7-1165G7
- Memory: Crucial 32GB DDR4-3200 SODIMM
- Storage: Samsung 980 PRO PCIe NVMe SSD 2TB
- Internet speed: 620 Mbps download, 160 Mbps upload

AWS

Multiple validators on the following EC2 instances:

- [m6i.2xlarge](#)
- : 8 vCPU, 32 GiB memory
- [m7g.2xlarge](#)
- : 8 vCPU, 32 GiB memory

These configurations have proven to work well for 1000-1500 validators and haven't been tested for more validators. Also, the validator clients have been separated from the consensus and execution clients and running on [t4g.small](#) instances.

Azure

Multiple validators on the following VM instances:

- [Standard_D8_v5](#)
- : 8 vCPU, 32 GiB memory
- [Standard_D8ps_v5](#)
- : 8 vCPU, 32 GiB memory

These configurations have proven to work well for 1000-1500 validators and haven't been tested for more validators. Also, the validator clients have been separated from the consensus and execution clients and running on [Standard_D2pls_v5](#) instances.

GCP

Multiple validators on the [c2d-highmem-4](#) instance: 4 vCPU, 32 GB memory

These configurations have proven to work well for 1000-1500 validators and haven't been tested for more validators. Also, the validator clients have been separated from the consensus and execution clients and running on [e2-small](#) instances.

Gnosis validators

To set up a Gnosis Chain validator, you can either do that [manually](#) or use one of the available [one-click tools](#) . [Edit this page](#)