

# 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](#)  
Last updated on Mar 26, 2024 [Previous Health check](#) [Next Aura-based validators](#)