PORTALDOT HACKER HOUSE 2026 · NODE OPERATIONS AND TOOLING

NodeScope

Node truth suite for Portaldot V3

Two pillars. One evidence discipline.

HEALTH FEES EVIDENCE



nodescope.vercel.app · github.com/Firzadf/nodescope

dorahacks.io/build/50146 · demo youtu.be/8dKrHL5f5gs

PROBLEM

A node can answer once. That proves almost nothing.

Health over time

An operator can see a node respond, but cannot prove it stayed healthy, or what changed since the last check.

One operation, two prices

The same operation is priced on the EVM surface and on the native surface, and headline fee numbers hide the difference.

SOLUTION

One build, two pillars, one evidence discipline.

Health

Health Score 0-100 with every point explained. Watch & Discord/Slack alerts. Reports verified by SHA-256.

Fees

One operation priced on EVM and native, side by side. Fee-only and all-in shown as they are.

Nothing polls unless you start Watch. Every score point explained. No simulated data.

DEMO FLOW · 60 SECONDS

From endpoint to verified report in five steps.

01 Open /app. The testnet endpoint is already filled in.

02 Run full diagnostic: connect, health check, capability discovery, Substrate probe, snapshot, combined verdict.

03 Read the verdict and Health Score: a stalled head reads DEGRADED even when every RPC answers, with the lost points named.

04 Compare two snapshots: new and resolved findings, block delta, latency trend.

05 Export the report and verify it at /verify. No account. No wallet.

ON-CHAIN EVIDENCE · PORTALDOT V3 TESTNET · CHAIN 420420777

Three reports anchored. Anyone can recheck them.

REGISTRY	0xd48da7eff3264bdd51a86b873da9ff6997aae99c
DEPLOY TX	0x1c2a055523a4cf8b73d771df4d3c54d21392a85f86a14a4d68213bf6db5f4904

Ownerless contract · Deploy block 216268

Health #1

Anchor block 216341

REPORT	0x08ac72ad0f7a818bc18a8624232811fc4f994cf065bbd2cad1eea4b0bb002df4
TX	0xba35df8e2f182d75885b75b75f0dd97340f4ce64333840d1cf06a252441e9476

Fees

Anchor block 216343

REPORT	0x246d6d43b308b8801109910bb52d8ad8d264376e7c8557255b3704176ada0464
TX	0x0c08335507cfb2a0df4b0236543607aed04527ec26361e6e0022c9100c88f2c9

Health #2

Anchor block 216346

REPORT	0x528f38d58920b2c7fef730c27e95200e429a126874746e8cead5c1146c768a5b
TX	0xc74a08f3835b0c5b7d813ab15597488affa1987bce79a88d843dfdc31a9ec913

Check any anchor at nodescope.vercel.app/verify

FEES FINDING · MEASURED 27 OCT 2026 · CONTRACT DEPLOY

The headline says 804x. The bill says 1.016x.

804x

FEE-ONLY · THE HEADLINE

1.016x

ALL-IN · WHAT YOU PAY

EVM deploy 124.098 tPOT · Native all-in 122.191 tPOT · within 2%

Most of the gap is a 122.037 tPOT storage deposit on the native side. A deposit is a hold, not a burned fee: it is refundable when storage is freed. The EVM figure already folds it in.

tPOT IS A TESTNET TOKEN WITH NO MARKET PRICE.

ENGINEERING

Built to be rechecked, not to be believed.

574 tests across 89 files	Vitest, run on every push. Suite verified 31 Oct 2026.
5/5 Foundry contract tests	The attestation contract, tested in isolation.
CI on Ubuntu and Windows	Node on both; Foundry on Ubuntu.
CLI and GitHub Action	check and fees without the browser; a pre-deploy cost gate teams can run.
Deterministic comparison	Same inputs, same diff. Reports verified by SHA-256.
Read-only by design	No wallet, no signing. Watch runs only when you start it.

ECOSYSTEM CONTRIBUTION

Findings the ecosystem can use, not just a demo.

· Six measured findings for Portaldot, documented with reproduction steps: fee model, deposit semantics, dry-run limits, WSS connect, unavailable equivalents.

· A GitHub Action any team can run as a pre-deploy cost gate.

· An evidence standard: anchored reports anyone can recompute from the repo.

· Adoption outreach prepared. No team results claimed yet.

BUSINESS MODEL

Free to use. Paid when it runs for you.

Free, open source (MIT)

The app, Fee Lab, CLI, GitHub Action, and the attestation registry.

Paid, when there is demand

Hosted monitoring with alerts for node operators. A managed pre-deploy cost gate with history for teams and CI.

Targets: Portaldot builders, node operators, wallets and dApps that need EVM vs native routing.

Sizing, honestly: no total market claimed. Only verified counts are used.

ROADMAP · TEAM

What happens next.

Hosted 24/7 monitoring	Watch & alerts already run in the browser and CLI; hosted, when demand exists.
Pre-deploy cost gate in CI	The GitHub Action as a check teams run before deploying.
Mainnet check	The mainnet profile becomes a live check when a public mainnet EVM RPC is verified.
GitHub Action on Marketplace	Publish the action so any team can add it in one step.

Team: Firza Duta Fauzan, solo builder.

Verify it yourself: nodescope.vercel.app/verify