MAINNET QUALIFIED • 24/7 LIVE DAEMON

Gensyn Delphi 24/7 Autonomous Evidence Miner

Production-hardened TypeScript autonomous agent for primary-source evidence discovery, KL-divergence belief-impact scoring, multi-layer deduplication, and idempotent mainnet submission.

16 / 10
Judged Submissions
160% of arena qualification threshold

16 / 3
Distinct Markets
Broad coverage across Wave-1 pots

67+
Continuous Cycles
0 consecutive errors • 0 HTTP 429s

$7,250
Arena Prize Pool
+ 5× $250 USDC.e Feedback Bounties

End-to-End Autonomous Evidence Pipeline

Fault-tolerant 6-stage architecture separating discovery, scoring, deduplication, rate control, and idempotent delivery.

STAGE 1
Multi-Source Scout
Competition feed, Delphi /v1/* & Grok-8x inbox/pending

→

STAGE 2
KL-Divergence Scorer
Belief-delta EV ranker + verbatim quote & HTTP 2xx QC

→

STAGE 3
Canonical-URL Dedup
URL hash, content SHA-256, fact hash & SimHash64

→

STAGE 4
Circuit Breaker
Per-domain token buckets & 4-fail 45s host isolation

→

STAGE 5
SQLite WAL + DLQ
Pre-flight Idempotency-Key & 5-attempt auto-replay

→

STAGE 6
Live Delphi API
POST /v1/submissions with <= 3-item cap guard

24/7 Supervisor & Storage

daemon.ts

- Crash-restarting `launch-arena.sh` wrapper with atomic `heartbeat.json` telemetry.
- Single-writer SQLite WAL ledger (`ledger.ts`) + append-only JSONL audit logs.
- Atomic `inbox/pending` ingestion with `accepted/` & `rejected/` quarantine.

Sponsor-Aligned Guardrails

verifier.ts

- Live `verifyAndFetchSource` re-verification & verbatim substring quote checks.
- Blocks social-only primary URLs (`x.com`, `reddit.com`) without primary backing.
- Anti-self-cancellation stance lock & strict `note + links + files <= 3` cap.

Resilient HTTP & Idempotency

rate-limiter.ts

- `DomainTokenBucketLimiter` configured for Delphi, FRED, SEC, DefiLlama, CoinGecko.
- Honors `Retry-After` with jittered exponential backoff on 429 / 5xx.
- Replays DLQ items with identical `Idempotency-Key` to prevent duplicate charges.

24/7 Production Resilience Proof

Observed live mainnet execution via `npm run arena:status` and atomic `heartbeat.json` (`pid=66142`, ~6.1h continuous uptime).

67+
Continuous Cycles
0 consecutive cycle errors (`lastError: null`)

0
HTTP 429 Rate Limits
1,308 backoff retries • 394 isolated circuit trips

15 / 15
DLQ Replays Succeeded
pending=0 • retrying=0 • exhausted=0

653+
Dedup Blocks Enforced
665 total blocks preventing redundant spam

OPERATIONAL METRIC	OBSERVED LIVE VALUE	ARENA REQUIREMENT / SLA	STATUS
Supervisor Health	`HEALTHY (ONLINE), pid=66142, uptime=22,055s`	Unattended 24/7 continuous operation	PASS
Qualification Progress	`16 / 10 judged submissions • 16 / 3 distinct markets`	>= 10 judged submissions across >= 3 markets	QUALIFIED
Live Mainnet Ledger	`24 live submissions (0 dry-run) • $45.00 settlement upside`	Real mainnet submissions with active pot exposure	ACTIVE
Dead-Letter Queue (DLQ)	`pending=0, retrying=0, succeeded=15, exhausted=0`	Zero stuck or dropped submissions on transient faults	PASS
Scout Inbox Pipeline	`pending=0, accepted=14, rejected=12`	Clean atomic verification & spam rejection	PASS

5 Submitted API & SDK Engineering Feedback Reports

Dispatched to `POST https://feedback.delphi.fyi/v1/feedback` (`docs/feedback-pack-20261126.json`) with live `X-Request-Id` & `cf-ray` telemetry.

1. API

EvidenceClient & /v1/limits Runtime / Type Defects

`/v1/limits` returns `dailyCapLeft` as string & `dailyCapResetAt: null` (contradicting TS types); undocumented `1+links+files <= 3` cap returns 400; missing `/v1` base path mislabels HTML 404 as `server_error`; `waitForSubmission()` 300s default < 308–1,434s live latency; 64-char truncation strips `.pdf`.

2. MARKETS

entry-state restricted: true Ambiguity & /markets.json Drift

`GET /v1/markets/:addr/entry-state` returns `restricted: true` alongside `canSubmit: true` on open Wave-1 markets, causing defensive agents to self-lock. Static `/markets.json` pots diverge from drained `/entry-state` pots, omit ETag, and use `address` vs SDK `id`.

3. JUDGING

Undocumented duplicate vs irrelevant Slot-Accounting Asymmetry

Live cross-checks prove `verdict: "duplicate"` refunds the per-market slot (`remainingOnMarket: 1`) while `verdict: "irrelevant"` permanently burns it (`cap_reached`), yet both emit identical `status: "judged"` / `not_accepted` with no `slotConsumed` boolean.

4. REWARDS

below_minimum Zero-Pay Opacity & RateLimit-* Collisions

Three accepted primary-source macro submissions on untouched $20.00 pots returned `$0` (`zeroPayReason: "below_minimum"`) with zero numeric thresholds or belief-impact diagnostics. Sequential GETs showed oscillating `RateLimit-Remaining` (85→87→86) and `resetAt` window collisions.

5. DOCS

@gensyn-ai/gensyn-delphi-sdk@2.4.0/2.4.1 Packaging & Auth Gaps

`POST /v1/terms/acceptance` requires `{"termsVersion"}` vs documented `acceptTerms(version)`; `README.md` omits `X-Agent-Harness`/`X-Agent-Model` headers and links to excluded `examples/evidence-starter/`; top-level `dotenvConfig()` mutates `process.env` at import time.

Verification & Engineering Rigor

Deterministic automated test coverage, strict TypeScript compilation, and zero-trust secret hygiene prior to repository freeze.

10 / 10 Suites • 55 / 55 Vitest PASS

npm test

- **Core Engine:** dedup, `verifier`, `quality-scorer`, `evaluator`, `ranker`.
- **Storage & Client:** `client-ledger` (SQLite WAL + DLQ idempotency), `inbox-adapter`.
- **Resilience & E2E:** `chaos` fault injection (429/5xx/timeouts), `connectors`, `e2e-dry-run`.

TypeScript Strict Mode: 0 Errors

tsc --noEmit

- `npm run typecheck` & `npm run build` exit `0` cleanly on `Node.js >= 22.13.0`.
- Zero external native DB bindings — uses built-in `node:sqlite` with strict schema types.
- Defensive runtime adapters (`delphi-adapter.ts`) normalize SDK/API type drift.

Zero Leaked Credentials

gitleaks

- `.gitignore` strictly excludes `.env*`, `data/`, `inbox/{pending,accepted,rejected}/`, `logs/`, `*.sqlite*`, `*.jsonl`.
- Verified via `git ls-files`, `git diff --cached`, and `gitleaks --staged` before commit.
- All feedback packs & docs scrub API keys and private state, keeping only public wallet metadata.

Content & Compliance Guards

QC Gates

- Rejects judge-steering phrases, bloated payloads, and unverified third-party claims.
- Enforces SHA-256 source hashing and verbatim quote substring matching.
- Pre-registered payout wallet & Pilot Terms `2026-11-18` verified on mainnet.

Roadmap & Multi-Wave Market Sniper Design

Scaling from Wave-1 qualification to high-EV early-bird capture across upcoming Delphi competition waves.

1. Multi-Wave Early-Bird Sniper

watch-new-markets.mjs

- Sub-minute polling of `/markets.json` + `/entry-state` to detect newly funded Wave-2+ markets within seconds of launch.
- Prioritize untouched `$20.00` pots before belief saturation reduces marginal payout.
- Pre-warm primary-source connectors (`FRED`, `SEC EDGAR`, `DefiLlama`) by market category.

2. KL-Divergence EV Calibration

ranker.ts

- Replace uniform submission heuristics with expected belief-delta scoring to avoid `below_minimum` zero-pay outcomes.
- Gate Restricted-tier (`remainingOnMarket: 1`) submissions on high-conviction primary evidence only.
- Dynamically weight pot remaining, current market odds, and source authority.

3. Closed-Loop Verdict Telemetry

evaluator.ts

- Ingest live judging verdicts (`accepted`, `duplicate`, `irrelevant`, `below_minimum`) back into `Ranker` weights.
- Leverage `duplicate` slot-refund detection for safe rapid follow-up with distinct primary sources.
- Auto-tune `waitForSubmission()` polling to match observed 308–1,434s judging latency.

4. Multi-Agent Scout Fusion

inbox-adapter.ts

- Combine Grok-8x real-time event discovery with deterministic TypeScript primary-source verification.
- Zero-trust handoff: every scout candidate undergoes live HTTP 2xx fetch, quote matching, and SimHash64 dedup.
- Ready for multi-wave scaling without increasing rate-limit footprint (`0` 429s).