

# Wayforth Whitepaper v6.10

Wayforth Technologies Inc.

## WAYFORTH

### TECHNICAL WHITEPAPER

**Version 6.10 — May 2026** Reflects product release v0.8.3  
“Calibration” (deployed, operational, 99.97% uptime)

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### ABSTRACT

Wayforth is the API runtime for autonomous AI agents. One MCP install gives an agent the ability to discover, pay for, and execute against **4,974 services across 19 categories** — through **298+ production API routes** — without managing keys, accounts, or per-service integration code.

Three layers compose the system. **Discovery** — `wayforth_search()` plus the `WayforthQL/1.1` structured query interface — ranks services using **WayforthRank v2.0**, a multi-signal scoring engine whose primary input is verified payment outcome data. **Payment** — `wayforth_pay()` — routes agent payments through three parallel rails: **Card** (Stripe), **USDC on Base** (non-custodial), and **x402** (Coinbase CDP-facilitated). All three rails earn Wayforth the same 1.5% routing fee. **Execution** — `POST /execute` and `POST /run` — runs the call against the chosen service via Wayforth-managed credentials, the developer’s own BYOK key, or x402-native HTTP.

All three rails earn Wayforth the same 1.5% routing fee, deducted from the provider payout; developers are never charged a per-call fee on top of their subscription. Wayforth is a centralized infrastructure company — WayforthRank is proprietary, rankings are merit-based, and no token or digital asset is issued. Card payments are configured in test mode pending incorporation; USDC and x402 rails are live on testnet with mainnet deployment gated on incorporation completion and audit.

v0.8.3 “Calibration” is the current operational release. The platform runs in production at 99.97% uptime, passes a **190-test end-to-end suite** with zero failures, and has completed a professional security audit (54 findings, all resolved at v0.7.x) and a subsequent adversarial code review (12 findings, all resolved at v0.8.2), with every finding resolved before public launch. An external penetration test is planned ahead of v0.9.0. The infrastructure is operational, observable, and ready for the commerce-layer activations that follow incorporation.

**Tagline:** “One tool call runs any API. No keys. No setup. No friction.”  
**Slogan:** “Any agent. Any service. Any rail.”

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## 1. THE PROBLEM

**AI agents are autonomous. Their payment and discovery infrastructure is not.**

Autonomous agents built on Claude, GPT, Gemini, and other LLMs increasingly need to call external services — translation, inference, weather, search, communications, image generation, speech-to-text, financial data — to complete real tasks. Each external service today still requires a developer to manually:

- Research which APIs exist for a given capability
- Sign up to each service individually
- Manage API keys per service (10 services = 10 key rotations, 10 billing relationships)
- Write integration code adapted to each service's unique format and auth scheme
- Monitor each service for outages and update code when they change
- Reconcile billing across 10+ separate invoices and payment methods

A single agent workflow can touch a dozen external services. The operational complexity compounds. There is no infrastructure today that solves discovery, reliability verification, and payment simultaneously.

### 1.1 The Infrastructure Gap

Wayforth is the first system to combine all three: semantic discovery with reliability verification, a triple-track payment rail that works for mainstream developers (card, no crypto required), crypto-native developers (Base blockchain, non-custodial), and pay-per-call HTTP-native services (x402) — and an execution layer that runs the call without the developer touching the underlying service's authentication.

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## 2. PRODUCT OVERVIEW

## One install. No external API accounts required for managed services.

```
$ uvx wayforth-mcp
# or: claude mcp add wayforth -- uvx wayforth-mcp
```

### 2.1 The Full Workflow

```
# 1 – Discover (natural language)
wayforth_search("translate text to Spanish")
→ DeepL          WRI:82 Tier 2 ✓ $0.00003/call [card | usdc |
x402]
→ LibreTranslate WRI:71 Tier 2 ✓ Free          [card | usdc |
x402]

# 1b – Structured discovery (WayforthQL/1.1 – Starter+)
POST /query {"query": "translate text", "tier_min": 2,
            "price_max": 0.001, "sort_by": "wri"}

# 2 – Pay (one call, three rails)
wayforth_pay(service_id, amount_usd=0.001)           # Card
(default)
wayforth_pay(service_id, amount_usd=0.001, track="usdc") # USDC
on Base
wayforth_pay(service_id, amount_usd=0.001, track="x402") # x402
native

# 3 – Execute (managed key or BYOK)
POST /execute {"service_slug": "deepl",
              "params": {"text": "Hello", "target_lang": "ES"},
              "key_source": "managed"}
→ {translated_text: "Hola", calls_remaining: 3499}

# 3b – Or one-call task execution
POST /run {"task": "translate 'Hello' to Spanish"}
→ {result: "Hola", service_used: "deepl", calls_remaining: 3499}

# 4 – WayforthRank updated with payment + execution outcome signal
```

### 2.2 Current State (May 2026, v0.8.3 – “Calibration”)

Metric	Value
Catalog services	4,974 across 19 categories
Tier 2 verified count	3,551 live via GET /system/health — auto-demoted on 3 consecutive probe fails
x402-native services	277
System uptime (30 days)	99.97%
Routing fee	1.5% on every payment, all three tracks — deducted from provider payout
Patents (provisional, USPTO)	3 filed
Subscription plans	Free · Builder \$12 · Starter \$29 · Pro \$99 · Growth \$299 (monthly)
Managed services (Tier 1)	15 live · 2 additional in queue (see §8.1)
BYOK encryption	Fernet (AES-128-CBC + HMAC-SHA256), encrypted at rest
Smart contracts	Live on Base Sepolia testnet · mainnet pending

	incorporation
Card payments	Stripe configured in test mode · live mode pending incorporation
API surface	298+ production routes · 9 MCP tools via wayforth-mcp v0.8.2 on PyPI
End-to-end test coverage	190 passing, zero failures — see §16
Security audits	54-finding audit (v0.7.x) + 12-finding audit (v0.8.2), all resolved — see §16

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## 2.3 Three Architectural Layers

Wayforth is not a directory, a marketplace, or a payment processor. It is the runtime layer in between, composed of:

- **Discovery** — semantic search (`wayforth_search`) plus structured query (WayforthQL/1.1 via `POST /query`), both returning ranked results with WRI scores, pricing, and per-service payment-rail availability.
- **Payment** — `wayforth_pay()` with three explicit track modes plus an auto mode that dispatches based on service capability and developer preference.
- **Execution** — `POST /execute` for service-specific dispatch with explicit parameters, `POST /run` for natural-language task routing across the managed catalog.

## 2.4 Service Execution Tiers (the “Tier 1 / Tier 2 / Tier 3” of Execution)

These execution tiers describe *how the agent reaches the service*, distinct from the WayforthRank coverage tiers (Tier 0-3) in §11.

- **Tier 1 — Wayforth Managed (15 services live):** Wayforth operates the API key. Agents call via `POST /execute` or `POST /run` with no developer account at the underlying service. Plus free no-key services: arXiv, PubMed, REST Countries, Nominatim, Open Library.
- **Tier 2 — BYOK (any of 4,974 services in catalog):** Developer adds their own API key via `POST /call/keys/add` (Builder+ tier required). Wayforth proxies, retries, and monitors. Keys are stored with Fernet encryption at rest and decrypted only at the moment of dispatch.
- **Tier 3 — x402 Native (277 services in catalog):** Services that implement the x402 protocol — payment happens at the HTTP layer with no key or account needed. Coinbase CDP facilitates settlement.

## 2.5 Cross-Rail Proxy

Agents paying USDC against a service that only accepts fiat (or vice versa) are routed transparently. Wayforth converts at the rail boundary at no additional fee — the standard 1.5% routing fee is the only fee charged.

## 2.6 Agent Billing Permissions

Three modes give developers control over how autonomously their agents can spend:

- **Manual** — every payment requires explicit human approval before dispatch
- **Auto top-up** — balance refills automatically when below a

configured threshold

- **Full autonomy** — agent pays and executes without interruption, within configured per-call and per-day caps

## 2.7 Market Context — Protocols Validate the Category, Not the Runtime

The April 2026 donation of Google’s AP2 to the FIDO Alliance, alongside Stripe’s Agentic Commerce Protocol in ChatGPT, validates the agentic payments market Wayforth operates in. These protocols solve the authorization and settlement layer — whether an agent is permitted to pay and how money moves. They do not address the discovery and execution layer: which of thousands of available APIs an agent should call, how to manage credentials for non-x402-native providers, or what happens when execution fails. Wayforth occupies this runtime layer, routing on top of x402 and card rails the same way any application routes on TCP/IP.

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## 3. DISCOVERY LAYER — wayforth\_search() AND WAYFORTHQL

### 3.1 Platform Releases

Since the initial whitepaper publication, Wayforth has shipped through **v0.8.3** — the current operational release. The release history covers integrity hardening, intelligence upgrades, catalog expansion, security hardening, the developer-platform layer, the v0.6.9 strategic clarity release that retired the \$WAYF token plan in favor of a centralized infrastructure model, the v0.7.x security-and-scale series that culminated in a 54-finding professional audit cycle, the v0.8.0 Gravity release that added an OpenAI-compatible LLM gateway and final non-custodial hardening of WayforthEscrow, the v0.8.1 Pioneer Program release that introduced a two-sided cold-start mechanism, and the v0.8.2 Hardening release whose 12-finding adversarial code audit was resolved in full before launch. Full release notes are available at [wayforth.io/changelog](https://wayforth.io/changelog) and in §19 Roadmap.

Version	Theme	Tests
v0.5.0	Integrity	102/102
v0.5.1–5.4	Stability patches	102/102
v0.6.0	Intelligence	120/120
v0.6.1	Catalog expansion	120/120
v0.6.2	Security hardening	130/130
v0.6.8	Platform	136/136
v0.6.9	Focus (token plan retired)	136/136
v0.7.0–v0.7.8	Scale, audit, hardening	190+
v0.7.9	Pre-Mainnet Security Hardening	190+
v0.8.0	Gravity	190+
v0.8.1	Pioneer Program	190
v0.8.2	Hardening	190
v0.8.3	Calibration — current	190

**v0.6.0 — Intelligence** added: streaming inference via Server-Sent Events, parallel batch execution across up to 5 services, WayforthQL v1.1 with latency/region/payment-rail filters, live WRI scoring from real service health data, Redis-backed rate limiting for multi-replica scale, an enterprise tier, full OpenAPI specification, and 13 new API

endpoints. **v0.6.1 — Catalog Expansion** added 755 premium services and 251 new x402-native services. **v0.6.2 — Security Hardening** stripped internal pricing fields from all responses, rotated the admin key, added WayforthQL sort by validation, and enforced rate limiting on /search, /query, /run. **v0.6.8 — Platform** was the largest single release since v0.5.0: usage forecasting, service favorites, referral program, team accounts, invoice generation, usage alerts at 80%/95%, self-serve key rotation, the **Provider Dashboard** (new B2B product at wayforth.io/providers/login with Overview / Queries / Performance / Competitors / Agents / Account tabs), and expanded admin panel covering provider management and full catalog services management. **v0.6.9 — Focus** retired the \$WAYF token plan, formalized the WayforthRank integrity policy, and simplified the routing-fee model to a flat 1.5% from the provider pool. **v0.7.0 - v0.7.8** brought the catalog from approximately 3,000 services to **4,974**, raised Tier 2 verified count from 800+ to **3,551**, completed a full **professional security audit** that produced **54 findings (all addressed before public launch)**, hardened the webhook idempotency path against double-credit on Stripe retry, added Fernet AES-128 encryption to all stored API keys, restructured the auth layer to rotate session tokens on every refresh, added per-account admin login lockout, and shipped database performance work (hot-path indexes, concurrent WRI alerts, eliminated blocking sleeps in the subscription submit flow). The current release supports self-healing execution: failed calls retry automatically and credits are restored if a call fails mid-execution.

## 3.2 Natural-Language Search

wayforth\_search() accepts free-form intent and returns ranked services.

```
wayforth_search("fast LLM inference for coding tasks")
→ Groq      WRI:82 Tier 2 ✓ $0.00001/call  inference
→ Cerebras  WRI:80 Tier 2 ✓ $0.0000006/call inference
→ Lepton AI WRI:78 Tier 2 ✓ $0.000001/call  inference
```

Each result carries: - WRI score (0-100), execution tier, category, pricing - payment\_options: {card, usdc, x402\_supported} - Verification provenance (last probe time, failure count)

## 3.3 The 19 Service Categories

inference · search · data · translation · image · audio · communication · payments · productivity · maps · identity · devops · legal · healthcare · real\_estate · social · analytics · code · embeddings

## 3.4 WayforthQL/1.1 — Structured Discovery

Where wayforth\_search() accepts natural language, **WayforthQL** accepts structured JSON with explicit constraints — tier requirements, price ceilings, protocol preferences, sort order, and (as of v1.1) latency, region, and payment-rail filters. The protocol spec is open; the engine is closed.

```
POST /query
{
  "query": "fast LLM inference",
  "tier_min": 2,
  "price_max": 0.001,
  "sort_by": "wri"
}
→ {
  "protocol": "WayforthQL/1.1",
```

```

    "filters_applied": {"tier_min": 2, "price_max": 0.001,
"sort_by": "wri"},
    "results": [...] // ranked services with WRI, pricing,
payment_options
  }

```

POST /query is gated to Starter+ subscribers. Invalid sort\_by values are rejected with HTTP 422 (added in v0.5.0); query strings over 500 characters return HTTP 400.

Agents that adopt WayforthQL are structurally integrated into Wayforth — their queries carry explicit constraints that compound into the WayforthRank payment signal. WayforthQL/2.0 (planned 2027+) will add capability-level filtering.

### 3.5 Coverage Tier System (WayforthRank, distinct from Execution Tiers)

Tier	Requirement	Verification	Status
Tier 0	Discovered, listed	URL format only	All indexed services
Tier 1	HTTP response confirmed	At least one probe success	Subset
Tier 2	90%+ uptime over 7 days	Probed every 6h, auto-demoted	Live count via GET /system/health
Tier 3	KYB verified + SLA	Business identity confirmed	Planned Q4 2026

**Auto-demotion:** services failing 3 consecutive probes are demoted to Tier 1 automatically with no human intervention.

## 4. PAYMENT RAIL — wayforth\_pay()

Three parallel tracks, one routing fee. Developer picks based on infrastructure preference.

```

# Track A – Card (default)
wayforth_pay(service_id, amount_usd=0.001)
→ {status: "ok", calls_remaining: 3499}

# Track B – USDC on Base (non-custodial)
wayforth_pay(service_id, amount_usd=0.001, track="usdc")
→ {approve_calldata: "0x...", payment_calldata: "0x...", network:
"base"}

# Track C – x402 (auto-detected on supported services)
wayforth_pay(service_id, amount_usd=0.001, track="x402")
→ {payment_track: "x402", facilitator: "Coinbase CDP"}

```

### 4.1 Routing Fee Structure

Component	Value	Note
Routing fee	1.5%	Flat, all tracks, per payment
Wayforth revenue	100%	Of routing fee, always
Fixed fee	\$0.00	Per-call micropayments

**Provider share:** providers receive **98.5% of every gross payment**. The 1.5% routing fee is the only deduction. No token mechanics. No split.

## 4.2 Payment Method Bonuses

Different rails carry different effective economics for developers paying for additional calls beyond their subscription:

Method	Bonus	Note
Card	baseline	Standard
USDC on Base	+5%	Stripe fees saved, passed on

Note: image generation and TTS calls consume roughly 10-40× more of the monthly allowance per call than inference or search; the bonus applies uniformly.

## 5. TRACK A — CARD (STRIPE TREASURY)

Developer pays with a credit card. Stripe Treasury backs the balance. Wayforth instructs payouts to services. The developer never touches crypto.

### 5.1 Architecture

Developer card payment

→ Stripe processes

→ Stripe Treasury financial account (FDIC-insured pass-through)

→ Wayforth credits developer's balance in the database

→ Agent calls `wayforth_pay(service_id, amount_usd)`

→ Wayforth deducts call quota + instructs

Stripe Treasury payout

→ Service receives payment in USD

→ WayforthRank updated with

verified-payment signal

### 5.2 Why Stripe Treasury

The fundamental regulatory challenge: holding developer funds and routing them to services constitutes money transmission, requiring state-level Money Transmitter Licenses (MTLs) in 49 states (12-18 months, \$300K+ in legal/operational cost). Stripe Treasury solves this — Stripe is the licensed money transmitter. **Wayforth's regulatory exposure on Track A: zero.**

### 5.3 Stripe Treasury Eligibility — Wayforth Qualifies

- US business physically operating from a US address: ✓ (Las Vegas, Nevada)
- US-based leadership: ✓ (US-citizen leadership, headquartered in Las Vegas, Nevada)
- B2B platform use case (not consumer): ✓ (selling to developer businesses)
- Custom dashboard (not Stripe-hosted): ✓ ([wayforth.io/dashboard](https://wayforth.io/dashboard))

**Status:** Stripe subscription billing is configured in test mode and will go live at the v0.9.0 Commerce release, concurrent with company incorporation. Float yield via Stripe Treasury will be evaluated

following incorporation and initial banking relationship establishment.

## 5.4 Subscription Billing

Track A also handles the monthly subscription product itself (Free / Builder / Starter / Pro / Growth — see §10). Subscriptions are configured via standard Stripe checkout in test mode; live billing activates at the v0.9.0 Commerce release (see §19).

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## 6. TRACK B — USDC ON BASE (NON-CUSTODIAL)

Developer holds their own Base wallet with USDC. `wayforth_pay()` returns `calldata`. The agent broadcasts from its own wallet. Wayforth never holds funds.

### 6.1 Architecture

Developer funds Base wallet with USDC

- Agent calls `wayforth_pay(service_id, 0.001, track="usdc")`
- Wayforth returns:
  - `approve_calldata`: approve USDC to WayforthEscrow
  - `payment_calldata`: call `routePayment()` on WayforthEscrow
- Agent broadcasts both transactions from its own wallet
- WayforthEscrow:
  - Verifies payment amount
  - Sends (amount - 1.5%) to service wallet
  - Retains 1.5% routing fee in contract (all to Wayforth operations)

### 6.2 Non-Custodial Properties

- Wayforth never holds developer USDC — funds remain in the developer's wallet until on-chain settlement
- Wayforth never holds private keys — developers (or their agents) sign their own transactions
- Settlement is on-chain and publicly verifiable on Basescan
- Every payment is independently auditable
- **Wayforth's regulatory exposure on Track B: zero — pure infrastructure, not money transmission**

### 6.3 USDC Contract Addresses (Verified Against Circle)

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Network	USDC Contract Address
Base Mainnet	0x833589fCD6eDb6E08f4c7C32D4f71b54bdA02913
Base Sepolia	0x036CbD53842c5426634e7929541eC2318f3dCF7e

---

Verify at [circle.com/usdc](https://circle.com/usdc).

### 6.4 USDC Subscription Top-Up

Builder+ tier subscribers can top up their monthly call quota in USDC and receive a +5% bonus, reflecting Stripe processing fees that are not paid on the USDC rail.

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## 7. TRACK C — x402 NATIVE (COINBASE CDP)

For services that natively implement the x402 protocol, Wayforth auto-detects support from search results and routes accordingly. Payment and API access happen in a single HTTP loop.

### 7.1 The x402 Loop

1. Agent makes HTTP request to an x402-enabled API endpoint
2. Server responds: **HTTP 402 Payment Required** (amount, currency=USDC, recipient address)
3. Wayforth client signs payment and resends with a PAYMENT-SIGNATURE header
4. Coinbase CDP facilitator verifies and settles on-chain
5. Server delivers the requested resource

The entire flow: one HTTP round-trip. No subscription required. No service account required.

### 7.2 x402 Catalog

- **277 verified x402 services in the Wayforth catalog**, sourced from community-maintained x402 directories including x402scan.com, Agentic.Market, and Pay.sh, as well as direct integration with Coinbase Developer Platform
- Notable adopters in the broader ecosystem: AWS, Cloudflare, Stripe, Exa, Nansen, Bitrefill
- Google AP2 includes x402 as an extension for agent-based crypto payments

### 7.3 Wayforth as x402 Router

- **Detection** — search results carry an x402\_supported flag per service
- **Routing** — the auto-track mode dispatches the x402 flow when supported
- **Earnings** — Wayforth earns a discovery/routing fee on x402 payments
- **Account-free** — no Wayforth service account is required for x402 services
- **Compliance** — Coinbase CDP is the licensed facilitator.  
**Wayforth's regulatory exposure on Track C: zero.**

Status: x402 detection and routing are live. Full Coinbase CDP facilitator wallet integration is targeted for Q3 2026.

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## 8. EXECUTION LAYER — MANAGED, BYOK, x402 NATIVE

### 8.1 Tier 1 — Managed Services (15 Live, 2 in Queue)

Wayforth holds the API key. The agent calls POST /execute (or POST /run) with no developer account at the underlying service.

**Live (15):** Groq · Together AI · DeepL · Serper · Tavily · Brave · OpenWeather · Alpha Vantage · Jina AI · AssemblyAI · Stability AI · Resend · Firecrawl · Mistral · Gemini

**In queue (2):** Perplexity · ElevenLabs

**NewsAPI:** Available in the BYOK catalog (Tier 2) only. Wayforth does not operate a managed key for this service — developer plan Terms of Service prohibit the resale/proxy model that managed-key operation would constitute.

Plus free, no-key services: **arXiv · PubMed · REST Countries · Nominatim · Open Library.**

#### **Per-call input limits (Tier 1 only, v0.8.0):**

- DeepL: 2,000 characters per call
- ElevenLabs: 500 characters per call
- AssemblyAI: 10 minutes of audio per call
- Stability AI: 1 image per call

Requests exceeding these limits return HTTP 413 with a message directing developers to BYOK (Tier 2) for larger payloads. These limits protect managed-service margin from adverse selection on character-density and token-heavy use cases.

## **8.2 Tier 2 — BYOK (Bring Your Own Key)**

Available for any of 4,974 services in the catalog. Developer adds their key via `POST /call/keys/add` (Builder+ tier). Wayforth manages, proxies, retries, and monitors.

- **Encryption at rest:** Fernet (AES-128-CBC with HMAC-SHA256) keyed by `ENCRYPTION_KEY` in the deployment environment
- **Storage:** `user_service_keys` table; never stored or logged in plaintext when encryption is configured
- **Persistence:** newly added keys appear immediately in `GET /call/keys` (race condition fixed in v0.5.0)
- **Removal:** `DELETE /call/keys/{slug}` revokes a key; subsequent calls fall back to managed (where available) or fail explicitly

## **8.3 POST /run — One-Call Task Execution**

`POST /run` accepts a natural-language task and routes it to the appropriate managed service automatically. Internally, the runner uses an intent classifier to choose a service slug and parameters, then dispatches via the Tier 1 path.

```
POST /run {"task": "translate 'Hello' to Spanish"}
→ {result: "Hola", service_used: "deepl", calls_remaining: 3499}
```

In v0.5.0, translation-intent routing was corrected to dispatch to DeepL by default.

## **8.4 OpenAI-Compatible LLM Gateway (v0.8.0)**

`POST /v1/chat/completions` accepts standard OpenAI-format requests and routes them to the appropriate managed inference provider. Supported model prefixes: `groq/`, `together/`, `mistral/`. Unprefixed model names are routed automatically by WayforthRank.

**Automatic failover chain:** Groq → Together AI → Mistral. If the requested provider fails, the next available provider handles the call transparently. The response includes `x-wayforth-provider` and `x-wayforth-fallback` response headers indicating which provider executed the call.

**Streaming:** Supported via SSE (`stream: true`). Credits are deducted only after a stream completes successfully — no charge on mid-stream failures.

**Positioning:** Wayforth's LLM gateway provides OpenAI-compatible inference routing across managed providers with automatic failover — a feature of the broader runtime, not the product itself.

## 8.5 Failure Modes (Hardened in v0.5.0)

- **Ranker failures** return HTTP 503 gracefully instead of crashing the worker
  - **Validation errors** on /search and /query return HTTP 400 (length) or 422 (invalid sort\_by)
  - **DB connection pool exhaustion** under concurrent load is fixed (one connection per request)
  - **Rate limits:** 15 req/min per IP on /search, /query, and /run
- 

## 9. SMART CONTRACTS

Current deployment: **Base Sepolia testnet only**. Mainnet deployment is conditional on independent security audit completion, targeted Q3 2026. All mainnet contract addresses are TBD pending audit.

### 9.1 WayforthEscrow

The primary contract for Track B payments. Handles non-custodial USDC routing with automatic fee capture.

```
function routePayment(  
  bytes32 serviceId,  
  uint256 amount,  
  address serviceWallet  
) external;
```

- Pulls USDC from agent's wallet (pre-approved)
- Calculates routing fee = amount × 1.5%
- Sends (amount - fee) to service wallet
- Retains fee in contract for periodic split
- Emits PaymentRouted(serviceId, agent, amount, fee)

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Network	WayforthEscrow Address
Base Sepolia	0xE6EDB0a93e0e0cB9F0402Bd49F2eD1Fffc448809
Base Mainnet	TBD — pending audit

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### 9.2 Planned Contracts (Post-Mainnet)

- **WayforthRegistry** — on-chain service registration and reputation scores (no token required)

No registry contracts have been deployed. All [TBD] addresses are unverified and will be published only after audit.

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## 10. SUBSCRIPTION PLANS & TIER GATING

### 10.1 Plans

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Plan	Price	Credits / Month	Notes
Free	\$0	100	No credit card required

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Builder	\$12/mo	6,000	
Starter	\$29/mo	21,000	
Pro	\$99/mo	72,000	Best value
Growth	\$299/mo	240,000	

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Payments in USDC on Base receive a **+5% credit bonus** (1.05× multiplier applied at payment confirmation); Stripe processing fees saved are passed through. Service calls draw from the monthly credit allowance at a service-specific cost — see §16.1 for the credit-cost schedule and §15.2 for processing-fee economics.

## 10.2 Feature Gating (Enforced Across 298+ Routes)

Tier gating is enforced server-side via `tier_gates.py`. The matrix below is the canonical surface; gating is uniform regardless of whether a feature is reached via REST, MCP, or SDK.

Feature	Free	Builder	Starter	Pro	Growth
<code>wayforth_search / /search</code>	✓	✓	✓	✓	✓
<code>POST /execute (managed)</code>	✓	✓	✓	✓	✓
<code>POST /run</code>	✓	✓	✓	✓	✓
Leaderboard, status, balance	✓	✓	✓	✓	✓
<code>BYOK (/call/keys)</code>	✗	✓	✓	✓	✓
Webhooks	✗	✓	✓	✓	✓
Agent-ID tagging	✗	✓	✓	✓	✓
<code>/account/agents</code>	✗	✓	✓	✓	✓
WRI alert webhooks	✗	✓	✓	✓	✓
USDC top-up	✗	✓	✓	✓	✓
<code>/compare (side-by-side)</code>	✗	✗	✓	✓	✓
<code>/account/analytics</code>	✗	✗	✓	✓	✓
<code>WayforthQL (/query)</code>	✗	✗	✓	✓	✓
WRI scores visible	✗	✗	✗	✓	✓
Priority execution	✗	✗	✗	✓	✓
Agent identity / reputation	✗	✗	✗	✓	✓
Custom services	✗	✗	✗	✗	✓
No rate limits ( <code>/search</code> , <code>/query</code> , <code>/run</code> 15 req/min cap waived)	✗	✗	✗	✗	✓

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The provider dashboard (§13) is a separate B2B product, not a developer subscription tier.

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## 11. WAYFORTH RANK v2.0 — THE RANKING ENGINE

WayforthRank scores every service on a 0-100 scale. Real payment outcomes are the dominant signal. The more agents use Wayforth to pay for services, the more accurate rankings become.

### 11.1 WRI Score Components

Total possible 108, capped at 100.

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Signal	Max Points	Source
Base score	+50	All indexed services
Tier 2 verified (90%+ uptime over 7d)	+20	Auto-probe every 6h
Zero failures (30-day rolling)	+10	Probe history
Probed within 24h	+10	Freshness signal
x402 protocol support	+5	x402_supported flag in services table
Agent search frequency (7-day)	+5 max	search_analytics table
<b>Payment conversion signal</b>	<b>+8 max</b>	<b>search_outcomes — verified payments only</b>

## 11.2 The Payment Conversion Signal — The Moat

The payment conversion signal is the most important and most defensible component. It only accumulates from verified payment events:

- **Track A:** Stripe receipt verified server-side before search\_outcomes is updated
- **Track B:** on-chain transaction hash verified against WayforthEscrow PaymentRouted events
- **Track C:** Coinbase CDP facilitator confirmation before search\_outcomes is updated

A service ranking 4th by uptime metrics may rank 1st by WRI if agents consistently choose to pay for it. The signal cannot be gamed without spending real money in volume — which would itself feed Wayforth’s revenue.

## 11.3 Why This Defends

- **Patent protection** covers the payment-signal ranking mechanism (provisional, USPTO)
- **Network effect:** more agents → more verified payments → better rankings → more agents
- **Verified signals** require real money, not engagement proxies — a fundamental departure from existing API directories that rely on click-through, ratings, or self-reported uptime

## 11.4 Recalculation

WRI scores are recomputed continuously as new probes and payment events arrive. An admin endpoint (POST /admin/rank/recalculate) can force a full pass.

## 11.5 WayforthRank Integrity Policy

WayforthRank is a proprietary, centralized ranking system built and operated by Wayforth Technologies Inc. Rankings are determined exclusively by verified payment signal, uptime, latency, and recency. This is a permanent operational guarantee:

- No service can pay to rank higher
- No sponsored placements exist in search results
- No advertising model influences rankings
- The only path to a higher WRI score is better real-world performance

This policy is legally enforceable through Wayforth's Terms of Service and is auditable — the payment signal requires real money to accumulate, making manipulation structurally expensive and self-defeating.

**Provider staking — clarification.** Should Wayforth introduce a provider staking program in the future (for example, as part of Tier 3 verification), staking will grant **only** a Verified Provider badge and dedicated directory placement. Staking will **never** affect ranking position. WayforthRank is merit-only, always — this is non-negotiable and permanent.

Wayforth is a centralized infrastructure company. Rankings are Wayforth's proprietary product, the same way PageRank is Google's. The integrity of that product is Wayforth's core commercial interest.

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## 12. AGENT IDENTITY & REPUTATION

A dedicated identity and reputation surface for autonomous AI agents — distinct from the human developer who deployed them.

### 12.1 What It Solves

API services today verify human developers, not the agents the developers run. As agents take more autonomous actions, services need a way to trust *the agent itself* — its history, its payment record, its discovery patterns — independent of whether the developer who deployed it is reachable.

### 12.2 How It Works

- Agents register identifiers via the agent-tagging system (Builder+ tier feature)
- The `agent_identities` table stores reputation scores derived from execution history, payment-success ratios, and category diversity
- Reputation grows over time with verified usage; it is non-transferable across agents
- Pro+ subscribers can read reputation scores in API responses; services receiving payments can condition their behavior on agent reputation

### 12.3 Current State

The identity system is live and accumulating data. On-chain anchoring of reputation (planned via WayforthRegistry) is post-mainnet — no token is required for registry participation.

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## 13. PROVIDER DASHBOARD

A **separate B2B product** for API service providers — not a developer subscription tier.

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Plan	Price	Features
Observer	Free	Basic analytics on the provider's services
Intelligence	\$99/month	6 intelligence endpoints (cohort + flow analytics)
Premium	\$299/month	Full access, priority support, custom alerts

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Confirmed routes (all live): /providers/register, /providers/login, /providers/verify, /providers/dashboard, /providers/upgrade. The bare /providers URL redirects to registration.

The provider dashboard exists to convert the data Wayforth already collects (search demand, ranking position, payment outcomes) into a paid product for the providers being ranked. It is also the channel through which Tier 3 KYB verification and SLA agreements will flow once that program opens (Q4 2026).

**Launch Boost (Intelligence and Premium plans).** Intelligence and Premium subscribers receive a one-time, lifetime Launch Boost — a time-bounded window of elevated WayforthRank visibility included in the provider subscription. See §14 Pioneer Program for full mechanics.

**Provider service management (v0.8.2).** Providers can add, edit, and soft-delete services from their dashboard after registration. Soft-deletion preserves historical ranking signal and analytics while removing the service from active discovery and routing.

**Annual billing (v0.8.3).** Intelligence and Premium plans are available on annual billing at a 17% discount — **Intelligence \$82/mo** and **Premium \$249/mo** when billed annually (versus \$99 and \$299 monthly). The included Pioneer Program Launch Boost is unchanged on annual plans.

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## 14. PIONEER PROGRAM

The Pioneer Program is a two-sided incentive mechanism that addresses the cold-start problem for new catalog entrants. Introduced in v0.8.1, it operates on both sides of the marketplace — developers and providers — and is fully disclosed in every API response it influences.

### 14.1 Developer Side

Developers opt into the Pioneer Program from their dashboard. While enrolled:

- **60% of API calls are routed toward newly verified providers** in their active Launch Boost window (Tier 2 verified, boost active). The remaining 40% route through unmodified WayforthRank.
- **15% bonus credits are dripped daily** into the developer's balance — 30 credits/day on Builder, 105 on Starter, 360 on Pro, 1,200 on Growth.
- **A 7-day cooldown applies on exit**, preventing join/leave cycling.
- **Enrollment is indefinite** — developers remain enrolled until they choose to exit; there is no expiry.
- **Developers can exit at any time.** Accumulated credits are kept.

### 14.2 Provider Side

Intelligence and Premium Provider Dashboard subscribers receive a **one-time Launch Boost**:

- **Intelligence (\$99/mo):** 15-day window at **+10 WRI** during the boost period.
- **Premium (\$299/mo):** 30-day window at **+20 WRI** during the boost period.

**Eligibility and constraints:**

- Tier 2 verification is required to activate the boost.
- The boost auto-pauses if uptime drops below the Tier 2 threshold.
- The boost is lifetime non-renewable per service — no service can receive a second boost.

### 14.3 Signal Integrity

Pioneer-routed calls generate **0.75× the normal WayforthRank payment-conversion signal**, disclosed in the API response as `signal_weight: 0.75`. The discount reflects that routing was influenced — the call was real, the payment was real, but the discovery was not purely organic.

Every search response surfaces the Pioneer state explicitly through three fields: `pioneer_routing` (whether the requesting developer is enrolled), `pioneer_routed_to_boosted` (whether a given result was surfaced via Pioneer routing rather than organic rank), and `signal_weight` (the ranking-signal multiplier applied to a resulting payment). Full disclosure in the response is a design requirement, not an option — an agent always knows when its discovery was influenced.

### 14.4 Relationship to the WayforthRank Integrity Policy

The WayforthRank Integrity Policy (§11.5) commits that no service can pay to rank higher in organic results. The Launch Boost is a **disclosed, time-bounded, non-repeatable visibility mechanism** layered alongside the organic ranking, not a sale of permanent rank position. After the boost window expires, the service’s WayforthRank score returns to its merit-derived value with no residual modification. The 0.75× signal discount on Pioneer-routed calls further ensures that boost-period traffic does not inflate the service’s long-term ranking signal.

In effect: the Pioneer Program accelerates discovery for new entrants. It does not purchase persistent ranking.

## 15. REVENUE MODEL

Wayforth earns on every developer interaction — search, payment, and execution. Revenue compounds with agent activity.

### 15.1 Revenue Streams

Stream	Mechanism	Status	Approx. Margin
Subscription billing	Free / Builder / Starter / Pro / Growth via Stripe	<b>Live (test mode)</b>	~80%
Payment routing fees	1.5% from provider pool, all three tracks	<b>Live (testnet rails)</b>	~98%
Execution layer revenue	Service-call premium on managed and BYOK execution	<b>Live</b>	(internal)
Provider Dashboard	Tiered subscription product for providers	<b>Live (pricing TBD)</b>	~85%
Treasury float	~4-5% APY on Stripe	Post-	~100%

Margin estimates depend on infrastructure costs at scale. Revenue projections are deliberately omitted — adoption is still too early to forecast responsibly. Live-mode commerce activation (Stripe live, Coinbase Commerce, Base mainnet) is gated on incorporation completion; see §19 Roadmap.

**Provider Dashboard subscriptions include the Pioneer Program Launch Boost (v0.8.1).** The Intelligence (\$99/mo) and Premium (\$299/mo) tiers carry a one-time, lifetime Launch Boost at 15 days / +10 WRI and 30 days / +20 WRI respectively. The Boost is funded out of the provider subscription itself; the developer-side credit bonus (15% dripped daily to enrolled developers) is absorbed by provider subscription revenue. At scale, provider subscription revenue generates approximately **8-9× the API cost of the developer credit incentive**, leaving the program meaningfully cash-positive after costs.

## 15.2 Credit Cost Schedule (Binding at Growth Tier)

Service calls consume credits from the monthly allowance at a service-specific cost. The schedule below reflects the binding rate at the **Growth tier**; all managed services are margin-positive at every tier after the Stability AI rate adjustment (45/100 → 86/150 credits, Core and Ultra respectively) shipped in the v0.7.x cycle.

Service	Credits / call	Effective cost
Groq / search	3	\$0.000374
DeepL translation	20	\$0.002492
Stability AI image (Core)	86	\$0.010713
Stability AI image (Ultra)	150	\$0.018690
ElevenLabs TTS	200	\$0.024920

## 15.3 x402 Micropayment Pricing

For services that settle natively via the x402 protocol, queries are denominated in fractions of USDC. Wayforth’s 1.5% routing fee applies on every settled payment, as it does on all rails.

## 15.4 Why Compounding Matters

Every routed payment also produces a verified ranking signal. Better rankings attract more agents; more agents drive more routed volume; more routed volume tightens the ranking signal. The same dollar that produces revenue also produces the moat.

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# 16. SECURITY & RELIABILITY

The v0.5.0 release (“Integrity,” May 2026) closed the platform’s first end-to-end correctness bar. The v0.7.x series closed the second: a **professional security audit producing 54 findings, all audited and addressed before public launch**. The v0.7.9 release added **Pre-Mainnet Security Hardening** — five additional items covering payment replay protection, provider identity verification, encryption-key rotation, audit logging, and webhook reliability (see §16.7). The v0.8.0 “Gravity” release shipped the final non-custodial hardening of the WayforthEscrow contract: the rescueToken admin drain function was removed, eliminating any path by which Wayforth could redirect or recover user funds (see §16.8). The v0.8.2 “Hardening” release closed

a third audit cycle: a **12-finding adversarial code audit** across both the gateway and platform repositories, all resolved before launch (see §16.9). An external penetration test is planned ahead of v0.9.0.

## 16.1 Test Coverage

- **190 end-to-end tests passing**, zero failures — the suite is fully clean
- 24 system status tests · 41 vault tests · plus the v0.7.x, v0.8.0, v0.8.1, v0.8.2, and v0.8.3 hardening and feature tests
- 0 crashes, 0 forbidden-field leaks
- Full test suite runs on every commit; no release has shipped with red tests

## 16.2 Professional Security Audit — 54 Findings Resolved

A full audit pass produced 54 findings across five categories, all of which have been resolved before public launch.

- **Critical fixes** — payment processing race conditions, administrative access controls, and encryption-at-rest for all stored credentials
- **High-severity fixes** — authentication hardening, session-management improvements, and rate-limiter robustness
- **Performance hardening** — database indexing on hot paths, connection-management tuning, and concurrency improvements across high-frequency operations
- **Error handling** — startup integrity checks, synchronous verification on payment paths, and idempotency guarantees on refund operations
- **Logging & auditability** — structured logging across authentication, payment, and administrative events, with sensitive identifiers masked

## 16.3 BYOK Encryption

- Algorithm: **Fernet** authenticated encryption (AES-128-CBC + HMAC-SHA256)
- Keys are stored encrypted at rest and never logged or persisted in plaintext
- Decryption boundary: keys are decrypted only in-process at the moment of dispatch and never returned to the client
- Key versioning: shipped in v0.7.9 — supports master-key rotation without service interruption (see §16.7)

## 16.4 Webhook Integrity

Provider webhooks (WRI alert subscriptions) are HMAC-signed. The signing key is provider-specific and rotated on demand from the provider dashboard. Retry policy with exponential backoff; failed deliveries logged and surfaced in the webhook management UI.

## 16.5 Health & Observability

- GET /system/health — gateway and dependency liveness
- GET /system/status — full component breakdown
- End-to-end request tracing on every call
- 99.97% uptime over the trailing 30 days

## 16.6 External Penetration Test (Planned)

An external penetration test is scheduled ahead of v0.9.0 public launch. Scope:

- Authentication-bypass attempts on every authenticated endpoint
- Per-tier rate-limiting verification
- BYOK encryption-at-rest review
- SQL injection on /search, /query, and admin routes
- Webhook HMAC validation
- CORS policy review
- x402 replay-attack prevention (application-layer protection shipped in v0.7.9; see §16.7)
- Coinbase CDP payment-verification gap analysis
- API-key enumeration prevention

Mainnet deployment of WayforthEscrow is gated on this engagement plus a \$50-\$100 real-money test across all three payment rails. See §18 Roadmap.

## 16.7 v0.7.9 — Pre-Mainnet Security Hardening

Ahead of mainnet, five additional security items were completed: **x402 payment replay protection** (deduplication at the database layer that prevents replay of payment headers); **provider email verification** (unverified providers cannot list services, closing fake provider registration as an attack surface); **API key encryption versioning** (master-key rotation without service interruption); **append-only administrative audit log** (covering all administrative write operations); and **WRI alert retry queue** (failed alerts retry with exponential backoff). The test suite grew to **190+** passing tests across these additions.

## 16.8 v0.8.0 — WayforthEscrow Non-Custodial Hardening

In v0.8.0 “Gravity,” the `rescueToken` administrative function — which had allowed Wayforth to recover tokens sent directly to the contract address — was **removed from WayforthEscrow**. Any tokens sent directly to the contract are now unrecoverable by design.

This eliminates the last administrative path by which Wayforth could redirect, drain, or recover user or provider funds from the escrow contract. The non-custodial architecture is now structurally enforced: Wayforth has **zero ability** to move funds that do not belong to it.

The `updateFeeRecipient` function is retained, because it only touches Wayforth’s own 1.5% fee share — never user or service-owner funds.

## 16.9 v0.8.2 — Production Security Audit (12 Findings Resolved)

A comprehensive adversarial code audit across both the **ranking gateway** and the **platform API** produced **12 findings**, all resolved before v0.8.2 launch.

### Gateway fixes:

- Rate limiter hardened to return HTTP 429 (previously returned only rate-limit headers without rejecting the request)
- API key enumeration throttled at the IP level
- Plan-tier resolution bug fixed
- Credit refund wired to all failure paths (previously inconsistent across error categories)
- Outbound webhook HMAC signing added
- Webhook retry queue repaired

### Platform fixes:

- Pioneer credit-minting race condition closed with atomic conditional UPDATE operations
- Provider Launch Boost credit-minting race closed with the same pattern
- Provider cross-tenant data leak in the agents tab fixed and scoped
- Missing Growth-tier gate on the custom-services endpoint added
- Pioneer routing seed moved fully server-side (was previously partially client-influenced)
- Provider session tokens migrated from plaintext to hash-only storage

### System-wide improvements shipped alongside the audit cycle:

- **Credit-refund idempotency** is now enforced across all 7 execution paths, including SSE streams
- **Rate limiting** is now Redis-backed for correct cross-replica enforcement
- **Provider service management** — providers can now add, edit, and soft-delete services from the dashboard after registration

**Test suite: 190 tests passing, zero failures.** Every release since v0.5.0 has shipped with green tests; v0.8.2 is the first release where the suite has zero skipped/flaky/warning entries — the suite is now fully clean.

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## 17. INTELLECTUAL PROPERTY

All three patents are **provisional (USPTO)**. Full applications are in preparation. Provisional applications are not examined and do not constitute granted patents; they establish a priority date for the corresponding non-provisional applications that must be filed within twelve months of the provisional filing date.

### Payment-Signal Weighted Ranking System for AI Agent API Service Discovery

*Multi-signal ranking system for AI-agent-callable APIs using verified payment-outcome feedback as the dominant ranking signal.*

**Core claim:** A computer-implemented method for ranking API services for autonomous AI agent discovery, in which a composite ranking score is computed as a weighted combination of at least a payment conversion signal, a base reliability signal, an execution volume signal, and a recency signal, wherein the payment conversion signal is assigned the highest weight among the combined signals. Payment events are verified against an external system of record (fiat payment processor receipt, on-chain transaction hash, or HTTP 402 payment protocol facilitator confirmation) before contributing to ranking signals. The system attributes verified payment outcomes to preceding search queries through a closed-loop attribution mechanism using a defined attribution time window and a multi-tier slug-matching algorithm.

**Defensibility:** the dominant ranking signal can only be produced by an entity that is simultaneously the search layer and the payment rail. A directory cannot generate it. A payment processor cannot generate it. The cost of manipulating the signal is structurally bounded below by the cost of executing real payments through the system.

### Multi-Rail Pre-Computed Payment Response System for Autonomous AI Agent API Service Acquisition

*Single unified API response delivering ranked discovery results together with pre-computed, execution-ready payment calldata for multiple distinct payment rails.*

**Core claim:** A computer-implemented method in which a structured discovery query returns a single unified response containing, for each ranked candidate service, both service discovery metadata and pre-computed payment calldata for at least two — and preferably three — distinct payment rails: a fiat platform-managed-quota rail, a blockchain stablecoin rail on a programmable blockchain network, and an HTTP 402 Payment Required protocol rail. The querying agent selects a service and a payment rail from the response and initiates payment execution directly using the pre-computed calldata, without additional API interactions with the discovery system, the payment system, or the service provider.

**Defensibility:** existing systems deliver discovery metadata (RapidAPI, Postman) or pre-computed payment instructions (Stripe Checkout, Coinbase Commerce) or in-loop payment (x402) — but not all three coordinated for multiple distinct rails in a single response. The combination is what removes the round-trip latency that makes agent service acquisition impractical at scale today.

## Agent Payment Pre-Authorization

A third provisional application has been filed covering agent payment pre-authorization patterns; details are withheld pending ongoing patent counsel review.

## License

- **Repository license:** Business Source License 1.1 (BSL 1.1)
- **Licensors:** Wayforth Technologies Inc.
- **Conversion:** automatic to Apache 2.0 on April 25, 2030
- **Restriction:** commercial use during the four-year exclusivity window requires a license from Wayforth Technologies Inc.
- **Public repo:** [github.com/WayforthOfficial/wayforth](https://github.com/WayforthOfficial/wayforth)
- **Private repos:** the WayforthRank engine, training data, and proprietary intelligence pipelines are not in the public repository

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# 18. LEGAL AND CORPORATE

## 18.1 Entity Structure

Attribute	Detail
Legal name	Wayforth Technologies Inc.
Entity type	<b>Delaware C-Corp</b>
Operating address	Las Vegas, Nevada
QSBS-eligible	Yes (C-Corp, qualifying trade, within window)
Fundraising vehicles	Reg D 506(b)/506(c), SAFE (MFN + Pro Rata), Convertible Note

## 18.2 Regulatory Posture by Track

Track	Licensed Counterparty	Wayforth Role	Wayforth MTL Exposure
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A — Card	Stripe (licensed MT)	Platform on Stripe Treasury	Zero
B — USDC	N/A (non-custodial)	Infrastructure provider	Zero
C — x402	Coinbase CDP (licensed)	Discovery + routing	Zero
Subscription	Stripe (card processor)	Platform on Stripe	Zero

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### 18.3 No Token

Wayforth Technologies Inc. does not issue, plan to issue, or intend to issue a digital token or cryptocurrency. Wayforth operates as a centralized infrastructure company. The USDC and x402 payment rails use existing blockchain infrastructure operated by third parties (Coinbase, Circle) — Wayforth does not issue or control any digital asset.

### 18.4 Disclaimers

This document is for informational purposes only. Forward-looking statements (roadmap items, projected features, illustrative revenue and yield numbers, target dates) involve uncertainty and may not materialize. Past performance of any metric does not guarantee future results. Wayforth Technologies Inc. reserves the right to change product features, pricing, and roadmap without notice. Where this document conflicts with the live product or terms posted at [wayforth.io](https://wayforth.io), the live product and posted terms govern.

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## 19. ROADMAP

“Direction, not deadlines.” — Wayforth ships in deliberate phases based on real usage data and developer feedback.

### Q2 2026 — Genesis ✓ COMPLETE

- Subscription system shipped — configured in test mode (migrations 001-021); live billing activates at v0.9.0 Commerce
- Stripe checkout configured for subscription billing (test mode)
- 4,974 services · 19 categories (current; see §3.1 for release progression)
- `wayforth_search()` + `wayforth_pay()` + WayforthQL/1.1 + `wayforth_execute()` + `POST /run`
- 15 managed services live, 2 in queue (Perplexity + ElevenLabs) — see §8.1
- Developer dashboard ([wayforth.io/dashboard](https://wayforth.io/dashboard))
- Admin panel ([wayforth.io/admin](https://wayforth.io/admin))
- Provider portal ([wayforth.io/providers](https://wayforth.io/providers)) — Observer / Intelligence / Premium
- 250+ verified x402 services in catalog
- 3 provisional patents filed
- Public GitHub: [github.com/WayforthOfficial/wayforth](https://github.com/WayforthOfficial/wayforth) (BSL 1.1)
- Public launch: Product Hunt, dev.to, Twitter, Changelog.com

### v0.5.0 — Integrity ✓ COMPLETE (this release)

- 102/102 end-to-end tests passing
- Rate limiting enforced on `/search`, `/query`, `/run`
- Forbidden internal pricing fields stripped from every API response
- XSS inputs no longer reflected in responses

- WayforthQL sort\_by validation
- DB connection pool exhaustion under load — fixed
- Ranker failures degrade gracefully (HTTP 503)
- POST /auth/regenerate-key for self-service key rotation
- BYOK persistence fix
- /run translation-intent routing fix
- Tier gating enforced across 298+ routes
- Architecture refactor: monolithic main.py → 25 focused modules
- Admin key rotated and removed from codebase

### **v0.5.1 — Integrity (patch) ✓ COMPLETE**

- 4 managed services configured (Together AI, Perplexity Sonar, Brave Search, ElevenLabs); Together AI and Brave Search brought live, Perplexity and ElevenLabs in queue (pending accounts)
- Empty search queries rejected with HTTP 400 (additional input validation)
- Zero/negative payment amounts rejected with HTTP 400
- /system/health derives service counts from live configuration rather than cached state
- Version unified across main.py and pyproject.toml

### **v0.6.0 — Intelligence ✓ COMPLETE**

- Streaming inference via Server-Sent Events on supported managed services
- Parallel batch execution across up to 5 services in a single agent call
- WayforthQL v1.1 — latency, region, and payment-rail filters added
- Live WRI scoring computed from real service health data
- Redis-backed rate limiting for multi-replica scale
- Enterprise tier introduced
- Full OpenAPI specification published
- 13 new API endpoints — usage history, intent catalog, service health, developer tooling
- POST /run — one-call task execution, routes to 9 intent categories (inference, translation, image, TTS, weather, financial, research, web search, data)
- GET /compare — side-by-side service comparison (Starter+)
- GET /account/analytics — per-agent usage analytics (Starter+)
- WRI alert webhooks with threshold triggers (Builder+)
- Agent identity system with reputation scores (Pro+)
- End-to-end test suite expanded from 102 to 120 — all passing

### **v0.6.1 — Catalog Expansion ✓ COMPLETE**

- 755 premium services added → 3,268 total
- 251 new x402-native services → 293 total
- Smithery MCP registry listing added
- wayforth-mcp v0.6.0 published to PyPI
- README and site stats updated
- Test count held at 120/120

### **v0.6.2 — Security Hardening ✓ COMPLETE**

- XSS inputs no longer reflected in responses
- Internal pricing fields stripped from all API responses
- WayforthQL sort\_by validation — invalid values rejected with HTTP 422
- Admin key rotated and removed from codebase
- DB connection pool exhaustion under load — fixed
- Rate limiting enforced on /search, /query, /run (15 req/min)
- Test suite expanded to 130/130 passing

## v0.6.8 — Platform ✓ COMPLETE

The largest release since v0.5.0. Wayforth becomes a full developer platform.

### Developer features:

- Usage forecasting — days until limit, daily average, exhaustion flag in `/billing/balance`
- Service favorites — star and retrieve frequently-used APIs
- Referral program — unique link per account, bonus calls on referred upgrades
- Team accounts — org-level access, multiple API keys
- Invoice generation — `GET /billing/invoice/{year}/{month}`
- Usage alerts at 80% and 95% — `wayf.balance_warning_80`, `wayf.balance_warning_95` webhooks + Resend emails
- `POST /auth/regenerate-key` — self-serve key rotation
- Changelog RSS at `/changelog.xml`

### Provider Dashboard (new B2B product):

- Overview: total calls, calls this month, avg WRI, estimated earnings (calls × price × 98.5%)
- Queries: search queries that surfaced provider services
- Performance: per-service health, uptime, WRI breakdown
- Competitors: top services in same category
- Agents: masked agent IDs calling their services
- Account: profile, verification status, tier, service management
- Login at `wayforth.io/providers/login`

### Admin panel expansion:

- Providers management — list, search, suspend/reinstate, view detail with services table
- Services management — full catalog table with filters (category, tier, verified, x402, search), bulk verify/delete, inline edit modal
- Tier 3 KYB page — clean empty state (launches v0.7.0)

Test suite expanded to **136/136 passing** (T001-T185).

## v0.6.9 — Focus ✓ COMPLETE

Strategic clarity release. The \$WAYF token plan was retired; Wayforth operates as a centralized infrastructure company. All token mechanics, the Pre-TGE Points System, and TGE-related references were removed from the platform, the website, and this whitepaper. The WayforthRank Integrity Policy (\$11.5) was formalized as a permanent operational guarantee: rankings cannot be paid for, no sponsored placements, no advertising model. The routing-fee structure simplified to 1.5% from the provider pool. Provider share remains 98.5% of every gross payment.

## v0.7.0 - v0.7.8 — Scale, Audit, Hardening ✓ COMPLETE

Multi-release sequence covering catalog growth, full audit cycle, and production hardening.

- **Catalog growth:** 3,000+ → **4,974** services (+65%); Tier 2 verified 800+ → **3,551**; x402-native 250+ → **277**
- **Professional security audit completed — 54 findings**, all audited and addressed before public launch (see §16.2 for category breakdown)
- **Webhook idempotency hardened** against payment-processor retry races

- **Encryption at rest** applied to all stored API keys
- **Session-management improvements** — token rotation on every refresh; per-account admin login logout
- **Database performance** — hot-path indexing, connection-management tuning, and concurrency improvements across high-frequency operations
- **Self-healing execution** — failed calls retry automatically; credits restored if a call fails mid-execution
- **Health and observability** — public health and status endpoints with component breakdown; end-to-end request tracing
- **Test suite expanded** across the v0.7.x cycle — zero failures across the suite
- **Uptime over the trailing 30 days: 99.97%**

### **v0.7.9 — Pre-Mainnet Security Hardening ✓ COMPLETE**

Five additional security items completed ahead of mainnet:

- **x402 payment replay protection** — application-layer deduplication preventing replay of payment headers
- **Provider email verification** — unverified providers cannot list services, closing fake provider registration as an attack surface
- **API key encryption versioning** — master-key rotation without service interruption
- **Append-only administrative audit log** — covering all administrative write operations
- **WRI alert retry queue** — failed alerts retry with exponential backoff

**190+ tests passing, zero failures.**

### **v0.8.0 — Gravity ✓ COMPLETE**

- **OpenAI-compatible LLM Gateway** — POST /v1/chat/completions routing across Groq, Together AI, and Mistral with automatic failover. Streaming via SSE. No API keys required for managed providers (see §8.4).
- **Tier 1 per-call input limits** — DeepL 2,000 characters, ElevenLabs 500 characters, AssemblyAI 10 minutes, Stability AI 1 image per call. Prevents adverse selection on character-priced and token-priced managed services (see §8.1).
- **WayforthEscrow hardened** — rescueToken admin drain function removed. Non-custodial architecture confirmed — Wayforth cannot redirect, drain, or recover user or provider funds (see §16.8).
- **Homepage repositioned** around the runtime layer. New /inference, /security, and /status pages added.

### **v0.8.1 — Pioneer Program ✓ COMPLETE**

Two-sided cold-start mechanism for new catalog entrants (see §14):

- **Pioneer Program** — developer opt-in: 60% routing to newly verified providers in their active boost window, 15% bonus credits dripped daily, 7-day cooldown on exit, credits kept on exit
- **Provider Launch Boost** — included in Intelligence (\$99/mo, 15 days +10 WRI) and Premium (\$299/mo, 30 days +20 WRI) Provider Dashboard plans; Tier 2 verification required; auto-pauses if uptime drops; one-time, lifetime, non-renewable per service
- **Pioneer signal weight** — 0.75× the normal WayforthRank payment-conversion signal; disclosed in API response as `signal_weight: 0.75`

- Six database migrations, full test coverage maintained

## v0.8.2 — Hardening ✓ COMPLETE

Full production security audit cycle across both repos (gateway + platform):

- **12-finding adversarial code audit** — all resolved before launch (see §16.9 for full breakdown)
- **Gateway hardening** — rate limiter returns HTTP 429, API key enumeration throttle, plan-tier resolution fix, credit-refund-on-all-failure-paths, outbound webhook HMAC signing, webhook retry queue repair
- **Platform hardening** — pioneer + provider credit-minting race conditions closed atomically, cross-tenant data leak fixed, missing tier gate added, server-side pioneer routing seed, hashed provider session tokens
- **Credit-refund idempotency** across all 7 execution paths including SSE streams
- **Redis-backed rate limiting** for cross-replica enforcement
- **Provider service management** — providers can add, edit, soft-delete services post-registration
- **190 tests passing, zero failures** — first fully clean suite in platform history

## v0.8.3 — Calibration ✓ COMPLETE (current release)

Credit model corrected across the full stack:

- **Per-service credit rates** — `credits_per_call` rates added to all managed services; credit deduction logic updated to per-service rates; legacy transaction-type bug resolved
- **Plan credit quotas corrected to canonical values** — Free 100, Builder 6,000, Starter 21,000, Pro 72,000, Growth 240,000
- **Pioneer Program** — Pacific-timezone drip scheduler; enrollment confirmed indefinite; `pioneer_routing`, `pioneer_routed_to_boosted`, and `signal_weight` fields added to search responses
- **Webhook event renamed** — `wayf.credits_reset` (was `wayf.calls_reset`)
- **Provider Dashboard** — annual billing at 17% discount (Intelligence \$82/mo · Premium \$249/mo billed annually)
- **Usage display** — percentage-first with threshold badges

## v0.9.0 — Commerce (pending incorporation)

Blocked on completion of Wayforth Technologies Inc. incorporation (in flight via Swyft). When incorporation completes, the commerce layer activates:

- **Stripe live mode** — subscription billing transitions from test to live; provider payouts go live
- **Coinbase Commerce** — additional fiat-to-crypto on-ramp
- **Mercury banking** — operating account, treasury management
- **Base mainnet** — WayforthEscrow deployment on Base mainnet; x402 Track C goes live for real-money settlement

Pre-launch sequence:

1. v0.7.9 + v0.8.0 + v0.8.2 + v0.8.3 calibration and hardening completed ✓
2. External penetration test
3. \$50-\$100 real-money test across all three payment rails
4. Product Hunt launch
5. v0.9.0 public launch

## v0.9.1+ — Operations

- Error standardization (uniform error envelope across endpoints)
- Logger unification (single structured-logger surface)
- Advanced audit tools (admin-side filtering, retention policy)

## Q4 2026 — Protocol (planned)

- Tier 3 KYB program — first verified services with SLA-backed listings (Verified Provider badge + dedicated directory placement; staking, if introduced, never affects ranking — see §11.5)
- SDK v2: full Python + TypeScript client libraries
- Target: \$100K ARR

## 2027+ — Scale

- **WayforthRank open API** — verified ranking data sold as a product
  - Cross-chain USDC support: Solana, Polygon, Arbitrum
  - 5,000+ services in catalog
  - Agent-identity mainnet — persistent on-chain reputation (via WayforthRegistry, no token)
  - WayforthQL/2.0 — region, latency, capability-level filters
  - Data products — payment intelligence sold to providers
  - Target: \$5M+ ARR
- 

# 20. CONCLUSION

**An operational runtime, in production, audited.** That is what Wayforth is at v0.8.3 “Calibration” — not a deck-stage idea, not a prototype, but a live platform running at 99.97% uptime with a 190-test end-to-end suite passing zero-failure and a completed professional security audit (54 findings, all resolved at v0.7.x) plus a subsequent adversarial code review (12 findings, all resolved at v0.8.2).

The data flywheel is the answer. Every payment makes WayforthRank smarter. Smarter rankings attract more agents. More agents generate more payments. The compound effect grows with every interaction.

Wayforth is not a directory. It is not a payment processor. It is not a marketplace. It is the **runtime layer** that makes AI agents economically capable — giving them the ability to find the right service, evaluate its reliability, pay for it across any rail, and execute the call without human credential management.

The triple-track payment system removes the single biggest adoption barrier in agent payment infrastructure: forcing crypto knowledge on developers who don't have it, or forcing fiat constraints on services that don't need them. Any developer with a credit card can use the full payment rail. Any developer with USDC on Base gets non-custodial, on-chain transparency. Any service that speaks x402 gets account-free payment in a single HTTP loop. Every track earns the same 1.5% routing fee. Every track feeds WayforthRank with the same verified payment signal.

The v0.5.0 Integrity release closed the platform's first correctness gate. The v0.7.x series closed the second — a full 54-finding professional audit, all findings resolved, followed by v0.7.9 Pre-Mainnet Security Hardening, v0.8.0 Gravity (OpenAI-compatible LLM Gateway, Tier 1 per-call limits, final non-custodial hardening of WayforthEscrow), v0.8.1 Pioneer Program (two-sided cold-start mechanism), and v0.8.2 Hardening (a second 12-finding adversarial

code audit, all resolved before launch). The next gate is the external penetration test followed by a small real-money test across all three payment rails; both clear the path to v0.9.0 Commerce, which activates the moment incorporation completes.

Across v0.5.0 through v0.8.3 — 190 end-to-end tests passing with zero failures (the suite is fully clean), 4,974 services across 19 categories surfaced through 298+ production API routes, 3,551 Tier 2 verified providers, 277 x402-native services, 15 Tier 1 managed services, three provisional patents protecting the closed-loop ranking signal, the multi-rail pre-computed payment response, and the agent authorization framework — Wayforth has demonstrated the disciplined execution required to build category-defining infrastructure. The product is shipping, the IP is filed, the audits are closed, and the cap table is clean. What comes next is the commerce-layer activation, the external pentest, and the public launch — and after that, breadth: scaling the managed-service catalog, deepening Tier 3 verified partnerships, and turning agent-payments-as-a-runtime from a category we defined into a category we own.

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**Get started:** [uvx wayforth-mcp](https://uvx.wayforth-mcp.com) **Dashboard:** [wayforth.io/dashboard](https://wayforth.io/dashboard) **GitHub:** [github.com/WayforthOfficial/wayforth](https://github.com/WayforthOfficial/wayforth) **Docs:** [wayforth.io/docs](https://wayforth.io/docs)  
**Contact:** [dor@wayforth.io](mailto:dor@wayforth.io)

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## **APPENDIX A — CHANGES FROM v5.0 (April 2026)**

For readers comparing this version to the previous whitepaper.

**Material corrections to v5.0:** 1. **Entity type** — v5 said “Nevada LLC”. Corrected: **Delaware C-Corp** (operating from Las Vegas, Nevada). Material for QSBS eligibility and investor disclosure. 2. **Execution-layer revenue language** — v5 disclosed internal managed/BYOK markup percentages. Removed; only the 1.5% routing fee is publicly disclosed.

**New sections vs. v5.0:** - Subscription Plans & Tier Gating (\$10) — replaces the v5 Credits System - Agent Identity & Reputation (\$12) — surfaced as a product feature (no patent claim in this version) - Provider Dashboard (\$13) — new B2B product line - Security & Reliability — The Integrity Release (\$15) — incorporates v0.5.0

**Updated counts and capabilities since v5.0:** - Verified API endpoints: 274+ → **298+** - Managed services live: 8 → **15** - x402 services in catalog: 34 → **42** - API surface: not previously stated → **138 production routes, 16+ MCP tools** - Test coverage: not previously stated → **120/120 passing** (102/102 at v0.5.0 ship; expanded with v0.6.0)

**Removed from v5.0 (deliberately):** - Credits-as-billing language (replaced by subscription plans) - Internal markup percentages (Hard Rule: only 1.5% routing fee is public) - “Nevada LLC” references (Delaware C-Corp is correct)

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## APPENDIX B — CHANGES FROM v6.2

For readers comparing this version to v6.2.

### v6.2 → v6.3 changes:

1. **Provider share corrected** — providers receive **98.5%** of every gross payment. The 1.5% routing fee is the only deduction. There is no additional platform fee.
2. **Platform stats updated to v0.6.8 levels.**
  - Categories: 18 → **19**
  - Tier 2 verified: not previously stated → **800+**
  - x402 native services: 42 → **293**
  - Managed services live: 15 → **13 live** (Perplexity + ElevenLabs pending)
  - Production API routes: 138 → **298+**
  - Test coverage: 120/120 → **136/136 passing (T001-T185)**
  - Catalog services: stated as **3,000+** (rounded for scalable marketing language)
3. **Release history updated through v0.6.8 — Platform.** Added v0.6.1 (Catalog Expansion), v0.6.2 (Security Hardening), v0.6.8 (Platform) entries to the Roadmap section and §3.1 Platform Releases. Release-summary table added to §3.1.
4. **Provider dashboard and admin panel expansion documented.** New B2B product surface at [wayforth.io/providers/login](https://wayforth.io/providers/login) covering Overview, Queries, Performance, Competitors, Agents, Account tabs; admin-side providers + services + Tier 3 KYB management documented in the v0.6.8 roadmap entry.
5. **Patent identifiers removed from public whitepaper.** The Intellectual Property section retains the full IP content with patent claims, defensibility paragraphs, and license terms — but the internal reference numbers (and any version suffixes) are no longer disclosed in the public document, pending filing. Patent content is unchanged in substance from v6.2; only the identifier strings have been removed.
6. **Catalog figures rounded for scalable marketing language.** Catalog services now stated as **3,000+** (precise count varies with each ingest cycle); x402-native services now stated as **250+** in current-state references (precise historical figures preserved in release notes and Appendix B delta lines).

### v6.3 → v6.4 changes:

Strategic update: \$WAYF token removed entirely. Wayforth operates as a centralized infrastructure company. No token is planned or intended.

- **Old §14 Token Economics** — removed entirely
- **Old §15 Pre-TGE Points System** — removed entirely
- **§4.1 Routing fee** — simplified to 100% to Wayforth operations on every routed payment
- **§9 Smart Contracts** — \$WAYF ERC-20 contract removed; GovernorWAYF and VerifierStaking removed; WayforthEscrow (USDC routing) retained; WayforthRegistry retained as token-free planned contract
- **§11.5 WayforthRank Integrity Policy** — added; permanent operational guarantee that rankings cannot be paid for
- **§17.3 No Token** — added; explicit statement that Wayforth does not and will not issue a digital token

- **Cayman Foundation** — removed from §17.1 Entity Structure
- **All TGE / Post-TGE / Pre-TGE references** — removed everywhere in the document
- **§18 Roadmap 2027+** — repositioned to WayforthRank open API, cross-chain USDC support, on-chain reputation via WayforthRegistry (no token), data products. \$5M+ ARR target retained.
- **Section renumbering** — old §16-§21 renumbered to **§14-§19** to reflect the removal of the two token sections. All cross-references updated.

Reflects product release v0.6.9 — “Focus”.

#### **v6.4 → v6.5 changes:**

Major platform update reflecting product release **v0.7.8** (current operational release).

- **Catalog growth** — 3,000+ → **4,974 total services** (+65%); Tier 2 verified 800+ → **3,551**; x402-native 250+ → **277**. Updated across §2.2, §3, §7, §8, §18.
- **Managed services** — list updated to the canonical 13 live (Groq, Together AI, DeepL, Serper, Tavily, Brave, OpenWeather, NewsAPI, Alpha Vantage, Jina AI, AssemblyAI, Stability AI, Resend) plus 5 coming-soon (Perplexity, ElevenLabs, Firecrawl, Mistral, Gemini) in §8.1.
- **WRI score scale** — clarified as **0-100** (was occasionally expressed as 0.0-1.0). x402 protocol support now explicitly listed among ranking signals in §11.1.
- **§11.5 WayforthRank Integrity Policy** — staking-merit-only clarification added: any future provider staking grants only a Verified Provider badge and dedicated directory placement, never affects ranking position.
- **§14 Revenue Model** — substantially expanded: new credit-cost schedule (§14.2), Stripe processing-fee table per plan (§14.3), x402 micropayment pricing (§14.4), and clarification that the 1.5% routing fee is deducted from the provider payout — developers are never charged a per-call fee on top of subscription.
- **§10 Subscription plans** — credit allowances updated to current canonical: Free 100, Builder 6,000, Starter 21,000, Pro 72,000, Growth 240,000. USDC +5% bonus surfaced explicitly.
- **§15 Security** — major rewrite. Replaced the “Independent audit is the next gate” framing with the present-tense account of the completed audit: **54 findings audited and addressed**, organized into critical / high / performance / error-handling / logging categories. External penetration test now reframed as a planned engagement ahead of v0.8.0 (§15.6).
- **§18 Roadmap** — v0.6.9 marked historical; **v0.7.0-v0.7.8** added as the current-release sequence covering scale, audit, and hardening. **v0.8.0 — Commerce** added as the next planned release, blocked on Wayforth Technologies Inc. incorporation completion. Pre-launch sequence documented (pentest → real-money test → Product Hunt → public). v0.8.1+ “Operations” entry added.
- **§19 Conclusion** — rewritten to lead with the operational-maturity framing: live platform, audited, in production.
- **Statistics updated throughout** — test count 136/136 → **190+ passing, zero failures**; uptime metric **99.97% (30-day)** added; release version **v0.6.9 → v0.7.8** in title page, abstract, §2.2, footer.
- **Document version** — v6.4 → **v6.5**. Reflects product release **v0.7.8**.

#### **v6.5 → v6.6 changes:**

Surgical update reflecting product release **v0.7.9 — Pre-Mainnet Security Hardening**.

- **Version bumped throughout** — v0.7.8 → **v0.7.9** in title page, abstract, §2.2 current-state table, §3.1 release prose, §15.1 test progression endpoint, §19 conclusion (both paragraphs), and footer.
- **§3.1 release table** — added a new row for **v0.7.9 — Pre-Mainnet Security Hardening (current)**; the v0.7.0–v0.7.8 row is retained as historical (no longer marked current).
- **§15 Security** — intro reframed from “v0.8.0 pre-hardening cycle” to **v0.7.9 — Pre-Mainnet Security Hardening**. §15.3 BYOK key-versioning bullet and §15.6 x402 replay-attack bullet now reference v0.7.9 instead of “v0.8.0 pre-hardening cycle”.
- **§15.7** — renamed to **v0.7.9 — Pre-Mainnet Security Hardening**; body rewritten as a single dense paragraph documenting the five items inline (payment replay protection, provider email verification, encryption-key versioning, append-only admin audit log, WRI alert retry queue) with concrete implementation hooks for each.
- **§18 Roadmap** — v0.7.0–v0.7.8 entry marked complete (no longer “current release”); new **v0.7.9 — Pre-Mainnet Security Hardening ✓ COMPLETE (current release)** entry added with the five bullets and 190+ test count. The “Pre-hardening cycle” sub-block previously nested under v0.8.0 — Commerce was moved into the v0.7.9 entry where it belongs; v0.8.0 — Commerce now lists only the four commerce-layer activations (Stripe live, Coinbase Commerce, Mercury, Base mainnet) plus the pre-launch sequence.
- **Document version** — v6.5 → **v6.6**. Reflects product release **v0.7.9**.

#### v6.6 → v6.7 changes:

Surgical update reflecting product release **v0.8.0 “Gravity”**.

- **Version bumped throughout** — v0.7.9 → **v0.8.0 “Gravity”** in title page, abstract, §2.2 current-state table, §3.1 release prose, §3.1 release table, §19 conclusion (both paragraphs), and footer. v0.7.9 retained as a historical release entry.
- **§3.1 release table** — added a new row for **v0.8.0 — Gravity (current)**; the v0.7.9 row is retained as historical.
- **§8.1 Tier 1 Managed Services** — added Tier 1 per-call input limits section (DeepL 2,000 chars, ElevenLabs 500 chars, AssemblyAI 10 minutes, Stability AI 1 image) introduced in v0.8.0 to protect managed-service margin from adverse selection. Requests over limit return HTTP 413 with a BYOK redirect.
- **§8.4 OpenAI-Compatible LLM Gateway (new section)** — describes POST /v1/chat/completions, model-prefix routing (groq/, together/, mistral/), Groq → Together AI → Mistral failover chain, x-wayforth-provider and x-wayforth-fallback response headers, SSE streaming with credit-deduction-on-success-only semantics, and OpenRouter-alternative positioning. The previous §8.4 (Failure Modes) is renumbered to §8.5.
- **§15 Security** — intro paragraph updated to reference the v0.8.0 WayforthEscrow hardening. **New §15.8 added** documenting the removal of the rescueToken admin function from the escrow contract — the final non-custodial hardening step. The updateFeeRecipient function is retained because it only touches Wayforth’s 1.5% fee share.
- **§15.6 External Penetration Test** — reframed as planned ahead of **v0.9.0** (previously v0.8.0, which has now shipped).
- **§18 Roadmap** — v0.7.9 marked complete (no longer “current release”); new **v0.8.0 — Gravity ✓ COMPLETE (current release)** entry added with four bullets covering the LLM Gateway, per-call limits, escrow hardening, and homepage repositioning. The previous “v0.8.0 — Commerce (pending incorporation)” entry was **renamed to v0.9.0 — Commerce** with the same scope

(Stripe live, Coinbase Commerce, Mercury, Base mainnet) and pre-launch sequence updated to reflect v0.7.9 + v0.8.0 hardening as complete. v0.8.1+ Operations entry renumbered to v0.9.1+.

- **Document version** — v6.6 → **v6.7**. Reflects product release **v0.8.0 “Gravity”**.

#### **v6.7 → v6.8 changes:**

Substantial update reflecting product releases **v0.8.1 Pioneer Program** and **v0.8.2 Hardening** (current release).

- **Version bumped throughout** — v0.8.0 → **v0.8.2** in title page, abstract, §2.2 current-state table, §3.1 release prose, §3.1 release table, §20 conclusion, and footer. The v0.8.0 and v0.8.1 rows are retained as historical entries.
- **§2.2 Current State table** — managed services count **13 → 15** live; test coverage **190+ → 190 passing, zero failures** (the suite is now fully clean); MCP version **v0.7.7 → v0.8.2**; security audits row updated to reflect both the 54-finding v0.7.x audit and the 12-finding v0.8.2 audit.
- **§3.1 release table** — added new rows for **v0.8.1 — Pioneer Program** and **v0.8.2 — Hardening (current)**; the v0.8.0 row retained as historical.
- **§8.1 Tier 1 Managed Services** — header updated (**15 Live, 2 in Queue**). Live list expanded to 15 with the addition of **Firecrawl, Mistral, and Gemini**. **NewsAPI removed from the managed list** and moved to BYOK-only with a note explaining the developer-plan-Terms-of-Service rationale. In-queue list reduced to two: Perplexity and ElevenLabs.
- **§13 Provider Dashboard** — added a **Launch Boost** paragraph (cross-referenced to §14) and a **Provider service management (v0.8.2)** paragraph describing the new add/edit/soft-delete capability.
- **§14 Pioneer Program (new section)** — substantial new section documenting the two-sided cold-start mechanism. Covers developer side (60% routing to newly verified providers in active boost windows, 15% bonus credits dripped daily — 30/Builder, 105/Starter, 360/Pro, 1,200/Growth, 7-day exit cooldown), provider side (Intelligence and Premium Launch Boost — 15-day/+10 WRI and 30-day/+20 WRI respectively, Tier 2 verification required, auto-pauses on uptime drop, lifetime non-renewable), signal integrity (0.75× WayforthRank signal weight on Pioneer-routed calls, disclosed as `signal_weight: 0.75`), and relationship to the WayforthRank Integrity Policy.
- **§15 Revenue Model (formerly §14)** — added Pioneer Program paragraph beneath the revenue table, documenting that provider subscription revenue absorbs the developer credit incentive at approximately **8-9× cost** at scale. All §14.x subsections renumbered to §15.x.
- **§16 Security (formerly §15)** — intro paragraph updated to reference the v0.8.2 audit cycle. §16.1 Test Coverage rewritten to reflect the fully clean suite. **New §16.9 added** documenting the v0.8.2 12-finding adversarial code audit across both repositories — gateway fixes (rate limiter 429, API key enumeration throttle, plan-tier bug, credit refund all-paths, outbound webhook HMAC, webhook retry repair), platform fixes (pioneer + provider credit-minting race closures, cross-tenant data leak fix, missing tier gate, server-side pioneer routing seed, hashed provider session tokens), and system-wide improvements (credit-refund idempotency across 7 paths including SSE, Redis-backed rate limiting, provider service management). All §15.x subsections renumbered to §16.x.
- **§17 Intellectual Property** — renumbered from §16.
- **§18 Legal and Corporate** — renumbered from §17. All subsections renumbered §17.x → §18.x.
- **§19 Roadmap** — renumbered from §18. Added new **v0.8.1 —**

**Pioneer Program ✓ COMPLETE** entry and **v0.8.2 — Hardening ✓ COMPLETE (current release)** entry. v0.8.0 marked complete (no longer current). v0.9.0 Commerce pre-launch sequence updated to reflect v0.7.9 + v0.8.0 + v0.8.2 hardening as complete.

- **§20 Conclusion** — renumbered from §19. Updated version references throughout to v0.8.2 and added explicit mentions of v0.8.1 Pioneer Program and v0.8.2 Hardening.
- **Cross-references updated** — every see \$X.Y reference throughout the document updated to reflect the renumbering (§14.1/§14.2 → §15.1/§15.2; §15.2/§15.7/§15.8 → §16.2/§16.7/§16.8; §18 Roadmap → §19 Roadmap).
- **Document version** — v6.7 → **v6.8**. Reflects product release **v0.8.2**.

#### **v6.8 → v6.9 changes:**

Reflects product release **v0.8.3 “Calibration”**. Version bumped throughout (title page, abstract, §2.2 current-state table, §3.1 release table, §16.1, §20 conclusion, footer); v0.8.2 marked historical in the §3.1 release table with a new **v0.8.3 — Calibration (current)** row added. §10 credit amounts confirmed canonical (Free 100, Builder 6,000, Starter 21,000, Pro 72,000, Growth 240,000). §13 Provider Dashboard — annual billing paragraph added (Intelligence \$82/mo · Premium \$249/mo at 17% annual discount). §14.1 enrollment confirmed indefinite; §14.3 pioneer response fields documented (pioneer\_routing, pioneer\_routed\_to\_boosted, signal\_weight). §15.2 Stability AI rate corrected: the single 65-credit row replaced with two SKU rows — **86 cr (Core) / 150 cr (Ultra)** — and the rate-adjustment sentence updated to “45/100 → 86/150 credits, Core and Ultra respectively.” §19 Roadmap — **v0.8.3 — Calibration ✓ COMPLETE (current release)** entry added (per-service credit rates, canonical quota correction, Pacific-timezone Pioneer drip scheduler, wayf.credits\_reset webhook rename, annual provider billing, percentage-first usage display); v0.8.2 marked historical; pre-launch sequence updated. Document version **v6.8 → v6.9**.

#### **v6.9 → v6.10 changes:**

Accuracy and positioning pass; no product-version change (remains v0.8.3 “Calibration”). §2.7 added — market-context paragraph framing AP2 (donated to the FIDO Alliance, April 2026) and Stripe/OpenAI’s Agentic Commerce Protocol as validation of the authorization/settlement layer, with Wayforth positioned at the discovery/execution runtime layer above them. §3.1 version-drift fixed (shipped-through reference v0.8.2 → v0.8.3). §5.3 Stripe status corrected — subscription billing now stated as configured in test mode, going live at v0.9.0; the “Stripe Treasury application in flight” claim removed and replaced with a post-incorporation float-yield evaluation note. §5.4 subscription-billing language aligned to test mode. Abstract and §20 audit wording changed from “two professional security audits” to “a professional security audit (54 findings, v0.7.x) and a subsequent adversarial code review (12 findings, v0.8.2).” §8.4 LLM gateway repositioned — “drop-in OpenRouter alternative” framing removed, recast as a feature of the broader runtime. §17 Patent 3 detail removed — the Tiered Pre-Authorization claim description replaced with a one-line note that a third provisional is filed with details withheld pending counsel review. §19 Roadmap legacy seams fixed — Genesis entry managed count 13 → “15 live, 2 in queue,” subscription items reworded to test mode; v0.5.1 entry no longer claims Perplexity/ElevenLabs are live. Document version **v6.9 → v6.10**.

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*End of document.*