

ZEN MESH

Secure webhook delivery for public and private networks

Business plan prepared for AWS From Idea to Frontier 2026

CORE PROPOSITION One delivery platform for webhooks headed to public endpoints or private services behind NAT, VPNs, firewalls, and Kubernetes - without opening inbound ports.

Project **Zen Mesh**

Founder **Leonardo** | Technical founder

Website <https://www.zen-mesh.io/>

11 August 2026 | Public-safe application edition

1. Executive summary

Zen Mesh is building a security-first webhook delivery platform for developer, platform, and security teams. It delivers provider events to public HTTP endpoints or to services inside private networks through outbound-only connectivity. The goal is to remove the operational and security trade-off between reliable event delivery and exposing private infrastructure.

The immediate wedge is high-value webhooks from platforms such as Stripe, GitHub, Shopify, and Twilio. Teams need verification, retries, replay, audit evidence, and safe delivery to environments that are often unreachable from the public internet. Existing approaches typically combine several tools: a public relay, a tunnel or VPN, queueing and retry logic, and custom security controls. Zen Mesh aims to provide these capabilities as one coherent product.

CURRENT STAGE Technical validation and launch preparation. Core enrollment and Fabric identity paths have been validated in sandbox environments; product packaging and production acceptance are still being completed.

2. The problem

- Webhook providers can reach public endpoints, but many valuable targets sit behind NAT, firewalls, VPNs, or private Kubernetes networking.
- Opening inbound ports or maintaining general-purpose tunnels expands attack surface and creates operational dependencies unrelated to webhook delivery.
- Reliability features such as retries, dead-letter handling, replay, and evidence are fragmented across provider-specific code and infrastructure.
- Regulated and multinational customers also need explicit control over where data is processed and which regional components may participate in a flow.

Why now

Webhook volume and business criticality are increasing while teams are consolidating infrastructure and tightening network exposure. At the same time, more operational targets are moving into private cloud networks, Kubernetes clusters, and hybrid environments. A focused delivery product can solve this integration gap without asking customers to adopt a general-purpose network overlay.

3. Product and differentiation

Capability	Zen Mesh approach
Public delivery	No customer-side runtime for a reachable HTTPS target.
Private delivery	Edge Lite or a Kubernetes edge runtime connects outbound only; the private target stays hidden.
Security	Workload identity, mutual TLS, provider signature verification, message authentication, and fail-closed authorization boundaries.
Operations	Delivery history, correlation, retry, dead-letter handling, replay, and auditable evidence.
Provider onboarding	Template packs for common providers, while retaining support for custom signed webhooks.
Regional control	A planned cell architecture that can make jurisdiction and region explicit for managed components and customer flows.

Design principles

- Fail closed when a flow or workload identity has not been explicitly established and authorized.
- Keep enrollment and Fabric control identity separate from tenant and flow authorization carried by the traffic layer.
- Prefer standard HTTPS over TCP 443 for customer-side outbound connectivity and operational simplicity.

4. Target customers and initial use cases

The initial buyer and user are closely connected: platform and security leaders approve the operating model, while developers and SRE teams configure and troubleshoot delivery.

Segment	High-value initial journey
SaaS and developer platforms	Deliver GitHub, billing, and lifecycle events into public or private services without bespoke relays.
FinTech and payments	Route Stripe and payment-related events to controlled environments with traceable delivery evidence.
Regulated enterprises	Keep private targets unreachable from the internet and apply explicit regional and identity controls.
Lean engineering teams	Replace custom retry workers, tunnels, and provider-specific glue with one managed workflow.

5. Business model

Zen Mesh is designed as a recurring software service with a low-friction developer entry point and expansion into operational and governance controls.

Tier	Role in the model
Free	Developer adoption and product evaluation with lower limits and best-effort support.
Pro Early Bird	US\$29/month or US\$290/year, with a six-month trial as currently published.
Business / Enterprise	Planned packaging for higher scale, support, governance, data residency, and organization controls.

Revenue expansion is expected to follow event volume, environments, private runtimes, retention requirements, support level, and governance needs. Final enterprise packaging will be validated with design partners before broad release.

6. Go-to-market

- Developer-led entry: useful documentation, a free path, and fast setup for public endpoints.
- Provider-led discovery: focused pages and template packs for Stripe, GitHub, Shopify, Twilio, and custom signed webhooks.
- Design partners: SaaS, FinTech, and security-conscious teams with a real private-delivery problem.
- Trust-led enterprise motion: publish clear security boundaries, deployment models, and evidence rather than relying on broad claims.
- APAC expansion: use Hong Kong as a candidate operating and customer-development base, subject to market validation and legal advice.

Competitive position

Zen Mesh does not compete by becoming a general-purpose VPN or message bus. Its focus is the complete webhook journey: provider verification, controlled ingress, reliable delivery, private-network reachability, operational evidence, and replay. The value is the removal of integration seams and the security burden those seams create.

7. AWS architecture plan

The AWS design will use regional deployment cells so ingress, processing, evidence, and customer connectivity can be operated and observed independently. The initial architecture will prioritize boring operations, least privilege, reproducibility, and a clear path from sandbox to production.

AWS capability	Planned use
Amazon EKS + EC2	Run the Fabric, identity, ingress, and delivery services using immutable images and controlled node pools.
Elastic Load Balancing + Route 53	Expose stable HTTPS endpoints over TCP 443 and route traffic to healthy regional cells.
Amazon ECR	Store signed, immutable component images for repeatable deployments.
AWS KMS + Secrets Manager	Protect service keys and bootstrap material, with strict separation between public recipients and private identities.
Amazon S3	Store bounded delivery evidence, exports, and operational artifacts with encryption and lifecycle policies.
CloudWatch + OpenTelemetry	Collect service health, delivery metrics, traces, and security-relevant operational signals without logging payload secrets.

DATA RESIDENCY DIRECTION Each managed cell will carry explicit jurisdiction, provider, and region metadata. Customer policy can constrain which cells participate in a tenant or flow; cross-tenant flows will remain denied until a dedicated, explicitly authorized capability exists.

8. Twelve-month execution plan

Window	Outcome and acceptance signal
0-3 months	Complete V1 production acceptance; launch the public and private delivery wedge; onboard initial design partners; validate pricing and onboarding friction.
3-6 months	Harden regional AWS deployment, observability, evidence, and incident operations; convert qualified pilots to paid Pro or Business usage.
6-9 months	Add enterprise organization controls, data-residency policy, and selected provider packs based on observed demand.
9-12 months	Evaluate additional AWS regions and AWS Marketplace; establish repeatable APAC and global customer acquisition motions.

The milestones above are forward targets, not historical traction claims. Success will be measured by repeatable onboarding, reliable delivery, paid conversion, expansion within customer environments, and evidence that regional controls solve a real buying constraint.

9. Founder and execution advantage

Zen Mesh is led by Leonardo, a technical founder with hands-on platform, reliability, Linux, Kubernetes, security, and operations experience. Relevant certifications include CKA, CKAD, LPIC, RHCSA, ITIL, and ISO 27002. The product is being developed from operational pain: secure connectivity, identity, deployment reproducibility, and evidence must work together rather than become separate projects for the customer.

The founder-led approach keeps the initial team lean and prioritizes measurable technical acceptance. Hiring and partnerships will follow validated demand, with early emphasis on customer development, product design, and production operations.

10. Why AWS From Idea to Frontier

The program is a strong fit because Zen Mesh is simultaneously solving a technical architecture problem and a go-global operating problem. AWS Solutions Architect support can accelerate the regional cell design, security review, observability, and cost model. AWS Activate credits can fund production validation without forcing premature compromises. Mentor and partner access can help test the proposition with FinTech, SaaS, and regulated customers in Hong Kong and across APAC.

Hong Kong is particularly relevant as an international business and technology hub connecting regional and global markets. Zen Mesh will evaluate Hong Kong incorporation as part of its APAC strategy, informed by customer demand and appropriate legal and compliance guidance.

11. Application ask

- Architecture review for a secure, cost-aware, multi-region AWS production baseline.
- Introductions to design partners with private webhook delivery, FinTech integration, or data-residency needs.
- GTM and pricing mentorship for the developer-to-enterprise expansion path.
- AWS Activate credits to support production validation and early customer workloads.

Public references

Zen Mesh product website: <https://www.zen-mesh.io/>

AWS From Idea to Frontier 2026: <https://aws.amazon.com/cn/local/hongkong/idea-to-frontier/>