

GARDIEL by Valutis Technologies

Pure Protection. Zero Compromise.

Our promise is immunity by design. Backups stay available, fast, verifiably clean, and protected without operational isolation. Our positioning is simple. If you need ransomware-resilient backups, Gardiel is the hardware-based solution that blocks execution at the write path and enables dependable, real-time recovery without the drawbacks of manual air gaps. Our vision is to become the reference standard for trustworthy data resilience so availability and integrity can be proven at any time. Our mission is to deliver hardware-enforced immunity with one-way ingress, real-time transformation, and versioned storage, so attacks have no path to execution and recovery succeeds with confidence.

GARDIEL

Investor Whitepaper

Security begins at backup. We deliver immunity by design.

Executive Summary // Gardiel delivers hardware-enforced, immutable backups with real-time recovery. By blocking execution at the write path and preserving verifiable integrity for every state, the system provides even more protection than air-gaps without the operational drag of physical isolation. It fits next to existing backup workflows to create continuously current, tamper-proof snapshots that can be restored at operational speed, confidently and repeatably. In a landscape where ransomware compromises both production and backups, Gardiel makes recovery a deterministic control with clean evidence, dependable uptime, and resilience you can prove.

Ransomware Reality // Ransomware remains the leading driver of cyber insurance losses and continues to grow in sophistication and frequency. Independent market outlooks project annual victim costs of about €245 billion by the start of the next decade, underscoring the financial exposure and elevating recovery from an IT task to a board-level obligation. The question is no longer whether an organization will be breached, but how quickly and cleanly it can come back.

The Solution // Gardiel sits between production and backup as a unidirectional, hardware-anchored gateway. Data flows inward only, and administration remains separate. In real time, the gateway transforms the bitstream to eliminate execution paths, covering both known and novel attack variants, and stores versioned, immutable states for clean, rapid restore. Existing backup systems remain in place, so adoption does not require rip-and-replace.

How It Works // The design follows a clear sequence: barrier, obfuscation, redundancy, and recovery. A one way data diode enforces inbound only flow and removes administrative backchannels. During ingestion, bitstream transformation at write time strips execution paths so that ransomware and other malware cannot become executable within storage. Versioned, immutable states preserve integrity, create a verifiable audit trail across time, and enable precise point in time rollback. Recovery is performed on inspected, transformed data before reintegration, which delivers clean restarts without the need for sandboxing.

The differentiator is our homomorphic approach. Gardiel keeps data in a homomorphic representation that allows storage, inspection, analytics, and controlled edits without rehydrating attackable plaintext. This means you can verify, search, tag, and enforce policies while data remains non-executable and integrity proofs remain intact. No other backup solution combines one-way ingress at the write path with homomorphic storage and analysis at operational speed.

For investors, this architecture translates into deterministic recovery objectives, measurable risk reduction, and a compliance-friendly evidence chain. It integrates alongside existing backup systems, avoids rip and replace, and scales horizontally as units are added. The result is air-gap-grade resilience with operational speed, lower downtime exposure, and a unique, defensible USP based on homomorphic storage, analysis, and editing that is designed for certification and insurer alignment.

Proof Points // Our foundation includes more than 350 patent claims across four families and three functional prototypes. Recognition from industry juries and academic leaders strengthens third-party credibility and speeds diligence with auditors, insurers, and procurement. For investors, this translates into defensibility and pricing power, shorter sales cycles, and support for premium valuation multiples.

Customer Impact // Organizations need high availability during incidents, provable integrity, and clean recovery with minimal operational friction. Software-only backup, immutable storage, and air-gap processes each solve pieces of the problem but fall short on assured recovery at speed. Gardiel combines air-gap security with operational speed while integrating with existing systems. Where required, GDPR Article 17 can be supported via homomorphic erasure without compromising snapshot integrity.

Beachhead Market // Our initial focus is upper midsize companies operating multi-site IT and OT with lean security teams, where the need for tamper-proof backups and instant recovery is most acute. From there, expansion targets regulated and mission-critical segments across healthcare, manufacturing, the public sector, and sovereign cloud environments.

Finance Model // Gardiel is offered as Hardware-as-a-Service (HaaS) with a 12-month minimum term and predictable recurring revenue. Pricing is set at €50,000 per unit per year, including hardware, maintenance, and updates. Growth comes from additional units per site or per roughly five hundred employees, as well as optional services for forensics, premium service-level agreements, and training. Standardized packages and a target cost of goods sold of twenty-five percent or lower provide clear margin control.

Patent Strategy // The patent portfolio protects the core method while the architecture leverages standard hardware plus a proprietary process. Each pending application allows filing of a plurality of divisional applications. This ensures broad and flexible protection, since the filing date of the divisional applications remains the same.

Next Horizon // The roadmap includes cluster failover, auto-restore, and formal certifications, followed by vertical expansion into finance, healthcare, OT, the public sector, and sovereign cloud. The system vision evolves toward a managed resilience network with telemetry, ML-based anomaly detection, and insurer integrations that translate recovery assurance into measurable risk improvement.

Funding Ask // We are raising €1.5 million for an 18-month runway to finalize the hardware, start certification, run ten to fifteen pilots, and launch in Germany. Use of funds is allocated to 55% for R&D, hardware, and staffing, 20% for patent internationalization, 10% for certification and forensic tooling, and 15% for marketing and sales. We are seeking warm introductions to banks and insurers, as well as pilot engagements with critical-infrastructure partners.

The Founders // The leadership team combines deep engineering and cybersecurity execution with intellectual-property stewardship and company building. Advisory support includes experienced voices from storage and adjacent industries, ensuring that product, compliance, and go-to-market move in lockstep.

Investment Invitation // We are building the reference standard for trustworthy data resilience. If you share our conviction that recovery must be provable, instant, and anchored in hardware, we invite you to join Gardiel at this inflection point. Your investment will accelerate certification, pilot deployments, and market entry, and it will help establish immunity by design as the new baseline for ransomware resilient backups in regulated and mission critical environments.

Security begins at backup. Connect with us.

GARDIEL

Investors Contact

Alexander Haunhorst

Managing Director

Call +49 152 542 531 26

alexander.haunhorst@valutistech.com

Valutis Technologies GmbH

Industriestr. 29

82194 Gröbenzell

www.valutistech.com