

## CASE STUDY

"At COE Security, we build, operate, and transfer world-class security solutions, empowering businesses with resilience and trust."

Joseph Henderson



COE SECURITY LLC

USA | BRAZIL | UAE | INDIA



## CASE STUDY

### COMPLIANCE BY DESIGN: EMPOWERING A WEB3 FINSERV FIRM WITH BLOCKCHAIN COMPLIANCE TOOLS



# Measurable Impact Our Security in Numbers



- 1,500+ Global Engagements
- 95% Client Satisfaction
- 10+ Years of Cybersecurity Excellence
- 15K+ Critical Vulnerabilities Identified
- 1M+ Security Incidents Managed
- \$350M+ Costs Saved
- \$2.5B+ Transactions Secured
- 24/7/365 Threat Monitoring & Response
- Proactive Threat Hunting
- Cutting-Edge Security Technologies
- Dedicated Security Advisors
- Zero-Day Exploit Mitigation
- Incident Response Planning & Execution
- Security Awareness Training
- Customizable Security Solutions

**We're  
Hiring!**

## Client Profile

The client is a Web3-native financial services platform offering DeFi lending, staking, and stablecoin services to institutional investors and retail users. Headquartered in Singapore and operating globally, they faced intensifying compliance demands under FATF, EU MiCA, and SEC regulations. The client needed a scalable compliance framework that could enforce KYC/AML, wallet screening, and transaction monitoring across multiple blockchains without compromising decentralization.

## Challenges Faced

Key security concerns included:

- Difficulty meeting FATF Travel Rule and MiCA requirements across DeFi operations
- No existing wallet screening or on-chain KYC enforcement
- Regulatory uncertainty in multiple jurisdictions
- Manual compliance reporting and lack of audit trails for smart contract actions

## Solution

COE Security implemented a robust Blockchain Compliance Toolkit, combining:

- Wallet Screening Integration: Automated blacklisted wallet flagging via Chainalysis & TRM API integration
- Travel Rule & KYC Modules: Enabled pseudonymous compliance through zero-knowledge KYC attestations
- Smart Contract Logging for Auditability: Introduced tamper-proof logs and compliance triggers within contract code
- Regulatory Mapping Engine: Matched transactional behaviors with applicable regulations across jurisdictions



# Compliance & Regulatory Mastery



- ISO 45001
- HIPAA & HITRUST
- NIST & NIST 800-171
- ISO 27001
- PCI DSS
- CMMC
- CIS Controls
- SOC 2
- CCPA & NYDFS
- EU CRA
- FedRAMP
- GDPR
- UK Cyber Essentials
- Essential Eight - Australia

## Streamlined Compliance Across the Chain

- Screened 50,000+ user wallets against global sanctions lists and OFAC/UN blacklists
- Logged every smart contract action (mint, transfer, stake) into a verifiable audit trail
- Automated suspicious transaction alerts for volume spikes and known laundering patterns
- Enabled zero-knowledge KYC for anonymous but compliant user onboarding
- Reduced manual effort by integrating reporting workflows with compliance dashboards

## Regulatory Alignment & Governance Strengthening

- Aligned DeFi operations with FATF Travel Rule, MiCA guidelines, and US SEC token classifications
- Implemented on-chain policy controls via smart contract-based compliance gates
- Trained the client's compliance team on blockchain AML/CFT frameworks
- Created a compliance readiness checklist with risk categories and jurisdiction-specific triggers

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# Our Cybersecurity Arsenal: Beyond Protection- We Build Resilience



- Application Penetration Testing (Thick/Thin)
- Mobile Application Penetration Testing
- API Penetration Testing
- Network Penetration Testing
- Operational Technology Security Testing
- Cloud Penetration Testing
- AI & LLM Security Audit and Pen Testing
- Red Teaming & Social Engineering Services
- Product & Hardware Penetration Testing
- IoT Security
- Security Operations Center Services (24/7)
- Custom Security Services

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## Blockchain Regulatory Assurance Suite

- Wallet Screening & Risk Scoring
- On-chain KYC & Travel Rule Integration
- AML/CTF Monitoring for DeFi
- Token Compliance Risk Scanning
- Smart Contract Audit Logging
- Jurisdiction-Based Compliance Mapping
- Regulatory Reporting Dashboards
- Compliance Trigger-Based Smart Contract Controls
- GDPR & Data Privacy Protocol Mapping
- Digital Identity & Credential Verification Solutions

## Implementation Details

- Integrated compliance tools with smart contracts on Ethereum and Avalanche
- Deployed ZK-proof-based KYC for privacy-preserving onboarding
- Connected TRM Labs wallet monitoring with SIEM for real-time alerts
- Delivered a modular compliance reporting dashboard with export-ready templates
- Provided audit log encryption using IPFS and timestamped blockchain anchoring

## Results Achieved

- Achieved regulatory readiness for MiCA and FATF in under 60 days
- Reduced manual compliance reporting efforts by 80%
- Detected 27 high-risk wallet interactions before fund compromise
- Gained approval from two institutional partners due to verified compliance tooling





# Industries We Protect with Cutting-Edge Security



- Financial Services
- Healthcare
- Retail
- E-commerce
- Government
- Cryptocurrency
- Blockchain Technology
- Automotive
- Transportation/Logistics
- Energy & Utilities
- Hospitality/Tourism
- Entertainment/Media
- Manufacturing
- Education
- Telecommunications
- HiTech & Information Technology

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## Client Testimonial

"With COE Security's Blockchain Compliance Tools, we now face regulators with confidence. The blend of privacy, automation, and transparency is exactly what we needed to scale compliantly."

## COE Security LLC

COE Security is a leading cybersecurity services provider, offering tailored solutions to evolving threats. We enable organizations to meet compliance, reduce risk, and strengthen cyber resilience through proven methods, expert execution, and a commitment to excellence.

"Peace of mind in a world of cyber threats.  
That's what we deliver."

*Joseph Henderson*

