Operational Security & Compliance for AcmeBank's Tokenized Bonds

Powered by OpenZeppelin's Open-Source Monitoring & Automation Stack





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OpenZeppelin

Tokenized Bonds: An **Emerging** Trend in Digital Finance

What Is a Tokenized Bond?

Rather than using traditional balance sheet capital, tokenized bonds have emerged as a novel approach by instead issuing bonds on-chain.

Tokenized bonds enable benefits such as better settlement times, fractional ownership, automation, more liquidity, efficient distribution, global accessibility, and more transparency.

Current State of Tokenized Bonds

- Tokenized government bonds
- Corporate tokenized bonds
- > Green bonds
- Municipal Bonds
- Real estate-backed tokenized bonds

Development Lifecycle

- Asset Structuring & Regulatory Compliance
- Smart Contract Development
- 3. Token Minting & Distribution
- Investor Verification & Compliance Measures (KYC & AML)
- 5. Secondary Market Trading & Liquidity Enhancement
- 6. Automated Payments & Redemption

OpenZeppelin Will Assist You Throughout the Entire Process

10+ years securing \$100B+ in on-chain value



- Security Advisory & Consulting Strategic design reviews, best practices, and architecture guidance.
- Smart Contract Security Audits Comprehensive code reviews identifying vulnerabilities and recommending fixes.
- Blockchain Infrastructure Security
 Assessments Reviews of node-level components, bridges, and backend systems.
- Incident Response Training & Simulations Development of incident response plans and live simulation exercises.
- Operational Security Reviews Assessment of key management, deployment, upgrade governance, and privileged role security.

LIVE DEMO: Critical Compliance & Security Scenarios

Missed Interest Large Unauthorized Regulatory **Payments Threshold Breaches Transfers** Detect overdue Transfers >\$10M Entity ownership >20% payments, alert blocks further trigger emergency operations team purchases pause

Critical Compliance & Security Scenarios 2

4



5



6



Private Key Compromise

Detect actions outside change control windows, emergency response

OFAC Sanctions Screening

Block interest payments to sanctioned addresses automatically

Roles Update Monitoring

Changes to critical roles can indicate insider threats or governance issues.

Questions?



How can we help?



OpenZeppelin