BLOCKCHAIN & CRYPTOCURRENCY
SECURITY SERVICE

The Blockchain and Cryptocurrency Security Service systematically reveals potential threats and vulnerabilities specific to the proposed application design and implementation.

Overview

Engaging Deja vu Security to perform a security review of your blockchain application or implementation enables you to reduce the risk of financial loss, as well as a high risk to reputation at the han ds of malicious hackers. The Blockchain and Cryptocurrency Security Service provides you with the ability to identify, understand, and mitigate distributed ledger and implementation risks to blockchain-based applications. Our methodology will carefully study the design and test the implementation of your blockchain application, looking for security vulnerabilities that could be used to exploit the distributed system.

How the Blockchain Security Service Works

The Blockchain Security Service understands, analyzes, and mitigates application risk. Based on customer need, objectives, and development stage, Deja vu Security offers a variety of security services including:

Threat Modeling & Secure Design Review: Reviews the usage and integration of blockchain and cryptocurrency into the overall system design for logic and systemic risks.

Security Code Review: Analyzes the code for implementation-based security flaws and deviations from business logic. Provides mitigation strategies and detailed fixes for complex security vulnerabilities.

Ledger Penetration Testing: Allows for the system to be analyzed from an attacker's perspective. It tests the application deployment and assists code reviews in uncovering complex vulnerabilities.

Application Fuzz Testing: Automates the process of finding vulnerabilities through fault injection and data mutation. Attackers use this process to discover vulnerabilities in solutions; now, so can you.

"From the very first conversation when we started looking for a company that could add value to Ethereum's security audit...we were impressed by Deja vu's width and depth of challenging the theoretical assumptions as well as coming up with suggestions for hardening the code base."

Jutta Steiner, Ethereum

Cryptocurrency and Transaction Verification and Testing: Testers exercise and verify that usage of cryptocurrency primitives and transaction verification, implementation, and logic are correct. Testers exercise the virtual machine and contract primitives to ensure expected execution is performed.

Peer to Peer Network Testing: Analyzes the distribution network implementation and protocol for threats that could lead to a Denial of Service or exploitation.

Why engage with Deja vu Security?

When you engage with Deja vu Security, we collaborate with you to proactively identify potential security threats. Each Blockchain and Cryptocurrency Security review creates unique deliverables including:

- A detailed document identifying security threats and vulnerabilities uncovered by the review.
- A prioritization methodology.
- Additional recommendations allowing you to maximize your return on investment.

After the Application Security review, Deja vu Security will help you:

- Understand the findings and any vulnerabilities found.
- Prioritize the discovered security issues.
- Evaluate the impact of implementing recommendations.
- Learn from the security risks that were identified.

After implementing the recommendations generated from the review, you can be confident that your organization has the best mitigation against imminent security risks or active attacks.

You receive an actionable mitigation plan to minimize your risk and maximize return on investment.

Scenarios

Here are some scenarios we can help you secure:

- Blockchain-Based Systems and Distributed Ledgers
- Virtual Machine and Transaction Verification
- Smart Contracts and Contract Implementations
- Peer to Peer Network and Distribution Implementations
- Miner Clients and Miner Pools
- Wallet Implementations
- Online Cryptocurrency Exchanges and Trading Systems
- Distributed Autonomous Organization Implementations
- Domain Specific Languages and Runtimes for Contracts and Virtual Machines

Blockchain and Cryptocurrency Security Service Offerings

- Threat Modeling & Secure Design Review
- Security Code Review
- Ledger Penetration Testing
- Application Fuzz Testing
- Cryptocurrency and Transaction Verification and Testing
- Peer to Peer Network Testing

About Deja vu Security

D eja vu Security is a trusted provider of information security research and consulting services to some of the world's largest companies. We focus on helping clients build secure solutions. We work with our customers to balance your business and security needs while providing a full range of security services. Seattle-based Deja vu Security was founded by a group of information security veterans with leadership experience at Microsoft, Amazon, and HP.

1415 10th Ave., Suite #1

Seattle, WA 98122

(855) 333 5288 | secure@dejavusecurity.com

www.dejavusecurity.com