WHITEPAPER V1.0

XEON Protocol

Universal ERC20 Hedging and Lending

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Abstract

The cryptocurrency industry has been witnessing exponential growth, with hundreds or even thousands of tokens released daily. However, there exists a stagnation in solutions that effectively empower this vast array of tokens. The Xeon Protocol emerges as a decentralized platform running a set of smart contracts on the blockchain, aimed at achieving universal ERC20 liquidity unlocking and speculation through hedging and lending.

Background

Within the crypto sphere, existing hedging and lending protocols predominantly serve a niche of tokens, often favoring blue-chip tokens. Xeon Protocol emerged in April 2023 to address the critical need for unlocking liquidity from committed tokens.

Challenges

Unlike traditional finance, cryptocurrencies pose challenges in utilizing assets as collateral, despite their measurable value on decentralized exchanges (DEXes). Investors often find themselves restricted to unlocking value from their assets only through over-the-counter (OTC) sales or DEX transactions. A robust financial ecosystem requires fundamental lending and risk management infrastructure. Given the substantial size of the crypto market, sound risk management and lending mechanisms are imperative to empower investors.

Opportunity

- There is currently no protocol enabling custom ERC20 options trading and collateralized lending.
- No barriers exist to create a decentralized over-the-counter (OTC), peer-to-peer (P2P), universal ERC20 DeFi protocol.
- Mainstream investors increasingly expect enhanced value unlocking from their investments.
- The ERC20 market is poised for exponential growth across all blockchains over the coming years.

There is need for a basic solution on the market that embraces the volatility of ERC20 tokens and still pivots their value. Most products on the market are complex in their architecture, yet overlooking the basic and majority ERC20 tokens traded by investors.

The Solution

The Xeon Protocol comprises three ecosystems: Neon Hedge, Neon Lend, and Neon Farm, offering hedging, lending, and farming services, respectively. The goal is to establish a decentralized protocol consisting of public smart contracts deployed across multiple blockchains, consolidating the value of all ERC20 tokens into an open OTC marketplace.

Drawing inspiration from Unicrypt, our protocol leverages a vault that accepts any ERC20 token for deposit or withdrawal. Additionally, an underlying value engine dynamically measures the value of any ERC20 token paired with currency in real-time.

Platforms

Neon offers advanced OTC hedging and lending tools for ERC20 tokens.

Our tools are the first of their kind, developed specifically to cater for ERC20 tokens, to address the challenges mentioned. Unlike other crypto hedging platforms, we do not utilize peer-to-pool AMM model, but our own synthetic peer-to-peer OTC model.

1. Neon Hedge - ERC20 hedging tools.
2. Neon Lending - ERC20 collateralized lending tools.
3. Neon Farm - ERC20 liquidity farming pools to investors and projects.

Use Cases

The main purpose for all our tools is to enable investors to manage risk or unlock liquidity from their tokens. More information on use cases can be found here:
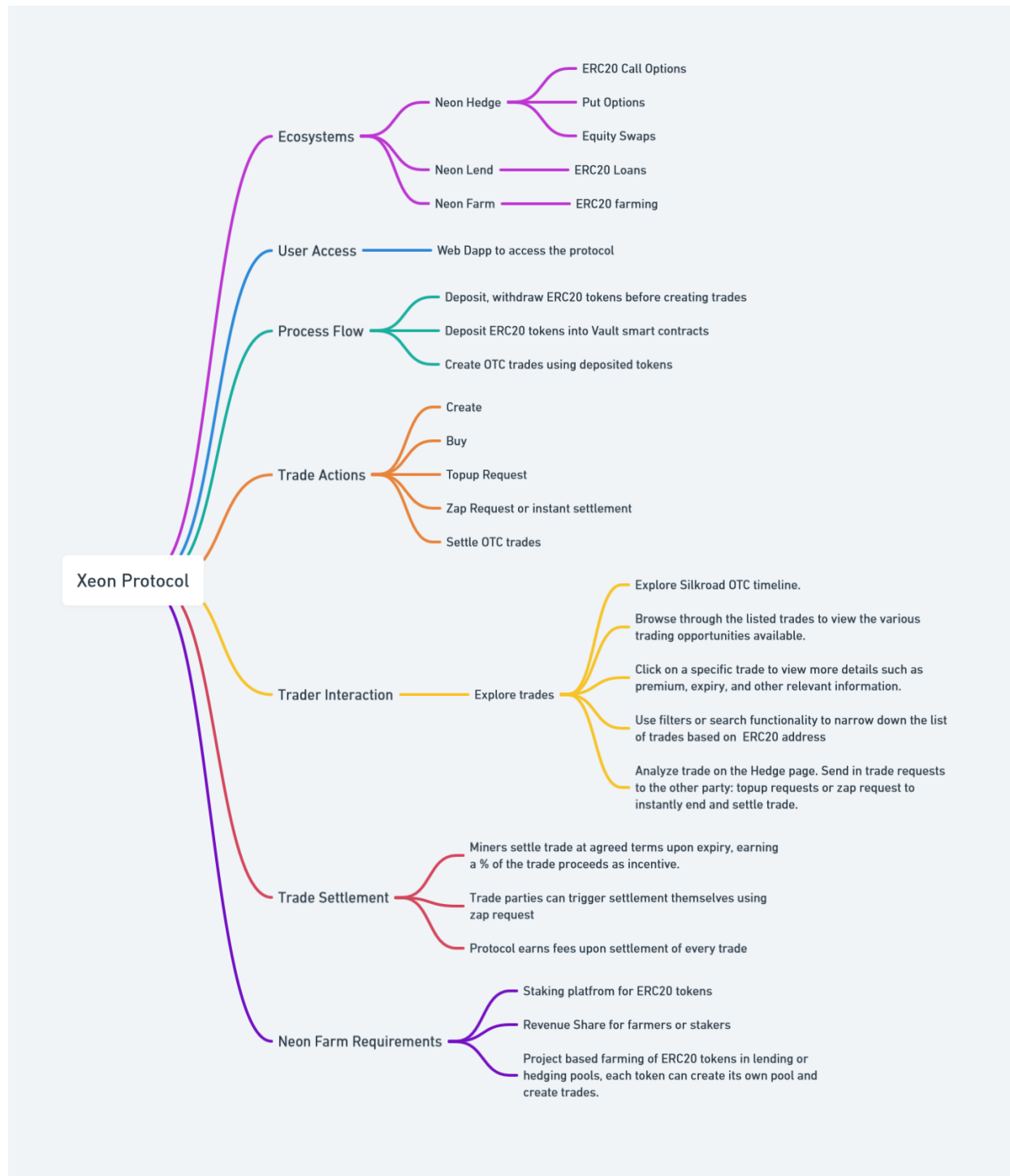
https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/how-it-works/use-cases

Assets deposited into our protocol can be used to create the following:

1. Call Options
   https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/otc-tools/call-options
2. Put Options
   https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/otc-tools/put-options
3. Equity Swaps
   https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/otc-tools/equity-swaps
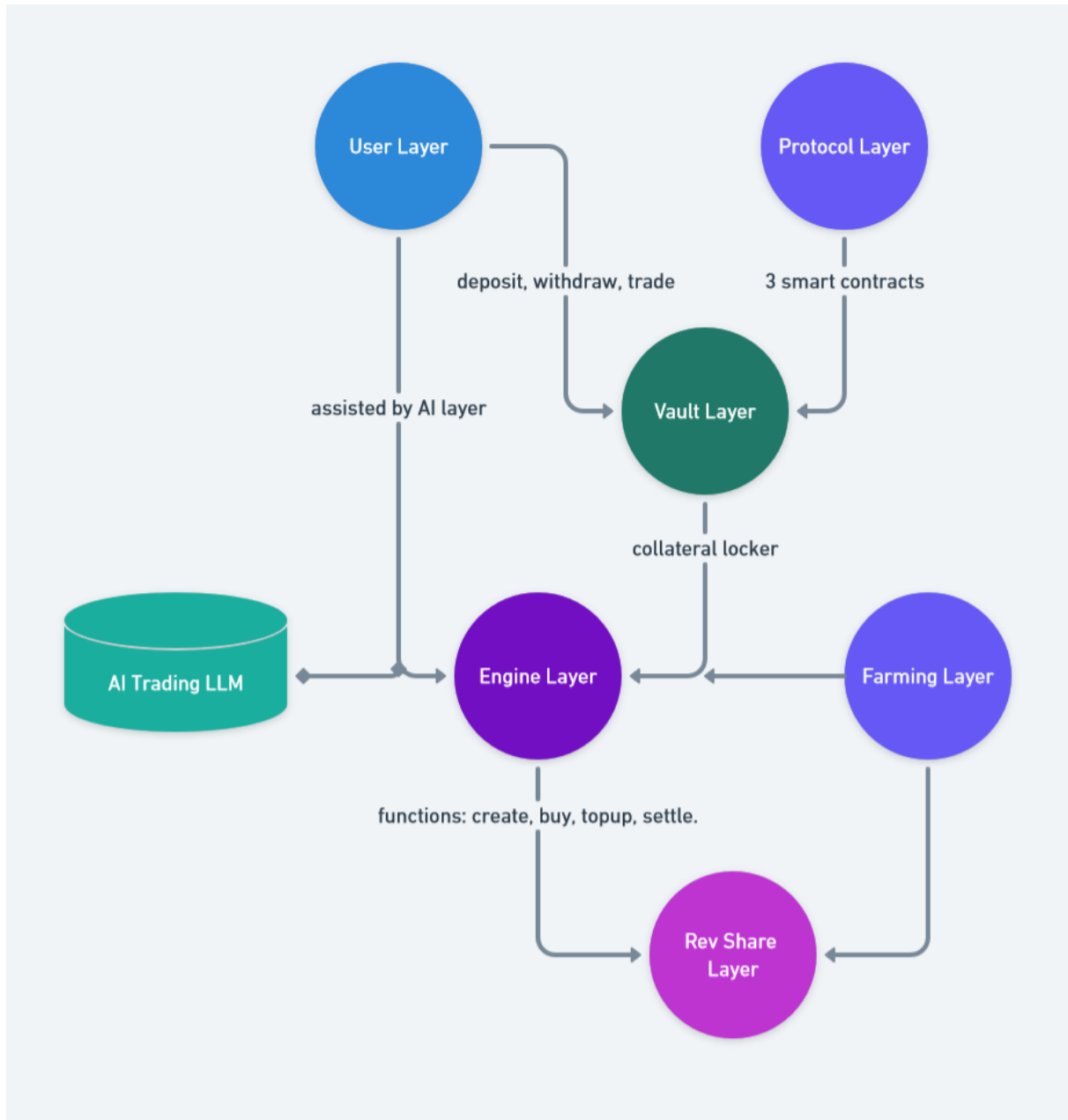4. Lending
   {coming soon}

Mindmap

* imported from official documentation

Xeon Protocol

- **Ecosystems**
  - Neon Hedge
    - ERC20 Call Options
    - Put Options
    - Equity Swaps
  - Neon Lend — ERC20 Loans
  - Neon Farm — ERC20 farming
- **User Access** — Web Dapp to access the protocol
- **Process Flow**
  - Deposit, withdraw ERC20 tokens before creating trades
  - Deposit ERC20 tokens into Vault smart contracts
  - Create OTC trades using deposited tokens
- **Trade Actions**
  - Create
  - Buy
  - Topup Request
  - Zap Request or instant settlement
  - Settle OTC trades
- **Trader Interaction**
  - Explore trades
    - Explore Silkroad OTC timeline.
    - Browse through the listed trades to view the various trading opportunities available.
    - Click on a specific trade to view more details such as premium, expiry, and other relevant information.
    - Use filters or search functionality to narrow down the list of trades based on ERC20 address
    - Analyze trade on the Hedge page. Send in trade requests to the other party: topup requests or zap request to instantly end and settle trade.
- **Trade Settlement**
  - Miners settle trade at agreed terms upon expiry, earning a % of the trade proceeds as incentive.
  - Trade parties can trigger settlement themselves using zap request
  - Protocol earns fees upon settlement of every trade
- **Neon Farm Requirements**
  - Staking platfrom for ERC20 tokens
  - Revenue Share for farmers or stakers
  - Project based farming of ERC20 tokens in lending or hedging pools, each token can create its own pool and create trades.

System Architecture

*imported from official documentation

Technology

9.1 ERC20 standard.

We adopted the ERC20 & ERC21 standard initially as the tokens that can interact with our protocol. This is the most common standard across most blockchains today.

9.2 Vault approach (with token approvals).

Tokens can be deposited into or withdrawn from a Vault smart contract. Investors need to approve their tokens during deposit so the protocol can freely handle them once deposited.

https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/mechanics/erc20-vault-model

9.3 Uniswap standard adopted for DEX Router.

Uniswap created a Interface standard that has now been widely adopted by other DEXes on new chains. This standardized approach to interfacing with a DEX enables us to fetch the pair & value of any ERC20 token on the chain we deploy our protocol.

https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/mechanics/getpairaddress

9.4 Storage

Utilizing mappings and structs for balance and trade data storage. With storage the goal is to use simple approaches that can scale with time as more data is more stored and retrieved. We want to use approaches that do not run into gas limit or any "Read" related issues.

9.5 Escrow

Collateral is captured through a locked in use mechanism. This ensures that once traders use their Vault balances to enter a deal, it is held in collateral to ensure settlement is fair at the end.

https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/mechanics/lockedinuse

9.6 Settlement

Settlement is done by the Vault using predetermined formulas. It only needs to get the current underlying value of the collateral from both parties at the time of settlement. Mapping crediting and debiting, with payoff to miners.

https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcI9KUv1DeX8YqX/mechanics/settlement

9.7 Risk management

Enabling investors to adjust their risk exposure during trades, with traders' consent required for adjustments to the deal.

https://app.gitbook.com/o/CdRqVKZQ8jcIiQELVhpJ/s/SiJYDrcl9KUv1DeX8YqX/mechanics/topup

More information on the mechanisms in the documentation.

Sustainability

The XEON token plays a pivotal role in the Xeon Protocol ecosystem, facilitating revenue sharing. Investors utilize the XEON token in exchange for a share of revenue generated within the ecosystem. This revenue is reinvested in ecosystem growth through avenues such as marketing, hiring, and outsourcing services. In turn, investors receive rewards for their contribution to ecosystem growth. Prioritizing user experience, the platform aims to provide one of the best user experiences on the market, ensuring ease of use and maximizing user benefits. Users are at the forefront of our ecosystem, driving our mission to create a seamless and rewarding experience for all participants.

UX

Usability will be the biggest factor for such a platform. Most interfaces are dull and horrendous to use for investors, inherently Defi seems even more difficult to get into for normal investors. To take this head on, we have placed an emphasis on making the UX one of the best in the industry. We aim to create an aesthetically soothing, yet simple interface for our investors.