

README and Documentation

Automated Stablecoin Documentation

1. Objective

- This stablecoin contract maintains a peg by dynamically adjusting supply through minting or burning based on real-time price data.

2. Triggers and Thresholds

- rebalance is triggered manually by operators when price deviation from the peg exceeds the set tolerance.
- Price deviations are fetched from Pyth Network and compared to the peg price.

3. Minting and Burning Logic

- The contract will burn tokens if the price rises above the peg + tolerance and mint tokens if it falls below the peg - tolerance.
- The amount of tokens minted/burned is calculated based on the severity of the deviation.

4. Role Management

- Only addresses with the OPERATOR_ROLE can trigger rebalancing functions to prevent abuse and centralize control.

5. Future Considerations

- Consider automating the rebalance function or implementing a DAO for decentralized access control.