GM, Aave community!

Aave Labs has continued its intensive work on V4 development. Below is a summary of what has been done in the past month as well as what is coming in the next 30 days.

September update:

- Continued designing, developing and architecting Aave V4.

- Completed integration of Aave V3 on the ZKsync Era Mainnet.

- Developed a modular version of the GHO Stewards.

- Addressed Paraswap integration incident in periphery contracts.

Aave V4 Updates

Development on Aave V4 has been progressing steadily for the past three months with the main focus on development of the Borrow Module and research on Liquidity Premiums. Below you will find the details of the advancements made in September.

Borrow Module

The Borrow Module development is advancing with an initial emphasis on replicating Aave V3's functionality. This approach allows for a stable foundation while concurrent research explores innovative designs tailored to specific market demands. This strategy balances immediate functionality with future adaptability, ensuring the module can evolve to meet diverse borrowing needs across various markets. As research insights materialize, we are aiming for a smooth transition to more advanced borrowing features.

Liquidity Premiums

Research on Liquidity Premiums is ongoing, exploring optimal design alternatives to align user debt with the quality of collateral assets. We are exploring asset weighting methods and risk parameter definitions to enhance risk management. A preliminary implementation on the supply side has been completed, with the borrowing section nearing finalization. This initial draft serves as a foundation for further iterations, addressing identified design challenges and refining the overall system for improved efficiency and accuracy in collateral valuation and borrowing capacity.

Liquidation Engine

Work has begun on the initial implementation of the Basic Liquidation Engine. This foundational development aims to enhance liquidity management within the protocol, providing a more robust framework for optimizing capital efficiency.

What else are we working on?

GHO Stewards

Given the need to extend the scope of control for GHO Stewards across various systems and networks, we have created a modular version of the GHO Steward, see [gho-core/pull/414](). This structure allows each Steward to manage a distinct set of responsibilities, segmented by their specific functions. This approach eliminates the necessity to redeploy the entire original Steward framework when updates are required; instead, only the specific Steward module responsible for the affected area needs to be redeployed. This revamped system has been thoroughly reviewed for security by Certora and will be implemented following approval in an [upcoming governance proposal]().

BUIDL GSM

Recent weeks have seen ongoing dialogues with BlackRock BUIDL team, focusing on identifying requirements and integration challenges with Aave. The primary objective is to achieve seamless integration while minimizing alterations to the current GSM implementation. This approach aims to support reserve allocation and management features, enabling third-party integrations, specifically with the BlackRock BUIDL 99 infrastructure (supported by Securitize), see [[Temp Check] BUIDL GSM]().

Paraswap Incident

On August 28, an incident was identified involving the Paraswap integration in the periphery contracts when performing swaps, see [Periphery Contracts Incident August 28 2024](). Aave Labs, in collaboration with BGD Labs, quickly identified the root cause and decided to freeze swaps in the interface momentarily until the issue was completely addressed. All swaps were re-enabled a few days after and are now active, with exception of repays in Aave V2. More details of the incident will

be shared soon.

Aave Labs Interface

ZKsync Integration

The successful implementation of Aave V3 on ZKsync Era Mainnet was completed, with markets going live on September 21st. The team conducted extensive testing, identified potential issues, and set up the necessary infrastructure to support the new network, including the configuration of the Aave Interface. This thorough preparation ensured a smooth launch and integration, enabling users to benefit from the advantages of ZK technology within the Aave ecosystem.

V3.2 Integration

The team is actively working on integrating the new features from Aave v3.2 into the Aave interface, with a primary focus on implementing liquid eModes. Our team is conducting thorough testing and making necessary adjustments to ensure a smooth transition and maintain the stability of the Aave platform during this integration process.

USDS Integration

The team is progressing with the integration of USDS, the upgraded version of DAI, into Aave V3. This integration aims to expand the range of stablecoin options available to Aave users. Rigorous testing and necessary adjustments are being conducted to ensure a seamless update of the protocol.

What's coming next?

Our main focus for the coming month will be

- Advancing research and development of Liquidity Premiums.

- Progressing the development of the Borrow Module.

- Finalizing the initial implementation of the Basic Liquidation Engine.

- Executing the integration of the liquid eModes into the Aave interface.

- Executing the integration of the USDS into the Aave interface.

Stay tuned for next month's update.

Aave Labs