V3 Overview

The Aave Protocol is decentralised non-custodial liquidity protocol where users can participate as suppliers, borrowers or liquidators. Suppliers provide liquidity to a market and can earn interest on the crypto assets provided, while borrowers are able to borrow in an overcollateralized fashion. Borrowers can also engage in one-block borrow transactions (”flash loans”), which do not require overcollateralization.

V3 of the Aave Protocol augments the core concepts of Aave Protocol (aTokens, instant liquidity, stable rate borrowing, credit delegation, etc.) with new features in following area.

Capital Efficiency

V3 allows users to optimise their assets supplied to the Aave Protocol in terms of yield generation and borrowing power.

Portal

This feature allows flow of liquidity between Aave V3 markets across different networks. Protocol V3 allows governance-approved bridges to burn aTokens on the source network while instantly minting them on the destination network. The underlying assets can then be supplied to Aave on the destination network in a deferred manner, by passing it to the pool after it has been moved through a bridge.

Aave V3 provides new system role -BRIDGE - with permission to leverage Portal feature. Only the addresses with theBRIDGE_ROLE can move the supplied liquidity in Aave V3.

Aave Governance holds the ability to grantBRIDGE_ROLE to any of the cross-chain protocol. ?

This can help bridging protocols like Connext, Hop Protocol, Anyswap, xPollinate and novel solutions that can be specifically built to leverage Portal, to tap into Aave Protocol liquidity to facilitate seamless cross-chain interactions.

In order to supportPortal, following three additional features are required by the protocol:

- Mint Unbacked Tokens
- : Allows addresses, withBRIDGE
- role permission, to mint unbackedaTokens
- to theonBehalfOf
- address.
- Back Unbacked Tokens
- : Allows contracts, withBRIDGE
- role permission, to back the currently unbacked aTokens withamount
- of underlying asset and payfee
- .
- Whitelist Bridges
- : allows theBridge Role Admin
- to add/remove addresses forBRIDGE_ROLE
- .
-

Check outPortal for more technical details.

Efficiency Mode (eMode)

The High Efficiency Mode oreMode allows borrowers to extract the highest borrowing power out of their collateral when supplied and borrowed assets are correlated in price, particularly when both are derivatives of the same underlying asset (eg. stablecoins pegged to USD).

This can enabling a wave of new use cases such as High leverage forex trading, Highly efficient yield farming (for example, deposit ETH staking derivatives to borrow ETH), Diversified risk management etc.

Check outeMode for more technical details.

Isolation Mode

New assets can be listed asisolated in Aave protocol V3. Borrowers supplying an isolated asset as collateral cannot supply other assets as collateral (though they can still supply to capture yield). Borrowers using an isolated collateral can only borrow stablecoins that have been configured by Aave governance to be borrowable in isolation mode, up to a specified debt ceiling.

Viewdebt ceiling andborrowable in isolation mode parameters onlive dashboard . ?

Siloed Borrowing

Siloed borrowing allows assets with potentially manipulatable oracles (for example illiquid Uni V3 pairs) to be listed on Aave as single borrow asset. This means that if an asset is configured assiloed , it can't be borrowed in a position at the same time as with other assets. This helps mitigating the risk associated with such assets from impacting the overall solvency of the protocol. Please see theSiloed Borrowing page for more details.

Risk Management

Aave V3 brings a greatly improved set risk parameters and new features to protect the protocol from insolvency.

Supply and Borrow Caps

The Aave governance can now configure Borrow and Supply Caps.

- Borrow Caps:
- allow to modulate how much of each asset can be borrowed, which reduces insolvency risk.
- Supply Caps
- : allow to limit how much of a certain asset is supplied to the Aave protocol. This helps reducing exposure to a certain asset and mitigate attacks like infinite minting or price oracle manipulation.
-

Viewsupply and borrow cap parameters onlive dashboard .

Granular Borrowing Power Control

In Aave V3, it will be possible to lower the borrowing power of any asset to as low as 0% without any impact on existing borrowers (it’s still possible to use the old approach - liquidating existing users - if deemed necessary)

Risk Admins

Aave V3 introduces the ability for the Aave Governance to grant entities permission to update the risk parameters with going through governance vote for every change. These entities can be DAOs or automated agents (eg. RiskDAO, Gauntlet) that can build on top of this feature to react automatically in case of unanticipated events.

Aave Governance will have the ability to revoke access to existing Risk Admins or add new Risk Admins.

Price Oracle Sentinel

The Sentinel feature introduces a grace period for liquidations and disables borrowing under specific circumstances.

This feature has been specifically designed for L2s to handle eventual downtime of the sequencer (but can be extended to handle other cases, even on L1s, in the future).

Variable Liquidation Close Factor

In V3, the liquidation mechanism has been improved to allow the position to be fully liquidated when it approaches insolvency i.e.HF < 0.95 (previously only half of the position could be liquidated at any point).

Decentralisation

Aave V3 introduces a new system role -ASSET_LISTING_ADMIN_ROLE - that can be granted by the Aave Governance to allow admins to create and set custom asset listing strategies for each asset listing.

Multiple Rewards Tokens

Aave Protocol V3 offers the option to havemultiple rewards per token. Now, it is possible for an asset listing to enable additional incentives denominated in native protocol tokens. It is also possible for user to claim multiple reward types per asset in single transaction. Read more inMultiple Rewards section .

Aave Interface

The Aave interface is hosted onIPFS in a decentralized manner. Aave maps the following DNS names to the Cloudflare IPFS gateway:

- https://app.aave.com
- will always point to the latest main IPFS hash with disabled test networks
- https://staging.aave.com
- will always point to the latest main IPFS hash with all networks enabled
-

IPFS Troubleshooting

If the Cloudflare gateway is not working and you are unable to connect toapp.aave.com , you can use any public or private IPFS gateway supporting origin isolation to access the Aave interface:

- Go to/ipns/app.aave.com
- Make sure the gateway supports origin isolation to avoid possible security issues
- You should be redirected to a URL that looks likehttps://app-aave-com.
-

Previous Links

The following links have worked previously:

- https://app-aave-com.ipns.cf-ipfs.com/#/
- https://app-aave-com.ipns.dweb.link/#/
-

Next Contracts Overview Last updated2 months ago On this page *Capital Efficiency * Portal * Efficiency Mode (eMode) * Isolation Mode * Siloed Borrowing * Risk Management * Supply and Borrow Caps * Granular Borrowing Power Control * Risk Admins * Price Oracle Sentinel * Variable Liquidation Close Factor * Decentralisation * Multiple Rewards Tokens * Aave Interface * IPFS Troubleshooting * Previous Links

Was this helpful?