Time passes fast, especially in DeFi and Aave; it is already 1 month since the Bored Ghosts started officially contributing to the Aave ecosystem!

As expected, during this first month we haven't been precisely bored, but working and releasing multiple projects/features/improvements.

In general, our main focus until now has been the following aspects:

- · Governance assurance tooling.
- Improvements on Aave developers' experience.
- · Closing some "legacy" aspects.

In this post, we will present a recap of what has been done, both from the perspective of the planning or <u>Day 0</u>, together with a general overview of the full scope completion of the Aave <> BGD collaboration.

# **Update from Working Day 0**

On the first day of the BGD <> Aave engagement, we have published an initial roadmap of what was planned to be done in the first 1-3 months. On those different items, the progress has been as described next.

# Migration Aave v2 Ethereum → Aave v3

On the implementation side, progress has been made, but mainly we have decided to do a multi-step approach for this migration. The reason is that some pieces (e.g. the interest rate strategies) can be updated completely in isolation, and the complexity of that type of change is lower than for example the upgrade of contracts involving heavy storage usage.

We have been working too on the security procedures requirements, highly critical given the size and complexity of the system.

In the following weeks, we will be able to publish a draft of the initial stage, targeting the beginning-middle of July for the security procedures and execution.

# Governance proposals' verification tooling

This was probably our main objective for the first month of BGD <> Aave, and we are really happy with the results! During this time we have made 2 main releases in this field:

· Aave Seatbelt.

We developed this governance proposal assurance tool, allowing anybody to check all changes/interactions/events that a given proposal would do on other systems, including those of Aave. We think this is fundamental for both security professionals around the Aave governance system, together with any other project trying to build on top of the Aave governance (e.g. analytics). You can find all the details about Aave Seatbelt here <a href="https://governance.aave.com/t/bgd-release-aave-seatbelt/8310">https://governance.aave.com/t/bgd-release-aave-seatbelt/8310</a>

• BGD Aave Governance proposals reports

. In the current state of the Aave governance system (and almost any system), it is not an option to get rid of the human expertise and critical component. As we thought our knowledge about Aave on BGD could give a lot of value to the community regarding proposals, we started systematically releasing our own reports about any proposal going live.

In total, we have published 9 reports in the last month. Pretty incredible the intense activity on the Aave governance!

We have already seen important value awareness-wise, for example with proposal 78, where we detected and informed the community of what we considered an important consequence of the proposal <a href="https://twitter.com/bgdlabs/status/1531988349837365248">https://twitter.com/bgdlabs/status/1531988349837365248</a>.

Of course, we will not stop here, and we will keep improving both the previous projects and coming up with new ideas.

#### Migration aBPT/stkABPT to Balancer v2

We have presented to the community on THIS POST our proposal for the execution of the migration.

Currently in the implementation phase, and with some topics pending to discuss and define the scope, as the strategy for staking of stkABPT into a potential Balancer gauge.

#### Rescue of funds locked on Aave ecosystem contracts

Mistakes of sending tokens to the wrong smart contract addresses are always painful, so we decided to set it as a priority to try to help members of the Aave community on this.

Because of that, one of our first contributions was to present a multi-phase plan for this "rescue mission", outlined HERE.

Since then we have been working on the implementation of Phase 1 of the rescue mission, and today we have released the draft codebase of it, generally mature, but still a work in progress. You can check it out <u>HERE</u>.

#### Misc Aave UI fixes

Currently, one of the main access points to the Aave protocol is the decentralized-hosted user interface located on <a href="app.aave.com">app.aave.com</a>, with its repository on <a href="https://github.com/aave/interface">https://github.com/aave/interface</a>.

Given our expertise, we have made several minor contributions to it, between bug fixes and improvements, listed in detail on the table at the end of this post.

# Aave Governance v3 prototype

Progress has been made on this, together with some improvements in the involvement of Guardians (cross-chain governance described later).

# Open discussion in the community concerning AAVE tokenomics

No particular development in this direction, but the requirement of having the community discussing on important aspects of AAVE and its distribution has been kickstarted, for example, the stkAAVE distribution to participants on the Aave v2 Ethereum pool <u>HERE</u>.

It is highly probable to see something in this direction in the following month or so.

# Exploration of different options and models to expand cross-chain governance to all Aave pools

We still need to put some aspects in order, but the community can expect an important update in the following 2 weeks

# Technical support on listings of stMATIC, sAVAX, FRAX, MAI, sUSD (and some others still on previous listing phases, like Snapshot)

From a technical perspective, we will be releasing on the following days a repository with utility contracts for:

- · Facilitate listings of assets by the Guardian.
- · Serve as an example of an Aave v3 listing, by using Solidity.

Our initial helper contracts (Listing Stewards) are for sAVAX, FRAX, MAI, and sUSD, but will be a relatively simpler process to expand to other assets, having a full test suite and specification included.

### Security

On the security aspects of the ecosystem, our main effort has been the technical review and support of the majority of the governance proposals submitted, including:

- Proposal 72: update of risk parameters of Aave Arc.
- Proposal 73: renewal of Aave Grants DAO.
- Proposal 77: addition of extra function claimToSelf() on Aave v2 Ethereum IncentivesController contract.
- Proposal 79/76 (same, but the first proposal expired): consolidation of v1 reserve factors and enabling DPI as a borrowing asset on Aave v2 Ethereum.

In addition to that, we have been working closely with Certora to get the most on their engagement with the Aave community, and we have been in contact with potential extra providers of security services to the community.

#### **Misc**

We have submitted proposal 82, to renew the AAVE allowance on the Safety Module and allow stakers to claim the rewards as normal, more information about it <u>HERE</u>.

# Progress on the general scope

As a general recap, we have contributed with good progress in 13 out of the 20 points of contribution in the initial list of tasks BGD <> AAVE

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Out of the other 7 where there is no big progress, 2 require some action from the community first, and the other 5, or didn't have as much priority, or no contribution was needed yet, or we are still in an early phase.

The following is the initial list of tasks on the <u>BGD <> Aave proposal</u> and their level of completion/participation at the current moment.

- 1. Maintenance of Aave V2 contracts until migration to V3
- 2. We have been working on especially 1 optimization to reduce any type of risk for potentially re-entrancy assets. Will be included in the proposal of the initial phase of v2 → v3 migrations of Aave Ethereum.
- 3. Migrating V2 markets to V3
- 4. Ongoing work on the migration codebase, is planned to be executed in 2 phases, with the first coming during July if security procedures allow.
- 5. Technical support on the listing of new assets
- 6. We are supporting the following listings approved by the community: sAVAX, FRAX, MAI, sUSD, stMATIC.
- 7. Create and improve tooling to monitor governance proposals and their general correctness
- 8. We have released the BGD proposals' report

#### https://github.com/bgd-labs/aave-proposals-reports

We have also released Aave Seatbelt

#### https://github.com/bgd-labs/seatbelt-for-ghosts

- 1. Migration of ABPT Balancer pool to Balancer v2
- 2. We have outlined a migration plan here <a href="https://governance.aave.com/t/bgd-abpt-balancer-v2-migration-plan/8381">https://governance.aave.com/t/bgd-abpt-balancer-v2-migration-plan/8381</a> and currently, we are in the implementation phase
- 3. Technical support on deployments for new chains
- 4. No special progress here, apart from following the status of the different chains for potential deployments. We will have some updates on this item following weeks.
- 5. Implementation and deployment of Aave Governance V3
- 6. We are still in the design and implementation phase. We will present to the community the final version of the Aave Governance v3 design once ready.
- 7. Technical assistance and implementation if the community creates a new iteration of the AAVE tokenomics
- 8. Waiting for more movements from the community.
- 9. Technical support and implementation to close LEND-to-AAVE migration, if approved by the community
- 10. The community will still need to make a decision if this makes sense.
- 11. Technical maintenance and improvement of the Aave liquidity protocol UI
- 12. Improvement of documentation for running the interface on forked networks

#### https://github.com/aave/interface/pull/787

Support and debugging of issues on repayment with collateral

#### https://github.com/aave/interface/pull/770

· Add support for siloed borrowing on UiPoolDataProvider

### https://github.com/aave/aave-v3-periphery/pull/84

Use flashLoanSimple in v3 aave-utilities to reduce gas consumption on swap/repayWithCollateral

#### https://github.com/aave/aave-v3-periphery/pull/82

#### https://github.com/aave/aave-utilities/pull/366

Integrate Coinbase dapp browser

### https://github.com/aave/interface/pull/810

- 1. Technical maintenance and improvement of the Aave safety module UI
- 2. No progress here.
- 3. Technical maintenance and improvement of the Aave governance UI
- 4. Resolve bug where broken IPFS responses were cached forever

#### https://github.com/aave/interface/pull/740

Resolve a UI bug where voting was allowed even after a vote has been casted (prohibited on the contract side)

#### https://github.com/aave/interface/pull/743

· Fix an issue with loading proposal id 0

#### https://github.com/aave/interface/pull/735

When the proposal is still active the cached data would load instantly while an update is triggered in the background.
This was misleading so we added a clear indication that data is loading

# https://github.com/aave/interface/pull/734

Fix time issues introduced by block time increase on ethereum

#### https://github.com/aave/interface/pull/812

Integration of Aave Seatbelt

#### https://github.com/aave/interface/pull/818

- 1. Managing deprecation of Aave V1
- 2. No progress here.
- 3. Technical support for teams developing products in the ecosystem, depending on capacity
- 4. We have supported teams mainly submitting governance proposals on their technical developments: Aave Grants DAO, consolidation of v1 to v2 Reserve Factor by Llama, Governance House in proposals concerning Aave Arc.
- 5. Point of contact for security disclosures and action
- 6. We supervised the disclosure of the fallback oracle misconfiguration, and we are managing the bounty release here <a href="https://governance.aave.com/t/bgd-proposal-for-bounty-fallback-oracle-misconfiguration/8421">https://governance.aave.com/t/bgd-proposal-for-bounty-fallback-oracle-misconfiguration/8421</a>
- 7. We are actively monitoring disclosures, but no other incident has happened.
- 8. Rescue locked funds send directly to contracts of the Aave ecosystem
- 9. We have outlined a plan for the rescue of locked tokens across the ecosystem here <a href="https://governance.aave.com/t/bgd-rescue-of-tokens-locked-on-aave-overview-and-phase-1/8150">https://governance.aave.com/t/bgd-rescue-of-tokens-locked-on-aave-overview-and-phase-1/8150</a>.
- 10. We have made public the repository containing the codebase for Phase 1 (still work-in-progress)HERE
- 11. Explore and propose the community integrations of the ecosystem with other protocols
- 12. No progress here.
- 13. Research new features and improvements from V3
- 14. We have some ideas, but they still need more design work.
- 15. Technical support on community initiatives related to the DAO treasury strategies
- 16. We gave support to the Llama team on the proposal to move the fee collection of Aave v1 Ethereum to the collector of Aave v2 Ethereum.

- 17. Coordination with other parties contributing to Aave
- 18. Coordinating with Lido during the week of the market's downtrend to evaluate if stETH at Aave (given its really big size) could create systemic risks, and how to protect them.
- 19. Collaboration with Certora for a roadmap of Aave's community projects on which to add Certora rules. Also, participation in the Aave <> Certora grants' program, for security researchers to write rules and get rewards.
- 20. Periodic communication with Chainlink, discussing points of improvement.

#### Miscellaneous

• Fix on Aave subgraph to correctly calculate fees in various situations

https://github.com/aave/protocol-subgraphs/pull/68

• Adjust Cryptostats fee adapter to account for new subgraph & Harmony network

https://cryptostats.community/discover/adapter/QmZXZfK791TVmDHjf25MaCzVqthCS9VgxVauRhqtiGt5ge

Adjust Cryptostats issuance adapter to account for issuance on stkABPT

https://cryptostats.community/discover/adapter/Qmbr7s4jHshat3QknYngJCCLQmBNTr853ebf35QSJfi2pm

• We submitted proposal 82 https://governance.aave.com/t/aip-renewal-of-safety-module-aave-allowance/8463

# What's coming next?

As always, we will keep the community well updated, but our main focus for this next month will be:

- Progress on Balancer v1 → v2 migration.
- Continue improving Aave developers' experience.
- Be ready for the execution of Rescue Mission Phase 1.
- Present to the community our solution for cross-chain governance in all networks, minimizing or removing Guardian's role
- Be in good shape with Aave Governance V3.
- Be ready for the initial phase of the Aave v2 Ethereum to Aave v3 Ethereum migration.