

D.A.M.P.

A Decentralized Asset Management Protocol on Polygon Network

Bounties

- 1) Polygon Network (Track - DeFi)
- 2) Superfluid - (Streaming + lending)
- 3) Chainlink
- 4) The Graph (Used Superfluid subgraph and Created a new subgraph for our project)
- 5) Portis
- 6) Consensus (used metamask, truffle and infura API)

Aim

With new protocols launching left, right and center, it is difficult for a user to manage his/her portfolio on chain. Traditional finance offers products such as stocks, bonds, debts, mutual funds etc. Many protocols try to give or improve services which are present in tradfi but there are very few protocols which actually allow on-chain asset management similar to mutual funds in traditional finance. Our aim is to build a protocol/project which allows users to stream their tokens to pools with a proven track record managed by the crypto community.

Introduction

D.A.M.P. (short for Decentralized Asset Management Protocol) is a highly modular and flexible protocol which allows users to stream their tokens to pools managed by the crypto community. We have created a smart contract solution to interact with various protocols on Polygon.

Our project is inspired by crypto management protocols such as **Enzyme Finance** (on Ethereum) and **dHEDGE** (on Ethereum and Polygon). We take their functionality one step further by introducing Superfluid streams which enable exciting new features such as dollar cost averaging and Instant reward distribution. Furthermore, we intend to provide a smart contract infrastructure to anyone who wants to integrate Superfluid streams and different protocol capabilities into their own project.

Services

We intend to provide various services to allow deeper interaction between Superfluid and different DeFi protocols.

1) Experts managed assets pool

This service allows users to stream tokens into pools managed by experts with a proven track record of portfolio management. For this hackathon (ETHOdyssey), we have implemented a basic version of this service.

In the current version, anyone can create a pool and assign a set of addresses as managers of that pool. Creating a pool requires sending three transactions:

- 1) For creating a DAMPool contract used by managers.
- 2) For creating a comptroller contract for users to stream tokens to and withdraw tokens from.
- 3) To set the address of the DAMPool that can control the functionality of the comptroller in the comptroller contract.

These pools accept a stream of one asset only called a 'denomination asset'. Currently, this asset is DAI provided by the Aave faucet on Polygon Mumbai testnet but the contracts support any type of asset supported by Superfluid.

Managers interact with different protocols using contracts called "adapters". These adapters allow our protocol to be modular and flexible. A manager can only call a verified adapter. The managers cannot run away with funds in a pool as they can only use these verified adapters. Adapters are currently created by the core developers but later on we intend to decentralize this aspect using a DAO model.

In the subsequent versions, we intend to use a reputation model for ordering the managers/pools according to their trustability, their management performance etc. Also, we intend to provide a way for managers to get commissions for profitable trades.

Whole architecture will be explained in a detailed document in the coming days. This document will include the mathematical formulas, smart contract interaction graph etc.

2) Community managed asset pools

This service will allow users to stream their tokens to pools managed by the whole community i.e. it is permissionless and without any fixed managers. Anyone can invest these tokens into protocols using verified adapters. The amount that they can use for trading will depend on a number of factors which determine their overall reputation as a manager. We intend to gamify this service in order to maximise the profits.

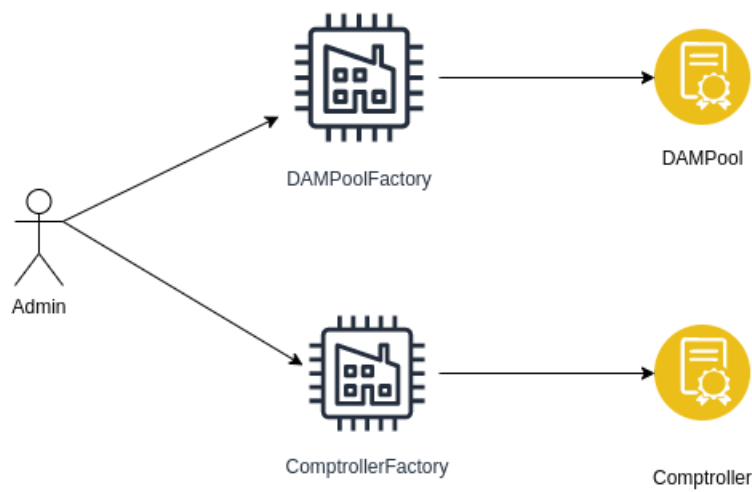
3) Automated pools

This service will allow users to stream tokens to pools which invest those tokens into different protocols automatically using services like Gelato network or Chainlink Keepers network. One of the projects which we can integrate to provide this service is 'Ricochet Exchange'. We met them in the Superfluid discord server and were very impressed with what they are doing.

All these services will be built in the coming months, hopefully with the help of the Superfluid community. We don't intend to make a website or front-end for the said services. We would like to follow the approach taken by 'Liquidity protocol' and allow anyone to create a front-end and make some profit if people trade through that front-end (front-end operators).

Technology Used

- 1) Superfluid (Constant Flow Agreements)
- 2) Chainlink (price feeds)
- 3) Portis (wallet integration)
- 4) Polygon (blockchain network)
- 5) The Graph (created a subgraph for our purpose as well as utilised Superfluid's subgraph)
- 6) Consensus (Metamask, Truffle and Infura API)
- 7) Moralis

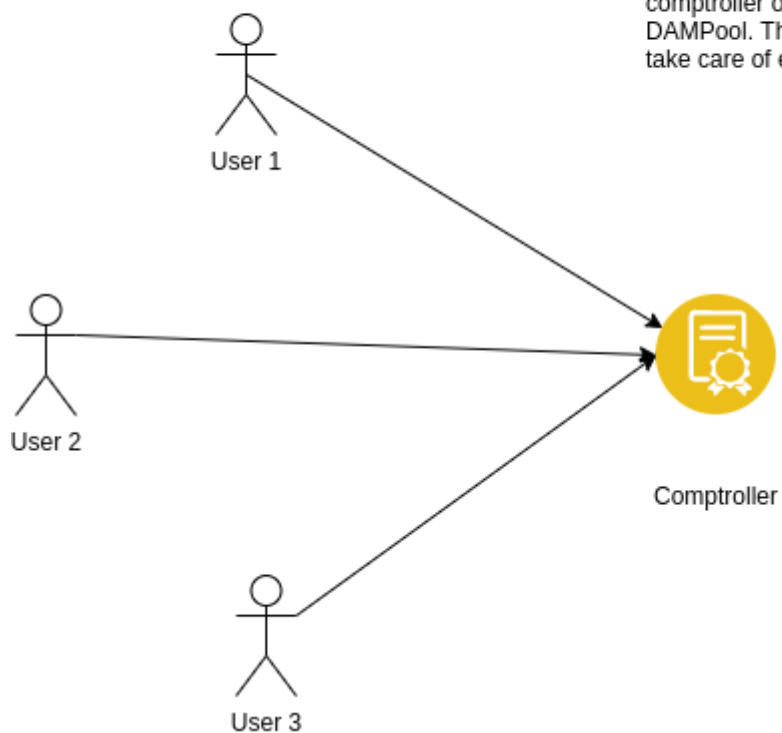


Creating Pools

A deployer (admin) has to interact with two factory contracts to create a DAMPool. After that, another transaction has to be sent to the newly created comptroller to set the DAMPool address that it relates to.

Streaming

To stream a token (aaveDAI currently) just start streaming to a comptroller of a corresponding DAMPool. The Comptroller will take care of everything



Interact with other protocols

Adapters allow you to interact with other protocols. Currently we support Aave on Mumbai testnet. One can deposit and withdraw DAI (aaveDAI) using this adapter.

