What are gauges?
- Comparable to gauges from Velodrome.
- By attaching the Gauge's LP tokens, you get STABLE as a reward.
- This mechanism aims to make token locking more attractive as users can receive additional rewards in the form of a so-called "boost factor" by voting on farms. This boost factor can range up to a factor of 2.5.
- The boost factor increases proportionally to the votes on the respective gauge, not like in Solidly across all gauges. Thus, each gauge has its own voting, and one must vote on that specific gauge to get the boost.
- Gauges pay out rewards every Block when a new epoch begins.
- By default, gauges pay out 2% (200) "referral fee" over 3 levels [6000, 3000, 1000] when "getRewardForOwnerToOtherOwner" is triggered. The user only receives 98% of their rewards. There is a maximum of 10% referral fees.
- The function "claimVotingFees" passes the fees from the added LP tokens into the bribing of the gauges (triggered externally).
- Whenever "updateReward" is triggered, it checks if "nextPoke" should be triggered to adjust the voting power again if the user only claims but does not vote anymore.
- Any user can trigger the payout from a user.

GaugeFactory
- The GaugeFactory is responsible for the creation and management of new gauges.
- When a Gauge is created, a new request is triggered in the BribeFactory and a Bribe is created.
- Allows individual users with our veTokens (veSTABLE and veUSDFI) via the Voter (veVoteProxy) to assign STABLE-rewards including the boost factor to individual Gauges.
- In return, users must vote with their veTokens on the respective gauges to receive these funds.
- Creates a new epoch "epoch++" which is needed for bribes every time "preDistribute" is triggered
- The function "*preDistribute*" can only be executed 1x per week and is always set to "lastDistribute "+1 week. Thus a shift of the fixed time is prevented, even if it is triggered somewhat later than after one week.
- The GaugeFactory automatically fetches the rewarbs from the StableMinter when "preDistribute" is triggered.
- Voting is only possible in the Voter and is transferred from there. The voter can be updated to be able to curb possible voting abuses.
- A user can vote only once per epoch. However it is possible to reset their votes after voting, but this will not allow them to vote again.
- New Gauges can only be created by an Admin or the Govermance to avoid Scam Gauges. Later on, this function will be further decentralized.
- Gauges have a "*maxVotesToken*" (max 100000 (100%)) to prevent a gauge from getting too many STABLE rewards even though it generates little revenue for the ecosystem.
- Gauges can get "*deprecateGauge*" or "*resurrectGauge*" status after creation by an admin / gov
- After "preDistribute", "distribute" can be triggered to distribute the rewards (for each Gauge separately)
- a voter can vote only 1x per "epoch" no matter on which day

Bribe
- The bribing system is designed to prevent permanent voting on the same farms. Here, the providers of liquidity in the farms are given the opportunity to distribute bribes.

- 20% of the LP fees generated in the deposited LP in the associated gauge are added here to each epoch.
- Bribes pay out 2% (200) "*referralFee*" over 3 levels [6000, 3000, 1000] by default when "getRewardForOwnerToOtherOwner" is triggered. The user gets only 98% of his rewards paid out. There is a maximum of 10% referral fees.
- More external tokens can be added as reward "rewardPerToken" to give even more incentives
- An owner can whitelist another address that can pick up his rewards to send them to the same wallet. The idea is to have one wallet where the LPs are stored and one where the rewards are received (hot/cold wallet).
- Any user can trigger the payout from a user.
- With "*getRewardForOwnerToOtherOwnerSingleToken*" a single reward token can be fetched in case another one is boken / paused.
- Bribes follow the "epoch" of the "GaugeFactory".
- A user has 50 "epoch" time (about 1 year) to collect his rewards before they expire.
- When an "epoch" is triggered all rewards of the last week are immediately paid out to the voters.
- "*recoverERC20*" can be used by "onlyOwner" to take tokens from the bribe that are not "*rewardTokens*".

BribeFactory
- The Bribe Factory has the task to create the bribes.
- Every user can control the BribeFactory via the Smart Contract, as it is useless without the GaugeFactory

veTokens
- The period of time is co-determining about the share you get in voting power
  - Example: If STABLE / USDFI are locked for 4 years, you get the same share of veToken.
  - With 2 years of locking you only get half of the voting power
- Voting power is obtained by locking veTokens as compensation for the previously defined locking period (veStable.vy)

PairFactory
- Comparable to Gauges by Velodrome / Solidly.
- sAMM ($x*y$) / vAMM ($x^3y + y^3x \geq k$).
- AMMs can adjust fees individually depending on the LP - from 0.01% up to 10%.
- Fees can be divided into 3 points per LP: "80% USDFI-Maker", "20% LP Owner Bribes", "0% Partners" (more points possible if needed later)
- LPs can be limited with „Max" gas-price to make frontrunning more difficult (the „Min" gas-price per chain must not be exceeded)

Specifications
When a new gauge is created, it should first be voted on, then deposited, and then a small amount should be Bribed so that it runs properly the next week.