Frequently Asked Questions

What is Maverick Protocol?

Maverick Protocol is a new infrastructure for decentralized finance, built to facilitate the most liquid markets for traders, liquidity providers, DAO treasuries, and developers, powered by a revolutionary [Automated Market Maker (AMM)](#) .

[You can learn more about Maverick by reading our Litepaper](#)!

How do I use Maverick Protocol?

Maverick Protocol has launched its dApp to Ethereum mainnet, where users can try out all the features of Maverick AMM. You can head to [app.mav.xyz](#) to make swaps, create liquidity pools, and explore [the novel liquidity modes](#) available on Maverick.

You will need a self-custodial wallet and some tokens in order to use the dApp. We have prepared comprehensive guides that will help you use the [swap](#) and [pool](#) features.

How does Maverick Protocol work?

Maverick Protocol is powered by Maverick AMM, Defi's first Dynamic Distribution AMM.

Maverick AMM helps its users maximize capital efficiency by automating the concentration of liquidity as price moves. Higher capital efficiency leads to more liquid markets, which means better prices for traders and more fees for liquidity providers. This built-in feature also helps LPs to eliminate the high gas fees that come from adjusting positions around price themselves.

Liquidity providers can also now choose to follow the price of an asset in a single direction, effectively making a bet on the price trajectory of a specific token. These directional bets are similar to single-sided liquidity strategies, in that the liquidity provider will be mostly or entirely exposed to a single asset in a given pool.

[You can learn all about Maverick AMM here](#) or [consult our Whitepaper](#) for a more technical explanation.

When does liquidity move in Maverick AMM?

All liquidity movement is governed by the Time Weighted Average Price (TWAP) of a given pool. After the first swap in a block, the contract updates the TWAP and checks if any liquidity needs to be moved, based on the rules of each movement mode. If it finds a bin that needs to be moved, it moves it. This operation only happens once in a single block. For more information, please refer to the [Whitepaper](#) .

Do liquidity providers have to pay gas when their liquidity is moved?

No. Since liquidity movement is natively automated by the AMM smart contract, LPs do not pay gas when their liquidity is moved for them. The only time an LP will pay gas is when they add or remove liquidity.

Why isn't my liquidity moving?

As explained above, the AMM contract only checks the TWAP after a swap. If a pool has low trading volume, the TWAP will not be updated/checked very often, meaning that liquidity bins may not move much.

If you have deployed a new pool and aren't seeing your liquidity move as expected, there is also the possibility that there isn't enough static liquidity for the AMM to discover price and move bins. As explained in our instructions for [Deploying a New Pool](#) , each pool requires a "base layer" of static liquidity in order for the movement modes to function properly.

What is a Maverick Position NFT? Why am I being asked to approve it?

When you add liquidity for the first time, you mint a Maverick Position NFT. This single NFT is used to store all of your LP balances on Maverick. If you open more liquidity positions, they will be stored on the same NFT. More information can be found in the [Whitepaper](#) .

If you choose to remove liquidity from a position, you will first have to approve the contract's access to your Maverick Position NFT. Then you can proceed with the remove liquidity flow.

The wallet that holds a Maverick Position NFT controls the liquidity associated with that NFT. Do not transfer or sell your Maverick Position NFT unless you want to give control of the liquidity to another wallet.

How do transaction fees work on Maverick?

When users add liquidity on the Pool page, they can choose from a range of fee tiers from 0.01% to 3%.

On the LP side, each pool on the testnet technically consists of several sub-pools, organized by these fee tiers. LPs have the freedom to choose which sub-pool they deposit in, and can even deposit in more than one sub-pool if they want.

On the Swap side, traders only ever see one pool for each asset pair. This is because the AMM intelligently routes their swap requests to whichever available sub-pool can offer them the best price at that moment. If the best price is in the 0.01% sub-pool, the trader will swap with that pool; if it's in the 2% sub-pool, they will swap with that pool instead.

What is the difference between the fee tiers?

The fee tiers correspond to the different transaction fees a trader will pay for swapping with those sub-pools, expressed as a percentage of their swap's quote asset (i.e., if they are swapping USDC for USDT, the fee is based on a percentage of their USDC input request).

LPs are free to decide which tier/distribution to add their liquidity to. Maverick might offer a general recommendation for each asset type and fee tier, based on a general projection of volume and risk, but ultimately the market will decide which distribution facilitates the most swaps for each token pair, and LPs may wish to re-distribute their deposits to capture more fees.

Why did my Add/Remove Liquidity transaction fail?

Occasionally, another user might make a big swap just before you submit a transaction. This can cause the price to move in your pool and exceed the slippage tolerance of your Add or Remove call. In this case, the transaction will fail in order to protect you from excessive slippage.

Why am I required to use Mode Static when deploying a new pool?

A layer of static liquidity is necessary for Maverick AMM's movement modes to function properly. This static liquidity facilitates proper price discovery, arbitrage, and automated bin movement. The UI therefore requires that every new pool deployed be started with a layer of liquidity in Mode Static. Click here for more information.

Why are gas fees so high on zkSync Era?

Gas fees on zkSync Era currently work a little differently from other chains. You may see a high gas cost in your transaction preview, but a lot of those fees should be refunded to you, meaning you pay lower net fees. If you want to check how much gas you actually spent on a transaction, you can consult zkSync's block explorer .

What is the Phase 2 Migration?

Maverick has released Phase 2 of the launch roadmap. With Phase 2, users and protocols can now permissionlessly incentivize any distribution of liquidity in a pool as part of a Boosted Position .

One consequence of the upgrade is that the AMM factory and pools have been redeployed. To accelerate the transition, the Maverick dApp at app.mav.xyz will only show Phase 2 pools. The Phase 1 pools will remain accessible at phase1-app.mav.xyz . We encourage users to migrate their liquidity from the Phase 1 to the Phase 2 dApp. To migrate liquidity, users will first need to remove it from Phase 1 pools.

The Phase 2 contracts have been audited and the audits are available at https://github.com/maverickprotocol/audits .