

# Arable FAQ [Draft]

## Abstract

Arable is a decentralised farmable synthetic asset issuance protocol. **Arable synths are collateralized by ACRE (Arable native token)**. This pooled collateral model enables users to perform exchange and farm synths with the smart contract. This mechanism solves the time and fee issues experienced in current farming experience.

Synthetic already has proven that synths are secure enough to exist for trading by letting collateral providers to be the counterparty of the trades. Therefore minting traditional synths is not a problem. The challenging problem is to come up with an economic model of where the rewards from farming should be generated. As a solution, **Arable is letting collateral providers to be the counterparty of yield farmers**.

The core logic is to create synths on a network that exists on the alt-chain. Synth minters are responsible for fully backing the amount of minted assets and the rewards to be given to yield farmers. E.g. If *arSOL* (Arable's synth for Solana) is minted on Avalanche network, minters should be responsible for *arSOL* staking rewards. Rewards are automatically given to farmers, and the minters' debts are automatically increased evenly. This solution needs to cooperate with an oracle service for specific asset's price and farming rewards information.

## FAQs

### - What products will be exist on the protocol

- ACRE airdrop application [Will be ready before token launch]
- ACRE staking and liquidity mining application [Will be ready before token launch]
- Synths minter application for stakers
- Zero slippage DEX platform that supports arable synths based on oracle price
- UX optimized farming application to provide easiest environment for farmers
- Governance system
- Universal cross-chain bridge - zero slippage swap between same synths  $arSOL_{Avalanche}$  /  $arSOL_{Polygon}$  /  $arSOL_{Cosmos}$ , and also with native token  $arSOL$  /  $SOL$

### - Where minters get ACRE tokens?

Minters get ACRE tokens from airdrop if they previously held AVAX or PNG, Buy on DEX or get ACRE rewards from staking and liquidity mining.

- **Are minters actually profitable?**

Yes. It's pretty much. Let's calculate a bit.

$$\text{Minter profit} = P_{\text{minter}}$$

$$\text{ACRE staking rewards for minter} = SR_{\text{minter}}$$

$$\text{Farming reward for minted synths} = FR_{\text{synths}}$$

$$\text{Synths Farming and Trading fees paid by farmers} = Fee_{\text{synths}}$$

$$\text{Synths Minted amount} = Synths_{\text{minted}}$$

$$\text{Bridging fee for minted} = BridgeFee_{\text{minted-synths}}$$

$$\text{Bridging fee for reward synths} = BridgeFee_{\text{reward-synths}}$$

$$P_{\text{minter}} = SR_{\text{minter}} - FR_{\text{synths}}$$

If they do mirrored farming on native chain, their profit will be

$$P_{\text{minter}} = SR_{\text{minter}} + Fee_{\text{synths}} - BridgeFee_{\text{minted-synths}} - BridgeFee_{\text{reward-synths}}$$

Here, the **bridging fee** is related to the amount of tokens moving from native chain to synths chain or synths chain to native chain.

If a person is already doing farming on a native chain already for the amount he minted on synthetic chain, the reward is calculated like below

$$P_{\text{minter}} = SR_{\text{minter}} + Fee_{\text{synths}} - BridgeFee_{\text{reward-synths}}$$

In the future we are looking to build a zero fee bridge by incentivizing bridge nodes with ACRE tokens. At that time the profit is calculated like below

$$P_{\text{minter}} = SR_{\text{minter}} + Fee_{\text{synths}}$$

This way minters won't get any risks, other than the issue of liquidation for sudden price changes for ACRE and synths' price volatility.

To help minters from liquidation risks, protocol could make a delay on liquidation until it reaches, super-min-collateralization-ratio for well known minters who join Arable insurance.

- **What security problems exist for minters?**

As in synthetix, synth minters will be getting risks of price volatility of synthetic assets and the native token ACRE.

To reduce risks, we will be introducing stable coin collaterals or other collaterals maintained by governance to help minters.

- **What problems exist for farmers?**

The issue that the farmers can get is minters' collateral could be less than total value of minted synths for price and farming rewards. To help minters in this case, the farming or synths trading fees will be dynamically adjusted based on how the bonding curve of borrowing interest rate works on lending protocols.

- **How does it work for native token hacks?**

If native chain is hacked, the price of native token goes down a lot and the supply of the token goes to a hacker. Hackers can sell that amount on native-chain and other exchanges but since our protocol is synths, they don't have a way to sell that amount on our liquidity.

To secure farmers and minters, we could introduce insurance farming to provide farmers to be able to get their tokens back at the time of price before hacking.

- **What should be the penalty duration for liquidation?**

It should be different by asset and the native staking pools. Minimum penalty duration could be 3 days to give time to stakers.

- **Where's the liquidity for synths assets swap?**

The collateral put on the staking contract will be taking the role of liquidity as stakers are counterparties of the swap. (Same as Synthetix)

- **What is the detailed liquidation flow?**

Liquidators find the position and initiate liquidate transactions.

Liquidation is done per address. Liquidation is not done fully, the liquidation amount will be done until the c-ratio meets target ratio.

The detailed flow for the liquidation event for Synthetix can be found [here](#).

- **What ratio should be maintained between protocol farming TVL and ACRE liquidity to make the protocol secure?**

Need to be discussed with finance experts. **By design, TVL is not able to overflow**  
**ACRE\_staked\_amount / liquidation\_threshold\_collateralization\_ratio.**

- **Where the actual bridge fees should be given?**

As described before, when there are bridges for synths and native assets, bridge fees will be given in ACRE for bridgers.

But before the bridge, ACRE staking rewards and farming / trading fees will be spent for paying the bridge fees.

- **What are the collaterals to be used for minting Arable synths? The collateral and Debt for minters (stakers)**

As a first stage, only ACRE token is used as collateral to mint synths. After some time, other tokens like USDT or synths itself could be used as collateral after serious consideration - the rewards will be given in ACRE if he maintain the c-ratio

- **What is Debt on Arable protocol?**

The debt is how much synths minters should provide to get back his full collateral put on the protocol. It is determined by his debt percent at the time of mint and the system debt being changed by farmers and traders.

- **What kind of users are on the protocol and what are their rewards and the roles?**

**Minters (Stakers):** Get ACRE, stake it, mint synths, sell synths on Arable DEX and do mirror actions on native-chains to get ACRE staking reward and service fee from synths farmers and traders.

**Farmers:** Buy synths from Arable DEX and do yield farming to get the same yield they can get from native chains - farmers need to pay a specific fee to minters for minting synths.

**Liquidators:** Watch the liquidatable positions of minters that collateralization ratio does not meet and liquidate, liquidators get rewards per liquidation event.

**ACRE LPs:** Provide liquidity to ACRE token on DEX and lock it on the liquidity mining contract to get liquidity mining rewards.

- **What if synths are minted based on farming requests and mint when mirrored assets are already created by verified members?** It will take time for farmers but minters will be better but protocol is built for farmers and minters would need to provide the best environment for farmers and for that they are getting rewards.

- **What kind of actions exist on the protocol?**

**ACRE staking** - staked ACRE is collateral for minting synths, should we split the staking pools per synths or combine them all into one? If we combine all, the debt would be hard to manage.

Staking should be splitted based on the synths. For important synths with high APY, should people be rewarded more?

If a minter is doing mirrored farming on the nativenetwork, it could be registered on off-chain, so that others can check what pools are missing.

**ACRE unstaking** - unlock duration could be 21 days for security.

**ACRE rewards for stakers** - only people who minted synths will get this reward that maintain the good collateralization ratio.

**ACRE LP staking**: LP staking will be mostly high at initial and after some time when trading fee is high enough and the liquidity is enough, more will be given to stakers (synths minters).

**Minting synths**: Is it risky to give collateral for high reward synths? No. The minters get more rewards from the farming fees as long as they provide more profitable farm tokens as synths.

**Burning synths**: Farmers can buy synths for the amount minted by minters.

**Synths staking**: Farmers can farm any synths on the pools provided by the protocol.

**Synths unstaking**: Unlock duration should be set based on native chain unlock duration + bridging time + little margin.

**Synths swap**: input token is burnt and output token is minted as in Synthetix.

**Synths farming rewards** - whose debt should be increased for the token rewards given to the farmer? The debt of minters who minted the synths should be increased proportionally based on minted amount.

**ACRE rewards for farmers**: This is just for bootstrapping farmers and the rewards won't exist after a specific period of time when protocol reaches enough farmers.

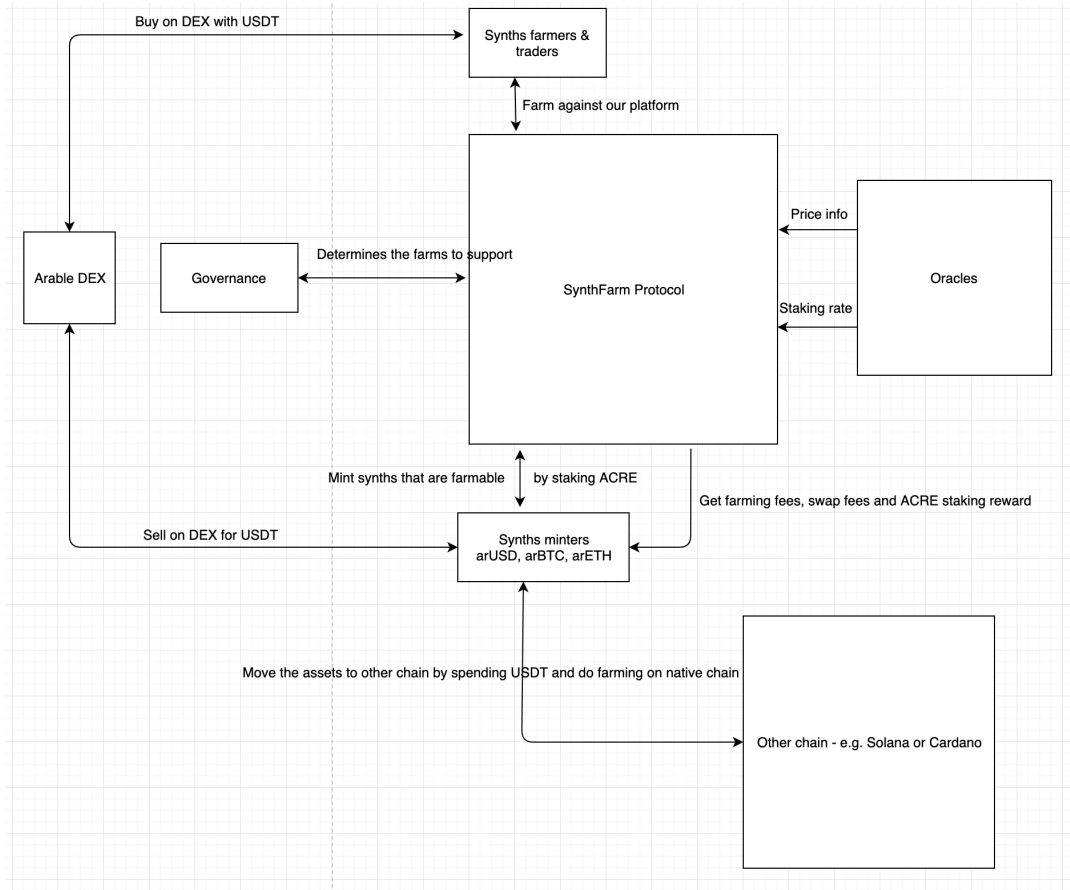
- **What is a detailed flow for minters (stakers) to participate in?**

- To mint synths on our platform, minters need to purchase our native token – ACRE (synths farm token).
- The platform doesn't care if minters do actual farming on the native network but recommends them to run action on native chains to not lose their assets for giving farming rewards to farmers.
- The profit minters get while running the service on our platform is
  - A. They get ACRE as reward based on the amounts of synths they have minted
  - B. They get synths itself that is spent by users for trading fee and farming fee
- Minters could lose assets while moving assets either when using centralized exchange or decentralized exchange or cross-chain bridge.

- **What is the FAQ for farmers**




- Farmers provide 0.9% of their farming and trading fees to minters as without minters, they can't do farming of the assets. It's similar to the commission rate on delegated proof of staking systems.
- Farmers provide 0.1% of their farming and trading fees to the protocol developers to incentivize developers to build a better system.
- Arable incentivizes farmers to do farming on the protocol with ACRE tokens.
- Yield farmers can farm other ecosystem's assets with nearly the same APY without using cross-chain bridges – e.g. they are not needed to cross Polkadot, Cardano, Cosmos, Solana and those bridges that they feel are inconvenient.
- Other ecosystem assets like SOL or ATOM can be used widely in Avalanche based DeFi applications – No popular DeFi apps are not available on the Cosmos ecosystem, but these assets can be used on popular apps like Compound or Aave.
- Traders can trade various of assets without chain variers and high trading and bridge fees – and reduce time for setting up

- **Arable workflow**




- **Arable app wireframes**



## Arable farms

Token	Rewards	APR	Native Network	Liquidity (Synths / Native network)	Historical rewards		
arOSMO	arOSMO	245%	Osmosis	\$10M / \$100M		Buy	Sell
arSOL-arRAY	arRAY	15%	Solana	\$10M / \$1000M		Buy	Sell
arAKT-arOSMO	arOSMO	15%	Osmosis	\$1M / \$10M		Buy	Sell

## Stake ACRE


Token	APR	Liquidity	Historical price			
ACRE	30%	\$10M		Buy	Stake	Unstake


## Arable synths


Token	Service APR	Fee charge	Native Network	Liquidity (Synths / Native network)	Historical rewards		
arAKT	arAKT	0.9%	Akash	\$1M / \$10M		Mint	Burn
arOSMO	arOSMO	0.5%	Osmosis	\$1M / \$10M		Mint	Burn


## My Farms

Claim all farm rewards


**arSOL-arRAY**  
APR 150% | Farm size \$10M


**arQUICK**  
APR 150% | Farm size \$10M


**arAKT-arOSMO**  
APR 150% | Farm size \$10M


**arSOL**  
APR 150% | Farm size \$10M

## Build farm

Unbonding time

1 day

7 days

14 days

From Balance: 1000  
50000 Max S arUSD ✓

To Size: 20000  
500 SR arSOL-arRAY ✓

Build

## Sell farm

Unbonding time

1 day

7 days

14 days

From Size: 20000  
500 Max SR arSOL-arRAY ✓

To Balance: 1000  
500 S arUSD ✓

Build



### Swap synths

From

500

Max S arSOL ✓

Balance: 1000

To

50000

U arUSD ✓

Balance: 1000

Price 100 arUSD per arSOL

Swap

Constant 1% fee with zero slippage

### Mint synths

Staked Value	C-ratio	Active Debt
\$10000	1000%	\$1000

Amount

1000

U arUSD ✓

Balance: 1000

Mint

### Burn synths

Staked Value	C-ratio	Active Debt
\$10000	1000%	\$1000

Amount

1000

U arUSD ✓

Balance: 1000

Burn

## - Social links

<https://github.com/ArableProtocol/arableintro/blob/main/Arable%20Protocol%20%5BDraft%5D.pdf> - Arable paper

<https://github.com/ArableProtocol/arableintro/blob/main/Arable%20FAQ%20%5BDraft%5D.pdf> - Arable FAQ

<https://arablefi.com> - Website

<https://medium.com/@ArableProtocol> - Medium

<https://github.com/ArableProtocol> - Github - source code is closed until launch

<https://discord.gg/CwW8fVwVxe> - Discord

<https://t.me/ArableProtocol> - Telegram

<https://twitter.com/ArableProtocol> - Twitter

<https://www.linkedin.com/company/arable-protocol> - LinkedIn

[contact@arablefi.com](mailto:contact@arablefi.com) - Contact email

<https://docs.arablefi.com/> - Protocol docs