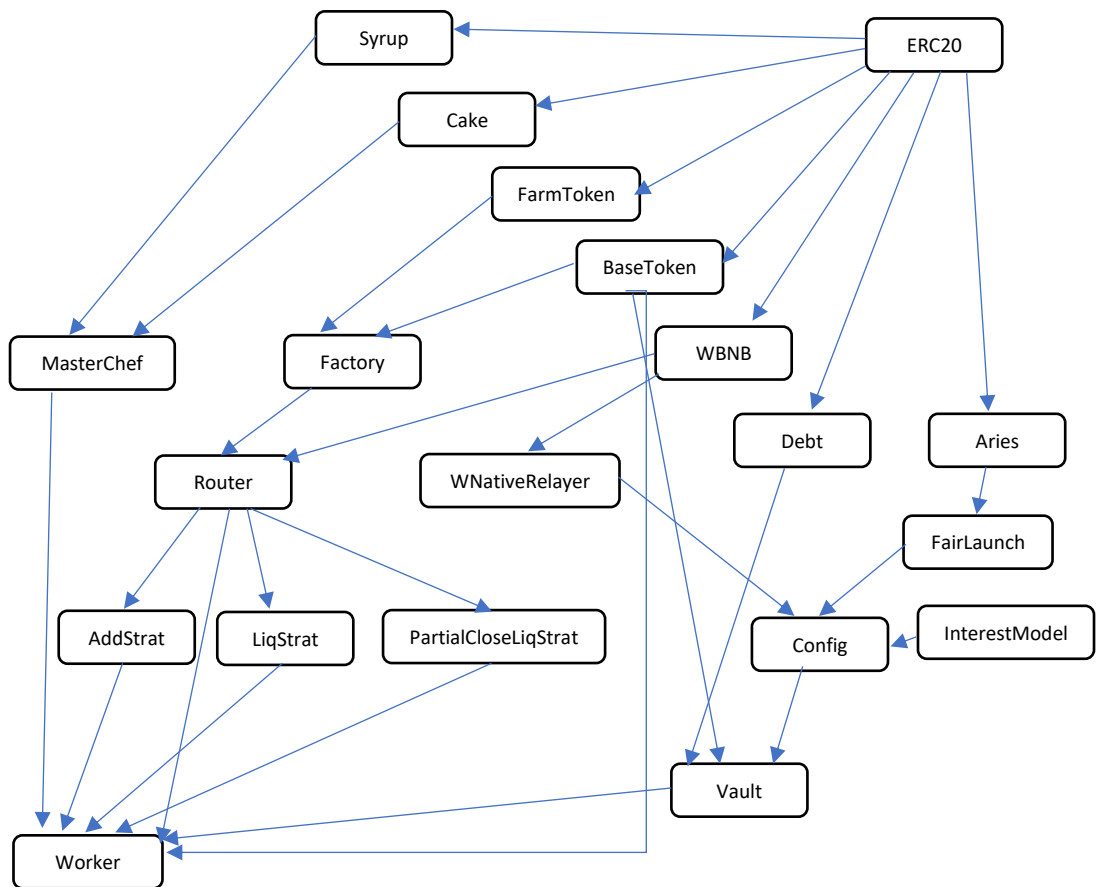# Aries Financial Contracts Deployment/Configuration Guide

10/8/2022

1. Contracts List

- Fair Launch (Staking)
- Vault (Interest Bearing Token – Lending/Farming)
- Vault Config
- WNativeRelayer
- PancakeV2Worker
- PancakeV2StrategyAddBaseOnly
- PancakeV2StrategyLiquidate
- PancakeV2StrategyPartialCloseLiquidate
- PancakeV2MasterChef
- PancakeV2Factory
- PancakeV2Router
- WBNB
- Debt Token
- Aries Token
- Base Token (Native/Stable coins)
- Farm Token

2. Contracts Relationship Diagram

3. Deployment, Initialization Contracts

1) FairLaunch (Staking)
- Constructor()

Parameter	Detail
_aries	The address of ARIES token contract.
_devaddr	The address of deployer address
_ariesPerBlock	The AREIS reward per block.
_startBlock	The start block number.
_bonusLockupBps	The ARIES bonus
_bounsEndBlock	The end block number.

- Deposit()

Parameter	Detail
_for	The address of staker.
_pid	The deposit poolId
_amount	The staking amount.

- Withdraw()

Parameter	Detail
_for	The address of staker.
_pid	The withdraw poolId.
_amount	The withdraw amount.

- Harvest()

Parameter	Detail
_pid	The harvest poolId.

2) Vault (Interest Bearing Token – Lending/Farming)
- Initialize()

Parameter	Detail
_config	The address of vault config contract.
_token	The address of Base Token.
_name	The name of Interest Bearing Token (ibToken).
_symbol	The symbol of ibToken.
_decimal	The decimal of ibToken.

_debtToken	The address of Debt Token.

- Deposit()

Parameter	Detail
_amountToken	The deposit amount.

- Withdraw()

Parameter	Detail
_share	The withdraw amount.

- Work()

Parameter	Detail
_id	The ID of the position to unlock the earning. Use ZERO for new position.
_worker	The address of the authorized worker to work for this position
_principalAmount	The amount of Token to supply by user.
_borrowAmount	The amount of Token to borrow from the pool.
_maxRetrun	The max amount of Token to return to the pool.
_data	The calldata to pass along to the worker for more working context.

3) Vault Config
- Initialize()

Parameter	Detail
_minDebtSize	The minimum debt size value.
_interestRate	The interest rate per second value.
_reservePoolBps	The interests allocated to the reserve pool value.
_killBps	The reward for killing a position value.
_getWrappedNativeAddr	The address of WBNB token.
_getWNativeRelayer	The address of WNativeRelayer contract.
_getFairLaunchAddr	The address of FairLaunch contract.
_getKillTreasuryBps	The bonus for treasury when kill the position.
_treasury	The address of treasury.

4) WNativeRelayer
- Constructor()

Parameter	Detail
_wnative	The address of WBNB Token.

5) PancakeV2Worker
- Initialize()

Parameter	Detail
_operator	The address of Vault contract.
_baseToken	The address of Base token.
_masterChef	The address of PancakeV2MasterChef contract.
_router	The address of PancakeV2Router contract.
_pid	The poolId of Debt token from FairLaunch contract.
_addStrat	The address of StrategyAddBaseTokenOnly contract.
_liqStrat	The address of StrategyLiquidate contract.
_reinvestBountyBps	The bonus for reinvester.

- Work()

Parameter	Detail
_id	The position Id to work on.
_user	The original user that is interacting with the operator.
_debt	The amount of user debt to help the strategy make decisions.
_data	The encoded data, consisting of strategy address and calldata.

6) PancakeV2StrategyAddBaseOnly
- Initialize()

Parameter	Detail
_router	The Pancakeswap Router smart contract

7) PancakeV2StrategyLiquidate
- Initialize()

Parameter	Detail
_router	The Pancakeswap Router smart contract

8) PancakeV2StrategyPartialCloseLiquidate
- Initialize()

Parameter	Detail

_router	The Pancakeswap Router smart contract

9) **PancakeV2MasterChef, PancakeV2Factory, PancakeV2Router.**
10) **ERC20 tokens (WBNB, DebtToken, ARIES, BaseToken, FarmToken)**

4. Permissions

- ❖ Aries -> transferOwnerShip(FairLaunch)
- ❖ Config -> setWhiteListedLiquidators([liquidators], true)
- ❖ WNativeRelayer -> setCallerOk([Vault])
- ❖ DebtToken -> setOkHolders ([Vault, FairLaunch], true)
- ❖ DebtToken -> transferOwnerShip(Vault)
- ❖ FairLaunch -> addPool(allocPoint, debtToken, true)
- ❖ Vault -> setFairLaunchPoolId(debtTokenPoolId)
- ❖ Worker -> setStrategyOk([PartialCloseStrat], true)
- ❖ Worker -> setReinvestOk([reinvestors], true)