

SynFutures V3

Executive Summary

This audit report was prepared by Quantstamp, the leader in blockchain security.

Туре	Decentralized Futures Exchange		
Timeline	2023-10-13 through 2023-11-15		
Language	Solidity		
Methods	Architecture Review, Unit Testing, Functional Testing, Computer-Aided Verification, Manual Review		
Specification	None		
Source Code	https://github.com/SynFutures/v3-contracts ☑ #f308420 ☑		
Auditors	 Zeeshan Meghji Auditing Engineer Michael Boyle Auditing Engineer Rabib Islam Auditing Engineer Hytham Farah Auditing Engineer 		

Documentation quality	Medium
Test quality	High
Total Findings	23 Fixed: 10 Acknowledged: 12 Mitigated: 1
High severity findings ③	1 Acknowledged: 1
Medium severity findings ①	3 Fixed: 1 Acknowledged: 2
Low severity findings ③	11 Fixed: 5 Acknowledged: 5 Mitigated: 1
Undetermined severity (3)	1 Fixed: 1
Informational findings ③	7 Fixed: 3 Acknowledged: 4

Summary of Findings

The current report is concerning an audit performed on the SynFutures@V3 protocol, which provides a market for users to trade both perpetual and dated futures. Market makers are able to provide liquidity using both limit orders and ranges; both traders and market makers are able to use leverage in order to open their positions. Price data is sourced from resources such as Chainlink and Uniswap V2-style markets, and the price that governs trading activity is mandated to remain within a range around the price from the resource. Users are also incentivized via a tipping mechanism to liquidate positions and fill limit orders as they are taken by traders.

Overall, we found the code quality of the project to be very high. One issue, SYN-1, stood out as particularly noteworthy as it lays out a means by which the protocol may unintentionally benefit a class of sophisticated actors at the expense of retail users. This attack uses user activity to generate a risk-free profit for the sophisticated actors.

A specification was provided for the audit; however, it may be significantly improved by using writing that is more concise and organized. It would also have been more helpful to receive it in the form of functional requirements rather than what appeared to be an extension of the whitepaper.

We noted following review of the test suite that its quality was remarkable; however, we were unable to retrieve coverage data.

Update: All of the issues have been addressed. Note that where some issues were determined by the SynFutures team to be "Fixed", we have determined that in fact they were "Mitigated". Also, we discovered a new issue (SYN-23). We recommend that this issue be addressed as well.

ID	DESCRIPTION	SEVERITY	STATUS
SYN-1	Order Filling Can Be Preempted by New Order Placement	• High ①	Acknowledged
SYN-2	Just-in-Time Distant Liquidity May Be Added and Receive Fees	• Informational ③	Acknowledged
SYN-3	New Liquidity Ranges May Exclude Fair Price	• Medium 🗓	Fixed
SYN-4	Users Are Incentivized to Delay Settlement	• Medium 🗓	Acknowledged

SYN-5 One Range Can Support Infinite Positions • Informational ○ Acknowledged SYN-6 Privileged Roles and Ownership • Low ○ Acknowledged SYN-7 Critical Role Transfer Not Following Two-Step Pattern • Low ○ Acknowledged SYN-8 Missing Input Validation • Low ○ Fixed SYN-9 Feeder Pair May Become Suboptimal • Low ○ Fixed SYN-10 Incentive to Realize Social Loss upon Donation • Low ○ Acknowledged SYN-11 Reliance on DEX Spot Reserves • Low ○ Acknowledged SYN-12 Instrument.normalize() Has Unchecked Assumptions • Low ○ Mitigated SYN-13 Liquidation And LP Whitelist Can Be Re-enabled • Low ○ Fixed SYN-14 Insufficient Validation Of Chainlink Prices • Low ○ Fixed SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor • Low ○ Fixed SYN-16 Heavy Reliance on Off-Chain Bots • Low ○ Acknowledged SYN-17 Unlocked Pragma • Informational ○ Fixed SYN-18 Protocol Does Not Support Rebasing Tokens • Informational ○ Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled • Informational ○ Fixed SYN-20 Wrong Error Message • Informational ○ Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Undetermined ○ Fixed	ID	DESCRIPTION	SEVERITY	STATUS
SYN-7 Critical Role Transfer Not Following Two-Step Pattern SYN-8 Missing Input Validation • Low ○ Fixed SYN-9 Feeder Pair May Become Suboptimal • Low ○ Fixed SYN-10 Incentive to Realize Social Loss upon Donation • Low ○ Acknowledged SYN-11 Reliance on DEX Spot Reserves • Low ○ Acknowledged SYN-12 Instrument.normalize() Has Unchecked Assumptions • Low ○ Mitigated SYN-13 Liquidation And LP Whitelist Can Be Re-enabled SYN-14 Insufficient Validation Of Chainlink Prices SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor SYN-16 Heavy Reliance on Off-Chain Bots SYN-17 Unlocked Pragma • Informational ○ Fixed SYN-18 Protocol Does Not Support Rebasing Tokens SYN-19 Large Orders May Have Trouble Getting Filled SYN-20 Wrong Error Message SYN-21 Application Monitoring Can Be Improved by Emitting More Events SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ○ Fixed Fixed Fixed Fixed	SYN-5	One Range Can Support Infinite Positions	• Informational ③	Acknowledged
SYN-8 Missing Input Validation • Low ○ Fixed SYN-9 Feeder Pair May Become Suboptimal • Low ○ Fixed SYN-10 Incentive to Realize Social Loss upon Donation • Low ○ Acknowledged SYN-11 Reliance on DEX Spot Reserves • Low ○ Acknowledged SYN-12 Instrument.normalize() Has Unchecked Assumptions • Low ○ Mitigated SYN-13 Liquidation And LP Whitelist Can Be Re-enabled • Low ○ Fixed SYN-14 Insufficient Validation Of Chainlink Prices • Low ○ Fixed SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor Fixed SYN-16 Heavy Reliance on Off-Chain Bots • Low ○ Acknowledged SYN-17 Unlocked Pragma • Informational ○ Fixed SYN-18 Protocol Does Not Support Rebasing Tokens • Informational ○ Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled • Informational ○ Fixed SYN-20 Wrong Error Message • Informational ○ Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Undetermined ○ Fixed SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ○ Fixed	SYN-6	Privileged Roles and Ownership	• Low i	Acknowledged
SYN-9 Feeder Pair May Become Suboptimal	SYN-7	Critical Role Transfer Not Following Two-Step Pattern	• Low i	Acknowledged
SYN-10 Incentive to Realize Social Loss upon Donation • Low ◎ Acknowledged SYN-11 Reliance on DEX Spot Reserves • Low ◎ Acknowledged SYN-12 Instrument.normalize() Has Unchecked Assumptions • Low ◎ Mitigated SYN-13 Liquidation And LP Whitelist Can Be Re-enabled • Low ◎ Fixed SYN-14 Insufficient Validation Of Chainlink Prices • Low ◎ Fixed SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor • Low ◎ Acknowledged SYN-16 Heavy Reliance on Off-Chain Bots • Low ◎ Acknowledged SYN-17 Unlocked Pragma • Informational ◎ Fixed SYN-18 Protocol Does Not Support Rebasing Tokens • Informational ◎ Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled • Informational ◎ Acknowledged SYN-20 Wrong Error Message • Informational ◎ Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Informational ◎ Fixed SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ◎ Fixed	SYN-8	Missing Input Validation	• Low 🗓	Fixed
SYN-12 Instrument.normalize() Has Unchecked Assumptions • Low Mitigated SYN-13 Liquidation And LP Whitelist Can Be Re-enabled • Low Fixed SYN-14 Insufficient Validation Of Chainlink Prices • Low Fixed SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor SYN-16 Heavy Reliance on Off-Chain Bots • Low Acknowledged SYN-17 Unlocked Pragma • Informational Fixed SYN-18 Protocol Does Not Support Rebasing Tokens • Informational Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled SYN-20 Wrong Error Message • Informational Fixed SYN-21 Application Monitoring Can Be improved by Emitting More Events SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined Fixed Fixed	SYN-9	Feeder Pair May Become Suboptimal	• Low 🗓	Fixed
SYN-12 Instrument.normalize() Has Unchecked Assumptions • Low • Low • Low • Fixed SYN-13 Liquidation And LP Whitelist Can Be Re-enabled • Low • Low • Fixed SYN-14 Insufficient Validation Of Chainlink Prices • Low • Low • Fixed SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor • Low • Low • Acknowledged SYN-16 Heavy Reliance on Off-Chain Bots • Low • Low • Acknowledged SYN-17 Unlocked Pragma • Informational • Fixed SYN-18 Protocol Does Not Support Rebasing Tokens • Informational • Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled • Informational • Informational • Exercise SYN-20 Wrong Error Message • Informational • Informational • Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Undetermined • Fixed	SYN-10	Incentive to Realize Social Loss upon Donation	• Low 🗓	Acknowledged
SYN-13 Liquidation And LP Whitelist Can Be Re-enabled	SYN-11	Reliance on DEX Spot Reserves	• Low 🗓	Acknowledged
SYN-14 Insufficient Validation Of Chainlink Prices Low Fixed SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor SYN-16 Heavy Reliance on Off-Chain Bots Low Acknowledged SYN-17 Unlocked Pragma Informational Fixed SYN-18 Protocol Does Not Support Rebasing Tokens Informational Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled SYN-20 Wrong Error Message Informational Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events SYN-22 Math Function From Uniswap Not Adapted for New Constants Undetermined Fixed	SYN-12	<pre>Instrument.normalize()</pre> <pre>Has Unchecked Assumptions</pre>	• Low i	Mitigated
SYN-15 Upgradeable Contract Initializer Should Be Disabled in Constructor SYN-16 Heavy Reliance on Off-Chain Bots • Low ③ Acknowledged SYN-17 Unlocked Pragma • Informational ④ Fixed SYN-18 Protocol Does Not Support Rebasing Tokens • Informational ④ Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled SYN-20 Wrong Error Message • Informational ④ Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Informational ⑥ Fixed SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ⑥ Fixed	SYN-13	Liquidation And LP Whitelist Can Be Re-enabled	• Low ③	Fixed
SYN-16 Heavy Reliance on Off-Chain Bots SYN-17 Unlocked Pragma Informational Acknowledged SYN-18 Protocol Does Not Support Rebasing Tokens Informational Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled SYN-20 Wrong Error Message Informational Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events SYN-22 Math Function From Uniswap Not Adapted for New Constants Undetermined Fixed Fixed	SYN-14	Insufficient Validation Of Chainlink Prices	• Low i	Fixed
SYN-17 Unlocked Pragma	SYN-15	• •	• Low ③	Fixed
SYN-18 Protocol Does Not Support Rebasing Tokens • Informational ③ Acknowledged SYN-19 Large Orders May Have Trouble Getting Filled • Informational ④ Acknowledged SYN-20 Wrong Error Message • Informational ④ Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Informational ④ Fixed SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ④ Fixed	SYN-16	Heavy Reliance on Off-Chain Bots	• Low 🗓	Acknowledged
SYN-19 Large Orders May Have Trouble Getting Filled • Informational ③ Acknowledged SYN-20 Wrong Error Message • Informational ③ Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Informational ④ Fixed SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ④ Fixed	SYN-17	Unlocked Pragma	• Informational ③	Fixed
SYN-20 Wrong Error Message • Informational ③ Fixed SYN-21 Application Monitoring Can Be Improved by Emitting More Events • Informational ④ Fixed SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ⑤ Fixed	SYN-18	Protocol Does Not Support Rebasing Tokens	• Informational ③	Acknowledged
SYN-21 Application Monitoring Can Be Improved by Emitting More Events SYN-22 Math Function From Uniswap Not Adapted for New Constants • Undetermined ③ Fixed	SYN-19	Large Orders May Have Trouble Getting Filled	• Informational ③	Acknowledged
Events Informational ③ Fixed SYN-22 Math Function From Uniswap Not Adapted for New Constants • Informational ⑤ Fixed Fixed Fixed	SYN-20	Wrong Error Message	• Informational ③	Fixed
	SYN-21		• Informational ③	Fixed
DEX Price Manipulation May Lead to Dated Future Protocol	SYN-22	Math Function From Uniswap Not Adapted for New Constants	• Undetermined ①	Fixed
SYN-23 DEX Price Manipulation May Lead to Dated Future Protocol Losses	SYN-23	DEX Price Manipulation May Lead to Dated Future Protocol Losses	• Medium 🛈	Acknowledged

Assessment Breakdown

Quantstamp's objective was to evaluate the repository for security-related issues, code quality, and adherence to specification and best practices.



Disclaimer

Only features that are contained within the repositories at the commit hashes specified on the front page of the report are within the scope of the audit and fix review. All features added in future revisions of the code are excluded from consideration in this report.

Possible issues we looked for included (but are not limited to):

- Transaction-ordering dependence
- Timestamp dependence
- Mishandled exceptions and call stack limits
- Unsafe external calls
- Integer overflow / underflow

- Number rounding errors
- Reentrancy and cross-function vulnerabilities
- Denial of service / logical oversights
- · Access control
- · Centralization of power
- Business logic contradicting the specification
- · Code clones, functionality duplication
- Gas usage
- · Arbitrary token minting

Methodology

- 1. Code review that includes the following
 - 1. Review of the specifications, sources, and instructions provided to Quantstamp to make sure we understand the size, scope, and functionality of the smart contract.
 - 2. Manual review of code, which is the process of reading source code line-by-line in an attempt to identify potential vulnerabilities.
 - 3. Comparison to specification, which is the process of checking whether the code does what the specifications, sources, and instructions provided to Quantstamp describe.
- 2. Testing and automated analysis that includes the following:
 - 1. Test coverage analysis, which is the process of determining whether the test cases are actually covering the code and how much code is exercised when we run those test cases.
 - 2. Symbolic execution, which is analyzing a program to determine what inputs cause each part of a program to execute.
- 3. Best practices review, which is a review of the smart contracts to improve efficiency, effectiveness, clarity, maintainability, security, and control based on the established industry and academic practices, recommendations, and research.
- 4. Specific, itemized, and actionable recommendations to help you take steps to secure your smart contracts.

Scope

Files Included

- contracts/*.sol
- contracts/libraries/*.sol
- contracts/interfaces/*.sol

Files Excluded

• contracts/test/*

Findings

SYN-1

Order Filling Can Be Preempted by New Order Placement

• High 🗓

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

This observation is a result of the core mechanism of limit orders in Oyster AMM that the order (partial) fills are in first-come-first-served sequence instead of the usual first-in-first-out sequence in CEXes. As mentioned in the report, we also agree this does not pose a threat to the entire system as an attack, but it is at the same level as a MEV attack for some users. Once the fill bot is open sourced, the issue should be mostly remediated. Will clarify in user FAQ.

File(s) affected: Broker.sol, Oyster.sol, Instrument.sol, LibOrder.sol

Description: Suppose a pearl had taken but unfilled orders, and that the price were to rebound, so as to avoid crossing the pearl. In such a scenario, a user may place an order on the pearl, fill it immediately, and then sell the order at a given tick at a profit. This strategy will be profitable whenever the percent difference between the current price and the price where unfilled but taken orders are are higher than the tradingFeeRatio.

Note that as a result of this attack, the value of taken will go back down to 0, and everyone who placed an order there will have to wait for the price to reach the tick again before they have another chance at filling their orders.

The following attack therefore allows the attacker to purchase the asset at a lower price by essentially stealing the orders that have been taken but not filled.

Exploit Scenario:

- 1. Suppose the price is at 105 but that the pearl at the tick corresponding to a price of 100 has positive taken value.
- 2. The following exploit can be executed in a single transaction:
 - 1. The attacker then calls place() to place a buy order equal to taken.

- 2. The attacker then calls fill() to immediately fill this order to buy at a price of 100.
- 3. The attack calls trade() again with size = 0 to close their position to sell the order they just filled making a 5% profit arbitrage.

Recommendation: There are several possible avenues available to remedy this issue:

- 1. Warn the users so that they are advised of the incentive to fill their own orders in a timely fashion.
- 2. Dynamically adjust the trading fee so that someone will always be better off filling an existing order rather than taking the arbitrage.
- 3. Prevent anyone from placing a new order before all orders taken have been filled, though in this case, it may also be advisable to implement partial fills.

SYN-2

Just-in-Time Distant Liquidity May Be Added and Receive • Informational ① Acknowledged Fees



Update

Marked as "Acknowledged" by the client.

File(s) affected: Liquidity.sol

Description: Fees are tracked by a global Amm variable feePerLiquidity under the assumption that out of range liquidity will be removed before it has had the chance to collect too many unearned fees. However, this mechanism opens up the possibility for an LP to add out of range liquidity right before a large purchase takes place, and then close their position immediately after to earn fees.

This issue could be exacerbated if exploited in conjunction with SYN-3.

Recommendation: Consider tracking fees at each pearl as is done in Uniswap V3 to more accurately distribute LP rewards. Moreover, prevent the addition of liquidity ranges that do not include the current fair price.

SYN-3 New Liquidity Ranges May Exclude Fair Price

• Medium 🗓

Fixed



Update

Marked as "Fixed" by the client. Addressed in: d825c76855ee152085de399a505e9c17d7354950.

The new alignTick() function fixes the issue.

File(s) affected: Liquidity.sol

Description: Liquidity ranges that exclude the fair price's tick can be added given the lack of a specifically configured minimum tickDelta. Take, for instance, that the current amm.tick might be 120. When adding liquidity, one might use a tickDelta of 29, and because the upper and lower ticks of ranges are truncated by a spacing value of 50, the resulting lower tick and upper tick would be 50 and 100, respectively, excluding the fair price tick (120).

Recommendation: Prevent the addition of liquidity ranges that do not include the fair price.

SYN-4 Users Are Incentivized to Delay Settlement

Medium (i)

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

This observation is also related to the core mechanism of limit orders in Oyster AMM that cancellations are prioritized over filling orders in the case of a partial fill. We see this as a neutral observation as the incentive is really dependent on the limit order prices and settlement price in this case. In addition, the smart contract allows anyone to trigger settlement for other users once a pair is in settled state. Will clarify in user FAQ.

File(s) affected: Broker.sol , Instrument.sol

Description: Supposing there are taken but unfilled buy (resp. sell) orders below (resp. above) the settlement price. There is an incentive to wait until all corresponding orders have been canceled, and then settle later so that your order is filled. This is because cancellations are prioritized to filling orders via the cancelOrderToPositionCache() function.

In the other direction, the incentive is to close one's position and cancel your orders before other users have the chance to cancel, so that one's order is not filled.

Recommendation: Depending on the settlement price, fill orders before canceling or cancel before filling so the incentive is always aligned with settling positions quickly.

SYN-5 One Range Can Support Infinite Positions

• Informational ①

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

This finding will be downgraded to informational.

Description: Aside from limit orders, liquidity is provided to the protocol through Ranges. Each Range has a finite amount of liquidity and notional value. However, as long as the short and long sides stay balanced, the Range can support an infinite number of positions. The cumulative sum of the absolute notional value of the position sizes can greatly exceed the notional value of the range.

Exploit Scenario: We have provided a POC in which the notional value of the range is exceeded by approximately 20 times the total notional value of the positions. The positions will all use 2X leverage in the POC.

File(s):

• libraries/Oyster.sol

POC

```
// SPDX-License-Identifier: UNLICENSED
pragma solidity ^0.8.0;
import "../common/SynFuturesV3Test.sol";
import "../../contracts/interfaces/IInstrument.sol";
import "../../contracts/libraries/LibTypes.sol";
import "../../contracts/libraries/LibQuery.sol";
import "../../contracts/libraries/LibCalldata.sol";
import "../../contracts/libraries/LibConst.sol";
import "../../contracts/libraries/LibRange.sol";
import "../../contracts/libraries/LibError.sol";
import "../../contracts/libraries/LibMath.sol";
import "../common/LibUtil.sol";
import "../common/Constant.sol";
import "@openzeppelin/contracts/token/ERC20/IERC20.sol";
import "@openzeppelin/contracts/token/ERC20/extensions/IERC20Metadata.sol";
import "@openzeppelin/contracts/utils/Strings.sol";
import "@openzeppelin/contracts/utils/math/SignedMath.sol";
contract InfiniteLiquidity is ETH_USDC_LINK_TEST, PERP_TEST, SynFuturesV3Test {
    address immutable alice = makeAddr("Alice");
    function setUp() public override {
       super.setUp();
       mintAndApprove(alice, ENDLESS_MONEY / quoteScaler);
   }
    //With only 100_000 USDC as liquidity:
    //There will be 1_000_000 of longs at 2x leverage
    //There will be 1_000_000 of longs at 2x leverage
    function test_infinite_liquidity() public{
        uint128 liquidityToAdd = 100_000 ether; // 100_000 USDC as liquidity
        (int24 tickLower, int24 tickUpper, Range memory range) = add_ranged_liquidity(liquidityToAdd);
       for (uint i = 0; i < 50; i++){
           uint price = IMarket(market).getMarkPrice(instrument, PERP_EXPIRY, Status.TRADING);
           if (i\%2 == 0){
               console.log("-----", i);
               //The long size will be the amount of ether worth 40_000 USDC
```

```
int128 longSize = int128(int(((40_000 ether)*(1e18))/price));
                //The margin will be 20_000 USDC (2X leverage)
                int128 longMargin = 20000 ether;
               create_position(longSize, longMargin);
           }
           else{
                console.log("-----", i);
               //The short size will be the amount of ether worth 40_000 USDC
               int128 shortSize = -int128(int(((40_000 \text{ ether})*(1e18))/price));
                //The margin will be 20_000 USDC (2X leverage)
               int128 shortMargin = 20000 ether;
                vm.startPrank(alice);
                create_position(shortSize, shortMargin);
                vm.stopPrank();
           }
           Amm memory amm = LibQuery.getAmm(instrument, expiry);
       }
        uint price = IMarket(market).getMarkPrice(instrument, PERP_EXPIRY, Status.TRADING);
        Amm memory amm = LibQuery.getAmm(instrument, expiry);
        console.log("FINAL: amm.totalLong: %s, amm.totalShort: %s", uint(amm.totalLong),
uint(amm.totalShort));
        uint totalLongUSDValue= uint((amm.totalLong*price))/1e18;
        uint totalShortUSDValue= uint((amm.totalShort*price))/1e18;
        console.log("FINAL: totalLongUSDValue: %s, totalShortUSDValue: %s", totalLongUSDValue/1e18,
totalShortUSDValue/1e18);
        console.log("FINAL: total USD Value of Liquidity Added: %s", liquidityToAdd/1e18 );
   }
    function add_ranged_liquidity(uint128 amount, uint24 tickDelta ) private returns(
        int24 tickLower, int24 tickUpper, Range memory range){
        bytes32[2] memory args = LibCalldata.encodeAddParam(
           PERP_EXPIRY,
           tickDelta,
           amount,
           ANY_PRICE_TICK,
           NULL_DDL
        return IInstrument(instrument).add(args);
    function add_ranged_liquidity(uint128 amount) private returns(
        int24 tickLower, int24 tickUpper, Range memory range){
           return add_ranged_liquidity(amount, LibConst.TICK_DELTA_MAX / 2);
       }
    function create_position(int128 size, int128 margin) public returns(PositionCache memory){
        bytes32[2] memory tradeArgs = LibCalldata.encodeTradeParam(
            PERP_EXPIRY,
            size,
           margin,
           LibUtil.getUnlimitedTick(size),
           NULL_DDL
       );
        return IInstrument(instrument).trade(tradeArgs);
   }
   /**
        READ/QUERY/VERIFICATION HELPER FUNCTIONS
    */
    function priceToValidTic(uint256 price) private returns (int24){
        int24 tick =LibMath.getTickAtWad(price);
        tick -= tick%LibConst.ORDER_SPACING;
        return tick;
```

```
function toString(int256 value) internal pure returns (string memory) {
    return string(abi.encodePacked(value < 0 ? "-" : "", Strings.toString(SignedMath.abs(value))));
}
</pre>
```

Recommendation: If the total position value should not exceed the notional value of the range, then consider imposing some limits on the total position value relative to the liquidity value.

SYN-6 Privileged Roles and Ownership

• Low (i) Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

Documentation will be added to make the privileged functionalities clear to users. Will clarify in user FAQ.

File(s) affected: Config.sol, Gate.sol

Description: Smart contracts will often have owner variables to designate the person with special privileges to make modifications to the smart contract.

The ownership of the Config contract raises the following concerns with privileged roles:

- 1. Owners can create bad markets that can drain Gate.
 - 1. Only the owner can set the beacon address for market types. By setting a new beacon address, a contract with arbitrary logic can be used as an instrument.
 - 2. The newly deployed contract would be considered an instrument by the Gate . Therefore, it can make calls to Gate.scatter().
 - 3. Any balances of any users in the Gate contract as well as token approvals for the Gate contract can be taken and deposited into the malicious instrument contract.
 - 4. This scenario allows for a rugpull if the owner of Config cannot be trusted. However, the solution is not straightforward. One potential solution is to limit the potential market types by using an enum as the key instead of a string and filling each key value in with legitimate data. This would prevent the attack by not allowing new market types, and thus new beacon addresses, from being used. Another potential solution is to directly deploy the instrument instead of using a proxy. This would make deploying a malicious instrument impossible, but it would significantly increase gas costs and limit upgradeability.
- 2. Tip configurations
 - 1. Tips are rewarded to users that fill limit orders and remove liquidity that is out of range. The tip amount is hardcoaded based on the quote token.
 - 2. If the tip amount is set too low (under the value of the gas costs), users may not be incentivized to call fill() or remove().
 - 3. If the tip amount is set very high, users will not be able to interact with the protocol with small values.
- 3. Quote Tokens Configurations
 - 1. The owner can set arbitrary configurations for quote tokens. This includes setting the fees, margin requirements, tip amount, and quote type (stable/nonstable).
 - 2. There is no enforced maximum for the fees. If the fees sum to greater than 100%, the protocol will not work correctly.
 - 3. Other misconfigurations are possible. Consider implementing on-chain checks to ensure correctness.
- 4. EMA update config
 - 1. If the limits are too relaxed, price manipulation may occur.
 - 2. If the limits are too strict, the price may lag too far behind the real market price during quick market movements.
- 5. Partially Restricted Profitable Functions
 - 1. Liquidators must be whitelisted until disabled.
 - 2. Liquidity providers must be whitelisted until disabled.
- 6. Any user can be blacklisted from withdrawing funds, placing orders, and liquidating orders.

A general list of privileged roles and their functions in other contracts is given below.

- 1. Gate (Expected to be the Guardian contract)
 - SynFuturesV3Admin
 - 1. setBlacklist(): Add or remove traders from blacklist.
- 2. EmaSpotMarket (Expected to be the Guardian contract)
 - SynFuturesV3Admin
 - 1. setCompactEmaParam(): Set configuration parameters related to the exponential moving average calculation including emaHalfTime and maxTimeDelta
- 3. ChainlinkMarket (Expected to be the Guardian contract)
 - SynFuturesV3Admin
 - 1. setFeeder(): Set the address of the appropriate chainlink price feeds
- 4. DexV2Market (Expected to be the Guardian contract)
 - SynFuturesV3Admin
 - 1. addDexV2Factory(): Configure the DEX to be used as an oracle.
- 5. Instrument
 - 1. SynFuturesV3Admin

- 1. setParam(): Set parameters related to the quote token.
- 2. setLeverage(): Set the initial margin ratio and maintenance magin ratio.
- 3. freeze(): Freeze the instrument to prevent most actions including trading.
- 4. resolve(): Change instrument state from FROZEN to RESOLVED. Sets the settlement price.
- 5. normalize(): Change instrument state from RESOLVED to NORMAL.
- 6. recycleInsuranceFund(): Sets the insurance fund to zero. Only possible if the instrument is not in NORMAL condition.
- 7. claimProtocolFee(): Sets amm.protocolFee to zero and credits the gate account of the caller.

6. Guardian

- 1. DEFAULT ADMIN ROLE
 - 1. setSynFuturesV3Address(): Set the addresses of various contracts including the markets, observer, gate and configuration contracts.
 - 2. setSynFuturesV3Admin(): Transfer ownership of the admin role to another account.
 - 3. setQuoteParam(): Set configuration related to the quote parameter including fee ratios.
 - 4. setMarketInfo(): Set the market type, market address and the corresponding beacon address.
 - 5. setAllowUnauthorizedLps(): Enable or disable whitelist for liquidity addition.
 - 6. setAllowUnauthorizedLiquidators(): Enable or disable whitelist for liquidation.
 - 7. setWhitelistLps(): Add/remove addresses from the liquidity addition whitelist.
 - 8. setWhitelistLiquidators(): Add/remoe addresses from the liquidation whitelist.
 - 9. setCompactEmaParam(): Set configuration parameters related to the exponential moving average calculation including emaHalfTime and maxTimeDelta.
 - 10. setFeeder(): Set the address of the appropriate chainlink price feeds.
 - 11. addDexV2Factory(): Configure the DEX to be used as an oracle.
 - 12. setBlacklist(): Add or remove traders from blacklist.
 - 13. setParam() : Set parameters related to the quote token.
 - 14. setLeverage(): Set the initial margin ratio and maintenance magin ratio.
 - 15. resolve(): Change instrument state from FROZEN to RESOLVED. Sets the settlement price.
 - 16. normalize(): Change instrument state from RESOLVED to NORMAL.
- 2. OPERATOR_ROLE
 - 1. freeze(): Freeze the instrument to prevent most actions including trading.
 - 2. recycleInsuranceFund() : Sets the insurance fund to zero. Only possible if the instrument is not in NORMAL condition.
 - 3. claimProtocolFee(): Sets amm.protocolFee to zero and credits the gate account of the caller.
 - 4. withdrawFromGuardian(): Withdraw any ERC-20 tokens or ether from the Guardian contract.
 - 5. withdraw(): Withdraw funds from the Gate contract which are attributed to the Guardian contract.

Recommendation: This centralization of power needs to be made clear to the users, especially depending on the level of privilege the contract allows to the owner. Consider following the above recommendations and making the privileged functionalities clear to users via documentation.

SYN-7 Critical Role Transfer Not Following Two-Step Pattern

• Low

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

As explained above, there are two types of admins. One is the proxy admin that manages contract upgrades, and the other is used to manage various configurations of our core contract. Proxy admin is expected to be our Gnosis multi-sig wallet and is already known in advance. And the other is expected to be the Guardian contract deployed following

TransparentUpgradeableProxy pattern which can be upgraded by the Gnosis multi-sig wallet. And Guardian contract itself inherits AccessContral contract in appropriate and is managed by different rales like admin, appropriate the risk related to

inherits AccessControl contract in openzeppelin and is managed by different roles like admin, operators. The risk related to transferring admin is low and we will handle this with great care.

File(s) affected: Config.sol , InstrumentBeacon.sol

Description: The owner of the contracts can call transferOwnership() to transfer the ownership to a new address. If an uncontrollable address is accidentally provided as the new owner address then the contract will no longer have an active owner, and functions with the onlyOwner modifier can no longer be executed.

Recommendation: Consider using OpenZeppelin's Ownable2Step contract to adopt a two-step ownership pattern in which the new owner must accept their position before the transfer is complete.

SYN-8 Missing Input Validation

• Low ①





Update

Marked as "Fixed" by the client. Addressed in: b1eaf65718b3c051f6baee8c5738b99aca3e067a .

The issue has been fixed.

File(s) affected: Instrument.sol

Related Issue(s): SWC-123

Description:

- 1. Instrument
 - 1. initialize(): The setting struct is not validated in any way. In particular the following validations are missing:
 - 2. minTicket and tip should be validated to be a reasonable value (e.g. non-zero and not too high)
 - 3. All Addresses should be validated to be non-zero, namely:
 - config
 - gate
 - market
 - quote
 - 4. All fields in the Setting.QuoteParam struct ending in "Ratio" should be validated to be less than 100%. Namely, the following variables:
 - tradingFeeRatio
 - protocolFeeRatio

Recommendation: We recommend adding the relevant checks.

SYN-9 Feeder Pair May Become Suboptimal

• Low i





Update

Marked as "Fixed" by the client. Addressed in: 3c80c41d249884c89fa8be95017940706094c574.

An updateFeeder() function was created.

File(s) affected: DexV2Market.sol

Description: When DexV2Market._constructFeeder() is called, there is a for loop that iterates over all the addresses in dexV2Factories. The for loop finds a pre-selected pair from each of the factories to find the pair that has the highest liquidity. However, there is no mechanism for updating a pair should a new pair emerge with more liquidity, or should it ever be the case that the liquidity contained therein is less than the requiredReserve.

Recommendation: Consider creating an updateFeeder() function that would reassign the feeder.pair field to a new pair with a higher reserve, and that will render the instrument inactive if there is insufficient liquidity.

SYN-10 Incentive to Realize Social Loss upon Donation

Low

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

After launch of v3, we might use some of the protocol fee as insurance fund to cover part of the losses from bankrupt accounts. And users will be informed that it will be first come first served.

File(s) affected: LibAmm.sol, LibPosition.sol, Oyster.sol

Description: Users can avoid paying for social loss if they realize it after a donation because the handleSocialLoss() function deducts as much as possible from the insurance fund before deducting from the user. This means that users who "act fast" can be disproportionately rewarded.

Suppose we start with an insurance fund of 0. If someone donates and then social loss is handled right after, loss would be potentially lower than in subsequent calls of handleSocialLoss() operations because each call of the handleSocialLoss() function reduces the insurance fund.

Recommendation: Ensure that users are aware of this, or find a way to distribute the insurance funds more equitably to all the users.

SYN-11 Reliance on DEX Spot Reserves

• Low 🗓

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

DEX prices based on reserves are not directly used in the Oyster AMM, instead they go through an EMA process and other safety checks. For settlement price, Oyster AMM does uses TWAP from the oracles. However, for a continuous spot index reference, the TWAP price is not necessarily superior than the current smoothed spot index prices in Oyster AMM. In the lack of consensus of a dominating approach to process DEX prices, we will keep the current implementation unchanged.

File(s) affected: EmaSpotMarket.sol , DexV2Market.sol

Description: SynFutures supports two types of oracles, which rely on exponential moving averages. The DexV2Market oracle calculates an exponential average of prices calculated by taking ratios of spot DEX reserves. Spot DEX reserves are easily manipulated by making large swaps. While the exponential average mitigates manipulations through large swaps to some extent, it may still be possible to manipulate the price enough to make a profit. The code that incorporates the raw price calculated from the DEX into the exponential moving average is shown below:

```
function _emaSpot(
    SpotState memory sstate, uint raw, EmaParam memory eparam
) internal view returns (uint, SpotState memory) {
    uint timeElapsed = block.timestamp - sstate.time;
   if (timeElapsed == 0) return (raw, sstate);
    uint maxDelta = sstate.raw.wmulDown(
        LibMath.r2w(eparam.maxChangeRatioPerSecond)) * _gap(timeElapsed, eparam.maxRawTimeDelta);
    uint cappedSpot = _cap(sstate.raw, maxDelta, raw);
    // weight = (1/2) ** (timeDelta / ema_half_time)
    uint weight = LibMath.halfpow(
        _gap(timeElapsed, eparam.maxTimeDelta) * LibMathUnsigned.WAD() / eparam.emaHalfTime);
    // emaSpot = (1 - weight) * spot + weight * emaSpot
    uint emaSpot= cappedSpot.wmul(LibMathUnsigned.WAD() - weight) + uint(sstate.spot).wmul(weight);
   return (emaSpot, SpotState(uint32(block.timestamp), emaSpot.toUint224(), raw.toUint224()));
}
```

The impact of the raw price on the exponential average is increased if there is a large amount of time since the previous price update and the difference between the raw price and the previous average. However, various configuration settings are in place to limit the possible change of the price, including eparam.maxRawTimeDelta. The extent to which price manipulation is possible is highly dependent on these configuration parameters. The more stringent the configuration parameters, the lower the possibility for price manipulation. However, configuration parameters that are too stringent will not allow the price to update fast enough to keep up with volatile market conditions.

We note that when determining a settlement price, a time-weighted average price is calculated from the DEX using functions such as pair.price1CumulativeLast(). However, when the Instrument is still in TRADING status, the raw price is included as part of the exponential average. Since the raw price is based on the spot reserves of a DEX, it is more manipulable.

Recommendation: Consider whether prices obtained from time-weighted average price oracles can be used instead of prices calculated using spot reserves of DEXs.

SYN-12 Instrument.normalize() Has Unchecked Assumptions

Low (i) Mitigated



Update

Marked as "Fixed" by the client. Addressed in: 5cfa24225708c29eb334df94c03b01934a48f85f.

We are marking this as "Mitigated" per the in-code comment: "the following check is not sufficient due to some accounts with non-taken

File(s) affected: Instrument.sol

Description: The function Instrument.normalize() is intended to restore the Instrument contract to a state that resembles a newly deployed contract except for LibPearl.nonce and the Record structs. However, the function assumes that all accounts should have been cleared via the settle() function as stated by the code comment below:

```
ticks, tbitmap and records should already be cleared via settle() all accounts.
```

It is assumed that the accounts will be settled through some off-chain mechanism. However, it would be safer to have an on-chain check within normalize() to ensure that all accounts have been settled. An obvious but expensive option would be the introduction of counters for the number of positions, orders, and ranges. Perhaps there is another way to have the on-chain check with more gas efficiency.

Recommendation: Consider adding an on-chain validation check to ensure all outstanding accounts have been settled if there is a gas-efficient way to do it.

SYN-13 Liquidation And LP Whitelist Can Be Re-enabled

Low (i) Fixed



Update

Marked as "Fixed" by the client. Addressed in: f9380349a1278c15531213c131e3b40547d75f2d.

Description: The addition of liquidity through Instrument.add() and liquidation through Instrument.liquidate() can both be restricted to a whitelist. It is a common pattern for a project to have a whitelist at the initial launch and then disable it permanently later. However, in the Config contract it is possible to re enable the whitelist for both liquidation and liquidity addition through the functions Config.setAllowUnauthorizedLps() and Config.setAllowUnauthorizedLiquidators(). The ability to re-enable the whitelist significantly increases centralization and should be removed if not needed.

Recommendation: Consider removing the ability to reenable the whitelist. The whitelist could be enabled at launch and then disabled once the team is comfortable with the risk level.

SYN-14 Insufficient Validation Of Chainlink Prices







Update

Marked as "Fixed" by the client. Addressed in: f9691c7b9e10abd1950176d0b58532b2eb53b3f5.

File(s) affected: ChainlinkMarket.sol

Description: The ChainlinkMarket contract provides an exponential moving average of Chainlink prices for a pair. The Chainlink prices are retrieved using the function IChainlinkAggregator.latestRoundData(). However, some additional checks should be run on the results of this function for safety.

- 1. The price retrieved from the function should be greater than zero.
- 2. The updatedAt timestamp returned should be no older than some appropriate value.

Recommendation: Add the recommended validation checks to the retrieved Chainlink prices.

SYN-15

Upgradeable Contract Initializer Should Be Disabled in Constructor

• Low (i) Fixed



Update

Marked as "Fixed" by the client. Addressed in: 8c047d374040db91e50a2bde1184e4951e76d1b8.

File(s) affected: Instrument.sol

Description: The implementation contracts behind a proxy can be initialized by any address. This is not a security problem in the sense that it impacts the system directly, as the attacker will not be able to cause any contract to self-destruct or modify any values in the proxy contracts. However, taking ownership of implementation contracts can open other attack vectors, like social engineering or phishing attacks.

Recommendation: Call _disableInitializers() in the constructor of Instrument.sol to avoid the initialization of the implementation contracts.

SYN-16 Heavy Reliance on Off-Chain Bots

• Low

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

All the functionality provided by off chain bots are accessible by any users. Once the bots are open sourced, any user could easily perform these actions in the case our bot is offline.

Description: In order to ensure that market makers do not receive more fees than intended, bots are required to fill orders and liquidate positions in a timely fashion. If these bots malfunction or if their servers experience downtime, the effectiveness of the protocol may suffer.

Recommendation: Consider clarifying these risks in end-user-facing documentation.



Update

Marked as "Fixed" by the client. Addressed in: 06248aa9d16b0dfc0dcecab8590d9dac3a2bea6c .

Related Issue(s): SWC-103

Description: Every Solidity file specifies in the header a version number of the format pragma solidity (^)0.8.*. The caret (^) before the version number implies an unlocked pragma, meaning that the compiler will use the specified version and above, hence the term "unlocked".

Recommendation: For consistency and to prevent unexpected behavior in the future, we recommend to remove the caret to lock the file onto a specific Solidity version. For the purposes of this project, version 0.8.18 may be appropriate.

SYN-18 Protocol Does Not Support Rebasing Tokens

• Informational (i)

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

Rebasing tokens won't be used in our platform.

Description: Some ERC20 tokens can change the balance of accounts outside of transfer methods. These tokens are commonly referred to as rebasing tokens. Since the protocol only ensures that an expected amount of tokens is recieved after a transfer, tokens that change the balance through other methods will disrupt internal accounting.

Recommendation: Markets should only be created using tokens that cannot modify the balance of a contract outside of a typical transfer call.

SYN-19 Large Orders May Have Trouble Getting Filled

Informational ①

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

The Oyster AMM provides small tips to those users help fill the limit orders from their margin. The tip amount is fixed aiming to cover the gas cost for those who help with the fill and thus it is not proportionate to the size of the fill. Suppose a partially filled limit order could be trigged to fill without canceling it, its margin could be drained by paying the tips. That poses a real threat to the system and thus is not allowed.

Description: Orders are filled by calling the fill() function and only executes successfully when the absolute value of Pearl.taken is greater than the size of the order. However, a particularily large order may have a hard time getting filled because smaller orders are likely to reach the threshold first, and therefore have more time to get filled before the order.

Recommendation: Consider adding a way to partially fill an order without cancelling it.

SYN-20 Wrong Error Message

• Informational 🛈

Fixed



Update

Marked as "Fixed" by the client. Addressed in: 29adbaf213748098cec2c9c0d68f72b1e5b736d3.

File(s) affected: Liquidity.sol

Description: The following error statements in Liquidity.add() should be reversed:

```
if (aparam.expiry <= block.timestamp + LibConst.SETTLING_DURATION) revert ExpiryTooLate();</pre>
```

if (aparam.expiry > alignedBlockTime + LibConst.MAX_EXPIRY_PERIOD) revert ExpiryTooEarly();

Recommendation: Adjust the error messages.

SYN-21

Application Monitoring Can Be Improved by Emitting More Events





Update

Marked as "Fixed" by the client. Addressed in: 4e3fc26b879c29c2c51eb5bb12753b828fd91e34.

File(s) affected: Config.sol , EmaSpotMarket.sol

Description: In order to validate the proper deployment and initialization of the contracts, it is a good practice to emit events. Also, any important state transitions can be logged, which is beneficial for monitoring the contract, and also tracking eventual bugs or hacks. Below we present a non-exhaustive list of events that could be emitted to improve application management:

- 1. Config
 - 1. setWhitelistLps()
 - 2. setWhitelistLiquidators()
- EmaSpotMarket
 - 1. syncEmaParam(): Set ema param for the caller. Typically only called by the instrument, but technically callable by anyone.

Recommendation: Consider emitting the events.

SYN-22

Math Function From Uniswap Not Adapted for New Constants

Undetermined (i)





Update

Marked as "Fixed" by the client. Addressed in: 457dc2a12f06d4a80397b1360208e3152dfbac85.

File(s) affected: LibMath.sol

Description: The <code>getSqrtRatioAtTick()</code> function is borrowed from Uniswap's <code>TickMath.sol</code> library. In the original implementation this function relies on the fact that the maximum tick value is the opposite of the minimum tick value. In the SynFutures implementation, the absolute value of the maximum tick value is greater than the absolute value of the minimum tick value. Therefore, it is possible for a tick that is less than the minimum tick value to return a value without reverting as long as its absolute value is less than the maximum tick value.

Recommendation: Consider ensuring the tick parameter is not less than MIN_TICK or greater than MAX_TICK.

SYN-23

DEX Price Manipulation May Lead to Dated Future Protocol Losses

• Medium ①

Acknowledged



Update

Marked as "Acknowledged" by the client. The client provided the following explanation:

We ack the issue of SYN-23 and plan to monitor those dated futures closely as recommended.

File(s) affected: Instrument.sol, EmaSpotMarket.sol

Description: The EmaSpotMarket contracts are used to pull prices from either Chainlink or Uniswap V2-type markets. However, for long-tail assets where liquidity is sufficiently low, the prices obtained from these oracles may become more liable to manipulation by a sufficiently wealthy adversary.

In the context of a dated futures instrument, an attacker may decide to open a position on the instrument and manipulate the reserves at, for example, a Uniswap V2-type market. If the instrument relies on this market for price data, and if the price at this market is sufficiently affected for a long enough period of time up until instrument maturity, then the hitherto unrealized profit will become realized and able to be withdrawn.

While such an attack may be considered extraordinary, similar attacks involving external price manipulation have been executed on other decentralized futures markets.

Recommendation: Liquidity for assets of interest along with protocol metrics should be monitored in order to gauge the profitability of such an attack. If such an attack becomes significantly profitable for a wealthy-enough adversary, emergency measures may be taken to prevent serious loss.

Definitions

- **High severity** High-severity issues usually put a large number of users' sensitive information at risk, or are reasonably likely to lead to catastrophic impact for client's reputation or serious financial implications for client and users.
- Medium severity Medium-severity issues tend to put a subset of users' sensitive information at risk, would be detrimental for the client's
 reputation if exploited, or are reasonably likely to lead to moderate financial impact.
- Low severity The risk is relatively small and could not be exploited on a recurring basis, or is a risk that the client has indicated is low impact in view of the client's business circumstances.
- Informational The issue does not post an immediate risk, but is relevant to security best practices or Defence in Depth.
- Undetermined The impact of the issue is uncertain.
- Fixed Adjusted program implementation, requirements or constraints to eliminate the risk.
- Mitigated Implemented actions to minimize the impact or likelihood of the risk.
- **Acknowledged** The issue remains in the code but is a result of an intentional business or design decision. As such, it is supposed to be addressed outside the programmatic means, such as: 1) comments, documentation, README, FAQ; 2) business processes; 3) analyses showing that the issue shall have no negative consequences in practice (e.g., gas analysis, deployment settings).

Code Documentation

- 1. DexV2Market.sol#101 Should be for futures not perpetuals. perpetual → futures
- 2. LibMath.sol#30 maximum → minimum
- 3. Amm Statue \rightarrow Amm Status (LibTypes.sol#6)
- 4. Provide more details on the implementation of the Order struct and Pearl.taken and Pearl.left . In general, make a note that there is a two step process where first orders are taken from by traders, and then orders are filled manually using the importantly, that this does not guarantee "first come first serve" but rather the order is determined by who calls Instrument.fill() first on their order.

Adherence to Best Practices

- 1. Gate.launch() does not revert when an Instrument has already been launched. If the instrument already exists, consider reverting the function, since liquidity can be directly added using the Instrument.add() function.
- 2. Several times the "using {Library} for {Type}" syntax is called for a Library that does not contain the type in any of its functions first arguments, and therefore is not usable. This occurs with the following:
 - o using Oyster for mapping(uint32 => Amm)
 - ∘ using Oyster for Amm
 - o using LibTickBitmap for mapping(uint48 => uint) (Though there is mapping(int16 => uint256)
- 3. The mtype field of the MarketInfo struct could be an enum as opposed to a string.
- 4. Consider incrementing the iterator in for-loops within an unchecked block to save gas.
- 5. Although most of the code already uses custom errors instead of require statements, there are few places which use require statements such as in LibQuery. It would be better to use require statements across the entire codebase for consistency and gas efficiency.
- 6. Where possible mark public state-changing functions as external, for example, Guardian.setParam() for gas efficiency.
- 7. Use uint256 and int256 instead of uint and int to be more explicit.
- 8. Consider indexing parameters of some events, particularly ones which have no indexed parameters, for example ChainlinkMarket.SetFeeder.
- 9. Use "_" to make large numbers more readable e.g.1_000_000_000_000_000. This can be applied to several constants in LibConst.
- 10. Consider adding instructions in the README.md file for obtaining code coverage results.

Appendix

File Signatures

The following are the SHA-256 hashes of the reviewed files. A file with a different SHA-256 hash has been modified, intentionally or otherwise, after the security review. You are cautioned that a different SHA-256 hash could be (but is not necessarily) an indication of a changed condition or potential vulnerability that was not within the scope of the review.

Contracts

- 147...80c ./contracts/Gate.sol
- 654...dad ./contracts/ChainlinkMarket.sol
- 524...257 ./contracts/Config.sol
- 08c...404 ./contracts/Guardian.sol
- 726...c52 ./contracts/EmaSpotMarket.sol

```
bb2...47a ./contracts/Observer.sol
   0cd...29f ./contracts/InstrumentBeacon.sol
   3c7...7f0 ./contracts/DexV2Market.sol
   d97...a09 ./contracts/InstrumentProxy.sol
   f3f...b50 ./contracts/Instrument.sol
   eba...f64 ./contracts/interfaces/IOwned.sol
   604...5b5 ./contracts/interfaces/IChainlinkMarket.sol
   30d...801 ./contracts/interfaces/IInstrument.sol
   184...08e ./contracts/interfaces/IObserver.sol
   f01...a1f ./contracts/interfaces/IConfig.sol
   2e8...e96 ./contracts/interfaces/IWETH.sol
   0b8...646 ./contracts/interfaces/IChainlinkAggregator.sol
   daf...7e6 ./contracts/interfaces/IDexV2Market.sol
   cc1...1f0 ./contracts/interfaces/IGate.sol
   af9...0a9 ./contracts/interfaces/IUniswapV2.sol
   fed...472 ./contracts/interfaces/IMarket.sol
   238...a71 ./contracts/peripheral/ProxyTraderFactory.sol
   54e...514 ./contracts/peripheral/ProxyTrader.sol
   1d9...d9d ./contracts/peripheral/proxy/BUProxy.sol
   90b...d78 ./contracts/peripheral/proxy/Beacon.sol
   334...c30 ./contracts/peripheral/proxy/TUProxy.sol
   153...6bb ./contracts/libraries/LibAmm.sol
   d41...846 ./contracts/libraries/Oyster.sol
   c26...c05 ./contracts/libraries/LibParam.sol
   01e...e98 ./contracts/libraries/Broker.sol
   d77...b6e ./contracts/libraries/Liquidity.sol
   0fa...755 ./contracts/libraries/LibConst.sol
   61a...80e ./contracts/libraries/LibErc20.sol
   425...da4 ./contracts/libraries/LibPosition.sol
   c5d...6a1 ./contracts/libraries/LibEvent.sol
   204...7db ./contracts/libraries/LibRange.sol
   a19...125 ./contracts/libraries/LibQuery.sol
   bc3...45c ./contracts/libraries/LibAccount.sol
   f2b...6c1 ./contracts/libraries/LibTypes.sol
   fd6...be4 ./contracts/libraries/LibMath.sol
   8bf...444 ./contracts/libraries/LibPearl.sol
   f95...42f ./contracts/libraries/LibCalldata.sol
   193...588 ./contracts/libraries/LibError.sol
  7e9...94b ./contracts/libraries/LibTickBitmap.sol
   2ab...b11 ./contracts/test/MockChainlinkFeeder.sol
   b33...e0e ./contracts/test/WETH.sol
   295...f41 ./contracts/test/TestToken.sol
  c67...5d6 ./contracts/test/hardhat/SqrtPriceMathTest.sol

    a92...67f ./contracts/test/hardhat/TickBitmapTest.sol

    ab5...f25 ./contracts/test/hardhat/TickTest.sol

Tests

    184...a2c ./test/hardhat/SqrtPriceMath.test.ts
```

- 721...944 ./test/hardhat/Instrument.test.ts
- fbe...39f ./test/hardhat/TickBitmap.test.ts
- c41...825 ./test/hardhat/imrSimulation.test.ts
- dcf...4dc ./test/hardhat/Tick.test.ts
- f42...31d ./test/hardhat/ProxyTrader.test.ts
- aeb...58a ./test/hardhat/integration.test.ts

```
0ea...326 ./test/hardhat/sdk_test/synfutures.test.ts
  6be...e6d ./test/hardhat/sdk_test/util.test.ts
  91f...14e ./test/hardhat/common/actor.ts
  02d...18e ./test/hardhat/common/marketEnvironment.ts
  46d...850 ./test/hardhat/common/fixture.ts
  6af...cd6 ./test/hardhat/shared/utilities.ts
  081...f16 ./test/hardhat/shared/constants.ts
  265...622 ./test/foundry/OysterAmmTest.t.sol
 10b...494 ./test/foundry/GateTest.t.sol
  83b...123 ./test/foundry/DexV2MarketTest.t.sol
  479...986 ./test/foundry/ConfigTest.t.sol
  a61...584 ./test/foundry/ChainlinkMarketTest.t.sol
  9e1...a4c ./test/foundry/InvolvedFundTest.t.sol
  0e4...a07 ./test/foundry/InstrumentTest.t.sol
  5ec...d6f ./test/foundry/ObserverTest.t.sol
  906...e77 ./test/foundry/RangeTest.t.sol
 fe3...fe1 ./test/foundry/PerpetualTest.t.sol
 265...0aa ./test/foundry/LiquidationTest.t.sol
 7f6...842 ./test/foundry/interfaces/IUniswapV2Router.sol
  0e4...c10 ./test/foundry/peripheral/ProxyTrader.t.sol
  182...d96 ./test/foundry/peripheral/Guardian.t.sol
  db7...85b ./test/foundry/peripheral/ProxyTraderFactory.t.sol
  061...473 ./test/foundry/weirdToken/ReentrantTokenTest.t.sol
  4db...56e ./test/foundry/weirdToken/AbstractWeirdTokenTestBase.sol
  abd...13e ./test/foundry/weirdToken/Bytes32SymbolTokenTest.t.sol
  201...1ea ./test/foundry/weirdToken/TransferFeeTokenTest.t.sol
  2a0...33d ./test/foundry/weirdToken/BlocklistTokenTest.t.sol
  0ac...c0d ./test/foundry/weirdToken/NoRevertTokenTest.t.sol
  59b...eef ./test/foundry/common/Constant.sol
 2cf...990 ./test/foundry/common/DexV2MarketEnvironment.sol
 1b7...aad ./test/foundry/common/SynFuturesV3Test.sol
  114...002 ./test/foundry/common/ChainlinkMarketEnvironment.sol
  815...7ab ./test/foundry/common/Fixture.sol
  579...82d ./test/foundry/common/LibUtil.sol
  8b7...791 ./test/foundry/common/LibUtilTest.t.sol
  0f9...afa ./test/foundry/common/IFixture.sol
  457...331 ./test/foundry/common/Misc.sol
  23e...d58 ./test/foundry/common/FixtureTest.t.sol
 f42...4dd ./test/foundry/common/AbstractMarketEnvironment.sol
  980...692 ./test/foundry/common/LibActor.sol
 2b2...c5f ./test/foundry/common/Types.sol
  b04...5b4 ./test/foundry/common/InstrumentStorage.sol
  0b9...793 ./test/foundry/common/forge-extended/Assertion.sol
  ccf...bde ./test/foundry/common/forge-extended/ForgeScriptExtended.sol
  d9d...36e ./test/foundry/common/forge-extended/consoleEx.sol
  d6f...c34 ./test/foundry/common/forge-extended/ForgeTestExtended.sol
  b32...cde ./test/foundry/common/solidity-extended/StrUtils.sol
  fbe...51a ./test/foundry/common/solidity-extended/Array.sol
  7e3...8d1 ./test/foundry/common/solidity-extended/StrUtilsTest.t.sol
• 7c5...809 ./test/foundry/library/NumericalComputationTest.t.sol
  bd8...8f1 ./test/foundry/library/LibQueryTest.t.sol
• 2a6...1a8 ./test/foundry/library/LibPositionTest.t.sol
  0c1...753 ./test/foundry/library/TickBitmapTest.t.sol
 d52...ea0 ./test/foundry/library/LiquidityTest.t.sol
• 590...26a ./test/foundry/library/NumericalConvertionTest.t.sol
```

```
ee1...76a ./test/foundry/library/LibParamTest.t.sol
70c...59b ./test/foundry/library/OysterTest.t.sol
526...f60 ./test/foundry/library/LibCalldataTest.sol
5d8...374 ./test/foundry/library/AccountTest.t.sol
2d9...89e ./test/foundry/library/LibRangeTest.t.sol
720...db1 ./test/foundry/operation/OrderOperationTest.t.sol
996...6b4 ./test/foundry/operation/InstrumentConditionTest.t.sol
5f1...815 ./test/foundry/operation/SettleOperationTest.t.sol
612...ad2 ./test/foundry/operation/SetParamTest.t.sol
34e...3b8 ./test/foundry/operation/FundOperationTest.t.sol
512...647 ./test/foundry/operation/DepositWithdrawTest.t.sol
618...6df ./test/foundry/operation/StatusTest.t.sol
```

Toolset

The notes below outline the setup and steps performed in the process of this audit.

89f...18f ./test/foundry/operation/AddRemoveTest.t.sol

Setup

Tool Setup:

• Slither ☑ v0.9.2

Steps taken to run the tools:

- 1. Install the Slither tool: pip3 install slither—analyzer
- 2. Run Slither from the project directory: slither .

Automated Analysis

Slither

Relevant issues found by Slither were integrated into the final report.

Test Suite Results

This repository includes a dual test suite using both Foundry and Hardhat. Altogether, the test suite appears quite substantial, relying on a robust SDK.

```
==FOUNDRY TESTS BEGIN HERE==
Running 2 tests for test/foundry/library/AccountTest.t.sol:AccountTest
[PASS] test_extractPosition_fully() (gas: 83420)
[PASS] test_extractPosition_partially() (gas: 110973)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 229.49ms
Running 2 tests for test/foundry/weirdToken/ReentrantTokenTest.t.sol:ReentrantTokenTest
[PASS] test_deposit_toAccount_reentrant() (gas: 143686)
[PASS] test_withdraw_fromAccount_reentrant() (gas: 181575)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 1.36s
Running 2 tests for test/foundry/common/LibUtilTest.t.sol:LibUtilTest
[PASS] test_sizeByNotional() (gas: 785437)
[PASS] test_sizeToTickWithGap() (gas: 871885)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 1.40s
Running 4 tests for test/foundry/operation/SetParamTest.t.sol:ETH_USDT_LINK_SetParamTest
[PASS] test_getEmaParam() (gas: 71021)
[PASS] test_setCompactEmaParam() (gas: 30744)
[PASS] test_setParam_revertNotSynFuturesV3Admin() (gas: 34548)
[PASS] test_seteParam() (gas: 51439)
Test result: ok. 4 passed; 0 failed; 0 skipped; finished in 723.10ms
Running 4 tests for test/foundry/operation/SetParamTest.t.sol:WETH_USDC_DEXV2_SetParamTest
```

```
[PASS] test_getEmaParam() (gas: 71098)
[PASS] test_setCompactEmaParam() (gas: 30777)
[PASS] test_setParam_revertNotSynFuturesV3Admin() (gas: 34548)
[PASS] test_seteParam() (gas: 51439)
Test result: ok. 4 passed; 0 failed; 0 skipped; finished in 664.72ms
Running 6 tests for test/foundry/operation/FundOperationTest.t.sol:ETH_USDT_LINK_FundOperationTest
[PASS] test_adjustInsuranceFund(address, uint256) (runs: 256, μ: 597304, ~: 601190)
[PASS] test_adjustInsuranceFund_revertBadTiming() (gas: 690949)
[PASS] test_claimProtocolFee() (gas: 1089643)
[PASS] test_claimProtocolFee_revertNotSynFuturesV3Admin() (gas: 35774)
[PASS] test_claimProtocolFee_withNonZeroInsuranceFund() (gas: 1338353)
[PASS] test_recycleInsuranceFund_revertNotSynFuturesV3Admin(uint256) (runs: 256, μ: 605479, ~: 605479)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 5.24s
Running 6 tests for test/foundry/operation/FundOperationTest.t.sol:WETH_USDC_DEXV2_FundOperationTest
[PASS] test_adjustInsuranceFund(address, uint256) (runs: 256, μ: 490837, ~: 477704)
[PASS] test_adjustInsuranceFund_revertBadTiming() (gas: 566708)
[PASS] test_claimProtocolFee() (gas: 1053850)
[PASS] test_claimProtocolFee_revertNotSynFuturesV3Admin() (gas: 35774)
[PASS] test_claimProtocolFee_withNonZeroInsuranceFund() (gas: 1253429)
[PASS] test_recycleInsuranceFund_revertNotSynFuturesV3Admin(uint256) (runs: 256, μ: 566773, ~: 567784)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 3.97s
Running 12 tests for test/foundry/GateTest.t.sol:GateTest
[PASS] test_blacklisted_trader_can_not_withdraw() (gas: 171794)
[PASS] test_blaklisted_trader_can_not_trade() (gas: 1601711)
[PASS] test_constructor() (gas: 17011)
[PASS] test_getAllInstruments() (gas: 14562524)
[PASS] test_launch_revert_MarketTypeNotSupported() (gas: 46713)
[PASS] test_newInstrument_revertBadInstrumentAddress() (gas: 3801906)
[PASS] test_newInstrument_revert_NewInstrumentFailed() (gas: 8797746687696184530)
[PASS] test_newInstrument_revert_instrumentExists() (gas: 1350678)
[PASS] test_newInstrument_with_liquidity_with_reserveInGate_inAdvance() (gas: 3958188)
[PASS] test_newInstrument_with_liquidity_without_reserveInGate_inAdvance() (gas: 1344712)
[PASS] test_receive_revert_NoDirectDeposit() (gas: 15185)
[PASS] test_reentry_revertReentrancyGuard() (gas: 282511)
Test result: ok. 12 passed; 0 failed; 0 skipped; finished in 866.15ms
Running 18 tests for test/foundry/peripheral/Guardian.t.sol:GuardianTest
[PASS] test_addDexV2Factory() (gas: 75775)
[PASS] test_claimProtcolFee() (gas: 788655)
[PASS] test_freeze_resolve_normalize() (gas: 228713)
[PASS] test_recycleInsuranceFund_withdraw() (gas: 379576)
[PASS] test_setAllowUnauthorizedLps() (gas: 40033)
[PASS] test_setBlacklist() (gas: 93181)
[PASS] test_setCompactEmaParam() (gas: 62563)
[PASS] test_setFeeder() (gas: 121146)
[PASS] test_setMarginRatio() (gas: 67875)
[PASS] test_setMarketInfo() (gas: 197029)
[PASS] test_setParam() (gas: 111091)
[PASS] test_setQuoteParam() (gas: 151225)
[PASS] test_setSynFuturesV3Address() (gas: 48244)
[PASS] test_setSynFuturesV3Admin() (gas: 35176)
[PASS] test_setToAddress() (gas: 33141)
[PASS] test_setWhitelist() (gas: 86170)
[PASS] test_setWhitelistLiquidators() (gas: 86238)
[PASS] test_withdrawFromGuardian() (gas: 94754)
Test result: ok. 18 passed; 0 failed; 0 skipped; finished in 769.53ms
Running 10 tests for test/foundry/operation/SettleOperationTest.t.sol:ETH_USDC_LINK_SettleTest
[PASS] test_all_back_liquidity_only() (gas: 1237250)
[PASS] test_all_back_unfilled_order_only() (gas: 1170204)
[PASS] test_equity_positions_only() (gas: 1557766)
[PASS] test_equity_positions_ranges_mixed() (gas: 1936675)
[PASS] test_equity_positions_ranges_order_mixed() (gas: 2302384)
[PASS] test_settleAll_duringTradingPhase() (gas: 1336538)
[PASS] test_settle_account_negative_balance_social_loss(bool) (runs: 256, μ: 1392794, ~: 1397367)
[PASS] test_settle_ranges_positions() (gas: 1088440)
[PASS] test_settle_ranges_positions_order_mixed() (gas: 1515640)
[PASS] test_settle_revert_when_frozen() (gas: 1517950)
Test result: ok. 10 passed; 0 failed; 0 skipped; finished in 9.02s
```

```
Running 6 tests for
test/foundry/operation/InstrumentConditionTest.t.sol:ETH_USDT_LINK_InstrumentConditionTest
[PASS] test_instrumentCondition_frozen() (gas: 586945)
[PASS] test instrumentCondition resolved() (gas: 647033)
[PASS] test_setInstrumentCondition_normalize() (gas: 29612108)
[PASS] test setInstrumentCondition resolve() (gas: 1588515)
[PASS] test_setInstrumentCondition_revertBadCondition() (gas: 144829)
[PASS] test_setInstrumentCondition_revertNotSynFuturesV3Admin() (gas: 147152)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 1.70s
Running 6 tests for
test/foundry/operation/InstrumentConditionTest.t.sol:WETH_USDC_DEXV2_InstrumentConditionTest
[PASS] test_instrumentCondition_frozen() (gas: 587120)
[PASS] test_instrumentCondition_resolved() (gas: 643782)
[PASS] test_setInstrumentCondition_normalize() (gas: 29630762)
[PASS] test_setInstrumentCondition_resolve() (gas: 1600738)
[PASS] test_setInstrumentCondition_revertBadCondition() (gas: 143052)
[PASS] test_setInstrumentCondition_revertNotSynFuturesV3Admin() (gas: 145376)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 1.63s
Running 9 tests for test/foundry/InstrumentTest.t.sol:ETH_USDT_LINK_InstrumentTest
[PASS] test_initialize() (gas: 18103)
[PASS] test_initialize_revertAlreadyInitialized() (gas: 23998)
[PASS] test_multicall_example_revertCustomError() (gas: 73925)
[PASS] test_multicall_example_revertStdError() (gas: 145972)
[PASS] test_multicall_example_revertString() (gas: 579621)
[PASS] test_multicall_oneCallFailedAmongMultipleCalls() (gas: 517202)
[PASS] test_multicall_revertTimeOut() (gas: 470811)
[PASS] test_multicall_successCase() (gas: 854897)
[PASS] test_queryContext_revert() (gas: 19317)
Test result: ok. 9 passed; 0 failed; 0 skipped; finished in 726.68ms
Running 9 tests for test/foundry/InstrumentTest.t.sol:WETH_USDC_DEXV2_InstrumentTest
[PASS] test_initialize() (gas: 18103)
[PASS] test_initialize_revertAlreadyInitialized() (gas: 23998)
[PASS] test_multicall_example_revertCustomError() (gas: 94414)
[PASS] test_multicall_example_revertStdError() (gas: 88076)
[PASS] test_multicall_example_revertString() (gas: 521515)
[PASS] test_multicall_oneCallFailedAmongMultipleCalls() (gas: 479371)
[PASS] test_multicall_revertTimeOut() (gas: 412501)
[PASS] test_multicall_successCase() (gas: 818091)
[PASS] test_queryContext_revert() (gas: 19317)
Test result: ok. 9 passed; 0 failed; 0 skipped; finished in 680.27ms
Running 6 tests for test/foundry/InvolvedFundTest.t.sol:ETH_USDC_LINK_InvolvedFundTest
[PASS] test_case() (gas: 1316442)
[PASS] test_case_settle_with_unfilled_order() (gas: 1493023)
[PASS] test_claimProtocolFee_getNoFund() (gas: 1408165)
[PASS] test_involveFundMatchBalance() (gas: 849658)
[PASS] test_recycleInsuranceFund_getNoFund() (gas: 1496436)
[PASS] test_settle_buyer_cannot_realize_excessive_profit() (gas: 1454404)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 840.58ms
Running 6 tests for test/foundry/InvolvedFundTest.t.sol:WETH_USDT_DEXV2_InvolvedFundTest
[PASS] test_case() (gas: 1317661)
[PASS] test_case_settle_with_unfilled_order() (gas: 1493211)
[PASS] test_claimProtocolFee_getNoFund() (gas: 1408978)
[PASS] test_involveFundMatchBalance() (gas: 848325)
[PASS] test_recycleInsuranceFund_getNoFund() (gas: 1496924)
[PASS] test_settle_buyer_cannot_realize_excessive_profit() (gas: 1455216)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 835.71ms
Running 8 tests for test/foundry/library/LibCalldataTest.sol:LibCalldataTest
[PASS] test_decodeAddParam(uint32,uint24,uint128,uint48,uint32) (runs: 256, μ: 1784, ~: 1784)
[PASS] test_decodeCancelParam(uint32, uint192, uint32) (runs: 256, μ: 863, ~: 863)
[PASS] test_decodeDepositParam(address, uint96) (runs: 256, μ: 758, ~: 758)
[PASS] test_decodePlaceParam(uint32,int24,int128,uint128,uint32) (runs: 256, \mu: 1715, \sim: 1715)
[PASS] test_decodeRemoveParam(uint32,address,int24,int24,uint48,uint32) (runs: 256, μ: 2165, ~: 2165)
[PASS] test_decodeTradeParam(uint32,int128,int128,int24,uint32) (runs: 256, \mu: 1592, \sim: 1592)
[PASS] test_decodeWithdrawParam(address, uint96) (runs: 256, μ: 713, ~: 713)
[PASS] test_encodeDirectAssembly() (gas: 488)
```

```
Test result: ok. 8 passed; 0 failed; 0 skipped; finished in 645.76ms
Running 5 tests for test/foundry/library/LibParamTest.t.sol:LibParamTest
[PASS] test_calMinQuoteReserve() (gas: 1505)
[PASS] test calcMinOrderValue() (gas: 1451)
[PASS] test_calcMinPositionValue() (gas: 1010)
[PASS] test_calcMinRangeValue() (gas: 1440)
[PASS] test_calcMinTickDelta() (gas: 16075)
Test result: ok. 5 passed; 0 failed; 0 skipped; finished in 3.79ms
Running 3 tests for test/foundry/library/LibPositionTest.t.sol:LibPositionTest
[PASS] test_combine_exact_close() (gas: 35395)
[PASS] test_combine_opposite_side() (gas: 38454)
[PASS] test_combine_same_side() (gas: 28687)
Test result: ok. 3 passed; 0 failed; 0 skipped; finished in 658.94ms
Running 5 tests for test/foundry/library/LibQueryTest.t.sol:LibQueryTest
[PASS] test_getFeeRatio() (gas: 28098)
[PASS] test_getGate() (gas: 22108)
[PASS] test_getMinMarginAmount() (gas: 27898)
[PASS] test_getTip() (gas: 27728)
[PASS] test_isEmptyAcc() (gas: 1124573)
Test result: ok. 5 passed; 0 failed; 0 skipped; finished in 663.73ms
Running 1 test for test/foundry/library/LibRangeTest.t.sol:LibRangeTest
[PASS] test_getLiquidityFromMargin() (gas: 16342)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 2.02ms
Running 25 tests for test/foundry/operation/AddRemoveTest.t.sol:ETH_USDC_LINK_DATED_AddRemoveTest
[PASS] test_add_account() (gas: 537405)
[PASS] test_add_ctx() (gas: 837809)
[PASS] test_add_initial_revertExpiryTooEarly() (gas: 66816)
[PASS] test_add_initial_revertExpiryTooLate() (gas: 63114)
[PASS] test_add_remove_leverage_should_be_roughly_10x(uint24) (runs: 256, μ: 788803, ~: 790439)
[PASS] test_add_return() (gas: 522949)
[PASS] test_add_revertAddInvalidTickDelta() (gas: 161406445)
[PASS] test_add_revertAddSlippage(bool) (runs: 256, μ: 403127, ~: 508252)
[PASS] test_add_revertAddTraderIneligible() (gas: 713229)
[PASS] test_add_revertAddTrivial(bool) (runs: 256, μ: 478740, ~: 569751)
[PASS] test_add_revertTickOutOfBound() (gas: 797364)
[PASS] test_add_revert_RangeFull() (gas: 12551976)
[PASS] test_add_revert_RangeOccupied() (gas: 516223)
[PASS] test_init_revertNotGate() (gas: 26385)
[PASS] test_range_remove_other_revert_RangeSage() (gas: 1789830)
[PASS] test_range_remove_revert_PositionBankrupt() (gas: 1433836)
[PASS] test_remove_other_accout() (gas: 1210299)
[PASS] test_remove_other_return() (gas: 1267459)
[PASS] test_remove_position(bool) (runs: 256, μ: 607717, ~: 607752)
[PASS] test_remove_postRemoveBalance_less_than_zero() (gas: 54507946)
[PASS] test_remove_revertRangeNotExist() (gas: 460058)
[PASS] test_remove_revertRemoveSlippage() (gas: 499449)
[PASS] test_remove_self_account(bool) (runs: 256, \mu: 652638, \sim: 609789)
[PASS] test_remove_self_ctx(bool) (runs: 256, \mu: 548282, \sim: 507050)
[PASS] test_remove_self_return(bool) (runs: 256, \mu: 634813, \sim: 579845)
Test result: ok. 25 passed; 0 failed; 0 skipped; finished in 25.32s
Running 9 tests for test/foundry/PerpetualTest.t.sol:ETH_USDT_LINK_PerpetualTest
[PASS] test_amm_fundingIncomerPerLongShort_case0(bool) (runs: 256, μ: 1044566, ~: 1044553)
[PASS] test_amm_fundingIncomerPerLongShort_case1(bool) (runs: 256, μ: 1045249, ~: 1045232)
[PASS] test_amm_fundingIncomerPerLongShort_case2(bool) (runs: 256, \mu: 813877, \sim: 814347)
[PASS] test_amm_fundingIncomerPerLongShort_case3(bool) (runs: 256, μ: 811269, ~: 810348)
[PASS] test_amm_lastFundingUpdateTime() (gas: 481801)
[PASS] test_initializePerpetual() (gas: 400552)
[PASS] test_order_position_entryFundingPerContract_case0() (gas: 2993328)
[PASS] test_totalLongEqualTotalshort() (gas: 1059142)
[PASS] test_trade_position_entryFundingPerContract() (gas: 1419408)
Test result: ok. 9 passed; 0 failed; 0 skipped; finished in 21.48s
Running 25 tests for test/foundry/peripheral/ProxyTrader.t.sol:ProxyTraderTest
[PASS] test_RevertIf_approve_notProvider() (gas: 33438)
[PASS] test_RevertIf_fill_notOperator() (gas: 937287)
[PASS] test_RevertIf_initialize_twice() (gas: 25465)
```

```
[PASS] test_RevertIf_multiRemove_badLength() (gas: 9012228)
[PASS] test_RevertIf_multiRemove_notOperator() (gas: 9012566)
[PASS] test_RevertIf_multifill_badLength() (gas: 1394233)
[PASS] test_RevertIf_multifill_notOperator() (gas: 1394464)
[PASS] test_RevertIf_remove_notOperator() (gas: 1171204)
[PASS] test_RevertIf_update_notOperator() (gas: 466181)
[PASS] test_RevertIf_withdraw_notEnoughBalance() (gas: 37533)
[PASS] test_RevertIf_withdraw_notProvider() (gas: 168536)
[PASS] test_approve() (gas: 65387)
[PASS] test_exposed_assembleRemoveParam() (gas: 1369149)
[PASS] test_fill() (gas: 1008792)
[PASS] test_initialization() (gas: 26306)
[PASS] test_isOperator() (gas: 38421)
[PASS] test_isProvider() (gas: 38567)
[PASS] test_multiRemove() (gas: 8942538)
[PASS] test_multiRemove_partialSuccess() (gas: 1165874)
[PASS] test_multiUpdate() (gas: 592675)
[PASS] test_multifill() (gas: 1491892)
[PASS] test_multifill_partialSuccess() (gas: 1371692)
[PASS] test_remove() (gas: 1146944)
[PASS] test_update() (gas: 586568)
[PASS] test_withdraw() (gas: 189171)
Test result: ok. 25 passed; 0 failed; 0 skipped; finished in 1.25s
Running 3 tests for test/foundry/peripheral/ProxyTraderFactory.t.sol:ProxyTraderFactoryTest
[PASS] test_RevertIf_createTrader_notProvider() (gas: 73085)
[PASS] test_constructor() (gas: 69193)
[PASS] test_createTrader() (gas: 200658)
Test result: ok. 3 passed; 0 failed; 0 skipped; finished in 674.22ms
Running 5 tests for test/foundry/RangeTest.t.sol:ETH_USDT_LINK_RangeTest
[PASS] test_can_earn_fee_when_active() (gas: 1142505)
[PASS] test_can_earn_fee_when_inactive() (gas: 1454137)
[PASS] test_remove_by_others_imUnsafeNotScaleSafe_pricedown() (gas: 1289493)
[PASS] test_remove_by_others_notScaleSafebutImSafe_pricedown() (gas: 1144880)
[PASS] test_remove_by_self_mmrUnsafe_priceup() (gas: 1254541)
Test result: ok. 5 passed; 0 failed; 0 skipped; finished in 798.43ms
Running 28 tests for test/foundry/OysterAmmTest.t.sol:WETH_USDC_DEXV2_OysterAmmTest
[PASS] test_close_viaTrade(bool) (runs: 256, μ: 871286, ~: 871756)
[PASS] test_inquire_with_nonzero_size(bool) (runs: 256, μ: 795913, ~: 795964)
[PASS] test_inquire_with_zero_size() (gas: 430008)
[PASS] test_swap_doNotEatOppositeSideOrder() (gas: 1521161)
[PASS] test_swap_exhaustLiquidityThenSwapBackward() (gas: 999589)
[PASS] test_swap_jumpDownToNextActiveRange() (gas: 1697097)
[PASS] test_swap_jumpDownToOrder() (gas: 748764)
[PASS] test_swap_jumpUpToNextActiveRange() (gas: 1718698)
[PASS] test_swap_jumpUpToNextIsolatedRange() (gas: 1492166)
[PASS] test_swap_jumpUpToNextOrder() (gas: 749291)
[PASS] test_swap_revertOutOfLiquidity(uint256, bool) (runs: 256, μ: 1609747, ~: 1600348)
[PASS] test_swap_revertOutOfSlippage(uint256,bool) (runs: 256, μ: 867927, ~: 884688)
[PASS] test_swap_revertTrivial(bool) (runs: 256, \mu: 842749, \sim: 842661)
[PASS] test_swap_shortWhenFairPriceAligned() (gas: 1152862)
[PASS] test_swap_takeLongOrderAtCurrentTick() (gas: 1243099)
[PASS] test_swap_takeOrderAtCurrentTickFully() (gas: 1194668)
[PASS] test_swap_takeOrderAtCurrentTickPartially() (gas: 1044256)
[PASS] test_swap_tickSqrtPX96Equation() (gas: 1516892)
[PASS] test_swap_updateOrderInfoAtTickFullyTaken() (gas: 932866)
[PASS] test_swap_updateOrderInfoAtTickPartiallyTaken() (gas: 913847)
[PASS] test_trade_decrease_oldPosition_increaseLeverage() (gas: 1077444)
[PASS] test_trade_decrease_oldPosition_revertTradeMMrUnsafe() (gas: 1001957)
[PASS] test_trade_flip_oldPosition_revertTradeImrUnsafe(bool) (runs: 256, μ: 834876, ~: 834398)
[PASS] test_trade_increase_oldPosition_revertTradeImrUnsafe(bool) (runs: 256, μ: 807455, ~: 807938)
[PASS] test_trade_increase_oldPosition_withProfit_revertTradeImrUnsafe(bool) (runs: 256, μ: 1013521, ~:
1031141)
[PASS] test_trade_open_newPosition_revertTradeImrUnsafe(bool) (runs: 256, μ: 854123, ~: 854533)
[PASS] test_trade_withTickCrossing() (gas: 1512471)
[PASS] test_trade_withoutTickCrossing() (gas: 682850)
Test result: ok. 28 passed; 0 failed; 0 skipped; finished in 48.37s
Running 25 tests for test/foundry/operation/AddRemoveTest.t.sol:WETH_USDT_DEXV2_PERP_AddRemoveTest
```

[PASS] test_add_account() (gas: 479201)

```
[PASS] test_add_ctx() (gas: 731027)
[PASS] test_add_initial_revertExpiryTooEarly() (gas: 66816)
[PASS] test_add_initial_revertExpiryTooLate() (gas: 2363)
[PASS] test_add_remove_leverage_should_be_roughly_10x(uint24) (runs: 256, μ: 767084, ~: 761373)
[PASS] test_add_return() (gas: 415372)
[PASS] test_add_revertAddInvalidTickDelta() (gas: 151475305)
[PASS] test_add_revertAddSlippage(bool) (runs: 256, μ: 353754, ~: 450722)
[PASS] test_add_revertAddTraderIneligible() (gas: 654204)
[PASS] test_add_revertAddTrivial(bool) (runs: 256, μ: 435519, ~: 522789)
[PASS] test_add_revertTickOutOfBound() (gas: 750390)
[PASS] test_add_revert_RangeFull() (gas: 12632175)
[PASS] test_add_revert_RangeOccupied() (gas: 457297)
[PASS] test_init_revertNotGate() (gas: 26385)
[PASS] test_range_remove_other_revert_RangeSage() (gas: 1805822)
[PASS] test_range_remove_revert_PositionBankrupt() (gas: 1410573)
[PASS] test_remove_other_accout() (gas: 1193022)
[PASS] test_remove_other_return() (gas: 1237576)
[PASS] test_remove_position(bool) (runs: 256, \mu: 587135, \sim: 588324)
[PASS] test_remove_postRemoveBalance_less_than_zero() (gas: 57276505)
[PASS] test_remove_revertRangeNotExist() (gas: 424028)
[PASS] test_remove_revertRemoveSlippage() (gas: 441814)
[PASS] test_remove_self_account(bool) (runs: 256, \mu: 624120, \sim: 581797)
[PASS] test_remove_self_ctx(bool) (runs: 256, \mu: 530607, \sim: 477626)
[PASS] test_remove_self_return(bool) (runs: 256, \mu: 607709, \sim: 550663)
Test result: ok. 25 passed; 0 failed; 0 skipped; finished in 24.30s
Running 1 test for test/foundry/library/OysterTest.t.sol:OysterTest
[PASS] test_all_mmrs(uint256) (runs: 256, μ: 499406, ~: 499406)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 2.35s
Running 2 tests for test/foundry/weirdToken/BlocklistTokenTest.t.sol:BlocklistTokenTest
[PASS] test_deposit_toAccount_revertBlocked(uint96) (runs: 256, μ: 85222, ~: 86429)
[PASS] test_withdraw_fromAccount_revertBlocked(uint96) (runs: 256, μ: 93651, ~: 94296)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 1.75s
Running 1 test for test/foundry/weirdToken/Bytes32SymbolTokenTest.t.sol:Bytes32SymbolTokenTest
[PASS] test_create_instrument_revert() (gas: 119687)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 167.53ms
Running 23 tests for test/foundry/ChainlinkMarketTest.t.sol:ChainlinkMarketIntegrationTest
[PASS] test_constructor() (gas: 2526257)
[PASS] test_getBenchmarkPrice_forInstrumentOfNoneStable() (gas: 139653)
[PASS] test_getBenchmarkPrice_forPerpetual() (gas: 107641)
[PASS] test_getBenchmarkPrice_withStableBase() (gas: 140778)
[PASS] test_getBenchmarkPrice_withStableQuote() (gas: 135056)
[PASS] test_getSpotPrice_SpotPriceGoDown() (gas: 206940)
[PASS] test_getSpotPrice_SpotPriceGoDownCapped() (gas: 205324)
[PASS] test_getSpotPrice_SpotPriceGoUp() (gas: 206963)
[PASS] test_getSpotPrice_SpotPriceGoUpCapped() (gas: 205399)
[PASS] test_getSpotPrice_WithAggregator1Zero() (gas: 78115)
[PASS] test_getSpotPrice_revert_NoFeeder() (gas: 22247)
[PASS] test_getSpotPrice_withAggregator1Nonzero() (gas: 112804)
[PASS] test_marketType() (gas: 7065)
[PASS] test_prepareInstrument() (gas: 306130)
[PASS] test_prepareInstrument_revertNoFeeder() (gas: 27931)
[PASS] test_prepareInstrument_revertNotGate() (gas: 95207)
[PASS] test_prepareInstrument_revert_DecimalsExceed() (gas: 1045018)
[PASS] test_prepareInstrument_revert_QuoteNotSupported() (gas: 130262)
[PASS] test_setFeeder() (gas: 89093)
[PASS] test_setFeeder_revert_DecimalsExceed() (gas: 57477)
[PASS] test_setFeeder_revert_LengthMismatch() (gas: 18107)
[PASS] test_setFeeder_revert_NotSynFuturesV3Admin() (gas: 16745)
[PASS] test_setFeeder_withAggregator1ZeroAddress() (gas: 61407)
Test result: ok. 23 passed; 0 failed; 0 skipped; finished in 602.22ms
Running 5 tests for test/foundry/ChainlinkMarketTest.t.sol:ChainlinkMarketTest
[PASS] test_getMarkPrice_forInstrumentOfJustMovingToSettlingStatus() (gas: 276133)
[PASS] test_getMarkPrice_forInstrumentOfTradingStatusChangedFromDormantStatus() (gas: 115941)
[PASS] test_getMarkPrice_markPrice_whenAndAfterSwitchingToSettling() (gas: 496876)
[PASS] test_getMarkPrice_withDormantStatus() (gas: 92184)
[PASS] test_markPrice_emitUpdateAccState() (gas: 380824)
Test result: ok. 5 passed; 0 failed; 0 skipped; finished in 190.13ms
```

```
Running 2 tests for test/foundry/ChainlinkMarketTest.t.sol:ChainlinkMarketUnitTest
[PASS] test_cap() (gas: 1938)
[PASS] test_truncateString() (gas: 9435)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 3.29ms
Running 11 tests for test/foundry/ConfigTest.t.sol:ConfigTest
[PASS] test_initialize() (gas: 7822)
[PASS] test_setLiquidatorWhitelist_revertLengthMismatch() (gas: 13393)
[PASS] test_setLpWhitelist() (gas: 32604)
[PASS] test_setLpWhitelist_revertLengthMismatch() (gas: 13327)
[PASS] test_setMarketInfo_emitSetMarketInfo() (gas: 88390)
[PASS] test_setMarketInfo_revertResetMarketInfo() (gas: 89638)
[PASS] test setMarketInfo revertSetMarketZeroAddress() (gas: 20590)
[PASS] test setQuoteParam() (gas: 134042)
[PASS] test_setQuoteParam_emitSetQuoteParam() (gas: 143431)
[PASS] test setQuoteParam revertLengthMismatch() (gas: 28499)
[PASS] test_setQuoteParam_revertUnauthorized() (gas: 29823)
Test result: ok. 11 passed; 0 failed; 0 skipped; finished in 15.05ms
Running 11 tests for
test/foundry/operation/DepositWithdrawTest.t.sol:ETH_USDC_LINK_DATED_DepositWithdrawTest
[PASS] test_adjustMargin_fromAccountToPosition() (gas: 1483774)
[PASS] test_adjustMargin_fromPositionToAccount_AdjustWithdrawTooMuch() (gas: 754285)
[PASS] test_adjustMargin_fromPositionToAccount_withUnrealizedLoss() (gas: 1619865)
[PASS] test_adjustMargin_fromWalletToPosition(bool,uint256) (runs: 256, μ: 796948, ~: 797249)
[PASS] test_deposit_nativeTokenToAccount(uint256) (runs: 256, μ: 91764, ~: 94466)
[PASS] test_deposit_native_revert_InvalidMsgValue() (gas: 28357)
[PASS] test_deposit_toAccount(uint256) (runs: 256, μ: 131130, ~: 133081)
[PASS] test_withdraw_fromAccount(uint96) (runs: 256, μ: 114954, ~: 115614)
[PASS] test_withdraw_fromAccount_revert_WithdrawAdjustWithdrawTooMuch(uint96) (runs: 256, μ: 59165, ~:
55403)
[PASS] test_withdraw_fromPosition_withUnrealizedProfit() (gas: 1544114)
[PASS] test_withdraw_nativeTokenfromAccount(uint256) (runs: 256, μ: 111082, ~: 114316)
Test result: ok. 11 passed; 0 failed; 0 skipped; finished in 7.30s
Running 4 tests for test/foundry/DexV2MarketTest.t.sol:DexV2MarketIntegrationTest
[PASS] test_addDexV2Factory() (gas: 65619)
[PASS] test_addDexV2Factory_revert_DexV2RepeatedFactory() (gas: 66516)
[PASS] test_constructor() (gas: 2992207)
[PASS] test_prepareInstrument_revert_QuoteNotSupported() (gas: 29792)
Test result: ok. 4 passed; 0 failed; 0 skipped; finished in 15.29ms
Running 21 tests for test/foundry/DexV2MarketTest.t.sol:DexV2MarketTest
[PASS] test_computed_scaler_correction() (gas: 36256752)
[PASS] test_getBenchmarkPrice_forInstrumentWithBaseStable() (gas: 9326652)
[PASS] test_getBenchmarkPrice_forInstrumentWithBothStable() (gas: 9327733)
[PASS] test_getBenchmarkPrice_forInstrumentWithQuoteStable() (gas: 9374956)
[PASS] test_getBenchmarkPrice_forPerpetual() (gas: 9315971)
[PASS] test_getMarkPrice_forInstrumentOfDormantStatus() (gas: 9315103)
[PASS] test_getMarkPrice_forInstrumentOfJustMovingToSettlingStatus() (gas: 9553012)
[PASS] test_getMarkPrice_forInstrumentOfSettledStatus() (gas: 9597452)
[PASS] test_getMarkPrice_forInstrumentOfSettlingStatusWithDifferentBlockTimestamp() (gas: 9523181)
[PASS] test_getMarkPrice_forInstrumentOfSettlingStatusWithSameBlockTimestamp_withToken0Quote() (gas:
[PASS] test_getMarkPrice_forInstrumentOfSettlingStatusWithSameBlockTimestamp_withToken1Quote() (gas:
9529693)
[PASS] test_getMarkPrice_forInstrumentOfTradingStatusChangedFromDormantStatus() (gas: 9404320)
[PASS] test_getMarkPrice_forSettlingStatusWithUnInitializedAccState() (gas: 9655095)
[PASS] test_getSpotPrice_SpotPriceGoDown() (gas: 9402321)
[PASS] test_getSpotPrice_SpotPriceGoUp() (gas: 9402321)
[PASS] test_markPrice_emitUpdateAccumulateStateforInstrumentOfSettledStatus() (gas: 9531758)
[PASS] test_prepareInstrument() (gas: 8460250)
[PASS] test_prepareInstrument_revertDecimalsExceed() (gas: 8278385)
[PASS] test_prepareInstrument_revertDexV2PairNoLiquidity() (gas: 8230613)
[PASS] test_prepareInstrument_revertQuoteNotSupported() (gas: 64376)
[PASS] test_revertDexV2PairLiquidity() (gas: 9492207)
Test result: ok. 21 passed; 0 failed; 0 skipped; finished in 728.78ms
Running 1 test for test/foundry/DexV2MarketTest.t.sol:DexV2MarketUnitTest
[PASS] test_cap() (gas: 1998)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 2.55ms
```

```
Running 1 test for test/foundry/common/FixtureTest.t.sol:TokensFixtureTest
[PASS] test_loadQuoteParamsFromJson() (gas: 440823)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 32.97ms
Running 2 tests for test/foundry/common/solidity-extended/StrUtilsTest.t.sol:StrUtilsTest
[PASS] testParseUnits() (gas: 18566)
[PASS] testWadToString() (gas: 54710)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 5.77ms
Running 1 test for test/foundry/weirdToken/TransferFeeTokenTest.t.sol:TransferFeeTokenTest
[PASS] test_createInstrument() (gas: 56344048)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 715.44ms
Running 2 tests for test/foundry/library/LiquidityTest.t.sol:LiquidityTest
[PASS] test_decodeStrikeLimit(int24,int24) (runs: 256, μ: 4012, ~: 4012)
[PASS] test_inTickLimits() (gas: 7450)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 95.71ms
Running 2 tests for test/foundry/weirdToken/NoRevertTokenTest.t.sol:NoRevertTokenTest
[PASS] test_deposit_toAccount_returnFalse() (gas: 35089)
[PASS] test_withdraw_fromAccount_returnFalse() (gas: 72325)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 670.67ms
Running 9 tests for test/foundry/library/NumericalComputationTest.t.sol:NumeriaclComputationTest
[PASS] test_addDelta_fixedValue() (gas: 906)
[PASS] test_addDelta_overflow() (gas: 3753)
[PASS] test_alignTimestamp() (gas: 498843)
[PASS] test_alignTimestamp_fuzz(uint32) (runs: 256, μ: 4865, ~: 4865)
[PASS] test_constant_tickSpacingToMaxLiquidityPerTick() (gas: 1431)
[PASS] test_getSqrtRatioAtTick_atBoundary() (gas: 56350)
[PASS] test_getWadAtTick() (gas: 570797)
[PASS] test_halfpow() (gas: 72310)
[PASS] test_oppositeSigns() (gas: 559)
Test result: ok. 9 passed; 0 failed; 0 skipped; finished in 181.48ms
Running 2 tests for test/foundry/library/NumericalConvertionTest.t.sol:NumericalConvertionTest
[PASS] test_sqrtX96ToWad_fixedValue() (gas: 2717)
[PASS] test_wadToSqrtX96_fixedValue() (gas: 3198)
Test result: ok. 2 passed; 0 failed; 0 skipped; finished in 1.96ms
Running 9 tests for test/foundry/PerpetualTest.t.sol:ETH_USDC_LINK_PerpetualTest
[PASS] test_amm_fundingIncomerPerLongShort_case0(bool) (runs: 256, μ: 1045176, ~: 1045162)
[PASS] test_amm_fundingIncomerPerLongShort_case1(bool) (runs: 256, μ: 1045859, ~: 1045841)
[PASS] test_amm_fundingIncomerPerLongShort_case2(bool) (runs: 256, μ: 814276, ~: 814753)
[PASS] test_amm_fundingIncomerPerLongShort_case3(bool) (runs: 256, μ: 811656, ~: 810672)
[PASS] test_amm_lastFundingUpdateTime() (gas: 482004)
[PASS] test_initializePerpetual() (gas: 400755)
[PASS] test_order_position_entryFundingPerContract_case0() (gas: 2996779)
[PASS] test_totalLongEqualTotalshort() (gas: 1060157)
[PASS] test_trade_position_entryFundingPerContract() (gas: 1420626)
Test result: ok. 9 passed; 0 failed; 0 skipped; finished in 19.86s
Running 16 tests for test/foundry/ObserverTest.t.sol:ETH_USDT_LINK_ObserverTest
[PASS] test_observer_getAllInstruments() (gas: 718012)
[PASS] test_observer_getAmm() (gas: 506116)
[PASS] test_observer_getInstrumentBatch() (gas: 598271)
[PASS] test_observer_getNextInitializedTickOutside(int24) (runs: 256, μ: 553925, ~: 533622)
[PASS] test_observer_getOrders(bool) (runs: 256, \mu: 761582, \sim: 761907)
[PASS] test_observer_getParam() (gas: 51175)
[PASS] test_observer_getPearls() (gas: 814380)
[PASS] test_observer_getPortfolios() (gas: 1358402)
[PASS] test_observer_getRanges(int24) (runs: 256, \mu: 465453, \sim: 465471)
[PASS] test_observer_getRecords() (gas: 1432197)
[PASS] test_observer_getTickBitmaps() (gas: 453944)
[PASS] test_observer_getVaultBalances(uint256) (runs: 256, μ: 163527, ~: 167217)
[PASS] test_observer_inquireByNotional(bool) (runs: 256, μ: 800879, ~: 799308)
[PASS] test_observer_inspectMaxReserveDexV2Pair() (gas: 8371378)
[PASS] test_observer_liquidityDetails_order(bool) (runs: 256, μ: 4937661, ~: 4937872)
[PASS] test_observer_liquidityDetails_range() (gas: 15539966)
Test result: ok. 16 passed; 0 failed; 0 skipped; finished in 59.52s
```

```
Running 1 test for test/foundry/ObserverTest.t.sol:ObserverInternalUnitTest
[PASS] test_count1s() (gas: 6588602)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 341.18ms
Running 6 tests for test/foundry/operation/StatusTest.t.sol:ETH_USDT_LINK_StatusTest
[PASS] test_dormant_allowedFunctions() (gas: 734191)
[PASS] test_settled_allowedFunctions() (gas: 818652)
[PASS] test_settling_allowedFunctions() (gas: 1639918)
[PASS] test_trading_allowedFunctions() (gas: 574933)
[PASS] test_update(uint32,uint32) (runs: 256, \mu: 2255448, ~: 2254134)
[PASS] test_update_expiryNotAligned() (gas: 10384408066)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 126.18s
Running 6 tests for test/foundry/operation/OrderOperationTest.t.sol:OrderIntTest
[PASS] test_add_order_revert_OrderImrUnsafe(bool) (runs: 256, \mu: 406427, \sim: 406738)
[PASS] test_add_order_revert_OrderTickUnaligned() (gas: 287098)
[PASS] test_order_ctx(bool) (runs: 256, \mu: 518873, \sim: 519012)
[PASS] test_order_return(bool) (runs: 256, μ: 526001, ~: 526123)
[PASS] test_order_revertWrongSide(bool) (runs: 256, μ: 122370, ~: 122446)
[PASS] test_order_revertWrongSide_currentTick() (gas: 537312)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 7.04s
Running 16 tests for test/foundry/ObserverTest.t.sol:WETH_USDC_DEXV2_ObserverTest
[PASS] test_observer_getAllInstruments() (gas: 795303)
[PASS] test_observer_getAmm() (gas: 506291)
[PASS] test_observer_getInstrumentBatch() (gas: 665810)
[PASS] test_observer_getNextInitializedTickOutside(int24) (runs: 256, μ: 551950, ~: 533793)
[PASS] test_observer_getOrders(bool) (runs: 256, μ: 764206, ~: 764468)
[PASS] test_observer_getParam() (gas: 51175)
[PASS] test_observer_getPearls() (gas: 816941)
[PASS] test_observer_getPortfolios() (gas: 1362126)
[PASS] test_observer_getRanges(int24) (runs: 256, μ: 465612, ~: 465646)
[PASS] test_observer_getRecords() (gas: 1435921)
[PASS] test_observer_getTickBitmaps() (gas: 454119)
[PASS] test_observer_getVaultBalances(uint256) (runs: 256, μ: 125407, ~: 88517)
[PASS] test_observer_inquireByNotional(bool) (runs: 256, μ: 803634, ~: 801665)
[PASS] test_observer_inspectMaxReserveDexV2Pair() (gas: 8337178)
[PASS] test_observer_liquidityDetails_order(bool) (runs: 256, μ: 4973616, ~: 4973837)
[PASS] test_observer_liquidityDetails_range() (gas: 15581111)
Test result: ok. 16 passed; 0 failed; 0 skipped; finished in 60.81s
Running 6 tests for test/foundry/operation/StatusTest.t.sol:EthUsdcLinkStatusTestDexV2
[PASS] test_dormant_allowedFunctions() (gas: 734446)
[PASS] test_settled_allowedFunctions() (gas: 817275)
[PASS] test_settling_allowedFunctions() (gas: 1661999)
[PASS] test_trading_allowedFunctions() (gas: 575486)
[PASS] test_update(uint32,uint32) (runs: 256, \mu: 2345728, \sim: 2344322)
[PASS] test_update_expiryNotAligned() (gas: 10384408066)
Test result: ok. 6 passed; 0 failed; 0 skipped; finished in 126.89s
Running 28 tests for test/foundry/OysterAmmTest.t.sol:ETH_USDT_LINK_OysterAmmTest
[PASS] test_close_viaTrade(bool) (runs: 256, \mu: 900667, \sim: 900421)
[PASS] test_inquire_with_nonzero_size(bool) (runs: 256, μ: 829506, ~: 826213)
[PASS] test_inquire_with_zero_size() (gas: 477027)
[PASS] test_swap_doNotEatOppositeSideOrder() (gas: 1550903)
[PASS] test_swap_exhaustLiquidityThenSwapBackward() (gas: 1029831)
[PASS] test_swap_jumpDownToNextActiveRange() (gas: 1692799)
[PASS] test_swap_jumpDownToOrder() (gas: 774900)
[PASS] test_swap_jumpUpToNextActiveRange() (gas: 1720787)
[PASS] test_swap_jumpUpToNextIsolatedRange() (gas: 1525246)
[PASS] test_swap_jumpUpToNextOrder() (gas: 774568)
[PASS] test_swap_revertOutOfLiquidity(uint256,bool) (runs: 256, μ: 1643029, ~: 1656571)
[PASS] test_swap_revertOutOfSlippage(uint256,bool) (runs: 256, μ: 894281, ~: 890412)
[PASS] test_swap_revertTrivial(bool) (runs: 256, \mu: 852539, \sim: 849809)
[PASS] test_swap_shortWhenFairPriceAligned() (gas: 1188371)
[PASS] test_swap_takeLongOrderAtCurrentTick() (gas: 1262332)
[PASS] test_swap_takeOrderAtCurrentTickFully() (gas: 1226043)
[PASS] test_swap_takeOrderAtCurrentTickPartially() (gas: 1078226)
[PASS] test_swap_tickSqrtPX96Equation() (gas: 1511958)
[PASS] test_swap_updateOrderInfoAtTickFullyTaken() (gas: 974370)
[PASS] test_swap_updateOrderInfoAtTickPartiallyTaken() (gas: 955799)
[PASS] test_trade_decrease_oldPosition_increaseLeverage() (gas: 1103517)
```

```
[PASS] test_trade_decrease_oldPosition_revertTradeMMrUnsafe() (gas: 997232)
[PASS] test_trade_flip_oldPosition_revertTradeImrUnsafe(bool) (runs: 256, μ: 857735, ~: 855188)
[PASS] test_trade_increase_oldPosition_revertTradeImrUnsafe(bool) (runs: 256, μ: 830113, ~: 827296)
[PASS] test_trade_increase_oldPosition_withProfit_revertTradeImrUnsafe(bool) (runs: 256, μ: 1049380, ~:
1060772)
[PASS] test_trade_open_newPosition_revertTradeImrUnsafe(bool) (runs: 256, μ: 875267, ~: 872402)
[PASS] test_trade_withTickCrossing() (gas: 1535971)
[PASS] test_trade_withoutTickCrossing() (gas: 722033)
Test result: ok. 28 passed; 0 failed; 0 skipped; finished in 38.24s
Running 29 tests for test/foundry/operation/OrderOperationTest.t.sol:WETH_USDC_DEXV2_OrderTest
[PASS] test_add_order_OrderFull(bool) (runs: 256, \mu: 4041383, \sim: 4041677)
[PASS] test_add_order_OrderOccupied(bool) (runs: 256, μ: 325765, ~: 325672)
[PASS] test_add_order_revert_OrderTrivial(bool) (runs: 256, μ: 166113, ~: 166067)
[PASS] test_batch_cancel() (gas: 969657)
[PASS] test_cancel_fully(bool) (runs: 256, \mu: 539539, \sim: 539557)
[PASS] test_cancel_partiallyMultipleMaker() (gas: 1033747)
[PASS] test_cancel_partiallySingleMaker() (gas: 865811)
[PASS] test_cancel_revertAlreadyFullyTaken() (gas: 803779)
[PASS] test_cancel_revertOrderTickUnaligned() (gas: 82264)
[PASS] test_fill() (gas: 917708)
[PASS] test_fill_by_others() (gas: 936396)
[PASS] test_fill_fundingIndex(bool) (runs: 256, μ: 2738300, ~: 2723034)
[PASS] test_fill_order_cross_tick_multiple() (gas: 6643427)
[PASS] test_fill_order_current_tick_nonce() (gas: 1374437)
[PASS] test_fill_order_fee_distruibution() (gas: 1281448)
[PASS] test_fill_order_history_tick_nonce() (gas: 1417370)
[PASS] test_fill_order_revert_OrderNotFullyTaken() (gas: 1260955)
[PASS] test_fill_order_revert_OrderTickUnaligned() (gas: 1283499)
[PASS] test_fill_order_with_right_tick_loss_per_order(bool) (runs: 256, μ: 7233369, ~: 7221239)
[PASS] test_fill_revertOrderNotFullyTaken(bool) (runs: 256, μ: 546228, ~: 546169)
[PASS] test_fill_socialloss(bool) (runs: 256, \mu: 1769441, \sim: 1756756)
[PASS] test_multiple_addOrder_same_tick() (gas: 536928)
[PASS] test_multiple_cancel_order_failed_last_come() (gas: 1411440)
[PASS] test_multiple_cancel_order_fully() (gas: 851384)
[PASS] test_multiple_cancel_order_partial() (gas: 1375390)
[PASS] test_nonce_canOverflow() (gas: 931958)
[PASS] test_nonce_increment_revert_ReuseNonEmptyRecord() (gas: 1359620)
[PASS] test_order_revert_OrderTooFar(bool) (runs: 256, μ: 56843, ~: 57115)
[PASS] test_order_revert_OrderTooFarIMRCase() (gas: 99808)
Test result: ok. 29 passed; 0 failed; 0 skipped; finished in 96.57s
Running 28 tests for test/foundry/operation/OrderOperationTest.t.sol:ETH_USDT_LINK_OrderTest
[PASS] test_add_order_OrderFull(bool) (runs: 256, \mu: 4077713, \sim: 4077946)
[PASS] test_add_order_OrderOccupied(bool) (runs: 256, μ: 330534, ~: 330836)
[PASS] test_add_order_revert_OrderTrivial(bool) (runs: 256, μ: 169771, ~: 170026)
[PASS] test_batch_cancel() (gas: 956602)
[PASS] test_cancel_fully(bool) (runs: 256, \mu: 527668, \sim: 527390)
[PASS] test_cancel_partiallyMultipleMaker() (gas: 1024087)
[PASS] test_cancel_partiallySingleMaker() (gas: 853919)
[PASS] test_cancel_revertAlreadyFullyTaken() (gas: 792068)
[PASS] test_cancel_revertOrderTickUnaligned() (gas: 47730)
[PASS] test_fill() (gas: 905255)
[PASS] test_fill_by_others() (gas: 923833)
[PASS] test_fill_order_cross_tick_multiple() (gas: 6523698)
[PASS] test_fill_order_current_tick_nonce() (gas: 1352844)
[PASS] test_fill_order_fee_distruibution() (gas: 1257989)
[PASS] test_fill_order_history_tick_nonce() (gas: 1395956)
[PASS] test_fill_order_revert_OrderNotFullyTaken() (gas: 1238086)
[PASS] test_fill_order_revert_OrderTickUnaligned() (gas: 1268958)
[PASS] test_fill_order_with_right_tick_loss_per_order(bool) (runs: 256, μ: 6465699, ~: 6464936)
[PASS] test_fill_revertOrderNotFullyTaken(bool) (runs: 256, μ: 535547, ~: 535783)
[PASS] test_fill_socialloss(bool) (runs: 256, \mu: 1593648, \sim: 1583798)
[PASS] test_multiple_addOrder_same_tick() (gas: 543545)
[PASS] test_multiple_cancel_order_failed_last_come() (gas: 1379073)
[PASS] test_multiple_cancel_order_fully() (gas: 826403)
[PASS] test_multiple_cancel_order_partial() (gas: 1343336)
[PASS] test_nonce_canOverflow() (gas: 881644)
[PASS] test_nonce_increment_revert_ReuseNonEmptyRecord() (gas: 1311455)
[PASS] test_order_revert_OrderTooFar(bool) (runs: 256, μ: 59796, ~: 59801)
[PASS] test_order_revert_OrderTooFarIMRCase() (gas: 106274)
Test result: ok. 28 passed; 0 failed; 0 skipped; finished in 110.47s
```

```
Running 22 tests for test/foundry/LiquidationTest.t.sol:ETH_USDT_LINK_DATED_LiquidationTest
[PASS] test_close_viaLiquidate(bool) (runs: 256, μ: 1790747, ~: 1789358)
[PASS] test_liquidate_revertLiquidatorIneligible() (gas: 48125)
[PASS] test_liquidate_revertPositionNotExist() (gas: 63986)
[PASS] test_liquidate_revert_SelfLiquidation() (gas: 36859)
[PASS] test_liquidate_revert_imr(bool) (runs: 256, μ: 1396901, ~: 1395961)
[PASS] test_liquidate_revert_safe(bool) (runs: 256, \mu: 1061477, \sim: 1060544)
[PASS] test_liquidate_revert_targetSizeExceeded(bool) (runs: 256, μ: 1328277, ~: 1327268)
[PASS] test_liquidate_revert_zeroTargetSize(bool) (runs: 256, μ: 1184444, ~: 1182789)
[PASS] test_sweep_no_socialloss(bool,bool) (runs: 256, \mu: 1611673, \sim: 1621736)
[PASS] test_sweep_revertLiquidatorIneligible() (gas: 48064)
[PASS] test sweep revertPositionNotExist() (gas: 63675)
[PASS] test_sweep_revert_safe(bool) (runs: 256, \mu: 1061385, \sim: 1060315)
[PASS] test_sweep_revert_targetSizeExceeded(bool) (runs: 256, µ: 1244672, ~: 1243068)
[PASS] test_sweep_revert_zeroTargetSize(bool) (runs: 256, μ: 1183347, ~: 1182096)
[PASS] test_sweep_with_socialloss_no_amm_profit(bool,bool) (runs: 256, µ: 1990821, ~: 1989594)
[PASS] test_sweep_with_socialloss_with_amm_proft(bool,bool) (runs: 256, μ: 1093398, ~: 1104931)
[PASS] test_takeover_partially_with_margin_with_socialloss(bool,bool) (runs: 256, μ: 1859072, ~: 1879321)
[PASS] test_takeover_with_margin_no_socialloss(bool) (runs: 256, μ: 1677856, ~: 1676909)
[PASS] test_takeover_with_margin_with_socialloss(bool,bool) (runs: 256, μ: 1814507, ~: 1823188)
[PASS] test_takeover_with_margin_with_socialloss_revertNoCounterpartyLong() (gas: 1480752)
[PASS] test_takeover_with_margin_with_socialloss_revertNoCounterpartyShort() (gas: 770280)
[PASS] test_takeover_with_position_no_socialloss(bool) (runs: 256, μ: 1800621, ~: 1799183)
Test result: ok. 22 passed; 0 failed; 0 skipped; finished in 228.79s
Running 22 tests for test/foundry/LiquidationTest.t.sol:WETH_USDC_DEXV2_PERP_LiquidationTest
[PASS] test_close_viaLiquidate(bool) (runs: 256, \mu: 1796307, \sim: 1794672)
[PASS] test_liquidate_revertLiquidatorIneligible() (gas: 48125)
[PASS] test_liquidate_revertPositionNotExist() (gas: 63958)
[PASS] test_liquidate_revert_SelfLiquidation() (gas: 36859)
[PASS] test_liquidate_revert_imr(bool) (runs: 256, \mu: 1401406, \sim: 1400490)
[PASS] test_liquidate_revert_safe(bool) (runs: 256, \mu: 1064411, \sim: 1063540)
[PASS] test_liquidate_revert_targetSizeExceeded(bool) (runs: 256, μ: 1331401, ~: 1330404)
[PASS] test_liquidate_revert_zeroTargetSize(bool) (runs: 256, μ: 1187118, ~: 1185544)
[PASS] test_sweep_no_socialloss(bool,bool) (runs: 256, \mu: 1613833, \sim: 1626469)
[PASS] test_sweep_revertLiquidatorIneligible() (gas: 48064)
[PASS] test_sweep_revertPositionNotExist() (gas: 63647)
[PASS] test_sweep_revert_safe(bool) (runs: 256, \mu: 1064207, \sim: 1063311)
[PASS] test_sweep_revert_targetSizeExceeded(bool) (runs: 256, μ: 1247084, ~: 1245248)
[PASS] test_sweep_revert_zeroTargetSize(bool) (runs: 256, μ: 1186405, ~: 1184851)
[PASS] test_sweep_with_socialloss_no_amm_profit(bool,bool) (runs: 256, μ: 1999842, ~: 1998866)
[PASS] test_sweep_with_socialloss_with_amm_proft(bool,bool) (runs: 256, μ: 1094814, ~: 1106405)
[PASS] test_takeover_partially_with_margin_with_socialloss(bool,bool) (runs: 256, μ: 1878927, ~: 1885828)
[PASS] test_takeover_with_margin_no_socialloss(bool) (runs: 256, μ: 1684083, ~: 1683040)
[PASS] test_takeover_with_margin_with_socialloss(bool,bool) (runs: 256, μ: 1825110, ~: 1828394)
[PASS] test_takeover_with_margin_with_socialloss_revertNoCounterpartyLong() (gas: 1485690)
[PASS] test_takeover_with_margin_with_socialloss_revertNoCounterpartyShort() (gas: 770766)
[PASS] test_takeover_with_position_no_socialloss(bool) (runs: 256, μ: 1807760, ~: 1806477)
Test result: ok. 22 passed; 0 failed; 0 skipped; finished in 42.82s
Ran 58 test suites: 540 tests passed, 0 failed, 0 skipped (540 total tests)
==HARDHAT TESTS BEGIN HERE==
2023-11-16 04:57:28 deployed wrappedNative at: 0xd723C18b9EbeC382A4cDb22939517ca21729Fb8e
2023-11-16 04:57:30 deployed tokenAssistant at: 0x70bD543Abbd32011f483E7bAbcc79fB8D62EA2a8
2023-11-16 04:57:30 deployed multicall3 at: 0x11C475964634d6b44aa43bCADF63aDA6Cf04c0F2
2023-11-16 04:57:31 deployed USDC at 0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580
2023-11-16 04:57:31 deployed USDT at 0x208B314810a368F978B612b87E6271Ea5ff1cD95
2023-11-16 04:57:31 deployed DAI at 0x9fdE50e50ffFb0EE02d5398Aa0B0E9d25d64CcAA
2023-11-16 04:57:32 deployed WBTC at 0x15b948eE63563f6AF626a061517e1e531A9D78d0
2023-11-16 04:57:32 deployed MATIC at 0x8D44a26983030e390a3cCf135B270B313AEbb181
2023-11-16 04:57:32 deployed BNB at 0x0a4674bfdD977d7440A371c5E3333d0E99FF69f2
2023-11-16 04:57:45 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318::setFeeder(instruments:[[SynFuturesV3-ETH-
USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF], chainlinkFeeders:[(ftype:BASE_STABLE, scaler0:0,
aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6, scaler1:0, aggregator1:
[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096)])
0x6ea26f939a0cbf4693d211f45fc0e93d6efadbd84b3cb2e130bd376ea7683f5e, nonce: 1, gasPrice: 60.0, gasLimit:
30000000
```

```
gasPrice: 60.0Gwei, tx fee: 0.005404
2023-11-16 04:57:45 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,feeder:
(ftype:BASE STABLE, scaler0:10000000000, aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6,
scaler1:1000000000, aggregator1:[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096))
before launch
2023-11-16\ 04:57:46\ - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:[SynFuturesV3-ETH-USDC-
000000000021e19e0c9bab2400000])
2023-11-16 04:58:00 — submitted => LOCAL txHash:
0xc299a1ba54beeaeabc36cc4d3a082051d8206a79c24d23c8f481ce8ba781130b, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2280579
2023-11-16 04:58:00 — minted => LOCAL blockNumber: 50, confirmations: 1, gasUsed: 1201293(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001204
2023-11-16 04:58:00 - raw event => #0 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF data: 0x topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
  '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
]
2023-11-16 04:58:00 - event => #1 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateCondition(timestamp:2023-11-
15T20:55:39.000Z, condition: NORMAL)
2023-11-16 04:58:00 -
                       event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0xcbf145cdfd327106d3ed422bc16c3da3a8821672e756dcddc950f07dc7527430,instrument:
[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,base:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,symbol:ETH-USDC-LINK,total:1)
2023-11-16 04:58:00 - event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, spotState:(time:1700081739, spot:1600.0,
raw:160000000000000000000000))
2023-11-16 04:58:00 - event => #4 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateFundingIndex(fundingIndex:0)
2023-11-16 04:58:00 - event => #5 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateAmmStatus(expiry:PERPETUAL, status:TRADING, sqrtPX96:1600.0, mark:1600.0)
2023-11-16 04:58:00 - event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 04:58:01 — event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,quantity:10000.0 USDC)
2023-11-16 04:58:01 - event => #8 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:10000.0 USDC)
2023-11-16 04:58:01 —
                      event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,instrument:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 04:58:01 - event => #10 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8, tickLower:57650, tickUpper:89850, range:
(liquidity:139.20351079004370536, entryFeeIndex:0.0, balance:10000.0, sqrtEntryPX96:1600.0))
after launch
0xa513E6E4b8f2a923D98304ec87F64353C4D5C853 0xB7f8BC63BbcaD18155201308C8f3540b07f84F5e
0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF 6 1000000000000
   Admin Operations

✓ setParam should success with expected params set (1145ms)

✓ setParam should revert if sender not admin (382ms)

✓ setInstrumentCondition should revert if sender not admin (153ms)

   User Operations

✓ withdraw revert with no funds (86ms)
deposit success gas cost: 86681

✓ deposit success (131ms)
withdraw success gas cost: 42624

✓ withdraw with funds (83ms)
```

```
2023-11-16 04:58:15 - request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:DEXV2,instrument:
[UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4,data:0x0000000000000000000000008d44a26983030e390a3ccf
135b270b313aebb18100000000000000000000000011eb93171edcbbc0ed8ccc838735b67ec1b2580,addArgs:
00000000003635c9adc5dea00000])
2023-11-16 04:58:32 — submitted => LOCAL txHash:
0x930e8eec4cd841a081fa93f5c0a97e9a3050046511053b9b9f51e6f53ab7dd16, nonce: 7, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2384346
2023-11-16 04:58:32 ├─ minted => LOCAL blockNumber: 129, confirmations: 1, gasUsed: 1255952(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001256
2023-11-16 04:58:32 - event => #0 [DexV2Market]0x2279B7A0a67DB372996a5FaB50D91eAA73d2eBe6-
SetFeeder(instrument:[UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4,feeder:(ftype:QUOTE_STABLE,
isToken0Quote:false, pair:[UNKNOWN]0x1A4fB285c6a77a41e8627E3ffb8e3f067236390e, scaler0:1,
scaler1:1000000000000))
2023-11-16 04:58:32 \vdash raw event => #1 [UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4 data: 0x
topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
  '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
]
2023-11-16 04:58:32 \vdash raw event => #2 [UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4 data:
'0xde6365ff61871542a8bd842ab06b852e791eda6d1213bef2c5bf668e1e0420c0'
]
2023-11-16\ 04:58:32 - event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853- event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64355C4D5C855- event => #3 [Gate]0xa515E6E4b8f2a923D98506- event => #3 [Gate]0xa515E6E4b8f2a92506- event => #3 [Gate]0xa515E6E4b8f2a9506- event => #3 [Gate]0xa515E6
NewInstrument(index:0x5d3400543e168474773f1a86d69bb9672b02df0192057de8ba1bc91be750b8e7,instrument:
[UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4,base:
[MATIC]0x8D44a26983030e390a3cCf135B270B313AEbb181, quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, symbol:MATIC-USDC-DEXV2, total:2)
2023-11-16 04:58:32 —
                                event => #4 [DexV2Market]0x2279B7A0a67DB372996a5FaB50D91eAA73d2eBe6-
UpdateSpotState(instrument:[UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4,spotState:(time:2023-11-
15T21:38:33.000Z, spot:20.0, raw:20000000000000000000))
2023-11-16 04:58:32 \vdash raw event => #5 [UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4 data:
'0x3b9390dcf8f970ba14e01c06887281b15552b9378e4df88e106fb130026bcfbf',
  ]
2023-11-16 04:58:32 - event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1000.0 USDC)
2023-11-16 04:58:32 — event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,quantity:1000.0 USDC)
2023-11-16 04:58:32 - event => #8 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:
[UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4, value:1000.0 USDC)
2023-11-16 04:58:32 - event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:
[UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4,expiry:2023-11-24,quantity:1000.0 USDC)
2023-11-16 04:58:32 — raw event => #10 [UNKNOWN]0x97208C99C75961D47371475d6903e5041F324ab4 data:
'0xee0675525fac605bfcf2ae26dcd769c6d0871098b6eed3ade01f7247b3b28071',
  ✓ launch a dexv2 instrument (19704ms)
add range gas cost: 547850
same tick add range gas cost: 305880

✓ add (1090ms)

remove range gas cost: 165974
remove range at same tick gas cost: 174918
       ✓ remove (879ms)
first time add order: gas cost 330904
second time add order : gas cost 263395
add order in tick which exists order with margin in eoa : gas cost 291965
add order in tick which exists order with margin in account : gas cost 222288
```

```
✓ order (2146ms)

2023-11-16 04:58:42 deployed wrappedNative at: 0xd723C18b9EbeC382A4cDb22939517ca21729Fb8e
2023-11-16 04:58:43 deployed tokenAssistant at: 0x70bD543Abbd32011f483E7bAbcc79fB8D62EA2a8
2023-11-16 04:58:43 deployed multicall3 at: 0x11C475964634d6b44aa43bCADF63aDA6Cf04c0F2
2023-11-16 04:58:43 deployed USDC at 0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580
2023-11-16 04:58:44 deployed USDT at 0x208B314810a368F978B612b87E6271Ea5ff1cD95
2023-11-16 04:58:44 deployed DAI at 0x9fdE50e50ffFb0EE02d5398Aa0B0E9d25d64CcAA
2023-11-16 04:58:44 deployed WBTC at 0x15b948eE63563f6AF626a061517e1e531A9D78d0
2023-11-16 04:58:44 deployed MATIC at 0x8D44a26983030e390a3cCf135B270B313AEbb181
2023-11-16 04:58:45 deployed BNB at 0x0a4674bfdD977d7440A371c5E3333d0E99FF69f2
2023-11-16 04:58:54 request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318::setFeeder(instruments:[[SynFuturesV3-ETH-
USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF],chainlinkFeeders:[(ftype:BASE_STABLE, scaler0:0,
aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6, scaler1:0, aggregator1:
[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096)])
0x6ea26f939a0cbf4693d211f45fc0e93d6efadbd84b3cb2e130bd376ea7683f5e, nonce: 1, gasPrice: 60.0, gasLimit:
30000000
2023-11-16 04:58:54 — minted => LOCAL blockNumber: 46, confirmations: 1, gasUsed: 90061(0.30%),
gasPrice: 60.0Gwei, tx fee: 0.005404
2023-11-16 04:58:54 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,feeder:
(ftype:BASE_STABLE, scaler0:10000000000, aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6,
scaler1:10000000000, aggregator1:[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096))
before launch
2023-11-16\ 04:58:54  request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:[SynFuturesV3-ETH-USDC-
Args:
000000000021e19e0c9bab2400000])
0xc299a1ba54beeaeabc36cc4d3a082051d8206a79c24d23c8f481ce8ba781130b, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2280579
2023-11-16 04:59:06 ├─ minted => LOCAL blockNumber: 50, confirmations: 1, gasUsed: 1201293(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001204
2023-11-16 04:59:06 - raw event => #0 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF data: 0x topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
  '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
]
2023-11-16 04:59:06 - event => #1 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateCondition(timestamp:2023-11-
15T20:55:44.000Z, condition: NORMAL)
2023-11-16 04:59:06 - event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0xcbf145cdfd327106d3ed422bc16c3da3a8821672e756dcddc950f07dc7527430,instrument:
[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,base:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,symbol:ETH-USDC-LINK,total:1)
2023-11-16 04:59:06 - event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, spotState:(time:1700081744, spot:1600.0,
raw:16000000000000000000000))
                      event => #4 [SynFuturesV3-ETH-USDC-
2023-11-16 04:59:06
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateFundingIndex(fundingIndex:0)
2023-11-16 04:59:06 - event => #5 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateAmmStatus(expiry:PERPETUAL, status:TRADING, sqrtPX96:1600.0, mark:1600.0)
2023-11-16 04:59:06
                        event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
                        event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
2023-11-16 04:59:06
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8, quantity:10000.0 USDC)
2023-11-16 04:59:06
                        event => #8 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:10000.0 USDC)
                        event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 04:59:06
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,instrument:[SynFuturesV3-ETH-USDC-
```

```
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:10000.0 USDC)
                      event => #10 [SynFuturesV3-ETH-USDC-
2023-11-16 04:59:06
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8, tickLower:57650, tickUpper:89850, range:
(liquidity:139.20351079004370536, entryFeeIndex:0.0, balance:10000.0, sqrtEntryPX96:1600.0))
after launch
0xa513E6E4b8f2a923D98304ec87F64353C4D5C853 0xB7f8BC63BbcaD18155201308C8f3540b07f84F5e
0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF 6 1000000000000
trade in range : gas cost 260414
trade 2nd in range with balance in eoa: gas cost 209157
trade 2nd in range with balance in account : gas cost 209172
trade in 2 ranges : gas cost 209434
trade cross 1 order : gas cost 279160
trade cross 2 order : gas cost 277032
trade in 1 order : gas cost 235022

✓ trade (48798ms)

fill order to blank position: gas cost 121096
fill order to blank position : gas cost 88225
cancel part filled order : gas cost 111099
cancel order : gas cost 148792

✓ fill & cancel (1095ms)

 ProxyTrader
2023-11-16\ 04:59:27 \vdash request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318::setFeeder(instruments:[[SynFuturesV3-ETH-
USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF],chainlinkFeeders:[(ftype:BASE_STABLE, scaler0:0,
aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6, scaler1:0, aggregator1:
[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096)])
0x6ea26f939a0cbf4693d211f45fc0e93d6efadbd84b3cb2e130bd376ea7683f5e, nonce: 1, gasPrice: 60.0, gasLimit:
30000000
2023-11-16 04:59:27 ├─ minted => LOCAL blockNumber: 46, confirmations: 1, gasUsed: 90061(0.30%),
gasPrice: 60.0Gwei, tx fee: 0.005404
2023-11-16 04:59:27 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,feeder:
(ftype:BASE_STABLE, scaler0:10000000000, aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6,
scaler1:10000000000, aggregator1:[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096))
before launch
2023-11-16\ 04:59:27  request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:[SynFuturesV3-ETH-USDC-
Args:
000000000021e19e0c9bab2400000])
0xc299a1ba54beeaeabc36cc4d3a082051d8206a79c24d23c8f481ce8ba781130b, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2280579
2023-11-16 04:59:38 — minted => LOCAL blockNumber: 50, confirmations: 1, gasUsed: 1201293(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001204
2023-11-16 04:59:38 - raw event => #0 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF data: 0x topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
  '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707
]
2023-11-16 04:59:39 -
                       event => #1 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateCondition(timestamp:2023-11-
15T20:55:45.000Z, condition: NORMAL)
2023-11-16 04:59:39
                       event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0xcbf145cdfd327106d3ed422bc16c3da3a8821672e756dcddc950f07dc7527430,instrument:
[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,base:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,symbol:ETH-USDC-LINK,total:1)
                       event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
2023-11-16 04:59:39
UpdateSpotState(instrument:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, spotState: (time:1700081745, spot:1600.0,
raw:16000000000000000000000))
2023-11-16 04:59:39 - event => #4 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateFundingIndex(fundingIndex:0)
2023-11-16 04:59:39 —
                       event => #5 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
```

```
UpdateAmmStatus(expiry:PERPETUAL, status:TRADING, sqrtPX96:1600.0, mark:1600.0)
2023-11-16 04:59:39
                         event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 04:59:39 — event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,quantity:10000.0 USDC)
2023-11-16 04:59:39 - event => #8 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:10000.0 USDC)
2023-11-16 04:59:39 — event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,instrument:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 04:59:39
                           event => #10 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,tickLower:57650,tickUpper:89850,range:
(liquidity:139.20351079004370536, entryFeeIndex:0.0, balance:10000.0, sqrtEntryPX96:1600.0))
after launch
    ✓ init success (148ms)
    Funds and permission management

✓ grant operator role failed (797ms)

✓ grant operator role success (176ms)

✓ deposit to gate success (475ms)

✓ withdraw from gate failed (105ms)

✓ withdraw from gate success (192ms)

✓ withdraw failed (148ms)

✓ withdraw success (155ms)

    Interact with instrument

✓ fill success (984ms)

✓ multi fill success (1062ms)

✓ remove success (809ms)

✓ multi remove success (1239ms)
     ✓ update success (448ms)

✓ multi update success (483ms)

✓ withdraw rewards from gate success (265ms)
 SqrtPriceMath
    #getNextSqrtPriceFromDeltaBase

✓ fails if price is zero (79ms)

✓ fails if liquidity is zero

✓ fails if input amount overflows the price

✓ any input amount cannot underflow the price

✓ returns input price if amount in is zero and isLong = true (38ms)

✓ returns input price if amount in is zero and isLong = false

✓ returns the minimum price for max inputs

      ✓ input amount of 0.1 token0 (49ms)

✓ amountIn > type(uint96).max (43ms)

✓ can return 1 with enough amountIn and zeroForOne = true (45ms)

    #getDeltaBase

✓ returns 0 if liquidity is 0 (68ms)

✓ returns 0 if prices are equal (55ms)
      ✓ returns 0.1 amount1 for price of 1 to 1.21 (44ms)
    #getDeltaQuote
      ✓ returns 0 if liquidity is 0 (51ms)

✓ returns 0 if prices are equal (43ms)
      ✓ returns 0.1 amount1 for price of 1 to 1.21 (79ms)
    swap computation

✓ sqrtP * sqrtQ overflows (61ms)
 Tick
    #update

✓ flips from zero to nonzero (46ms)

✓ does not flip from nonzero to greater nonzero (78ms)

✓ flips from nonzero to zero (86ms)
      ✓ does not flip from nonzero to lesser nonzero (98ms)

✓ does not flip from nonzero to lesser nonzero (75ms)

✓ reverts if total liquidity gross is greater than max (177ms)

✓ nets the liquidity based on upper flag (227ms)

✓ reverts on overflow liquidity gross (122ms)
    #cross

✓ cross success with liquidityNet returned (65ms)
```

```
tbitmap
   #isInitialized

✓ false at start

✓ initilize tick by #flipTick (66ms)

✓ is flipped back by #flipTick (107ms)
     ✓ uninitialized is not changed by another flip to a different tick (80ms)

✓ initialized is not changed by another flip to a different tick (113ms)

✓ is not changed by another flip to a different tick on another word (81ms)

   #flipTick
random tick: -255383

✓ flips only the specified tick (243ms)

✓ reverts only itself (380ms)

   #nextInitializedTick
     right = true

✓ returns tick to right if at initialized tick (53ms)

✓ returns tick to right if at initialized tick (110ms)

✓ returns the tick directly to the right (61ms)

✓ returns the tick directly to the right (59ms)

✓ returns the next words initialized tick if on the right boundary (64ms)

✓ returns the next words initialized tick if on the right boundary (66ms)

✓ returns the next initialized tick from the next word (131ms)

✓ next initialized tick not found (1188ms)
     right = false

✓ returns same aligned tick if initialized (59ms)

✓ will not exceed the word boundary (62ms)

✓ below the word boundary (83ms)

✓ next initialized tick not found (843ms)

 IMR Simulation Test
2023-11-16 05:00:14 \vdash request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318::setFeeder(instruments:[[SynFuturesV3-BTC-
USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2], chainlinkFeeders:[(ftype:BASE_STABLE, scaler0:0,
aggregator0:[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae, scaler1:0, aggregator1:
[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096)])
0xd6a73986a0d8c07d957e6b713003d31670464d7d241d1b9d4994aa83d233c93d, nonce: 1, gasPrice: 60.0, gasLimit:
30000000
2023-11-16 05:00:14 ├─ minted => LOCAL blockNumber: 46, confirmations: 165, gasUsed: 90061(0.30%),
gasPrice: 60.0Gwei, tx fee: 0.005404
2023-11-16 05:00:14 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,feeder:
(ftype:BASE_STABLE, scaler0:10000000000, aggregator0:[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae,
scaler1:10000000000, aggregator1:[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096))
2023-11-16 05:00:15 \vdash request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:[SynFuturesV3-BTC-USDC-
Args:
000000000021e19e0c9bab2400000])
2023-11-16 05:00:29 — submitted => LOCAL txHash:
0x1d10a23628bcd38ad914a42e4a08f8b0dbb9d2d79f5b543c2de89526646f573f, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2276595
2023-11-16 05:00:29 — minted => LOCAL blockNumber: 50, confirmations: 161, gasUsed: 1199195(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001202
2023-11-16 05:00:29 - raw event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2 data: 0x topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
  '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
2023-11-16 05:00:29 —
                      event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateCondition(timestamp:2023-11-
15T20:55:42.000Z, condition: NORMAL)
2023-11-16 05:00:29 -
                       event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0x59807c7dd36a9ce029808e8787b9dcf42f734464512092ab83107ff8415eca50,instrument:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,base:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,symbol:BTC-USDC-LINK,total:1)
                      event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
2023-11-16 05:00:29 —
```

```
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081742, spot:25600.0,
raw:256000000000000000000000))
2023-11-16 05:00:29 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateAmmStatus(expiry:2023-12-
15, status: TRADING, sqrtPX96:25369.5999999999999999, mark:25369.6)
2023-11-16 05:00:29 event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:00:29 — event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,quantity:10000.0 USDC)
2023-11-16 05:00:29 — event => #7 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:10000.0 USDC)
2023-11-16 05:00:29 — event => #8 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-12-15,quantity:10000.0 USDC)
2023-11-16 05:00:29 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:2023-12-15,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,tickLower:85300,tickUpper:117500,range:
(liquidity:34.878340638359192936, entryFeeIndex:0.0, balance:10000.0,
sqrtEntryPX96:25369.5999999999999999))
after launch
20000000000000000000000
2023-11-16 05:00:37 \leftarrow request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 100000.0, tickDelta: 953, expiry: 4294967295, deadline: 429496729 }])
2023-11-16 05:00:44 — submitted => LOCAL txHash:
0xcd39964d13daf041f2a05d06e7f7572e4dcda82bb211f99e7534c2ba8d4c9b7c, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 799082
2023-11-16 05:00:44 ├─ minted => LOCAL blockNumber: 120, confirmations: 91, gasUsed: 473567(59.26%),
gasPrice: 1.0Gwei, tx fee: 0.000474
2023-11-16 05:00:44 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084309, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:00:44 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:00:44 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
2023-11-16 05:00:44
                                  event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:100000.0 USDC)
2023-11-16 05:00:44
                                 event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:100000.0 USDC)
2023-11-16 05:00:44 - event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:100000.0 USDC)
2023-11-16 05:00:44 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN] 0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, instrument: [SynFuturesV3-BTC-USDC-MANAGE of the content of the conten
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:100000.0 USDC)
2023-11-16 05:00:44
                                    event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:75050, tickUpper:76950, range:
(liquidity:464405.345766534525531113, entryFeeIndex:0.0, balance:100000.0,
sqrtEntryPX96:1999.99999999999999))
2023-11-16 05:00:46 request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 475.352951048738165815, amount: 130449.204436083840180984, limitTick: 8388607, deadline: 429496729
}])
0xe2c8ead54210f9185765a00544545a7d83add6c5334216a08038a15a5deb77a5, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 516042
2023-11-16 05:00:53 — minted => LOCAL blockNumber: 121, confirmations: 90, gasUsed: 290000(56.20%),
gasPrice: 1.0Gwei, tx fee: 0.000290
2023-11-16 05:00:53 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
```

```
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084318, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:00:53 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:00:53 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:130449.204437 USDC)
2023-11-16 05:00:53 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,quantity:130449.204437 USDC)
2023-11-16 05:00:53 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:130449.204437 USDC)
2023-11-16 05:00:53 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:130449.204437 USDC)
                          event => #6 [SynFuturesV3-BTC-USDC-
2023-11-16 05:00:53
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:62215193640424768,protocolFee:996.312707397012572974)
2023-11-16 05:00:53 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:475.352951048738165815,amount:130449.204437,take
nSize:0,takenValue:0,entryNotional:996312.707397012572973743,feeRatio:2.9%,sqrtPX96:2196.4886050976769606
94, mark: 2000.0)
2023-11-16 05:00:53 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:100559.823215089622810787,
size:475.352951048738165815, entryNotional:996312.707397012572973743, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
BigNumber { value: "29889381221910377189213" }
BigNumber { value: "996312707397012572973743" }
475352951048738165815
contractValue BigNumber { value: "29889381221910377189213" }
excelValue 29889
mark 2000.0
mark 2000.0
2023-11-16 05:00:55 \qquad \text{request} \Rightarrow \text{LOCAL [UNKNOWN]} 0 \times 3 \text{C} 4 \text{C} \text{d} \text{D} \text{d} \text{B} 6 \text{a} 900 \text{f} \text{a} 2 \text{b} 5 \text{S} \text{5} \text{d} \text{d} 299 \text{e} 03 \text{d} 12 \text{FA} 4293 \text{BC}}
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 76950,
tickLower: 75050, target: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc, expiry: 4294967295, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
2023-11-16 05:01:01 — submitted => LOCAL txHash:
0x9016201f0fa179782bbbd2486df2493f50b839d4c15412cbdbf21747bf477759, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 447032
2023-11-16 05:01:01 — minted => LOCAL blockNumber: 122, confirmations: 89, gasUsed: 244687(54.74%),
gasPrice: 1.0Gwei, tx fee: 0.000245
2023-11-16 05:01:01 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084326, spot:2000.0,
raw:20000000000000000000000))
2023-11-16 05:01:01 —
                          event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund:8.648281322280637162)
2023-11-16 05:01:01
                        event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:340282366920938463463356414042407315441)
2023-11-16 05:01:01
                           event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:(balance:81098.435533418724884703,
size:-475.352951048738165815, entryNotional:1044107.340378107212356613, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:01:01
                           event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:75050, tickUpper:76950, fee:28893.06851451336
4267574,pic:(balance:81098.435533418724884703, size:-475.352951048738165815,
entryNotional:1044107.340378107212356613, entrySocialLossIndex:0.0, entryFundingIndex:0.0), operator:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tip:0.0)
mark 2000.0

✓ attacker trades to upper boundary (25453ms)

2023-11-16 05:01:02 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
```

```
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 100000.0, tickDelta: 953, expiry: 4294967295, deadline: 429496729 }])
2023-11-16 05:01:10 |— submitted => LOCAL txHash:
0xcd39964d13daf041f2a05d06e7f7572e4dcda82bb211f99e7534c2ba8d4c9b7c, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 799082
2023-11-16 05:01:10 — minted => LOCAL blockNumber: 120, confirmations: 91, gasUsed: 473567(59.26%),
gasPrice: 1.0Gwei, tx fee: 0.000474
2023-11-16 05:01:10 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700084309, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:01:10 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:01:10 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
2023-11-16 05:01:10 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:100000.0 USDC)
2023-11-16 05:01:10 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:100000.0 USDC)
2023-11-16 05:01:10 \longrightarrow event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:100000.0 USDC)
2023-11-16 05:01:10 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:100000.0 USDC)
2023-11-16 05:01:10 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tickLower:75050,tickUpper:76950,range:
(liquidity:464405.345766534525531113, entryFeeIndex:0.0, balance:100000.0,
sqrtEntryPX96:1999.999999999999999))
2023-11-16 05:01:11 - request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -512.121493690047707951, amount: 133476.032669386003704187, limitTick: -8388608, deadline:
429496729 }])
0x54100fee3c7a0e71f69255ee7e89c0cf6697f74d8f5f455bc9abef1a7a2cf8f7, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 517365
2023-11-16 05:01:19 — minted => LOCAL blockNumber: 121, confirmations: 90, gasUsed: 290739(56.20%),
gasPrice: 1.0Gwei, tx fee: 0.000291
2023-11-16 05:01:19 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084318, spot:2000.0,
raw:20000000000000000000000))
2023-11-16 05:01:19 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:01:19 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:133476.03267 USDC)
2023-11-16 05:01:19 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,quantity:133476.03267 USDC)
                          event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:01:19
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:133476.03267 USDC)
2023-11-16 05:01:19
                          event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:133476.03267 USDC)
2023-11-16 05:01:19 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:65577363085548323,protocolFee:976.105063403898926847)
2023-11-16 05:01:19
                        event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, size:-512.121493690047707951, amount:133476.03267, take
nSize:0,takenValue:0,entryNotional:976105.06340389892684636,feeRatio:3.12%,sqrtPX96:1816.4235693796777604
03,mark:2000.0)
                          event => #8 [SynFuturesV3-BTC-USDC-
2023-11-16 05:01:19
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
```

```
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:102045.449628394454555547,
size:-512.121493690047707951, entryNotional:976105.06340389892684636, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
mark 2000.0
equity of attacker 53907525652197965499907
balance of attacker 102045449628394454555547
mark 2000.0
equity of LP 178592401954398135410986
2023-11-16 05:01:21 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 76950,
tickLower: 75050, target: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc, expiry: 4294967295, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
0xab44a9a5b09797fc4f4bbb984b883a705402b2ade029dafb0bdc2ce976d16a88, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 458429
2023-11-16 05:01:27 — minted => LOCAL blockNumber: 122, confirmations: 89, gasUsed: 251622(54.89%),
gasPrice: 1.0Gwei, tx fee: 0.000252
                       event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
2023-11-16 05:01:27 —
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084326, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:01:27 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 8.704947764404336729)
2023-11-16 05:01:27 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161954235652009510654651962961812165688641518740263372466044
2023-11-16 05:01:27 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, funding:0.0)
2023-11-16 05:01:27 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:(balance:84578.966098831298744089,
size:512.121493690047707951, entryNotional:930229.551524528579235102, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:01:27 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:75050, tickUpper:76950, fee:30454.47797820164
6355348,pic:(balance:84578.966098831298744089, size:512.121493690047707951,
entryNotional:930229.551524528579235102, entrySocialLossIndex:0.0, entryFundingIndex:0.0),operator:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tip:0.0)
mark 2000.0

✓ attacker trades to lower boundary (25611ms)

 Instrument Integration Test
2023-11-16 05:01:28 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318::setFeeder(instruments:[[SynFuturesV3-BTC-
USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2], chainlinkFeeders:[(ftype:BASE_STABLE, scaler0:0,
aggregator0:[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae, scaler1:0, aggregator1:
[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096)])
0xd6a73986a0d8c07d957e6b713003d31670464d7d241d1b9d4994aa83d233c93d, nonce: 1, gasPrice: 60.0, gasLimit:
30000000
                      minted => LOCAL blockNumber: 46, confirmations: 1, gasUsed: 90061(0.30%),
2023-11-16 05:01:28
gasPrice: 60.0Gwei, tx fee: 0.005404
2023-11-16 05:01:28
                       event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, feeder:
(ftype:BASE_STABLE, scaler0:10000000000, aggregator0:[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae,
scaler1:10000000000, aggregator1:[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096))
before launch
2023-11-16 05:01:29 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:[SynFuturesV3-BTC-USDC-
000000000021e19e0c9bab2400000])
0x1d10a23628bcd38ad914a42e4a08f8b0dbb9d2d79f5b543c2de89526646f573f, nonce: 5, type: 2, maxPriorityFee:
```

```
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2276595
2023-11-16 05:01:41 — minted => LOCAL blockNumber: 50, confirmations: 1, gasUsed: 1199195(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001202
2023-11-16 05:01:41 - raw event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2 data: 0x topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
  '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
]
2023-11-16 05:01:41 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateCondition(timestamp:2023-11-
15T20:55:46.000Z, condition: NORMAL)
2023-11-16 05:01:41 - event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0x59807c7dd36a9ce029808e8787b9dcf42f734464512092ab83107ff8415eca50,instrument:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,base:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,symbol:BTC-USDC-LINK,total:1)
2023-11-16 05:01:41 — event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081746, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:01:41 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateAmmStatus(expiry:2023-12-
15, status: TRADING, sqrtPX96: 25369.5999999999999999, mark: 25369.6)
2023-11-16 05:01:41 — event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:01:41 — event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,quantity:10000.0 USDC)
2023-11-16 05:01:41 \leftarrow event => #7 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
2023-11-16 05:01:41 — event => #8 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-12-15,quantity:10000.0 USDC)
2023-11-16 05:01:41 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:2023-12-15,trader:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8, tickLower:85300, tickUpper:117500, range:
(liquidity:34.878340638359192936, entryFeeIndex:0.0, balance:10000.0,
sqrtEntryPX96:25369.5999999999999999))
after launch
2023-11-16 05:01:49 \qquad \text{request} \Rightarrow \text{LOCAL [UNKNOWN]}0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC}
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 9999999999.0, tickDelta: 16096, expiry: 1700812800, deadline: 429496729
}])
0x76c953a90edcf18a187a11f0109ebf49cbcc0179128afb156eeca252f117b0e6, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 794769
2023-11-16 05:01:56 — minted => LOCAL blockNumber: 95, confirmations: 1, gasUsed: 470975(59.26%),
gasPrice: 1.0Gwei, tx fee: 0.000471
2023-11-16 05:01:56 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081798, spot:25600.0,
raw:256000000000000000000000))
                          event => #1 [SynFuturesV3-BTC-USDC-
2023-11-16 05:01:56
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateAmmStatus(expiry:2023-11-
2023-11-16 05:01:56
                          event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:999999999.0 USDC)
2023-11-16 05:01:56
                          event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:999999999.0 USDC)
                          event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:01:56
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:999999999.0 USDC)
2023-11-16 05:01:56
                          event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:999999999.0 USDC)
2023-11-16 05:01:56 - event => #6 [SynFuturesV3-BTC-USDC-
```

```
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:2023-11-24,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:85350, tickUpper:117550, range:
(liquidity:34849390.13744276262688775, entryFeeIndex:0.0, balance:999999999.0,
sqrtEntryPX96:25530.879999999999999))
2023-11-16 05:01:58 — request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 10.0, amount: 53127.736853763057217784, limitTick: 8388607, deadline: 429496729 }])
2023-11-16 05:02:06 — submitted => LOCAL txHash:
0xe1672a93510d04ae208d172f38f5f5aa6e971dc83a09cff8d6a55dd75c24ab31, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 538490
2023-11-16 05:02:06 — minted => LOCAL blockNumber: 96, confirmations: 1, gasUsed: 304523(56.55%),
gasPrice: 1.0Gwei, tx fee: 0.000305
2023-11-16 05:02:06 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081807, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:02:06 — event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:53127.736854 USDC)
2023-11-16 05:02:06 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:53127.736854 USDC)
2023-11-16 05:02:06 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:53127.736854 USDC)
2023-11-16 05:02:06 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:53127.736854 USDC)
2023-11-16 05:02:06 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:21979194361305, protocolFee:255.320506401276422918)
2023-11-16 05:02:06 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, size:10.0, amount:53127.736854, takenSize:0, takenValue:
0, entryNotional: 255320.506401276422917223, feeRatio: 0.3%, sqrtPX96: 25533.221333931394002562, mark: 25530.88)
2023-11-16 05:02:06 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:52106.454828394894308331, size:10.0,
entryNotional:255320.506401276422917223, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:02:06 request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::place(args:[{ expiry: 1700812800,
size: 2.0, amount: 51003.006675013138439651, tick: 101470, deadline: 429496729 }])
0xb6dac92b6bb24d67aeb7202586cf40b25cc6ec0593a9ab51b8a3d924696cf965, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 488387
2023-11-16 05:02:11 ├─ minted => LOCAL blockNumber: 97, confirmations: 1, gasUsed: 271898(55.67%),
gasPrice: 1.0Gwei, tx fee: 0.000272
2023-11-16 05:02:11 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:51003.006676 USDC)
2023-11-16 05:02:11
                        event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,quantity:51003.006676 USDC)
                         event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:02:11 —
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:51003.006676 USDC)
2023-11-16 05:02:11
                          event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:51003.006676 USDC)
2023-11-16 05:02:11
                         event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Place(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:101470,nonce:0,order:(balance:51003.006676,
2023-11-16 05:02:13 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: -135.586786156824986273, amount: 723675.494950095164202484, limitTick: -8388608, deadline:
2023-11-16 05:02:21 — submitted => LOCAL txHash:
0xfb337a1f968e8a0cbba61879ab060501f488eefb655fe90c4b0cb61e2ba59b45, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 473967
```

```
2023-11-16 05:02:21 — minted => LOCAL blockNumber: 98, confirmations: 1, gasUsed: 263489(55.59%),
gasPrice: 1.0Gwei, tx fee: 0.000263
2023-11-16 05:02:21 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081822, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:02:21 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:723675.494951 USDC)
2023-11-16 05:02:21 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:723675.494951 USDC)
2023-11-16 05:02:21 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:723675.494951 USDC)
2023-11-16 05:02:21 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:723675.494951 USDC)
2023-11-16 05:02:21 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:319816528253745, protocolFee:3715.136988505762681945)
2023-11-16 05:02:21 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, size:-135.586786156824986273, amount:723675.494951, tak
enSize:0,takenValue:0,entryNotional:3459816.482104486259026234,feeRatio:0.3%,sqrtPX96:25501.5033375065692
19825, mark: 25530.88)
2023-11-16 05:02:21 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:709836.229022582054963895,
size:-135.586786156824986273, entryNotional:3459816.482104486259026234, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:02:22 - request => LOCAL [UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: -2.0, amount: 10737.882703373828228218, limitTick: -8388608, deadline: 429496729 }])
0x9d51e0361f97acd37b5eb196a735470c7e76db425c59c4c7197111bdfec519a6, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 576875
2023-11-16 05:02:33 — minted => LOCAL blockNumber: 99, confirmations: 1, gasUsed: 304182(52.73%),
gasPrice: 1.0Gwei, tx fee: 0.000304
2023-11-16 05:02:33 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081832, spot:25600.0,
raw:2560000000000000000000000))
                        event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:02:33 —
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10737.882704 USDC)
2023-11-16 05:02:33
                        event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,quantity:10737.882704 USDC)
2023-11-16 05:02:33 —
                        event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:10737.882704 USDC)
2023-11-16 05:02:33 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:10737.882704 USDC)
2023-11-16 05:02:33
                         event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:319816528253745, protocolFee:3766.139995180775820385)
2023-11-16 05:02:33
                         event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
000000, takenValue:51003006675013138439650, entryNotional:51003.00667501313843965, feeRatio:0.3%, sqrtPX96:25
501.503337506569219825, mark: 25530.88)
2023-11-16 05:02:33
                        event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,pic:(balance:10533.870677299947446241, size:-2.0,
entryNotional:51003.00667501313843965, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
ammFund: 10000838543.121185
distributeFund: 10000838543.121185
```

the diff: 0

```
2023-11-16 05:02:44 - request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::fill(arg:{ nonce: 0, tick:
101470, target: 0xdf3e18d64bc6a983f673ab319ccae4f1a57c7097, expiry: 170081280 })
0x1f6279741bd140a7b5604911b78d3794283b899430eff1ff272e599b2433fde3, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 205967
2023-11-16 05:02:46 — minted => LOCAL blockNumber: 100, confirmations: 1, gasUsed: 111240(54.01%),
gasPrice: 1.0Gwei, tx fee: 0.000111
2023-11-16 05:02:46 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Fill(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:101470,nonce:0,fee:153.009020025039415318,pic:
(balance:51156.015696025039415318, size:2.0, entryNotional:51003.00667501313843965,
entrySocialLossIndex:0.0, entryFundingIndex:0.0),operator:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tip:0.0)
2023-11-16 05:02:46 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,pic:(balance:51156.015696025039415318, size:2.0,
entryNotional:51003.00667501313843965, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:02:47 - request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::place(args:[{ expiry: 1700812800,
size: -5.0, amount: 128146.618740136461397666, tick: 101520, deadline: 429496729 }])
0x66b2cb8ec03d60b5593be3540853a4cf27aaef59872f2aa394771dfedb24dc77, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 490319
2023-11-16 05:02:52 — minted => LOCAL blockNumber: 101, confirmations: 1, gasUsed: 273468(55.77%),
gasPrice: 1.0Gwei, tx fee: 0.000273
2023-11-16 05:02:52 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:128146.618741 USDC)
2023-11-16 05:02:52 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,quantity:128146.618741 USDC)
2023-11-16 05:02:52 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:128146.618741 USDC)
2023-11-16 05:02:52 - event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:128146.618741 USDC)
2023-11-16 05:02:52 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Place(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:101520,nonce:0,order:(balance:128146.618741,
size:-5.0))
2023-11-16 05:02:54 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 544.863678033291741045, amount: 2931151.90464535373150501, limitTick: 8388607, deadline: 429496729
}])
0x796f1353135b83feda2eb49deb69ea029a8888b373532c0101eefe4760a09574, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 429537
2023-11-16 05:03:01 — minted => LOCAL blockNumber: 102, confirmations: 1, gasUsed: 233464(54.35%),
gasPrice: 1.0Gwei, tx fee: 0.000233
2023-11-16 05:03:01 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081861, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:03:01
                          event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:2931151.904646 USDC)
2023-11-16 05:03:01
                          event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, quantity:2931151.904646 USDC)
2023-11-16 05:03:01 —
                         event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value: 2931151.904646 USDC)
2023-11-16 05:03:01 -
                        event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:2931151.904646 USDC)
2023-11-16 05:03:01 —
                          event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:1518944117518207, protocolFee:17695.761722796934751464)
```

```
2023-11-16 05:03:01 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, size:544.863678033291741045, amount:2931151.904646, tak
enSize:0,takenValue:0,entryNotional:13929621.727616158931078065,feeRatio:0.3%,sqrtPX96:25629.323748027292
279533, mark: 25530.88)
2023-11-16 05:03:01 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:3578764.701005642928541169,
size:409.276891876466754772, entryNotional:10463300.299759198181353418, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
ammFund: 10003897841.644571
distributeFund: 10003897841.644571
the diff: 0
_____
2023-11-16 05:03:14 request => LOCAL [UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 3.0, amount: 16524.294258116408691908, limitTick: 8388607, deadline: 429496729 }])
0x7f85281fcd8553693305de36cf0df88db37d47dbc26f709388727b21a0957f15, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 465344
2023-11-16 05:03:22 ├─ minted => LOCAL blockNumber: 103, confirmations: 1, gasUsed: 257047(55.24%),
gasPrice: 1.0Gwei, tx fee: 0.000257
2023-11-16 05:03:22 —
                         event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081881, spot:25600.0,
raw:25600000000000000000000000))
2023-11-16 05:03:22 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:16524.294259 USDC)
2023-11-16 05:03:22 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,quantity:16524.294259 USDC)
2023-11-16 05:03:22 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:16524.294259 USDC)
2023-11-16 05:03:22 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:16524.294259 USDC)
2023-11-16 05:03:22 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:1518944117518207, protocolFee:17772.649694041016628303)
2023-11-16 05:03:22 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
000000, takenValue:76887971244081876838599, entryNotional:76887.971244081876838599, feeRatio:0.3%, sqrtPX96:2
5629.323748027292279533, mark:25530.88)
2023-11-16 05:03:22 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,pic:(balance:26494.97223028217381947, size:1.0,
entryNotional:25629.323748027292279533, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
ammFund: 10003914365.938831
distributeFund: 10003914365.938831
the diff: 0
2023-11-16 05:03:33 - request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::cancel(arg:{ ticks: 101520,
expiry: 1700812800, deadline: 429496729 })
0x6d11ecf4cdff29177a725224fc0ebf859cff0dddf799176d49d8c86e0c314bb0, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 217139
2023-11-16 05:03:37 —
                        minted => LOCAL blockNumber: 104, confirmations: 1, gasUsed: 114378(52.68%),
gasPrice: 1.0Gwei, tx fee: 0.000114
2023-11-16 05:03:37
                         event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Cancel(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:101520,nonce:0,fee:230.663913732245630515,pic:
(balance:128377.282654732245630515, size:-3.0, entryNotional:76887.971244081876838599,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:03:37
                         event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,pic:(balance:179788.939171798731165249, size:-1.0,
entryNotional:25629.323748027292279533, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:03:38 \leftarrow request => LOCAL [UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f
```

```
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 5.0, amount: 13823.011041165968094374, limitTick: 8388607, deadline: 429496729 }])
2023-11-16 05:03:46 — submitted => LOCAL txHash:
0xe56a0e1ec4a2809d1a218d24dd1120e852c6632d1a35d111d6dcfa03c8331ccb, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 512658
2023-11-16 05:03:46 — minted => LOCAL blockNumber: 105, confirmations: 1, gasUsed: 287808(56.14%),
gasPrice: 1.0Gwei, tx fee: 0.000288
2023-11-16 05:03:46 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081905, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:03:46 — event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:13823.011042 USDC)
2023-11-16 05:03:46 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,quantity:13823.011042 USDC)
2023-11-16 05:03:46 \longrightarrow event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:13823.011042 USDC)
2023-11-16 05:03:46 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:13823.011042 USDC)
2023-11-16 05:03:46
                         event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:1529975836728576, protocolFee:17900.799256257311120158)
2023-11-16 05:03:46 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,size:5.0,amount:13823.011042,takenSize:0,takenValue:0
,entryNotional:128149.562216294491854839,feeRatio:0.3%,sqrtPX96:25630.501152012596544227,mark:25530.88)
2023-11-16 05:03:46 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:13310.41279313482203258, size:5.0,
entryNotional:128149.562216294491854839, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16\ 05:03:50 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::liquidate(expiry:2023-11-
24, target:[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f, size:5.0, amount:50000.0)
2023-11-16 05:03:56 — submitted => LOCAL txHash:
0x3450d2547408bc6a6abebf0666efe0e0b0d1f5fb98fd00ae97e43ec61832ccfb, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 393227
2023-11-16 05:03:56 — minted => LOCAL blockNumber: 132, confirmations: 1, gasUsed: 203985(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000204
2023-11-16 05:03:56 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700170826, spot:24000.0,
raw:2400000000000000000000000))
2023-11-16 05:03:56 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:03:56 \longrightarrow event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:50000.0 USDC)
                         event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
2023-11-16 05:03:56
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, quantity:50000.0 USDC)
2023-11-16 05:03:56
                          event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:50000.0 USDC)
2023-11-16 05:03:56
                          event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:50000.0 USDC)
2023-11-16 05:03:56
                           event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:115416.867621529716340911, size:15.0,
entryNotional:383470.068617570914772062, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
                         event => #7 [SynFuturesV3-BTC-USDC-
2023-11-16 05:03:56 —
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Liquidate(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,amount:50000.0,mark:23942.4,target:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,size:5.0)
```

```
ammFund: 10003978188.949873
distributeFund: 10003978188.949873
the diff: 0
2023-11-16 05:04:06 request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 4055, expiry: 1700812800, deadline: 429496729 }])
0xcb08a3520066c5cca0f87d28de2052a00e239a64efcdc1eef06204fda8d99ede, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 572109
2023-11-16 05:04:11 ├─ minted => LOCAL blockNumber: 133, confirmations: 1, gasUsed: 326556(57.08%),
gasPrice: 1.0Gwei, tx fee: 0.000327
2023-11-16 05:04:11 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:04:11 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, quantity:10000.0 USDC)
2023-11-16 05:04:11 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
2023-11-16 05:04:11 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:10000.0 USDC)
2023-11-16 05:04:11 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:97450,tickUpper:105550,range:
(liquidity:809.968241461784054149, entryFeeIndex:0.001529975836728576, balance:10000.0,
sqrtEntryPX96:25630.501152012596544227))
2023-11-16 05:04:13 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 39765.172732665820073374, amount: 790232268.707038610213111272, limitTick: 8388607, deadline:
429496729 }])
0x974a966479d2297a17dbe18ba2de0818c509885b1780d2efa05016b675162e3d, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 491970
2023-11-16 05:04:22 — minted => LOCAL blockNumber: 134, confirmations: 1, gasUsed: 274390(55.77%),
gasPrice: 1.0Gwei, tx fee: 0.000274
2023-11-16 05:04:22 —
                         event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState:(time:1700170852, spot:24000.0,
raw:2400000000000000000000000))
2023-11-16 05:04:22 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:790232268.707039 USDC)
2023-11-16 05:04:22 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:790232268.707039 USDC)
2023-11-16 05:04:22 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:790232268.707039 USDC)
                        event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:04:22 —
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:790232268.707039 USDC)
2023-11-16 05:04:22
                        event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:108874650231639124, protocolFee:1264895.260236974066676762)
2023-11-16 05:04:22
                          event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,size:39765.172732665820073374,amount:790232268.707039
,takenSize:0,takenValue:0,entryNotional:1246994460.980716755556603912,feeRatio:0.3%,sqrtPX96:38367.739188
847716855154, mark: 23942.4)
2023-11-16 05:04:23
                          event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:785359707.730737662694114495,
size:39780.172732665820073374, entryNotional:1247377931.049334326471375974, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
ammFund: 10794220457.656912
distributeFund: 10794220457.656912
the diff: 0
2023-11-16 05:04:37 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
```

```
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 105550,
tickLower: 97450, target: 0x90f79bf6eb2c4f870365e785982e1f101e93b906, expiry: 1700812800, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
0xa37e35b84b19ccdd0914449edc3fb4ca387574f2e5388f9e5015ded435009e57, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 453467
2023-11-16 05:04:42 — minted => LOCAL blockNumber: 161, confirmations: 1, gasUsed: 235951(52.03%),
gasPrice: 1.0Gwei, tx fee: 0.000236
2023-11-16 05:04:42 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1.0 USDC)
2023-11-16 05:04:42 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1.0 USDC)
2023-11-16 05:04:42 - event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:1.0 USDC)
2023-11-16 05:04:42
                        event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:3608.447574926415969599,
size:-0.923165373387052504, entryNotional:35419.768274289649496649, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:04:42 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:97450,tickUpper:105550,fee:86.9457771499334
94849, pic: (balance: 3608.447574926415969599, size: -0.923165373387052504,
entryNotional:35419.768274289649496649, entrySocialLossIndex:0.0, entryFundingIndex:0.0),operator:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,tip:1.0)
2023-11-16 05:04:44 - request => LOCAL [UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 5.0, amount: 27211.726349614868367122, limitTick: 8388607, deadline: 429496729 }])
0x98e1203393f5ad53d02fe4639addc7d4c3b28bc5143dda66fb26cbe497223a1c, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 477833
2023-11-16 05:04:53 — minted => LOCAL blockNumber: 162, confirmations: 1, gasUsed: 282181(59.05%),
gasPrice: 1.0Gwei, tx fee: 0.000282
2023-11-16 05:04:53 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState:(time:1700259793, spot:53000.0,
raw:5300000000000000000000000))
2023-11-16 05:04:53 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:27211.72635 USDC)
2023-11-16 05:04:53
                        event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,quantity:27211.72635 USDC)
2023-11-16 05:04:53
                         event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:27211.72635 USDC)
2023-11-16 05:04:53
                        event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:27211.72635 USDC)
                        event => #5 [SynFuturesV3-BTC-USDC-
2023-11-16 05:04:53
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:108891165076230128, protocolFee:1265087.104324377783768543)
2023-11-16 05:04:53
                          event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,size:5.0,amount:27211.72635,takenSize:0,takenValue:0,
entryNotional:191844.087403717091780101, feeRatio:0.3%, sqrtPX96:38369.895802943574508555, mark:52888.7)
2023-11-16 05:04:53
                          event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:26444.350000385131632879, size:5.0,
entryNotional:191844.087403717091780101, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:04:54 request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: -3500.0, amount: 239044070.615140646774098804, limitTick: -8388608, deadline: 429496729 }])
0x902f6b9454dd8766eb0d35511050a4eaf0763773f55c7e9870adb1d67b7ed7b8, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 472404
2023-11-16 05:05:04 — minted => LOCAL blockNumber: 163, confirmations: 1, gasUsed: 278680(58.99%),
```

```
gasPrice: 1.0Gwei, tx fee: 0.000279
2023-11-16 05:05:04 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700259803, spot:53000.0,
raw:53000000000000000000000000))
2023-11-16 05:05:04 \longrightarrow event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:239044070.615141 USDC)
2023-11-16 05:05:04 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:239044070.615141 USDC)
2023-11-16 05:05:04 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:239044070.615141 USDC)
2023-11-16 05:05:04 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:239044070.615141 USDC)
2023-11-16 05:05:04
                         event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:120228836419224241, protocolFee:1396790.748285079945641938)
2023-11-16 05:05:04 —
                        event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, size:-3500.0, amount:239044070.615141, takenSize:0, take
nValue:0,entryNotional:131703643.960702161873394777,feeRatio:0.3%,sqrtPX96:36903.611849844521951642,mark:
52888.7)
2023-11-16 05:05:04 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:247033651.31169919964323854,
size:-3090.723108123533245228, entryNotional:116302713.089547598329850408, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:05:08 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:2023-11-24, target:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,size:5.0)
0xd28b2a4a2d4618105610c4a00fbbc8af3fd45e878812cecf07cd4297352bd9a3, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 439533
2023-11-16 05:05:15 — minted => LOCAL blockNumber: 190, confirmations: 1, gasUsed: 270320(61.50%),
gasPrice: 1.0Gwei, tx fee: 0.000270
2023-11-16 05:05:15 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700348725, spot:22000.0,
raw:22000000000000000000000000))
2023-11-16 05:05:15 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:05:15
                        event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:120244720166944830, protocolFee:1396975.261258799794801097)
2023-11-16 05:05:15
                         event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex:0.0, shortSocialLossIndex:17.948381608003259905, insuranceFund:0.0)
2023-11-16 05:05:15 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24,longSocialLossIndex:0.0,shortSocialLossIndex:17.948381608003259905,insuranceFund:73883.179916929746222
2023-11-16 05:05:15
                          event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:2023-11-24,trader:
[UNKNOWN] 0 \times 23618 e 81E3f5 c dF7f54C3d65f7FBc0aBf5B21E8f, size: -5.0, takenSize: 0, takenValue: 0, entryNotional: 1845] \\
12.973719849159158242, feeRatio:0.3%, sqrtPX96:36901.57766612774633958, mark:21960.4, operator:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955)
ammFund: 11033291738.998404
distributeFund: 11033291738.998404
the diff: 0
2023-11-16 05:05:24 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::update(expiry:2023-11-24)
0xf8fe9de2fc5eda9392b373d13b404d8a6716677dad2688ac628f6c7d743e3827, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 239349
2023-11-16 05:05:28 — minted => LOCAL blockNumber: 192, confirmations: 1, gasUsed: 152422(63.68%),
gasPrice: 1.0Gwei, tx fee: 0.000152
```

```
2023-11-16 05:05:28 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:3401159728, spot:22000.0,
raw:2200000000000000000000000))
2023-11-16 05:05:28 -
                        event => #1 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateAccState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,state:(time:3401159728,
raw:2200000000000000000000, initTime:2077-10-11T06:35:28.000Z, initMark:220000000000000000000,
accumulation:0))
2023-11-16 05:05:28 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateAmmStatus(expiry:2023-11-
24, status: SETTLING, sqrtPX96:36901.57766612774633958, mark: 22000.0)
2023-11-16 05:05:28 request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 1.0, amount: 0.0, limitTick: 8388607, deadline: 429496729 }])
0x278b9595a48c0edd9de210ad27dc79aaed1cba5359a2602c2f4cc5df3b6719f5, nonce: 6, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 513797
2023-11-16 05:05:37 — minted => LOCAL blockNumber: 193, confirmations: 1, gasUsed: 295843(57.58%),
gasPrice: 1.0Gwei, tx fee: 0.000296
2023-11-16 05:05:37 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:3401159737, spot:22000.0,
raw:2200000000000000000000000))
                        event => #1 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
2023-11-16 05:05:37
UpdateAccState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,state:(time:3401159737,
raw:2200000000000000000000, initTime:2077-10-11T06:35:28.000Z, initMark:220000000000000000000,
accumulation:1980000000000000000000000000))
2023-11-16 05:05:37 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:120247896846444672, protocolFee:1397012.16303987700584669)
2023-11-16 05:05:37 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24, trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, size:1.0, amount:0.0, takenSize:0, takenValue:0, entryNot
ional:36901.781077211045592246, feeRatio:0.3%, sqrtPX96:36901.984489415599583213, mark:22000.0)
2023-11-16 05:05:37 — event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:168350.926336 USDC)
2023-11-16 05:05:37 — event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:168350.926336 USDC)
2023-11-16 05:05:37 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:168350.926336 USDC)
2023-11-16 05:05:37 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:05:39 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: -53540.465544043725790979, amount: 247782234.97885805672051001, limitTick: -8388608, deadline:
429496729 }])
0x81272ce092c81aeddb01ecebb9ead2fb80f0a56f04aeaf76222ee494aa5625c7, nonce: 6, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 465831
                       minted => LOCAL blockNumber: 194, confirmations: 1, gasUsed: 292608(62.81%),
2023-11-16 05:05:48
gasPrice: 1.0Gwei, tx fee: 0.000293
2023-11-16 05:05:48
                          event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:3401159749, spot:22000.0,
raw:2200000000000000000000000))
2023-11-16 05:05:48
                          event => #1 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateAccState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,state:(time:3401159749,
raw:2200000000000000000000, initTime:2077-10-11T06:35:28.000Z, initMark:220000000000000000000,
accumulation:46200000000000000000000000000))
2023-11-16 05:05:48
                          event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:247782233.978859 USDC)
2023-11-16 05:05:48
                        event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
```

```
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:247782233.978859 USDC)
2023-11-16 05:05:48
                         event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value: 247782234.978859 USDC)
2023-11-16 05:05:48
                         event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:247782234.978859 USDC)
2023-11-16 05:05:48 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex: 251572145315357792, protocolFee: 2922535.486173084910871992)
2023-11-16 05:05:48 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,size:-53540.465544043725790979,amount:247782234.97885
9, takenSize:0, takenValue:0, entryNotional:1525523323.133207905025301074, feeRatio:0.3%, sqrtPX96:22000.05139
1797069616072, mark: 22000.0)
2023-11-16 05:05:48 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:913114544.998850395281307979,
size:-13760.292811377905717605, entryNotional:392070696.502087014346630411,
entrySocialLossIndex:17.948381608003259905, entryFundingIndex:0.0))
ammFund: 11280905623.050926
distributeFund: 11280905623.050926
the diff: 0
2023-11-16 05:05:58 \longrightarrow request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::update(expiry:2023-11-24)
0x81adaec71c597e9f1d03e764bae81b2fc874e3ea528f89899be82171eb1c0eb2, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 197672
2023-11-16 05:06:01 — minted => LOCAL blockNumber: 196, confirmations: 1, gasUsed: 124949(63.21%),
gasPrice: 1.0Gwei, tx fee: 0.000125
2023-11-16 05:06:01 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:807005256, spot:22000.0,
raw:2200000000000000000000000))
2023-11-16 05:06:01
                        event => #1 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateAccState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,state:(time:807005256,
raw:2200000000000000000000, initTime:2077-10-11T06:35:28.000Z, initMark:220000000000000000000,
2023-11-16 05:06:01 —
                        event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateAmmStatus(expiry:2023-11-
24, status:SETTLED, sqrtPX96:22000.051391797069616072, mark:22000.0)
ammFund: 11280905623.050926
distributeFund: 11280905623.050926
the diff: 0
2023-11-16 05:06:10 \leftarrow request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
2023-11-16 05:06:13 — submitted => LOCAL txHash:
0x203cdccff4b854f7ef67d6fe981d8752012a7a46d51c07d8a9649d0bb52c1506, nonce: 57, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 264006
2023-11-16 05:06:13 - minted => LOCAL blockNumber: 197, confirmations: 1, gasUsed: 136952(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000137
2023-11-16 05:06:13 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:06:13
                          event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:1002458799.650623 USDC)
2023-11-16 05:06:13 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1002458799.650623 USDC)
                        event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
2023-11-16 05:06:13 —
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:1002458799.650623 USDC)
2023-11-16 05:06:13 —
                          event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,settlement:22000.0,balance:1002458799.650623,operator
```

```
:[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:06:13 \vdash request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955)
0x3e08472ed56fd56160c2c82bf9a3663c3e80d7c88f5b3463b6b142692fb729d1, nonce: 58, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 264006
2023-11-16 05:06:16 — minted => LOCAL blockNumber: 198, confirmations: 1, gasUsed: 136952(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000137
2023-11-16 05:06:16 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:06:16 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:295284982.544739 USDC)
2023-11-16 05:06:16 — event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:295284982.544739 USDC)
2023-11-16 05:06:16 - event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:295284982.544739 USDC)
2023-11-16 05:06:16 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, settlement:22000.0, balance:295284982.544739, operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:06:16 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f)
0x8bb59406d1847c45695e5b1cc0a0c9f0fdfb373348cc40adff9dcfc4231fcbe6, nonce: 59, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 107846
2023-11-16 05:06:17 ├─ minted => LOCAL blockNumber: 199, confirmations: 1, gasUsed: 66208(61.39%),
gasPrice: 1.0Gwei, tx fee: 0.000066
2023-11-16 05:06:17 ├─ event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:06:17 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,settlement:22000.0,balance:0.0,operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:06:17 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E)
2023-11-16 05:06:22 — submitted => LOCAL txHash:
0x178ff53119d67bacbb95149aa8b810b03b49fc8b27a19b8dc04e7d498dcdfd49, nonce: 60, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 255546
2023-11-16 05:06:22 — minted => LOCAL blockNumber: 200, confirmations: 1, gasUsed: 132564(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000133
2023-11-16 05:06:22 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:06:22 |--
                        event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:22865.648482 USDC)
                         event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:06:22 —
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:22865.648482 USDC)
                          event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
2023-11-16 05:06:22 —
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:22865.648482 USDC)
2023-11-16 05:06:22 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, settlement:22000.0, balance:22865.648482, operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:06:22 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097)
```

```
0xaf3fc36754006da819581999005064078112725899b91c228e9a53a862e50ede, nonce: 61, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 107846
2023-11-16 05:06:24 — minted => LOCAL blockNumber: 201, confirmations: 1, gasUsed: 66208(61.39%),
gasPrice: 1.0Gwei, tx fee: 0.000066
2023-11-16 05:06:24 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:06:24 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, settlement:22000.0, balance:0.0, operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16\ 05:06:24 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906)
0x493c43076e9ea663f590fbd1c7a10890610aec3c2a1ebb82f8e2deb41bdf0476, nonce: 62, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 264006
2023-11-16 05:06:27 — minted => LOCAL blockNumber: 202, confirmations: 1, gasUsed: 136952(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000137
2023-11-16 05:06:27 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:06:27 — event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:18702.00831 USDC)
2023-11-16 05:06:27 \longrightarrow event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:18702.00831 USDC)
2023-11-16 05:06:27 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:18702.00831 USDC)
2023-11-16 05:06:27 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,settlement:22000.0,balance:18702.00831,operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:06:27 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC)
2023-11-16 05:06:31 — submitted => LOCAL txHash:
0xe0497e9f49ac70240d06cfee52eefddd79728cf92889881fd8a280c2f07656d1, nonce: 63, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 376343
2023-11-16 05:06:31 — minted => LOCAL blockNumber: 203, confirmations: 1, gasUsed: 195227(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000195
2023-11-16 05:06:31 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:2023-11-24,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:85350, tickUpper:117550, fee:8767135.83980834
7335062512, pic: (balance: 9980124720.532721347112468758, size: 16850.939084874826015337,
entryNotional:370721525.867288054686431591, entrySocialLossIndex:0.0, entryFundingIndex:0.0),operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,tip:0.0)
2023-11-16 05:06:31 - event => #1 [SynFuturesV3-BTC-USDC-
\verb|LINK] 0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader: 0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader: 0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader: 0x659174E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader: 0x659174E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E91B2db24E9
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:06:31
                                    event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:9980123854.532679 USDC)
                                   event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:06:31
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:9980123854.532679 USDC)
2023-11-16 05:06:31
                                    event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:9980123854.532679 USDC)
2023-11-16 05:06:31
                                    event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, settlement:22000.0, balance:9980123854.532679, operator
:[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
ammFund: 2996418.666093
```

```
distributeFund: 2996418.666090015
the diff: 0.0000029853545129299164

✓ random actions in futures (294567ms)
2023-11-16 05:06:43 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 1000000.0, tickDelta: 16096, expiry: 4294967295, deadline: 429496729 }])
2023-11-16 05:06:51 — submitted => LOCAL txHash:
0x145accceae4ce1ddde230dc8fde6c258a0db805c64364886eff8ca17383b783d, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 801848
2023-11-16 05:06:51 ├─ minted => LOCAL blockNumber: 95, confirmations: 108, gasUsed: 475169(59.26%),
gasPrice: 1.0Gwei, tx fee: 0.000475
2023-11-16 05:06:51 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081798, spot:25600.0,
raw:25600000000000000000000000))
2023-11-16 05:06:51 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:06:51 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateAmmStatus(expiry:PERPETUAL, status:TRADING, sqrtPX96:25600.0, mark:25600.0)
2023-11-16 05:06:51 — event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1000000.0 USDC)
2023-11-16 05:06:51 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:1000000.0 USDC)
2023-11-16 05:06:51 - event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:1000000.0 USDC)
2023-11-16 05:06:51 — event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:1000000.0 USDC)
2023-11-16 05:06:51 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:85400, tickUpper:117600, range:
(liquidity:3466.290595521304999266, entryFeeIndex:0.0, balance:1000000.0, sqrtEntryPX96:25600.0))
2023-11-16 05:06:53 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -26.810954906919626973, amount: 898957.65152813436372602, limitTick: -8388608, deadline: 429496729
2023-11-16 05:07:01 — submitted => LOCAL txHash:
0xbe76a6821061e9e6850bb57acc1a00d65a605f0bbd74e87b1c3ad13f79f5e26d, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 564821
2023-11-16 05:07:01 \longrightarrow minted => LOCAL blockNumber: 96, confirmations: 107, gasUsed: <math>321110(56.85\%),
gasPrice: 1.0Gwei, tx fee: 0.000321
2023-11-16 05:07:01 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700081809, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:07:01 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:07:01 \longrightarrow event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:898957.651529 USDC)
2023-11-16 05:07:01 —
                                    event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, quantity:898957.651529 USDC)
2023-11-16 05:07:01
                                   event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:898957.651529 USDC)
                                    event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:07:01
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:898957.651529 USDC)
                                  event => #6 [SynFuturesV3-BTC-USDC-
2023-11-16 05:07:01 —
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:265480894807035894,protocolFee:306.744642986736459535)
2023-11-16 05:07:01
                                  event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN] 0 \times 976 EA74026 E726554 dB657 fA54763 abd 0 C3a0aa9, size: -26.810954906919626973, amount: 898957.651529, take abd 0 C3a0aa9, size: -26.810954906919626973, amount: 898957.651529, take 0 C3a0aa9, size: -26.8109606973, amount: 898957.651529, 
nSize:0,takenValue:0,entryNotional:306744.64298673645953481,feeRatio:0.3%,sqrtPX96:5113.16072142111105059
```

```
,mark:25600.0)
2023-11-16 05:07:01 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:897730.67295705305416186,
size:-26.810954906919626973, entryNotional:306744.64298673645953481, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
ammFund: 1898957.651529
distributeFund: 1898957.651529
the diff: 0
2023-11-16 05:07:14 - request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::place(args:[{ expiry: 4294967295,
size: 2.0, amount: 10216.100743627113702179, tick: 85390, deadline: 429496729 }])
0x1e28c7caeea79d66ef6eb0835c693cf45dcb7099e4083cdf71be3b39626759ca, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 460167
gasPrice: 1.0Gwei, tx fee: 0.000254
2023-11-16 05:07:18 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10216.100744 USDC)
2023-11-16 05:07:18 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, quantity:10216.100744 USDC)
2023-11-16 05:07:18 \( \to \) event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10216.100744 USDC)
2023-11-16 05:07:18 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10216.100744 USDC)
                         event => #4 [SynFuturesV3-BTC-USDC-
2023-11-16 05:07:18 —
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Place(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:85390,nonce:0,order:(balance:10216.100744,
size:2.0))
ammFund: 1909173.752273
distributeFund: 1909173.752273
the diff: 0
2023-11-16 05:07:29 - request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 4055, expiry: 4294967295, deadline: 429496729 }])
0x82318750b72dcd47c03c6487942b9b83ff62afb7b80df5a6a005cbe8abab9f75, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 571956
2023-11-16 05:07:33 ├─ minted => LOCAL blockNumber: 125, confirmations: 78, gasUsed: 326469(57.08%),
gasPrice: 1.0Gwei, tx fee: 0.000326
2023-11-16 05:07:33
                         event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
2023-11-16 05:07:33
                       event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,quantity:10000.0 USDC)
2023-11-16 05:07:33
                        event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
                        event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:07:33 —
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
                        event => #4 [SynFuturesV3-BTC-USDC-
2023-11-16 05:07:33
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:81300,tickUpper:89450,range:
(liquidity:1796.161091490911033483, entryFeeIndex:0.265480894807035894, balance:10000.0,
sgrtEntryPX96:5113.16072142111105059))
2023-11-16 05:07:35 |-- request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -0.012561960563033924, amount: 13.424070463837590414, limitTick: -8388608, deadline: 429496729 }])
0xffbb6f33c52621974ff226c9fc2ccd1d9bc5a1af1b48f0c1f926fb0e30f99e81, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 502787
2023-11-16 05:07:43 - minted => LOCAL blockNumber: 126, confirmations: 77, gasUsed: 281341(55.96%),
gasPrice: 1.0Gwei, tx fee: 0.000281
2023-11-16 05:07:43 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
```

```
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700257159, spot:5113.16072142,
raw:5113160721420000000000))
2023-11-16 05:07:43 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:07:43 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:13.424071 USDC)
2023-11-16 05:07:43
                        event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:13.424071 USDC)
2023-11-16 05:07:43
                       event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:13.424071 USDC)
2023-11-16 05:07:43
                         event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:13.424071 USDC)
2023-11-16 05:07:43
                        event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:265517493271662661,protocolFee:306.808842204042188999)
2023-11-16 05:07:43
                        event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
:0, takenValue:0, entryNotional:64.199217305729463695, feeRatio:0.3%, sqrtPX96:5108.050371813556851089, mark:5
113.16072142)
2023-11-16 05:07:43 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:13.167274130777082145,
size:-0.012561960563033924, entryNotional:64.199217305729463695, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:07:45 request => LOCAL [UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -1.0, amount: 1073.717246471394752632, limitTick: -8388608, deadline: 429496729 }])
0x500618141504f34ce8ba65b9fe9a978832b04cae50889736561acf12478489c5, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 637340
2023-11-16 05:07:53 - minted => LOCAL blockNumber: 127, confirmations: 76, gasUsed: 369190(57.93%),
gasPrice: 1.0Gwei, tx fee: 0.000369
2023-11-16 05:07:53 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState:(time:1700257168, spot:5113.16072142,
raw:5113160721420000000000))
2023-11-16 05:07:53 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 0.014278911340329298)
2023-11-16 05:07:53
                       event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161954235708038668275043155490079938132223662559871227847151
45216)
                         event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:07:53
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:1073.717247 USDC)
2023-11-16 05:07:53
                        event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, quantity:1073.717247 USDC)
2023-11-16 05:07:53
                         event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:1073.717247 USDC)
2023-11-16 05:07:53
                         event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:1073.717247 USDC)
2023-11-16 05:07:53
                         event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:265517493271662661,protocolFee:311.916892575855745851)
2023-11-16 05:07:53
                         event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL, trader:
00000, takenValue:5108050371813556851089, entryNotional:5108.050371813556851089, feeRatio:0.3%, sqrtPX96:5108
.050371813556851089, mark:5113.16072142)
```

```
2023-11-16 05:07:53 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,pic:(balance:1053.285045512745772595, size:-1.0,
entryNotional:5108.050371813556851089, entrySocialLossIndex:0.0,
entryFundingIndex:-0.000532328084004495))
2023-11-16 05:07:54 request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::cancel(arg:{ ticks: 85390,
expiry: 4294967295, deadline: 429496729 })
2023-11-16 05:08:01 — submitted => LOCAL txHash:
0x396e377118f55f44207cbab5c121df53965a10ef246d60dc9bbe180653a2d314, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 391382
gasPrice: 1.0Gwei, tx fee: 0.000230
2023-11-16 05:08:01 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700257175, spot:5113.16072142,
raw:5113160721420000000000))
2023-11-16 05:08:01 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161954235706629787138571196572313713656027749203259344594233
12749)
2023-11-16 05:08:01 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Cancel(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:85390,nonce:0,fee:15.324151115440670553,pic:
(balance:10231.424895115440670553, size:1.0, entryNotional:5108.050371813556851089,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:08:01 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, funding: 0.011519852885592941)
2023-11-16 05:08:01 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, funding:0.0)
2023-11-16 05:08:01 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,pic:(balance:10231.436414968326263494, size:1.0,
entryNotional:5108.050371813556851089, entrySocialLossIndex:0.0, entryFundingIndex:0.011519852885592941))
2023-11-16 05:08:05  request => LOCAL [UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 13.504738569470461011, amount: 45460.43500497728712931, limitTick: 8388607, deadline: 429496729 }])
0x4921595f3a5a988377628c9387dcb13d07e7b7fa85b4445f4be4fd4befdb8c49, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 660872
2023-11-16 05:08:15 ├─ minted => LOCAL blockNumber: 130, confirmations: 73, gasUsed: 383636(58.05%),
gasPrice: 1.0Gwei, tx fee: 0.000384
2023-11-16 05:08:15 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700343588, spot:5113.16072142,
raw:51131607214200000000000))
2023-11-16 05:08:15 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161954218314394694859798283743188439986063046265297193012649
13442)
2023-11-16 05:08:15 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:45460.435005 USDC)
2023-11-16 05:08:15 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,quantity:45460.435005 USDC)
2023-11-16 05:08:15
                         event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:45460.435005 USDC)
                         event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:08:15
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:45460.435005 USDC)
2023-11-16 05:08:15 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:313711059524199664,protocolFee:396.455663918788531363)
2023-11-16 05:08:15
                        event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,size:13.504738569470461011,amount:45460.435005,takenS
ize:0, takenValue:0, entryNotional:84538.771342932785511953, feeRatio:0.3%, sqrtPX96:7666.786026644628972192,
```

```
mark:5113.16072142)
2023-11-16 05:08:15 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:45122.279919628268857952,
size:13.504738569470461011, entryNotional:84538.771342932785511953, entrySocialLossIndex:0.0,
entryFundingIndex:142.220812338991739938))
ammFund: 1965721.328596
distributeFund: 1965721.328596
the diff: 0
2023-11-16 05:08:27 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 89450,
tickLower: 81300, target: 0x90f79bf6eb2c4f870365e785982e1f101e93b906, expiry: 4294967295, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
0x5bb90608690badcc4a9c2a7d807253edc97ebc4d5fd30ed4e6b667f17d3146b7, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 591411
2023-11-16 05:08:34 ├─ minted => LOCAL blockNumber: 131, confirmations: 72, gasUsed: 320269(54.15%),
gasPrice: 1.0Gwei, tx fee: 0.000320
2023-11-16 05:08:34 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700343607, spot:5113.16072142,
raw:5113160721420000000000))
2023-11-16 05:08:34 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161954219310566759612382412596318825845969220478220985161021
41371)
2023-11-16 05:08:34 — event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1.0 USDC)
2023-11-16 05:08:34 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1.0 USDC)
2023-11-16 05:08:34 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:1.0 USDC)
2023-11-16 05:08:34 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, funding:0.0)
2023-11-16 05:08:34 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:3611.861022984687962413,
size:-4.604425639659766834, entryNotional:35301.146154867757924958, entrySocialLossIndex:0.0,
entryFundingIndex:-4.819316227184032013))
2023-11-16 05:08:34 —
                         event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:81300,tickUpper:89450,fee:86.62914530116730
3555,pic:(balance:3611.861022984687962413, size:-4.604425639659766834,
entryNotional:35301.146154867757924958, entrySocialLossIndex:0.0,
entryFundingIndex:-4.819316227184032013), operator:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,tip:1.0)
ammFund: 1965720.328596
distributeFund: 1965720.328596
the diff: 0
2023-11-16 05:08:45  request => LOCAL [UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 5.0, amount: 23507.032067039981837871, limitTick: 8388607, deadline: 429496729 }])
0x7d760cc14f09f0cc99df0acdd3ee0a69917bd09fd3aec7f36fa904e2dd37c783, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 507138
2023-11-16 05:08:55 ├─ minted => LOCAL blockNumber: 132, confirmations: 71, gasUsed: 301384(59.43%),
gasPrice: 1.0Gwei, tx fee: 0.000301
                          event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
2023-11-16 05:08:55
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700343626, spot:5113.16072142,
raw:5113160721420000000000))
2023-11-16 05:08:55
                          event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161954220165292903290900848111438759434999390919897841700978
99348)
2023-11-16 05:08:55
                          event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,to:
```

```
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:23507.032068 USDC)
2023-11-16 05:08:55 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,quantity:23507.032068 USDC)
2023-11-16 05:08:55 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:23507.032068 USDC)
2023-11-16 05:08:55 — event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:23507.032068 USDC)
                          event => #6 [SynFuturesV3-BTC-USDC-
2023-11-16 05:08:55
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:351684373929383253,protocolFee:440.331178119942389352)
2023-11-16 05:08:55 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,size:5.0,amount:23507.032068,takenSize:0,takenValue:0
entryNotional:43875.514201153857988567, feeRatio:0.3%, sqrtPX96:10043.638832363016834695, mark:5113.1607214
2)
2023-11-16 05:08:55 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,funding:-15.167472242532724063)
2023-11-16 05:08:55 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:68438.642458581120701934,
size:18.504738569470461011, entryNotional:128414.28554408664350052, entrySocialLossIndex:0.0,
entryFundingIndex:141.097690098267944788))
2023-11-16 05:08:55 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 117600,
tickLower: 85400, target: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc, expiry: 4294967295, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
0x061894f6abe09b19bf224aeff512f3b717224305a918665e9d0d3034c6201bf6, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 422709
2023-11-16 05:09:01 ├─ minted => LOCAL blockNumber: 133, confirmations: 70, gasUsed: 230150(54.45%),
gasPrice: 1.0Gwei, tx fee: 0.000230
2023-11-16 05:09:01 \( \to \) event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700343633, spot:5113.16072142,
raw:5113160721420000000000))
2023-11-16 05:09:01 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161954220982879036392079020564957113095328699909247416125338
29712)
2023-11-16 05:09:01 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, funding:0.0)
2023-11-16 05:09:01 —
                        event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:(balance:923793.098452385208318888,
size:12.92320393767196672, entryNotional:129795.992906948813214375, entrySocialLossIndex:0.0,
entryFundingIndex:140.698230066131357776))
2023-11-16 05:09:01 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tickLower:85400,tickUpper:117600,fee:1219.04023794321
9186317, pic: (balance: 923793.098452385208318888, size: 12.92320393767196672,
entryNotional:129795.992906948813214375, entrySocialLossIndex:0.0,
entryFundingIndex:140.698230066131357776), operator:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tip:0.0)
ammFund: 1989227.360664
distributeFund: 1989227.360664
the diff: 0
2023-11-16 05:09:10 - request => LOCAL [UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 4055, expiry: 4294967295, deadline: 429496729 }])
2023-11-16 05:09:14 — submitted => LOCAL txHash:
0x563d51e0fae47acac2e84b902a3fbee24d1407cf130acd78aeb0473eb7d2723c, nonce: 12, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 571719
2023-11-16 05:09:14 — minted => LOCAL blockNumber: 134, confirmations: 69, gasUsed: 343569(60.09%),
gasPrice: 1.0Gwei, tx fee: 0.000344
                          event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:09:14 —
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,to:
```

```
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:09:14 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,quantity:10000.0 USDC)
2023-11-16 05:09:14 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:10000.0 USDC)
2023-11-16 05:09:14 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:09:14
                        event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,tickLower:88050,tickUpper:96200,range:
(liquidity:1282.507118497291879005, entryFeeIndex:0.351684373929383253, balance:10000.0,
sqrtEntryPX96:10043.638832363016834695))
2023-11-16 05:09:18 - request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::place(args:[{ expiry: 4294967295,
size: -5.0, amount: 75279.034181795143837141, tick: 96200, deadline: 429496729 }])
0xefa8f20ad8bf48517fe1db9cae7c88ec788aba30a255767de6c225673e370aee, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 424313
2023-11-16 05:09:23 ├─ minted => LOCAL blockNumber: 160, confirmations: 43, gasUsed: 248857(58.65%),
gasPrice: 1.0Gwei, tx fee: 0.000249
2023-11-16 05:09:23 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:75279.034182 USDC)
2023-11-16 05:09:23 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, quantity:75279.034182 USDC)
2023-11-16 05:09:23 \leftarrow event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:75279.034182 USDC)
2023-11-16 05:09:23 - event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:75279.034182 USDC)
2023-11-16 05:09:23
                         event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Place(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:96200,nonce:0,order:(balance:75279.034182,
size:-5.0))
2023-11-16\ 05:09:25 \vdash request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 2.344977536900088595, amount: 7411.630786050788200662, limitTick: 8388607, deadline: 429496729 }])
0x8968daf6e0fdfb0f65d6e3b88d4702999d71e2ef373cba6559e9214bb933bbd9, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 473406
2023-11-16 05:09:35 ├─ minted => LOCAL blockNumber: 161, confirmations: 42, gasUsed: 279460(59.03%),
gasPrice: 1.0Gwei, tx fee: 0.000279
2023-11-16 05:09:35 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState:(time:1700346177, spot:15033.24118283,
raw:15033241182830000000000))
2023-11-16 05:09:35 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161953721053401347543763518984838184037623628369802010600085
35752)
2023-11-16 05:09:35
                          event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7411.630787 USDC)
2023-11-16 05:09:35
                          event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:7411.630787 USDC)
2023-11-16 05:09:35
                         event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:7411.630787 USDC)
2023-11-16 05:09:35
                          event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:7411.630787 USDC)
2023-11-16 05:09:35
                          event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
```

```
UpdateFeeState(expiry:PERPETUAL,feeIndex:419136822259040936,protocolFee:469.167259834227970902)
2023-11-16 05:09:35 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,size:2.344977536900088595,amount:7411.630787,takenSiz
e:0, takenValue:0, entryNotional:28836.08171428558154979, feeRatio:0.3%, sqrtPX96:15055.806836359028767428, ma
rk:15033.24118283)
2023-11-16 05:09:35 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:-1.899920372329115349)
2023-11-16 05:09:35 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:7217.279175663781410289,
size:2.332415576337054671, entryNotional:28681.607858742327855788, entrySocialLossIndex:0.0,
entryFundingIndex:287.614299274325862088))
2023-11-16 05:09:36 - request => LOCAL [UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 5.0, amount: 7941.847822551838796204, limitTick: 8388607, deadline: 429496729 }])
0x7a823d170ec4df938ce6e6c0476a360534681a41aa230cfdf8d7a4897ae9c3a8, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 649284
2023-11-16 05:09:44 - minted => LOCAL blockNumber: 162, confirmations: 41, gasUsed: 353497(54.44%),
gasPrice: 1.0Gwei, tx fee: 0.000353
2023-11-16 05:09:44 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700346187, spot:15033.24118283,
raw:15033241182830000000000))
2023-11-16 05:09:44 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161953721062931651135284589596145366593737485962280520692779
19916)
2023-11-16 05:09:44 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7941.847823 USDC)
2023-11-16 05:09:44 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,quantity:7941.847823 USDC)
2023-11-16 05:09:44 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:7941.847823 USDC)
2023-11-16 05:09:44 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:7941.847823 USDC)
2023-11-16 05:09:44
                         event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:419136822259040936,protocolFee:544.44629401602311474)
2023-11-16 05:09:44 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
00000, takenValue:75279034181795143837140, entryNotional:75279.03418179514383714, feeRatio:0.3%, sqrtPX96:150
55.806836359028767428, mark: 15033.24118283)
2023-11-16 05:09:44
                        event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,pic:(balance:7640.731686272819424651, size:5.0,
entryNotional:75279.03418179514383714, entrySocialLossIndex:0.0,
entryFundingIndex:287.611687508871113388))
2023-11-16 05:09:47 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::liquidate(expiry:PERPETUAL,target:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,size:2.0,amount:10000.0)
0x97ed87d37cce3aae7a499ba15d8fdf1384e0712eca7bf7788d8eb75751b18bc6, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 405720
2023-11-16 05:09:54 — minted => LOCAL blockNumber: 188, confirmations: 15, gasUsed: 234786(57.87%),
gasPrice: 1.0Gwei, tx fee: 0.000235
2023-11-16 05:09:54
                        event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700348708, spot:14000.0,
raw:140000000000000000000000))
2023-11-16 05:09:54
                        event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161953832462405136940761965414815978385784768907958868814396
```

```
58073)
2023-11-16 05:09:54 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,pic:(balance:4584.439011763691654791, size:3.0,
entryNotional:45167.420509077086302284, entrySocialLossIndex:0.0,
entryFundingIndex:287.611687508871113388))
2023-11-16 05:09:54 —
                          event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:09:54 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:10000.0 USDC)
2023-11-16 05:09:54 - event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:10000.0 USDC)
2023-11-16 05:09:54 — event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:09:54 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,funding:-71.859852872227376423)
2023-11-16 05:09:54 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0, funding:-61.613172094007211174)
2023-11-16 05:09:54 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:20140.098825206674592552,
size:4.332415576337054671, entryNotional:58793.221531460385390644, entrySocialLossIndex:0.0,
entryFundingIndex:256.805101461867507801))
2023-11-16 05:09:54 - event => #10 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Liquidate(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,amount:10000.0,mark:14000.0,target:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,size:2.0)
ammFund: 2099859.873456
distributeFund: 2099859.873456
the diff: 0
2023-11-16 05:10:05 \vdash request => LOCAL [UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 4055, expiry: 4294967295, deadline: 429496729 }])
2023-11-16 05:10:09 — submitted => LOCAL txHash:
0x29adf1c7a9a0f209c5c313e7d83dac1c01ed586ef0b80a658ee905787d17f17a, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 545001
2023-11-16 05:10:09 — minted => LOCAL blockNumber: 189, confirmations: 14, gasUsed: 326364(59.88%),
gasPrice: 1.0Gwei, tx fee: 0.000326
2023-11-16 05:10:09 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
2023-11-16 05:10:09 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,quantity:10000.0 USDC)
                         event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:10:09 —
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
                         event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:10:09 —
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:10:10
                          event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,tickLower:92100,tickUpper:100250,range:
(liquidity:1046.737996708928508109, entryFeeIndex:0.419136822259040936, balance:10000.0,
sgrtEntryPX96:15055.806836359028767428))
2023-11-16 05:10:10 |-- request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:PERPETUAL, target:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0, size:1.0)
2023-11-16 05:10:18 |— submitted => LOCAL txHash:
0x219e36b8f525c2e94817c5dcdb28100ea662222be1372df277a4d45df98212a8, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 369096
2023-11-16 05:10:18 - minted => LOCAL blockNumber: 190, confirmations: 13, gasUsed: 234174(63.45%),
gasPrice: 1.0Gwei, tx fee: 0.000234
2023-11-16 05:10:18 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
```

```
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700348732, spot:14000.0,
raw:1400000000000000000000000))
2023-11-16 05:10:18 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161953833522931659614039022455746240652597725619100546292327
42025)
2023-11-16 05:10:18 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,pic:(balance:3056.292674509127769861, size:2.0,
entryNotional:30111.613672718057534856, entrySocialLossIndex:0.0,
entryFundingIndex:287.611687508871113388))
2023-11-16 05:10:18 —
                                  event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:437557863347107960,protocolFee:558.748667339820846551)
2023-11-16 05:10:18 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,funding:-31.099865723770002467)
2023-11-16 05:10:18 —
                                   event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 686.417744585646327559)
2023-11-16 05:10:18 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:PERPETUAL,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0, size:-1.0, takenSize:0, takenValue:0, entryNotional:1430
2.373323797731810468, feeRatio:0.3%, sqrtPX96:13586.643672877351913455, mark:14000.0, operator:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955)
ammFund: 2109859.873456
distributeFund: 2109859.873456
the diff: 0
2023-11-16 05:10:30 \vdash request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 2.0, amount: 12565.72074644897928571, limitTick: 8388607, deadline: 429496729 }])
2023-11-16 05:10:39 - submitted => LOCAL txHash:
0x8c27fd3541681bd7a590be78e78147323dc00006bef416c2685a5bac8628467f, nonce: 6, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 460962
2023-11-16 05:10:39 — minted => LOCAL blockNumber: 191, confirmations: 12, gasUsed: 271204(58.83%),
gasPrice: 1.0Gwei, tx fee: 0.000271
2023-11-16 05:10:39 —
                                     event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700348754, spot:14000.0,
raw:1400000000000000000000000))
2023-11-16 05:10:39 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161953833164775047779445401319238082203633679642904073295607
84315)
2023-11-16 05:10:39 -
                                     event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:12565.720747 USDC)
2023-11-16 05:10:39 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, quantity:12565.720747 USDC)
2023-11-16 05:10:39 |--
                                   event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:12565.720747 USDC)
2023-11-16 05:10:39 — event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:12565.720747 USDC)
2023-11-16 05:10:39 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:477945322501889653,protocolFee:590.106097990442848188)
2023-11-16 05:10:39 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, size:2.0, amount:12565.720747, takenSize:0, takenValue:0
,entryNotional:31357.430650622001636309,feeRatio:0.3%,sqrtPX96:19319.786948834486843108,mark:14000.0)
2023-11-16 05:10:39
                                     event => #8 [SynFuturesV3-BTC-USDC-
LINK] 0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee (trader: additional content of the content of the
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:-0.830433781244326561)
2023-11-16 05:10:39 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:32579.559415822942259445,
```

```
size:6.332415576337054671, entryNotional:90150.652182082387026953, entrySocialLossIndex:0.0,
entryFundingIndex:256.613422301220957627))
2023-11-16 05:10:40 request => LOCAL [UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 96200,
tickLower: 88050, target: 0x15d34aaf54267db7d7c367839aaf71a00a2c6a65, expiry: 4294967295, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
0x1e856fd0571c696b0edd818085ee72cb9b85668d1e887972d9bd6cb2542722be, nonce: 13, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 417443
gasPrice: 1.0Gwei, tx fee: 0.000230
2023-11-16 05:10:46 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700348760, spot:14000.0,
raw:1400000000000000000000000))
2023-11-16 05:10:46 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:1157920892373161953834534265524278803480660432104850692763329813305778312
39941)
2023-11-16 05:10:46 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65, funding:0.0)
2023-11-16 05:10:46 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,pic:(balance:-6306.454133094331428401,
size:-2.344977536900088595, entryNotional:45304.466412712372919652, entrySocialLossIndex:0.0,
entryFundingIndex:-117.89490833529137908))
2023-11-16 05:10:46 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:PERPETUAL, trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,tickLower:88050,tickUpper:96200,fee:161.9305653324599
41461,pic:(balance:-6306.454133094331428401, size:-2.344977536900088595,
entryNotional:45304.466412712372919652, entrySocialLossIndex:0.0,
entryFundingIndex:-117.89490833529137908), operator:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,tip:0.0)
ammFund: 2122425.594203
distributeFund: 2122425.594203
the diff: 0
ammFund: 2122425.594203
distributeFund: 2122425.594203
the diff: 0
2023-11-16 05:11:11 \leftarrow request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906)
0x8b2fdd80e273e1398ccda0baee9941022f70fec315c2973680f71efd589f21d7, nonce: 59, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 184662
2023-11-16 05:11:13 — minted => LOCAL blockNumber: 195, confirmations: 8, gasUsed: 102324(55.41%),
gasPrice: 1.0Gwei, tx fee: 0.000102
2023-11-16 05:11:13 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, funding:0.0)
2023-11-16 05:11:13 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, funding:-520.648155522279054007)
2023-11-16 05:11:13 —
                       event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:13
                         event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:1223.682714241848275388,shortSocialLos
sIndex:0.0,insuranceFund:0.0)
2023-11-16 05:11:13
                         event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,settlement:19319.786948834486843108,balance:0.0,opera
tor:[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:13 \vdash request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955)
0x003706adcb23f1ee9ef14d294583d01df7caa82e587086be6cc63283b85db446, nonce: 60, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 273545
```

```
2023-11-16 05:11:16 - minted => LOCAL blockNumber: 196, confirmations: 7, gasUsed: 141900(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000142
2023-11-16 05:11:16 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:0.0)
2023-11-16 05:11:16 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:-2.339382065110699902)
2023-11-16 05:11:16 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:16 — event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:57018.620177 USDC)
2023-11-16 05:11:16 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:57018.620177 USDC)
2023-11-16 05:11:16 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:57018.620177 USDC)
2023-11-16 05:11:16 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, settlement:19319.786948834486843108, balance:57018.620
177, operator: [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:16 \leftarrow request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f)
0x387a3381a7000eb32300e04f80d9504679e7b06e212ff358fd6d8f2c19b9aab4, nonce: 61, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 273569
2023-11-16 05:11:19 — minted => LOCAL blockNumber: 197, confirmations: 6, gasUsed: 141913(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000142
2023-11-16 05:11:19 — event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,funding:0.0)
2023-11-16 05:11:19 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,funding:2130.752225997892884517)
2023-11-16 05:11:19 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:19 — event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:277018.787127 USDC)
2023-11-16 05:11:19 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:277018.787127 USDC)
2023-11-16 05:11:19 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:277018.787127 USDC)
                        event => #6 [SynFuturesV3-BTC-USDC-
2023-11-16 05:11:19 —
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,settlement:19319.786948834486843108,balance:277018.78
7127, operator: [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:19 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E)
2023-11-16 05:11:21 — submitted => LOCAL txHash:
0x8e76584bd2f22704f8dbb9a4dc95c1cf5788f9d1af62da4ecc6c43368d148103, nonce: 62, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 154388
2023-11-16 05:11:21 — minted => LOCAL blockNumber: 198, confirmations: 5, gasUsed: 82340(53.33%),
gasPrice: 1.0Gwei, tx fee: 0.000082
2023-11-16 05:11:21
                          event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, funding:0.0)
2023-11-16 05:11:21
                         event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, funding:-117.894376007207374585)
```

```
2023-11-16 05:11:21 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:21 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:2057.456241195522657125,shortSocialLos
sIndex:0.0,insuranceFund:0.0)
2023-11-16 05:11:21 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, settlement:19319.786948834486843108, balance:0.0, opera
tor:[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:21 \leftarrow request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0)
0xd869ea18265c76f2319e7c1ed037e58f5a62928d7749f332d9fb49ef19cd6502, nonce: 63, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 273545
2023-11-16 05:11:24 — minted => LOCAL blockNumber: 199, confirmations: 4, gasUsed: 141900(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000142
2023-11-16 05:11:24 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0, funding:0.0)
2023-11-16 05:11:24 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,funding:-62.735389713749545806)
2023-11-16 05:11:24 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:24 —
                          event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7406.605027 USDC)
2023-11-16 05:11:24 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7406.605027 USDC)
2023-11-16 05:11:24 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:7406.605027 USDC)
2023-11-16 05:11:24 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0xdD2FD4581271e230360230F9337D5c0430Bf44C0, settlement:19319.786948834486843108, balance:7406.6050
27, operator: [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:24 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097)
2023-11-16 05:11:30 - submitted => LOCAL txHash:
0x8f8d017bc29017e7b39dac708948806257d068e72ba950f4ffc83da6e82ed881, nonce: 64, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 350465
2023-11-16 05:11:30 — minted => LOCAL blockNumber: 200, confirmations: 3, gasUsed: 181802(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000182
2023-11-16 05:11:30 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Fill(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:96200,nonce:0,fee:225.837102545385431511,pic:
(balance:75504.871284545385431511, size:-5.0, entryNotional:75279.03418179514383714,
entrySocialLossIndex:0.0, entryFundingIndex:-151.241136322328849968),operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,tip:0.0)
2023-11-16 05:11:30
                          event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, funding:0.0)
                          event => #2 [SynFuturesV3-BTC-USDC-
2023-11-16 05:11:30
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, funding:166.73113993518735444)
2023-11-16 05:11:30
                          event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, funding:256.232472799110747544)
2023-11-16 05:11:30
                          event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:30
                         event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
```

```
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:76993.651085 USDC)
2023-11-16 05:11:30 \longrightarrow event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:76993.651085 USDC)
2023-11-16 05:11:30 - event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:76993.651085 USDC)
2023-11-16 05:11:30 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, settlement:19319.786948834486843108, balance:76993.651
085,operator:[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:30 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL, target:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc)
0xecd9de90476459b166a32b6713625ccddec751278371d27064cc435d29c8a5fc, nonce: 65, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 388817
2023-11-16 05:11:36 — minted => LOCAL blockNumber: 201, confirmations: 2, gasUsed: 201697(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000202
2023-11-16 05:11:36 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:PERPETUAL,trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,tickLower:92100,tickUpper:100250,fee:61.5570917336560
01705, pic: (balance: 7796.827469723438984436, size: -1.0, entryNotional: 19319.786948834486843108,
entrySocialLossIndex:0.0, entryFundingIndex:-117.89490833529137908),operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8,tip:0.0)
2023-11-16 05:11:36 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,funding:0.0)
2023-11-16 05:11:36 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,funding:0.0)
2023-11-16 05:11:36 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:36 — event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7796.827469 USDC)
2023-11-16 05:11:36 - event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7796.827469 USDC)
2023-11-16 05:11:36 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:7796.827469 USDC)
2023-11-16 05:11:36 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0x9965507D1a55bcC2695C58ba16FB37d819B0A4dc,settlement:19319.786948834486843108,balance:7796.8274
69, operator: [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:36 \vdash request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL, target:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65)
0x4a04ed861160a4513c0fdef7fe02a30e4857f4ffbfa225b3af56ca16a8a975fb, nonce: 66, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 150632
2023-11-16 05:11:38
                         minted => LOCAL blockNumber: 202, confirmations: 1, gasUsed: 79839(53.00%),
gasPrice: 1.0Gwei, tx fee: 0.000080
2023-11-16 05:11:38
                          event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65, funding:0.0)
                          event => #1 [SynFuturesV3-BTC-USDC-
2023-11-16 05:11:38 —
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:38
                          event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:2545.450871900886204081,shortSocialLos
sIndex:0.0,insuranceFund:0.0)
                          event => #3 [SynFuturesV3-BTC-USDC-
2023-11-16 05:11:38
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
```

```
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65, settlement:19319.786948834486843108, balance:0.0, opera
tor:[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:38 - request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC)
2023-11-16 05:11:41 — submitted => LOCAL txHash:
0x66f5f3565d15be44ad1d7d1cce58a0d7c86b7fd778b9e96af41a87d07ed55dd0, nonce: 67, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 273552
2023-11-16 05:11:41 — minted => LOCAL blockNumber: 203, confirmations: 1, gasUsed: 141904(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000142
2023-11-16 05:11:41 - event => #0 [SynFuturesV3-BTC-USDC-
LINK] 0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee (trader: additional content of the content of the
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, funding:0.0)
2023-11-16 05:11:41 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, funding:1493.22145403096055219)
2023-11-16 05:11:41 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:41 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1012268.49304 USDC)
2023-11-16 05:11:41 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:1012268.49304 USDC)
2023-11-16 05:11:41 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:1012268.49304 USDC)
2023-11-16 05:11:41 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
9304, operator: [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:11:41 \leftarrow request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:PERPETUAL,target:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
2023-11-16 05:11:45 — submitted => LOCAL txHash:
0x0c4c228f4e0caf720131ef1485936e6a9297cd221e9e5f004b5ac75f5f1d8527, nonce: 68, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 251661
2023-11-16 05:11:45 — minted => LOCAL blockNumber: 204, confirmations: 1, gasUsed: 130548(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000131
2023-11-16 05:11:45 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,funding:0.0)
2023-11-16 05:11:45 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,funding:-3160.875071132920030569)
2023-11-16 05:11:45 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:11:45 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:683332.504176 USDC)
2023-11-16 05:11:45 \leftarrow event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:683332.504176 USDC)
                                    event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
2023-11-16 05:11:45
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:683332.504176 USDC)
2023-11-16 05:11:45 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, settlement:19319.786948834486843108, balance:683332.50
4176, operator: [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
ammFund: 590.106102
distributeFund: 590.1060979904429
the diff: 0.0000040095570739140385

✓ random actions in perpetual (312858ms)
2023-11-16 05:11:56 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
```

```
maxTickUpper: 8388607, amount: 9999999999.0, tickDelta: 16096, expiry: 1700812800, deadline: 429496729
}])
2023-11-16 05:12:04 \vdash submitted => LOCAL txHash:
0x76c953a90edcf18a187a11f0109ebf49cbcc0179128afb156eeca252f117b0e6, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 794769
gasPrice: 1.0Gwei, tx fee: 0.000471
2023-11-16 05:12:04 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081799, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:12:04 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateAmmStatus(expiry:2023-11-
2023-11-16 05:12:04 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:999999999.0 USDC)
2023-11-16 05:12:04 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:999999999.0 USDC)
2023-11-16 05:12:04 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:9999999999.0 USDC)
2023-11-16 05:12:04 \( \to \) event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:9999999999.0 USDC)
2023-11-16 05:12:04 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:2023-11-24,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:85350, tickUpper:117550, range:
(liquidity:34849390.13744276262688775, entryFeeIndex:0.0, balance:999999999.0,
sqrtEntryPX96:25530.879999999999999))
2023-11-16 05:12:04 request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 5.0, amount: 16471.087481051293509471, limitTick: 8388607, deadline: 429496729 }])
0x903b077cd132d1c261edddec28b72f286a6ef6ea6eda2155c488b6be3f305b16, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 537383
2023-11-16 05:12:13 — minted => LOCAL blockNumber: 96, confirmations: 109, gasUsed: 304260(56.62%),
gasPrice: 1.0Gwei, tx fee: 0.000304
2023-11-16 05:12:13 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081808, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:12:13 —
                       event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:16471.087482 USDC)
2023-11-16 05:12:13 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:16471.087482 USDC)
2023-11-16 05:12:13
                        event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:16471.087482 USDC)
2023-11-16 05:12:13 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:16471.087482 USDC)
2023-11-16 05:12:13
                         event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:10989345239307, protocolFee:127.657326533225507141)
2023-11-16 05:12:13
                         event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, size:5.0, amount:16471.087482, takenSize:0, takenValue:0
, entryNotional:127657.326533225507140909, feeRatio:0.3%, sqrtPX96:25532.050626708614943995, mark:25530.88)
2023-11-16 05:12:13
                         event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:15960.458175867097971436, size:5.0,
entryNotional:127657.326533225507140909, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:12:13 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: -5.0, amount: 16467.429306132902028565, limitTick: -8388608, deadline: 429496729 }])
```

```
0x9ce22e7f7a1503048701ce51bda7d7f97683de7cef5df120781afd845c101920, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 521951
2023-11-16 05:12:21 — minted => LOCAL blockNumber: 97, confirmations: 108, gasUsed: 293682(56.27%),
gasPrice: 1.0Gwei, tx fee: 0.000294
2023-11-16 05:12:21 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081817, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:12:21 \longrightarrow event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:16467.429307 USDC)
2023-11-16 05:12:21 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:16467.429307 USDC)
2023-11-16 05:12:21 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:16467.429307 USDC)
2023-11-16 05:12:21 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:16467.429307 USDC)
2023-11-16 05:12:21
                         event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:21978690478614, protocolFee:255.314653066451014282)
2023-11-16 05:12:21 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,size:-5.0,amount:16467.429307,takenSize:0,takenValue:
0, entryNotional:127657.326533225507140908, feeRatio:0.3%, sqrtPX96:25530.88, mark:25530.88)
2023-11-16 05:12:21 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:15956.800000867097971436, size:-5.0,
entryNotional:127657.326533225507140908, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
ammFund: 10000032937.516788
distributeFund: 10000032937.516788
the diff: 0
2023-11-16 05:12:36 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 117550,
tickLower: 85350, target: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc, expiry: 1700812800, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
0xfb628c336f01a7aa49d90a186b484fdbfa892a94f236296c5cd33db13f71ce13, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 388610
2023-11-16 05:12:41 ├─ minted => LOCAL blockNumber: 124, confirmations: 81, gasUsed: 202204(52.03%),
gasPrice: 1.0Gwei, tx fee: 0.000202
2023-11-16 05:12:41 — event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000000764.943959 USDC)
2023-11-16 05:12:41 —
                         event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000000764.943959 USDC)
2023-11-16 05:12:41 —
                        event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:10000000764.943959 USDC)
2023-11-16 05:12:41 |--
                        event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:12:41
                          event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:2023-11-24, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:85350, tickUpper:117550, fee:765.943959199317
883761, pic: (balance: 10000000764.943959199317883761, size: 0.0, entryNotional: 0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0),operator:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tip:0.0)
ammFund: 32172.572831
distributeFund: 32172.572830800647
the diff: 1.9935396267101169e-7
2023-11-16 05:12:51 \leftarrow request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
```

0x18d5df1e9a02cb1e17608985af221cd12caf491184da1d27d26e996852bf0e76, nonce: 30, type: 2, maxPriorityFee:

```
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 255527
2023-11-16 05:12:55 — minted => LOCAL blockNumber: 127, confirmations: 78, gasUsed: 132554(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000133
2023-11-16 05:12:55 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:12:55 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:32172.572831 USDC)
2023-11-16 05:12:56 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:32172.572831 USDC)
2023-11-16 05:12:56 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:32172.572831 USDC)
2023-11-16 05:12:56 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, settlement:45875.8, balance:32172.572831, operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
2023-11-16 05:12:56 request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::settle(expiry:2023-11-24, target:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955)
0x464323981d37de1ae37a376d2c3cee4517edef3dcfc72df127d8ebe784d712fb, nonce: 31, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 135314
2023-11-16 05:12:58 — minted => LOCAL blockNumber: 128, confirmations: 77, gasUsed: 69770(51.56%),
gasPrice: 1.0Gwei, tx fee: 0.000070
2023-11-16 05:12:59 - event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:12:59 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex:0.0, shortSocialLossIndex:0.0, insuranceFund:0.0)
2023-11-16 05:12:59 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Settle(expiry:2023-11-24,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, settlement:45875.8, balance:0.0, operator:
[UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8)
   ✓ outrageous settlement price before normalizing pair (64343ms)
2023-11-16 05:13:04 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 4055, expiry: 4294967295, deadline: 429496729 }])
2023-11-16 05:13:12 — submitted => LOCAL txHash:
0x52c86b1d3a3c06906ae7c57ec1d9cfcb960b14a64753cb4d54c0789bbfc9ce8e, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 797850
2023-11-16 05:13:12 ├─ minted => LOCAL blockNumber: 120, confirmations: 85, gasUsed: 473657(59.37%),
gasPrice: 1.0Gwei, tx fee: 0.000474
2023-11-16 05:13:12 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084314, spot:2000.0,
raw:200000000000000000000000))
                        event => #1 [SynFuturesV3-BTC-USDC-
2023-11-16 05:13:12 |--
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
                         event => #2 [SynFuturesV3-BTC-USDC-
2023-11-16 05:13:12
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
2023-11-16 05:13:12 —
                         event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
2023-11-16 05:13:12 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:10000.0 USDC)
2023-11-16 05:13:12 —
                        event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:10000.0 USDC)
2023-11-16 05:13:12 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
```

```
2023-11-16 05:13:12 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:71950, tickUpper:80050, range:
(liquidity:2889.206850535991949602, entryFeeIndex:0.0, balance:10000.0,
sqrtEntryPX96:1999.999999999999999))
2889206850535991949602
2889206850535991949602
_____
2023-11-16\ 05:13:13 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 11.80852472362822551, amount: 15519.11529512619104936, limitTick: 8388607, deadline: 429496729 }])
0x30874a32ec3128799faa085f4cbedb7bf04a1ebbee357b8f205aad9d767fe413, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 522593
2023-11-16 05:13:21 ├─ minted => LOCAL blockNumber: 121, confirmations: 84, gasUsed: 295100(56.47%),
gasPrice: 1.0Gwei, tx fee: 0.000295
2023-11-16 05:13:21 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084323, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:13:21 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:13:21 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:15519.115296 USDC)
2023-11-16 05:13:21 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:15519.115296 USDC)
2023-11-16 05:13:21 \longrightarrow event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:15519.115296 USDC)
2023-11-16 05:13:21 — event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:15519.115296 USDC)
2023-11-16 05:13:21 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:30007513922041770,protocolFee:28.899304930372411796)
2023-11-16 05:13:21 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, size:11.80852472362822551, amount:15519.115296, takenSi
ze:0, takenValue:0, entryNotional:28899.304930372411795498, feeRatio:0.3%, sqrtPX96:2994.701311959593061092, m
ark:2000.0)
2023-11-16 05:13:21 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:15403.518076278510352818,
size:11.80852472362822551, entryNotional:28899.304930372411795498, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:13:21 \leftarrow request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 6932, expiry: 4294967295, deadline: 429496729 }])
2023-11-16 05:13:26 — submitted => LOCAL txHash:
0xb434785b89a533e7419fc9811b2b40f6d3db4cbc4a66fd16e846f381ab03a868, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 571773
2023-11-16 05:13:26 — minted => LOCAL blockNumber: 122, confirmations: 83, gasUsed: 326364(57.08%),
gasPrice: 1.0Gwei, tx fee: 0.000326
2023-11-16 05:13:26
                          event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
2023-11-16 05:13:26
                         event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, quantity:10000.0 USDC)
2023-11-16 05:13:26 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
2023-11-16 05:13:26
                        event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
                         event => #4 [SynFuturesV3-BTC-USDC-
2023-11-16 05:13:26 —
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:73100,tickUpper:86950,range:
```

```
(liquidity:801.880946789478546227, entryFeeIndex:0.03000751392204177, balance:10000.0,
sqrtEntryPX96:2994.701311959593061092))
2023-11-16 05:13:28 request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 4.275333016478269824, amount: 20909.189819708582240256, limitTick: 8388607, deadline: 429496729 }])
0xfd5110377f97cc2eda05e440a078a052fc12a8653d191f45a8b96a882799104c, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 560976
2023-11-16 05:13:37 — minted => LOCAL blockNumber: 123, confirmations: 82, gasUsed: 319991(57.04%),
gasPrice: 1.0Gwei, tx fee: 0.000320
2023-11-16 05:13:37 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084339, spot:2000.0,
raw:2000000000000000000000000))
2023-11-16 05:13:37 —
                         event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 2.175176858314867956)
2023-11-16 05:13:37
                        event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:340282366920938463463190403485109027556)
2023-11-16 05:13:37
                      event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:20909.18982 USDC)
2023-11-16 05:13:37 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:20909.18982 USDC)
2023-11-16 05:13:37 - event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:20909.18982 USDC)
2023-11-16 05:13:37 — event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:20909.18982 USDC)
                         event => #7 [SynFuturesV3-BTC-USDC-
2023-11-16 05:13:37 |--
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:44700648142296126,protocolFee:46.977187738654460405)
2023-11-16 05:13:37 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,size:4.275333016478269824,amount:20909.18982,takenSiz
e:0, takenValue:0, entryNotional:18077.882808282048608892, feeRatio:0.3%, sqrtPX96:5970.376555264270473278, ma
rk:2000.0)
2023-11-16 05:13:37 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,funding:-2.175176858314867956)
2023-11-16 05:13:37 —
                        event => #10 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:36238.221188187067290426,
size:16.083857740106495334, entryNotional:46977.18773865446040439, entrySocialLossIndex:0.0,
entryFundingIndex:-0.1842039466591839))
2023-11-16 05:13:37 - request => LOCAL [UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 4055, expiry: 4294967295, deadline: 429496729 }])
0x0ff7cfbbedd327d0a159a4da54b75685c44ef79ffd8fc8ea7c69fa823183eee6, nonce: 12, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 571773
gasPrice: 1.0Gwei, tx fee: 0.000326
2023-11-16 05:13:42
                         event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
2023-11-16 05:13:42
                        event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65, quantity:10000.0 USDC)
2023-11-16 05:13:42
                         event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
2023-11-16 05:13:42
                         event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:13:42 - event => #4 [SynFuturesV3-BTC-USDC-
```

```
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x15d34AAf54267DB7D7c367839AAf71A00a2C6A65,tickLower:82850,tickUpper:91000,range:
(liquidity:1662.222454905608752161, entryFeeIndex:0.044700648142296126, balance:10000.0,
sqrtEntryPX96:5970.376555264270473278))
2023-11-16 05:13:42 \vdash request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 86950,
tickLower: 73100, target: 0x90f79bf6eb2c4f870365e785982e1f101e93b906, expiry: 4294967295, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
2023-11-16 05:13:48 — submitted => LOCAL txHash:
0xcaa0a11109930b43ae8578bedff3e48077e0afc0ff5eb6707792f49e6026ba25, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 394926
2023-11-16 05:13:48 — minted => LOCAL blockNumber: 125, confirmations: 80, gasUsed: 215509(54.57%),
gasPrice: 1.0Gwei, tx fee: 0.000216
2023-11-16 05:13:48 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084351, spot:2000.0,
raw:2000000000000000000000000))
2023-11-16 05:13:48 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund:11.044478481859951427)
2023-11-16 05:13:48
                        event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:340282366920938463462638962296877878879)
2023-11-16 05:13:48 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:2564.316945132755954625,
size:-4.275333016478269824, entryNotional:25525.348007529135103859, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:13:48 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:73100,tickUpper:86950,fee:11.78214437984244
9593,pic:(balance:2564.316945132755954625, size:-4.275333016478269824,
entryNotional:25525.348007529135103859, entrySocialLossIndex:0.0, entryFundingIndex:0.0),operator:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tip:0.0)
2023-11-16 05:13:50 request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -4.894333004599683127, amount: 2034.513128791561976892, limitTick: -8388608, deadline: 429496729
0x115d6e0ebac44f4d5f60b595a45c1f1c5dfe08cf2f776da8d0481f207fe7f6f8, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 531494
gasPrice: 1.0Gwei, tx fee: 0.000300
2023-11-16 05:13:58 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084361, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:13:58 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:588271318624617681062168047051601933538286365571480082416)
2023-11-16 05:13:58 —
                         event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:2034.513129 USDC)
                        event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
2023-11-16 05:13:58
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:2034.513129 USDC)
                          event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:13:58
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:2034.513129 USDC)
2023-11-16 05:13:58
                          event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:2034.513129 USDC)
                          event => #6 [SynFuturesV3-BTC-USDC-
2023-11-16 05:13:58
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:60391364574846117,protocolFee:70.782249936815166276)
2023-11-16 05:13:58
                          event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, size:-4.894333004599683127, amount:2034.513129, takenSi
ze:0,takenValue:0,entryNotional:23805.062198160705870301,feeRatio:0.3%,sqrtPX96:3962.323115685786143923,m
ark:2000.0)
```

```
2023-11-16 05:13:58 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:1939.292880207357176518,
size:-4.894333004599683127, entryNotional:23805.062198160705870301, entrySocialLossIndex:0.0,
entryFundingIndex:1.728774029485040028))
2023-11-16 05:14:02 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::place(args:[{ expiry: 4294967295,
size: 4.894333004599683127, amount: 14657.065470041808080499, tick: 80050, deadline: 429496729 }])
0xa7ec4825b86ab96d987658ad729d5886962d71120f83b0a1981809067afbb2e0, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 452702
2023-11-16 05:14:07 — minted => LOCAL blockNumber: 152, confirmations: 53, gasUsed: 248489(54.89%),
gasPrice: 1.0Gwei, tx fee: 0.000248
2023-11-16 05:14:07 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:14657.065471 USDC)
2023-11-16 05:14:07 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:14657.065471 USDC)
2023-11-16 05:14:07 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:14657.065471 USDC)
2023-11-16 05:14:07 - event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:14657.065471 USDC)
2023-11-16 05:14:07 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Place(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,tick:80050,nonce:0,order:(balance:14657.065471,
size:4.894333004599683127))
2023-11-16 05:14:10 - request => LOCAL [UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -4.894333004599683127, amount: 3044.276013823348678564, limitTick: -8388608, deadline: 429496729
}])
0x98d44026c6ea5b5c961712089da6f700e4b9bf47386bf745afc0066094ff91a5, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 725402
2023-11-16 05:14:22 — minted => LOCAL blockNumber: 153, confirmations: 52, gasUsed: 385336(53.12%),
gasPrice: 1.0Gwei, tx fee: 0.000385
2023-11-16 05:14:22 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700086896, spot:2990.21285159,
raw:2990212851590000000000))
2023-11-16 05:14:22 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:17612047468735628222378343161483422621970442391283119931569)
2023-11-16 05:14:22 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:3044.276014 USDC)
2023-11-16 05:14:22 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,quantity:3044.276014 USDC)
2023-11-16 05:14:22 \rightarrow event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:3044.276014 USDC)
2023-11-16 05:14:22 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:3044.276014 USDC)
2023-11-16 05:14:22 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:60391364574846117,protocolFee:85.439315406856974357)
2023-11-16 05:14:22
                        event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL, trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, size:-4.894333004599683127, amount:3044.276014, takenSi
ze:4894333004599683127,takenValue:14657065470041808080499,entryNotional:14657.065470041808080499,feeRatio
:0.3%, sqrtPX96:2994.701311959593061092, mark:2990.21285159)
2023-11-16 05:14:22
                          event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,pic:(balance:2985.647752119832767678,
size:-4.894333004599683127, entryNotional:14657.065470041808080499, entrySocialLossIndex:0.0,
entryFundingIndex:51.757155764781748105))
```

```
2023-11-16 05:14:22 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::fill(arg:{ nonce: 0, tick: 80050,
target: 0x14dc79964da2c08b23698b3d3cc7ca32193d9955, expiry: 429496729 })
0xce22ab68f8d1f66c6d5cd0e061de63087af867798a19b64d89831c1467be69af, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 450647
2023-11-16 05:14:29 — minted => LOCAL blockNumber: 154, confirmations: 51, gasUsed: 235120(52.17%),
gasPrice: 1.0Gwei, tx fee: 0.000235
2023-11-16 05:14:29 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700086903, spot:2990.21285159,
raw:2990212851590000000000))
2023-11-16 05:14:29 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:17612232046907296659980951234243872262324316249602653759529)
2023-11-16 05:14:29 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Fill(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,tick:80050,nonce:0,fee:43.971196410125424241,pic:
(balance:14701.036667410125424241, size:4.894333004599683127, entryNotional:14657.065470041808080499,
entrySocialLossIndex:0.0, entryFundingIndex:-29.717164637615570767),operator:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,tip:0.0)
2023-11-16 05:14:29 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:-0.001779816413045823)
2023-11-16 05:14:29 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:244.85821470967268974)
2023-11-16 05:14:29 — event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:26033.18271 USDC)
2023-11-16 05:14:29 - event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:26033.18271 USDC)
2023-11-16 05:14:29 — event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:26033.18271 USDC)
2023-11-16 05:14:29 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
9341604110
2023-11-16 05:14:33 - request => LOCAL [UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::place(args:[{ expiry: 4294967295,
size: -4.894333004599683127, amount: 16859.520369135680033437, tick: 81450, deadline: 429496729 }])
2023-11-16 05:14:39 — submitted => LOCAL txHash:
0xba01c09154eb7086a3bbca6af170f01d820956af4a67dcff5432ea3d7c86ba59, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 487637
2023-11-16 05:14:39 — minted => LOCAL blockNumber: 181, confirmations: 24, gasUsed: 271503(55.68%),
gasPrice: 1.0Gwei, tx fee: 0.000272
2023-11-16 05:14:39 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:16859.52037 USDC)
2023-11-16 05:14:39 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097, quantity:16859.52037 USDC)
2023-11-16 05:14:39
                          event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:16859.52037 USDC)
2023-11-16 05:14:39 —
                          event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:16859.52037 USDC)
2023-11-16 05:14:39
                        event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Place(expiry:PERPETUAL,trader:
[UNKNOWN]0xdF3e18d64BC6A983f673Ab319CCaE4f1a57C7097,tick:81450,nonce:0,order:(balance:16859.52037,
size:-4.894333004599683127))
2023-11-16 05:14:41 request => LOCAL [UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 4.894333004599683127, amount: 4442.435853747207149444, limitTick: 8388607, deadline: 429496729 }])
0x5dfbc19af8852cf9bc46b782fb67dda0e4172019f86ec7598eadeedf4b7b78c3, nonce: 3, type: 2, maxPriorityFee:
```

```
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 761712
2023-11-16 05:14:53 — minted => LOCAL blockNumber: 182, confirmations: 23, gasUsed: 395220(51.89%),
gasPrice: 1.0Gwei, tx fee: 0.000395
2023-11-16 05:14:53 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700089439, spot:3449.87301517,
raw:3449873015170000000000))
2023-11-16 05:14:53 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:13066014571530677515968358588923369248082595455196857065072)
2023-11-16 05:14:53 — event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:4442.435854 USDC)
2023-11-16 05:14:53
                        event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,quantity:4442.435854 USDC)
2023-11-16 05:14:53 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:4442.435854 USDC)
2023-11-16 05:14:53 — event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:4442.435854 USDC)
2023-11-16 05:14:53 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:60391364574846117,protocolFee:102.298835775992654391)
2023-11-16 05:14:53 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, size:4.894333004599683127, amount:4442.435854, takenSiz
e:-4894333004599683127, takenValue:16859520369135680033437, entryNotional:16859.520369135680033437, feeRatio
:0.3%, sqrtPX96:3444.702343157104510069, mark:3449.87301517)
2023-11-16 05:14:53 —
                        event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E, funding:-65.386282134200767305)
2023-11-16 05:14:53 —
                         event => #9 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:5092.804343 USDC)
2023-11-16 05:14:53 —
                         event => #10 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:5092.804343 USDC)
2023-11-16 05:14:53
                          event => #11 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:5092.804343 USDC)
2023-11-16 05:14:53 —
                         event => #12 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0xbDA5747bFD65F08deb54cb465eB87D40e51B197E,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:14:55 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 8.837663564655201813, amount: 50806.069295330500407776, limitTick: 8388607, deadline: 429496729 }])
0xd926b6380fd8c0af0f3545efc73033fa95222d5b0b75b957d5d14a798811b314, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 469025
2023-11-16 05:15:07 — minted => LOCAL blockNumber: 183, confirmations: 22, gasUsed: 276407(58.93%),
gasPrice: 1.0Gwei, tx fee: 0.000276
                          event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
2023-11-16 05:15:07 —
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700089450, spot:3449.87301517,
raw:3449873015170000000000))
2023-11-16 05:15:07 |--
                         event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:13065790562576715487792311736447994335445834634009011668340)
2023-11-16 05:15:07 —
                          event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:50806.069296 USDC)
2023-11-16 05:15:07
                          event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:50806.069296 USDC)
                         event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:15:07
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:50806.069296 USDC)
```

```
2023-11-16 05:15:07 \( \to \) event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:50806.069296 USDC)
2023-11-16 05:15:07 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:95083174574697586,protocolFee:154.931276006704638846)
2023-11-16 05:15:07 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,size:8.837663564655201813,amount:50806.069296,takenSi
ze:0,takenValue:0,entryNotional:52632.440230711984454106,feeRatio:0.3%,sqrtPX96:8951.219243646536988231,m
ark:3449.87301517)
2023-11-16 05:15:07 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,funding:-352.495798743333558854)
2023-11-16 05:15:07 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:86481.264924520885793755,
size:24.921521304761697147, entryNotional:99609.627969366444858496, entrySocialLossIndex:0.0,
entryFundingIndex:-22.100326585841367692))

✓ discontinuous liquidity (127703ms)

2023-11-16 05:15:08 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 9999999999.0, tickDelta: 16096, expiry: 1700812800, deadline: 429496729
2023-11-16 05:15:16 — submitted => LOCAL txHash:
0x76c953a90edcf18a187a11f0109ebf49cbcc0179128afb156eeca252f117b0e6, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 794769
gasPrice: 1.0Gwei, tx fee: 0.000471
2023-11-16 05:15:16 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081801, spot:25600.0,
raw:2560000000000000000000000))
2023-11-16 05:15:16 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateAmmStatus(expiry:2023-11-
24, status: TRADING, sqrtPX96:25530.8799999999999999, mark:25530.88)
2023-11-16 05:15:16 \longrightarrow event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:999999999.0 USDC)
2023-11-16 05:15:16 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:999999999.0 USDC)
2023-11-16 05:15:16 \longrightarrow event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:999999999.0 USDC)
2023-11-16 05:15:16 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:999999999.0 USDC)
2023-11-16 05:15:16 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:2023-11-24,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:85350, tickUpper:117550, range:
(liquidity:34849390.13744276262688775, entryFeeIndex:0.0, balance:999999999.0,
sqrtEntryPX96:25530.8799999999999999))
2023-11-16 05:15:17 - request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 100.0, tickDelta: 953, expiry: 1700812800, deadline: 429496729 }])
0x73b0c51623c1f0b69bb66267c23ae652b0dce4642c2923ffeac10f7b15cc370a, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 570984
2023-11-16 05:15:22 — minted => LOCAL blockNumber: 96, confirmations: 109, gasUsed: 325914(57.08%),
gasPrice: 1.0Gwei, tx fee: 0.000326
2023-11-16 05:15:22
                         event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:100.0 USDC)
2023-11-16 05:15:22
                          event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, quantity:100.0 USDC)
2023-11-16 05:15:22
                          event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:100.0 USDC)
```

```
2023-11-16 05:15:22 - event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:100.0 USDC)
2023-11-16 05:15:22 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:100500,tickUpper:102400,range:
(liquidity:87.795697803530565947, entryFeeIndex:0.0, balance:100.0,
sgrtEntryPX96:25530.8799999999999999))
2023-11-16 05:15:28 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 1700812800,
size: 92350.040968848492522652, amount: 1447380841.41908828200336825, limitTick: 8388607, deadline:
429496729 }])
0x14dbb402680cff0f0dee83898d09b37e646fbfafd9d48bf6454878e0a1c09c98, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 562674
2023-11-16 05:15:37 ├─ minted => LOCAL blockNumber: 122, confirmations: 83, gasUsed: 319893(56.85%),
gasPrice: 1.0Gwei, tx fee: 0.000320
2023-11-16 05:15:37 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084332, spot:76800.0,
raw:7680000000000000000000000))
2023-11-16 05:15:37 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1447380841.419089 USDC)
2023-11-16 05:15:37 — event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:1447380841.419089 USDC)
2023-11-16 05:15:37 —
                          event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:1447380841.419089 USDC)
2023-11-16 05:15:37 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:1447380841.419089 USDC)
2023-11-16 05:15:37
                         event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:352022702098274158, protocolFee:4089269.129579440192166619)
2023-11-16 05:15:37 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,size:92350.040968848492522652,amount:1447380841.41908
9, takenSize:0, takenValue:0, entryNotional:4089269129.579440192166618858, feeRatio:0.3%, sqrtPX96:76798.28302
9222307913877, mark: 76592.64)
2023-11-16 05:15:37
                        event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:1431023764.900771239231333524,
size:92350.040968848492522652, entryNotional:4089269129.579440192166618858, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16\ 05:15:37 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::remove(args:[{ tickUpper: 102400,
tickLower: 100500, target: 0x90f79bf6eb2c4f870365e785982e1f101e93b906, expiry: 1700812800, minTickLower:
0, maxTickUpper: 8388607, deadline: 429496729 }])
2023-11-16 05:15:43 ├─ submitted => LOCAL txHash:
0x4769c609281508918df39a57c7107ab59360d533f3839cd2d6119c1a2112e6e6, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 451833
2023-11-16 05:15:44 ├─ minted => LOCAL blockNumber: 123, confirmations: 82, gasUsed: 235101(52.03%),
gasPrice: 1.0Gwei, tx fee: 0.000235
2023-11-16 05:15:44
                         event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1.0 USDC)
2023-11-16 05:15:44 - event => #1 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1.0 USDC)
2023-11-16 05:15:44
                        event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:2023-11-24,quantity:1.0 USDC)
2023-11-16 05:15:44 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:-1104.860325744714214701,
```

```
size:-0.024661967242830952, entryNotional:1893.996740372340773387, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:15:44 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Remove(expiry:2023-11-24, trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,tickLower:100500,tickUpper:102400,fee:30.906078773402
343241,pic:(balance:-1104.860325744714214701, size:-0.024661967242830952,
entryNotional:1893.996740372340773387, entrySocialLossIndex:0.0, entryFundingIndex:0.0),operator:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,tip:1.0)
-1104860325744714214701
0
2023-11-16 05:15:44 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:2023-11-24, target:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:-0.00493239344856619)
0x6cd0a746b0f1252d6d5020f4d5ce06c6c2c7b7070cd27e161d27aec90eaf5e73, nonce: 4, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 364982
2023-11-16 05:15:55 ├─ minted => LOCAL blockNumber: 124, confirmations: 81, gasUsed: 231563(63.45%),
gasPrice: 1.0Gwei, tx fee: 0.000232
2023-11-16 05:15:55 \( \to \) event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084346, spot:76800.0,
raw:768000000000000000000000))
2023-11-16 05:15:55 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:-883.888260595771389681,
size:-0.019729573794264762, entryNotional:1515.197392297872649429, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:15:55 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:352022734707111337, protocolFee:4089269.508378803124195851)
2023-11-16 05:15:55 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex:0.002381782820704645, shortSocialLossIndex:0.0, insuranceFund:0.0)
2023-11-16 05:15:55 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex:0.00240917356531852, shortSocialLossIndex:0.0, insuranceFund:0.0)
2023-11-16 05:15:55 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, size:0.00493239344856619, takenSize:0, takenValue:0, ent
ryNotional:378.799362932029231052, feeRatio:0.3%, sqrtPX96:76798.289053705777613407, mark:76592.64, operator:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
2023-11-16\ 05:15:55 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:2023-11-24, target:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:-0.00493239344856619)
0x944afb46c7f06b9ced33918c7b8b663390f1e95534a472c09bd007aa66552c48, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 337703
2023-11-16 05:16:02 — minted => LOCAL blockNumber: 125, confirmations: 80, gasUsed: 214463(63.51%),
gasPrice: 1.0Gwei, tx fee: 0.000214
2023-11-16 05:16:02 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084354, spot:76800.0,
raw:768000000000000000000000))
2023-11-16 05:16:02
                          event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24, trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:-662.916195446828564661,
size:-0.014797180345698572, entryNotional:1136.398044223404525471, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:16:02
                          event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:352022767315951074, protocolFee:4089269.887178195771349628)
2023-11-16 05:16:02
                          event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex:0.004790956386023165, shortSocialLossIndex:0.0, insuranceFund:0.0)
2023-11-16 05:16:02
                          event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex:0.004818347453690336, shortSocialLossIndex:0.0, insuranceFund:0.0)
                          event => #5 [SynFuturesV3-BTC-USDC-
2023-11-16 05:16:02
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:0.00493239344856619,takenSize:0,takenValue:0,ent
```

```
ryNotional:378.799392647153776258, feeRatio:0.3%, sqrtPX96:76798.295078189956203834, mark:76592.64, operator:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
2023-11-16 05:16:02 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:2023-11-24, target:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:-0.00493239344856619)
2023-11-16 05:16:09 — submitted => LOCAL txHash:
0xa1b93d559052d157d3351e57e3d911e6fbf7bf0a746a2bfcadb5cd76522767b9, nonce: 6, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 337703
2023-11-16 05:16:09 — minted => LOCAL blockNumber: 126, confirmations: 79, gasUsed: 214463(63.51%),
gasPrice: 1.0Gwei, tx fee: 0.000214
2023-11-16 05:16:09 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spotState: (time:1700084361, spot:76800.0,
raw:768000000000000000000000))
2023-11-16 05:16:09 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:-441.944130297885739641,
size:-0.009864786897132382, entryNotional:757.598696148936401513, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:16:09 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:352022799924793369, protocolFee:4089270.265977618133631446)
2023-11-16 05:16:09 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24,longSocialLossIndex:0.007200130274394981,shortSocialLossIndex:0.0,insuranceFund:0.0)
2023-11-16 05:16:09 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex: 0.007227521665115485, shortSocialLossIndex: 0.0, insuranceFund: 0.0)
2023-11-16 05:16:09 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, size:0.00493239344856619, takenSize:0, takenValue:0, ent
ryNotional:378.799422362281817992, feeRatio:0.3%, sqrtPX96:76798.301102674843685269, mark:76592.64, operator:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
2023-11-16 05:16:09 — request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:2023-11-24, target:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:-0.00493239344856619)
0x313408d557307a7602e520704d69129a98e0fc77bb516c8913a3914a2ad1fb9c, nonce: 7, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 337703
2023-11-16 05:16:16 ├─ minted => LOCAL blockNumber: 127, confirmations: 78, gasUsed: 214463(63.51%),
gasPrice: 1.0Gwei, tx fee: 0.000214
2023-11-16 05:16:16 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084368, spot:76800.0,
raw:7680000000000000000000000))
2023-11-16 05:16:16 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:-220.972065148942914621,
size:-0.004932393448566192, entryNotional:378.799348074468277555, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:16:16 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex:352022832533638222, protocolFee:4089270.644777070211044803)
2023-11-16 05:16:16 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24, longSocialLossIndex:0.00960930448582013, shortSocialLossIndex:0.0, insuranceFund:0.0)
2023-11-16 05:16:16
                          event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24,longSocialLossIndex:0.009636696199594005,shortSocialLossIndex:0.0,insuranceFund:0.0)
2023-11-16 05:16:16
                          event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, size:0.00493239344856619, takenSize:0, takenValue:0, ent
ryNotional:378.799452077413356257, feeRatio:0.3%, sqrtPX96:76798.307127160440057824, mark:76592.64, operator:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
2023-11-16 05:16:17 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:2023-11-24, target:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:-0.004932393448566192)
0xa329bfee69d9152d18f39e49e2b37368908a3f89f07804003ad2e75f17b60046, nonce: 8, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 334536
2023-11-16 05:16:23 — minted => LOCAL blockNumber: 128, confirmations: 77, gasUsed: 202046(60.40%),
gasPrice: 1.0Gwei, tx fee: 0.000202
```

```
2023-11-16 05:16:23 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084374, spot:76800.0,
raw:76800000000000000000000))
2023-11-16 05:16:23 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:16:23 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFeeState(expiry:2023-11-
24, feeIndex: 352022865142485633, protocolFee: 4089271.023576552003593348)
2023-11-16 05:16:23 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24,longSocialLossIndex:0.012018479020298651,shortSocialLossIndex:0.0,insuranceFund:0.0)
2023-11-16 05:16:23 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateSocialLossInsuranceFund(expiry:2023-11-
24,longSocialLossIndex:0.012045871057125935,shortSocialLossIndex:0.0,insuranceFund:0.0)
2023-11-16 05:16:23 - event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:2023-11-24,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,size:0.004932393448566192,takenSize:0,takenValue:0,en
tryNotional:378.799481792548544648, feeRatio:0.3%, sqrtPX96:76798.313151646745321612, mark:76592.64, operator
:[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9)
12045871057125935
0
ammFund: 11447380939.419088
distributeFund: 11447380939.419088
the diff: 0
   ✓ sweep lp multiple times (85792ms)
2023-11-16 05:16:37 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::add(args:[{ minTickLower: 0,
maxTickUpper: 8388607, amount: 10000.0, tickDelta: 4055, expiry: 4294967295, deadline: 429496729 }])
0x52c86b1d3a3c06906ae7c57ec1d9cfcb960b14a64753cb4d54c0789bbfc9ce8e, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 797850
2023-11-16 05:16:44 ├─ minted => LOCAL blockNumber: 120, confirmations: 85, gasUsed: 473657(59.37%),
gasPrice: 1.0Gwei, tx fee: 0.000474
2023-11-16 05:16:44 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084316, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:16:44 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:16:44 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
2023-11-16 05:16:44 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
2023-11-16 05:16:44 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:10000.0 USDC)
2023-11-16 05:16:44 - event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
2023-11-16 05:16:44 — event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:16:44
                         event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:71950, tickUpper:80050, range:
(liquidity:2889.206850535991949602, entryFeeIndex:0.0, balance:10000.0,
sqrtEntryPX96:1999.99999999999999))
2023-11-16 05:16:45 - request => LOCAL [UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: 10.0, amount: 10000.0, limitTick: 8388607, deadline: 429496729 }])
0x3b80900bbbe960474c49585f0b3b620cd51a6d273a292be9417bc495f191ad63, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 519423
2023-11-16 05:16:53 — minted => LOCAL blockNumber: 121, confirmations: 84, gasUsed: 291799(56.18%),
gasPrice: 1.0Gwei, tx fee: 0.000292
```

```
2023-11-16 05:16:53 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700084324, spot:2000.0,
raw:200000000000000000000000))
2023-11-16 05:16:53 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:16:53 — event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:16:53 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,quantity:10000.0 USDC)
2023-11-16 05:16:53 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:10000.0 USDC)
2023-11-16 05:16:53 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:16:53 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:24570092434229365,protocolFee:23.662693126426009422)
2023-11-16 05:16:53 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, size:10.0, amount:10000.0, takenSize:0, takenValue:0, ent
ryNotional:23662.693126426009421439, feeRatio:0.3%, sqrtPX96:2799.615229977043561463, mark:2000.0)
2023-11-16 05:16:53 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:9905.349227494295962314, size:10.0,
entryNotional:23662.693126426009421439, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
69081
-24551099416093832610
2023-11-16 05:17:00 request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -24.55109941609383261, amount: 10000.0, limitTick: -8388608, deadline: 429496729 }])
0x29e618067a15a3cd1cfadc3c6c572ecb36eb67f2601d6471aeb8712d4d66ac6d, nonce: 3, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 577106
2023-11-16 05:17:08 — minted => LOCAL blockNumber: 148, confirmations: 57, gasUsed: 329167(57.04%),
gasPrice: 1.0Gwei, tx fee: 0.000329
2023-11-16 05:17:08 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700086850, spot:1000.0,
raw:10000000000000000000000))
2023-11-16 05:17:08 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 526.1375082085662079)
2023-11-16 05:17:08 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:340282366920938463410760856610911590666)
2023-11-16 05:17:08 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
                        event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
2023-11-16 05:17:08
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:10000.0 USDC)
2023-11-16 05:17:08
                          event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
2023-11-16 05:17:08
                          event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:17:08
                          event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:73803401048995329,protocolFee:71.077763967870840111)
2023-11-16 05:17:08
                          event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL, trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, size:-24.55109941609383261, amount:10000.0, takenSize:0
,takenValue:0,entryNotional:47415.070841444830688836,feeRatio:0.3%,sqrtPX96:1332.2709868392861095,mark:10
00.0)
```

```
2023-11-16 05:17:08 - event => #9 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:9810.339716634220677244,
size:-24.55109941609383261, entryNotional:47415.070841444830688836, entrySocialLossIndex:0.0,
entryFundingIndex:0.0))
2023-11-16 05:17:12 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::place(args:[{ expiry: 4294967295,
size: 24.55109941609383261, amount: 24548.62832604891414922, tick: 69080, deadline: 429496729 }])
0x237978f4088df03128348d0686e354bb268ec805ea5efde6c8debc5186b1312b, nonce: 5, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 487142
2023-11-16 05:17:17 — minted => LOCAL blockNumber: 150, confirmations: 55, gasUsed: 271228(55.68%),
gasPrice: 1.0Gwei, tx fee: 0.000271
2023-11-16 05:17:17 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:24548.628327 USDC)
2023-11-16 05:17:17 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,quantity:24548.628327 USDC)
2023-11-16 05:17:17 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:24548.628327 USDC)
2023-11-16 05:17:17 - event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:24548.628327 USDC)
2023-11-16 05:17:17 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Place(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,tick:69080,nonce:0,order:(balance:24548.628327,
size:24.55109941609383261))
2023-11-16 05:17:17 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::sweep(expiry:PERPETUAL, target:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9, size:10.0)
0xf595a5c13842f71d11665520c4cb62f579676abd7332ecfac2cd3f3d5c6c6548, nonce: 6, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 499214
2023-11-16 05:17:27 ├─ minted => LOCAL blockNumber: 151, confirmations: 54, gasUsed: 300855(60.27%),
gasPrice: 1.0Gwei, tx fee: 0.000301
2023-11-16 05:17:27 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700086869, spot:1000.0,
raw:10000000000000000000000))
2023-11-16 05:17:27 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:10127465673863447398960194706293360000727328114361624519)
2023-11-16 05:17:27 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:17:27 - event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:73803401048995329,protocolFee:81.076757458955276598)
2023-11-16 05:17:27 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:108.768596396
499474557, insuranceFund: 0.0)
                          event => #5 [SynFuturesV3-BTC-USDC-
2023-11-16 05:17:27
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,funding:-526.86819672129148985)
                          event => #6 [SynFuturesV3-BTC-USDC-
2023-11-16 05:17:27
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:154.741627083
060653336, insuranceFund: 0.0)
2023-11-16 05:17:27
                          event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Sweep(expiry:PERPETUAL, trader:
[UNKNOWN]0x976EA74026E726554dB657fA54763abd0C3a0aa9,size:-10.0,takenSize:10000000000000000000,takenValue:
9998993491084436486710, entryNotional:9998.99349108443648671, feeRatio:0.3%, sqrtPX96:999.899349108443648671
, mark:1000.0, operator:[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955)
999899349108443648671
2023-11-16 05:17:27 \leftarrow request => LOCAL [UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::trade(args:[{ expiry: 4294967295,
size: -14.55109941609383261, amount: 10000.0, limitTick: -8388608, deadline: 429496729 }])
```

```
0x63541abc85ffc9c85361ba8a187ef6170b7fe38642de69aaf52e38adbf023ac1, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 639912
2023-11-16 05:17:38 — minted => LOCAL blockNumber: 152, confirmations: 53, gasUsed: 355437(55.54%),
gasPrice: 1.0Gwei, tx fee: 0.000355
2023-11-16 05:17:38 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700086879, spot:1000.0,
raw:100000000000000000000000))
2023-11-16 05:17:38 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:10123501585482487014383397495954433513613594631305123824)
2023-11-16 05:17:38 — event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:17:38 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,quantity:10000.0 USDC)
2023-11-16 05:17:38 \longrightarrow event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,value:10000.0 USDC)
2023-11-16 05:17:38 —
                                  event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:17:38 - event => #6 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFeeState(expiry:PERPETUAL,feeIndex:73803401048995329,protocolFee:95.626392293919754261)
2023-11-16 05:17:38 - event => #7 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,size:-14.55109941609383261,amount:10000.0,takenSize:1
4551099416093832610, takenValue:14549634834964477662510, entryNotional:14549.63483496447766251, feeRatio:0.3
%, sqrtPX96:999.899349108443648671, mark:1000.0)
2023-11-16 05:17:38 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x23618e81E3f5cdF7f54C3d65f7FBc0aBf5B21E8f,pic:(balance:9941.801460660142089349,
size:-14.55109941609383261, entryNotional:14549.63483496447766251,
entrySocialLossIndex:154.741627083060653336, entryFundingIndex:0.029750297310687835))
2023-11-16\ 05:17:39 - request => LOCAL [UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2::fill(arg:{ nonce: 0, tick: 69080,
target: 0x14dc79964da2c08b23698b3d3cc7ca32193d9955, expiry: 429496729 })
0x6e12e10b752da904de9553d0797da73e3dbb58c03d566bcae72e5d0638b8e15b, nonce: 7, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 446378
2023-11-16 05:17:45 ├─ minted => LOCAL blockNumber: 153, confirmations: 52, gasUsed: 236844(53.06%),
gasPrice: 1.0Gwei, tx fee: 0.000237
2023-11-16 05:17:45 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700086887, spot:1000.0,
raw:100000000000000000000000))
2023-11-16 05:17:45 —
                                  event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateFundingIndex(fundingIndex:10120330314777718842834906496058677709272442780186472314)
2023-11-16 05:17:45 - event => #2 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Fill(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,tick:69080,nonce:0,fee:73.645884978146742447,pic:
(balance:24622.274211978146742447, size:24.55109941609383261, entryNotional:24548.62832604891414922,
entrySocialLossIndex:0.0, entryFundingIndex:-52.686802720958670339),operator:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,tip:0.0)
2023-11-16 05:17:45
                                    event => #3 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee(trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:0.000650419789853795)
2023-11-16 05:17:45
                                 event => #4 [SynFuturesV3-BTC-USDC-
LINK] 0x659171E91B2db24E6aB962849d03A1A9d15A27E2-FundingFee (trader: additional content of the content of the
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955, funding:0.730173702299257289)
                                    event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
2023-11-16 05:17:45
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:53500.710197 USDC)
                                    event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:17:45
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:53500.710197 USDC)
2023-11-16 05:17:45
                                    event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
```

```
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:53500.710197 USDC)
2023-11-16 05:17:45 - event => #8 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdatePosition(expiry:PERPETUAL,trader:
[UNKNOWN]0x14dC79964da2C08b23698B3D3cc7Ca32193d9955,pic:(balance:0.0, size:0.0, entryNotional:0.0,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
18952081870

✓ spot price is outside of the liquidity range (72633ms)

 Synfutures V3 SDK
2023-11-16 05:17:46 \vdash request => LOCAL [UNKNOWN]0x70997970C51812dc3A010C7d01b50e0d17dc79C8
[ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318::setFeeder(instruments:[[SynFuturesV3-BTC-
USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,[UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472,
[UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e], chainlinkFeeders:[(ftype:BASE_STABLE, scaler0:0,
aggregator0:[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae, scaler1:0, aggregator1:
[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096),(ftype:BASE_STABLE, scaler0:0, aggregator0:
[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6, scaler1:0, aggregator1:
[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096),(ftype:BASE_STABLE, scaler0:0, aggregator0:
[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae, scaler1:0, aggregator1:
[UNKNOWN]0xA7918D253764E42d60C3ce2010a34d5a1e7C1398),(ftype:BASE_STABLE, scaler0:0, aggregator0:
[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6, scaler1:0, aggregator1:
[UNKNOWN]0xA7918D253764E42d60C3ce2010a34d5a1e7C1398)])
0xf2ea0e838370ff010dd95c345464d62e037e4b5dc75047c8493ddb21c8dfab65, nonce: 1, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 387809
2023-11-16 05:17:47 ├─ minted => LOCAL blockNumber: 42, confirmations: 1, gasUsed: 258539(66.67%),
gasPrice: 1.0Gwei, tx fee: 0.000260
2023-11-16 05:17:47 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,feeder:
(ftype:BASE_STABLE, scaler0:10000000000, aggregator0:[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae,
scaler1:10000000000, aggregator1:[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096))
2023-11-16 05:17:47 ├─ event => #1 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,feeder:
(ftype:BASE_STABLE, scaler0:10000000000, aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6,
scaler1:10000000000, aggregator1:[UNKNOWN]0x2910E325cf29dd912E3476B61ef12F49cb931096))
2023-11-16 05:17:47 —
                      event => #2 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472,feeder:(ftype:BASE_STABLE,
scaler0:1000000000, aggregator0:[UNKNOWN]0x93C7a6D00849c44Ef3E92E95DCEFfccd447909Ae,
scaler1:1000000000, aggregator1:[UNKNOWN]0xA7918D253764E42d60C3ce2010a34d5a1e7C1398))
2023-11-16 05:17:47 - event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
SetFeeder(instrument:[UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,feeder:(ftype:BASE_STABLE,
scaler0:1000000000, aggregator0:[UNKNOWN]0xbdEd0D2bf404bdcBa897a74E6657f1f12e5C6fb6,
scaler1:1000000000, aggregator1:[UNKNOWN]0xA7918D253764E42d60C3ce2010a34d5a1e7C1398))
0xd1585d3106f08f9eedb62840640f9237ca8e828d2ff71dbd89cd03881364019d, nonce: 2, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 44622
2023-11-16 05:17:47 ├─ minted => LOCAL blockNumber: 43, confirmations: 1, gasUsed: 29748(66.67%),
gasPrice: 1.0Gwei, tx fee: 0.000030
2023-11-16 05:17:47 - raw event => #0 [UNKNOWN]0x0165878A594ca255338adfa4d48449f69242Eb8F data:
'0x9eff24476d2d0b1156bf93f58ab598dd59a960bc4cf339d5f7ae4913e9982a57'
]
2023-11-16 05:17:48  request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:[SynFuturesV3-BTC-USDC-
Args:
000000000021e19e0c9bab2400000])
2023-11-16 05:17:59 — submitted => LOCAL txHash:
0xdd5e14db743b8c63cbabefb41f7934ca61f250eee2a035891a7206f819b383f3, nonce: 22, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2285066
2023-11-16 05:17:59 — minted => LOCAL blockNumber: 50, confirmations: 1, gasUsed: 1203656(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001207
2023-11-16 05:17:59 - raw event => #0 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2 data: 0x topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
  '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
]
```

```
2023-11-16 05:17:59 - event => #1 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateCondition(timestamp:2023-11-
15T20:55:45.000Z, condition: NORMAL)
2023-11-16 05:17:59 - event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0x59807c7dd36a9ce029808e8787b9dcf42f734464512092ab83107ff8415eca50,instrument:
[SynFuturesV3-BTC-USDC-LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,base:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,symbol:BTC-USDC-LINK,total:1)
2023-11-16 05:17:59
                    event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,spotState:(time:1700081745, spot:22000.0,
raw:2200000000000000000000000))
2023-11-16 05:17:59 - event => #4 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:17:59 \vdash event => #5 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-
UpdateAmmStatus(expiry:PERPETUAL, status:TRADING, sqrtPX96:21999.99999999999999999, mark:22000.0)
2023-11-16 05:17:59 - event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDC)
2023-11-16 05:17:59 — event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:10000.0 USDC)
2023-11-16 05:17:59 - event => #8 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2, value:10000.0 USDC)
2023-11-16 05:17:59 — event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:[SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:17:59 - event => #10 [SynFuturesV3-BTC-USDC-
LINK]0x659171E91B2db24E6aB962849d03A1A9d15A27E2-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,tickLower:83850,tickUpper:116050,range:
(liquidity:37.617289134283979201, entryFeeIndex:0.0, balance:10000.0,
sqrtEntryPX96:21999.999999999999999))
2023-11-16 05:18:01 - request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:[SynFuturesV3-ETH-USDC-
000000000021e19e0c9bab2400000])
0x719425c1b4b3885cecfde3724a117d019f83b1b7147cb14ee389098d43d25ff0, nonce: 25, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2259888
2023-11-16 05:18:12 - minted => LOCAL blockNumber: 58, confirmations: 1, gasUsed: 1190395(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001191
2023-11-16 05:18:12 - raw event => #0 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF data: 0x topics: [
  '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
 '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
2023-11-16 05:18:12 - event => #1 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateCondition(timestamp:2023-11-
15T20:56:03.000Z, condition: NORMAL)
2023-11-16 05:18:12
                       event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0xcbf145cdfd327106d3ed422bc16c3da3a8821672e756dcddc950f07dc7527430,instrument:
[SynFuturesV3-ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,base:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,symbol:ETH-USDC-LINK,total:2)
2023-11-16 05:18:12
                       event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:(time:1700081763, spot:1400.0,
raw:140000000000000000000000))
2023-11-16 05:18:12 —
                     event => #4 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:18:12 —
                       event => #5 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
2023-11-16 05:18:12
                       event => #6 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
```

```
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDC)
2023-11-16 05:18:12 — event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:10000.0 USDC)
2023-11-16 05:18:12 - event => #8 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:10000.0 USDC)
2023-11-16 05:18:12 - event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:[SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:10000.0 USDC)
2023-11-16 05:18:12 |--
                    event => #10 [SynFuturesV3-ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-Add(expiry:PERPETUAL,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,tickLower:56300,tickUpper:88500,range:
(liquidity:149.195845551219770534, entryFeeIndex:0.0, balance:10000.0,
sqrtEntryPX96:1399.999999999999999))
2023-11-16 05:18:13 - request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:
000000000021e19e0c9bab2400000])
2023-11-16 05:18:25 — submitted => LOCAL txHash:
0x449f08f7f2dbb184f4b5383cd0b367193bc29a4a4e3d8dde85a028c41028942f, nonce: 28, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2258786
2023-11-16 05:18:25 — minted => LOCAL blockNumber: 66, confirmations: 1, gasUsed: 1189814(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001190
2023-11-16 05:18:25 \vdash raw event => #0 [UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472 data: 0x
topics: [
 '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
 '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
]
2023-11-16 05:18:25 \vdash raw event => #1 [UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472 data:
'0xde6365ff61871542a8bd842ab06b852e791eda6d1213bef2c5bf668e1e0420c0'
]
2023-11-16 05:18:25 - event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0x0f7f439c5572e1cb107d66aaa07ceeae4949e0cb16e5c3194806354d735104dc,instrument:
[UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472,base:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,symbol:BTC-USDT-LINK,total:3)
                     event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
2023-11-16 05:18:25
UpdateSpotState(instrument:[UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472,spotState:
(time:1700081780, spot:22000.0, raw:2200000000000000000000))
2023-11-16 05:18:25 \vdash raw event => #4 [UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472 data:
'0x6287d4e630b53796d564aa1826a13b9501d64682c62e810bd91dbd60b5db6104'
2023-11-16 05:18:25 \vdash raw event => #5 [UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472 data:
'0x3b9390dcf8f970ba14e01c06887281b15552b9378e4df88e106fb130026bcfbf'
 ]
2023-11-16 05:18:25 — event => #6 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:10000.0 USDT)
2023-11-16 05:18:25 — event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:10000.0 USDT)
2023-11-16 05:18:25 - event => #8 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:
[UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472, value:10000.0 USDT)
2023-11-16 05:18:25 — event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:
[UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472,expiry:PERPETUAL,quantity:10000.0 USDT)
2023-11-16 05:18:25 \vdash raw event => #10 [UNKNOWN]0x120338CA068dc3FCa190487e5962E9571Fe45472 data:
```

```
'0xee0675525fac605bfcf2ae26dcd769c6d0871098b6eed3ade01f7247b3b28071',
 '0x000000000000000000000000f39fd6e51aad88f6f4ce6ab8827279cfffb92266'
]
2023-11-16 05:18:26 request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::launch(mtype:LINK,instrument:
,addArgs:
000000000021e19e0c9bab2400000])
0x5b66b5860d9033be8b67ca397d198bbd59d137e6e0d3a0143069072d39d175d7, nonce: 31, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 2259581
2023-11-16 05:18:38 — minted => LOCAL blockNumber: 74, confirmations: 1, gasUsed: 1190232(52.67%),
gasPrice: 1.0Gwei, tx fee: 0.001190
2023-11-16 05:18:38 — raw event => #0 [UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e data: 0x
topics: [
 '0x1cf3b03a6cf19fa2baba4df148e9dcabedea7f8a5c07840e207e5c089be95d3e',
 '0x0000000000000000000000005fc8d32690cc91d4c39d9d3abcbd16989f875707'
]
2023-11-16 05:18:38 \vdash raw event => #1 [UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e data:
'0xde6365ff61871542a8bd842ab06b852e791eda6d1213bef2c5bf668e1e0420c0'
]
2023-11-16 05:18:38 - event => #2 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-
NewInstrument(index:0x3e05b5131fab3216c2490601407bf97a189bc72a6d3d4595bc96c63f06fb34fe,instrument:
[UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,base:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,symbol:ETH-USDT-LINK,total:4)
2023-11-16 05:18:38 - event => #3 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,spotState:
(time:1700081798, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:18:38 \vdash raw event => #4 [UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e data:
'0x6287d4e630b53796d564aa1826a13b9501d64682c62e810bd91dbd60b5db6104'
]
2023-11-16 05:18:38 \vdash raw event => #5 [UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e data:
'0x3b9390dcf8f970ba14e01c06887281b15552b9378e4df88e106fb130026bcfbf',
 ]
2023-11-16 05:18:38 — event => #6 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:10000.0 USDT)
2023-11-16 05:18:38
                event => #7 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:10000.0 USDT)
                event => #8 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
2023-11-16 05:18:38 —
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:
[UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e, value:10000.0 USDT)
2023-11-16 05:18:38
                event => #9 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:
[UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:10000.0 USDT)
2023-11-16 05:18:38 — raw event => #10 [UNKNOWN]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e data:
'0xee0675525fac605bfcf2ae26dcd769c6d0871098b6eed3ade01f7247b3b28071',
 '0x000000000000000000000000f39fd6e51aad88f6f4ce6ab8827279cfffb92266'
]

✓ init function should load all created instruments (2828ms)

✓ computeInstrumentAddress function should calculate the address correctly
```

```
✓ getAllInstrument function should get the correct result (2918ms)

✓ fetchInstrumentBatch function should get the correct result (1084ms)

unrealizedPnl -5590122224458339780186
unrealizedLoss -5590122224458339780186
2023-11-16 05:18:49 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::trade(args:[{ expiry: 4294967295, size:
0.019708400978580353, amount: 5675.275435793230162203, limitTick: 8388607, deadline: 340016364 }])
0x96f151c79de4d35bf7c4272bf346492cc8ad08e55e49f2a323a2b6830120606e, nonce: 8, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 559992
2023-11-16 05:18:58 — minted => LOCAL blockNumber: 76, confirmations: 1, gasUsed: 318044(56.79%),
gasPrice: 1.0Gwei, tx fee: 0.000318
2023-11-16 05:18:58 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700081818, spot:1400.0, raw:1400000000000000000000))
2023-11-16 05:18:58
                        event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:18:58 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:5675.275436 USDC)
2023-11-16 05:18:58 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:5675.275436 USDC)
2023-11-16 05:18:58 \vdash event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:5675.275436 USDC)
2023-11-16 05:18:58 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:5675.275436 USDC)
2023-11-16 05:18:58 - event => #6 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFeeState(expiry:PERPETUAL,feeIndex:557565421239149,protocolFee:0.027728814823965649)
2023-11-16 05:18:58 - event => #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Trade(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, size:0.019708400978580353, amount:5675.275436, takenSiz
e:0, takenValue:0, entryNotional:27.728814823965648942, feeRatio:0.3%, sqrtPX96:1413.942667313145875258, mark:
1400.0)
2023-11-16 05:18:58 - event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:5675.164520740704137404, size:0.019708400978580353, entryNotional:27.728814823965648942,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))

✓ getSizeToTargetTick function should calculate the size correctly (13740ms)

   ✓ inquire function should get the correct result (613ms)

✓ allowUnauthorizedLPs function should get the correct result (40ms)

0x96884fbbd35b5c143e38133a6b43c6e276de6c1c2de4eb83d1ccd08a85963d2d, nonce: 7, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 71711
2023-11-16 05:19:00 — minted => LOCAL blockNumber: 77, confirmations: 1, gasUsed: 47807(66.67%),
gasPrice: 1.0Gwei, tx fee: 0.000048

✓ inWhiteList function should get the correct result (185ms)

2023-11-16 05:19:01 — submitted => LOCAL txHash:
0xe9b5404e81a365510453dfb16ed2d35a9212867e0f8b6d2c7280ee43f74191a6, nonce: 8, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 46124
2023-11-16 05:19:01 ├ minted => LOCAL blockNumber: 78, confirmations: 1, gasUsed: 25895(56.14%),
gasPrice: 1.0Gwei, tx fee: 0.000026
0xc9e990f38d1409fb4ff30977643cb73db746a5cf039f9349e06a4df7216c48f7, nonce: 9, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 71711
2023-11-16 05:19:01 — minted => LOCAL blockNumber: 79, confirmations: 1, gasUsed: 47807(66.67%),
gasPrice: 1.0Gwei, tx fee: 0.000048

✓ add/remove lp whitelist function should work fine (604ms)

2023-11-16 05:19:01 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::deposit(arg:{ quantity: 0.000000000001, token:
0x911eb93171edcbbc0ed8ccc838735b67ec1b258 })
0xe01a325d6807d584a699ce2761f478d6c9afebb72e4a336a03e29b09c8e8e727, nonce: 9, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 142658
2023-11-16 05:19:02 — minted => LOCAL blockNumber: 80, confirmations: 1, gasUsed: 89841(62.98%),
gasPrice: 1.0Gwei, tx fee: 0.000090
2023-11-16 05:19:02
                         event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:1.0 USDC)
```

```
2023-11-16 05:19:02 - event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:1.0 USDC)

✓ deposit function should work fine (1093ms)

2023-11-16 05:19:02 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::add(args:[{ minTickLower: 0, maxTickUpper: 8388607,
amount: 100.0, tickDelta: 953, expiry: 4294967295, deadline: 340016364 }])
0x805d65de02fb6b0c44f18aacc5d9cf56c3cc192648ed6b542f37d02d3a9622fd, nonce: 10, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 523682
2023-11-16 05:19:07 ├─ minted => LOCAL blockNumber: 81, confirmations: 1, gasUsed: 325593(62.17%),
gasPrice: 1.0Gwei, tx fee: 0.000326
2023-11-16 05:19:07 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:99.0 USDC)
2023-11-16 05:19:07 - event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:99.0 USDC)
2023-11-16 05:19:07 - event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:100.0 USDC)
2023-11-16 05:19:07 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:100.0 USDC)
                        event => #4 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
2023-11-16 05:19:07 —
Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:71550, tickUpper:73450, range:
(liquidity:380.706451082024295997, entryFeeIndex:0.000557565421239149, balance:100.0,
sqrtEntryPX96:1413.942667313145875258))

✓ add function should work fine (6631ms)

2023-11-16 05:19:09 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::remove(args:[{ tickUpper: 73450, tickLower: 71550,
target: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc, expiry: 4294967295, minTickLower: 0, maxTickUpper:
8388607, deadline: 340016364 }])
0x270faec13a4ea1fb5d3b54582d99ce3658739a242645d78d05f9c0c294b6f147, nonce: 11, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 428175
2023-11-16 05:19:19 ├─ minted => LOCAL blockNumber: 82, confirmations: 1, gasUsed: 237348(55.43%),
gasPrice: 1.0Gwei, tx fee: 0.000237
2023-11-16 05:19:19 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700081839, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:19:19 - event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 0.000066788671764895)
2023-11-16 05:19:19 — event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:340282366920938463463371218589018488500)
2023-11-16 05:19:19
                        event => #3 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-0.000066788671764895)
2023-11-16 05:19:19 - event => #4 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:5775.164453952032372509, size:0.019708400978580353, entryNotional:27.728814823965648942,
entrySocialLossIndex:0.0, entryFundingIndex:-0.003388842749722956))
                        event => #5 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
2023-11-16 05:19:19
Remove(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tickLower:71550, tickUpper:73450, fee:0.0, pic:
(balance:100.0, size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0), operator:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tip:0.0)
    ✓ remove function should work fine (11531ms)
unrealizedPnl -2902301028794510699050
unrealizedLoss -2902301028794510699050
2023-11-16 05:19:20 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::trade(args:[{ expiry: 4294967295, size: 1.0, amount:
2507.777719567649475213, limitTick: 8388607, deadline: 340016364 }])
0x25914f63ed856869c2cc25373d1070c928582fe57610097599f7fdf4830c7da5, nonce: 12, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 513264
2023-11-16 05:19:30 — minted => LOCAL blockNumber: 83, confirmations: 1, gasUsed: 287980(56.11%),
gasPrice: 1.0Gwei, tx fee: 0.000288
2023-11-16 05:19:30 —
                          event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
```

```
(time:1700081850, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:19:30 - event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 0.000101773214117935)
2023-11-16 05:19:30 — event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:340282366920938463463369443480911490761)
2023-11-16 05:19:30 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:2507.77772 USDC)
2023-11-16 05:19:30 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:2507.77772 USDC)
2023-11-16 05:19:30 - event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,value:2507.77772 USDC)
2023-11-16 05:19:30 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:2507.77772 USDC)
2023-11-16 05:19:30 - event => #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFeeState(expiry:PERPETUAL,feeIndex:38569019262715421,protocolFee:1.918112480327370124)
2023-11-16 05:19:30 - event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Trade(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, size:1.0, amount:2507.77772, takenSize:0, takenValue:0, e
ntryNotional:1890.383665503404474968, feeRatio:0.3%, sqrtPX96:2527.365844042849884983, mark:1400.0)
2023-11-16 05:19:30 - event => #9 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-0.00003498454235304)
2023-11-16 05:19:30 - event => #10 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:8275.380604305476401569, size:1.019708400978580353, entryNotional:1918.11248032737012391,
entrySocialLossIndex:0.0, entryFundingIndex:-0.005163950856720695))

✓ trade function should work fine (10940ms)
unrealizedPnl -261999513959494879214
unrealizedLoss -261999513959494879214
2023-11-16 05:19:33 - request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266 [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::trade(args:[{ expiry: 4294967295, size: 0.2, amount:
339.56064506750904297, limitTick: 8388607, deadline: 340016364 }])
2023-11-16 05:19:42 — submitted => LOCAL txHash:
0xd433887568032b33d7dbe5d14987be6dbfe2d04cc7678617ead505e8f0157036, nonce: 32, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 564038
2023-11-16 05:19:42 ├─ minted => LOCAL blockNumber: 84, confirmations: 1, gasUsed: 320666(56.85%),
gasPrice: 1.0Gwei, tx fee: 0.000321
2023-11-16 05:19:42 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700081862, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:19:42 - event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 0.159766276290062664)
2023-11-16 05:19:42 —
                         event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:340282366920938463463212864891461094944)
2023-11-16 05:19:42 - event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:339.560646 USDC)
2023-11-16 05:19:42 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:339.560646 USDC)
2023-11-16 05:19:42
                          event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:339.560646 USDC)
                          event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:19:42
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:339.560646 USDC)
2023-11-16 05:19:42
                          event \Rightarrow #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFeeState(expiry:PERPETUAL,feeIndex:49467436278759411,protocolFee:2.460111994286865004)
2023-11-16 05:19:42 - event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266, size:0.2, amount:339.560646, takenSize:0, takenValue:0, e
ntryNotional:541.999513959494879214, feeRatio:0.3%, sqrtPX96:2905.826572602720817882, mark:1400.0)
2023-11-16 05:19:42
                          event => #9 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,pic:
(balance:337.392647944162020483, size:0.2, entryNotional:541.999513959494879214,
```

```
entrySocialLossIndex:0.0, entryFundingIndex:-0.161742540307116512))
2023-11-16 05:20:04 request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266 [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::sweep(expiry:PERPETUAL,target:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,size:0.2)
0xc7d143488c919910fcad0f1af58eef78b518b7857ccd472f96ab4a9566c3e1ff, nonce: 33, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 450722
2023-11-16 05:20:12 — minted => LOCAL blockNumber: 110, confirmations: 1, gasUsed: 272671(60.50%),
gasPrice: 1.0Gwei, tx fee: 0.000273
2023-11-16 05:20:12 —
                          event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700084393, spot:400.0, raw:40000000000000000000))
2023-11-16 05:20:12 - event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund:89.693238664938426959)
2023-11-16 05:20:12
                         event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:340282366920938463389807227677832780244)
2023-11-16 05:20:12 —
                          event => #3 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,pic:
(balance:0.0, size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:20:12 —
                          event => #4 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFeeState(expiry:PERPETUAL,feeIndex:60365853294803401,protocolFee:3.002111508246359884)
2023-11-16 05:20:12 —
                          event => #5 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:247.973773965
60047356, insuranceFund:0.0)
2023-11-16 05:20:12
                         event => #6 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,funding:-14.68112744272566294)
2023-11-16 05:20:12 - event => #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:247.973773965
60047356, insuranceFund: 410.236761110536804984)
2023-11-16 05:20:12
                          event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Sweep(expiry:PERPETUAL,trader:
[UNKNOWN] 0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266, size:-0.2, takenSize:0, takenValue:0, entryNotional:541.
999513959494879213, feeRatio:0.3%, sqrtPX96:2527.365844042849884983, mark:400.0, operator:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266)

✓ sweep function should work fine (42144ms)

unrealizedPnl -31914022748255179833
unrealizedLoss -31914022748255179833
2023-11-16 05:20:34 - request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266 [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::trade(args:[{ expiry: 4294967295, size: -0.2, amount:
89.068838492917013415, limitTick: -8388608, deadline: 340016364 }])
2023-11-16 05:20:43 — submitted => LOCAL txHash:
0xcb74de2997dadfa4c9dcd5b563f57fdfa42490f1119676281862e18e46e668f5, nonce: 34, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 581202
2023-11-16 05:20:43 — minted => LOCAL blockNumber: 136, confirmations: 1, gasUsed: 332049(57.13%),
gasPrice: 1.0Gwei, tx fee: 0.000332
2023-11-16 05:20:43
                          event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700086926, spot:2527.36584404, raw:252736584404000000000))
2023-11-16 05:20:43 \leftarrow event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:247.973773965
60047356, insuranceFund: 410.236761110622002077)
2023-11-16 05:20:43
                          event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:340282366920938463389807227677749229793)
2023-11-16 05:20:43
                        event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:89.068839 USDC)
2023-11-16 05:20:43
                          event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:89.068839 USDC)
2023-11-16 05:20:43
                          event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:89.068839 USDC)
                          event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:20:43
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:89.068839 USDC)
2023-11-16 05:20:43
                          event => #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFeeState(expiry:PERPETUAL,feeIndex:69888085183569418,protocolFee:3.475670654306104705)
2023-11-16 05:20:43
                        event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266, size:-0.2, amount:89.068839, takenSize:0, takenValue:0, e
```

```
ntryNotional:473.559146059744820167, feeRatio:0.3%, sqrtPX96:2218.300383237201920746, mark:2527.36584404)
2023-11-16 05:20:43
                        event => #9 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,pic:
(balance:87.174602415761020719, size:-0.2, entryNotional:473.559146059744820167,
entrySocialLossIndex:247.97377396560047356, entryFundingIndex:0.0))
unrealizedPnl -4612322403239699381
unrealizedLoss -4612322403239699381
2023-11-16 05:20:46 request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906 [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::trade(args:[{ expiry: 4294967295, size: 0.4, amount:
543.07669265937817404, limitTick: 8388607, deadline: 340016364 }])
0x82898d299b424ee368e72117797214f6cabb1805ee77d0e6c0d2baf7aef89a2e, nonce: 8, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 556469
2023-11-16 05:20:56 — minted => LOCAL blockNumber: 137, confirmations: 1, gasUsed: 315852(56.76%),
gasPrice: 1.0Gwei, tx fee: 0.000316
2023-11-16 05:20:56 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700086936, spot:2527.36584404, raw:252736584404000000000))
2023-11-16 05:20:56
                        event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:1157920892373161954235588126097833376383312573297864371907867126133394324
10760)
2023-11-16 05:20:57 \leftarrow event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:543.076693 USDC)
2023-11-16 05:20:57 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, quantity:543.076693 USDC)
2023-11-16 05:20:57 \longrightarrow event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:543.076693 USDC)
2023-11-16 05:20:57 — event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:543.076693 USDC)
2023-11-16 05:20:57 - event => #6 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFeeState(expiry:PERPETUAL,feeIndex:90308734088379425,protocolFee:4.491229314325344405)
2023-11-16 05:20:57 \( \to \) event => #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, size:0.4, amount:543.076693, takenSize:0, takenValue:0, e
ntryNotional:1015.558660019239699381, feeRatio:0.3%, sqrtPX96:2905.826572602720817882, mark:2527.36584404)
2023-11-16 05:20:57 \( \text{went} => \#8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:
(balance:539.014458359923041202, size:0.4, entryNotional:1015.558660019239699381,
entrySocialLossIndex:0.0, entryFundingIndex:-73.5603637354520334))
2023-11-16 05:21:19 - request => LOCAL [UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906 [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::liquidate(expiry:PERPETUAL,target:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,size:-0.2,amount:87.174602415761020719)
0x38307196e5b93a93286aa9c4f6b53f340c4cafdc68aad274bf929f85d1653e14, nonce: 9, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 458514
2023-11-16 05:21:28 — minted => LOCAL blockNumber: 163, confirmations: 1, gasUsed: 242380(52.86%),
gasPrice: 1.0Gwei, tx fee: 0.000242
2023-11-16 05:21:28 — event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700089469, spot:3000.0, raw:300000000000000000000))
2023-11-16 05:21:28
                          event \Rightarrow #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:1157920892373161954226193288677334557708661696902689621533562993907385302
73163)
2023-11-16 05:21:28
                          event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,pic:
(balance:0.0, size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:21:28
                          event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:87.174603 USDC)
2023-11-16 05:21:28
                          event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906, quantity:87.174603 USDC)
2023-11-16 05:21:28
                          event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:87.174603 USDC)
2023-11-16 05:21:28
                          event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
```

```
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:87.174603 USDC)
2023-11-16 05:21:28
                          event \Rightarrow #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:247.973773965
60047356, insuranceFund: 370.411176377319194469)
2023-11-16 05:21:28 —
                         event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,funding:0.155575304155107432)
2023-11-16 05:21:28 - event => #9 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,funding:-0.559333208808648494)
2023-11-16 05:21:28 — event => #10 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,pic:
(balance:718.565306654458298943, size:0.2, entryNotional:507.77933000961984969, entrySocialLossIndex:0.0,
entryFundingIndex:-73.171425475064264821))
2023-11-16 05:21:28 - event => #11 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Liquidate(expiry:PERPETUAL, trader:
[UNKNOWN]0x90F79bf6EB2c4f870365E785982E1f101E93b906,amount:87.174603,mark:3000.0,target:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,size:-0.2)
    ✓ liquidate function should work fine (98906ms)
2023-11-16 05:21:52 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::trade(args:[{ expiry: 4294967295, size: 0.0, amount:
-7812.22247390154650504, limitTick: 0, deadline: 340016364 }])
2023-11-16 05:21:57 — submitted => LOCAL txHash:
0xdb60de110bf3785385f4b9df3b7c0cb652e356c565a6240310bf313c882d525a, nonce: 13, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 399362
2023-11-16 05:21:57 ├─ minted => LOCAL blockNumber: 189, confirmations: 1, gasUsed: 234274(58.66%),
gasPrice: 1.0Gwei, tx fee: 0.000234
2023-11-16 05:21:57 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700091999, spot:1400.0, raw:1400000000000000000000))
2023-11-16 05:21:57 - event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:247.973773965
60047356, insuranceFund: 424.19327570812256809)
2023-11-16 05:21:58
                          event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:1157920892373161954226193288677334557708661696902689621533122051635546774
52918)
2023-11-16 05:21:58 —
                          event => #3 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-119.571505438463111689)
2023-11-16 05:21:58 — event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7522.529203 USDC)
2023-11-16 05:21:58
                          event => #5 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:7522.529203 USDC)
2023-11-16 05:21:58 — event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:7522.529203 USDC)
2023-11-16 05:21:58
                          event \Rightarrow #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Adjust(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, net:-7522529203772654410750)
2023-11-16 05:21:58 — event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance: 633.27989509435887913, size: 1.019708400978580353, entryNotional: 1918.11248032737012391,
entrySocialLossIndex:0.0, entryFundingIndex:-117.265652658917085066))

✓ adjust function should work fine (6531ms)

2023-11-16 05:21:59 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::place(args:[{ expiry: 4294967295, size: 1.0, amount:
346.486528121297649563, tick: 72345, deadline: 340016364 }])
0xfa1154f4fd2f3f399ae8a30d5d0cfbc6bdce48aee7fd103f961291bba3717fd3, nonce: 14, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 407628
2023-11-16 05:22:03 — minted => LOCAL blockNumber: 190, confirmations: 1, gasUsed: 259477(63.66%),
gasPrice: 1.0Gwei, tx fee: 0.000259
                         event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
2023-11-16 05:22:03
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:346.486529 USDC)
                          event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
2023-11-16 05:22:03
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:346.486529 USDC)
2023-11-16 05:22:03
                          event \Rightarrow #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
```

Place(expiry:PERPETUAL, trader:

```
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tick:72345,nonce:0,order:(balance:346.486529,
size:1.0))
    ✓ place function should work fine (5712ms)
unrealizedPnl -22987241302282699306
unrealizedLoss -22987241302282699306
2023-11-16 05:22:05 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::trade(args:[{ expiry: 4294967295, size: -4.0, amount:
1008.689288511349159537, limitTick: -8388608, deadline: 340016364 }])
0x2b7dab8587be46ec3554d7bba728d26c58ea8fecd01ce612f23e979aab95406b, nonce: 15, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 670548
2023-11-16 05:22:17 — minted => LOCAL blockNumber: 191, confirmations: 1, gasUsed: 384885(57.40%),
gasPrice: 1.0Gwei, tx fee: 0.000385
2023-11-16 05:22:17 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700092018, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:22:17 —
                          event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:247.973773965
60047356, insuranceFund: 424.597172896772870105)
2023-11-16 05:22:17 —
                         event \Rightarrow #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:1157920892373161954226193288677334557708661696902689621533118740211370912
06442)
2023-11-16 05:22:17 —
                          event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:1008.689289 USDC)
2023-11-16 05:22:17 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:1008.689289 USDC)
2023-11-16 05:22:17 - event => #5 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFeeState(expiry:PERPETUAL,feeIndex:174423707938431290,protocolFee:10.060376975836277668)
2023-11-16 05:22:17 — event => #6 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Trade(expiry:PERPETUAL, trader:
00000, takenValue:1385946112485190598252, entryNotional:5569.147661510933262532, feeRatio:0.3%, sqrtPX96:669.
122107391653092431, mark:1400.0)
2023-11-16 05:22:17 - event => #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-0.33766870513305272)
2023-11-16 05:22:17 —
                          event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:1120.969108599040425487, size:-2.980291599021419647, entryNotional:4149.420997327704806494,
entrySocialLossIndex:247.97377396560047356, entryFundingIndex:-2.796666044043242468))
2023-11-16 05:22:18 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::fill(arg:{ nonce: 0, tick: 72345, target:
0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc, expiry: 429496729 })
2023-11-16 05:22:23 — submitted => LOCAL txHash:
0xa82e451737e7e2a06c996fb8a71c6f06b679249ff30b9384edc268b4f6850383, nonce: 16, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 289806
2023-11-16 05:22:23 ├─ minted => LOCAL blockNumber: 192, confirmations: 1, gasUsed: 166277(57.38%),
gasPrice: 1.0Gwei, tx fee: 0.000166
2023-11-16 05:22:23 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700092024, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:22:23 - event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:1157920892373161954226020576969538060651743478767497936080514514668416066
22356)
2023-11-16 05:22:23
                          event \Rightarrow #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Fill(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72345, nonce:0, fee:4.157838337455571794, pic:
(balance:350.644367337455571794, size:1.0, entryNotional:1385.946112485190598252,
entrySocialLossIndex:0.0, entryFundingIndex:-117.596795076503331542),operator:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tip:0.0)
2023-11-16 05:22:23
                          event \Rightarrow #3 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.126054933058514794)
2023-11-16 05:22:23
                          event => #4 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-0.151265919670217753)
2023-11-16 05:22:23
                          event => #5 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:1477.929067842427011703, size:-1.980291599021419647, entryNotional:2757.134081949971490861,
entrySocialLossIndex:247.97377396560047356, entryFundingIndex:-2.847421453252155448))

✓ fill function should work fine (19535ms)

2023-11-16 05:22:24 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
```

```
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::place(args:[{ expiry: 4294967295, size: -1.0, amount:
353.485666828286468612, tick: 72545, deadline: 340016364 }])
0x7a4692f191a6b584c11ea2358ba46f9761cf0faa287034847abab15d60479288, nonce: 17, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 407898
2023-11-16 05:22:28 — minted => LOCAL blockNumber: 193, confirmations: 1, gasUsed: 259648(63.66%),
gasPrice: 1.0Gwei, tx fee: 0.000260
2023-11-16 05:22:28 — event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, value:353.485667 USDC)
2023-11-16 05:22:28 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:353.485667 USDC)
2023-11-16 05:22:28
                         event \Rightarrow #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Place(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72545, nonce:0, order:(balance:353.485667,
size:-1.0))
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::cancel(arg:{ ticks: 72545, expiry: 4294967295, deadline:
340016364 })
2023-11-16 05:22:37 — submitted => LOCAL txHash:
0xff635e50915d4d2bf4e2fecc8d52290ae5d1223202b9df451b81d69cb7b98526, nonce: 18, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 401678
2023-11-16 05:22:37 ├─ minted => LOCAL blockNumber: 194, confirmations: 1, gasUsed: 214900(53.50%),
gasPrice: 1.0Gwei, tx fee: 0.000215
2023-11-16 05:22:37 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700092037, spot:1400.0, raw:1400000000000000000000))
2023-11-16 05:22:37 —
                        event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:1157920892373161954225646368269312317029554947364319079144758098798536834
46973)
2023-11-16 05:22:37 — event => #2 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:353.485667 USDC)
2023-11-16 05:22:37 — event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:353.485667 USDC)
2023-11-16 05:22:37 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:353.485667 USDC)
2023-11-16 05:22:37 - event => #5 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Cancel(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72545, nonce:0, fee:0.0, pic:(balance:0.0,
size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:22:37 — event => #6 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.0)
2023-11-16 05:22:37 - event => #7 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-0.217772772666160341)
2023-11-16 05:22:37 - event => #8 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:1477.711295069760851362, size:-1.980291599021419647, entryNotional:2757.134081949971490861,
entrySocialLossIndex:247.97377396560047356, entryFundingIndex:-2.957391506538133571))

✓ cancel function should work fine (14648ms)

2023-11-16 05:22:38 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::update(expiry:PERPETUAL)
0x717c9835b83009dc765be987947056dcd1fb9ba2da9ce9e12728e181949a08ff, nonce: 19, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 172764
2023-11-16 05:22:41 — minted => LOCAL blockNumber: 195, confirmations: 1, gasUsed: 108468(62.78%),
gasPrice: 1.0Gwei, tx fee: 0.000108
2023-11-16 05:22:41 —
                        event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,spotState:
(time:1700092042, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:22:41
                        event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdateFundingIndex(fundingIndex:1157920892373161954225502441846148569484391648031132264357346879042446651
08757)
   ✓ update function should work fine (3815ms)
2023-11-16 05:22:44 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF::settle(expiry:PERPETUAL, target:
```

[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC)

```
0xb9718b40116bfd2f50f2d314c1b906298512fcd0bc3e2b831fe747beddf268de, nonce: 20, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 255960
2023-11-16 05:22:46 — minted => LOCAL blockNumber: 198, confirmations: 1, gasUsed: 132779(51.87%),
gasPrice: 1.0Gwei, tx fee: 0.000133
2023-11-16 05:22:46 - event => #0 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.0)
2023-11-16 05:22:46 - event => #1 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-0.083758758717753976)
2023-11-16 05:22:47 - event => #2 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:0.0, size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16\ 05:22:47 — event => #3 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Approval(owner:
[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:2909.70473 USDC)
2023-11-16 05:22:47 - event => #4 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:2909.70473 USDC)
2023-11-16 05:22:47 — event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDC-
LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF,expiry:PERPETUAL,quantity:2909.70473 USDC)
2023-11-16 05:22:47 - event => #6 [ETH-USDC-LINK]0x9dE34409A7478d87B89dfA2b1C9c2280C35e6EFF-
Settle(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, settlement:669.122107391653092431, balance:2909.70473,
operator:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC)
   ✓ settle function should work fine (8349ms)
2023-11-16 05:22:52 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::trade(args:[{ expiry: 4294967295, size:
-0.072731442536446859, amount: 100.0, limitTick: 71933, deadline: 340016364 }])
2023-11-16 05:23:00 — submitted => LOCAL txHash:
0x9b2553134da58f580cdaca0900d643052d2a29fecea2475dfaf89c04f5b1ad45, nonce: 21, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 570132
2023-11-16 05:23:00 — minted => LOCAL blockNumber: 200, confirmations: 1, gasUsed: 324885(56.98%),
gasPrice: 1.0Gwei, tx fee: 0.000325
2023-11-16 05:23:00 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,spotState:
(time:1700092061, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:23:00 \longrightarrow event => #1 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateFundingIndex(fundingIndex:0)
2023-11-16 05:23:00 - event => #2 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:100.0 USDT)
2023-11-16 05:23:00 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:100.0 USDT)
2023-11-16 05:23:00 - event => #4 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,value:100.0 USDT)
2023-11-16 05:23:00 - event => #5 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:100.0 USDT)
2023-11-16 05:23:00 - event => #6 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
2023-11-16 05:23:00
                         event => #7 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Trade(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, size:-0.072731442536446859, amount:100.0, takenSize:0, t
akenValue:0,entryNotional:100.000000000000001298,feeRatio:0.3%,sqrtPX96:1350.291586530886339436,mark:1400
.0)
2023-11-16 05:23:00
                         event => #8 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:99.599999999999994, size:-0.072731442536446859, entryNotional:100.00000000000001298,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
   ✓ intuitiveTrade function should work fine(SHORT) (10669ms)
2023-11-16 05:23:02 request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266 [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::trade(args:[{ expiry: 4294967295, size: 0.1, amount:
138.438849728411081362, limitTick: 72571, deadline: 340016364 }])
0xcea425e8fbc1cb9b33766e5f12488c7c05c0f5c7e8b43efc0f5e840c78a3e33b, nonce: 35, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 605754
2023-11-16 05:23:10 — minted => LOCAL blockNumber: 201, confirmations: 1, gasUsed: 348054(57.46%),
```

```
gasPrice: 1.0Gwei, tx fee: 0.000348
2023-11-16 05:23:10 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,spotState:
(time:1700092070, spot:1400.0, raw:1400000000000000000000))
2023-11-16 05:23:10 - event => #1 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateSocialLossInsuranceFund(expiry:PERPETUAL,longSocialLossIndex:0.0,shortSocialLossIndex:0.0,insurance
Fund: 0.00037660048102154)
2023-11-16 05:23:10 - event => #2 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateFundingIndex(fundingIndex:1157920892373161954235692230402929959102228503398093391614048124342215114
75200)
2023-11-16 05:23:10 —
                                   event => #3 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:138.438849728411081362 USDT)
2023-11-16 05:23:10 — event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:138.438849728411081362 USDT)
2023-11-16 05:23:10 - event => #5 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,value:138.438849728411081362 USDT)
2023-11-16 05:23:10 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:138.438849728411081362 USDT)
2023-11-16 05:23:10 - event => #7 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateFeeState(expiry:PERPETUAL,feeIndex:4794480345899852,protocolFee:0.238438849728411084)
2023-11-16 05:23:10 - event => #8 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Trade(expiry:PERPETUAL,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266, size:0.1, amount:138.438849728411081362, takenSize:0, takenSize:0, takenSize:0.1, amount:138.438849728411081362, takenSize:0, takenSize:0, takenSize:0.1, amount:138.438849728411081362, takenSize:0, takenSize:0, takenSize:0.1, amount:138.438849728411081362, takenSize:0, takenSi
kenValue:0,entryNotional:138.438849728411081362,feeRatio:0.3%,sqrtPX96:1419.3464067538423329,mark:1400.0)
2023-11-16 05:23:10 —
                                 event => #9 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,pic:
(balance:137.885094329497437036, size:0.1, entryNotional:138.438849728411081362,
entrySocialLossIndex:0.0, entryFundingIndex:0.0))
     ✓ intuitiveTrade function should work fine(LONG) (9915ms)
2023-11-16 05:23:11 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::trade(args:[{ expiry: 4294967295, size: 0.0, amount:
72.319598960736976502, limitTick: 0, deadline: 340016364 }])
0xd96d782d593e05dafa78969f1230f680383abba66b54c270b94dcc3daa4ddf58, nonce: 22, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 390099
2023-11-16 05:23:16 — minted => LOCAL blockNumber: 202, confirmations: 1, gasUsed: 209119(53.61%),
gasPrice: 1.0Gwei, tx fee: 0.000209
2023-11-16 05:23:16 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,spotState:
(time:1700092077, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:23:16 —
                                 event => #1 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateFundingIndex(fundingIndex:1157920892373161954235699563743516669374076146067124398496926180126951956
07769)
2023-11-16 05:23:16 —
                                   event => #2 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:-0.000219858759636243)
2023-11-16 05:23:16 —
                                 event => #3 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:72.319598960736976502 USDT)
                                   event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
2023-11-16 05:23:16 —
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:72.319598960736976502 USDT)
2023-11-16 05:23:16
                                   event => #5 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e, value:72.319598960736976502 USDT)
2023-11-16 05:23:16
                                   event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:72.319598960736976502 USDT)
2023-11-16 05:23:16
                                   event => #7 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Adjust(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,net:72319598960736976502)
                                   event => #8 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
2023-11-16 05:23:16
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:171.919379101977340253, size:-0.072731442536446859, entryNotional:100.00000000000001298,
entrySocialLossIndex:0.0, entryFundingIndex:-0.003022884628282576))

✓ adjustMargin function should work fine(transfer out) (6083ms)

2023-11-16 05:23:17 - request => LOCAL [UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266 [ETH-USDT-
```

```
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::trade(args:[{ expiry: 4294967295, size: 0.0, amount:
100.0, limitTick: 0, deadline: 340016364 }])
2023-11-16 05:23:22 |— submitted => LOCAL txHash:
0xe51eae1a46c47c0340649e7fa21e52a164b2482d9d0c7f4aa73693e491c85d0a, nonce: 36, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 389438
2023-11-16 05:23:22 — minted => LOCAL blockNumber: 203, confirmations: 1, gasUsed: 208125(53.44%),
gasPrice: 1.0Gwei, tx fee: 0.000208
2023-11-16 05:23:22 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,spotState:
(time:1700092083, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:23:22 - event => #1 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateFundingIndex(fundingIndex:1157920892373161954235705849464019563883566461252725503245387202883578397
18876)
2023-11-16 05:23:22 - event => #2 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
FundingFee(trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,funding:-0.00029109176828698)
2023-11-16 05:23:22 - event => #3 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:100.0 USDT)
2023-11-16 05:23:22 - event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,quantity:100.0 USDT)
2023-11-16 05:23:22 - event => #5 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,value:100.0 USDT)
2023-11-16 05:23:22 - event => #6 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:100.0 USDT)
2023-11-16 05:23:22
                          event => #7 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Adjust(expiry:PERPETUAL,trader:
[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,net:1000000000000000000000)
2023-11-16 05:23:22 - event => #8 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266,pic:
(balance:237.884803237729150056, size:0.1, entryNotional:138.438849728411081362,
entrySocialLossIndex:0.0, entryFundingIndex:-0.002910917682869796))

✓ adjustMargin function should work fine(transfer in) (5873ms)

2023-11-16 05:23:23 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::place(args:[{ expiry: 4294967295, size: 1.0, amount:
346.486528121297649563, tick: 72345, deadline: 340016364 }])
0x96153dcda06df468f9c94c2d3b13a756c8a504e75820b992fd0b5be6e2298293, nonce: 23, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 489830
2023-11-16 05:23:29 — minted => LOCAL blockNumber: 204, confirmations: 1, gasUsed: 273135(55.76%),
gasPrice: 1.0Gwei, tx fee: 0.000273
2023-11-16 05:23:29 — event => #0 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:346.486528121297649563 USDT)
2023-11-16 05:23:29 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:346.486528121297649563 USDT)
2023-11-16 05:23:29 — event => #2 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,value:346.486528121297649563 USDT)
2023-11-16 05:23:29 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:346.486528121297649563 USDT)
2023-11-16 05:23:29
                          event => #4 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Place(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72345, nonce:0, order:
(balance:346.486528121297649563, size:1.0))
    ✓ limitOrder function should work fine (8071ms)
2023-11-16 05:23:31 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::add(args:[{ minTickLower: 0, maxTickUpper: 8388607,
amount: 100.0, tickDelta: 953, expiry: 4294967295, deadline: 340016364 }])
0x706ab3b1250775502b4f5b11f8f3a578d50d11438e4d3eb40bcc57bc22139db3, nonce: 24, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 549675
2023-11-16 05:23:36 — minted => LOCAL blockNumber: 205, confirmations: 1, gasUsed: 312185(56.79%),
gasPrice: 1.0Gwei, tx fee: 0.000312
                          event => #0 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
2023-11-16 05:23:36
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
```

```
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:100.0 USDT)
2023-11-16 05:23:36 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:100.0 USDT)
2023-11-16 05:23:36 - event => #2 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,value:100.0 USDT)
2023-11-16 05:23:36 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:100.0 USDT)
2023-11-16 05:23:36
                          event => #4 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Add(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tickLower:71600,tickUpper:73500,range:
(liquidity:373.269020313996860398, entryFeeIndex:0.004794480345899852, balance:100.0,
sqrtEntryPX96:1419.3464067538423329))

✓ addLiquidity function should work fine (6138ms)

2023-11-16 05:23:37 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::remove(args:[{ tickUpper: 73500, tickLower: 71600,
target: 0x3c44cdddb6a900fa2b585dd299e03d12fa4293bc, expiry: 4294967295, minTickLower: 0, maxTickUpper:
8388607, deadline: 340016364 }])
0xe4f38b3ce37dff5ae06e918335d748ba379983c40124d088b2d27e2a3211fabd, nonce: 25, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 337082
2023-11-16 05:23:43 — minted => LOCAL blockNumber: 206, confirmations: 1, gasUsed: 183213(54.35%),
gasPrice: 1.0Gwei, tx fee: 0.000183
2023-11-16 05:23:43 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,spotState:
(time:1700092104, spot:1400.0, raw:1400000000000000000000))
2023-11-16 05:23:43 \longrightarrow event => #1 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateFundingIndex(fundingIndex:1799939890061611196436389606272934530559296957471093352)
2023-11-16 05:23:43 \( \text{event} => \#2 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.000604575211057573)
2023-11-16 05:23:43 — event => #3 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:271.919983677188397826, size:-0.072731442536446859, entryNotional:100.00000000000001298,
entrySocialLossIndex:0.0, entryFundingIndex:0.005289547931467782))
2023-11-16 05:23:43
                          event => #4 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Remove(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tickLower:71600,tickUpper:73500,fee:0.0,pic:
(balance:100.0, size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0,
entryFundingIndex:0.005289547931467782),operator:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tip:0.0)
    ✓ removeLiquidity function should work fine (6868ms)
2023-11-16 05:23:44 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::place(args:[{ expiry: 4294967295, size: 1.0, amount:
352.955862270582104934, tick: 72530, deadline: 340016364 }])
0xdf6ec805bb7da366c6022b292720bfcf530ab2b43567b070358b37ee12ae7db2, nonce: 26, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 411735
2023-11-16 05:23:49 — minted => LOCAL blockNumber: 207, confirmations: 1, gasUsed: 221995(53.92%),
gasPrice: 1.0Gwei, tx fee: 0.000222
2023-11-16 05:23:49 — event => #0 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:352.955862270582104934 USDT)
2023-11-16 05:23:49 ← event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:352.955862270582104934 USDT)
                         event => #2 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
2023-11-16 05:23:49
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e, value:352.955862270582104934 USDT)
2023-11-16 05:23:49
                         event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:352.955862270582104934 USDT)
2023-11-16 05:23:49
                          event => #4 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Place(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,tick:72530,nonce:0,order:
(balance:352.955862270582104934, size:1.0))
2023-11-16 05:23:50 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::place(args:[{ expiry: 4294967295, size: 1.0, amount:
353.132375500833358149, tick: 72535, deadline: 340016364 }])
```

```
0x82628d6af44051866d6bf8f384565f1505eecb19465aa7aecbb83ed5f2df5062, nonce: 27, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 412788
2023-11-16 05:23:55 — minted => LOCAL blockNumber: 208, confirmations: 1, gasUsed: 222941(54.01%),
gasPrice: 1.0Gwei, tx fee: 0.000223
2023-11-16 05:23:55 — event => #0 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:353.132375500833358149 USDT)
2023-11-16 05:23:55 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, quantity:353.132375500833358149 USDT)
2023-11-16 05:23:55 — event => #2 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,value:353.132375500833358149 USDT)
2023-11-16 05:23:55 — event => #3 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Scatter(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:353.132375500833358149 USDT)
2023-11-16 05:23:55
                         event => #4 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Place(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72535, nonce:0, order:
(balance:353.132375500833358149, size:1.0))
2023-11-16 05:23:56 request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC [ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e::cancel(arg:{ ticks: 72345,72530,72535, expiry:
4294967295, deadline: 340016364 })
0x58fcd131764dd120b7a121dbdd5bc96367b7ec4d45bcfa547b6135006200edb0, nonce: 28, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 678309
2023-11-16 05:24:10 ├─ minted => LOCAL blockNumber: 209, confirmations: 1, gasUsed: 356339(52.53%),
gasPrice: 1.0Gwei, tx fee: 0.000356
2023-11-16 05:24:10 - event => #0 [ChainlinkMarket]0x8A791620dd6260079BF849Dc5567aDC3F2FdC318-
UpdateSpotState(instrument:[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,spotState:
(time:1700092127, spot:1400.0, raw:140000000000000000000))
2023-11-16 05:24:10 - event => #1 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdateFundingIndex(fundingIndex:4209466082837839097112082424663083936639704228775727775)
2023-11-16 05:24:10 — event => #2 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Approval(owner:
[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:346.486528121297649563 USDT)
2023-11-16 05:24:10 - event => #3 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:346.486528121297649563 USDT)
2023-11-16 05:24:10 —
                        event => #4 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:346.486528121297649563 USDT)
2023-11-16 05:24:10 -
                        event => #5 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Cancel(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72345, nonce:0, fee:0.0, pic:(balance:0.0,
size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:24:10 - event => #6 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.0)
2023-11-16 05:24:10 —
                        event => #7 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.000515008513123118)
                          event => #8 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
2023-11-16 05:24:10 —
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:271.920498685701520944, size:-0.072731442536446859, entryNotional:100.00000000000001298,
entrySocialLossIndex:0.0, entryFundingIndex:0.012370509000884757))
2023-11-16 05:24:10
                          event => #9 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Approval(owner:
[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:352.955862270582104934 USDT)
                          event => #10 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
2023-11-16 05:24:10
[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:352.955862270582104934 USDT)
                          event => #11 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
2023-11-16 05:24:10
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:352.955862270582104934 USDT)
2023-11-16 05:24:10
                          event => #12 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
Cancel(expiry:PERPETUAL,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72530, nonce:0, fee:0.0, pic:(balance:0.0,
size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
```

2023-11-16 05:24:10 - event => #13 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-

```
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.0)
2023-11-16 05:24:10 - event => #14 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:271.920498685701520944, size:-0.072731442536446859, entryNotional:100.00000000000001298,
entrySocialLossIndex:0.0, entryFundingIndex:0.012370509000884757))
2023-11-16 05:24:10
                         event => #15 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Approval(owner:
[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e, spender:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:353.132375500833358149 USDT)
2023-11-16 05:24:10 —
                        event => #16 [USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95-Transfer(from:
[ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853, value:353.1323755008333358149 USDT)
2023-11-16 05:24:10 —
                        event => #17 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Gather(quote:
[USDT]0x208B314810a368F978B612b87E6271Ea5ff1cD95,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,instrument:[ETH-USDT-
LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e,expiry:PERPETUAL,quantity:353.132375500833358149 USDT)
                          event => #18 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
2023-11-16 05:24:10 —
Cancel(expiry:PERPETUAL, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, tick:72535, nonce:0, fee:0.0, pic:(balance:0.0,
size:0.0, entryNotional:0.0, entrySocialLossIndex:0.0, entryFundingIndex:0.0))
2023-11-16 05:24:10 - event => #19 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
FundingFee(trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,funding:0.0)
2023-11-16 05:24:10 - event => #20 [ETH-USDT-LINK]0x3eeb516ff88f2bb9159d050484Fa7Dd29CC8E88e-
UpdatePosition(expiry:PERPETUAL,trader:[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,pic:
(balance:271.920498685701520944, size:-0.072731442536446859, entryNotional:100.00000000000001298,
entrySocialLossIndex:0.0, entryFundingIndex:0.012370509000884757))

✓ batchCancelOrder function should work fine (27192ms)
2023-11-16 05:24:12 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::deposit(arg:{ quantity: 0.0000000001, token:
0x911eb93171edcbbc0ed8ccc838735b67ec1b258 })
0xd8a9930bb731d59bccb9407c240e359f73fd8456aff0299c0ddbe1af3ace076c, nonce: 29, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 91286
2023-11-16 05:24:12 ├─ minted => LOCAL blockNumber: 210, confirmations: 1, gasUsed: 55641(60.95%),
gasPrice: 1.0Gwei, tx fee: 0.000056
2023-11-16 05:24:12 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, to:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,value:100.0 USDC)
2023-11-16 05:24:12 — event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Deposit(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580, trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:100.0 USDC)
    ✓ vaultOperation function should work fine(deposit) (935ms)
2023-11-16 05:24:12 - request => LOCAL [UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853::withdraw(arg:{ quantity: 0.0000000001, token:
0x911eb93171edcbbc0ed8ccc838735b67ec1b258 })
0xf3b94aee9065122f32a6a82a77adf65886389dcd9fecbc2504a6b2db1a8bb21c, nonce: 30, type: 2, maxPriorityFee:
1.0, maxFee: 1.0, gasPrice: 1.0, gasLimit: 83448
2023-11-16 05:24:13 ├─ minted => LOCAL blockNumber: 211, confirmations: 1, gasUsed: 50504(60.52%),
gasPrice: 1.0Gwei, tx fee: 0.000051
2023-11-16 05:24:13 - event => #0 [USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580-Transfer(from:
[Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853,to:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC, value:100.0 USDC)
2023-11-16 05:24:13 - event => #1 [Gate]0xa513E6E4b8f2a923D98304ec87F64353C4D5C853-Withdraw(quote:
[USDC]0x911EB93171EDCBBC0ED8CCc838735b67ec1b2580,trader:
[UNKNOWN]0x3C44CdDdB6a900fa2b585dd299e03d12FA4293BC,quantity:100.0 USDC)

✓ vaultOperation function should work fine(withdraw) (670ms)

  sdk utils
    ✔ formatExpiry()
 113 passing (27m)
```

Code Coverage

We were unable to retrieve coverage data from the test suite.

Update: Below are the coverage results obtained from forge coverage ——ffi at commit 29e0a26. The central contracts of the protocol have decent coverage overall.

File	% Lines	% Statements	% Branches	% Funcs
contracts/ChainlinkMarket.so	100.00%	99.34%	97.83%	100.00%
	(85/ 85)	(151/ 152)	(45/ 46)	(12/ 12)
contracts/Config.sol	100.00%	100.00%	100.00%	100.00%
	(32/ 32)	(53/ 53)	(18/ 18)	(10/ 10)
contracts/DexV2Market.sol	100.00%	100.00%	97.92%	100.00%
	(116/ 116)	(187/ 187)	(47/ 48)	(21/ 21)
contracts/EmaSpotMarket.sol	100.00%	100.00%	100.00%	100.00%
	(62/ 62)	(93/ 93)	(18/ 18)	(17/ 17)
contracts/Gate.sol	100.00% (56/ 56)	100.00% (82/ 82)	88.89% (16/ 18)	100.00% (11/ 11)
contracts/Guardian.sol	100.00% (62/ 62)	100.00% (96/ 96)	87.50% (14/ 16)	100.00% (23/ 23)
contracts/Instrument.sol	100.00%	100.00%	89.66%	100.00%
	(174/ 174)	(262/ 262)	(52/ 58)	(36/ 36)
contracts/Observer.sol	95.68% (133/ 139)	95.05% (192/ 202)	68.75% (11/ 16)	82.76% (24/ 29)
contracts/libraries/Broker.sol	100.00%	99.48%	91.67%	100.00%
	(145/ 145)	(192/ 193)	(55/ 60)	(10/ 10)
contracts/libraries/LibAccou	100.00%	96.55%	85.29%	100.00%
nt.sol	(81/ 81)	(112/ 116)	(29/ 34)	(15/ 15)
contracts/libraries/LibAmm.s	100.00%	100.00%	81.25%	100.00% (7/ 7)
ol	(60/ 60)	(77/ 77)	(26/ 32)	
contracts/libraries/LibCalldat	100.00%	100.00%	100.00% (0/ 0)	100.00%
a.sol	(60/ 60)	(83/ 83)		(24/ 24)
contracts/libraries/LibErc20. sol	100.00% (9/ 9)	88.89% (16/ 18)	66.67% (4/ 6)	100.00% (3/ 3)
contracts/libraries/LibMath.s	80.20%	77.04%	69.80%	56.82%
ol	(239/ 298)	(349/ 453)	(104/ 149)	(25/ 44)
contracts/libraries/LibParam.	91.67%	84.13%	50.00%	100.00% (9/ 9)
sol	(22/ 24)	(53/ 63)	(10/ 20)	
contracts/libraries/LibPearl.s ol	87.50% (28/ 32)	79.17% (38/ 48)	87.50% (7/ 8)	80.00% (4/ 5)
contracts/libraries/LibPositio	100.00%	100.00%	100.00%	100.00% (6/ 6)
n.sol	(80/ 80)	(109/ 109)	(28/ 28)	
contracts/libraries/LibQuery.	80.16%	81.17%	43.48%	82.50%
sol	(202/ 252)	(306/ 377)	(20/ 46)	(33/ 40)
contracts/libraries/ LibRange. sol	100.00% (30/ 30)	100.00% (42/ 42)	100.00% (6/ 6)	100.00% (5/ 5)
contracts/libraries/LibTickBit map.sol	100.00% (35/ 35)	98.18% (54/ 55)	91.67% (11/ 12)	100.00% (5/ 5)
contracts/libraries/Liquidity.s	100.00%	100.00%	97.22%	100.00% (5/ 5)

File	% Lines	% Statements	% Branches	% Funcs
ol	(68/ 68)	(109/ 109)	(35/ 36)	
contracts/libraries/Oyster.sol	100.00% (223/ 223)	100.00% (319/ 319)	99.00% (99/ 100)	100.00% (16/ 16)
contracts/peripheral/Helper. sol	100.00% (47/ 47)	100.00% (64/ 64)	50.00% (1/ 2)	100.00% (15/ 15)
contracts/peripheral/comma nder/Commander.sol	87.07% (101/ 116)	87.80% (144/ 164)	42.86% (6/ 14)	81.82% (27/ 33)
contracts/peripheral/comma nder/CommanderFactory.sol	56.67% (17/ 30)	62.79% (27/ 43)	33.33% (2/ 6)	62.50% (5/ 8)
contracts/peripheral/comma nder/Ranger.sol	95.71% (67/ 70)	97.06% (99/ 102)	62.50% (5/ 8)	82.35% (14/ 17)
contracts/peripheral/feeder/ MockChainlinkFeederFactory. sol	100.00% (44/ 44)	96.00% (72/ 75)	56.25% (9/ 16)	100.00% (11/ 11)
contracts/peripheral/feeder/ MockChainlinkFeederUSD.sol	100.00% (10/ 10)	100.00% (10/ 10)	100.00% (0/ 0)	100.00% (5/ 5)
contracts/peripheral/lib/LibC ommander.sol	85.99% (178/ 207)	82.17% (258/ 314)	53.26% (49/ 92)	78.26% (18/ 23)
contracts/peripheral/lib/LibC ommanderCalldata.sol	62.00% (31/ 50)	62.96% (34/ 54)	100.00% (0/ 0)	50.00% (10/ 20)
contracts/peripheral/pythAd aptor/PythFeeder.sol	0.00% (0/ 9)	0.00% (0/ 14)	0.00% (0/ 4)	0.00% (0/ 1)
contracts/test/MockChainlin kFeeder.sol	100.00% (4/ 4)	100.00% (4/ 4)	100.00% (0/ 0)	100.00% (4/ 4)
contracts/test/TestToken.sol	50.00% (1/ 2)	50.00% (1/ 2)	100.00% (0/ 0)	50.00% (1/ 2)
contracts/test/WETH.sol	90.00% (18/ 20)	91.30% (21/ 23)	50.00% (4/ 8)	71.43% (5/ 7)
contracts/test/hardhat/Sqrt PriceMathTest.sol	0.00% (0/ 6)	0.00% (0/ 12)	100.00% (0/ 0)	0.00% (0/ 4)
contracts/test/hardhat/TickB itmapTest.sol	0.00% (0/ 13)	0.00% (0/ 22)	100.00% (0/ 0)	0.00% (0/ 6)
contracts/test/hardhat/TickT est.sol	0.00% (0/ 4)	0.00% (0/ 7)	100.00% (0/ 0)	0.00% (0/ 4)
test/foundry/GateTest.t.sol	33.33% (1/ 3)	25.00% (1/ 4)	100.00% (0/ 0)	50.00% (1/ 2)
test/foundry/common/Chainl inkMarketEnvironment.sol	96.61% (57/ 59)	97.83% (90/ 92)	50.00% (2/ 4)	100.00% (5/ 5)
test/foundry/common/DexV2 MarketEnvironment.sol	67.37% (64/ 95)	70.14% (101/ 144)	33.33% (4/ 12)	63.64% (7/ 11)
test/foundry/common/Fixtur e.sol	100.00% (72/ 72)	100.00% (91/ 91)	50.00% (2/ 4)	100.00% (6/ 6)
test/foundry/common/Instru	100.00%	100.00%	100.00% (0/ 0)	66.67% (6/ 9)

File mentStorage.sol	% Lines (20/ 20)	% Statements (29/29)	% Branches	% Funcs
test/foundry/common/LibAct or.sol	0.00% (0/ 112)	0.00% (0/ 171)	0.00% (0/ 6)	0.00% (0/ 28)
test/foundry/common/LibUtil .sol	79.14% (110/ 139)	76.29% (177/ 232)	55.56% (20/ 36)	84.38% (27/ 32)
test/foundry/common/Misc.s	0.00% (0/ 2)	0.00% (0/ 4)	100.00% (0/ 0)	0.00% (0/ 2)
test/foundry/common/SynFu turesV3Test.sol	88.44% (130/ 147)	86.19% (181/ 210)	45.45% (10/ 22)	77.42% (24/ 31)
test/foundry/common/forge- extended/Assertion.sol	63.19% (91/ 144)	64.19% (95/ 148)	37.50% (3/ 8)	66.67% (24/ 36)
test/foundry/common/forge- extended/ForgeScriptExtend ed.sol	0.00% (0/ 7)	0.00% (0/ 11)	0.00% (0/ 2)	0.00% (0/ 2)
test/foundry/common/forge- extended/consoleEx.sol	0.00% (0/ 64)	0.00% (0/ 64)	0.00% (0/ 6)	0.00% (0/ 20)
test/foundry/common/solidit y-extended/Array.sol	17.77% (35/ 197)	17.80% (84/ 472)	12.50% (1/ 8)	18.68% (17/ 91)
test/foundry/common/solidit y-extended/StrUtils.sol	43.75% (21/ 48)	44.30% (35/ 79)	25.00% (5/ 20)	55.56% (5/ 9)
test/foundry/library/OysterTe st.t.sol	100.00% (2/ 2)	100.00% (2/ 2)	100.00% (0/ 0)	100.00% (1/ 1)
test/foundry/library/TickBitm apTest.t.sol	0.00% (0/ 3)	0.00% (0/ 4)	100.00% (0/ 0)	0.00% (0/ 3)
test/foundry/operation/Statu sTest.t.sol	100.00% (31/ 31)	100.00% (36/ 36)	100.00% (0/ 0)	100.00% (2/ 2)
test/foundry/weirdToken/Ab stractWeirdTokenTestBase.sol	0.00% (0/ 59)	0.00% (0/ 81)	0.00% (0/ 8)	0.00% (0/ 5)
Total	79.67% (3154/ 3959)	77.53% (4631/ 5973)	73.33% (778/ 1061)	69.43% (561/ 808)

Changelog

- 2023-11-15 Initial report
- 2023-12-13 Final report

About Quantstamp

Quantstamp is a global leader in blockchain security. Founded in 2017, Quantstamp's mission is to securely onboard the next billion users to Web3 through its best-in-class Web3 security products and services.

Quantstamp's team consists of cybersecurity experts hailing from globally recognized organizations including Microsoft, AWS, BMW, Meta, and the Ethereum Foundation. Quantstamp engineers hold PhDs or advanced computer science degrees, with decades of combined experience in formal verification, static analysis, blockchain audits, penetration testing, and original leading-edge research.

To date, Quantstamp has performed more than 500 audits and secured over \$200 billion in digital asset risk from hackers. Quantstamp has worked with a diverse range of customers, including startups, category leaders and financial institutions. Brands that Quantstamp has worked

with include Ethereum 2.0, Binance, Visa, PayPal, Polygon, Avalanche, Curve, Solana, Compound, Lido, MakerDAO, Arbitrum, OpenSea and the World Economic Forum.

Quantstamp's collaborations and partnerships showcase our commitment to world-class research, development and security. We're honored to work with some of the top names in the industry and proud to secure the future of web3.

Notable Collaborations & Customers:

- Blockchains: Ethereum 2.0, Near, Flow, Avalanche, Solana, Cardano, Binance Smart Chain, Hedera Hashgraph, Tezos
- DeFi: Curve, Compound, Maker, Lido, Polygon, Arbitrum, SushiSwap
- NFT: OpenSea, Parallel, Dapper Labs, Decentraland, Sandbox, Axie Infinity, Illuvium, NBA Top Shot, Zora
- · Academic institutions: National University of Singapore, MIT

Timeliness of content

The content contained in the report is current as of the date appearing on the report and is subject to change without notice, unless indicated otherwise by Quantstamp; however, Quantstamp does not guarantee or warrant the accuracy, timeliness, or completeness of any report you access using the internet or other means, and assumes no obligation to update any information following publication or other making available of the report to you by Quantstamp.

Notice of confidentiality

This report, including the content, data, and underlying methodologies, are subject to the confidentiality and feedback provisions in your agreement with Quantstamp. These materials are not to be disclosed, extracted, copied, or distributed except to the extent expressly authorized by Quantstamp.

Links to other websites

You may, through hypertext or other computer links, gain access to web sites operated by persons other than Quantstamp. Such hyperlinks are provided for your reference and convenience only, and are the exclusive responsibility of such web sites&aspo; owners. You agree that Quantstamp are not responsible for the content or operation of such web sites, and that Quantstamp shall have no liability to you or any other person or entity for the use of third-party web sites. Except as described below, a hyperlink from this web site to another web site does not imply or mean that Quantstamp endorses the content on that web site or the operator or operations of that site. You are solely responsible for determining the extent to which you may use any content at any other web sites to which you link from the report. Quantstamp assumes no responsibility for the use of third-party software on any website and shall have no liability whatsoever to any person or entity for the accuracy or completeness of any output generated by such software.

Disclaimer

The review and this report are provided on an as-is, where-is, and as-available basis. To the fullest extent permitted by law, Quantstamp disclaims all warranties, expressed or implied, in connection with this report, its content, and the related services and products and your use thereof, including, without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement. You agree that your access and/or use of the report and other results of the review, including but not limited to any associated services, products, protocols, platforms, content, and materials, will be at your sole risk. FOR AVOIDANCE OF DOUBT, THE REPORT, ITS CONTENT, ACCESS, AND/OR USAGE THEREOF, INCLUDING ANY ASSOCIATED SERVICES OR MATERIALS, SHALL NOT BE CONSIDERED OR RELIED UPON AS ANY FORM OF FINANCIAL, INVESTMENT, TAX, LEGAL, REGULATORY, OR OTHER ADVICE. This report is based on the scope of materials and documentation provided for a limited review at the time provided. You acknowledge that Blockchain technology remains under development and is subject to unknown risks and flaws and, as such, the report may not be complete or inclusive of all vulnerabilities. The review is limited to the materials identified in the report and does not extend to the compiler layer, or any other areas beyond the programming language, or other programming aspects that could present security risks. The report does not indicate the endorsement by Quantstamp of any particular project or team, nor guarantee its security, and may not be represented as such. No third party is entitled to rely on the report in any way, including for the purpose of making any decisions to buy or sell a product, service or any other asset. Quantstamp does not warrant, endorse, guarantee, or assume responsibility for any product or service advertised or offered by a third party, or any open source or third-party software, code, libraries, materials, or information linked to, called by, referenced by or accessible through the report, its content, or any related services and products, any hyperlinked websites, or any other websites or mobile applications, and we will not be a party to or in any way be responsible for monitoring any transaction between you and any third party. As with the purchase or use of a product or service through any medium or in any environment, you should use your best judgment and exercise caution where appropriate.

uantstamp

SynFutures V3 © 2023 – Quantstamp, Inc.

•••