Nutcracker Sandbox Performance Report April 2026

| 30-Day Lookback Live Testing

Testing Parameters & Configuration Strategy:

Cross-asset 30-day Rebalancing / Hybrid Delta-Neutral
Target Yield (base_pnl_perc): 1.8%
Trade Sizing: 0.5% - 1.0% of Total Equity Execution
Timeframe: Sliding 30m to 4h loops
Risk Profile: Conservative-Moderate (No hard inventory brakes)
Asset Pairs: 9
Quote/Transacting currencies: USDC, BTC
Environment: Single Platform

Key Performance Indicators (USDC)

Start Value:	2,544.79 USDC
End Value:	2,874.50 USDC
Net PnL:	329.71 USDC
Realized part (trades):	127.20 USDC
Unrealized part:	202.51 USDC
Total Return (lookback window):	12.96%
Annualized Return:	340.29%
Turnover (Annualized):	18.41x
ROIC (based on realized part):	60.82%
ATR Efficiency (Realistic):	187.99%
ATR Opportunity (Realistic):	175.38 USDC

JPCL Framework Analysis

This sandbox validates the 'Yield from Motion' thesis. At an 18.4x annualized turnover, the engine demonstrates a capacity to significantly exceed the 'Institutional Pro' benchmark (7.5x).
The ATR Efficiency of 187.99% indicates that deterministic execution captures sub-duration micro-volatility (the 'Atomic Pulse') far more effectively than discretionary rebalancing.
Even with conservative 1-4h intervals and a delta-neutral stance, the 'Stagnancy Tax' avoided is quantifiable at over 12% relative to static T-bill holders for the same period.