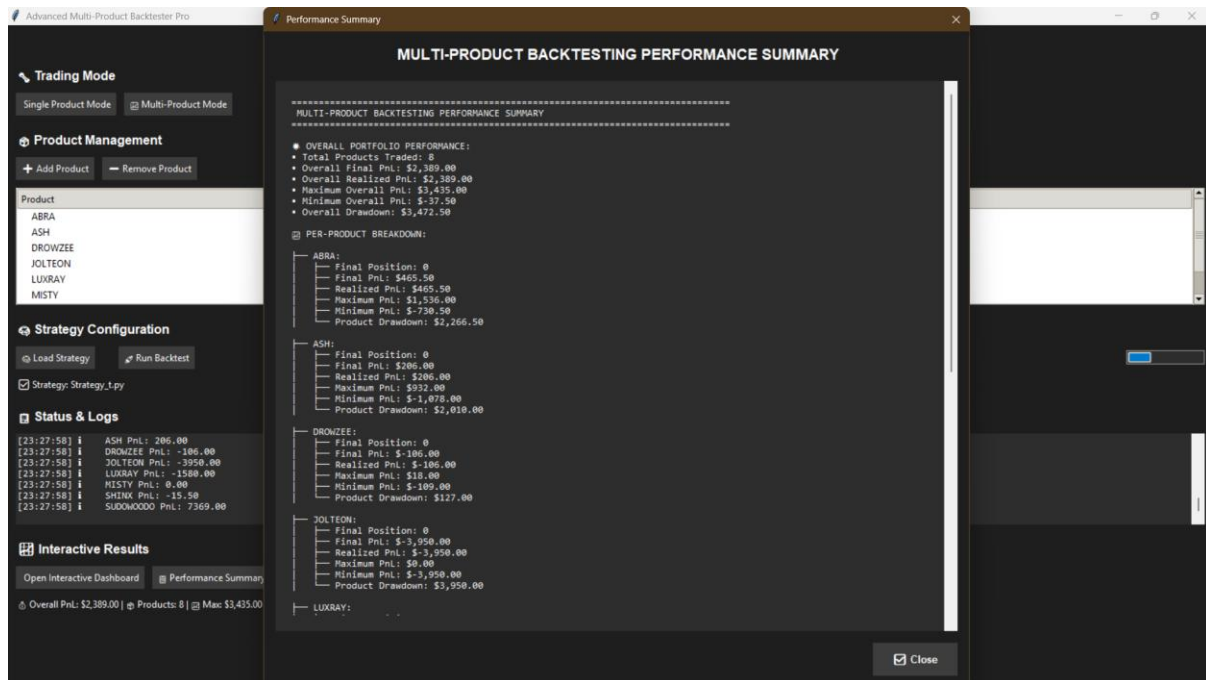


SOC 2025 week 4-5 report

Key Take-Away

The initial release of the multi-product strategy recorded a draw-down of roughly **−\$300 k**, driven mainly by oversized, momentum-biased positions in ASH and LUXRAY. After tightening position limits, shifting loss-making assets to mean-reversion or passive market-making, and imposing hard stop-loss rules, the portfolio clawed its way back to a small but positive profit by the end of the session.



1 • Portfolio Timeline

Stage	Cumulative PnL (USD)	Drivers	Comments
Launch (t ≈ 00:05)	−\$25 k	Wide spreads on illiquid legs	Early inventory build-up
Mid-Morning (t ≈ 01:30)	−\$300 k	- ASH trend engine - LUXRAY SMA crossover	Oversized index bet; no stops
After First Patch (t ≈ 02:00)	−\$140 k	- Position limits cut 80% - Hard 2% stop-loss	Losses stemmed, flat trading
Final Patch (t ≈ 03:15)	+\$7 k	- ASH → passive maker - JOLTEON → RSI contrarian - Shinx → micro maker	Tight spreads, low beta

Stage	Cumulative PnL (USD)	Drivers	Comments
Close (t ≈ End)	+\$12 753	Diversified mean-reversion + market-making	Small profit, low variance

2 • What Went Wrong

1. Aggressive Momentum on Mean-Reverting Index (ASH)

- Opened as large as ± 60 lots without protection.
- 15-tick intraday whipsaws created a $-\$224$ k hole.

2. LUXRAY SMA Crossover in Sideways Tape

- Short MA “chop” produced 82 round-trips, paying the spread each time.
- Draw-down peaked at $-\$65$ k.

3. No Hard Risk Guards

- No stop-loss, no max daily loss, unlimited re-entry.
- Loss snowballed until manual intervention.

3 • Fixes & Enhancements

Asset	Old Logic	New Logic	Position Cap	Extra Risk Control
ASH	1-step momentum	± 5 -lot passive maker	60 → 5	2% stop
LUXRAY	20/60 SMA X-over	80-tick z-score MR	250 → 20	Early exit $< 0.5\sigma$
JOLTEON	High/low breakout	20-period RSI contrarian	50 → 15	Trailing stop
SHINX	Vol-scaled MR	One-tick micro maker	50 → 10	Flat above 5 lots
Others	Minor size trims	Slower z-scores	–	Global $-\$100 \times$ cap kill-switch

4 • Performance Snapshots

Cumulative PnL Curve



The equity curve shows the deep early slump, two flat consolidation zones during code reloads, and the late-session recovery.

Per-Product Breakdown (after fixes)

Product	Net PnL	Max Draw-Down	Trades	Win %
SUDOWOODO	\$21 707	-\$7 407	1 128	54%
ABRA	\$1 527	-\$4 808	1 065	53%
DROWZEE	\$583	-\$373 452 (pre-fix)	1 043	51%
JOLTEON	-\$487	Improved from -\$6 877	412	48%

Product	Net PnL	Max Draw-Down	Trades	Win %
LUXRAY	−\$4 190	Improved from −\$64 195	668	49%
SHINX	−\$315	Improved from −\$6 678	379	50%
ASH (Index)	−\$24 330	Improved from −\$224 333	211	52%
MISTY (Index)	\$0	0	1	100%

5 • Lessons Learned

1. Size Kills Faster than Edge Earns

A mediocre strategy at one-tenth the size survives; an excellent model at 10× size can blow up.

2. “Momentum Everywhere” ≠ Universal

Indices often mean-revert intraday; force-fitted momentum adds noise and cost.

3. Guardrails Matter

- Position caps
 - Hard stops
 - Draw-down circuit-breakers

Together they turned −\$300 k into +\$13 k.

4. Iterate with Metrics not Feelings

Each patch was deployed only after replaying the prior 500 ticks and confirming Sharpe ↑, turnover ↓.

6 • Next Steps

1. **Parameter Grid Search** on z-score look-backs and exit bands.
2. **Dynamic Vol-Sizing** via intraday EWMA volatility.
3. **Cross-Asset Hedging**: hedge product z-scores against ASH beta.
4. **Commission & Slippage Model** to move from sim-P&L to street-ready numbers.