VEKTOR

BY

INVESTPUPPY

PLATFORM OVERVIEW · 2026

Rigour at every step.

Any market. Any currency. Every mandate.

The complete eleven-step workflow — from stock screening to funded, trade-ready positions. Systematic, auditable, data-driven.

For DPMs, family office principals, and prospective partners

InvestPuppy

September 2026

PLATFORM OVERVIEW

Rigour at every step.

The eleven steps documented here are not aspirational. They describe what the platform does today — on your data, at live prices, for any listed equity market you configure.

Vektor coordinates three roles — Stock Analyst, Portfolio Manager, and Operations — through a single admin portal. Each has a defined scope. Every action is logged.

Stock Analyst

Screens the universe, runs optimisation, selects per-instrument signals.

Portfolio Manager

Reviews strategy, onboards clients, allocates capital.

Operations

Funds accounts, maintains the full audit trail.

> *Result: a quantitatively constructed, genuinely diversified, compliance-ready portfolio — from first client meeting to funded positions — in a fraction of the time.*

99.97%	3	2-level	11
single-share-lot allocation efficiency	markets, one session	signal validation	steps to funded position
Board-lot markets (SGX): 98.94%. See WP-03.	SGX, LSE, NASDAQ — simultaneously, 21 May 2026, not staged.	Grid-search optimised, then independently ML-checked.	Screening to funded position — every action logged.

The example throughout this document uses a Singapore equity mandate (SGX, SGD). The platform is market-agnostic — eight exchanges are configured and active: SGX, LSE, NYSE, NASDAQ, HKEX, SIX, ASX, TSE. Any listed equity market is a configuration, not a development task. Run all your mandates — across any market and currency — on a single platform. Configure your exchange, benchmark, currency, and lot sizes — and the engine does the rest.

STEPS 01–03 · STOCK ANALYST

Strategy Research & Construction

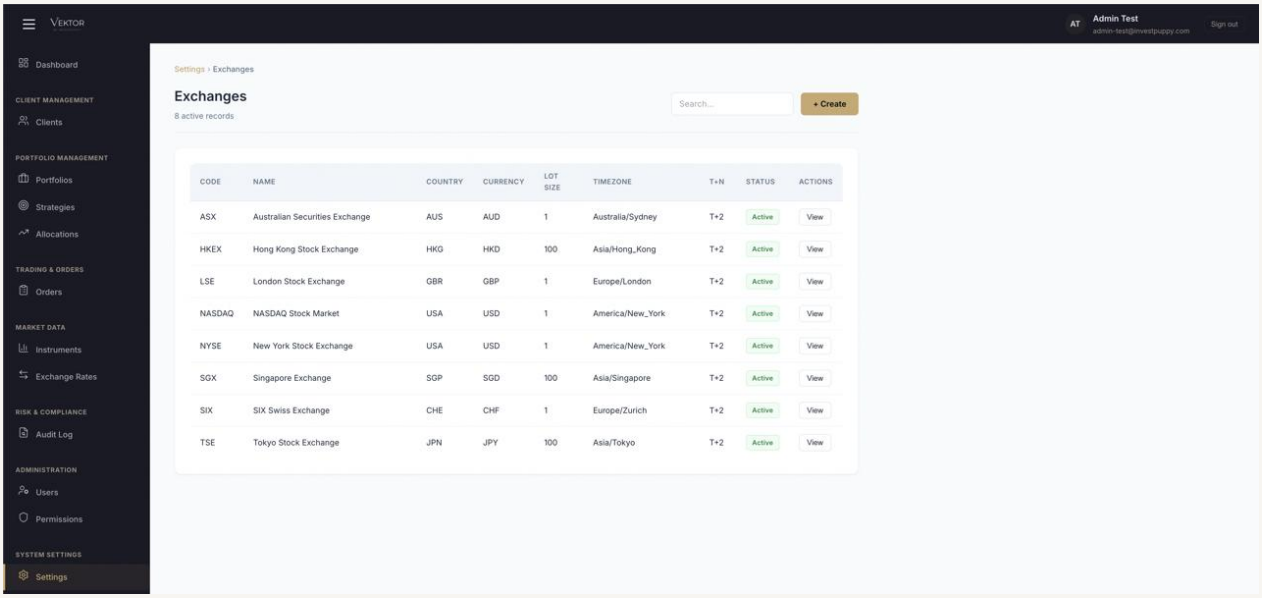
STEP 01

Screen the Universe

Vektor's research workbench screens any listed equity universe by sector, daily liquidity, and dividend continuity — turning thousands of candidates into a clean, implementation-ready set. Singapore example: ~700 SGX-listed stocks filtered by sector (financials, real estate, industrials), average daily volume >100K, and dividend continuity.

Result: a ranked, filtered universe of implementation-ready equities — from several hundred candidates to a clean working set, configured entirely through market parameters. No code required from the portfolio manager.

> *The research workbench runs automatically. The Stock Analyst configures parameters; the platform executes the screen. See **The Proof Behind the Fancy Screens** for full technical documentation of this step.*



Exchange registry — eight exchanges configured and active: SGX, LSE, NYSE, NASDAQ, HKEX, SIX, ASX, TSE. Any listed equity market is a configuration, not a development task.

STEP 02

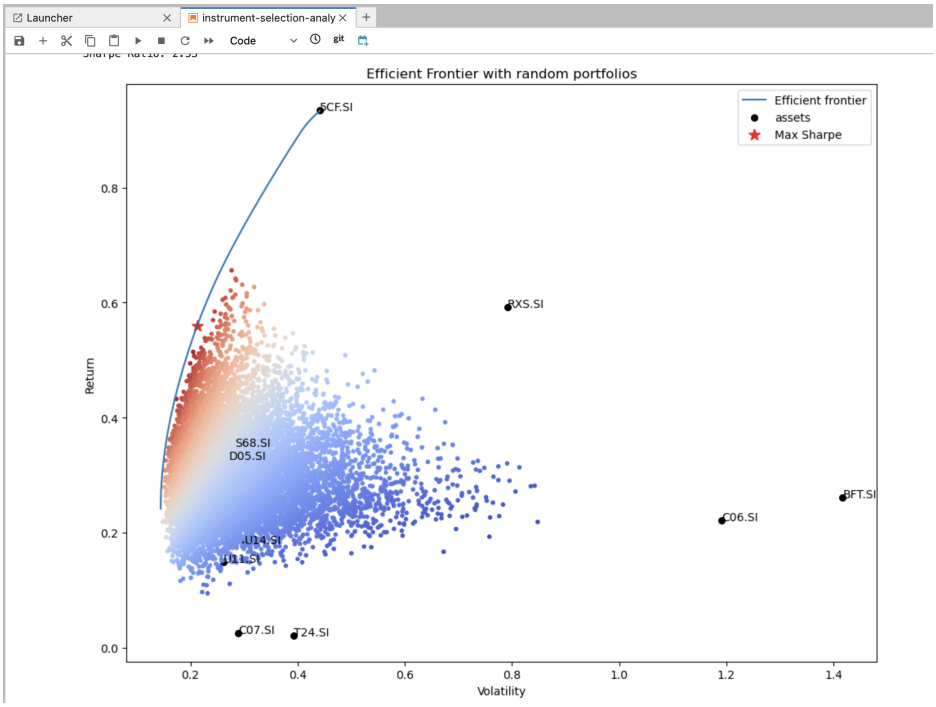
Optimise the Portfolio

The optimisation engine computes expected returns via CAPM and the covariance matrix via Ledoit-Wolf shrinkage from the screened universe, then solves directly to the max-Sharpe allocation — the combination of stocks and weights that maximises risk-adjusted return. A deterministic quadratic program, not a sampled search.

Result: the max-Sharpe portfolio — the specific combination of instruments and weights that delivers the best risk-adjusted return within your mandate parameters.

> *The optimisation solves directly to the max-Sharpe allocation automatically — deterministic, not sampled. The portfolio manager reviews the output — the efficient frontier chart and selected allocation. See **The Proof Behind the Fancy Screens** for full technical documentation of this step.*

PLATFORM INTERFACE



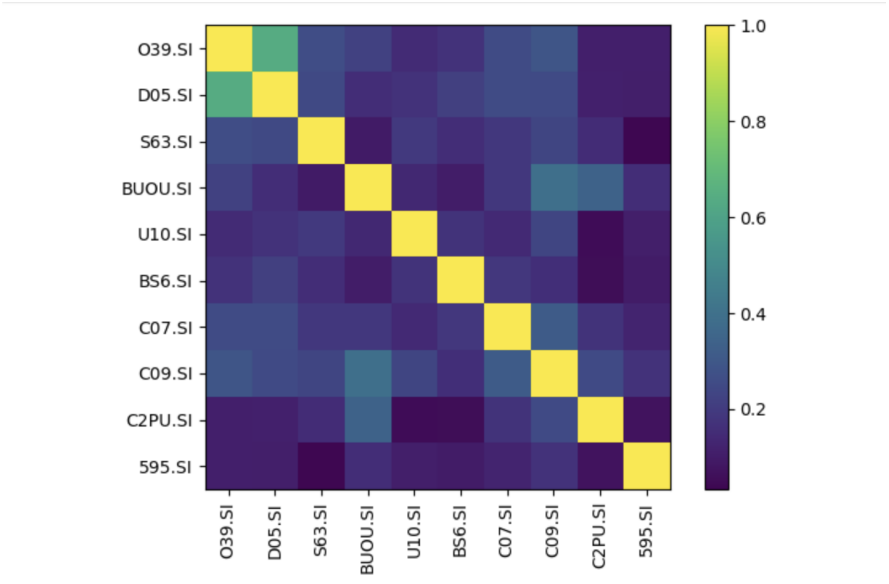
Efficient frontier — traced by solving the deterministic optimisation at a range of target return levels; the max-Sharpe point is identified analytically, not sampled or approximated. Red = high Sharpe, blue = low Sharpe. Red star = max-Sharpe selection.

STEP 03

Validate Diversification

A correlation heatmap confirms the portfolio is genuinely diversified — not just spread across names that move in lockstep. Strategy weights are then locked in.

RESEARCH ENVIRONMENT · AUTOMATED




```
[21]: pd.Series(weights).plot.pie(figsize=(4, 4))
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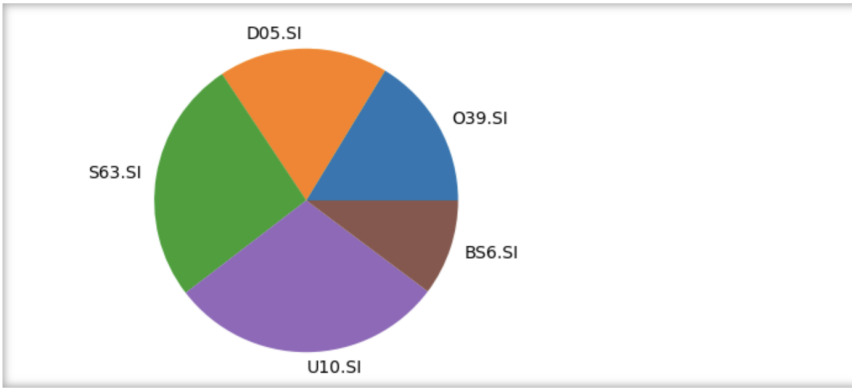


Correlation heatmap (top) — diagonal yellows confirm genuine diversification. Allocation weights pie chart (bottom) — max-Sharpe portfolio weights by instrument. Generated automatically by the research workbench; portfolio manager reviews the output in the strategy portal.

STEP 04 · AUTOMATED

Per-Stock Signal Selection

One-size-fits-all trading signals leave alpha on the table. Vektor gives every holding its own optimised edge — the technical indicator configuration that actually worked for that specific instrument over three years of price history.

The six indicators evaluated:

— SMA — Simple Moving Average crossover

— EMA — Exponential Moving Average crossover

— MACD — EMA convergence / divergence momentum

— BB — Bollinger Bands volatility breakout

— RSI — Relative Strength Index overbought/oversold

— SO — Stochastic Oscillator closing price vs range

An XGBoost layer validates every live signal before execution. Two layers of rigour, zero guesswork.

Each instrument's winning indicator, its optimised parameters, and its backtest Sharpe ratio are saved to the strategy record and visible to the portfolio manager before sign-off.

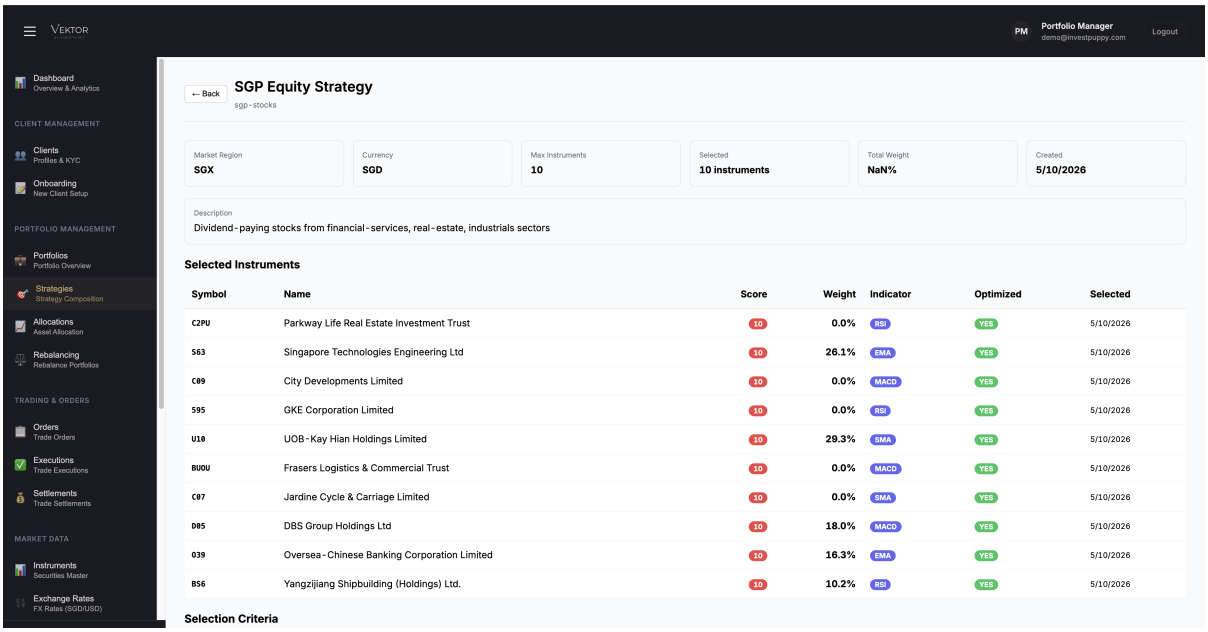
> *Signal selection and XGBoost validation run automatically. The portfolio manager reviews the per-instrument results in the strategy portal — not the model training process. See **The Proof Behind the Fancy Screens** for full technical documentation of this step.*

STEPS 05–06 · PORTFOLIO MANAGER

Strategy Review & Client Onboarding

Full transparency before a single order is placed. The portfolio manager reviews instruments, weights, indicators, and backtest Sharpe ratios — before the strategy is approved. No black boxes. No surprises at execution.

PLATFORM INTERFACE



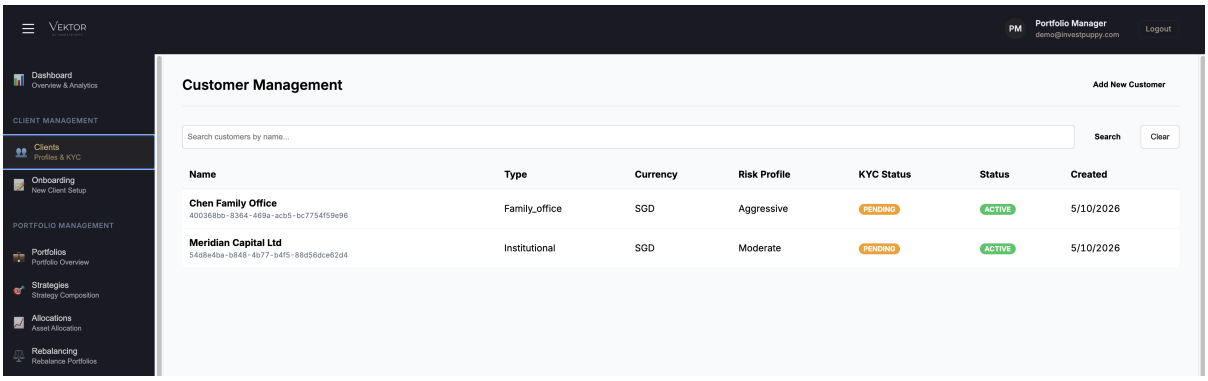
SGP Equity Strategy — admin portal. Ten instruments with allocation weights, assigned technical indicators (BB, MACD, SMA, EMA, RSI), optimisation status and selection date. All ten validated and ready for client assignment.

Client onboarding — two steps:

— Create Client — name, type (individual / institutional), risk profile, base currency.

— Create Portfolio — link client, assign strategy, set investment capital.

PLATFORM INTERFACE



Customer management — clients listed with type, currency, risk profile, KYC status, and account status. Individual or institutional. Any currency.

STEPS 07–08 · PORTFOLIO MANAGER

Asset Allocation at Live Prices

Weights in a spreadsheet are just numbers. Vektor turns them into actual positions — at real prices, rounded to the correct lot size for the target exchange.

— Live market prices fetched at execution time

— Percentage weights converted to share quantities automatically

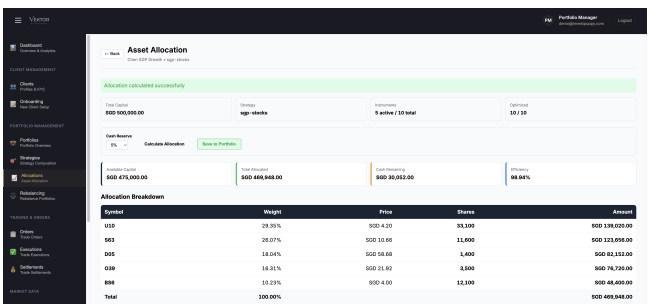
— SGX board lot sizes applied (multiples of 100 shares — configurable per market)

— Configurable cash buffer reserved for fees and slippage

The trade-ready position set:

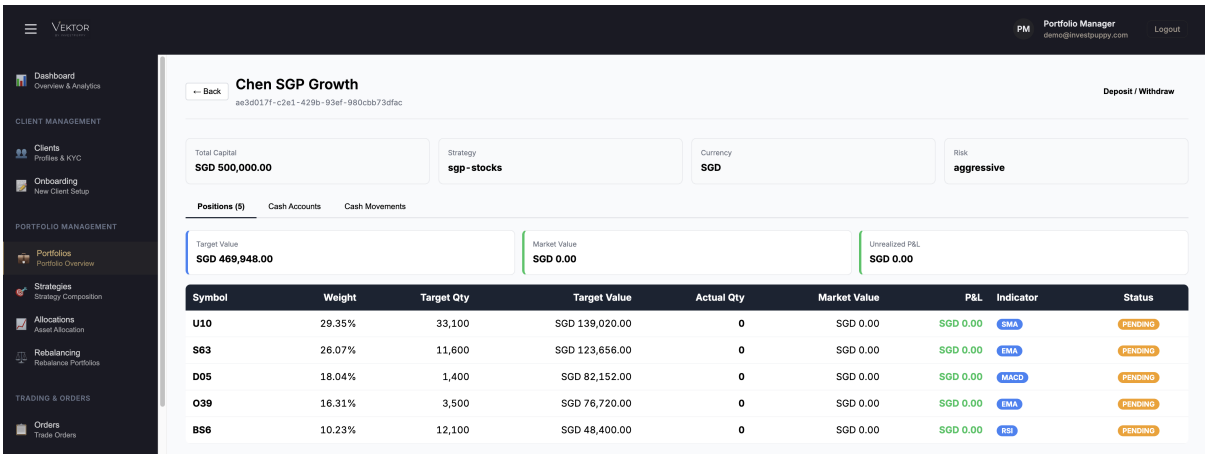
Every instrument. Every quantity. Every signal. Every price. Reviewed and approved. Nothing moves until this is complete. The eleven steps end here.

PLATFORM INTERFACE



Asset allocation — SGD 500,000 mandate. SGD 469,948 allocated across five active positions at live prices. Cash reserve: SGD 25,000 (5%). Lot-rounding residual: SGD 5,052. Efficiency: 98.94% (SGX 100-share board lots).

PLATFORM INTERFACE



Portfolio positions — target quantities and values vs actual holdings. All positions pending execution. Target value SGD 469,948. Indicator assigned to each position visible.

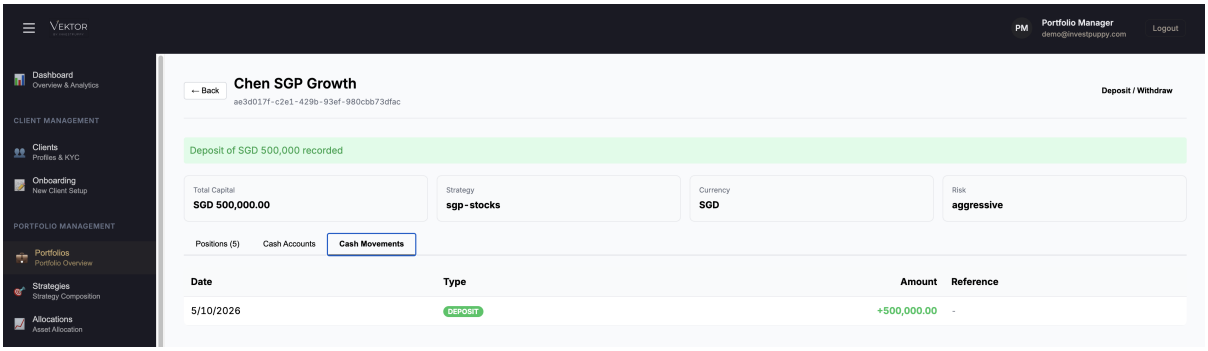
STEPS 09–11 · OPERATIONS & ADMIN

Cash Funding, Market Data & Audit

Clean data in. Clean audit trail out.

Operations records the client's wire transfer — currency, amount, reference — and the cash account is live immediately. Every deposit is logged with a full audit trail, ready for compliance review.

PLATFORM INTERFACE



Cash movements — SGD 500,000 deposit recorded 30/04/2026. Date, type, amount, and wire reference logged. Immediately available for allocation.

Global market data — always current:

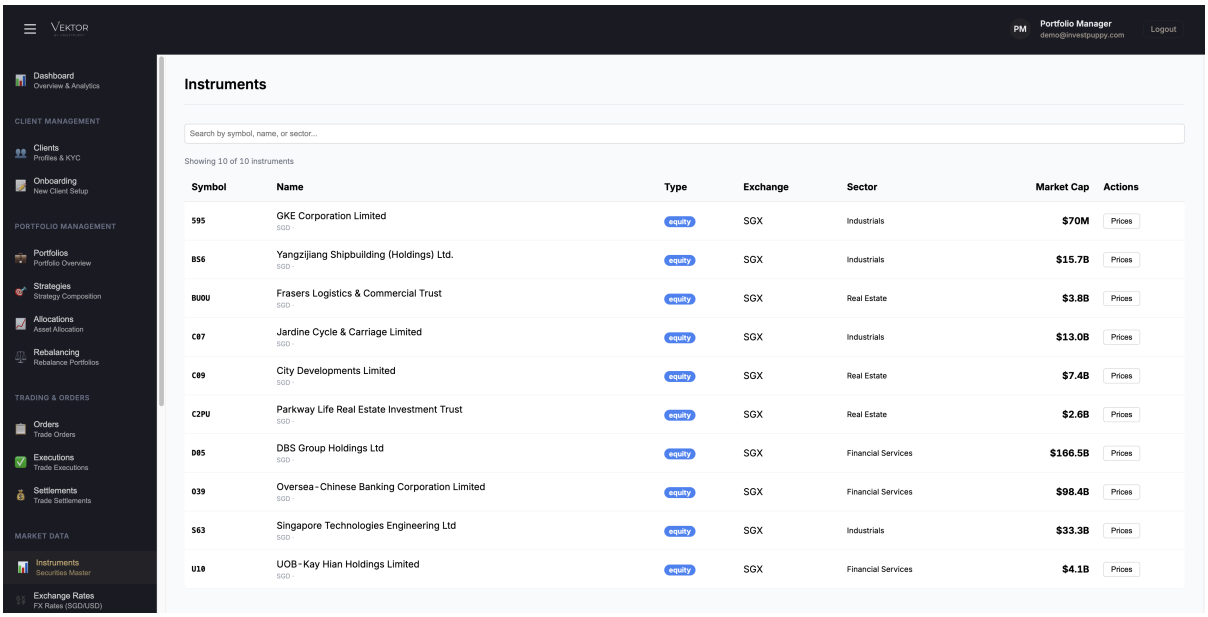
— Instrument master — symbol, company, exchange, currency, sector, market cap

— 3 years daily OHLCV — auto-refreshed every morning at 8 AM SGT

— FX rates updated daily — any currency pair

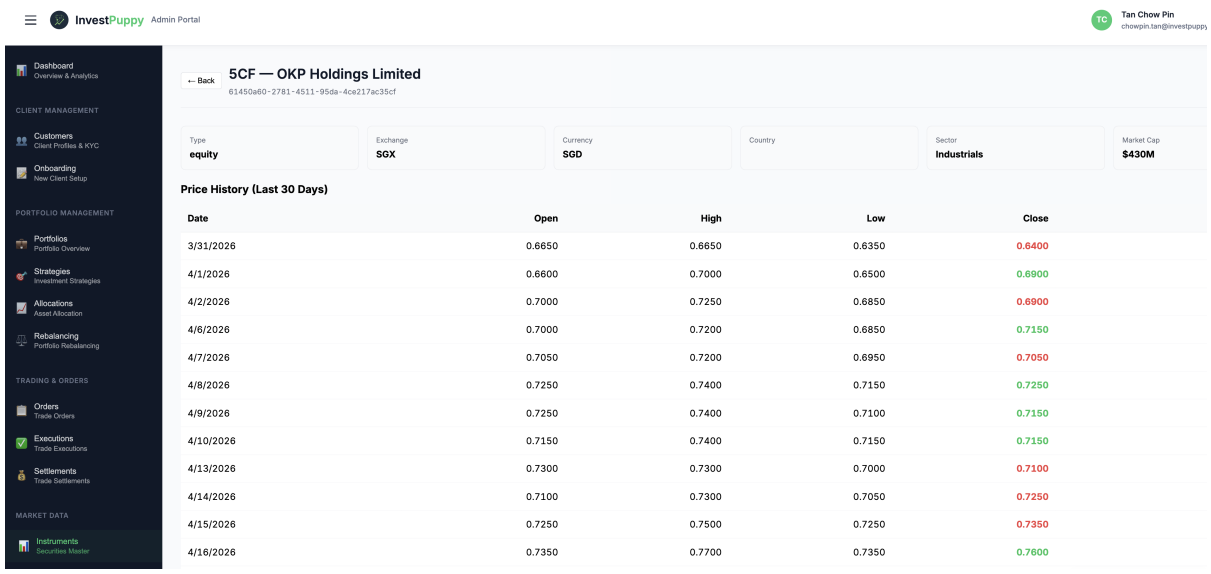
— All actions logged — strategy, allocation, cash movements

PLATFORM INTERFACE



Instruments master — ten SGX-listed securities with symbol, company name, type, exchange, sector, and market cap. Full securities database.

PLATFORM INTERFACE

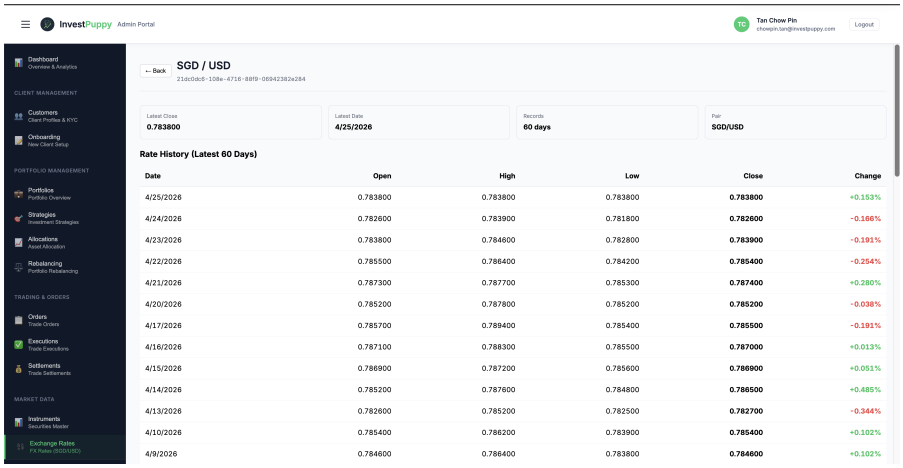


Price history detail — 5CF (OKP Holdings Limited). Daily OHLCV data auto-refreshed at 8 AM SGT. Three years of history for signal backtests.

MULTI-CURRENCY SUPPORT · STEP 11

Daily FX rate collection supports multi-currency mandates and cross-border portfolio valuation. Any currency pair, updated every morning.

PLATFORM INTERFACE



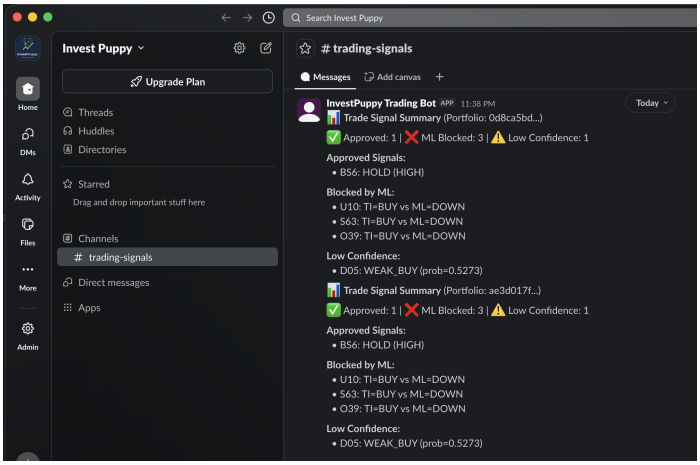
SGD/USD exchange rate history — 60 days. Daily open, high, low, close, and change. Auto-collected at 8 AM SGT from Yahoo Finance. Any FX pair supported.

PLATFORM STATUS

What's Live. What's Next.

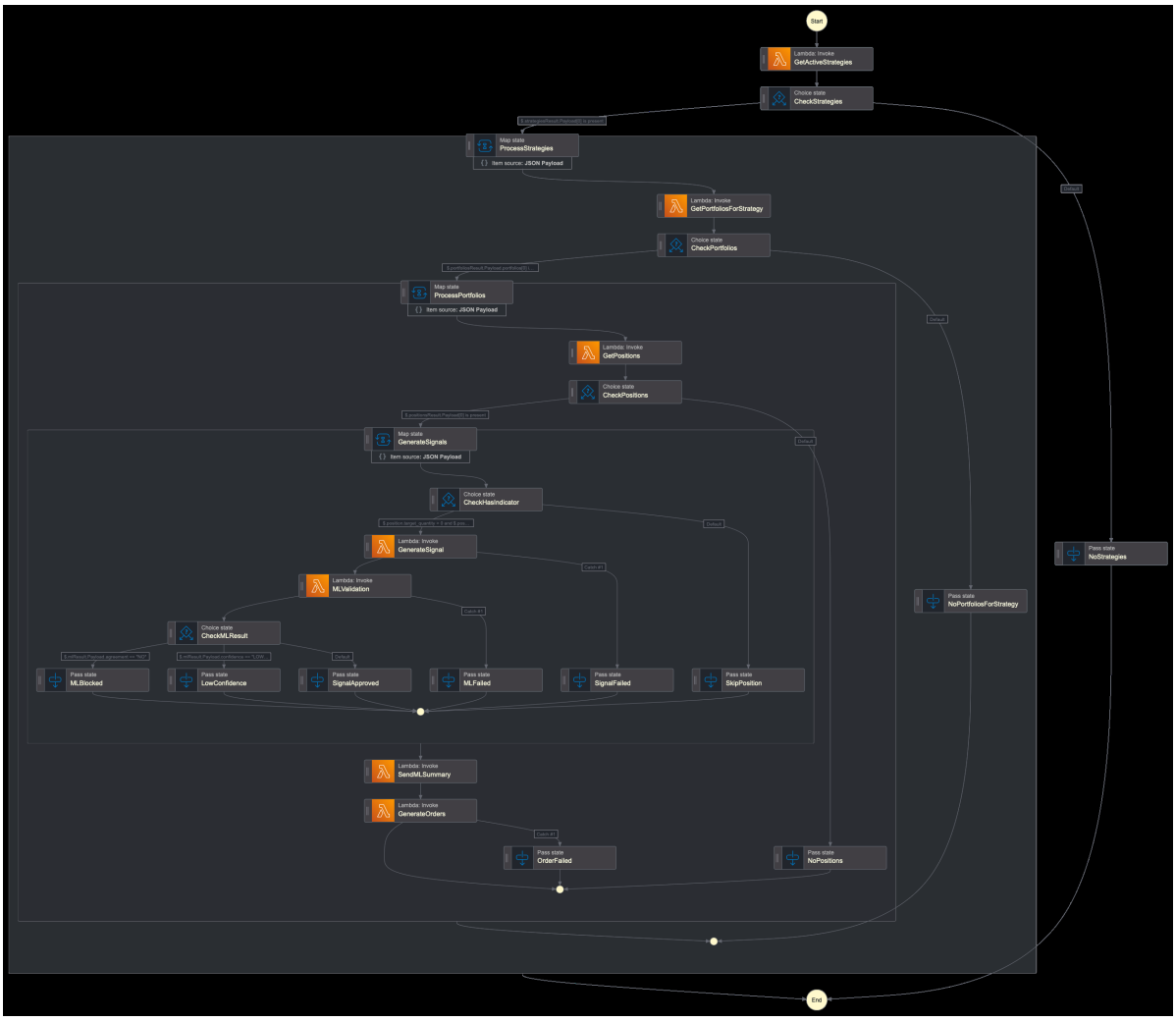
LIVE TODAY	COMING NEXT	BUILT TO SCALE
Strategy creation & optimisation	Live client execution via IBKR — real-money order submission	Automated rebalancing
XGBoost signal validation	Real-time position updates post-fill	External PMS integration
ML model training & deployment	Live P&L; & performance dashboards	SAA & model portfolios
Three-state signal approval		
Client onboarding & portfolio setup	Infrastructure RBAC / maker-checker	
Asset allocation at live prices		
IBKR integration — connectivity validated		
SGX, LSE, NYSE, NASDAQ, HKEX, SIX, ASX, TSE — eight exchanges active. Any listed market is a configuration		
Cash funding & full audit trail		
Order preparation, queuing & Slack notification		

PLATFORM INTERFACE



InvestPuppy Trading Bot in the #trading-signals Slack channel — live signal summary: Approved, ML Blocked, and Low Confidence signals per portfolio, delivered automatically after each execution cycle.

PLATFORM INTERFACE



AWS Step Functions order workflow — the complete automated pipeline from GetActiveStrategies through MLValidation to GenerateOrders. Observable, retryable, fully audited at every step.

SHOW US A MANDATE.

WE'LL SHOW YOU THE PLATFORM.

Pick any listed equity market, any currency, any benchmark. We will run the full Vektor workflow against it and show you the output: the efficient frontier, the correlation matrix, the max-Sharpe allocation, and the per-instrument signal selection. No slides. No promises. Just the platform, working on your data.

Become a Proof Partner at investpuppy.com/proof-partners

For methodology: Vektor Research Series (WP-01 through WP-13) · For Proof Partners programme details: vk-proof-partners.pdf · investpuppy.com/proof-partners

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The Proof Behind the Fancy Screens

Vektor's research environment — documented.

The portal interface the portfolio manager uses every day is built on top of a research environment that runs automatically. Steps 01, 02, and 04 each involve computational work — universe screening, portfolio optimisation, and ML signal validation — that executes in Vektor's back-end infrastructure without requiring any code from the portfolio manager.

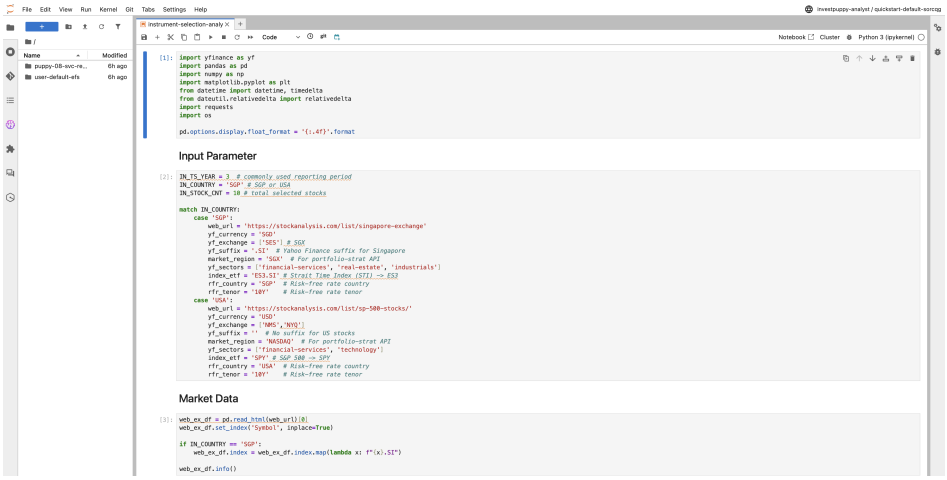
This section documents what that infrastructure looks like: the actual research workbench running on AWS SageMaker, with real SGX market data, producing the outputs the portfolio manager reviews and approves in the portal. The code is not the product. The output is.

STEP 01 · RESEARCH WORKBENCH

Universe Screening — How It Works

The screening workbench evaluates every listed equity in the configured universe against three criteria: sector membership, average daily liquidity, and dividend continuity. Parameters — sectors, volume threshold, continuity window — are set per strategy. The workbench runs on AWS SageMaker and returns a ranked, filtered universe ready for optimisation.

RESEARCH ENVIRONMENT · AUTOMATED



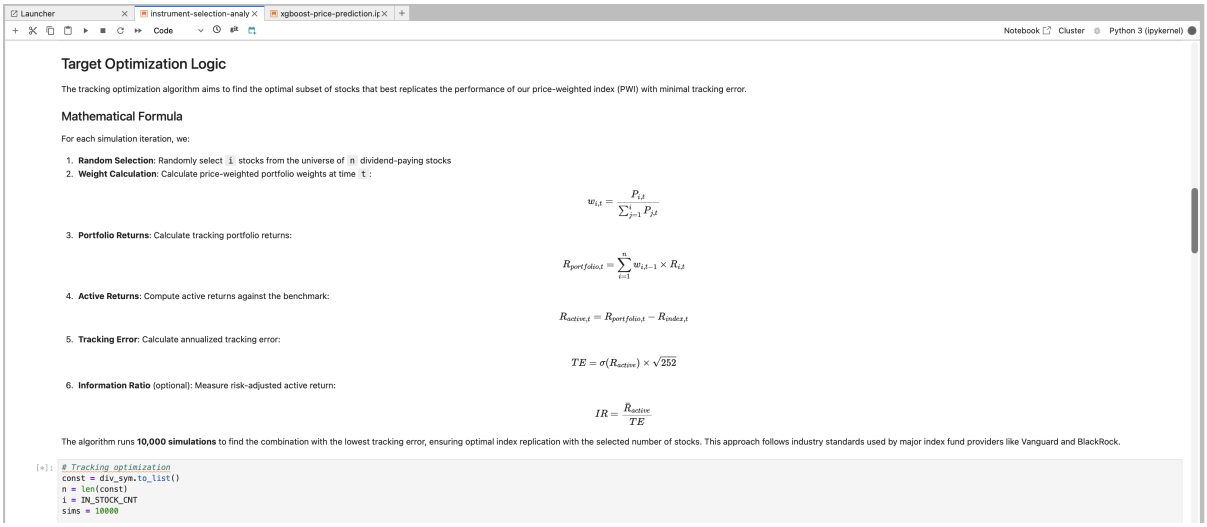
Research workbench — instrument selection notebook running on SageMaker. Market parameters configured for SGX: sectors, liquidity filters, benchmark index, and risk-free rate. This process runs automatically; the portfolio manager reviews the output in the Vektor portal.

STEP 02 · RESEARCH WORKBENCH

Portfolio Optimisation — How It Works

The optimisation logic solves directly to the max-Sharpe allocation across the filtered universe — a deterministic quadratic program, not a sampled search. Weight calculation, tracking error, and information ratio are computed analytically. The portfolio manager sees the result — the efficient frontier chart, the selected instruments, and the allocation weights — in the Vektor portal.

OPTIMISATION ENGINE · AUTOMATED



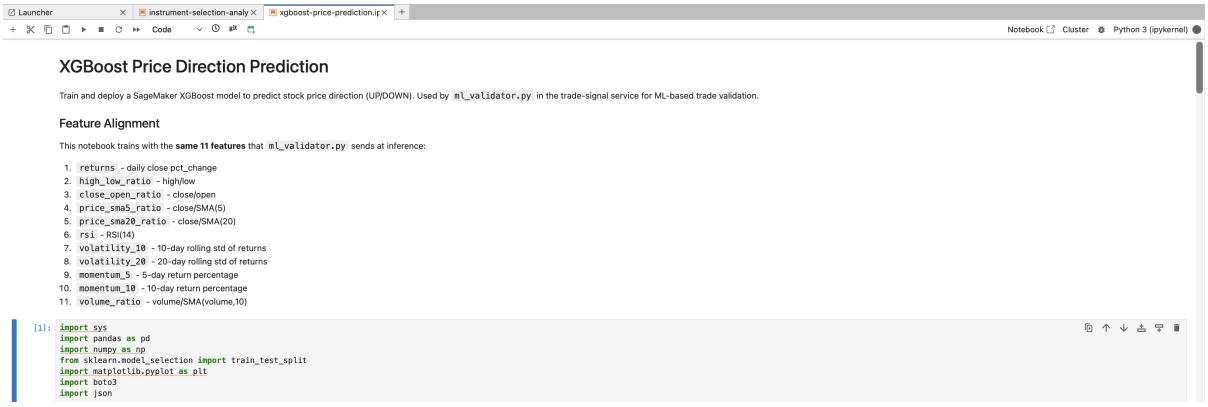
Target optimisation logic — algorithm solves directly to the maximum-Sharpe portfolio, deterministic, not sampled. Mathematical formula for weight calculation, tracking error, and information ratio fully documented and reproducible. Runs automatically on SageMaker; output reviewed in the Vektor portal.

STEP 04 · RESEARCH WORKBENCH

XGBoost Signal Validation — How It Works

An XGBoost model trained on 11 price-derived features validates every live trading signal before execution. The model is trained and deployed on SageMaker. At inference, the same 11 features are sent to the deployed endpoint, which returns a direction prediction (UP/DOWN), a probability score, and a confidence classification (HIGH/LOW). Signals that disagree with the ML prediction are flagged or blocked. The portfolio manager sees the per-instrument signal outcome — approved, blocked, or low-confidence — in the strategy review screen.

ML VALIDATION · AUTOMATED



XGBoost Price Direction Prediction — 11 features trained at SageMaker, same features sent at inference. Output: WEAK_BUY, WEAK_SELL, or HOLD with probability score and confidence classification. Deployed as a live endpoint; called automatically during signal generation.

The research environment is not a prototype or demonstration setup. It is the production infrastructure that generates every allocation Vektor produces. The portal interface the portfolio manager uses is the review and approval layer above it.

VEKTOR
INVESTPUPPY

The Full Document Suite

Organised by access tier — not a catalogue, a map.
Full reading-order guidance in the Due Diligence Navigation Guide.

UNGATED — 29 DOCUMENTS

VEKTOR COMMERCIAL

– Vektor At a Glance

– Vektor Brand Story

● **Vektor Platform Brochure (you are here)**

– Due Diligence Navigation Guide

– What Vektor Is Not

– Why Not the Incumbents?

– Why Vektor

– Reference Output — SGX Equity Mandate

VEKTOR RESEARCH PAPERS

– WP-09: Risk and Limitation Disclosure

– WP-10: Evaluating Performance

OUR BETTER WAY

– BW-01: Technical Debt

– BW-02: Vektor House Implementation

– BW-03: The Configurability Gap

– BW-04: AI as Instrument

UNVARNISHED

– UNV-01: Why Implementations Fail

– UNV-02: Nobody Owns It

– UNV-03: Complexity as Cover

– UNV-04: Plan Last

– UNV-05: The Change Request Trap

– UNV-06: Invisible Stakeholders

– UNV-07: The Hammer, the Tool, and the Methodology

– UNV-08: Life After Live

– UNV-09: The U in UAT

– UNV-10: Nine Women

– UNV-11: The AI Revolution — Automating Bad Practice at Scale

– UNV-12: Model Bank — the perfect solution for banks that don't exist

– UNV-13: The parameter that broke the camel's back

WHITE PAPERS

– WP-12: Rebalancing: Drift Thresholds and Disclosure

– WP-13: Portfolio Valuation Methodology

investpuppy.com/documents

REGISTRATION REQUIRED — 13 DOCUMENTS

VEKTOR COMMERCIAL

– Vektor FAQ

– One Platform, Three Delivery Models

– Reference Output — SGX · NASDAQ · LSE · 21 May 2026

VEKTOR RESEARCH PAPERS

– WP-Index · Research Series Index

– WP-01: Quantitative Portfolio Construction

– WP-02: Signal Optimisation

– WP-03: Capital Allocation

– WP-04: Indicator Selection

– WP-05: Multi-Currency

– WP-06: Audit and Compliance

– WP-07: Technical Architecture

– WP-08: AI and ML Philosophy

WHITE PAPERS

– WP-11: Signal Robustness Architecture — Why walk-forward validation was considered and discarded

How to register: investpuppy.com/research

NDA REQUIRED — 8 DOCUMENTS

VEKTOR COMMERCIAL

– First 90 Days

– Mutual Non-Disclosure Agreement

– Proof Partners Programme

– Workflow Integration Guide

– Vektor Operational Walkthrough — Client to Portfolio Valuation

– Proof Partners Agreement

INVESTPUPPY

– Alloy Partners Programme

OTHER

– Vektor OpenWealth Integration — Commercial Overview

Available once a Proof Partners conversation begins. Start at investpuppy.com/proof-partners