

decision through analysis

VIA PERFORMANCE & ATTRIBUTION

An Advanced Performance & Attribution Solution

HIGHLIGHTS

opturo[®] Virtual Investment Analytics (VIA) includes the industry's most advanced transaction-based performance and attribution solution. VIA is a stateless, versatile and agile platform that executes on-the-fly analysis. VIA uniquely provides accurate solutions to critical and pervasive financial evaluation and processing challenges. It does so without imposing a footprint on the client's system and without the need for expensive infrastructure, prolonged implementations or disruptions to client workflow and ongoing maintenance costs.

VIA: Performance & Attribution is the industry's first real-time, best-of-breed, comprehensive, low-latency, rapid implementation, in-house, batch reporting performance and attribution solution.

It is specifically geared towards improving the content obtained from the analysis of portfolio performance while reducing the cost.

It has the flexibility to properly analyze each portfolio's own custom investment process, providing reliable and appropriate information to both the firm and its clients.

Real-Time Reporting: Current performance reporting as external market data, holdings and trade data change, supporting any period from any specified start date to the current moment. E.g. Date-To-Time Performance and Risk Attribution from the third quarter of last year to the current moment using up-to-the-moment prices and positions.

Exact Performance: Built upon daily, component-level, trade-inclusive, multi-currency returns for both longs and shorts. Incorporates corporate actions, over-night cash flows and tax reclaim to provide accurate weights and returns for performance reporting and attribution while resolving the notorious difficulties arising from intra-day transactions.

Exact Attribution: Performance Attribution & Decision Risk Attribution that accurately differentiates the effects of controllable investment decisions from the effects imposed by the market.

Multi-Asset: Comprehensively addressing equity, fixed income and balanced-funds.

Custom Decision Trees: Allows the user to designate, on-the-fly, the structure of the decision process that will be employed in the attribution analysis of each fund, such as applying different investment decisions to equities than to fixed income assets within a unified evaluation of the effects of each of a fund's decisions on its total performance and risk.

Rapid Deployment: Leverages Opturo's proprietary plug & play technology to offer a quick and cost effective implementation.

THE OPTURO ADVANTAGE

Exact and Meaningful: Every performance and attribution term calculated is the precise answer to a clear financial question.

Follow-The-Money Performance

- **Daily & Trade-inclusive:** Correctly calculates the component-level returns for any possible transaction combination of sales, purchases, flips and shorts.
- **Sign-Appropriate:** The return for every instrument has the same sign as its gain and is never below -100%.
- **Resolves problems endemic in all popular daily, component-level, trade-inclusive alternatives** such as in all versions of modified Dietz and IRR.

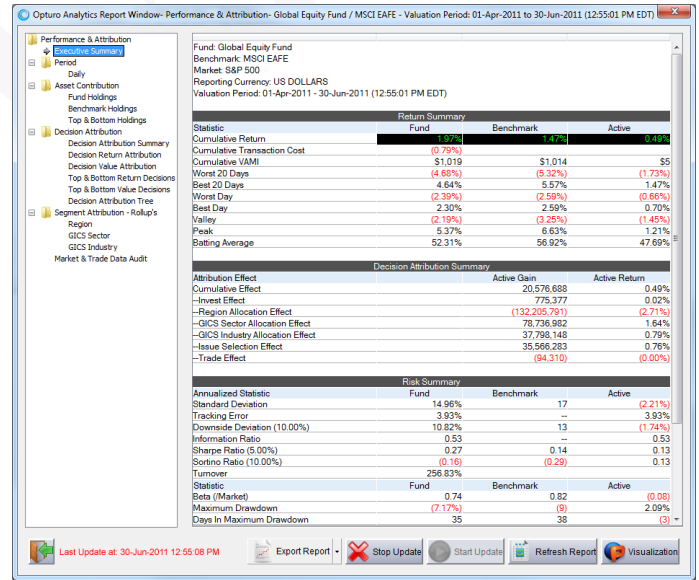
Decision Performance & Risk Attribution

- **Clearly distinguishes** explaining all returns and risks by attributing them to controllable investment decisions from explaining by attributing them to uncontrollable market factors.
- **Daily & Multi-period** of any specified length with option to employ real-time up-to-the-moment data.
- **Trade-inclusive.**
- **Custom on-the fly, user-specified decision tree.** Evaluates all and only your actual investment decisions as you deploy them, matching attribution to your actual investment process.
- **Multi-Currency** with hedging.
- **Multi-Asset:** Mutually consistent equity, fixed income and balanced-fund decision analysis.
- **Long/Short:** Market neutral, 130/30, etc.
- **Avoids problems** such as the all-to-common Interaction Terms, and the technical Smoothing of temporal compounding that deprives attributes of their intended economic meaning, since Opturo's decision analysis strictly employs only precise effects of actual investment decisions.
- **Ability to generate look-through performance & attribution reports for Fund of Funds** portfolios with Mutual Funds, ETF's and Derivatives. Analyze attribution and contribution across multiple decisions and segments including Sector, Industry and Region.

Multi-Factor Performance Attribution

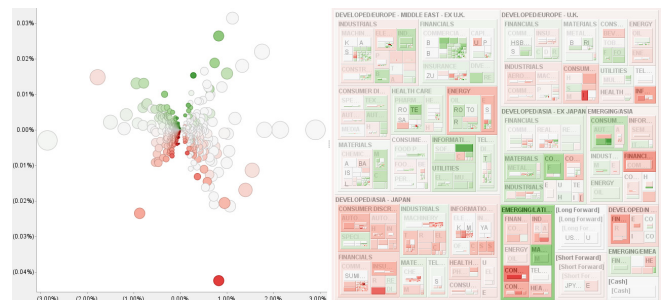
- **Integrates to all third-party** (Barra®, Northfield® etc.) and in-house Risk and Attribution models.
- **Transaction Factor Analysis Mode:** Industry first implementation of trade weights and returns within multi-factor attribution analysis.

Real-time Performance, Attribution & Risk Analytic Updates



Advanced Technical Features

- **Custom Reporting:** To meet internal and client performance reporting requirements.
- **Multiple Performance Modes:** The system can run in both Holdings-based (trade inclusive) and Transaction modes.
- **Multiple Data Modes:** The system can run with either Quantity or Value based data as input.
- **Ability to generate Daily Holdings** from transaction and corporate action data.
- **Rapid Deployment:**
 - Leverages proprietary plug-and-play technology.
 - Quick and cost-effective implementation.



Unique time-series data visualization for in-depth analysis



opturo® is a financial software and consultancy firm specializing in providing innovative, practical and cost effective Performance, Risk, Composite Management for GIPS® and Investment Process Automation solutions backed by extensive financial industry experience and state-of-the-art technology. It is the mission of Opturo to deliver superior technology solutions to our clients to optimize their investment processes.

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