Informa Investment Solutions
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Zephyr Analytics API

The **Zephyr Analytics API** enables you to link your online or offline applications to a robust math library and produce industry-accepted MPT/PMPT statistics, returns-based and asset allocation analyses.

The **Zephyr Analytics API** is sourced from Informa Investment Solutions' industry-leading analysis and reporting application, Zephyr StyleADVISOR, and robust separate account research application, PSN Enterprise. This offering gives you the ability to leverage our decades of experience, shortening your time-to-market, and increasing your coverage while providing a more reliable, consistent and cost-effective solution than you could create on your own.

API Specifications

- Designed for extensibility, horizontal scalability, and high performance
- Stateless structure allows it to run in a variety of environments
- Built for speed and optimized for a large number of calculations
- Communicates via JSON as well as options JSON + binary format
- Ability to run as a web service or hosted solutions, either locally or on our servers

Statistical Calculations

- Over 200 MPT and PMPT statistics
- Rolling, expanding, and simple date range windows are available for all statistics
- Cash adjust any statistic
- Calculate any benchmark-relative statistic vs. an RBSA style benchmark
- Calculate a universe of any statistic – both the range in percentiles of that universe and the position of any particular manager in that universe

Asset Allocation Calculations

- Markowitz mean variance optimization
- Historical estimates of means, standard deviations, and correlations
- Group and asset level constraints
- Relative constraints – e.g. Domestic Equity must be more than twice Fixed Incomeprocess
- Calculate and report monthly, quarterly or annual returns with and without fees for easy comparison and disclosure to your clients

To view our documentation or sample code, call 1-800-789-5323 or e-mail sales@informais.com.

Statistics Available in the Zephyr Analytics API

Alpha Annualized
Alpha Not Annualized
Alpha Star Annualized
Alpha Star Not Annualized
Arithmetic Risk-Adjusted Performance Annualized
Arithmetic Risk-Adjusted Performance Not Annualized
Average Deviation
Average Return
Average Return Negative
Average Return Positive
Batting Average
Best N Quarter Return
Best One Year Return
Beta
Calmar Ratio
Correlation
Conditional Value at Risk (CVaR) Cornish-Fisher Not Volatility Normalized
Conditional Value at Risk (CVaR) Cornish-Fisher Volatility Normalized
Conditional Value at Risk (CVaR) Historical Not Volatility Normalized
Conditional Value at Risk (CVaR) Historical Volatility Normalized
Differenced Return Annualized
Differenced Return Not Annualized
Down Capture Annualized
Down Capture Not Annualized
Down Probability Annualized
Down Probability Not Annualized
Down Probability
Down Return Annualized
Down Return Not Annualized
Downside Deviation with respect to Cash Annualized
Downside Deviation with respect to Cash Not Annualized
Downside Deviation with respect to Constant Annualized
Downside Deviation with respect to Constant Not Annualized
Downside Omega Annualized
Downside Omega Not Annualized
Downside Standard Deviation Annualized
Downside Standard Deviation Not Annualized
Drawdown
Drawdown-Stats Peak-Valley Average Duration
Drawdown-Stats Peak-Valley Average
Drawdown-Stats Peak-Valley Count
Drawdown-Stats Peak-Valley Minimum
Drawdown-Stats Peak-Valley Total
Drawdown-Stats Direction-Reversal Average Duration
Drawdown-Stats Direction-Reversal Average
Drawdown-Stats Direction-Reversal Count
Drawdown-Stats Direction-Reversal Minimum
Drawdown-Stats Direction-Reversal Total
Excess Drawdown
Excess Return Annualized
Excess Return Not Annualized
Excess Return with respect to Cash Annualized
Excess Return with respect to Cash Not Annualized
Excess Return with respect to Constant Annualized
Excess Return with respect to Constant Not Annualized
Gain Loss Ratio
Geometric Return
High Water Stats High Water Mark Date
High Water Stats To High Water Mark
High Water Stats Under Water Length
High Water Stats Under Water Loss
Information Ratio Population
Information Ratio Sample
Kurtosis
Longest Drawdown End Date
Longest Drawdown Length
Longest Drawdown Recovery Date
Longest Drawdown Recovery Length
Longest Drawdown Start Date
Longest Drawdown Value
Longest Run-up End Date
Longest Run-up Length
Longest Run-up Recovery Date
Longest Run-up Recovery Length
Longest Run-up Start Date
Longest Run-up Value
Longest Uninterrupted Gain End Date
Longest Uninterrupted Gain Length
Longest Uninterrupted Gain Recovery Date
Longest Uninterrupted Gain Recovery Length
Longest Uninterrupted Gain Start Date
Longest Uninterrupted Gain Value
Longest Uninterrupted Loss End Date
Longest Uninterrupted Loss Length
Longest Uninterrupted Loss Recovery Date
Longest Uninterrupted Loss Recovery Length
Longest Uninterrupted Loss Start Date
Longest Uninterrupted Loss Value
Max Drawdown End Date
Max Drawdown Length
Max Drawdown Recovery Date
Max Drawdown Recovery Length
Max Drawdown Start Date
Max Drawdown Value
Max Return
Max Run-up End Date
Max Run-up Length
Max Run-up Recovery Date
Max Run-up Recovery Length
Max Run-up Start Date
Max Run-up Value
Max Uninterrupted Gain End Date
Max Uninterrupted Gain Length
Max Uninterrupted Gain Recovery Date
Max Uninterrupted Gain Recovery Length
Max Uninterrupted Gain Start Date
Max Uninterrupted Gain Value
Max Uninterrupted Loss End Date
Max Uninterrupted Loss Length
Max Uninterrupted Loss Recovery Date
Max Uninterrupted Loss Recovery Length
Max Uninterrupted Loss Start Date
Max Uninterrupted Loss Value
Median Absolute Deviation
Median Correlation
Median
Minimum Return
Number of Down Periods
Number of Periods
Number of Up Periods
Omega Annualized
Omega Not Annualized

Statistics Available in the Zephyr Analytics API, continued

Pain Index
Pain Ratio
Relative Calmar Ratio
Relative Pain Ratio
Relative Risk
Return Annualized
Return Not Annualized
Risk-Adjusted Performance PopulationRisk-Adjusted Performance Sample
R-Squared
Run-up-Stats Peak-Valley Average Duration
Run-up-Stats Peak-Valley Average
Run-up-Stats Peak-Valley Count
Run-up-Stats Peak-Valley Minimum
Run-up-Stats Peak-Valley Total
Run-up-Stats Direction-Reversal Average Duration
Run-up-Stats Direction-Reversal Average
Run-up-Stats Direction-Reversal Count
Run-up-Stats Direction-Reversal Minimum
Run-up-Stats Direction-Reversal Total
Serial Correlation
Sharpe Omega Annualized
Sharpe Omega Not Annualized
Sharpe Ratio Internal
Significance Level
Skewness
Sortino Ratio with respect to Cash
Sortino Ratio with respect to Constant
Standard Deviation Annualized Population
Standard Deviation Annualized Sample
Standard Deviation Not Annualized Population
Standard Deviation Not Annualized Sample
Standard Deviation of Excess Return Annualized Population
Standard Deviation of Excess Return Annualized Sample
Standard Deviation of Excess Return Not Annualized Population
Standard Deviation of Excess Return Not Annualized Sample
Sterling Ratio
Style Drift
Tracking Error Annualized
Tracking Error Not Annualized
Treynor Ratio Internal Annualized
Treynor Ratio Internal Not Annualized
Treynor Ratio
t-statistic
Up Capture Annualized
Up Capture Not Annualized
Up Probability
Up Return Annualized
Up Return Not Annualized
Upside Deviation with respect to Cash Annualized
Upside Deviation with respect to Cash Not Annualized
Upside Deviation with respect to Constant Annualized
Upside Deviation with respect to Constant Not Annualized
Upside Omega Annualized
Upside Omega Not Annualized
Upside Standard Deviation Annualized
Upside Standard Deviation Not Annualized
Value at Risk (VaR) Cornish Fisher Not Volatility Normalized
Value at Risk (VaR) Cornish Fisher Volatility Normalized
Value at Risk (VaR) Historical Not Volatility Normalized
Value at Risk (VaR) Historical Volatility Normalized
Variance
Worst N Quarter Return
Worst One Year Return
Zephyr K-Ratio

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Informa Investment Solutions provides clients a full spectrum of back to front office applications and services.

Our unique ability to provide investment professionals with customized systems, data, and services has made us the leading service provider in the marketplace.

For over thirty years, we have serviced both institutional and retail investment professionals by providing value added solutions. Our clients include financial institutions, brokerages, investment management companies, investment consultants, independent advisors, and pension plan sponsors.