VaRworks

Extreme Event and Tail Risk Analysis for experienced risk managers.

Allegro ANALYTICS

POWERED BY FEA

Risk Managers worldwide are facing growing demands from investors, regulators, and counterparts to measure, manage, and disclose their portfolio risk profile, and ensure that they comply with best risk management practices.

Recent experience has clearly shown that measurement and management of extreme event and tail risk is paramount. Traditional market risk management applications rely on risk estimation methodologies only suitable for normal market conditions, and risk managers play a limited role in the risk measurement process. Using best-of-breed models that combine rigorous quantitative models with the risk manager's judgment and experience is essential to avoid unexpected portfolio "blow-ups", and to give risk managers the competitive advantage necessary to provide the best possible service to investors, and ultimately, to attract and retain capital.

PRODUCT DESCRIPTION

VaRworks is a risk management toolkit that integrates risk data and calibration functionality, with FEA's advanced risk analytics for Value at Risk (VaR), Expected Tail Loss (ETL), stress test, and back-test calculations in a newly designed user interface with highly customizable reports.

VaRworks, Excel-based interface allows for the level of user interaction that modern extreme event risk estimation techniques require. By partnering with FEA, risk managers have at their disposal best-of-breed market risk analysis tools that can easily fit within their risk management process. Back-testing functionality allows risk managers to check the validity of the risk models being used, and avoid costly surprises.

What makes VaRworks unique? No other application can match VaRworks in terms of its extreme event and tail risk analysis tools, its ease of integration, and high degree of user interaction. VaRworks is fully documented, rigorously tested, highly optimized, and comes with all the features that risk managers at hedge funds have come to expect from FEA analytics. That's why some of the most sophisticated risk managers rely on VaRworks to generate daily VaR and mark-to-market numbers, to monitor and disclose the risk of their strategies.

PRODUCT BENEFITS

- Calculate tail risk and examine exposure to extreme market events.
- Enhance the risk control process by implementing risk-based trading limits.
- Determine your portfolio's response to multiple correlated extreme market scenarios.
- Identify and manage portfolio "hot spots" and determine optimal hedges.
- Back-test the effectiveness and accuracy of your risk measures.
- Keep full control of the measurement and disclosure process.
- Offer flexibility, fast implementation time, and easy fit into user's workflow.

KEY FEATURES

- Risk methodologies to calculate VaR and Expected Shortfall: Analytic or Parametric VaR, Monte Carlo and Historical Simulation, and Extreme Value Theory for tail risk analysis.
- Advanced stress test, scenario analysis, and back-testing modules.
- Highly customizable, Excel based reporting tools.
- Open market data approach, and volatility and correlation calibration tools.
- Marginal and Incremental VaR analysis.
- Wide coverage for equity, fixed income, commodity and foreign exchange underlying instruments.
- Flexibility, fast implementation time, and easy fit into user's workflow.

Allegro
Commodity Management

ADDED FEATURES

- Conditional volatility and correlation calibration for extreme event analysis.
- Comparative analysis and integrated estimation of VaR and ETL.
- Flexible reporting and "drill-down" analysis down to the instrument level.
- Advanced back-testing and "top-down" or "macro" VaR and Expected Tail Loss module.
- Enhanced data visualization tools.
- 5 years of daily historical time series and market data management tools.
- User-friendly interfaces.
- As an FEA client, you also get the added benefit of access to the first-class support and expertise provided by the FEA Risk team.

SOFTWARE ARCHITECTURE

VaRworks is a Microsoft Excel® Add-In that is written completely in C/C++ providing for extremely fast calculations. It includes Excel Add-In functions (XLL files), customizable Excel templates, and documentation. When installed, VaRworks XLLs add functions to Excel that are used like built-in worksheet functions, allowing users to customize the included templates or create new ones. VaRworks is also available as a VaRlib C/C++ library for Unix and Windows programmers who want to incorporate VaRworks functions into custom and third-party C, C++, Visual Basic, and SQL database applications.

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