

Risk

Markets Technology

Awards

2019

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Trading systems:
Structured products/cross-asset

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Numerix

Numerix offers outstanding support for structured products and cross-asset instruments through its broad asset-class coverage, which includes rates, foreign exchange, credit, equities, commodities, inflation, volatility and life products, as well as a multi-asset hybrid model for exposure simulations.

The Numerix Oneview Enterprise Platform provides pricing, risk, analysis and trade management, and its functionality is now also hosted on the Amazon Web Services cloud, offering the flexibility to expand capabilities to support any trade volumes and compute requirements. In addition, Numerix has enhanced the performance of Oneview through continued exploitation of graphics processing unit (GPU) parallel processors, as well as the use of adjoint algorithmic differentiation (AAD) techniques for automatically calculating sensitivities when pricing. The company is currently working on delivery of backward Monte Carlo on GPU.

As well as offering hundreds of industry-standard, predefined templates and closed-form pricers that represent commonly traded deals, Numerix provides an easy-to-learn proprietary scripting language that allows users to innovate new products rapidly. Users can specify the details of any instrument's payout and cashflows, as well as create robust trade templates for the new deal types and upload them into Oneview's trade repository. This enables users to bring new product types to market in days instead of months.

Numerix also offers a flexible credit support annex (CSA) scripting language that allows users to incorporate all a deal's CSA terms, so CSA optionality can be priced accurately. CSA terms handled include single collateral versus multi collateral, cash versus



Steve O'Hanlon, Numerix

non-cash collateral, cheapest-to-deliver collateral, minimum threshold amount, rounding and haircuts.

Judges said:

"Numerix shows a consistent focus on flexibility for handling new products, complex CSAs and multi-curve modelling, as well as on performance with the implementation of AAD, GPUs and cloud."

"Good parallel development of pricing, modelling, trade processing and order management, as well as technology."

"Numerix has a strong anchor client and strong analytics, and a platform in transition – all components for developing a long-term solution."

Steve O'Hanlon, chief executive officer, Numerix, says:

"Our pedigree is in pricing and valuation. For the past 15 years, we've dominated the multi-asset class pricing business by increasing the depth of asset-class coverage and responding with the scalability and performance enhancements the evolving market has demanded. Why are we being named the best pricing and structured products provider today? It's because we've also innovated the technology underpinning our analytics. Through a powerful platform of dynamic microservices that can serve up the Numerix Oneview front-to-risk application for XVA, market risk, margin and regulatory calculations, or provide end-users with the customised business logic and development tools needed to build their own capital markets apps amplified by diverse cloud deployment options, we've solidified our place as a market leader in front-office risk." ■