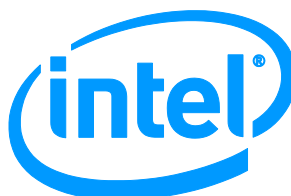# STAC Analytics Technology Conference

November 9, 2011
Doors open: 1:00pm
Meeting starts: 1:30pm

Bank of America
5 Canada Square
Canary Wharf
London

Gold Sponsors:

NOTE:
This meeting will be preceded by a meeting of the
STAC Bi-Temporal Data Special Interest Group (London branch)
at the same location. That meeting requires a separate registration at
http://www.stacresearch.com/nov9BTD.

Welcome and review of highlights from the New York Conference

Peter will share some of the key insights from the New York STAC Technology Conference.

Peter Lankford, Founder & Director, Securities Technology Analysis Center. Peter has overseen STAC since its birth in 2006. In that time, the STAC Benchmark Council (trading organizations and technology vendors) has established several performance benchmark standards that used heavily by capital markets firms. Before STAC, Peter was SVP of Information Management Solutions at Reuters, where he led the $240M market data systems business. Prior to that, Peter held management positions at Citibank, First Chicago, and operating-system maker IGC. Peter has an MBA, Masters in International Relations, and Bachelors in Chemistry from the University of Chicago.

Head in the clouds? From Naivety to Clarity in 512 days: Strategies for Grid and HPC in and out of the Cloud for Finance
[video/slides]

Today's technologists must contend with new regulatory demands on the one hand and cost reduction and consolidation on the other. Cloud seems like a panacea: more compute, more immediately, at lower cost. But is it that simple? Even putting aside security and SLA considerations, is cloud always a good *economic* proposition? Adam will tackle these questions and challenge the place of cloud as "burst" capacity for HPC workloads, exploring the naïve idea that unlimited pay-per-use compute is cheap. He will then re-position cloud in the pantheon of compute and show how to make it a core part of a forward-looking growth strategy.

Dr. Adam Vile, Senior Partner (Technical Consulting), Excelian. Dr Vile is a published author and well-known expert in his field, with over 10 years' experience in investment banking following a career as a computer scientist. He is a specialist in Grid, Data Caching and HPC.

Impossible on a Grid—But Very Possible [video/slides]

Using a case study in counterparty credit risk management as his example, Claudio will propose that the common practice of linear risk analysis is an unnecessary compromise that is rooted in the standard middleware paradigm of risk management software. He will argue that if a firm bypasses the memory bottle-neck at the algorithmic level and moves from grid farms to heterogeneous computing, it can compute non-linear risk analytics that would not be feasible on standard grid farms.

Claudio Albanese, Founder, Global Valuation and Visiting Professor, Kings College. Claudio was awarded a PhD in Physics at ETH in Zurich and was Full Professor of Mathematics at the University of Toronto and at Imperial College. He is currently the CEO of Global Valuation Ltd, he sits on the Board of Carador Income Fund PLC and HypoTechs LLP, and teaches as Visiting Professor at King's College London.

Standard Benchmarks for Risk Platforms [video/slides]

Peter Lankford, Founder & Director, STAC

Peter will take attendees on a brisk walk through the STAC-A2 Benchmark structure, including the market-risk suite and the emerging credit-risk suite.

COFFEE BREAK

Technical Brief: Intel's MIC (Many Integrated Core) Architecture [video/slides]

Evgueny will discuss the MIC architecture, a key part of Intel's strategy to bring increased performance with programmability to high-performance computing.

Evgueny Khartchenko, Sr. SW Application Engineer, Intel® DRD. Evgueny joined Intel 12 years ago with a background in Computation Fluid Dynamics. He initially joined as a first line manager of VTune performance Analyzer development. From 2003 to 2007, Evgueny held consulting and technology management roles where he enabled EMEA and UK FSI Customers with Intel Tools and Intel technologies for High Performance Computing. Since 2007, Evgueny has been a technical lead at Intel's FasterLab. There he works with UK FSI customers on latency optimizations, developing latency analysis tools, and facilitating feedback to Intel's network group, processor architects and software tools development groups.

Big Data Solutions in Capital Markets - A Reality Check
Andrew Delaney, A-Team Group [video/slides]

Network Implications of Big Data Workloads [video/slides]

Yang will discuss examples of Big Data deployments at Cisco customers to provide insight into key questions such as: How does the network impact performance of Big Data workloads? When does it make more sense to provision additional servers than to upgrade the network and vice versa?

Yang Yang, Technical Marketing Engineer, Cisco. Yang is responsible for driving technology adoption in Nexus access switch platforms. He works closely with the core engineering team, sales team, and third-party vendors to deliver innovative data center access switch platforms. He is a veteran of 11 years at Cisco, with solutions experi-ence including routing, switching, multicast, and security. Currently he is focused on low-latency switching architecture, performance analysis, and monitoring, as well as driving the Precision Timing Protocol (PTP) implementation in the Nexus platform to provide sub-micro second accuracy timing solutions for HFT and data center networks.

The STAC-M3 Effect [video/slides]
Peter Lankford, Founder & Director, STAC

Peter will review the STAC-M3 Benchmark suite, the technology stacks that have been tested against it, and how it has provided an industry focal point for innovative performance engineering.

Panel: The New Frontier in Storage Performance [video/slides]

It is well known that while storage capacity has met or exceeded advances in CPU and memory over the past few decades, storage performance has lagged them all by a few orders of magnitude. For trading organizations, storage performance is the gating factor on many important top-line activities such as strategy back-testing and risk management. However, recent innovations such as solid-state media (including flash and DRAM), higher speed interconnects, more powerful controllers, and smarter software appear to be opening up that bottleneck. Just how good are these new solutions, and what opportunities do they present to trading organizations? Our panel will provide its views.

Rob Anderson, EMEA CTO, Isilon Systems (EMC). Rob engages with users in finance, media & entertainment, life sciences, telecoms, energy and other market sectors to discuss how Isilon's breakthrough technologies can help accelerate results, manage growth and reduce management costs. He has led engineering teams in the development of Isilon's industry-leading OneFS clustered filesystem, filing numerous patents including eight for which he is named as an author. Rob formerly held senior technical roles with Amazon.com and Equator Technologies. He holds an M.Sc. in Computer Science from the University of Washington and a B.Eng. in Computer Engineering from McGill University.

Larry Jones, Sr. Director, HPC and Life Sciences, DataDirect Networks. Larry is charged with developing and evangelizing compelling storage solutions for the HPC, Finance and Life Sciences end markets. He has 30+ years experience in networking, storage, and technical marketing related to the cloud storage, financial services, tele-communications, collaboration software and High Performance Computing industries. Prior to his role at DataDirect Networks, Larry led the definition and introduction of the first parallel, object-based file system at Panasas, and held senior marketing roles at E*Trade, IBM, and Nortel Networks. Larry holds a BA in History from the University of Michigan, regularly contributes to trade journals, and has been a featured presenter at industry conferences including the IDC User Forum, STAC conferences, the XGen sequencing conference, SuperComputing, the Oil & Gas HPC conference.

NETWORKING RECEPTION