

Derivatives Trading Technologies

Steve Stewart



INTRODUCTIONS

- + Trading Technologies
- + TT's relationship with ATHEX
- + The technology environment in the derivatives space
- + Developing needs of our clients



TRADING TECHNOLOGIES

- + Founded in 1994
- + 13 offices globally, over 300 staff
- + Spearheaded SaaS and hybrid-cloud infrastructure in the derivative space
- + Acquired in December 2021 by 7RIDGE
- + Market connectivity across 6 continents and over 55 exchanges



TT/ATHEX

- + Announced connectivity to ATHEX in early 2021
- All stock and index futures are tradeable through TT's full product suite:
 - + Spreads
 - + Algos
 - + FIX & API trading
- + TT's 10,000 screens have access to the growing Greek market
- Primary platform offering connectivity to ATHEX exchange



MARCH 23, 2021

Trading Technologies Launches Connectivity to Athens Stock Exchange for Derivatives Trading Via the TT® Platform



CHICAGO and ATHENS, March 23, 2021 – Trading Technologies International, Inc. (TT), a global provider of high-performance professional trading software, infrastructure and data solutions, and the Athens Stock Exchange (ATHEX), the national exchange of Greece, today announced that all derivative products listed on the ATHEX Derivatives Market are now available for trading through the TT platform and accessible to TT's global user base.

Clients can leverage TT's full suite of tools, including functionality for spread and algo trading, charting and analytics, mobile trading, options, FIX services and API development, to trade the full suite of derivatives products listed on the ATHEX Derivatives Market. These include stock and index futures as well as stock and index options.

"Adding the national exchange of Greece extends our already robust market portfolio in Europe and reinforces our global leadership position. We're expecting rapid takeup as connectivity was driven largely by demand from some of our largest FCM partners and their clients. We look forward to working with the ATHEX team to grow our mutual customer base," said Steve Stewart, Managing Director, Sales EMEA at Trading Technologies.

"We are very pleased with our mutually beneficial collaboration with TT that will give its clients access to the promising Greek market," said Sokratis Lazaridis, CEO, ATHEX Group.

With market connectivity that spans six continents, TI's privately managed infrastructure delivers secure market access and superior performance from anywhere in the world. Designed specifically for professional traders, TI incorporates a broad array of customizable tools to accommodate trading strategies that range from manual point-and-click trading to single-digit microsecond automated order entry.



HOW ARE TECHNOLOGY REQUIREMENTS EVOLVING

- Market is embracing the full range of new technologies:
 - Front to back solutions
 - + Data management
 - + Infrastructure & connectivity
 - + Trade surveillance & risk management
- + Regulatory environment becoming more complicated
- + Risk of market fragmentation
- + Competition on more verticals than front end



FRON-TO-BACK SOLUTIONS

- + Cultural change: post-trade operations as a potential driver of profit
- + MiFID II forcing infrastructure change
- + TT partnering with Ateo
- + Market leaders in post trade allocation, matching and clearing.
- + Currently used by leading brokers and sell-side firms:
 - + Automated allocation
 - + Aggregation and matching of orders and fills across 70+ exchanges
 - + Customized reporting
 - + Native back-end integration



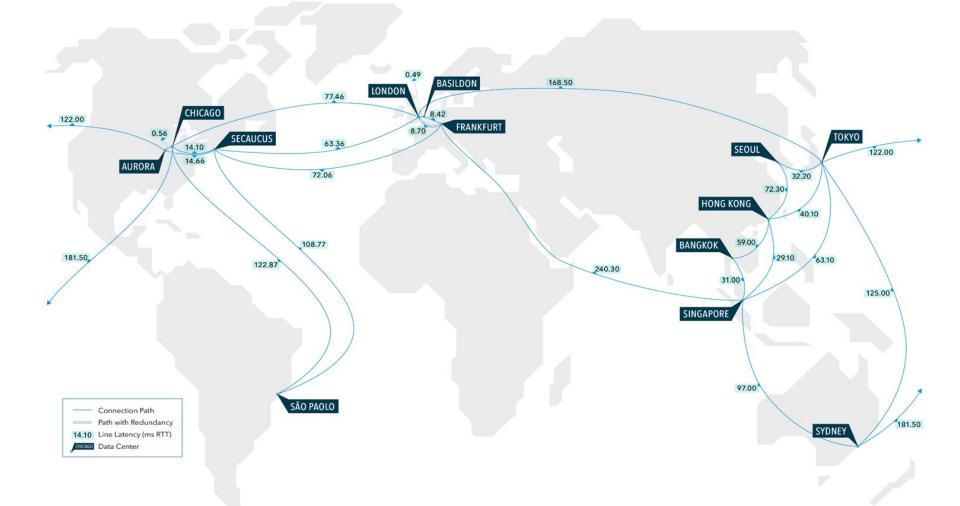
THE DATA PROBLEM

- MiFID II requires even greater attention to detail in trade reporting
- + 65 different fields in reports
- + Data becoming one of the main verticals challenging technology providers
- + Clients require:
 - + Optimisation of data
 - Accuracy and availability
 - + Reliability
 - Real-Time Processing
- + Partnership with Ateo streamlines reporting and exporting to all downstream systems



THE INFRASTRUCTURE ARMS RACE

- + Race to Zero
- + Market standard latency has moved from seconds to microseconds in TT's lifetime
- + laaS offering is in response to greater demands from clients
- + Catering for performance and connectivity demands through:
 - + Co-location
 - + Hosting services
 - + Network services
 - + Exchange services
- + Expanding infrastructure footprint





TRADING APPLICATIONS DE SURVEILLANCE

- Regulation behind trade surveillance is changing the derivatives industry
- + Legacy systems are let down by rigid data collection and processes
 - + Miss sophisticated market manipulation tactics
 - + Generate too many false positives
- + Important for multi-asset trading firms FCMs & sell-side
- + TT Score uses machine learning to reduce errors
- + Systems need to be integrated across markets and platforms



TRADING APPLICATIONSK MANAGEMENT

- + Operate at optimal risk levels for maximum returns
- + Risk management is fragmented lack of visibility across the trade lifecycle
- + 7RIDGE acquisition of TT led to integration with KRM22
- + Global risk cockpit being integrated into TT to unify data collection and analysis
 - + Lower cost and time spent managing suppliers
 - + Lower operating risk with fewer working parts
- + Coverage must be global to cater for international institutions:
 - + EU Market Abuse Regulations
 - + US Dodd Frank
 - HK Securities and Futures Ordinance



THE FUTURE OF DERIVATIVES TECHNOLOGY

- + Strong and transparent relationships between vendors and clients
- + Open lines of communication will lead to appropriate development
- + Multi-asset offerings?