

PROGRESS[®]

SMART ORDER ROUTER

ACCELERATOR

THE POWER OF APAMA—DELIVERING BEST EXECUTION

The Progress[®] Apama[®] Smart Order Router (SOR) Accelerator is designed to jumpstart the implementation of algorithmically-driven applications that will route equities orders to trading venues in support of best execution requirements. Responding to the diverse liquidity sources (exchanges, multi-lateral trading facilities, dark pools, etc.) that are increasingly available to equities traders, the Apama SOR Accelerator provides the foundation for automated routing applications that exploit the Apama platform's rich complex event processing (CEP) capabilities. With the Apama SOR Accelerator, trading firms can now more easily and flexibly create applications that respond to MiFID and Reg NMS requirements for best execution.

The Apama SOR Accelerator is built upon the Progress[®] Apama[®] Algorithmic Trading Platform, the industry-leading environment for creating algorithmic trading and associated capital markets applications. Progress Apama is a comprehensive platform for building sophisticated applications that incorporate unique proprietary algorithmic techniques. In contrast to rigid "black box" applications with

HIGHLIGHTS

- > *Powerful language with Eclipse interface for extending core Apama order routing logic*
- > *Richly graphical, easily customized dashboards for an aggregated view of markets, as well as parent and child orders*
- > *Patented complex event processing engine for low-latency execution of orders*
- > *Integration framework and adapters for connectivity to different trading venues*
- > *Backtesting/analytic tools that can test new order routing applications or replay past execution history*

corresponding lengthy development cycles, the Apama platform supports rapid creation of highly differentiated strategies that deliver competitive advantage.

THE APAMA SOR ACCELERATOR

The Apama SOR Accelerator exploits key strengths within the underlying Apama platform to accelerate deployment of order routing applications focused upon delivering best execution. Apama SOR Accelerator offers extensions to the core platform that customers can modify and otherwise extend to create solutions for specific requirements in capital markets. Leveraging the experience of Apama in a number of order routing deployments, the SOR Accelerator offers:

- > Extensible business logic, implemented within the rich Apama CEP language, which incorporates sophisticated real-time trade order routing capabilities that reflect both the unique trading strategies of the firm and the different characteristics of the equities trading venues
- > An integration framework, together with specific adapters, that provides both inbound connectivity for market data providers and outbound connection to trading venues for the routing/cancellation of orders
- > Visual dashboards that can be completely customized, display an aggregated view of liquidity from different venues, and allow traders to manage parent and child orders, suspend or resume orders/trading venues, and configure and monitor order routing rules

THE APAMA PLATFORM

As the industry's leading platform for algorithmic trading, Apama is a cross-asset trading environment supporting equities, futures and options, fixed income and foreign exchange. Apama leverages the power of complex event processing with tools for both business users and developers. The richly featured Apama CEP architecture includes:

- > A graphical development environment for the drag-and-drop creation of sophisticated algorithmically driven applications
- > Eclipse-based access to the industry's most powerful and complete language for building event-driven applications
- > A patented execution engine that delivers both high throughput and low latency in support of the most demanding capital markets requirements
- > Richly visual user dashboards that can be tailored to application and user-specific requirements, providing both local and web-based access
- > Highly interactive event capture and replay services that capture application history for backtesting new applications or analyzing of production applications using true market data
- > Integration infrastructure, supporting both packaged adapters and a development environment for adding additional connectivity as needed to integrate with unique or proprietary market data providers or trading venues

The screenshot displays the Progress Apama SOR Accelerator interface, which is a complex data visualization tool. It features several overlapping windows and panels:

- Top Left Panel:** A table listing order details with columns for Time, Strategy, Order ID, User, Symbol, Price, Quantity, Executed, Remained, Status, Message, State, and Type. The table shows multiple orders for different strategies and users, with various statuses like 'Order accepted', 'Order has been completed', and 'Order has been received'.
- Top Right Panel:** A table showing instrument data with columns for Instrument, Region, Alt Id List, Precision normalized, Contract Equity, Contract Valid From, Contract Valid To, Publication Mode, and Min Publication Qty. It lists various instruments like AUD/CAD, AUD/CHF, AUD/JPY, etc.
- Bottom Left Panel:** A 'Filter Selection' dialog box with fields for Order Id, Strategy, In Market, and State, along with a 'Reset' button.
- Bottom Center Panel:** A 'Fills' table showing order allocation details with columns for Order Allocated ID, counterPart, parentID, Destination, Side, Price, Quantity, valueDate, and Fill Time. It shows a single fill for order 1313695943.
- Bottom Right Panel:** A 'Parent Order Details' dialog box showing fields for ID, Symbol, Side, Quantity, Price, Qty Remaining, Type, Client Order ID, Submit Time String, Status, and State. It provides detailed information about a specific order.

The interface is designed for real-time monitoring and analysis of market data and order execution.

SOR Accelerator screen examples

PROGRESS SOFTWARE

Progress Software Corporation (NASDAQ: PRGS) is a global software company that enables enterprises to be operationally responsive to changing conditions and customer interactions as they occur. Our goal is to enable our customers to capitalize on new opportunities, drive greater efficiencies, and reduce risk. Progress offers a comprehensive portfolio of best-in-class infrastructure software spanning event-driven visibility and real-time response, open integration, data access and integration, and application development and management—all supporting on-premises and SaaS/cloud deployments. Progress maximizes the benefits of operational responsiveness while minimizing IT complexity and total cost of ownership.

WORLDWIDE HEADQUARTERS

Progress Software Corporation, 14 Oak Park, Bedford, MA 01730 USA
Tel: +1 781 280-4000 Fax: +1 781 280-4095 On the Web at: www.progress.com

Find us on  facebook.com/progresssw  twitter.com/progresssw  youtube.com/progresssw

For regional international office locations and contact information, please refer to the Web page below:
www.progress.com/worldwide

Progress, Apama and Business Making Progress are trademarks or registered trademarks of Progress Software Corporation or one of its affiliates or subsidiaries in the U.S. and other countries. Any other marks contained herein may be trademarks of their respective owners. Specifications subject to change without notice.

© 2011 Progress Software Corporation and/or its subsidiaries or affiliates. All rights reserved.

Rev. 08/11 | 110714-0006

