

PROGRESS APAMA[®] EVENT PROCESSING PLATFORM

DATA INTEROPERABILITY WITH LESS COMPLEXITY

Progress[®] Apama[®] is the market-leading platform for the design, development and deployment of sophisticated Complex Event Processing (CEP) applications that can monitor event streams, detect and analyze event patterns, and take action—all within milliseconds. The Apama event processing infrastructure can deliver real-time responsiveness to applications in financial services, transport and logistics, energy and communications. Event processing solutions can include RFID-enabled inventory management and distribution, sensor-driven industrial and utility SCADA operations, element management in communications, energy trading, or any operation that must respond to real-time information flow.

The Progress Apama platform focuses on a real-time event pattern detection model that operates on inbound event stream data as the events occur. Apama's CEP architecture eliminates the latency of traditional systems that store and index event data prior to analysis. With its patented event processing model, the Apama platform can detect time-based, attribute and location-based relationships with unparalleled

HIGHLIGHTS

Monitor, analyze and act in real time:

- > *Complete design, development and deployment for event processing solutions*
- > *Comprehensive adapter framework for the widest variety of event sources*
- > *Visual modeling of event scenarios streamlines design*
- > *Patented, scalable event processing engine for high throughput and ultra-low latency*
- > *Richly visual, easily customized dashboards for real-time monitoring of CEP applications*

responsiveness that is measurable in sub-millisecond time. And with Apama, you can support thousands of individual event processing scenarios operating simultaneously, providing scalability that is unmatched in the industry.

EMPOWERING BUSINESS AND TECHNOLOGY

Apama's toolset is specifically designed for technical and business users and covers the full lifecycle of event processing application development. As an Eclipse environment, Apama plug-ins provide full-featured graphical development for high-level modeling, as well as rich, code-oriented tools for low-level event processing.

FULL RANGE OF CEP CAPABILITIES

The Apama platform fully incorporates the principles of CEP via a powerful event processing language that enables organizations to derive higher level business events from multiple low-level event streams. The Apama platform can capture temporal and causal constraints—as well as composite event definitions (which are often termed “complex or business events”). Available in a native language environment through Apama's event processing language and Java, Apama provides total control and expressive power for the most advanced event processing applications.

Once created, Apama event processing applications execute within one or more Apama Correlators, managed by the Apama Event Manager. Correlators monitor inbound event streams for patterns that match conditions defined within the Apama CEP application. The correlators support a unique, multi-dimensional filtering mechanism that quickly sifts through multiple event data streams, detects the sought after patterns, and identifies appropriate responses as specified by the application—doing so within milliseconds. Apama supports flexible configurations with multiple correlator instances available to distribute inbound events for load balancing and fault tolerance.

MODELING EVENT SCENARIOS

The Progress® Apama® Event Modeler™ provides a unique graphical environment that enables business users to compose, deploy and evolve event processing scenarios in days or hours, rather than lengthy development cycles required by offerings that rely exclusively on programming languages. Apama

users can create highly sophisticated event processing applications that render the application logic as a graphical state diagram. Through a point-and-click assembly process, users can express time and data flow patterns, constraints and sophisticated event correlations that define the event patterns that will trigger an action, as well as the action to be taken. With the Apama Event Modeler, complete event processing scenarios can be created, tested and deployed without the need to resort to low-level coding.

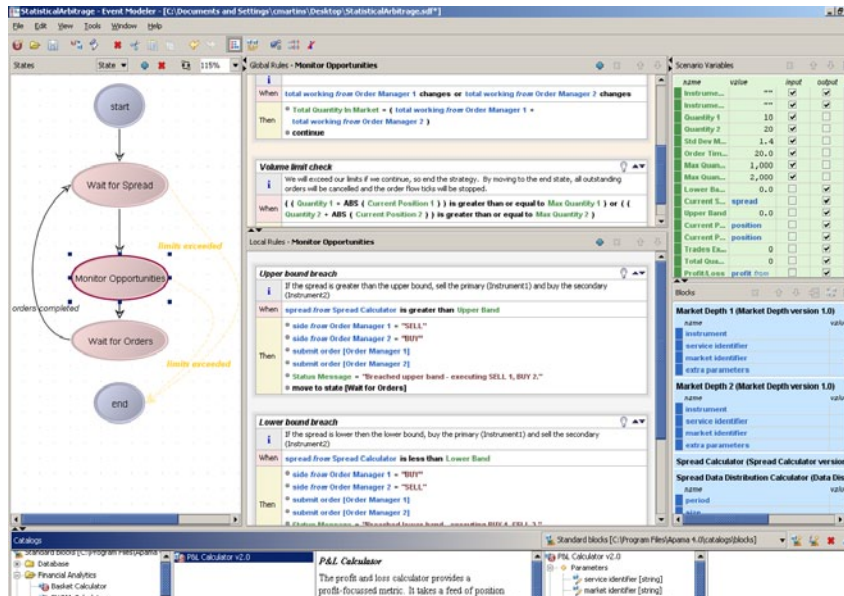


Figure 1:
The Apama Event Modeler graphical environment brings the power of CEP to business users.

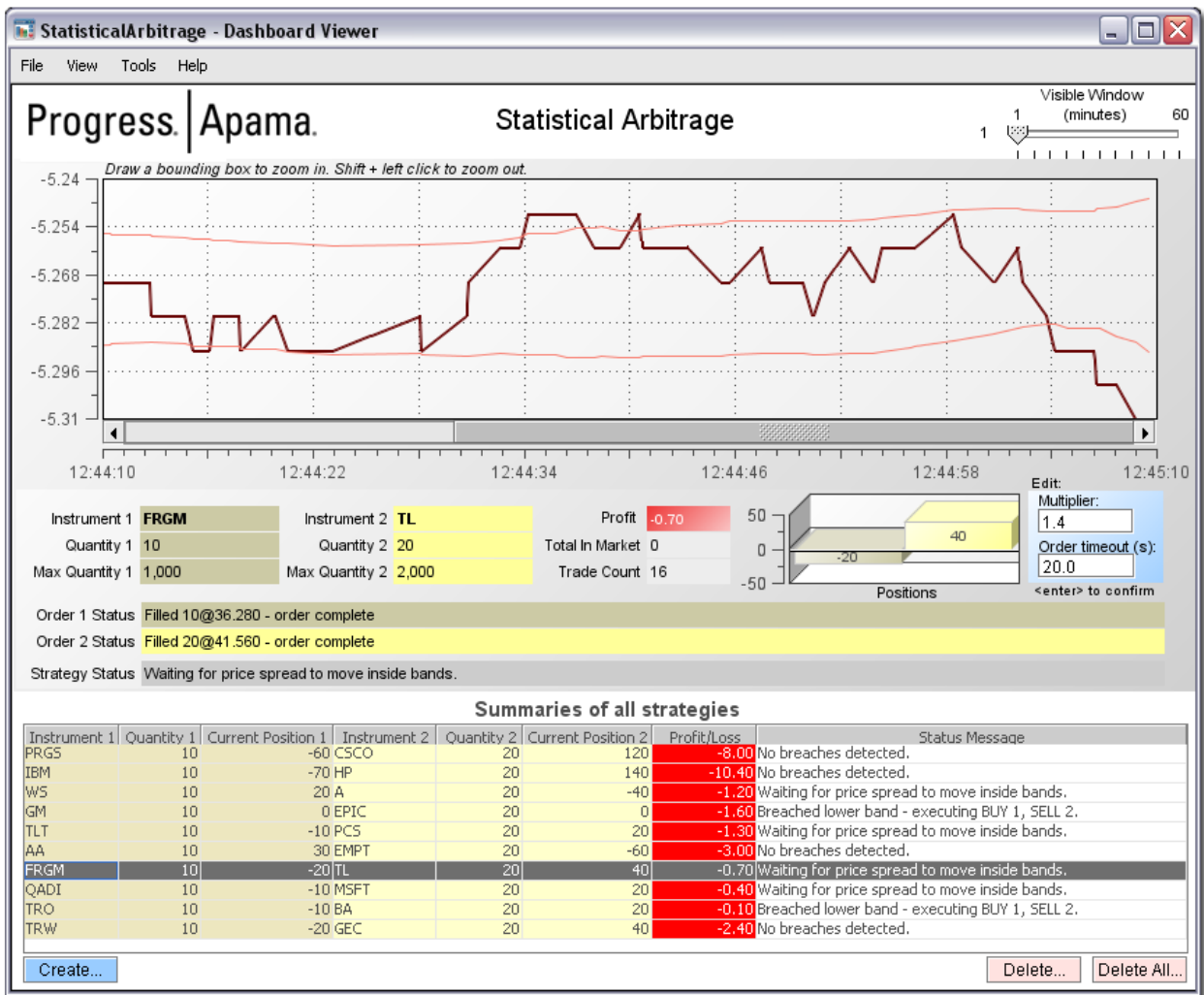
SMARTBLOCKS: CAPTURE AND REUSE OF CEP LOGIC

To further accelerate the development of CEP applications, the Apama platform offers Progress® Apama® SmartBlocks™—packages of reusable event processing logic. Organizations can encapsulate predefined application components as SmartBlocks for incorporation in new CEP applications without need for programming. Event Modeler includes a standard set of event processing SmartBlocks, as well as providing tools for creating implementation-specific SmartBlocks for particular requirements.

VISUALIZING EVENTS WITH REAL-TIME DASHBOARDS

To facilitate the monitoring of CEP applications, Apama includes the Dashboard Studio, a development environment for building richly graphical, intuitive user interfaces. The dashboard development environment offers a

graphical drag-and-drop interface with over 120 graphical widgets that can be selected and modified to create the dashboards.



Individual graphical objects are easily bound to the underlying CEP logic that drives their display in production environments, making it quite easy to prototype, deploy, and evolve dashboard interfaces that are unique to a particular application's requirements. In addition to these dashboard capabilities, the Apama platform also provides a set of APIs for integration of its CEP functionality within a customer's application environment, replacing the Apama interface with one of the customer's choosing—including perhaps a third-party application.

Figure 2:

Rich, interactive dashboards to monitor and respond to events

EVENT CAPTURE AND REPLAY

For testing and analysis, Apama's incorporates event storage capabilities that persist events for later event replay and analysis. Event streams can be captured and written to any standard data store so that new event processing scenarios can be tested prior to deployment in live production environments. The Data Player offers a highly interactive replay capability that allows the designer to select a particular date, time and duration (and the specific event streams) against which to test processing scenarios. Additionally, an audit trail of event processing operations can be enabled that are executed by the Apama applications themselves, thus allowing organizations to analyze the behavior of applications that are already in production to calibrate and tune their performance.

INTEGRATION AND ADAPTERS

The Apama Integration Adapter Framework (IAF) offers a wide range of pre-packaged adapters that integrate with event streams carried by the most popular middleware (Progress® SonicMQ®, JMS, Tibco Rendezvous) and databases (any ODBC- or JDBC-capable database). In addition to packaged adapters, the IAF also includes a toolkit for the development of new adapters to support environments that have streaming data sources not as yet supported by an existing adapter. In addition to the IAF, Apama also provides a range of APIs for integrating Apama within existing enterprise application environments.

HIGH AVAILABILITY AND MANAGEMENT

The Apama Platform Enterprise Monitoring and Management Environment offers a central graphical console for system administration across multiple components and multiple machines. Via this console, individual event processing modules are configured, initiated and terminated. The environment fully supports a high availability capability for fault-tolerant platform operations, including recovery in the event of failure and uninterrupted operation through hot-standby.

SUPPORTED PLATFORMS

Apama Studio

- > Microsoft Windows Vista and XP
- > Windows Server 2003, 2008

Apama Correlators, Adapters and Management

- > Microsoft Windows Vista and XP
- > Windows Server 2003, 2008 (32-bit and 64-bit)
- > RedHat Enterprise Linux 4, 5 (32-bit and 64-bit)
- > Sun Solaris 10 64-bit
- > SUSE Enterprise Linux 9 (32-bit and 64-bit)

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.

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