SUNGARD WEALTHSTATION

WEALTHSTATION CLIENT ACCESS: INVESTOR — ORDER MANAGEMENT SYSTEM

WealthStation Client Access: Investor is an advanced browser-based trading platform available for brokerages, banks and clearing firms. A high-performance, multi-threaded, asynchronous routing system developed to support high-volume securities trading applications, the platform's trading engine, or order management system, is composed of more than 200 standardized pre-trade, database-driven, order checking rules. It also contains a flexible commission module, order routing capabilities to major back-office systems, and a FIX engine that can be used for routing to other execution points.

WealthStation Client Access: Investor provides a reliable and time-tested process for transmitting significant trade volumes. To address the database, power and protocol issues that normally surround online trading systems in an ASP environment, SunGard implemented several architectural philosophies:

- Uses database centricity to enhance the system performance, reliability and flexibility. Sensitive data is consolidated into a single data store that can be firewalled and maintained with strict access authorization to increase security. Performance scales at the rate of relational databases, which handle thousands of transactions per second and terabytes of data.
- Supports distributed CPU horsepower that is load-balanced and interoperates along a logical network bus. Power can simply be expanded by adding more machines.
- Leverages open standard protocols such as XML and Java, so that SunGard can quickly incorporate new technologies and tools when building new features.

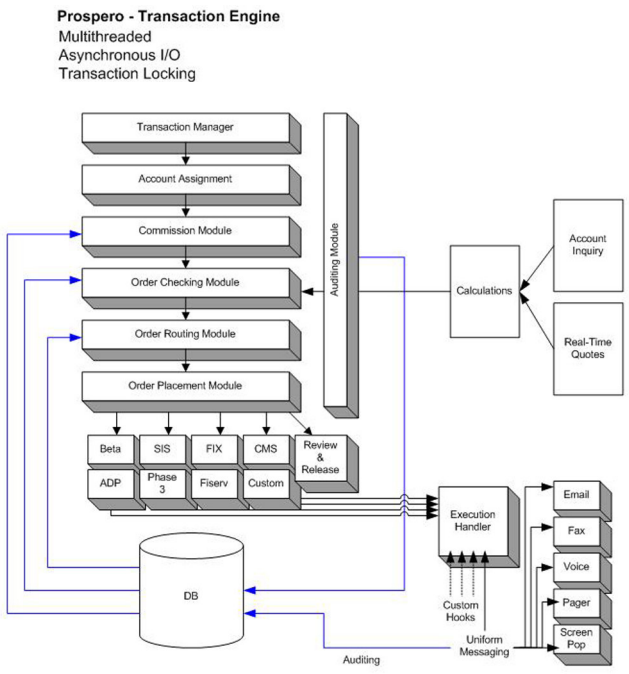
A Brokerage Object Model (BOM) is an open API and XML specification that ties modules together in a reliable, standardized fashion and allows for the integration of development environments, such as .NET and J2EE power your sites. Third-party developers can interact with WealthStation software through BOM API calls, either over a secure Internet connection or through privately leased lines.

HOW THE SYSTEM WORKS

The system's customizable, dynamic rules engine uses real-time, back-office data to check your client's money and security availability at trade time. Entitlement driven, it allows rules set-up based on account classification or experience level. The customizable routing engine enables routing set-up on the exchange level or by symbol or group of symbols. Routing plans can differ based on the time of day.

An order placed in the WealthStation Client Access: Investor system starts out in the transaction manager, where order details from the BOM API are set and stored in the database. From there, the account type for the order is determined using a robust account assignment module. With the commission module, you determine commissions by account, representative or office, depending on your configuration.

SUNGARD Architecure: Transaction Component Flow Diagram



The Prospero transaction engine is designed for uiltra-high performance and 100% transaction completion. SUNGARD does not use store and forward at any point of the system. All OLAP transactions are completed with reliable result messages. Order matching problems are eliminated through the use of real-time interfaces to the back office. Problems associated with "drop copies" have been eliminated. Prospero has handled 60,000 trades (120,000 orders) in a single day for a single broker/dealer. Prospero has processed over 60 million orders.

The order then passes through the order-checking module to determine order validity, and the account holds the necessary position or funds for the order using real-time, back-office data and quotes. The order-checking module can also be set to trap out-of-bound orders and route them to an administrative approval module for further review. After the order passes all order-checking rules, it is sent to the routing module, which determines where the order is routed based on configurable routing plans. The order placement module then sends the order on the specified route to a back-office or via the FIX engine.

After an order routes successfully, the execution handler waits for an asynchronous execution message "if supported by the back-office." Your client receives an execution notification via either an e-mail or pop-up message. Through each step in the order lifecycle, the database updates to help preserve order information, provide a detailed audit trail and help assure order detail is not lost.

The system attends to debugging and auditing. Extensive transaction logs are kept for future analysis, allowing reconstruction of trading conditions after the fact. Self-detected errors and invariants trigger internal alarms. To track trading history, manage customer access, and review audit trails, you can employ Investor's administration module, which provides Web-based access to system controls and helps streamline many day-to-day tasks, such as enabling accounts and changing entitlements.

MADE FOR GROWING SYSTEMS AND NEEDS

WealthStation Client Access: Investor software runs on Windows® 2003 servers and genuine Intel® hardware using Microsoft SQL® Server. Investor's trading engine was tested to process 670 trades per second, and the dynamic rules/routing engine can process 420 trades per minute using a dual Xeon 3.0 GHz processor. Since the system scales linearly through Redundant Array of Inexpensive Machines (RAIM), support of 6,000 to 10,000 orders per minute can be accomplished through a trading engine server farm scalable to how ever many servers are needed.

WealthStation Client Access: Investor provides you with a solution that can help decrease time to market and reduce the risks of building a one-off solution from scratch. It is well positioned to support the growing demands of the international marketplace, as well.