Montran TS

Trading System

Trading System Solution

PROVIDES ELECTRONIC MARKET PLACES AND THE ASSOCIATED FACILITIES FOR BRINGING TOGETHER PURCHASERS AND SELLERS FOR THE PURPOSE OF SECURITIES AND FOREIGN CURRENCIES TRADING.

Montran's Trading System

The TS implements the complete management of:

- **Timetable:** Used to control the Trading System daily schedule, it contains timetable events (Start-of-Day ... End-of-Day) which can be executed manually or automatically.

- **Participants:** Entities which enable the management of system parameters for institutions that hold qualifications to directly participate in the Trading System markets.

- **Markets:** Independent components (operating concurrently) of the Trading System where one or more symbols can be traded according to specific rules:

  → Market Profile – Name, code, tick size regime, odd lot regime, symbol type, timetable, 'T + n' settlement, validation constraints, etc.

  → Business Status – Pre-open, open, closed, halted.

  → Tick Size Regime – Facility to specify the minimum amount that a price of a symbol traded on a market can change.

  → Odd Lot Regime – Enables management of contiguous price intervals, specifying the round lot size for each interval.

- **Symbols:** Securities and currency pairs that have been accepted for trading in the system.

  → Debt and Equity Symbols, Currency pairs – open architecture allows other types to be added.

  → Symbol Profile – Name, ISIN, issuer, lot size, CFI ISO identification, corporate actions, etc.

- **Symbol – Markets:** Sub-markets of the given market, that include only the respective symbols; this allows different symbols to be treated differently on the same market, and the same symbol to be treated differently on different markets (in terms of status, price, etc.).

- **Orders:** Firm instructions from a participant to buy or sell a specified quantity of securities / base amount of currency pairs on a specified market.

  → Order types – Market orders, limit orders, market-to-limit orders, iceberg orders, stop market orders, stop limit orders.

  → Order time-in-force – Day, immediate or cancel, fill or kill, good till date, good till cancelled.

- **Negotiations:** Iterative interactions in which two counterparties engage for the purpose of reaching mutually agreeable terms for concluding a trade.

- **Auctions:** Facilitates the definition of the auction master data, the competitive and / or non-competitive bidding process, the simulation and execution of auction results based on the award algorithm implemented

- **Trades:** Synchronized sale and purchase of securities/currency pairs registered by the Trading System transaction management module.

- **Indices:** Statistical measures of the changes in a portfolio of stocks representing a portion of the overall market.

- **Circuit Breakers:** Measures designed to prevent panic selling by stopping trading after a symbol or an index has fallen by a certain amount.

- **Trading Information:** Trading board, market in depth, trade summary, symbol data, recent trades, moving ticker.

- **Trading Reports:** PDF, XLS, CSV formats are available.

- **Trading Charts:** Standard set of charts which allows system users to analyze market trends which in turn allows them to make administrative or trading decisions.

- **Trading Alerts:** Trade cancelled at settlement, stop-loss, circuit breaker triggering, new negotiation initiation, etc.

- **Billing:** A module that facilitates the management of charge rates for operations performed in the Trading System with automatic collection facility.

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Interfacing Capabilities

- **Settlement Interface:** ISO 15022 based post trade settlement interface with the CSD (or RTGS) application (including settlement acknowledgment and cancellation plus rejection reason notification). Communications between TS and other systems are encrypted using SSL.

- **Data Dissemination Interface:** (e.g.: the institution's website, Bloomberg system, etc.).

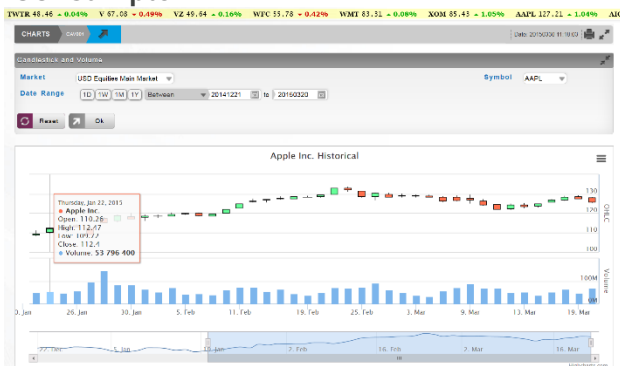- **Other Systems:** For the particular needs of each customer.

Administrative Control

- **Users:** Profiles of persons with different responsibilities in the system. Connectivity with the system using SSL. User certificates are stored on smartcards/eTokens, 2-factor authentication is possible.

- **Profiles:** Allow selecting activities a user can perform.

- **Groups:** Allow arranging users in collections, which are then used when granting access throughout the system.

- **Password Policy:** Configurable parameters that enforce the desired level of password strength.

- **System Parameters:** Configurable parameters that allow administrators to change system-wide configurations (E.g.: quotes expiration time, billing charge period, etc.).

- **Calendar:** Facility to create / modify calendar entries and defining business days and non-working days.

- **Users' Activity:** Allows authorized administrators to monitor the activity of users in the system.

- **Complete Audit:** For both static data changes and user audit trail.

Access to Information

The Montran TS system user interface is fully online and entirely web-based. The users access the TS functionality and control all aspects of the system using a web-browser, login credentials, and by navigating through the system menu and associated screens.
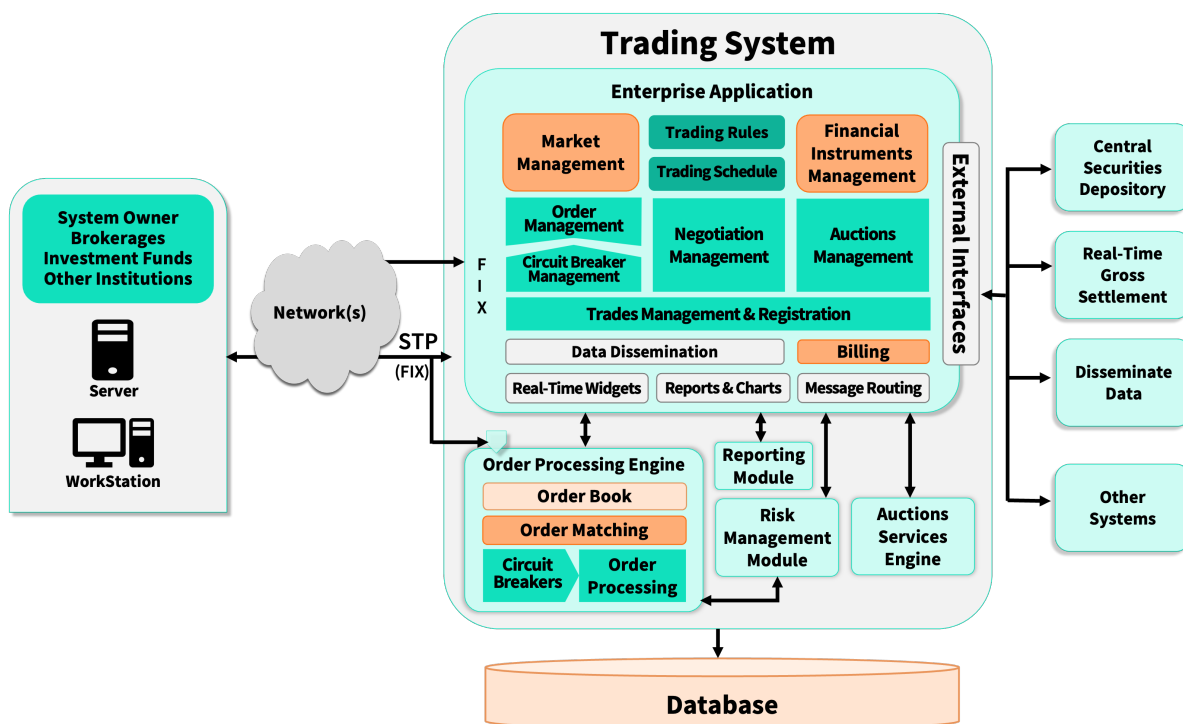
GUI Sample

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Trading System Solution

TS Architecture and Security

- System security based on PKI with smart card or eToken access.

- Communications between TS and other systems is encrypted.

- Based on open system architecture.

- A standard browser based "thin client" user interface.

- Separate module for orders processing to ensure low latency, high throughput for order operations.

- Server application components written in Java and running in an enterprise environment, Java EE 8.0 application server.

- Interoperability using standardized Java API (JDBC, JMS, JTA, JCA), Interface adapters, and SOA integration.

- Operating systems supporting Java™, including: Windows Server, UNIX, Linux, AIX, zOS.

- Uses any JDBC compliant RDBMS, including: Microsoft SQL Server, Oracle, and others.

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