



# ORC TRADING FOR VOLATILITY TRADING

## KNOW WHEN TO BUY AND SELL OPTIONS

*Shorting on the peaks. Buying on the lows.*

Market participant interest in volatility trading has never been greater. Proprietary trading firms and bank trading desks are seeking to profit amid the most unpredictable automated market climate witnessed. Traders are attempting to take advantage of differences in implied volatility and future forecasts for realized volatility of the option underlyings and generate real returns for their desks.

Orc Software's volatility trading tools are increasingly being called on by these firms in all major global markets to increase profits and provide extensive real-time pricing & risk analytics, order validation & limits, multi-market liquidity access for trading exchange listed options (predominantly equity options and fixed income options) and hedging with cash and futures.

### ORC TRADING FOR VOLATILITY TRADING GIVES FIRMS:

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- Scalable trading system
- Low-latency execution
- Pricing models / API for all traded products & asset classes
- Volatility models / API for all traded products & asset classes
- Portfolio reports & simulation tools
- Order validation & limits
- Auto hedging
- Flexible risk analytics
- Multi-market access
- Flexible, open Orc Protocol



# WHO NEEDS VOLATILITY TRADING EDGE?

**HEADS OF TRADING** at proprietary trading firms and banking trading desks that need to grow their business, increase profits and identify market opportunities.

- Would it create greater trading and cost efficiencies if your front office trading system and volatility / risk management solutions were integrated on a single platform?
- When looking for short-lived mis-pricings in the market, would you be able to increase profits if you could configure your trading system to automatically execute or receive alerts for opportunities based on user-defined inputs?
- During changing market conditions would trading efficiencies increase if your traders had real-time fair values automatically updating to accurately reflect the market?

**Orc Solution → Orc Trading for Volatility Trading offers a scalable trading system with auto trading, pricing and volatility models / API for all traded products & asset classes, and excellent market access.**

**RISK MANAGERS** at proprietary trading firms and banks that need to view market risk with real-time risk analytics, and control risk with implemented trading controls.

- When monitoring market exposure, would visibility be improved if you could easily access an extensive suite of reports and simulation scenarios to view, in a few mouse clicks, individual or consolidated risk across trading desks and markets in real time?
- When executing directly on exchanges, would operational risk be reduced if you could restrict trading activity by defining rule-based position limits?
- Would the ability to report and consolidate global trading activities (extracting data for aggregated reports from distributed trading desk systems in real-time over the Orc Protocol) into one single system increase efficiency and minimize risk on a global position?

**Orc Solution → Orc Trading for Volatility Trading offers portfolio reports, order validation & limits, and the Orc Protocol.**

**TRADERS** at proprietary trading firms and banks that need volatility management tools for providing access to real-time implied market volatilities.

- When there are movements in the market would the ability to adjust volatility using an easy and comprehensive volatility management tool be advantageous?
- When defining your volatility surface values, would you benefit from a complete, single screen view of implied volatilities?

**Orc Solution → Orc Trading for Volatility Trading offers easy-to-use, fast volatility surface updates, with connections to major worldwide derivatives exchanges, and market data used to calculate real-time implied volatility.**

More information on  
[www.orcsoftware.com](http://www.orcsoftware.com)

“ With the ever increasing requirements for maintaining Sequoia’s screen presence in the markets, more sophisticated volatility modeling has gained significant importance for us.

Orc enabling us to run our own models through the API has resulted in Sequoia achieving our goal for an intuitive, fast and easy-to-use trader solution that requires minimal updating when the market environment changes. ”

*Trading benefits for Sequoia Capital using Orc’s volatility model API.  
Douglas Garistina, Managing Partner, Sequoia Capital*

# ORC TRADING FOR VOLATILITY TRADING SOLUTION FEATURES

## BUSINESS LOGIC

- Trading engine
  - Manual trading engine based on click trading in Orc Trader
  - Automated trading engine in Orc Trader
  - Customizable automatic trading engine based on Orc Liquidator
- Profit & loss and risk management
  - Risk sensitivities, scenario analysis and P&L analysis in Orc Trader to protect against risk exposure and wrong market views
  - External risk system using positions (and potentially more) from Orc Protocol
- Parameter management
  - Pricing parameters (vols, dividends, yield curves, etc.) in Orc Trader

- Trading parameters (refills on trades, quote volumes etc) in Orc Trader or Orc Liquidator client
- External application on top of Orc Protocol/ Orc Liquidator protocol for pricing and/or trading parameters
  - Pricing
    - Orc pricing and volatility models in Orc Trader/Orc Liquidator
    - Custom pricing and volatility models in Orc Trader/Orc Liquidator
  - External application using Orc Protocol to feed critical, real-time pricing data to Orc Trader/Orc Liquidator
    - Hedging engine
      - Click trading in Orc Trader
      - Trade/portfolio hedging in Orc Trader

- Custom trade/portfolio hedging in Orc Liquidator

## FAST, UNMATCHED MARKET ACCESS

- Connectivity to all major derivatives markets including market data
- Low latency connectivity to cash and futures markets for hedging directly or via brokers

## PROVEN TECHNICAL PERFORMANCE

- Java-enabled, server-based algorithmic trading engine
- Reliable
- Scalable
- Robust

The screenshot displays the Orc Trader software interface, which is used for volatility trading. It features several key components:

- Market Data Table:** A large table at the top showing market data for various contracts, including bid/ask prices, volumes, and positions. A red circle highlights a specific contract.
- Volatility Manager:** A central window showing a volatility surface plot with a blue line representing the volatility curve and a red shaded area representing the volatility range. A red circle highlights a point on the curve.
- ES Mar 925 Combo Price:** A window at the bottom showing the price and details for a specific contract, including a table of bid/ask prices and volumes.
- Position Total:** A window showing the total position for various contracts, including a table of contract details and positions.

- 1 Trade options, futures, and cash products on multiple exchanges
- 2 Post-trade risk and position information to support trading
- 3 Manage volatility for accurate pricing
- 4 Create user-defined combinations across instruments and exchanges

# ORC TRADING FOR VOLATILITY TRADING SUCCESS STORIES

## HEAD OF TRADING AT AN INVESTMENT BANK

The head of trading at an investment bank wanted to add a volatility trader to his existing and profitable directional proprietary trading desk. He hired a highly qualified trader and wanted to get him up and running fast with trading technology capable of translating his strategies to an automated formula. Using Orc Trading for Volatility Trading the bank was able to achieve its goals economically and avoided introducing additional IT complexity.

## CTO AT A BROKER FIRM

The CTO at a high-end, full service broker firm was looking to support discretionary option trading strategies such as those found at hedge funds. The firm hired a volatility trader to set up a trading service that would employ volatility trading while capping risk. Using Orc Trading for Volatility Trading the trader was able to quickly deploy a new trading service that would support complex calculations with rigorous caps on risk taken in each position. As the trades required both order state management and portfolio allocation to individual accounts, they used a FIX application to message between the firms OMS.



More information on  
[www.orcsoftware.com](http://www.orcsoftware.com)



### Take Advantage

Orc Trading is used by leading financial firms worldwide for enhanced trading, pricing and risk management on electronically traded derivatives. Orc Trading provides the competitive edge to trade from a single platform, on any listed instrument, across all asset classes, on 100+ markets. Orc Trading comprises market leading solutions including among others Orc Trading for Algorithmic Trading, Orc Trading for Arbitrage, Orc Trading for Market Making, Orc Trading for Risk Management and Orc Trading for Volatility Trading.



Orc is a leading global provider of technology for advanced derivatives trading and connectivity. Customers include leading banks, trading and market-making firms, exchanges, brokerage houses, institutional investors, hedge funds and software vendors.

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