



Release Notes | 13 September 2022

## Release Notes

We are constantly adding new features to extend the Wyden platform and provide the best trading experience for banks, crypto funds, brokers, hedge funds and other financial institution.

# Release Notes

We are constantly adding new features to extend the functionality of our Wyden platform and make it more efficient – to provide our clients with the best possible trading experience.

Find below the list of our latest release notes including recent changes.

## Version 6.4.0

- ✓ Risk management UI
- ✓ Continuous risk checks
- ✓ Support for post trade actions
- ✓ Support for post only orders
- ✓ Kill switch
- ✓ RFS support
- ✓ Off-exchange settlement support for Fireblocks
- ✓ Support for custom portfolio metrics
- ✓ Virtual spot positions
- ✓ OTC order books
- ✓ New UI notification system
- ✓ Order and transaction history UI/API
- ✓ Broker desk functionality
- ✓ New connectors
  - Cumberland
  - Galaxy Digital
  - dYdX
  - Metaco

## Version 6.3.0

- ✓ UI for balances on exchange and in custody
- ✓ Blockchain transfers UI and API
- ✓ Fireblocks integration for balances and transfers
- ✓ Multi-level portfolio hierarchies
- ✓ Real-time portfolio reporting on single or multi-portfolio level
- ✓ New connectors
  - Bitcoin Suisse
  - Egonex
  - Bitpanda
  - FTX
  - Huobi Derivatives
  - CoinMarketCap



- ✓ Order management
  - Configurable pre-trade checks
  - Limit price support for TWAP, VWAP and POV execution algos
  - Support for order properties via UI
- ✓ Other
  - Multi-account support for historical data services
  - Replacement of the internal Esper CEP engine with project reactor

### Version 6.2.1

- ✓ New connectors
  - Sino
  - Live Rates

### Version 6.2

- ✓ Trading data and performance visualizations
  - Portfolio value dashboard
  - Custom metrics visualization
- ✓ New connectors
  - Binance Futures
  - Poloniex
  - Sino
- ✓ Separation of venue adapters into separately deployable components
- ✓ Identity and access management through Keycloak
- ✓ Browser-based configuration UI
- ✓ Multi account support
- ✓ New execution algorithms
  - Market Sweep
  - Percentage of Volume
  - Sniper
  - Iceberg
- ✓ Extended inbound FIX interface with support for
  - RFQ
  - Market data
  - Algo order
- ✓ New example strategy
  - EMA Kotlin strategy
- ✓ Bond trading capabilities
  - DV01 calculation
  - Nelson-Siegel interpolation
  - Coupon frequency
  - Bond rating

## ✓ Other

- Support for Java 11
- Generic events extension

**Version 6.1**

## ✓ Redesigned UI for desktop and mobile devices

## ✓ New connectors

- Refinitiv Elektron
- Bloomberg Tradebook
- Gemini
- LMAX Digital
- Bittrex
- eToroX
- Blockfills
- Crypto Broker
- Enigma Securities

## ✓ Execution Algo &amp; Smart Order Routing UI

## ✓ REST API extensions

- Rate Limit endpoint
- Health Check endpoint
- New marketdata subscription endpoint

## ✓ System monitoring capabilities for

- Performance (e.g. Tick-to-Trade)
- System Health-State
- Resource consumption (e.g. CPU usage, SQL queries and HTTP calls)

## ✓ New example strategies

- Market maker strategy
- Relative Strength Index (RSI) strategy

## ✓ Other

- Full order book support during back tests
- Inbound FIX API support for execution algos
- Fee handling functionality
- Smart routing for simple orders
- Decommissioning of the Coinigy adapter



**Version 6.0**

- ✓ New connectors
  - Deribit
  - Huobi
  - OKEEx & OKCoin
  - Kraken
  - BitHump
- ✓ Level II order book
  - Level II order book for all adapters/exchanges
  - Order book UI
  - Order book events available to strategies
  - Aggregated order book across exchanges
  - Execution algo exchange selection based on order book data
- ✓ Integration of Hazelcast Cache
  - Replacement of the previous Level Zero Cache
- ✓ Example strategies
  - NLP strategy
  - Short Strangle strategy
  - Delta Hedge strategy
- ✓ Other
  - Reference data can now be downloaded automatically upon startup
  - Subscribe and unsubscribe during InfluxDB based back tests

**Version 5.2**

- ✓ Generic events
  - Full support for generic events that can contain (i.e. corporate actions, external signals, alternative data, and news / social-media-sentiment data)
  - Strategies can subscribe to these events for analysis and signal generation
  - Generic events can be persisted in InfluxDB
- ✓ OTC RFQ Functionality
  - Full support for RFQ (Request for Quote) processes
- ✓ New connectors
  - Intrinio
  - Binance
- ✓ User Interface extensions
  - Visualization of orders and execution in the TradingView chart
  - Integrated RFQ functionalities
- ✓ Historical data management
  - Persistence of Trade and Quote into InfluxDB
- ✓ Example strategies
  - Spreader example strategy

**Version 5.1**

- ✓ Strategy development
  - Full Python support

**Version 5.0**

- ✓ Order execution
  - Smart order routing (SOR) execution algos
  - Algo order entry UI
  - Algo order parent / child display
  - Algo order persistence
  - Display Algo Order State in UI
  - Order Custom Pre-Trade checks
- ✓ New connector related extensions
  - Crypto-adapter order reconciliation on WebSocket reconnect
  - Generic inbound FIX interface
  - Handling of crypto Fees
  - Support for crypto withdrawals & deposit address query
  - Encryption of API keys
  - Support non spot-cryptos with CoinAPI
  - Make send, cancel & modify order non-blocking
- ✓ New connectors
  - coinbase Prime & Pro (GDAX) adapter
  - Exante
- ✓ Strategy development
  - Python strategy live trading support
  - Subscribe to Account/Deposit events via WebSocket
  - JSON based properties on all Entities
- ✓ AlgoTrader UI
  - Reference data management UI
  - Historical data management UI
  - Display of CashBalances in the UI
  - Perpetual swaps P&L calculation
  - Add Trade Action to Market Data & Position table
- ✓ Others
  - Migrate UI Entities to TypeScript
  - Spring profile validation on startup
  - Disseminate LifeCycleEvents event to strategies running in distributed mode
  - Run flyway-migration on startup
  - Eliminate FutureFamily, OptionFamily, GenericFutureFamily and BondFamily
  - Merge FeedType, Broker and OrderServiceType
  - Upgrade to Java 8 Date/Time API



**Version 4.5**

- ✓ User Interface extensions
  - Allow Trading View chart to display data from historical data adapters
  - Switch UI tables to AG Grid
  - Switch UI to TypeScript
  - Add React DataGrid update throttling
  - Enable CSV Export
  - Improve security search experience
  - Show execution algo properties in the UI
- ✓ New connectors
  - PrimeXM
  - SocGen
  - Bitflyer
  - Bitfinex
  - Bitstamp
  - Binance
  - BitMEX
  - CoinAPI
  - CoinMarketCap
- ✓ Historical Data Management
  - CoinAPI historical data download
- ✓ New Adapters Related Features
  - Implemented crypto margin and exchange trading
  - Balances download
  - Withdrawal of cryptocurrencies
  - Fees can be configured in %
  - Currency code mappings
  - Automatic connection gap detection
  - Automatic reconnect
  - Rest and WebSocket message synchronization
- ✓ New execution algos
  - TWAP
  - VWAP
- ✓ Other
  - Use Swagger for REST API documentation

**Version 4.0**

- ✓ Major changes
  - InfluxDB integration
  - Cryptocurrency trading through Coinigy
  - Support HTML customizations

- ✓ New connectors
  - Coinigy
  - QuantHouse
  - Nexus Prime
  - UBS
  - Quandl
- ✓ Historical Data Management
  - use InfluxDB time-series-database
  - Quandl Historical Data Download
- ✓ Market Data
  - QuantHouse low latency market data
  - Live data recording
  - Ad-hoc bar aggregation
  - Propagate BidVO, AskVO and TradeVO events to strategies
- ✓ Domain Model
  - Decimal quantities on Orders, Transactions, Positions, etc.
- ✓ Order Processing
  - ExecutionModel
  - Support OrderCompletion events for AlgoOrders
  - PositionMutationEvent
- ✓ Backtesting
  - Stream Historical Data from InfluxDB
  - Base Strategy Name
- ✓ IB Interface
  - Process IB RTVolume
  - IB calendar spread support
  - IBOrderIdSynchronizer
- ✓ Archetypes
  - algotrader-archetype-simple
  - algotrader-archetype-esper
- ✓ Example strategies
  - EMA strategy
  - Random strategy
  - HTML5 based example strategy monitoring

## Version 3.0

- ✓ Major changes
  - HTML5 based web frontend
  - Docker based installation and deployment
  - Excel based back test report
  - Execution algo API redesign



- ✓ New execution algos
  - VWAP
  - Target position
  - Trailing Limit
- ✓ Installation & Deployment
  - Use of Flyway command line
  - Generate separate assemblies for client & core
- ✓ Domain Model
  - Added CNH, CZK, DKK, HUF, ILS, MXN currencies
  - Generate VOBUILDERS
- ✓ Database
  - Security family & security mapping changed to one table per hierarchy
  - Updated database sample data
- ✓ Esper
  - Added ExponentialMovingAverage function
  - Engine callback API redesign
- ✓ Futures & Options
  - Added future monthYear
- ✓ Market Data
  - CvsTypeCoercer to accept yyyy-MM-dd HH:mm:ss format
  - Market data price normalization
- ✓ Adapters
  - Added DropCopy for TT & LMAX
- ✓ Events & Messaging
  - Added embedded ActiveMQ message broker
  - Added Websocket infrastructure
- ✓ Processes & Networking
  - Added embedded Jetty HTTP server
  - Added optional TLS transport security & BASIC auth

## Version 2.3

- ✓ Strategy Development
  - Support for strategy groups
  - Added local MarketDataCache
  - Simplified strategy starters

## ✓ Adapters

- Added Trading Technologies Fix interface (trading, market data & reference data)
- Added Fortex Fix interface (trading & market data)
- Added FIX session life cycle events
- Add Trading status events for LMAX
- Redesigned IB interface
- Added support for fix-jdbc-message-store
- Support custom logging per Fix session

## ✓ Event Handling

- Added event dispatch framework
- Added event listeners
- Added strategy life cycle events (INIT, PREFEED, START & EXIT)
- All events are now ValueObjects

## ✓ Distributed Cache Manager

- LookupService now uses CacheManager instead of DAO's
- CacheManager / GenericDao are now available to strategies

## ✓ New entity / VO generation framework

- Added Entity Visitors
- Entities, Entity Interfaces, Value Objects and Entity to VO Converters are now generated using Hibernate tools
- Entity identifiers now use long instead of int
- Enhanced equals and hashCode methods

## ✓ New DAO Framework

- AbstractDAO is now base class of all DAO's
- Finders have been moved to Hibernate.hbm.xml

## ✓ Esper Enhancements

- Enhanced syntax for Esper statement subscribers
- Esper Engine is now configured through Spring
- Replaced EngineLocator with Spring EngineManager
- Strategy initModules and runModules are now configured through Spring
- Spring Services are now available to Esper statements directly

## ✓ Order Management Enhancements

- Replaced Esper based OpenOrderWindow with Java based OrderRegistry
- SlicingOrder: assure minimum quantity on the last slice
- Exchange can now be set directly on an Order
- OrderStatus events now include lastQuantity attribute



- ✓ Miscellaneous Enhancements
  - Migration to Spring Configuration annotations
  - Harmonized date / time formats
  - New Entity Security Reference
  - GoogleFincanceDownloader
  - Enhanced reset service
  - New Reports TradeReport & PortfolioReport
  - Updated DB sample data
  - Remove margin / exit value from position
  - Remove support for server side close position
  - Trading hour definitions are now optional
  - Client now shows unrealizedPnL & FX Exposure
- ✓ 3rd Party Library Upgrades
  - Java 1.8
  - Esper 5.2.0 (5.3.0?)
  - Hibernate 4.x
  - Spring from 3.x to 4.x
  - Log4J 2.x

## Version 2.2

- ✓ Additional Fix Trading and Market Data Interface
  - LMAX
  - FXCM
  - Currenex
  - DukasCopy (added market data interface)
- ✓ Add Calendar Service, Exchange, Trading Hours and Holidays)
- ✓ Eclipse based strategy creation wizard
- ✓ Eclipse based config editor
- ✓ New configuration manager
- ✓ Support custom order properties
- ✓ Generic symbology resolver
- ✓ Persist order and order status to database
- ✓ Report Manager
- ✓ Weekly options
- ✓ Market-on-open, limit-on-open, market-on-close and limit-on-close
- ✓ Order completion event
- ✓ Order recovery
- ✓ In-process exchange simulator
- ✓ Add flyway for database migration
- ✓ Add csv diff tool
- ✓ 3rd Party Library updates (Esper 5.1.0)

**Version 2.1**

- ✓ New Instruments: Bond, Fund & Commodity
- ✓ Overhaul AlgoTrader Reference Data Manager (based on Grails)
- ✓ RealTick Fix interface
- ✓ Fix market data interface
- ✓ Enable multiple concurrent market data streams
- ✓ AlgoTrader Maven Archetype to generate new projects
- ✓ Embedded in-memory DataSource based on H2 database
- ✓ Bloomberg Historical data and security retriever interface
- ✓ BreakOut Example Strategy
- ✓ Allow broker specific parameters (e.g. commissions)
- ✓ More flexibility on market data file naming
- ✓ ManagementService: allow securityId, symbol, isin, bbgid, ric and conid for security definition
- ✓ Switch from LIFO to average cost
- ✓ East-to-Borrow list for stocks
- ✓ Overhaul Esper Engine management (EngineLocator, Engine, AbstractEngine and EngineImpl)
- ✓ Overhaul Spring Proxy generation
- ✓ Enable client specific code generation based on UML
- ✓ 3rd Party Library updates (Esper 4.11.0)

**Version 2.0**

- ✓ Multi Account Handling
- ✓ Bloomberg Market Data Interface
- ✓ Level-Zero Cache
- ✓ New Execution Algorithm "Disbtributional"
- ✓ InteractiveBrokers Financial Advisors Handling over FIX
- ✓ SABR Option Pricing Engine
- ✓ Single-JVM Live-Trading Mode
- ✓ Eclipse Colorer Integration
- ✓ Support for Global Industry Classification Standard (GICS)
- ✓ Relate Component to Combination instead of Security
- ✓ DocBook based documentation
- ✓ Add JavaDoc Comments
- ✓ Client Expert Mode
- ✓ 3rd Party Library updates:
  - Esper 4.9
  - Spring Framework 3.2.3
  - Spring Integration 2.2.4
  - Hibernate 3.6.10

**Version 1.12**

- ✓ Esper 4.8
- ✓ Use Spring integration for mail reconciliation
- ✓ Esper Threading
- ✓ Hibernate Locking
- ✓ Portfolio Value Restoring
- ✓ OpenPositionCallback / ClosePositionCallback
- ✓ Generic approach for Bars and Ticks
- ✓ FIX
  - FIX 4.4
  - DukasCopy Fix interface
  - Init orderId from log-file
  - HWeekly Fix logon/logoff
- ✓ Client
  - Markers, Annotations, Description & Crosshair
  - Monitoring & Rechability Checking & Notifications
- ✓ Market Data Snapshots
- ✓ Strategy Properties
- ✓ Market Data Gap Checking
- ✓ Position Realized P/L
- ✓ Handle crossed spreads

**Version 1.11**

- ✓ Reconciliation (IB / RBS / UI)
- ✓ SimpleOrders vs AlgoOrders (e.g. SlicingOrder)
- ✓ Fix Interface
- ✓ OrderPreference
- ✓ PortfolioValue logging and charting
- ✓ MailMessageReceiver
- ✓ AndroMDA 3.4
- ✓ ForexFuture / FX Hedging by ForexFuture

**Version 1.10**

- ✓ GenericEvents
- ✓ Update Charting Functionality (add Indicators & Bars)
- ✓ JMX over SSL

**Version 1.9**

- ✓ SyntheticSecurities (Combinations / SyntheticIndices)
- ✓ AlgoTraderSSHClient
- ✓ PropertyService / PropertyHolder / Property

- ✓ Improve Hibernate Sessions Handling / Caching
- ✓ Metrics Logging
- ✓ PortfolioService
- ✓ General performance optimizations

**Version 1.8**

- ✓ IncrementalLimitOrder
- ✓ HistoricalDataService HistoricalBars
- ✓ MBean annotations
- ✓ SecurityFamily TickSizePattern
- ✓ Measurement & MeasurementService

**Version 1.7**

- ✓ Update ServiceLocation & configuration
- ✓ Separation of code into core and common
- ✓ Update account functionality
- ✓ Reconciliation
- ✓ OrderValidation
- ✓ TWS 921.5 / IB Gateway 921.5 / IB Client 9.65 / IBController 2.9.0
- ✓ Esper 4.5

**Version 1.6**

- ✓ TickCallback and OrderCallback
- ✓ Combinations & allocations
- ✓ Asynchronous event propagation using ActiveMQ
- ✓ Convert Model to UML2.0
- ✓ Esper 4.4

**Version 1.5**

- ✓ async Order & MarketDataService
- ✓ Esper 4.3

**Version 1.4**

- ✓ GenericFutures
- ✓ Cash balances & FX-equalization
- ✓ Management service diagrams
- ✓ MarketDataEvents (Bars, Bid, Ask & Trade)
- ✓ AndroMDA 3.4 SNAPSHOT
- ✓ Maven 2
- ✓ Esper 4.2