NinjaTrader 8 is our next generation trading platform re-architected using modern design techniques allowing us to achieve greater performance and flexibility than ever before. Out of the box, NinjaTrader 8 incorporates over 500 changes and enhancements largely collected from client feedback and is ready to deliver the most advanced trading features for discretionary and automated traders of all levels trading stocks, futures, forex and options.

We have enjoyed incredible success with our pioneering strategy of offering a standards based (.NET) programming environment for indicators and strategies. The types of add-ons created by our vibrant developer community wildly surpassed our expectations and prompted us to re-think how the NinjaTrader platform could evolve. With NinjaTrader 8 we have created a true trading application development platform allowing developers to build incredibly rich and integrated applications limited only by the imagination. We are confident that by providing formal support for deeper access into our core framework we will energize the community to build even better tools adding significant value to our ecosystem.

Although we have made large advancements with NinjaTrader 8, existing users will feel right at home as general usability has remained intact. We hope that you are as excited as we are about NinjaTrader 8. This document is a high level overview of the most significant changes in NinjaTrader 8.

General 1
- Performance Enhancements 1
- New Tabbed Interface 1
- New Attach Orders to Indicators 2
- New Instrument Overlay Selector 3
- New Order Ticket Window 3
- New Account Data Window 3
- New Instrument Management 4
- New Instrument Lists Window 5
- New Sharing Services 6
- New Sub-Second Granularity 6
- New Historical Bid/Ask Data Per Tick 6
- Control Center 6
- Enhancement Instrument Selector 7
- Application Options 7
- New Trading Hours 8
- Workspaces 9

New Apply an ATM Strategy to an Unprotected Position 9
Improved Instrument Linking 9
Miscellaneous Enhancements 9
Forex 11
General Enhancements 11
New FX Board 11
FX Pro Window 12
Account Management 13
Improved Order Grids 13
Improved Strategies Tab 13
Account Performance Window 13
New Analysis Display 14
Data Management 16
New Database Window 16
New Auto Rollover Feature 16
New Market Data Archives 16
Import/Export 17
Market Research 18
New Advanced Alertingf 18
Improved Alerts Log 19
New Hot List Analyzer 19
Market Analyzer 20
News Window 22
Enhacned Time and Sales 22
Charting 23
New Interval Selector 23
New Interval Linking 24
New Free Mode Scrolling 24
New centering of price on y-axis mode 24
New Crosshair Anchoring 25
New Chart Styles 25
Data Box 25
New Visible mode for chart objects 26

Drawing Tool Enhancements 26
Multi-Series Equidistant Bar Spacing 27
New Data Series Break at EOD 27
Market Replay 28
New Playback 28
Playback Performance Improvements 28
Strategy Analyzer 29
General Enhancements 29
New Strategy Analyzer Log 29
New Strategy Parameter Templates 30
Enhanced Backtesting Engine 30
Improved Optimization 30
New 3D Optimization Graph 30
New Multi-Objective Optimization 31
Walk Forward Optimization 32
NinjaScript® 33
General Improvements 33
Supported NinjaScript® Object Types 33
NinjaScript® Import/Export 34
NinjaScript® Code Wizard 34
New NinjaScript® Suspension Optimization 34
New TickReplay Engine 34
Expanded NinjaScript® Access 35
NinjaScript® Editor 35
NinjaScript® Strategies 36
NinjaScript® Output Window 37
Connectivity Adapters 38
General Connections 38
CQG/Continuum 38
eSignal 38
FXCM 38
GAIN 38
Interactive Brokers 39

IQfeed 39
MBT 39
TDA 39
Trading Technologies 39
Rithmic 39
Trading Interfaces 41
General Trading Improvements 41
Quantity Selector 41
ATM Strategies 41
Chart Trader 42
Hot Keys 43
SuperDOM 43

General

Performance Enhancements

- Upgraded to the latest Microsoft .NET 4.5 runtime environment
- NinjaTrader 8 core and UI is now fully multi-threaded which adds significant performance increases across the entire platform
- Connectivity adapters now run in their own thread, which permits these events to run independent of the main application thread
- Changed the way data is saved in the database resulting in significant performance enhancements
- Replaced the Windows Forms UI with WPF allowing us to take advantage of the latest UI concepts and models
- Improved optimizations in terms of open workspaces resources to use minimal CPU usage
- Significant improvements on Strategy Optimization, resulting in 10x performance gains in our benchmarks
- Added support for concurrent historical bar requests, greatly improving data load time compared to NinjaTrader 7

New Tabbed Interface

We developed a new tabbed interface which is available from all trading and market analysis interfaces, optimizing the amount of screen real estate and workspaces used to monitor and trade several markets at a time. Tabs can be dynamically named based on the Tab Content such as Instrument Names, Accounts, ATM Strategies, etc. or using Custom User-Defined Text. Existing tab content can also be duplicated into a new tab, or into an entirely new window. Tabs can optionally be disabled on any individual window in order to maximize the display.

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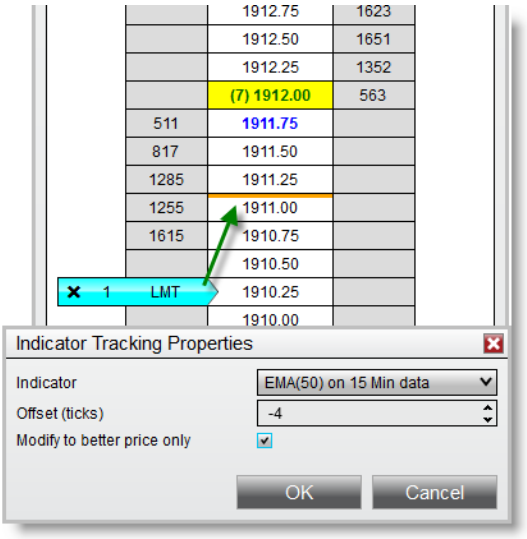
New Attach Orders to Indicators

We introduced a new hands-free trade management concept which allows you to attach manual orders placed via Chart Trader or the SuperDOM to indicators which will automatically follow the price as the indicator values change. Configure your favorite indicator such as an EMA, and watch as your working orders are modified to follow the price of the indicator precisely on each tick, on price change, or on bar close. Available for both manual entry and exit orders as well as ATM Strategy Stop Loss and Profit Target orders.



- No programming needed and defined completely through the user-interface
- Configure a tick offset to track changes below or above the indicator value
- Option to determine should the order modify to a better price only, or alternatively follow price change in either direction

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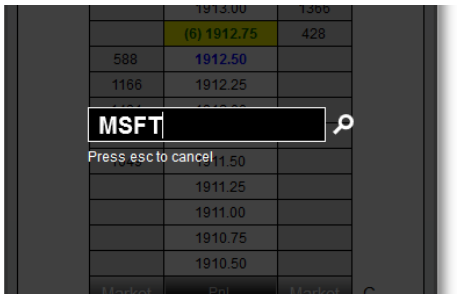
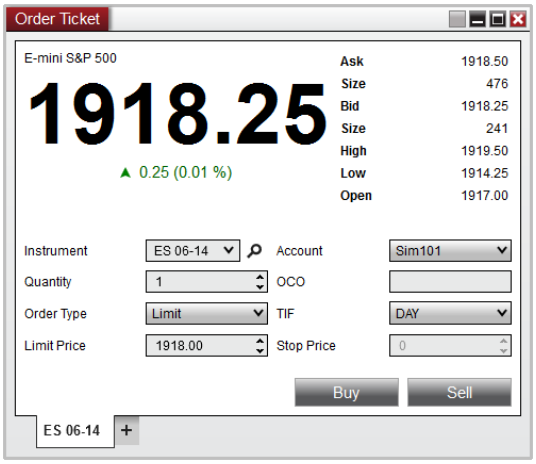
New Instrument Overlay Selector

"On-the-fly" instrument switching has been added to all windows, significantly reducing the time it takes to switch an interface from one market to the next. This feature also includes a quick search button to easily navigate to the Instrument Window to look up instruments directly from the feature being switched.



New Order Ticket Window

We designed a new Order Ticket Window which replaces the Order Entry panel from the Control Center Order Tab. This interface is designed to work with all supported order types and includes an option to close the Order Ticket window after order submission to help keep your workspace clean.



New Account Data Window

Designed a sister window to the Control Center, the new Account Data window works as a supplementary account data display feature giving you the ability to organize multiple tabs or windows for better account tracking and management. Tabs can be duplicated from Control Center to a new Account Data window and performs user defined filtering rules based on connected accounts. Filter each window or tab independently, allowing multiple windows and tabs to show individual account data such as Orders, Strategies, Executions, Positions and Account Balances.

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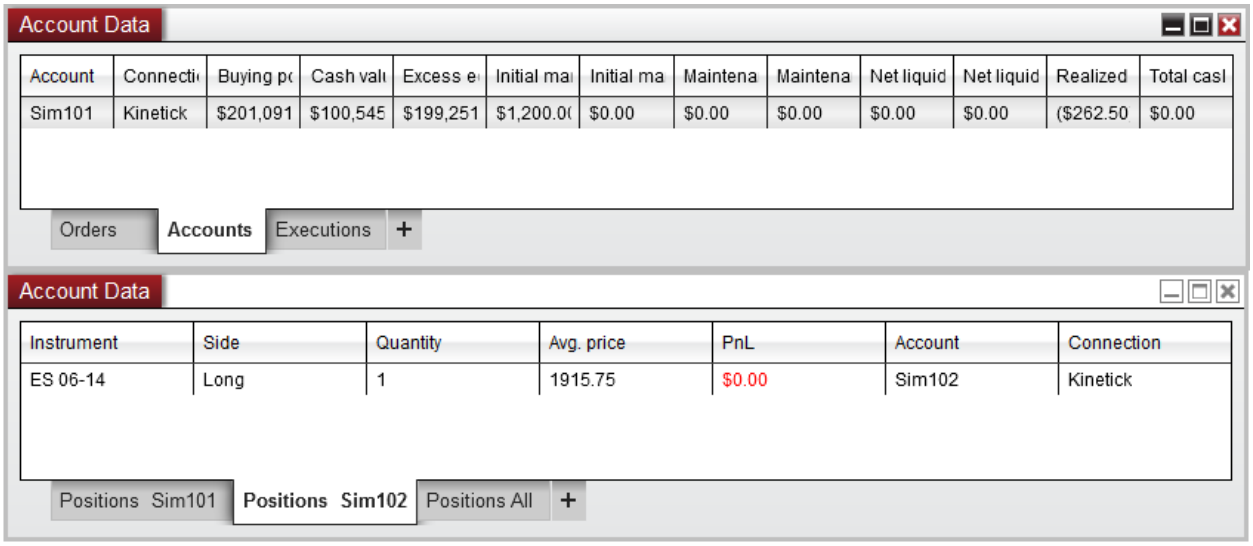

New Instrument Management

The methods used to manage instruments in NinjaTrader 8 have been renovated to a much more matured system.

We've introduced the flexibility to push instrument updates from our servers, ensuring users always have the latest broker and data feed symbol mapping, as well as any other exchange mandated changes, such as Trading hours and rollover dates. Any custom changes made by the user will not be impacted by server changes, which give users the flexibility to customize their own local instrument database, unless they optionally select to reset these settings to the latest server defaults.

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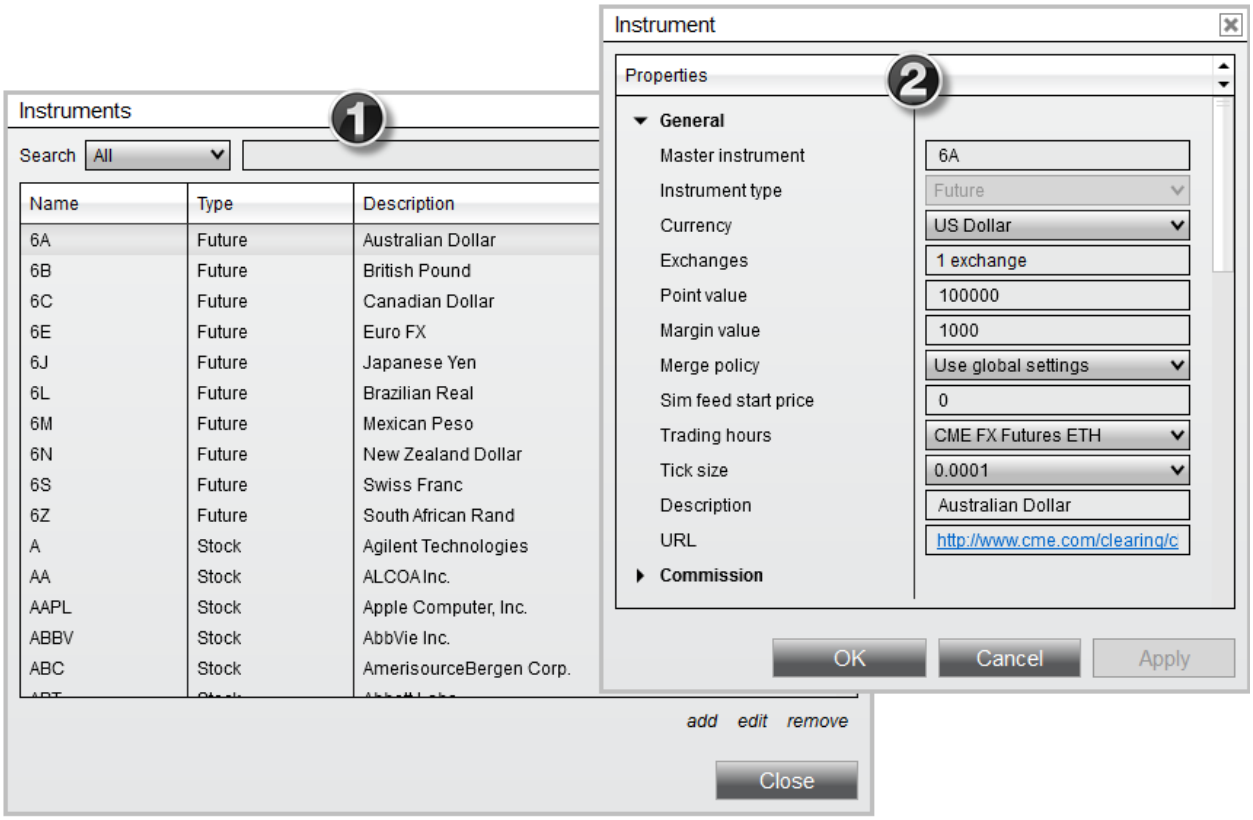

The Instrument Manager Window 1 and Instrument Editor 2 were both modernized and simplified.

- Auto search while typing, streamlining the search process
- Added multi-select capability to allow for bulk editing and management of instruments
- Multi-select available to interfaces which would support multiple instruments, such as the Market Analyzer which allows for faster selection of desired instruments

New Instrument Lists Window

We designed a new menu for improved management of user lists, selected Exchange(s), and Futures Expiry contained in a list. Multi-select feature allows you to dynamically add, edit, or remove multiple instruments to a list at once.

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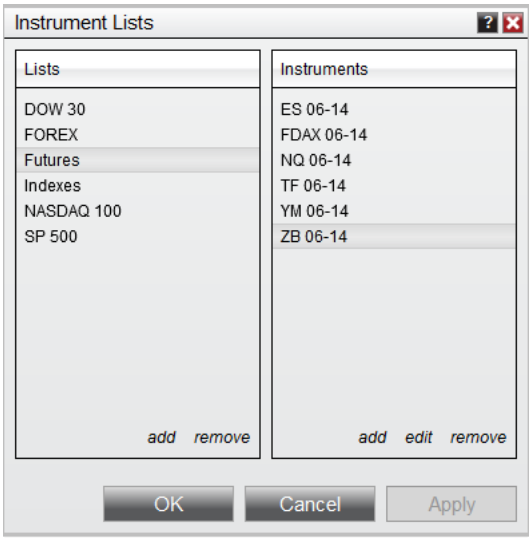

New Sharing Services

We've added an application wide interface to share NinjaTrader content via various social outlets. Share custom messages and content of any window, chart, or grid using the right click-> share interface. Services for Facebook, Twitter, Stocktwits, and Email are standard with the ability for developers to build their own Service through NinjaScript.

New Sub-Second Granularity

Market data time stamps are now processed and stored to the .NET 'Tick' which is the equivalent of 100 nanosecond resolution.

New Historical Bid/Ask Data Per Tick

Historical Bid/Ask data is now stored with each last trade tick data.

Control Center

We've restructured the NinjaTrader Control Center which allows for a quicker and more intuitive management procedure. Connections and Workspaces menus have been moved directly to the Main

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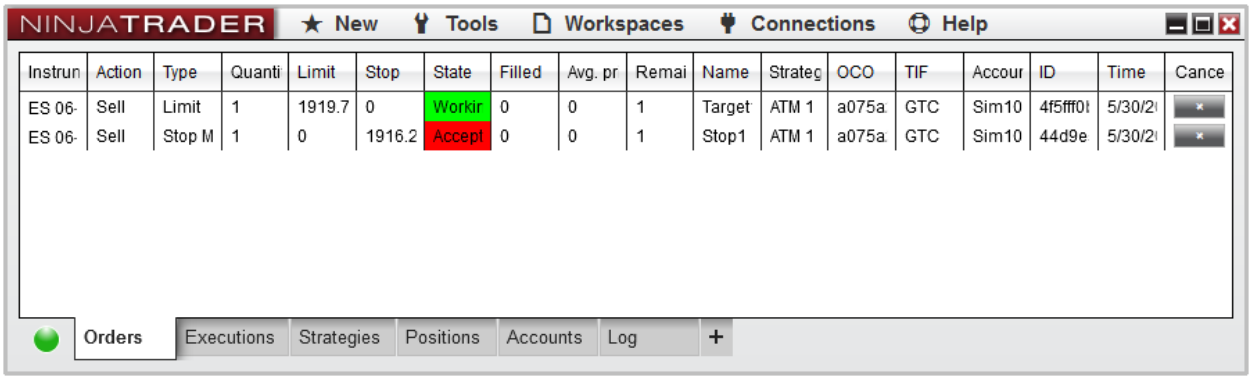
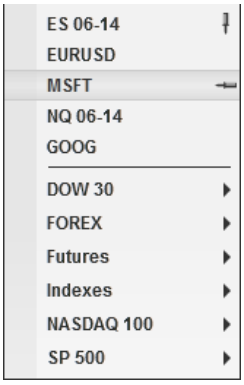
Menu bar for easy access and the Account Performance tab has been moved to its own dedicated Window.



Enhancement Instrument Selector



Our Instrument Selector was updated, standardized, and now saves the last used instrument for quick access. We also introduced a new "pinning" of favorite instruments, replacing the former 'default' instrument list. Likewise, we removed the requirement for the default instrument list, meaning you can access any custom list and your favorite instruments from any interface.

Application Options

- Improved "Sounds" preferences allowing users to easily add their own custom sound files
- Option for sounds to "Play consecutively" preventing synchronized sound triggers to play without being cut off prematurely
- "Simulation Color" is now a global property adding consistency to trading interfaces
- Enhanced the "Auto Close" feature to enable users to specify a list of instruments to close positions at a specific time

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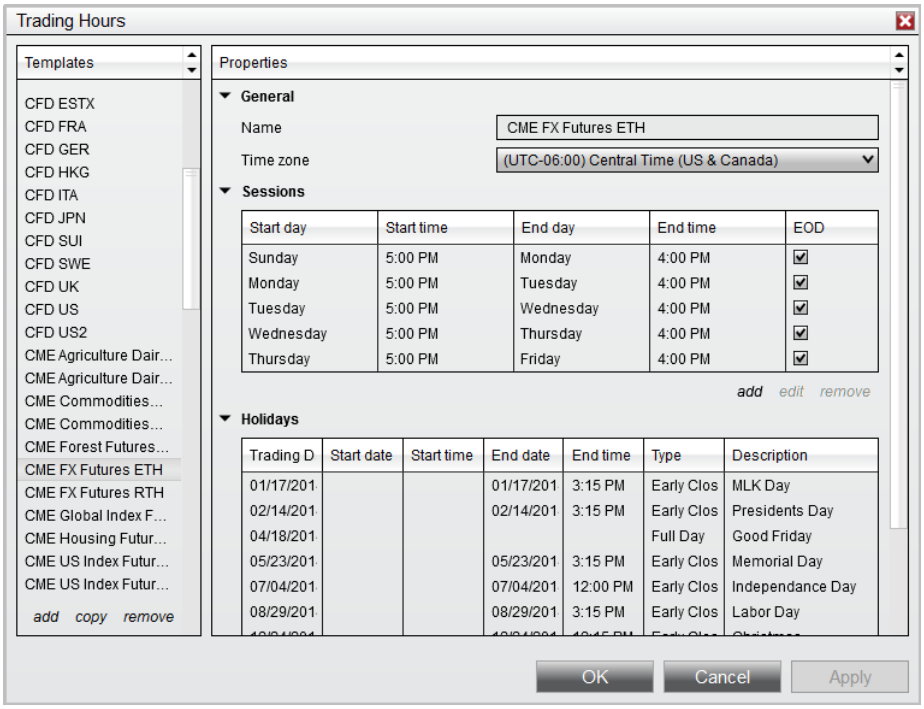
- Added “Confirm and Window / Tab close” option, which will prevent the unintentional closing of windows
- Added Regionalization language support. German will be included at launch with the ability to add more languages in the future
- New application “Skins”, which can be designed and shared by users making a more personalized user experience

New Trading Hours

Formerly named the “Session Manager”, our new Trading Hours window was designed for easier management of the hours used for charting, indicator calculations, real-time strategy execution, and strategy back testing periods. Each session now has an “EOD” (End of Day) option to support multiple trading session definitions for a single day. We also added Holiday support to handle various scheduled breaks in exchange hours:

- Early Close
- Full Day
- Late Open



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Sessions and Holidays can now be downloaded and updated from NinjaTrader servers granting exchange mandated changes to be pushed to all users rather than needing to reconfigure these updates individually.

Workspaces

The Workspaces menu has been integrated directly to Control Center toolbar for faster switching and workspace management. Inactive workspaces are visible from workspace menu for a more functional approach to workspace organization. Windows detected to have opened outside of the viewable range of a monitor will be prompted to move them back in view of the primary screen.

New Apply an ATM Strategy to an Unprotected Position

From the Positions grid, you can now apply an ATM Strategy to an open unprotected position.

Improved Instrument Linking

- Added “Link All Mode” to group changes to specific window
- New “Interval Link” which allows for simultaneous changing time frames on charts
- Added “Global Link button across workspaces” allowing users to keep instruments in separate workspaces unlinked if desired

Miscellaneous Enhancements

- Added support for CFD’s as a new Asset type available for supported brokerage technologies (FXCM, Interactive Brokers as of this writing)

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- Improvements regarding window sizing making all non-modal screens resizable to user preferences
- Added MIT order support which can also be used as Profit Targets in ATM Strategies

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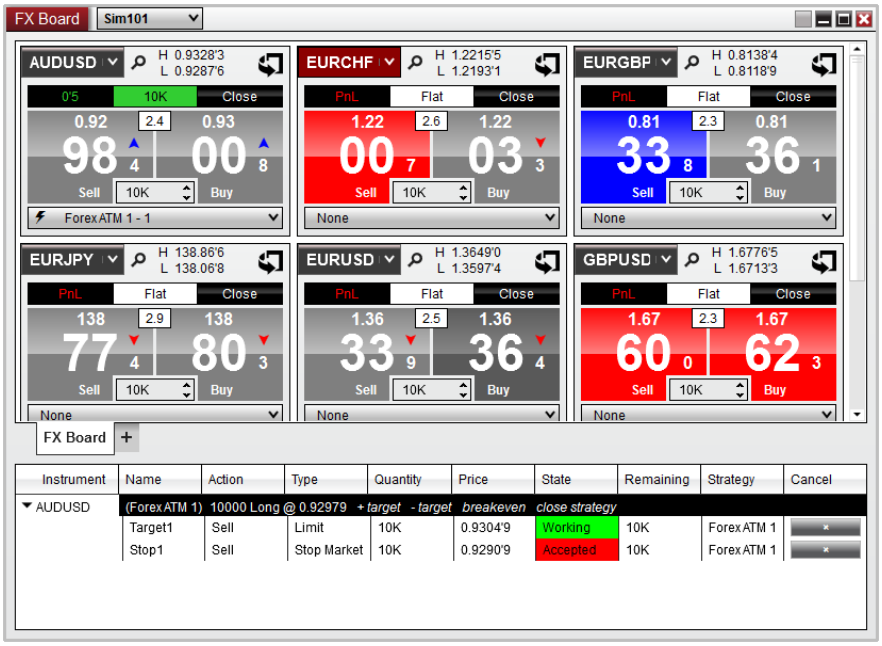
Forex

General Enhancements

- Improved internal multi-currency rate conversion for accurate profit and loss reporting and added a configurable currency denomination setting per Forex and CFD account connection
- Quantity selector is Forex Lot Size aware for scroll up/down operation on Forex
- Forex Lot Size is pulled from account automatically or manually selected per connection
- Back testing Forex is now normalized by account lot size for more accurate reporting

New FX Board



We fully conceptualized our take on a new market data and trading interface designed specifically for Forex and CFD products. The market display components are laid out as a number of tiles and allow you to simultaneously view multiple instrument tiles at once. Each tile will highlight as the bid or ask updates to represent either an uptick or down tick in price. These instrument tiles will double as an quick order entry screen allowing you to quickly place buy/sell market and limit orders at current market prices, or you can dynamically flip the tile around which will expose a manual order entry feature that

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enables you to place orders at a specific price level. You will also see current account position, profit and loss, and view open orders and ATM Strategies using the Orders Grid.

FX Pro Window

The FX Pro window has received a number of design updates for a more visible and readable Forex quote display that is consistent with FX Board. The order controls received a few tweaks such adding the ability to manually edit the limit and stop price fields, and quick controls to bring in the current bid and ask price.

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Account Management

In addition to the new Account Data window, we have taken steps to improve the mechanics of the account data grids and displays.

Improved Order Grids

- Added GTD date display to TIF order column
- Increase/Decrease menu now located in content menu by default (option to re-enable on the grid)
- Editing order price and quantity now uses fully featured editor
- Active orders now shown by order type color
- Option to 'stack' or 'unstack' aggregated orders

Improved Strategies Tab

NinjaScript® strategies now have the ability to synchronize the strategy position to adopt the real world account position. This improvement allows users to re-start their strategy completely in tune with their live account without having to recalculate the strategy when enabling after restarting or making changes to the strategy.

- Synchronize all strategies command
- Added Account Position and "Sync" display Column
- Option to Edit the Instrument a strategy is running on

Account Performance Window

The Account Performance tab was removed from the Control Center and redesigned as a dedicated window that can be saved to the workspace in order to recall previous settings as well as permitting multiple window instances and tabs for a more thorough analysis of different reports to display simultaneously. We added a number of additional features and enhancements and also various bug fixes regarding display and calculation of data.

- Added Statistics:

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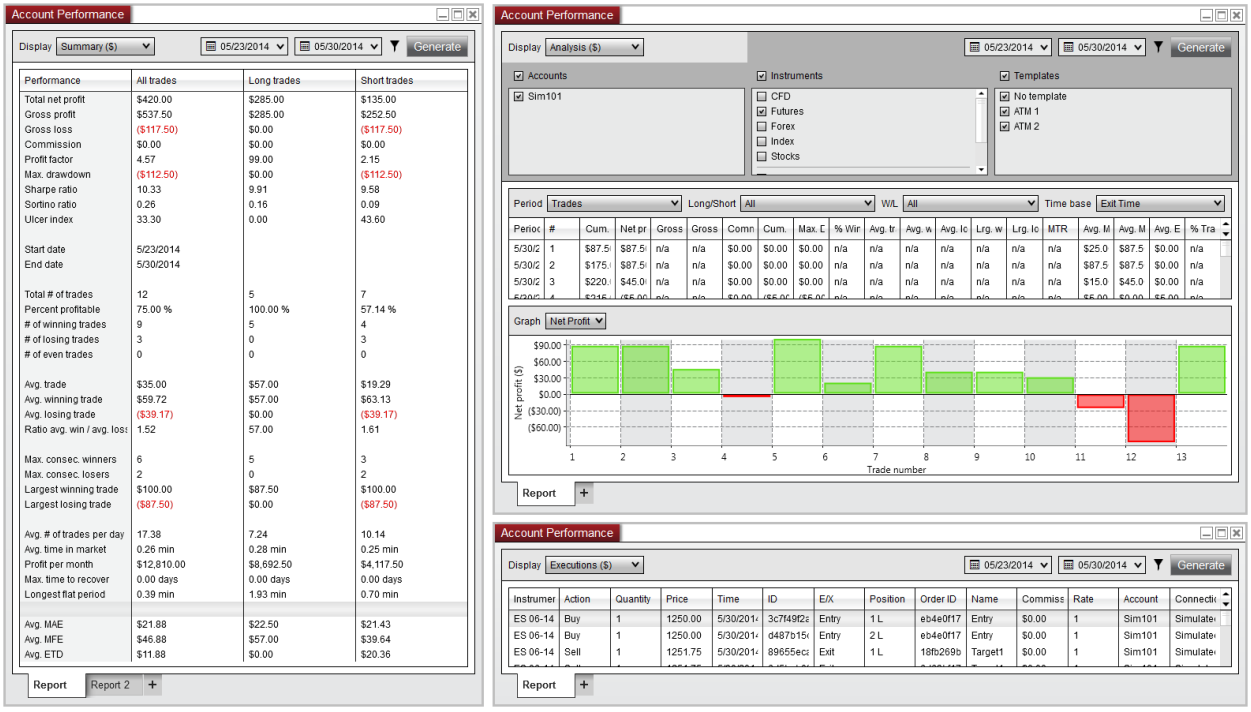
- Ulcer index
- Calmer Ratio
- Longest Flat Period
- Even Trades
- Ability to add your own custom statistics

- Added new Pips and Ticks Display Mode in additional the existing Currency, Percent, and Points modes
- Added option to remove executions directly from Account Performance window
- Added option to mark executions and trades with custom comments to be displayed in the Journal display



New Analysis Display

We stylized the existing graphs used in both the Account Performance window and the Strategy Analyzer to make it easier to analyze trade data and also added a new “Analysis” display which integrates Periods and Graph analysis which are interactive with the period selection.

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- Added Cumulative Max Drawdown and Drawdown graphs
- Analysis can be done on Entry or Exit time basis
- Filter by long/short and winning/losing trades

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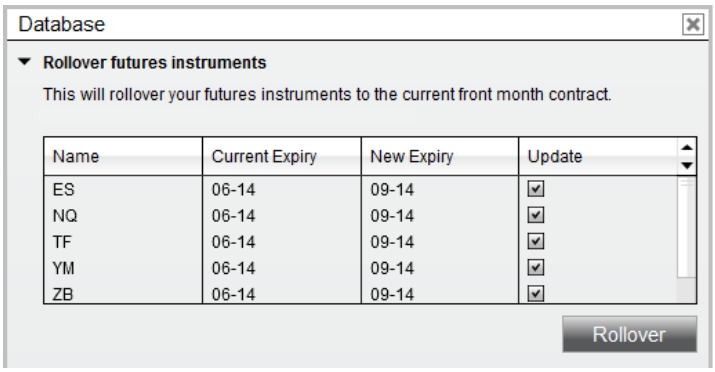
Data Management

New Database Window

A new window to centralize the management of all database operations, along with the added capability to update Instruments, Instrument Lists, and Trading Hours from NinjaTrader server.

New Auto Rollover Feature

Automatically rollover future expiries to streamline the rollover process between contract months. This database feature will goes through all instrument lists and finds the futures that are ready to rollover based on rollover date, and will update your existing lists when requested by the user.



New Market Data Archives

NinjaTrader 7's Historical Data Manager was renamed to the Market Data Archives window. This update has centralized the management of all data types, including Market Replay data which was previously done in a separate workflow. The Market Data Archives window will allow users to visualize and edit both their historical and market replay data, as well as import, export, and download new data all in one location.

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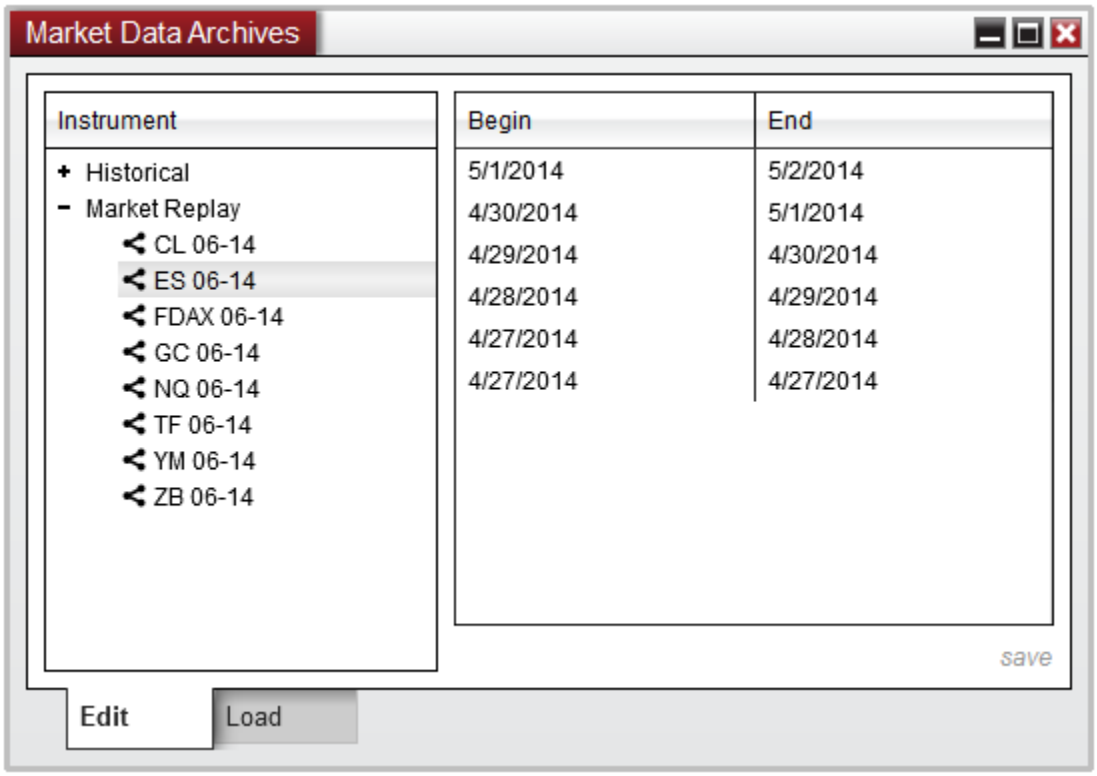

Import/Export

- Added options to select which items to restore from an existing backup archive
- Now does a scheduled backup on its own without manual interaction

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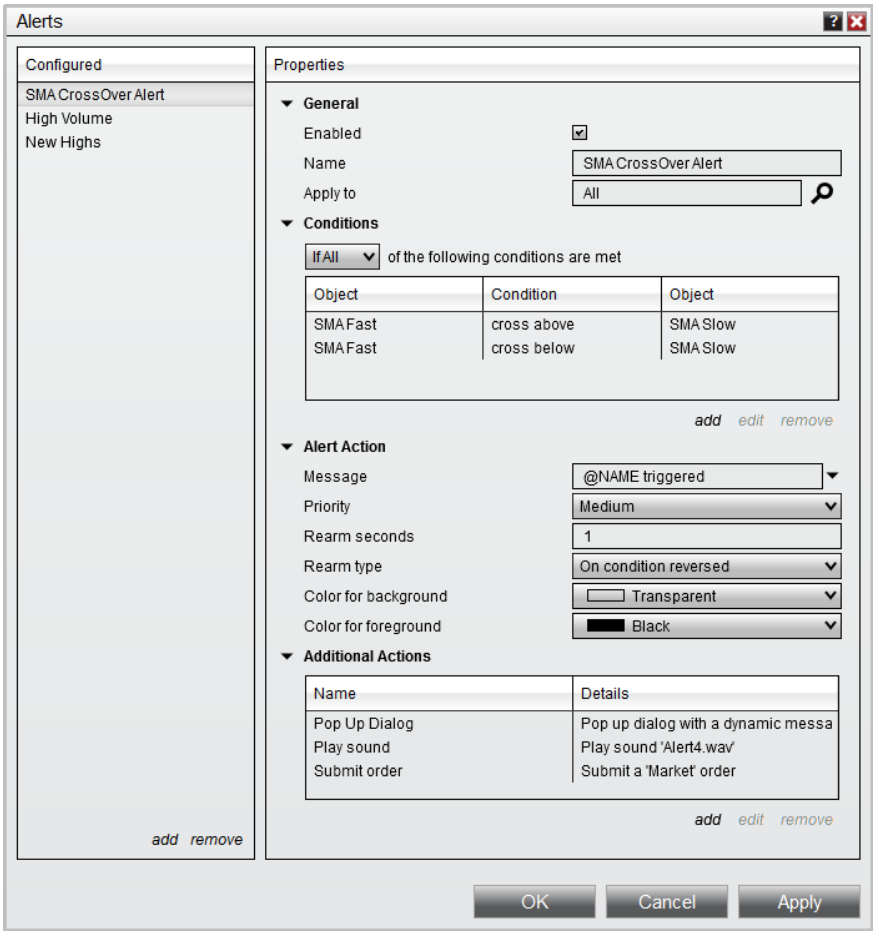
Market Research

New Advanced Alerting

Our alerts functionality has been completely redesigned and improved to allow the execution of complex multifaceted conditions without programming of any kind. Multi-object values are now supported which allow you to compare two data series or indicator values which were not possible before without custom programming. Alert conditions have been extended to work natively with charts and include manually drawn Chart Objects which can now be used as an input condition for any of your alerts.

Alerts are also flexible in that you have the option to apply alerts to all instruments, or even a specific typeset of instruments, as well as define “if all” or “if any” conditions would need to be satisfied in order for the alert to trigger.



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Once an alert condition has been satisfied as true, the following actions can be automatically triggered:

- Play Sound
- Share (Twitter, Facebook, Email, etc.)
- Show custom message box
- Order Submission

New “Rearm” types have been added in order to reset the alert under a few different events:

- On Timer – after so many seconds have elapsed
- On Condition Reversed – when the condition becomes false
- On Connect – after NinjaTrader has been manually connected to a data feed
- On Bar Close – after the selected data series has generated a new bar

Improved Alerts Log

The Alerts Log has been improved to now show all alerts generated in the session, rather than alerts since the window was open. Enjoy the new Go To Alert feature which will quickly show exactly which window triggered an alert. We’ve also added options to filter and sort by Instrument Type and Source (Charts, Market Analyzer, NinjaScript®, etc.)

Workspaces can now have their own independently located Alerts Log window to separate alerts generated for each workspace as well as new property to determine if the Alerts Log Window receives alerts from other active workspaces, attributing for a better system of organizing your alerts.

New Hot List Analyzer

Similar to the Market Analyzer, the new Hot List Analyzer dynamically loads “hot lists” from market data providers like Kinetick, who supply this information. This new window retains all the behavior of the market analyzer allowing you to add columns and indicators for adaptive market data analysis based on

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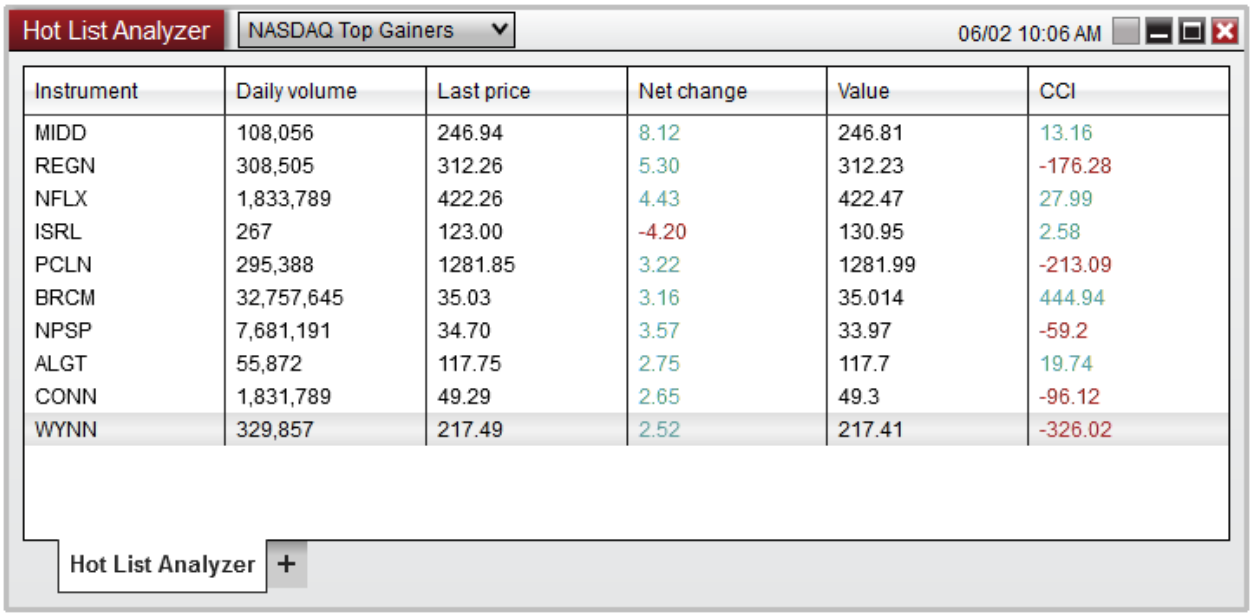
your trading preferences. We've also included the ability to create an instrument list directly from the hot list analyzer to easily move these lists to anywhere else in the platform.



Instrument	Daily volume	Last price	Net change	Value	CCI
MIDD	108,056	246.94	8.12	246.81	13.16
REGN	308,505	312.26	5.30	312.23	-176.28
NFLX	1,833,789	422.26	4.43	422.47	27.99
ISRL	267	123.00	-4.20	130.95	2.58
PCLN	295,388	1281.85	3.22	1281.99	-213.09
BRCM	32,757,645	35.03	3.16	35.014	444.94
NPSP	7,681,191	34.70	3.57	33.97	-59.2
ALGT	55,872	117.75	2.75	117.7	19.74
CONN	1,831,789	49.29	2.65	49.3	-96.12
WYNN	329,857	217.49	2.52	217.41	-326.02

A few Hot List examples:

- Most Active
- Top Gainers, Losers
- Top 52-week Highs, Lows
- Volume Increase
- Unusually High Volume
- Many more and is data provider specific

Market Analyzer

The Market Analyzer has been improved in terms of managing different groups of instruments and columns. From the Instrument Search, you can now multi-select instruments to quickly add or remove to market analyzer display. You can also apply Cell/Filter conditions to a specific instrument name(s) to allow for more customizable conditions.

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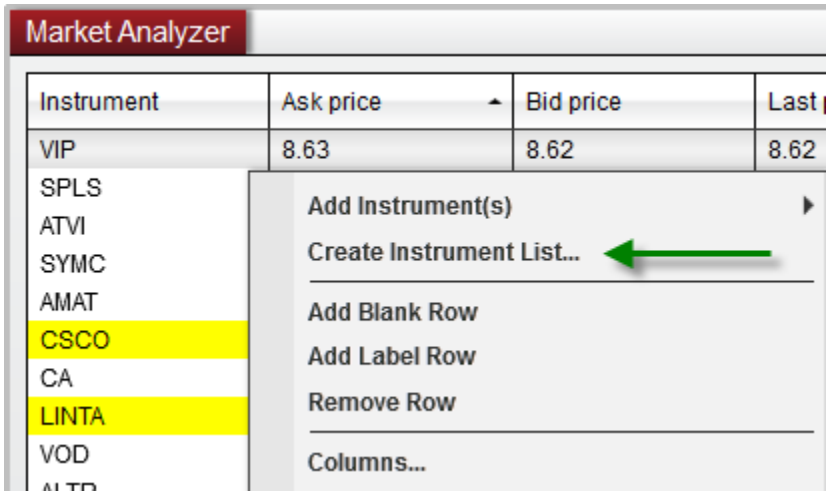
We now support custom Market Analyzer column development in NinjaScript, meaning you can program your own columns to run from within the Market Analyzer directly.

Instruments lists can dynamically be created from an existing market analyzer window.



Trading Hour templates can now be applied per indicator column to help control data requirements for specific columns.

Performance Improvements:

- Indicator columns load 300%+ faster than NinjaTrader 7
- Indicator columns no longer reload on changing Market Analyzer properties
- "Days to load" now supported improving bar loading times

New Data Columns:

- Ask/Bid/Last size
- Bid/Ask Spread
- Current Ratio
- Market Capitalization
- Notes
- Open Interest

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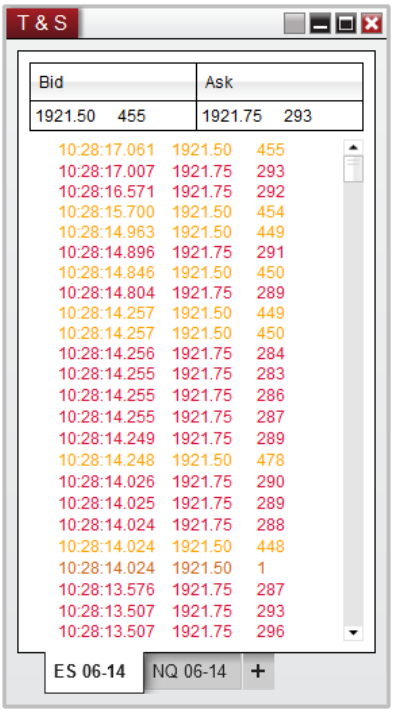
- Revenue per share
- Settlement Price
- Short Interest
- VWAP

News Window

- Simplified filtering and alert interface
- News articles can be read in separate window

Enhanced Time and Sales



The Time and Sales display has been improved to seamlessly display market data updates without flickering, which allows for a smoother and distraction free operation.

- Added real-time bid/ask price updates
- Added ability to scroll and analyze past records
- Added a new 'Block' alert sound option
- Added Configurable Time display format

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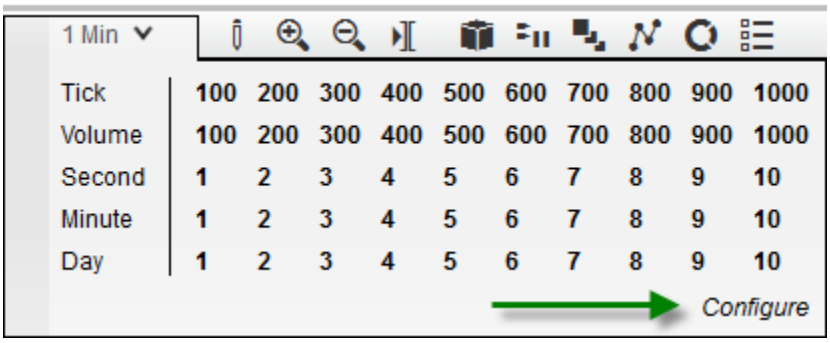
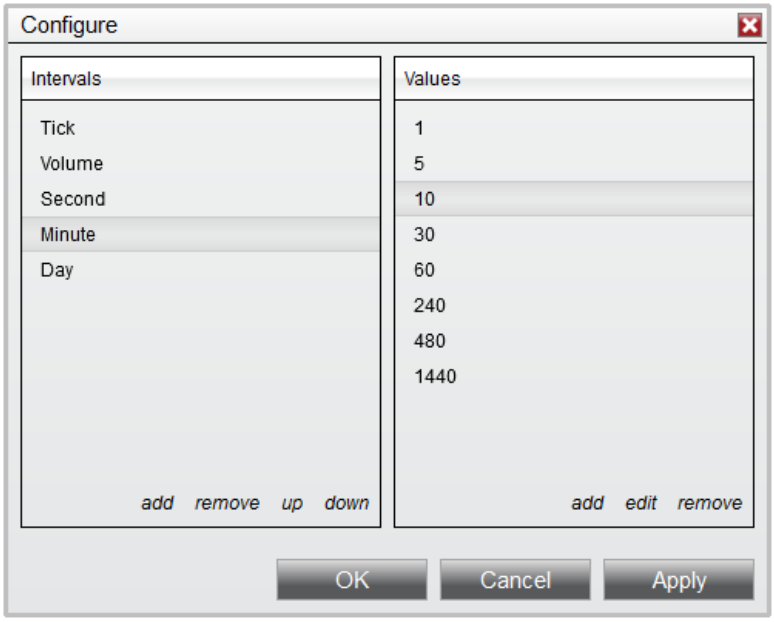
Charting

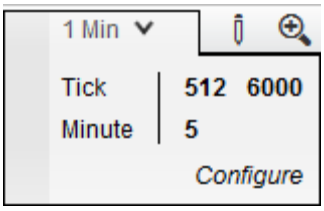
New Interval Selector

We've re-designed the chart's interval selector which is now 100% customizable (factory defaults shown in the image below).



This new design allows for users to completely define the interval types as well as the values used for easy access from the charts.





You can also remove or add the interval types as well as change the order in which they are displayed in the selector.

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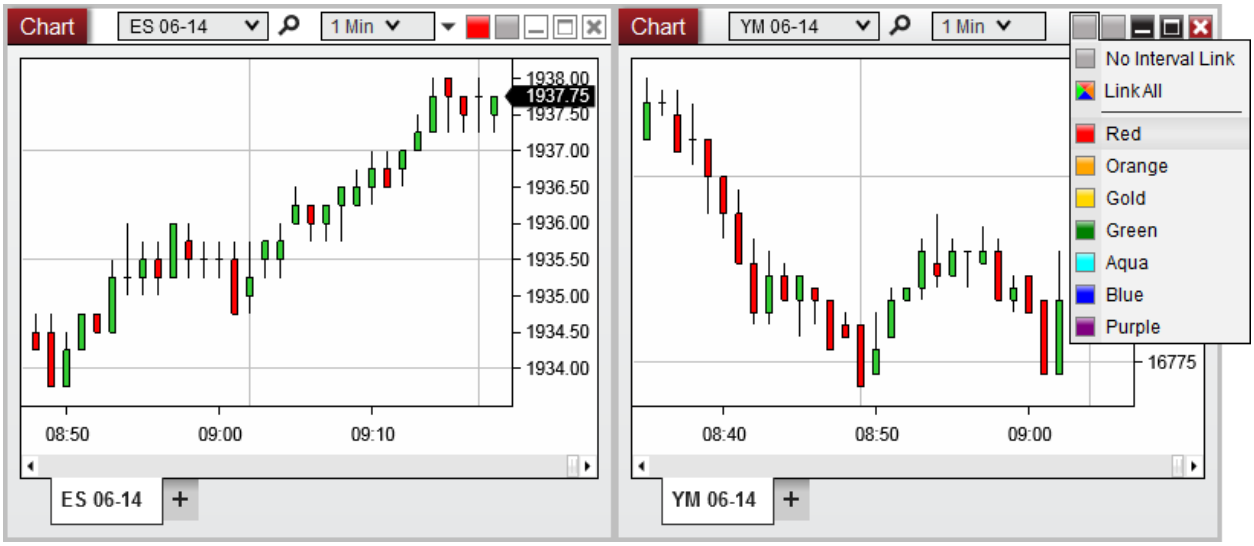
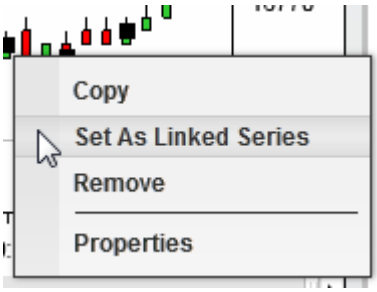
New Interval Linking

Based on the familiar instrument link feature, we've added a new Interval Link to charts, which will allow you to duplicate interval changes from one chart to another. For example, if you have two different instruments set to a 1 minute chart, you can now link these two charts where switching one chart to a 15-minute interval will also update the interval on the linked chart.



If you have more than one data series on the chart, you can specify which data series is the "linked" series via the right click menu on the data series object. This allows you to either link all series in a chart, or only a specific series if desired.



New Free Mode Scrolling

Using the control key + click and dragging on the chart now scrolls the chart's x-axis and y-axis in any direction that the mouse is moved, giving a more adaptable display.

New centering of price on y-axis mode

Charts now have an option to automatically rescale the price action to ensure the last traded price is exactly centered on the price axis.

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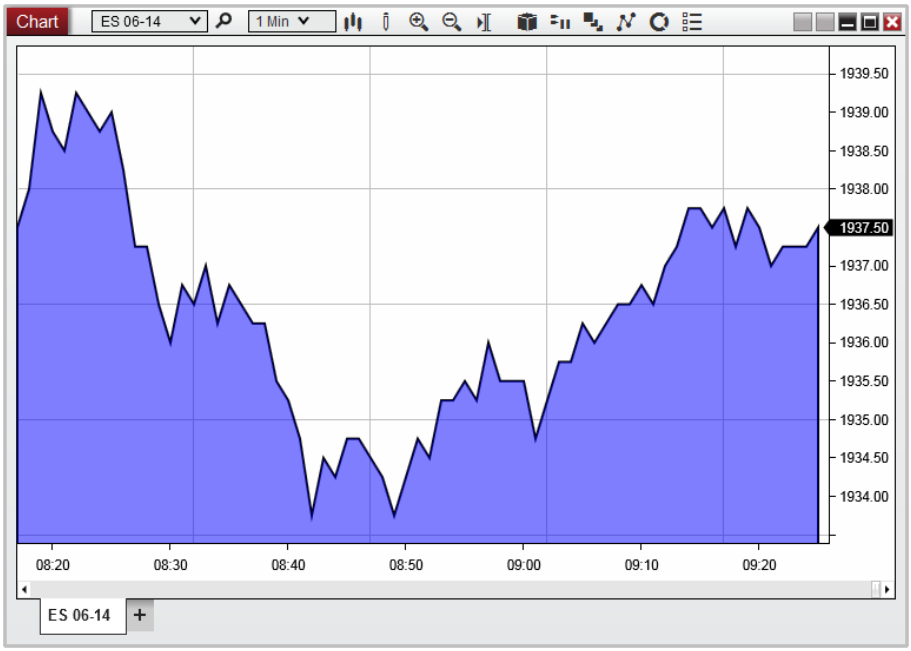
New Crosshair Anchoring

You can now lock the crosshair to a specific price, time, or to both axis points. This allows you to freely move your cursor to other areas of your desktop without disturbing the placement of the crosshair in order to further analyze specific price or time values.

New Chart Styles

We've added presets to chart styles allowing you to further customize different styles based on specific periods that are selected.

- Improved OHLC chart style with additional HLC capability
- New Open/Close style
- New Mountain chart style



Data Box

The chart's data box has been updated to improve the handling of a transparent series. In previous version of NinjaTrader, setting an indicator plot to be transparent would also remove the value from the data box, which was sometimes undesirable. We've now added options to allow you to hide indicator plots from chart itself, but still "Display in Data Box" to read the underlying values.

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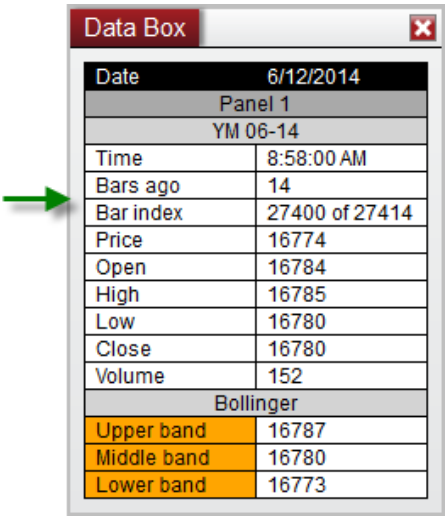
We've also added option to handle multiple indicator plots, where you can choose to show data for a specific plot, rather than all plots related to the indicator.

We have added the option to display "Bars ago" and "Bar index" to aid in the process of debugging NinjaScript indicator and strategies.



New Visible mode for chart objects

In addition to the improvements with the "Display in Data Box" option, all chart objects will have a "Visible" property which will allow you to quickly disable visibility of drawings, indicators and data series without having to completely remove them from the chart. This also gives the ability to have objects active, but not displayed if set to a transparent color.

Drawing Tool Enhancements

Drawing tools have been improved in a number of ways. In previous versions, only a handful of drawing objects had the ability to define and save multiple settings via templates. In NinjaTrader 8 we have enhanced all drawing objects to all include a template option. This allows you to define multiple different settings for a single draw object and apply these templates in a more efficient manner.

When using Global draw objects, you can now set these to be global across all workspaces, or on a per workspace basis, allowing you to eliminate certain drawing objects from specific workspaces if desired.

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All Draw Tools have been implemented as NinjaScript® objects allowing developers to build their own custom drawing tools.

Miscellaneous Drawing Tools Improvements

- New Region highlight tool
- New Risk-Reward tool
- New ability to hide all drawn draw objects
- New ability to roll drawn objects to new future expiries
- Enhanced draw objects dialogue window with mass edit capabilities
- Improved Arc tool
- Improved Gann Fan tool

Multi-Series Equidistant Bar Spacing

When adding more than one data series to a chart, NinjaTrader 7 used a non-equidistant bar spacing by default, in order to accurately align each bar series to the time axis. This charting display mode has been improved in NinjaTrader 8 by giving you the option to mix the equidistant bar spacing display. This gives users the ability to select which period is used to space the bars evenly and ensure the rest of added displayed bar series follow this sequence. We've also added a global property to automatically choose the most granular time-based series to build the equidistant bar display for the charts.

New Data Series Break at EOD

In NinjaTrader 7 Data Series would be cut at the end of the trading session and a new bar would start in the subsequent trading session. If the new property "Break at EOD" is set to false, a tick based bar would carry over from one session to the next.

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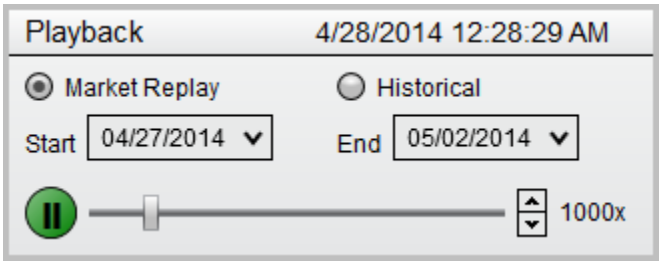
Market Replay

New Playback



Market Replay was renamed to Playback and now has the option to playback historical tick data that you would download from a market data provider such as Kinetick in addition to the classic Market Replay data files just like previous versions. We've also enhanced the market replay data structure by storing L1 and L2 data in a single file which ensures 100% accurate replay sequence.

Playback Performance Improvements

Market Replay now preloads the current day on connection which ensures that during fast forward operations that the entire day is replayed so you always have a stable session. We also added faster playback speeds (100/200/300/500/1000/Max) and a new "Max" playback which will process as many ticks as your CPU can handle.

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Strategy Analyzer

General Enhancements

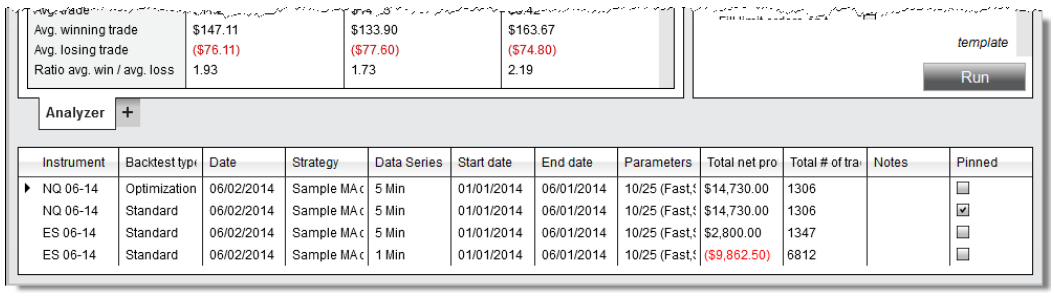
The Strategy Analyzer has benefited from many of the general performance enhancements done to the NinjaTrader 8 codebase which has improved the speed of backtesting and optimizing substantially.

We've added the ability to save a Strategy Analyzer session in the workspace and will even restore the last tested result summary, allowing you to pick up where you left off after a restart. You can also now save multiple templates of individual strategy settings, permitting you to research and track many different scenarios using the same strategy.

- Added Strategy Analysis Statistics
  - RSquared
  - Total Slippage
  - User developed custom Statistics are now supported through NinjaScript®

New Strategy Analyzer Log

The Strategy Analyzer has a new "Log" feature which allows you to save results and keep records of each backtest and optimization in real-time. This will help you track your progress as you perform new backtests and optimizations where you can even pin/remove favorite results to review for later as you attempt to obtain better results.



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The new log will also allow you to filter by instrument, strategy, date of backtest, as well as leave custom notes and remarks on the results themselves. Additionally, each result logged will save a snapshot of your strategy code so that you could compare your working copy vs previous generations, allowing you to keep track of changes made in code.

New Strategy Parameter Templates

After you've refined your strategy parameters through backtesting and optimization procedures, you can quickly save a series of parameters in an unlimited number of templates specific to that strategy. This allows you to quickly move your desired parameters from backtesting to live without having to re-input the optimized values when finally deploying your results to a live trading system.

Enhanced Backtesting Engine

- Order Fill Resolution and Fill engine enhanced
- Standard Fill Resolution breaks bars in to three virtual bars to simulate the direction of the price which was used to form the bar
- High Resolution mode automatically adds a secondary data series as the additional resolution used for fills, without needing to custom program

Improved Optimization

We've addressed several performance limitations in terms of optimizing using time, bool and enum data types ensuring that the optimizer takes full advantage of a multi-threaded CPU, resulting in the best performance possible. Additionally, 64-bit PC's will automatically store trade details of each a backtest in memory which allows for quicker analysis.

New 3D Optimization Graph

In addition to the general 2D Graphs used to review strategy performance, we've introduced a brand new 3D analysis when using two or more parameters, helping you visual how each input parameter influences the results of your strategy performance.

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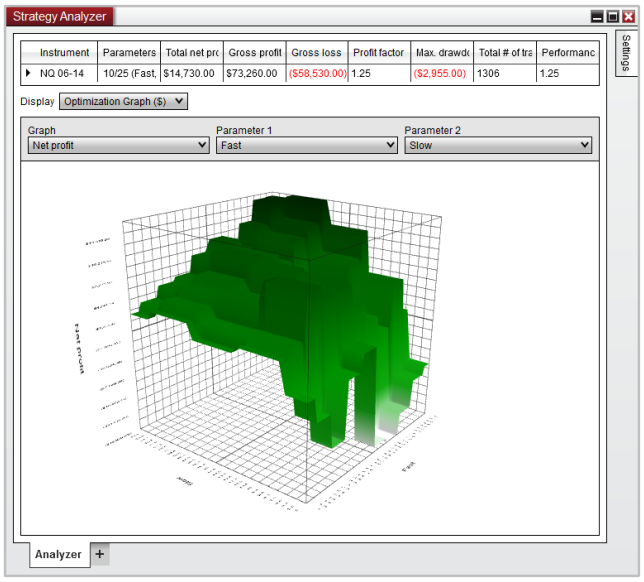
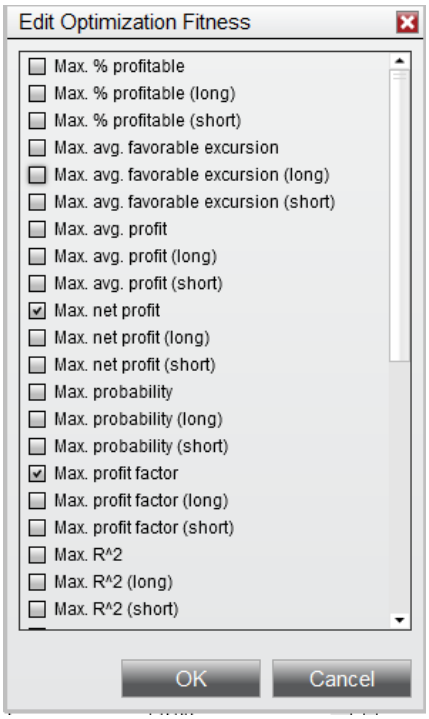


New Multi-Objective Optimization



Now select multiple optimization objectives to test the best tradeoff between two statistics to get the perfect strategy. Once completed, you can graph your results in the form of a Pareto Graph that would show only the best results between the selected optimization objectives which allows you to combine and compare every possible fitness combination in real time.

- Using Pareto Frontier graph analysis finds the best tradeoff between two statistics to get to the perfect strategy.
- Multi-objective test all or selected number of optimization fitness routines
- Combine different fitness combinations in real time
    - Example: Find the results of the most profitable strategy with the least draw down risk, and every best combination thereof.

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Walk Forward Optimization

The new trading hour definitions allow for more accurate optimization when doing walk forward analysis, especially while using trading hours which span multiple days.

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NinjaScript®

General Improvements

- Reload historical data programmatically via code
- Programmatically add custom bar types
- Draw on price panel and indicator panel from within the same script at the same time
- Draw objects can be set as global draw objects via code
- Choose draw object templates via code
- Access News via script with the new OnNews() method
- Access HotLists via Script
- Be able to differentiate which connection was disconnected (primary or secondary) from OnConnectionLoss()
- Improved the new bar detection using FirstTickOfBar
- Access instruments from instrument lists
- Added “Break EOD” feature which optionally reset indicator values on a new trading day for stability

Supported NinjaScript® Object Types

- AddOns
- Bar Types
- Chart Styles
- Drawing Tools and Markers
- Indicators
- Market Indicator Columns
- Optimizer Fitness
- Optimizer
- Strategy Analyzer Performance Metrics
- Strategies
- SuperDOM Columns

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NinjaScript® Import/Export

- Only a single .DLL File provided for both 32-bit and 64-bit systems
- The export process has been improved in terms of identifying which references are required for an export
- Agile.net protection improved significantly
    - Requires a purchase of an Agile.net license to take advantage of more secure protection methods

NinjaScript® Code Wizard

Our NinjaScript® Code Wizard used to generate minimum required code for new scripts has been updated to include all supported support NinjaScript® object types. We've also enhanced the available configuration options to help generate the desired script base in a much more efficient manner.

- Use an unlimited number of Input Parameters
- Optionally select additional data series
- Select any additional event methods to use relevant to NinjaScript® object type (On connection, OnMarketData, OnMarketDepth, etc.)

New NinjaScript® Suspension Optimization

Newly added NinjaScript® Suspension Optimization allows programmers to halt market data events from being processed when an indicator is not visible (such as Chart window minimized or another window is on top of the window hosting the indicator), saving CPU resources when not in use.

New TickReplay Engine

We've included an optional NinjaScript® feature which will replay OnMarketData on each tick stored in the data base. This will help ensure that your indicators and strategies receive the exact sequence of stored events and played back for the most accurate calculations on historical data that include the historical bid/ask price, just as you would expect in real-time.

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Expanded NinjaScript® Access

NinjaTrader 8 will introduce a new level of depth and breadth which will allow developers to build incredibly rich and integrated trading applications limited only by their imagination.

Developers will have access to:

- Trading objects such as connections, accounts, orders and executions
- Market data objects including historical data
- Controls such as Instrument Selector, Account Selector and Quantity Selector, Instrument Link, Interval Link etc.
- Window and Workspace methods
- Access to control, modify and interact with UI elements

It's no longer about writing custom indicators and strategies…the possibilities are truly endless, build what you can dream of and integrate it directly into the NinjaTrader application.

NinjaScript® Editor

The NinjaScript® Editor has been redesigned to include a new NinjaScript® Explorer menu which is pinned to the right side of the editor. This new explorer feature allows developers to nest and organize different NinjaScript® files into custom folders in order to easily locate and reference other scripts directly from the editor itself.

Additionally, we've included the new ability to exclude scripts from compilation if they are still under development or contain code breaking changes that would have previously prevented developers from working on secondary scripts. This new feature gives developers the flexibility to keep their underdeveloped scripts installed on their system and accessible from the NinjaScript® Editor until the scripts are ready to be compiled.

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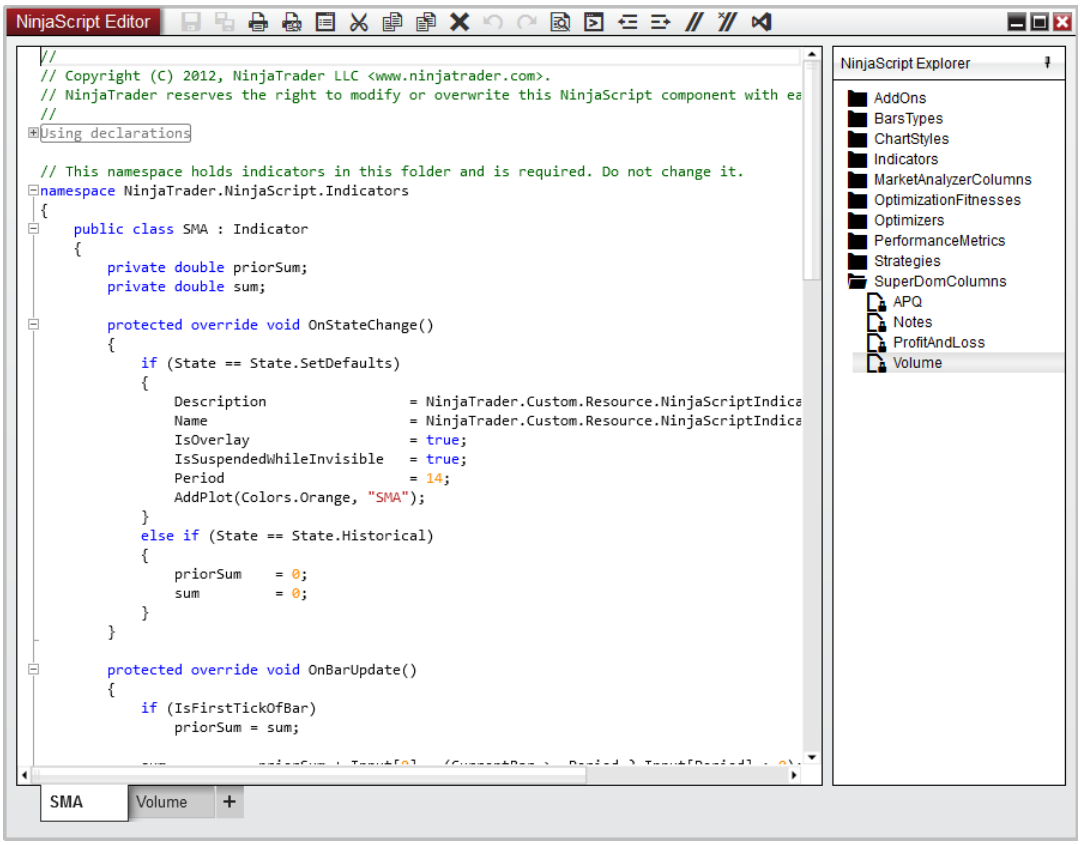

The NinjaScript® Editor now supports direct Visual Studio Integration which means you can open, edit, and debug your NinjaScript® files directly in Visual Studio. This allows the NinjaScript® editor to detect changes made outside of itself and automatically reload these changes in order to compile without having to restart or reload the scripts. This functionally applies to any other text editor of your choice, giving the ability to directly edit files outside of NinjaTrader should you desire.

NinjaScript® Strategies

Strategies have been improved as they can now read real-world order, execution, and account information. This greatly improves the start behavior of the strategy, allowing for the strategy to adopt the real-world position and continue operation as if the strategy was running.

- Exposed Real World Order, Execution, and Account Access
- Improved Start Behavior, including adopting Real World Position
- Improved Real-time Error Handling to provide ability to filter for rejections and handle terminal order states in code

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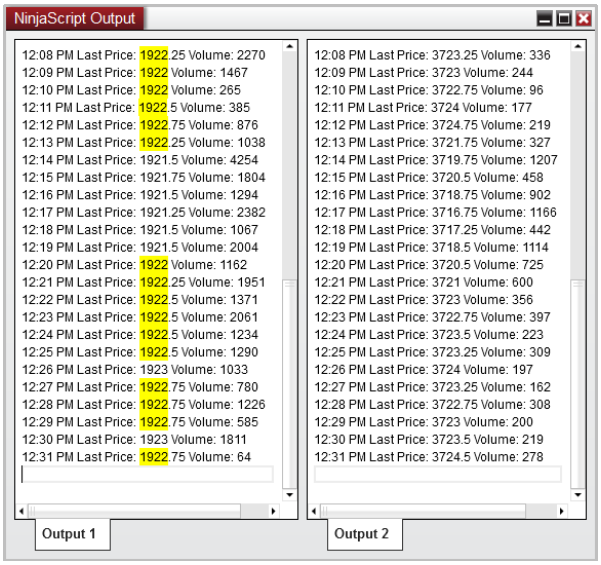
- Access commission rates

NinjaScript® Output Window



The NinjaScript® Output window has received a number of upgrades. Firstly, we've introduced a new smooth scrolling operation to help track and navigate data as it added to the output window.

The output window can now be separated into two tabs, where you can programmatically tell your script to output information to either tab. This allows for a Dual View mode and synchronized scrolling operation to help compare data output from two scripts.

There is also a new facility to search for strings, and simply double clicking on a string token will quickly highlight any other strings that match that token.

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Connectivity Adapters

General Connections

- Forex Connections can now auto subscribes to required instruments for currency conversion
- All adapters now supported on 64-bit version of NinjaTrader
- Auto-connect handling improved when connection cannot be established
- Account Denomination for PnL reporting can now be set per connection
- Preferred connections for real-time and historical market data, meaning you can now request historical data come from Provider A while your real-time data come from Provider B. This removes the dependency on the sequence in which you establish your connection to various brokers and data feeds

CQG/Continuum

- Always re-requests orders executions positions during reconnection
- Uses server time for all timestamps (market data order)
- Added settlement price as a fundamental data type

eSignal

- Updated to the latest API
- 64-bit support
- Supports full 10 levels of market depth on futures
- Improved pre/post market real-time data

FXCM

- Added Native OCO support

GAIN

- Orders added/cancelled/modified externally are reflected in real time in NinjaTrader
- Total cash balance provided by GAIN

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Interactive Brokers

- Updated to the latest API
- Now supports TWS: Gateway
- Added hotlist support

IQfeed

- Updated to the latest API

Kinetick

- Updated to the latest API

MBT

- Updated to the latest API
- 64-bit support
- Added Native OCO support

TDA

- Updated API
- 64-bit support
- Added Native OCO support
- Added hotlist support

Trading Technologies

- Updated to the latest API
- 64-bit support

Rithmic

- Updated API

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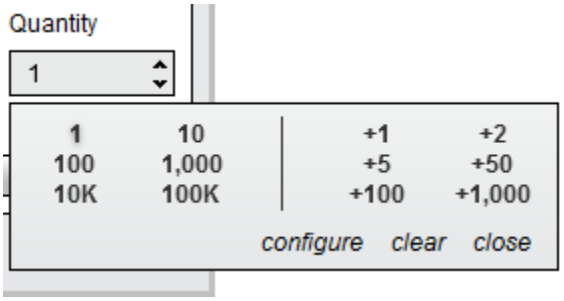
Trading Interfaces

General Trading Improvements

- You can now select secondary simulation accounts in the account selector while using global simulation mode (i.e., trade both Sim101 and a Sim102 account in global simulation mode)
- Added Pips and Ticks to PnL display
- Order Types and TIF selectors only load the supported order types and TIF's supported by the selected account
- Account selector now attempts to auto select the last selected account when connected
- Order Type and Order State colors now integrated into one color system and standardized across entire application, where the color of the order represents order type color unless order is pending/cancelled

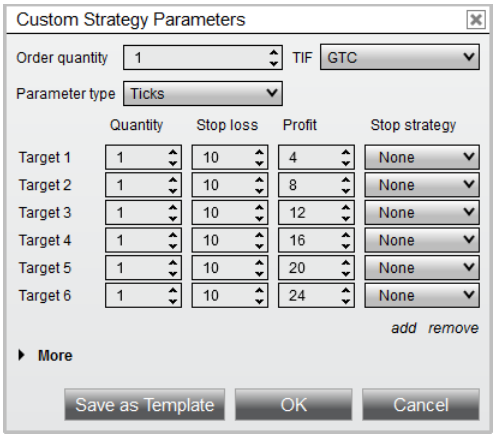
Quantity Selector

We updated the quantity selector which gives users quick access to preset quantity values, as well as increment values which can be customized ahead of time.



ATM Strategies

Our ATM Strategies have largely remained the same, with some slight improvements based on customer feedback over the years. Most significantly, you can now set an unlimited number of Stop Loss and Profit Targets resulting



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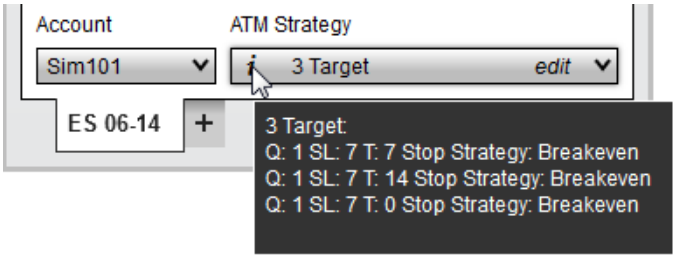
in more dynamic trade management. Profit target orders can optionally use Market If Touched (MIT) orders instead of Limit orders.

Pointing your mouse over a selected ATM Strategy will now display information tooltips in order to obtain details of the strategy parameters without having to open the ATM Strategy Parameters itself.



We also removed the ATM Strategy template files from the data base, and now are stored in individual XML for portability between your computers or sharing your templates with others.

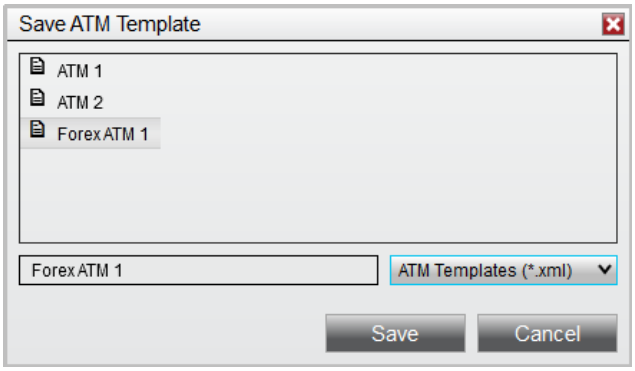
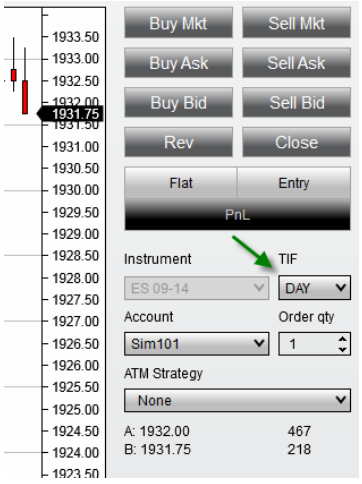


Chart Trader



The Chart Trader interface has been improved in that it can now be used on mulit-instrument charts. Currently, Chart Trader would only allow you to trade the Primary instrument on the chart, however we've given users the option to select which instrument on the chart they would like to trade.

The TIF option is now always visible, improving the control of the order types used on this interface.

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The indicator tracking feature discussed in the General section of this document is also available from Chart Trader, allowing you to synchronize orders on Chart Trader with indicators which have been added to the chart.

Hot Keys

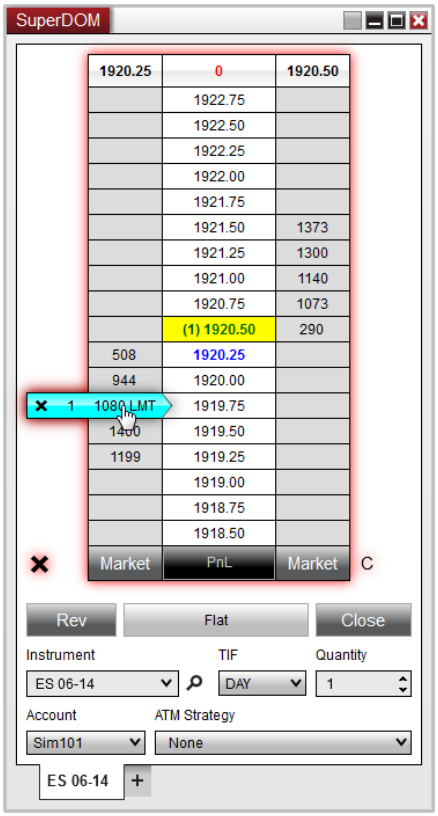
- Improved hot key setup process to allow for recording keystrokes
- Added various user requested hot keys
- Added SuperDOM hotkey category

SuperDOM

The SuperDOM has been redesigned allowing for significant performance and usability improvements, and can now plot indicators values on the price ladder itself. The number of rows and size of the price ladder display will now dynamically update as you resize the window. The number of market depth levels is only limited by your data provider, meaning if your provider offers 10 levels of market depth, the DOM can be configured to display all 10 of these levels.

The Dynamic SuperDOM's "Hold" button has been removed and replaced by a new "hover" mode which will temporarily freeze the price display when the mouse cursor is over the price display allowing for a quicker and more intuitive order management process.

We've also introduced the ability to add Columns next to the Price Ladder, and a new "Trade Control on Left" mode. NinjaTrader 8 will install with several system columns and also allow users to create their own custom NinjaScript® Columns:



- PnL
- APQ (Approximate Position in Queue)
- Volume

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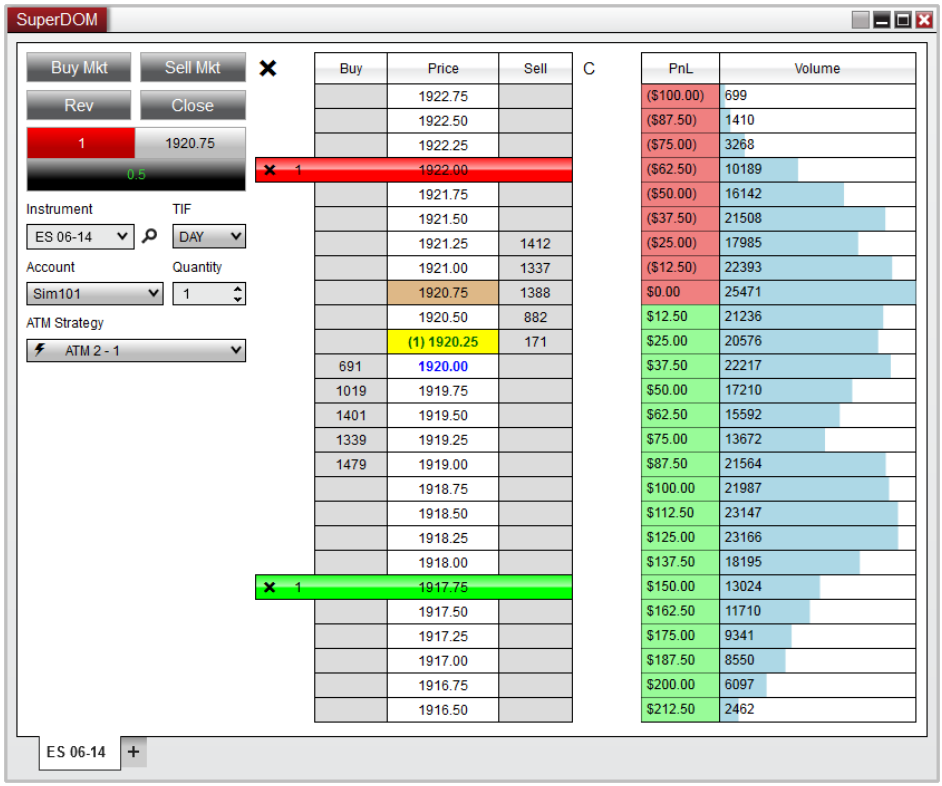
- Notes
- Custom NinjaScript® Columns supported



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