Users Manual
Infinity Bridge Indicator

This indicator will send TradeStation or MultiCharts trading system generated orders directly to the Infinity Trading Platform for immediate execution.

How It Works

The Infinity Bridge Indicator is a trade transmission utility, programmed as an indicator that simply sits in a subgraph waiting for a trade to occur on the chart above. When a trade arrow appears the bridge recognizes this event and places the proper trade on the Infinity platform.

It will work on any AUTOMATED strategy, or one that places a trade on a chart that in generated by a TradeStation or MultiCharts   system.

Users have multiple options regarding the type of order that is placed when an arrow appears, regardless of any order specifications imposed by the automated strategy or the associated trading / charting platform. Keep in mind that the operative strategy simply places the arrow on the chart. The Infinity Bridge takes over at that point, placing the order as specified in the input section of the bridge.

The bridge allows the user to specify limit or market orders for trade entries. Limit or market orders can also be specified separately for trade exits. Programmed target exits or exits initiated by position reversals are treated as exits for the purpose of order type placement. For example, it is possible to set the bridge parameters to enter the number of lots specified by the strategy on a limit order and, in the case of a scaled out exit, place these exit orders as either market or limit orders. If the position should reverse, the trades that occur to exit the existing long position are also executed using the same parameters specified for exits. The reversal entries, in this example, will go in as limit orders, identical to the method selected for the original entry.

All stop loss and end of day exits go in as market orders. This cannot be changed by the user.

One of the prime objectives of this program is to enable the system trader with multiple options to convert non filled limit orders to market orders. This is necessary in the event that a limit order is not filled within a reasonable period of market activity, for it is often these unfilled limits that turn into the best trades. Allowing these to go unfilled could cause the trader to miss some of the best strategy generated trading opportunities.

Slippage Issues

Slippage is defined as the difference between the order and fill price. If, for example, a buy order is placed at 1100.00 for an emini S&P contract and the price is filled at 1100.25 the slippage on this entry is 0.25 or one tick.

The settings used for these cancel / replace routines will have a significant effect on the performance of the strategy that is being automated using the Infinity Bridge. The actual generation of these orders is not affected by the bridge. The execution of generated orders by the exchange will occur as designated by the bridge settings. It is the execution of the generated trades that can have s significant impact of

the results of automated system trading.

Execution of limit orders is strictly a function of market liquidity at the time that the limit order reaches the exchange. If, for example, an order to buy two emini S&P futures contracts at 1100 is placed and only 50 contracts trade at that price before moving higher the probability of the purchase occurring at the designated price is very low if not nonexistent. Alternatively, if the market moves down to 1100 and immediately trades below 1100 there is a 100 % expectation that the limit order will be filled at the designated price. There also is the possibility that the order will be filled at 1100 even if the market does not fall below this price if sufficient liquidity is present at this price level. In this instance the probability of a fill is directly proportional to the timing of the order arriving at the exchange. Since orders on the electronic exchanges are on a first come – first served basis, the sooner an order gets to the exchange the higher is the probability of a fill in this example.

If the user sets the entry limit option to zero and the market exit option to false there will be no slippage on any trades baring any transmission or electronic errors. However, using these bridge settings could result in either the entry or the exit or both not being filled at all. With this in mind traders should use this setting combination only on highly liquid markets. If this combination is used on a market with lower liquidity the user should monitor all trades closely and be ready to act manually should any orders go unfilled at a critical point in the trade.

Frequently traders will set the entry to either be filled at the limit price and the exits to go to the market as market orders. The theory here is to avoid all slippage on the entry by using limit orders. However, one may not wish to take the chance of missing an important exit point, taking a chance on slippage on exit by going to the market.

Using the limit entry options gives the trader the option to allow the market to attempt to fill the order at the limit price but still guarantee a fill on the trade if the market moves significantly away from the order point. Using option 1 defines the number of ticks or points that the market must move before going to a market order. Obviously, the slippage will be equal to or greater than any point or tick spread designated by these parameters. The resulting slippage incurred when the bridge sends a cancel / replace order defined by the number of bars or price changes that have occurred following the placement of the limit order can vary significantly.

Interaction with TradeStation or MultiCharts Strategy Automation

The Infinity Bridge works independently from the TradeStation or MultiCharts strategy automation. It is not necessary to enable TradeStation or MultiCharts automation for the bridge to operate properly. However, enabling TradeStation or MultiCharts automation will not interfere with the operation of the bridge. Users should be aware that enabling both the bridge and TradeStation or MultiCharts automation will result in identical trades being placed both in the active Infinity and TradeStation or MultiCharts associated accounts.

Getting Started

Installation

This indicator is installed as any other script imported into TradeStation or MultiCharts by using the "Import EasyLanguage" (TradeStation) or "Import Read-Only" (MultiCharts) routine from the file menu or by simply double clicking on the .eld or .sef file that contains the indicator code. To complete the installation it is also necessary to install two .dll files into your windows directory. This will either be accomplished using an auto installer or will be completed by a technician using a remote assist utility.

To begin auto trading you must first apply the indicator to the chart that is running the strategy that you wish to auto trade through the Infinity Platform. Simply place the "Infinity Bridge" indicator on the selected chart using the familiar insert analysis techniques routine from the insert dialog on the main TradeStation or MultiCharts toolbar.

You must download and install the latest trading platform from TransAct.

It is vitally important that prior to installing this specific TransAct platform that you first completely remove any existing TransAct platform(s) from the computer that you will be using for the bridge. The bridge requires a special version of the platform and will not perform properly on other versions and can lead to serious trading errors if used on other platform installations.

Use the 'add – remove programs' page in the control panel of your computer to remove old versions. If you get an error message during this removal process stating that the removal was not complete then end the removal process and delete the c:\programfiles\yestrader folder form your computer. Only when this is complete is it safe to install the bridge compatible TransAct platform. Contact us at support@onlinesystemtrading if you encounter any problems with this removal routine.

You will receive an installation link in an email that you will use to install the new bridge compatible TransAct platform.

When you have installed this build of the platform you must enable it to receive orders from an external API. Refer to figure 1 below:
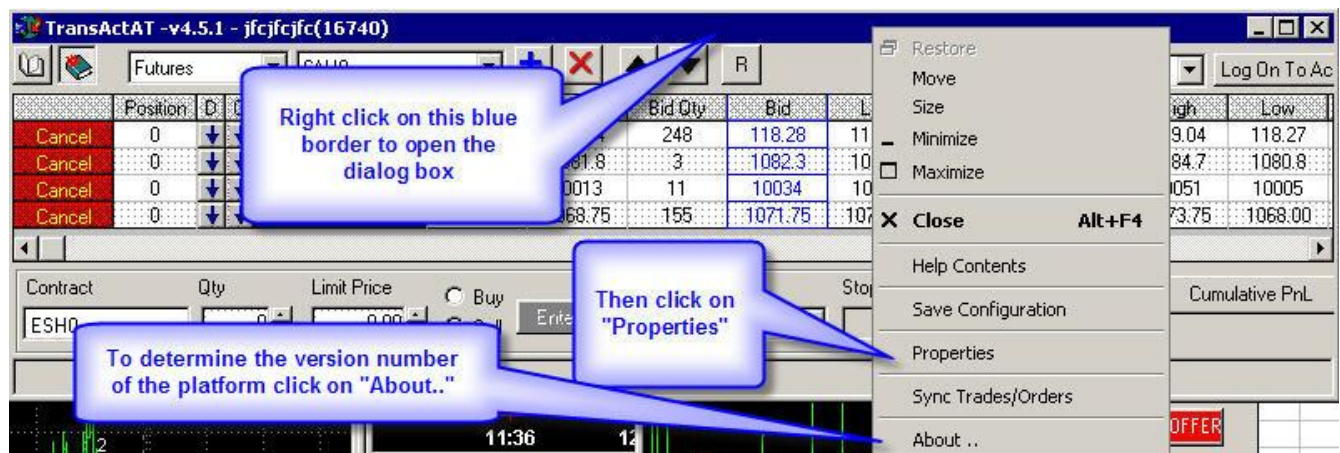

Figure 1 Infinity Platform Dialog

Open the configuration dialog by clicking on the top blue bar as illustrated above, and then click on Properties.

On the properties page be sure the "Enable External Order API" box is checked. See Figure 2 below.
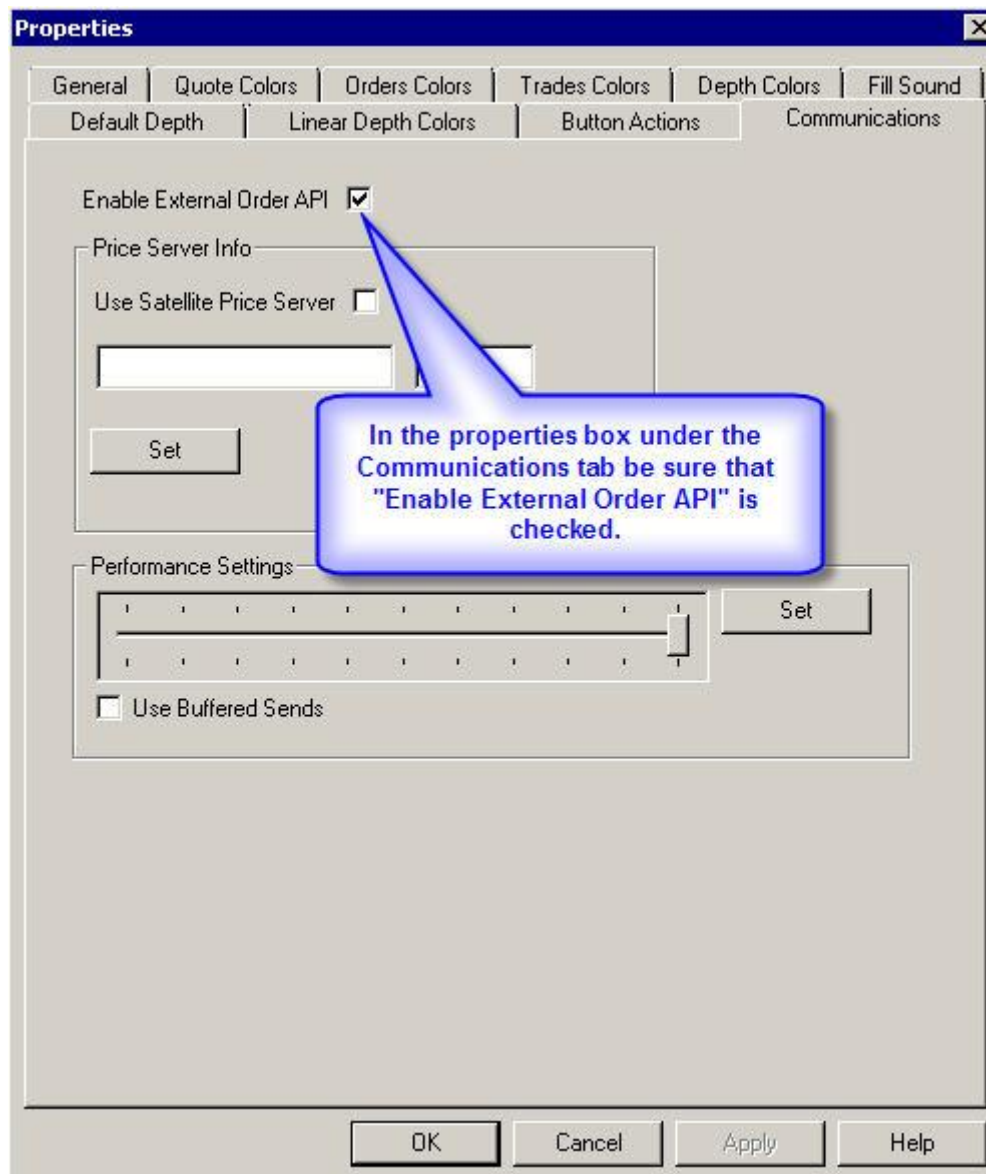

Figure 2. Infinity Platform Properties Box

Caution: Be sure to start the Infinity Platform before enabling the Infinity Bridge Indicator. If you attempt to run this program without the Infinity platform open TradeStation or MultiCharts may freeze up.

Multiple inputs control the various functions of the program.

Infinity Bridge Input Dialog

On_off: This activates the entire program. Setting this input to 1 takes the program "live", enabling all order sending routines. Setting it to 0 (zero) disables all order sending routines.

Please note that this input is not related in any way to the "status" button in the TradeStation or MultiCharts "format analysis techniques" dialog box. Clicking the status button to "off" effectively removes the bridge from the chart.

The On_Off input is used to enable / disable the bridge while still leaving it on the chart. In this fashion you can leave the bridge on your chart and retain the individual configuration specific to the chart and still have the indicator visible for immediate use if desired.

Account_Number: Insert the Infinity account number that will be used to trade this chart.

Smbl: This designates the symbol to receive orders from the chart to which the bridge is to be applied. The symbol must match the infinity symbol list and is NOT the symbol used by TradeStation or MultiCharts.
The infinity symbol must be placed in "matching quote marks" since it will accept only a string input. This input is CASE SENSITIVE so be sure to enter in ALL CAPS.

SIDE NOTE: This is programmed such that any order on this chart can be placed on any symbol at Infinity. One could theoretically generate an order on a corn chart and execute it in gold as long as everything is set up to go in as market orders. This creates some interesting possibilities.

Contract_multiplier: Allows the user to specify a greater number of lots for the trade in question other than the number of contracts specified by the actual strategy. For example, a user can now specify

a 2 lot in the TradeStation or MultiCharts strategy and actually trade a 4 lot through Infinity if the multiplier is set to 2. This input should only be a whole number (no decimals) as Infinity will not accept fractional lot numbers.

Market_limit: Determines the type of all entry orders. Users must either type market or limit. Again this input must be in quotes.

Limit_option: The limit_option input is where the user designates the specific routine to be used to replace the limit order with a market order in the event that a limit order is not filled. There are currently **4 options available**, as follows.

1. **Limit_option = 0:**

   Setting the limit_option input to zero (default) effectively disables this functionality resulting in limit orders either being filled at the limit price or not being filled at all.

2. **Limit_option = 1:**

   The following inputs – "points_or_ticks", "pt_trigger" and "tick_trigger" are only active when the "option_limit" input is set to 1.

   Points_or_ticks: This input activates either "tick_trigger" or "point_trigger" inputs below.

   > If set to 1 then the "point_trigger" is active.
   > If set to 2 then the "tick_trigger" is active.

   Tick_trigger: Sets the number of **ticks** that will trigger a limit order cancellation and replace the order with a market order.
   Pt_trigger: Sets the number of **points** that will trigger a limit order cancellation and replace the order with a market order.

   Pt_trigger option example: All unfilled limit orders will be canceled and will go immediately to market orders when the price moves pt_trigger points from the limit order.
   Example: ES limit order = buy 1,106.00 limit but the order goes unfilled. If the pt_trigger input is set to 1 the script cancels the limit and places a market order when the high of any bar subsequent to placing the limit order is equal to or greater than the limit order plus the pt_trigger value. In this example the limit order is cancelled and replaced with a market order when 1,107.00 is hit.

   Tick_trigger option example: All unfilled limit orders will be canceled and will go immediately to market orders when the price moves tick_trigger ticks from the limit order.
   Example: ES limit order = buy 1,106.00 limit but the order goes unfilled. If the tick_trigger input is set to 4 the script cancels the limit and places a market order when the high of any bar subsequent to placing the limit order is equal to or greater than the limit order plus the tick_trigger value. In this example the limit order is cancelled and replaced with a market order when 1,107.00 is hit.

In the two above examples the result is the same in both cases since one point in the ES equals 4 ticks.

A market if touched order can be accomplished by setting limit_option to 1 and tick_trigger to 1.

3.   **Limit_option = 2**:

Bar_trigger. **Only active with limit_option = 2**. Limit order is cancelled and is replaced with a market order bar_trigger number of bars following a no fill on the limit order.

4.   **Limit_option = 3**:

Price_change_trigger: **Only active with limit_option = 3**: Reversion to market orders occurs after price_change_trigger number of price changes. **NOTE**: Price changes, not ticks. Price change is an uptick or a downtick, not an equal price tick.

Market_exit: The user must type true or false. Quotation marks are not needed here.
If set to **true** all reversal and target exits go in as **market** orders.
If set to **false** all reversal and target exits go in as **limit** orders.

By default all **stop outs** and **end of day exits** go in as **market** orders. This cannot be changed by the user.

PrintLog: This input will be used only if it is necessary to perform diagnostics on the bridge program.
Tcks: This input will also be used only if it is necessary to perform diagnostics on the bridge program.

Activating the bridge with an open chart position

Changing indicator parameters with an open chart position

Changing strategy parameters with an open chart position

When any parameters are changed such that the bridge is forced to recalculate be aware that all counters involved in market orders replacing limit orders are reset to zero. This will re-activate the sequence that for example replaces a limit order after (input) number of price changes or ticks (limit options 2 or 3). Understand that after forcing a recalculation of the bridge the order placement routine will automatically enter the proper orders to match the real time position with the strategy position

following the (input number of bars (limit option 2), the (input) number of price changes (limit option 3), have occurred following the forced recalculation.

This same scenario applies when the bridge is activated when there is an open trade on the chart that is not matched by your live account. Activating the bridge here with any limit option other than zero will cause an automatic entry when the conditions of the selected limit option are met.

For all of the above reasons it is recommended that your live account position be matched exactly with your current chart position before activating or changing parameters on the bridge. This may require the placing of manual trades.

In a fast market you may get multiple fills on reversals, especially if you have the bridge set to revert to the market on a close tolerance, simply due to the nature of the transmission of orders and fills back and forth between servers and your platform. Under most conditions the bridge will automatically correct these errors and match the real time position to the chart position. However, under fast market conditions with close tolerance settings multiple orders may occur until the fast condition subsides.