

# STAGE FIVE

TRADING CORP



## **System Manual**

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## Overview

*S5 Trade Analyzer* is a stand-alone Windows program using the Open E-Cry (OEC) API. The program will analyze trades, reporting on any trades made during the current trading session.

## Installation

This program is named *S5 Trade Analyzer* and has a description of a Windows Installer Package. To install the system, follow the following steps.

1. Download the *S5 Trade Analyzer* installation program.
2. If you have previous versions of this system on your computer, you should remove them by clicking on *Start*, then *Control Panel* and then *Add or Remove Programs*. Use the *Add or Remove Programs* feature of Windows to remove the previous version.
3. Run the install program by going to the folder where the install program was downloaded and double clicking on the program's icon. This starts up the *S5 Trade Analyzer Setup Wizard* which guides you through the installation of the system. If you take the defaults, these elements are installed in a folder with the path *c:\Program Files (x86)\S5TradeAnalyzer\S5TradeAnalyzer*.

4. The installation process places a new icon  on your desktop for the *S5 Trade Analyzer*.

## .NET Framework

The program is written in the Visual Basic .NET programming language. In order for it to run on your computer, you must also have the Windows .NET Framework installed. With many computers, the .NET framework will already have been installed with the Windows operating system. If not already installed, it is a free feature of Windows that can be downloaded and installed. We recommend trying to start the program as outlined below. If you get an error message indicating that the .NET framework is not installed then you must do the following:

The .NET Framework is part of the Windows operating system. If it is not installed, it is a free download from Microsoft.

Follow this link to the Microsoft website and follow the instructions to download a program from Microsoft that will install the .NET Framework on your computer. The name of this install program is *dotnetfx.exe* and it is called the Microsoft .NET Framework Version 2.0 Redistributable Package.


<http://www.microsoft.com/downloads/details.aspx?FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5&displaylang=en>

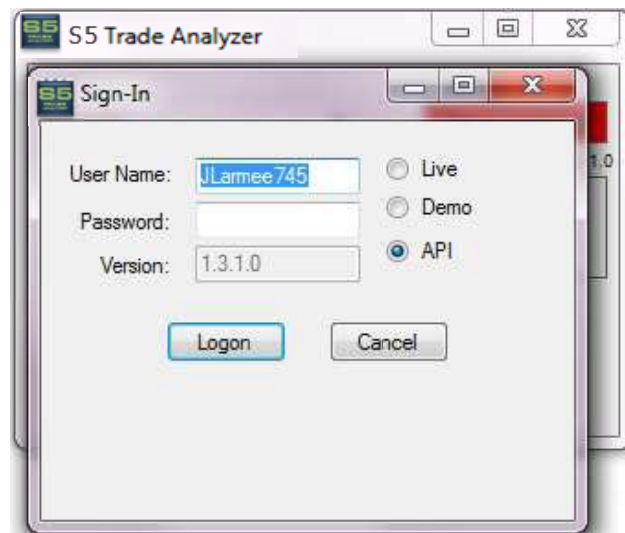
After you've downloaded the .NET Framework Version 2.0 Redistributable Package, be sure to run it so that the framework is installed on your computer.

## Using the S5 Trade Analyzer Program

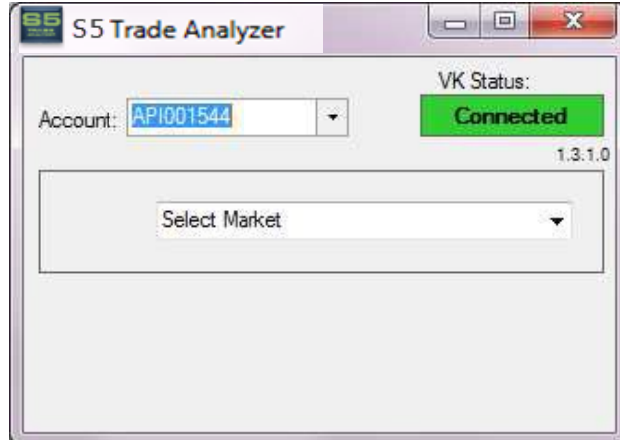
### Starting the Program

When you first install the program an  icon is placed on your computer's desktop.

Clicking on the  icon will start the program. When the program starts, a small main screen is started and an OEC sign-on screen is superimposed on the main screen as shown below:



Since we have not yet signed on, the S5 status on the main screen (partially hidden in the picture) shows a red *Disconnected*. At this point, the user should enter their OEC user name and password. They may also choose between the live, demo and API environments within Open E-Cry. Clicking the *Log-in* button submits these credentials to Open E-Cry. Once the user has successfully signed in, the sign-in screen will disappear leaving only the main screen as shown below:



This screen has a small footprint on the user's desktop. Note that once the user has signed in successfully, we show a green *Connected* status. The main screen allows you to:

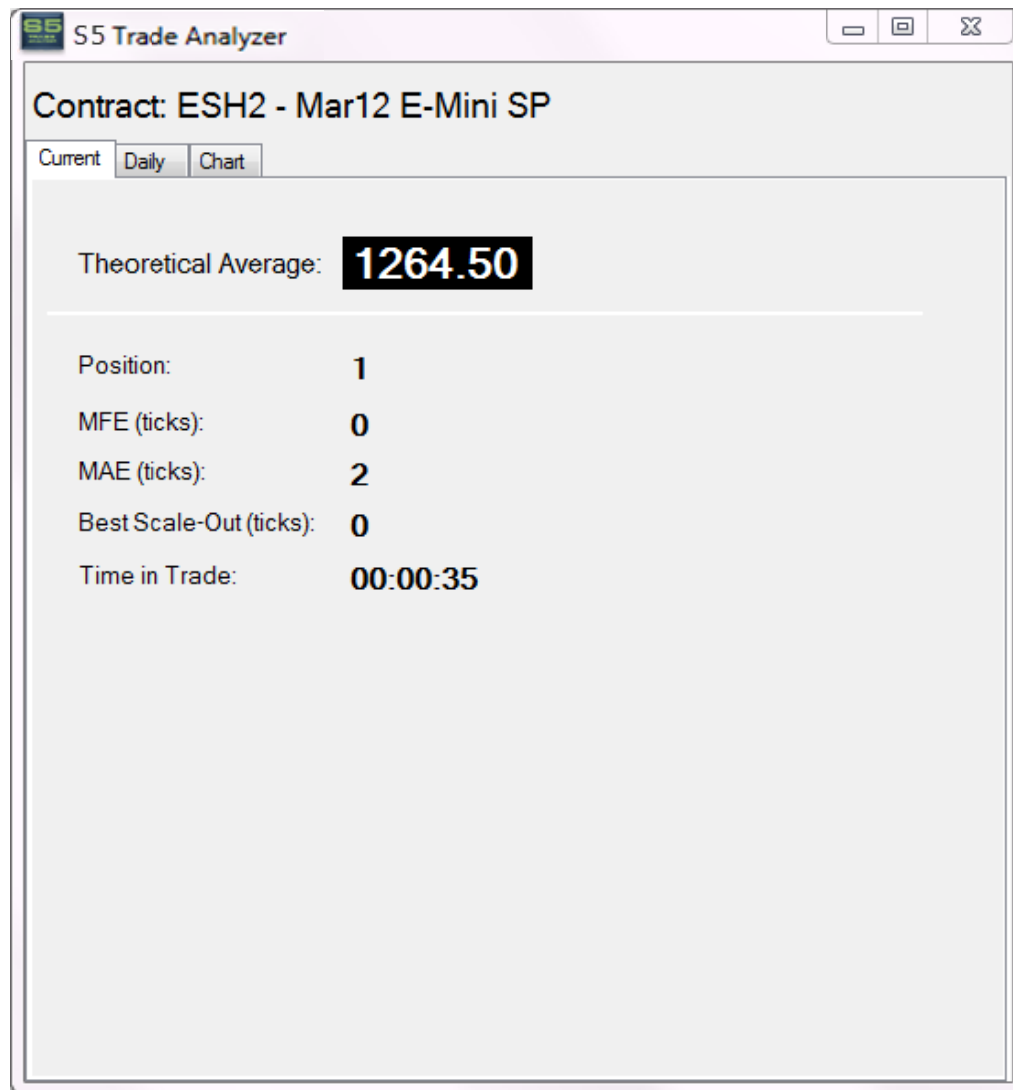
Select an account within OEC. We will default to the first account for the user. We will also insure that the account selected falls within the designated range of accounts for Stage 5. If it does not, we will display a message and the user will not be able to proceed further with the program.

When the program is loaded, it will go through all of the orders submitted by the user and segregate them into different markets. These markets will be displayed on the Market drop-down list. So, for example, one of the items on the drop-down list might be *Mar '12 S&P E-Mini*.

The user may click on any of the markets from the drop-down box. When they do so, the program will bring up the Trade Analysis screen as shown below. The user can bring up multiple trade analysis screens if desired, one for any market that has been traded.

If a Trade Analysis screen has been opened, the program will remember the location, and re-open it upon sign-on.

## Current Trade Analysis



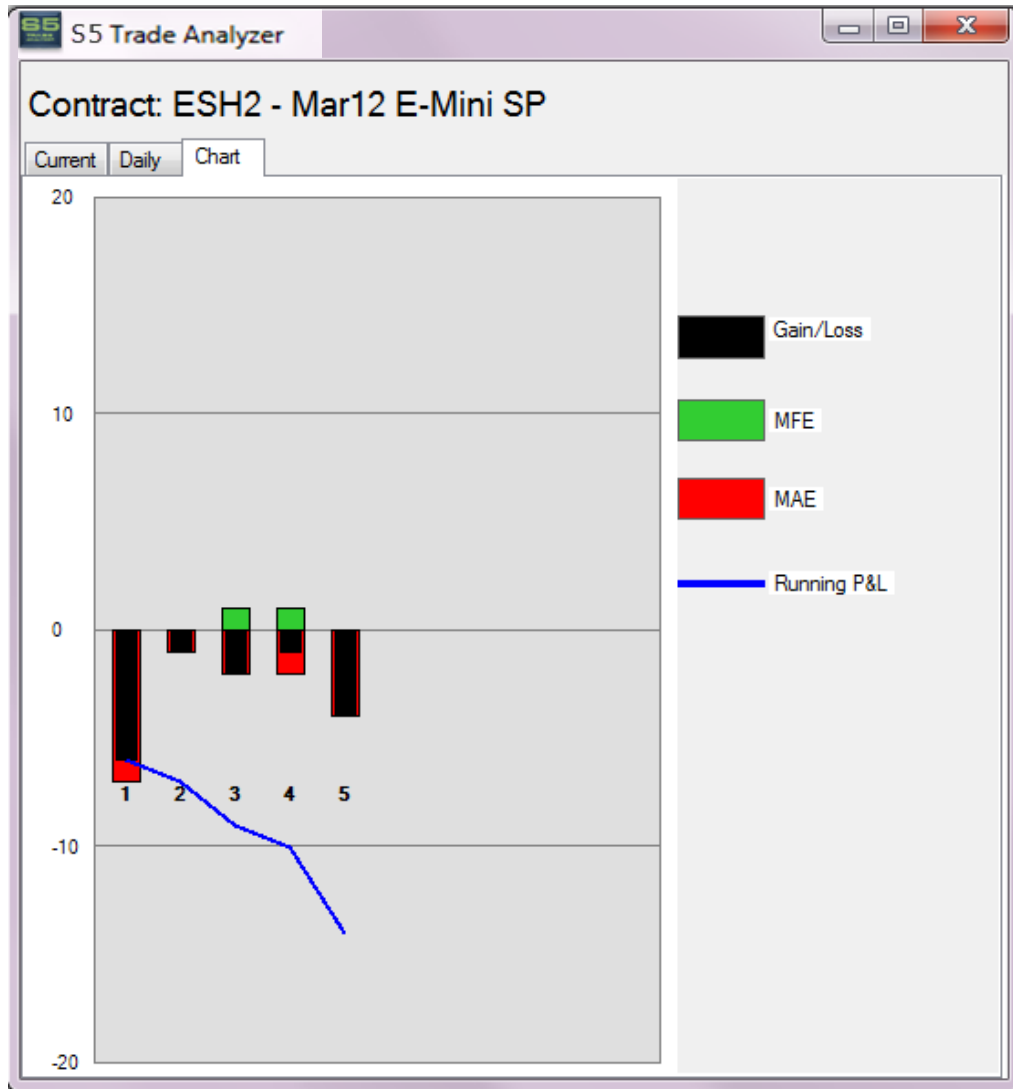
The Trade Analysis screen has three tabs. In this first tab, the *Current* tab, we will show the key statistics for the current open position.

The user may then select the second tab, the *Daily* tab as shown below:



## Charts

Here's the third tab of the screen, the *Chart* tab. This shows the Gain/Loss, MFE, MAE and the running P&L in graphical form.



If we cannot fit all of the trades on the chart, as is the case above, we will show the user the most recent trades.

However, the user may “stretch” the screen wider to see additional, earlier trades.



## Termination

Simply click on the 'X' in the upper right-hand corner to close a Trade Analysis screen. Closing out the main screen, terminates the program and any open screens.

## Behind the Scenes

Once connected to the Open E-Cry platform, the program will query any orders that have been submitted looking for orders that have fills.

Each order will be segregated by its market. For example, orders in the Mar'12 S&P e-mini market would be segregated from orders in the Mar'12 Euro FX market.

For each market that has been traded, we will request 1 second bars from Open E-Cry. We will then store the 1 second bars and use them for analyzing the trades in that market. Specifically, we need this data to calculate the MFE and MAE values.

Each order will be broken down into one or more fills. We will then look at the fills in chronological order and will organize the fills into trades. A trade is defined as a set of fills that enters a new position in the market and later closes out that position. A trade will consist of multiple orders.

The program will then calculate the following values for each trade. The program uses both 1 minute and 1 second bar data to calculate the MFE and MAE values:

- **Gain/Loss** – the profit or loss of the trade expressed as a number of ticks.
- **MFE (Max Favorable Excursion)** – The theoretical maximum gain of the trade. This analysis looks at the life of the trade which may include adding or subtracting from an open position. It then determines the maximum gain that could have been achieved by liquidating the position at the ideal point in time. This will always be a non-negative number.
- **MAE (Max Adverse Excursion)** – The theoretical maximum loss of the trade. This analysis looks at the life of the trade which may include adding or subtracting from an open position. It then determines the maximum loss that could have been achieved by liquidating the position at the worst possible point in time. This will always be a non-negative number.
- **BSO (Best Scale Out)** – The highest gain that was locked in during the life of the trade. BSO will be expressed as a non-negative number of ticks.
- **Max Position** – The maximum open position, either long or short, achieved during this trade.
- **TIT (Time in Trade)** – Measured from the first fill time until the last fill time. This will be expressed as hours, minutes and seconds: HH:MM:SS.
- **TSB (Time Standing By)** – Measured from the last fill of the previous trade until the first fill of the current trade. This will be expressed as hours, minutes and seconds: HH:MM:SS. We will show this as zero for the first trade of the day.

- **Running P/L** – This is the cumulative profit and loss. We will add the gain or loss from each trade in chronological order.

For open positions, we will also calculate a **Theoretical Average Price**. This the average price per contract of the open position.

The information on the Trade Analysis screen will be dynamic. That is, it will automatically change reflecting new fills.

## **Additional Information**

**Logging and Data Retention** -- The system will record each significant event in a log. These events include start-up, notification that orders have been filled, etc. A new log is created for each day of the month so that the system retains logs for at least thirty calendar days. These logs can be retrieved and examined for trouble-shooting purposes. They are named *Log1*, *Log2*, up through *Log31*.

These logs contain messages written in English and can be very useful in reconstructing the chain of events for a particular trading day. Feel free to browse them. Because of Windows standards, the logs are stored in a rather obscure directory. But, if you click on the green *Connected* indicator in the upper right-hand corner of the screen, it will take you directly to the directory.

At some point, you may be asked to send a log to Client Services for trouble-shooting purposes. To do this:

Click on the green *Connected* indicator in the upper right-hand corner of the screen.  
Right-click on the desired log and copy the log to your desktop.

Once on the desktop, you may open the log yourself or you can attach it to an e-mail to [client-services@s5trading.com](mailto:client-services@s5trading.com) .